

# ADDENDUM NO. 1

## WTCC Fire and Rescue Training Center

Prepared by:



Date of Issue: April 18, 2025

**THE FOLLOWING ITEMS TAKE PRECEDENCE OVER THE REFERENCED PORTION OF THE BIDDING DOCUMENTS FOR THE ABOVE REFERENCED PROJECT AND IN EXECUTING A CONTRACT SHALL BECOME A PART THEREOF.**

**1. Summary of Addenda #1:**

- A.** HH Architecture Design Addenda #1 (see HH addendum for summary of changes)
  - Revisions to specifications
  - Revisions to drawings
  - Clarifications
  - Attachments
- B.** CM Trade Package Manual and CM General Requirements Manual
  - Replaces previously issued bid manual and project requirements
- C.** BID PACKAGE SCOPES OF WORK REVISED OR ADDED:
  - BP01A – Final Cleaning
  - BP03A – Cast-in-Place Concrete
  - BP04A - Masonry
  - BP05A – Structural Steel and Metal Fabrications
  - BP07A – Waterproofing
  - BP07C – Metal panels and Metal Roofing
  - BP08A – Doors, Frames, and Hardware
  - BP08D – Overhead Doors
  - BP09A – Drywall, Framing, and Insulation
  - BP31A – Sitework
  - BP32A – Site Concrete
  - BP32C – Asphalt Paving and Curb & Gutter
  - The remaining Scopes of work will be issued in Addenda #2
- D.** BID PROPOSAL FORMS REVISED OR ADDED:
  - Form of Bid Proposal
    - Corrected Contractor and Owner section

**END OF ADDENDUM NO. 1**

# ADDENDUM NO. 1

## WTCC Fire and Rescue Training Center

Prepared by:



Date of Issue: April 18, 2025

**THE FOLLOWING ITEMS TAKE PRECEDENCE OVER THE REFERENCED PORTION OF THE BIDDING DOCUMENTS FOR THE ABOVE REFERENCED PROJECT AND IN EXECUTING A CONTRACT SHALL BECOME A PART THEREOF.**

**1. Summary of Addenda #1:**

- A.** HH Architecture Design Addenda #1 (see HH addendum for summary of changes)
  - Revisions to specifications
  - Revisions to drawings
  - Clarifications
  - Attachments
- B.** CM Trade Package Manual and CM General Requirements Manual
  - Replaces previously issued bid manual and project requirements
- C.** BID PACKAGE SCOPES OF WORK REVISED OR ADDED:
  - BP01A – Final Cleaning
  - BP03A – Cast-in-Place Concrete
  - BP04A - Masonry
  - BP05A – Structural Steel and Metal Fabrications
  - BP07A – Waterproofing
  - BP07C – Metal panels and Metal Roofing
  - BP08A – Doors, Frames, and Hardware
  - BP08D – Overhead Doors
  - BP09A – Drywall, Framing, and Insulation
  - BP31A – Sitework
  - BP32A – Site Concrete
  - BP32C – Asphalt Paving and Curb & Gutter
  - The remaining Scopes of work will be issued in Addenda #2
- D.** BID PROPOSAL FORMS REVISED OR ADDED:
  - Form of Bid Proposal
    - Corrected Contractor and Owner section

**END OF ADDENDUM NO. 1**



HH ARCHITECTURE

## ADDENDUM #1

April 18, 2025

Project Name: **East Wake Site - Fire & Rescue Training Center**

Owner: Wake Technical Community College

NCCS Project #: 2303  
HH Project #: 22-086

From: **HH Architecture**  
James G. Briglia, AIA jbriglia@hh-arch.com

To: Samet Corporation  
Andrew Gotschall agotschall@sametcorp.com

Message: Bidders are hereby informed that the following additions, deletions, changes, and clarifications supersede and supplement the Contract Documents for the above-referenced project. It forms a part of the previously issued Construction Documents dated **March 14, 2025**.

This addendum may include revised pages and drawings, which shall be inserted before the corresponding page or drawings in the previously issued documents.

### REVISIONS TO SPECIFICATIONS

---

1. **012100 Allowances: REPLACE** in its entirety section **012100 Allowances** issued previously with the attached version dated 04/14/2025
  - a. Allowance quantities changed, and additional allowances.
2. **102600 Wall and Door Protection: Delete** Section **102600 Wall and Door Protection**
3. **221116 Facility Water Distribution Piping: REPLACE** in its entirety section **221116 Facility Water Distribution Piping** with the attached **221117 SITE WATER DISTRIBUTION PIPING** revision dated 04/14/2025.
  - a. The section was renumbered and renamed to clarify where sections are to be applied.
4. **221126 Domestic Water Pumps: Delete** section **221126 Domestic Water Pumps** this work is not included in the project.

5. **251510 Energy Mgt Info Systems: REPLACE** in its entirety section **251510 Energy Mgt Info Systems** issued previously with the attached version dated 04/14/2025
  - a. Page 8, replace lines section 5 of "Graphics Required" with the following:

"Fire and Rescue Training Facility shall be added to the existing energy dashboard to allow input of utility bill information similar to current buildings using the energy dashboard in Skyspark"
6. **262713 – Electrical Metering Equipment: REPLACE** in its entirety section 262713 – Electrical Metering Equipment issued previously with the attached version dated 04/14/2025
  - a. Add text to page 2, line 37 and page 3, line 26 with the following:

"The Meter shall have Ethernet port and RS-485 terminals for communication to external devices."

#### **REVISIONS TO DRAWINGS**

---

7. **REPLACE H401** with the attached **H401** dated 4/14/2025.
  - a. Added controls for BAS integration to electric meter.
8. **REPLACE E002** with the attached **E002** dated 4/14/2025.
  - a. Moved two camera locations to different poles and added one new camera location and circuit.
  - b. Added raceways from restroom building to Training Tower and Burn Building for fiber cable with keynote 12.
9. **REPLACE E111** with the attached **E111** dated 4/14/2025.
  - a. Added data cable for camera in corner of restroom building with keynote 13.
  - b. Added circuits for future ERRC to electrical room with keynote 14.
  - c. Added conduit for network connection from meter to BAS with keynote 15.
10. **REPLACE E301** with the attached **E301** dated 4/14/2025.
  - a. Added detail 10/E301 raceway rough in for future owner use.
11. **REPLACE E401** with the attached **E401** dated 4/14/2025.
  - a. Added circuits 38 and 40 to panel P2.
12. **BURN BUILDING BB DRAWINGS:** Replace the following drawings with the attached drawings dated 4/14/2025
  - a. **BB001:** Updated notes for clarification.

- b. **BB002:** Updated note 4 under expansion anchor schedule.
- c. **BB201:** Added shaded area for ladder grooves to coordinate with Civil drawings, updated exterior steel stair dimensions, and updated notes for clarification.
- d. **BB202 – BB206:** Updated exterior steel stair dimensions, and updated notes for clarification.
- e. **BB207:** Updated exterior steel stair dimensions, added dimensions to clarify parapet, and updated notes for clarification.
- f. **BB208:** Update wall joint at third floor balcony.
- g. **BB301-BB303:** Updated height of debris chute.
- h. **BB306 – BB307:** Updated thermal lining at ceiling extents and rollover, and updated notes for clarification.
- i. **BB401:** Updated exterior steel stair dimensions.
- j. **BB402-BB407:** Updated exterior steel stair framing, updated additional reinforcing notes, added debris chute framing to plans.
- k. **BB501 – BB606, BB610:** Updated dimensions and notes on details for clarification.
- l. **BB609:** Updated debris chute details.

**13. TRAINING TOWER TT DRAWINGS:** Replace the following drawings with the attached drawings dated 4/14/2025

- a. **TT302:** Updated masonry control joint locations.
- b. **TT403:** Updated note for clarification.
- c. **TT502:** Updated dimensions and notes on details for clarification.
- d. **TT504:** Updated exterior steel stair framing, and updated notes on details for clarification.
- e. **TT505:** Updated notes on concrete stair sections for clarification.
- f. **TT603-TT604, TT606-TT608:** Updated notes on details for clarification.

14. **REPLACE TT003** with the attached **TT003** dated 3/14/2025

15. **ADD** the attached **BB003** dated 3/14/2025.

## **CLARIFICATIONS**

---

16. Please note the previously issued **STRUCTURAL S DRAWINGS** have an issue date of **3/19/2025**.

17. **DELETE E003-SITE PLAN PHOTOMETRICS** from the drawing index on G000, it is not provided as part of the set.

## **East Wake Site - Fire & Rescue Training Center**

Addendum #1

### **ATTACHEMENTS**

012100 Allowances Add1 25-0414  
221117 Site Water Distribution Piping  
251510 Energy Mgt Info Systems Add1 25-0414  
262713 Electrical Metering Equipment Add1 25-0414  
E002 SITE PLAN ADD1-2025-0414  
E111 PLANS -RESTROOM BUILDING ADD1-2025-0414  
E301 ELECTRICAL DETAILS ADD1-2025-0414  
E401 PANEL SCHEDULES ADD1-2025-0414  
H401 CONTROLS & SCHEDULES ADD1-2025-0414  
BB001 BURN BUILDING -GENERAL NOTES ADD1-2025-0414  
BB002 BURN BUILDING -TABLES, LEGEND & ABBREVIATIONS ADD1-2025-0414  
BB003 BURN BUILDING -LIFE SAFETY PLAN ADD1-2025-0414  
BB201 BURN BUILDING -FIRST FLOOR PLAN ADD1-2025-0414  
BB202 BURN BUILDING -SECOND FLOOR PLAN ADD1-2025-0414  
BB203 BURN BUILDING -THIRD FLOOR PLAN ADD1-2025-0414  
BB204 BURN BUILDING -FOURTH FLOOR PLAN ADD1-2025-0414  
BB205 BURN BUILDING -FIFTH FLOOR PLAN ADD1-2025-0414  
BB206 BURN BUILDING -SIXTH FLOOR PLAN ADD1-2025-0414  
BB207 BURN BUILDING -HIGH ROOF & STAIR ROOF PLANS ADD1-2025-0414  
BB208 BURN BUILDING -EXTERIOR WALL BRACING PLANS ADD1-2025-0414  
BB301 BURN BUILDING -SOUTH ELEVATION ADD1-2025-0414  
BB302 BURN BUILDING -WEST & EAST ELEVATIONS ADD1-2025-0414  
BB303 BURN BUILDING -NORTH ELEVATION ADD1-2025-0414  
BB306 BURN BUILDING -BUILDINGSECTIONS ADD1-2025-0414  
BB307 BURN BUILDING -BUILDINGSECTIONS ADD1-2025-0414  
BB401 BURN BUILDING -FOUNDATION PLAN ADD1-2025-0414  
BB402 BURN BUILDING -SECOND FLOOR FRAMING PLAN ADD1-2025-0414  
BB403 BURN BUILDING -THIRD FLOOR FRAMING PLAN ADD1-2025-0414  
BB404 BURN BUILDING -FOURTH FLOOR FRAMING PLAN ADD1-2025-0414  
BB405 BURN BUILDING -FIFTH FLOOR FRAMING PLAN ADD1-2025-0414  
BB406 BURN BUILDING -SIXTH FLOOR FRAMING PLAN ADD1-2025-0414  
BB407 BURN BUILDING -HIGH ROOF & STAIR ROOF FRAMING PLANS ADD1-2025-0414  
BB501 BURN BUILDING -TYPICALCONCRETEDETAILS ADD1-2025-0414  
BB502 BURN BUILDING -FOUNDATIONDETAILS ADD1-2025-0414  
BB503 BURN BUILDING -CONCRETE SLAB SECTIONS ADD1-2025-0414  
BB504 BURN BUILDING -EXTERIOR STEEL STAIR DETAILS ADD1-2025-0414  
BB505 BURN BUILDING -EXTERIOR STEEL STAIR DETAILS ADD1-2025-0414  
BB506 BURN BUILDING -CONCRETE STAIR SECTIONS ADD1-2025-0414  
BB601 BURN BUILDING -TYPICAL MASONRY DETAILS ADD1-2025-0414

## **East Wake Site - Fire & Rescue Training Center**

### **Addendum #1**

BB602 BURN BUILDING -THERMAL LINING AND CMU PARAPET DETAILS ADD1-2025-0414

BB603 BURN BUILDING -TYPICAL SCUPPER DETAILS ADD1-2025-0414

BB604 BURN BUILDING -TYPICAL STEEL PLATE DOOR DETAILS ADD1-2025-0414

BB605 BURN BUILDING -DOUBLE STEEL PLATE DOOR DETAILS ADD1-2025-0414

BB606 BURN BUILDING -TYPICAL STEEL PLATE SHUTTER DETAILS ADD1-2025-0414

BB609 BURN BUILDING -DEBRIS CHUTE DETAILS ADD1-2025-0414

BB610 BURN BUILDING -MISCELLANEOUSDETAILS ADD1-2025-0414

TT003 TRAINING TOWER -LIFE SAFETY PLAN ADD1-2025-0414

TT302 TRAINING TOWER -EAST & NORTH ELEVATIONS ADD1-2025-0414

TT403 TRAINING TOWER -FIFTH FLOOR & HIGH ROOF FRAMING PLANS ADD1-2025-0414

TT502 TRAINING TOWER -STRUCTURAL STEEL FRAMING DETAILS ADD1-2025-0414

TT504 TRAINING TOWER -EXTERIOR STEEL STAIR DETAILS ADD1-2025-0414

TT505 TRAINING TOWER -CONCRETE STAIR SECTIONS ADD1-2025-0414

TT603 TRAINING TOWER -DOOR DETAILS AND SCHEDULES ADD1-2025-0414

TT604 TRAINING TOWER -TYPICAL WINDOW SHUTTER DETAILS ADD1-2025-0414

TT606 TRAINING TOWER -GUARDRAIL GATE AT PARAPET ADD1-2025-0414

TT607 TRAINING TOWER -MISCELLANEOUS DETAILS ADD1-2025-0414

TT608 TRAINING TOWER -MISCELLANEOUS DETAILS ADD1-2025-0414

**END OF ADDENDUM #1**

## SECTION 012100 - ALLOWANCES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
  - 1. Lump-sum allowances.
  - 2. Unit-cost allowances.
- C. Related Requirements:
  - 1. Section 012200 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.
  - 2. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
  - 3. Section 014000 "Quality Requirements" for procedures governing the use of allowances for field testing by an independent testing agency.

#### 1.2 ACTION SUBMITTALS

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

#### 1.3 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. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

#### 1.4 LUMP-SUM 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.

#### 1.5 UNIT-COST 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 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.

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. A: Unsuitable Soil – On-Site Disposal and Backfill with On-Site Suitable Soils.
  - 1. Description: Removal of unsuitable soil, disposal of unsuitable soil for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  - 2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  - 3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  - 4. Allowance Quantity: **1,500 cubic yards.**
  - 5. Base Bid Quantity: Lump sum.
- B. Allowance No. B: Unsuitable Soil – On-site disposal and Backfill with off Site Source Suitable Soils.
  - 1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  - 2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  - 3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  - 4. Allowance Quantity: **1,500 cubic yards.**
  - 5. Base Bid Quantity: Lump sum.
- C. Allowance No. C: Unsuitable soil – Off-site disposal and Backfill with On-Site Source Suitable Soils.
  - 1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  - 2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  - 3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  - 4. Allowance Quantity: **250 cubic yards.**



5. Base Bid Quantity: Lump sum.
- D. Allowance No. D: Unsuitable Soil – Off-site disposal and Backfill with Off-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: **250 cubic yards.**
  5. Base Bid Quantity: Lump sum.
- E. Allowance No. E: Unsuitable Trench Soil – On-site disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soil for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: **250 cubic yards.**
  5. Base Bid Quantity: Lump sum.
  6. .
- F. Allowance No. F: Unsuitable Trench Soil – On-Site Disposal and Backfill with Off Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: **100 cubic yards.**
  5. Base Bid Quantity: Lump sum.
- G. Allowance No. G: Unsuitable Trench Soil – Off-Site Disposal and Backfill With On-Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: **50 cubic yards.**
  5. Base Bid Quantity: Lump sum.

- H. Allowance No. H: Unsuitable Trench Soil – Off-Site Disposal and Backfill with Off-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: *50 cubic yards.*
  5. Base Bid Quantity: Lump sum.
- I. ***Allowance No. I: Stream Crossing – Off-Site Disposal and Backfill with Class B or Class A Rip-Rap.***
1. *Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with either Class B or Class A Rip-Rap.*
  2. *Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.*
  3. *This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.*
  4. *Allowance Quantity: 500 cubic yards.*
  5. *Base Bid Quantity: Lump sum.*
- J. ***Allowance No. J: Stream Crossing – Off-Site Disposal and Backfill with #4 and/or #67 Stone.***
1. *Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with #4 and/or #67 Stone.*
  2. *Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.*
  3. *This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.*
  4. *Allowance Quantity: 200 cubic yards.*
  5. *Base Bid Quantity: Lump sum.*
- K. ***Allowance No. K: Stream Crossing – Type 4 Geotextile Fabric.***
1. *Description: Use of geotextile fabric prior to structural fill soil placement as directed by Testing Agency.*
  2. *Unit Price includes placement of geotextile fabric.*
  3. *This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.*
  4. *Allowance Quantity: 1,500 square feet.*
  5. *Base Bid Quantity: Lump sum.*

END OF SECTION 012100

## **SECTION 221117 SITE WATER DISTRIBUTION PIPING**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section includes water-distribution piping and related components outside the building for water service and fire-service mains.

#### **1.3 DEFINITIONS**

- A. PVC: Polyvinyl chloride plastic.

#### **1.4 ACTION SUBMITTALS**

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Detail precast concrete vault assemblies and indicate dimensions, method of field assembly, and components.
  - 1. Wiring Diagrams: Power, signal, and control wiring for alarms.

#### **1.5 INFORMATIONAL SUBMITTALS**

- A. Coordination Drawings: For piping and specialties including relation to other services in same area, drawn to scale. Show piping and specialty sizes and valves, meter and specialty locations, and elevations.
- B. Field quality-control test reports.

#### **1.6 CLOSEOUT SUBMITTALS**

- A. Operation and Maintenance Data: For water valves and specialties to include in emergency, operation, and maintenance manuals.

#### **1.7 QUALITY ASSURANCE**

- A. Regulatory Requirements:

1. Comply with requirements of utility company supplying water. Include tapping of water mains and backflow prevention.
  2. Comply with standards of authorities having jurisdiction for potable-water-service piping, including materials, installation, testing, and disinfection.
  3. Comply with standards of authorities having jurisdiction for fire-suppression water-service piping, including materials, hose threads, installation, and testing.
- B. Piping materials shall bear label, stamp, or other markings of specified testing agency.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- D. Comply with ASTM F 645 for selection, design, and installation of thermoplastic water piping.
- E. Comply with FMG's "Approval Guide" or UL's "Fire Protection Equipment Directory" for fire-service-main products.
- F. NFPA Compliance: Comply with NFPA 24 for materials, installations, tests, flushing, and valve and hydrant supervision for fire-service-main piping for fire suppression.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Preparation for Transport: Prepare valves, including fire hydrants, according to the following:
1. Ensure that valves are dry and internally protected against rust and corrosion.
  2. Protect valves against damage to threaded ends and flange faces.
  3. Set valves in best position for handling. Set valves closed to prevent rattling.
- B. During Storage: Use precautions for valves, including fire hydrants, according to the following:
1. Do not remove end protectors unless necessary for inspection; then reinstall for storage.
  2. Protect from weather. Store indoors and maintain temperature higher than ambient dew-point temperature. Support off the ground or pavement in watertight enclosures when outdoor storage is necessary.
- C. Handling: Use sling to handle valves and fire hydrants if size requires handling by crane or lift. Rig valves to avoid damage to exposed parts. Do not use handwheels or stems as lifting or rigging points.
- D. Deliver piping with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe-end damage and to prevent entrance of dirt, debris, and moisture.
- E. Protect stored piping from moisture and dirt. Elevate above grade. Do not exceed structural capacity of floor when storing inside.
- F. Protect flanges, fittings, and specialties from moisture and dirt.
- G. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.

## 1.9 PROJECT CONDITIONS

- A. Interruption of Existing Water-Distribution Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary water-distribution service according to requirements indicated:
  - 1. Notify Architect, Construction Manager, and Owner no fewer than two days in advance of proposed interruption of service.
  - 2. Do not proceed with interruption of water-distribution service without Owner's written permission.

## 1.10 COORDINATION

- A. Coordinate connection to water main with utility company.

## PART 2 - PRODUCTS

### 2.1 DUCTILE-IRON PIPE AND FITTINGS

- A. Mechanical-Joint, Ductile-Iron Pipe: AWWA C151, with mechanical-joint bell and plain spigot end unless grooved or flanged ends are indicated.
  - 1. Mechanical-Joint, Ductile-Iron Fittings: AWWA C110, ductile- or gray-iron standard pattern or AWWA C153, ductile-iron compact pattern.
  - 2. Glands, Gaskets, and Bolts: AWWA C111, ductile- or gray-iron glands, rubber gaskets, and steel bolts.
- B. Push-on-Joint, Ductile-Iron Pipe: AWWA C151, with push-on-joint bell and plain spigot end unless grooved or flanged ends are indicated.
  - 1. Push-on-Joint, Ductile-Iron Fittings: AWWA C110, ductile- or gray-iron standard pattern or AWWA C153, ductile-iron compact pattern.
  - 2. Gaskets: AWWA C111, rubber.
- C. Flanges: ASME 16.1, Class 125, cast iron.

### 2.2 PVC PIPE AND FITTINGS

- A. PVC, Schedule 40 Pipe: ASTM D1785.
  - 1. PVC, Schedule 40 Socket Fittings: ASTM D2466.
- B. PVC, Schedule 80 Pipe: ASTM D1785.
  - 1. PVC, Schedule 80 Socket Fittings: ASTM D2467.
  - 2. PVC, Schedule 80 Threaded Fittings: ASTM D2464.

- C. PVC, AWWA Pipe: AWWA C900, Class 150 and Class 200, with bell end with gasket, and with spigot end.
  - 1. Comply with UL 1285 for fire-service mains if indicated.
  - 2. PVC Fabricated Fittings: AWWA C900, Class 150 and Class 200, with bell-and-spigot or double-bell ends. Include elastomeric gasket in each bell.
  - 3. PVC Molded Fittings: AWWA C907, Class 150, with bell-and-spigot or double-bell ends. Include elastomeric gasket in each bell.
  - 4. Push-on-Joint, Ductile-Iron Fittings: AWWA C110, ductile- or gray-iron standard pattern or AWWA C153, ductile-iron compact pattern.
    - a. Gaskets: AWWA C111, rubber.
  - 5. Mechanical-Joint, Ductile-Iron Fittings: AWWA C110, ductile- or gray-iron standard pattern or AWWA C153, ductile-iron compact pattern.
    - a. Glands, Gaskets, and Bolts: AWWA C111, ductile- or gray-iron glands, rubber gaskets, and steel bolts.

## 2.3 GATE VALVES

### A. AWWA, Cast-Iron Gate Valves:

- 1. Non-rising-Stem, Metal-Seated Gate Valves:
  - a. Description: Gray- or ductile-iron body and bonnet; with cast-iron or bronze double-disc gate, bronze gate rings, bronze stem, and stem nut.
    - 1) Standard: AWWA C500.
    - 2) Minimum Pressure Rating: 200 psig.
    - 3) End Connections: Mechanical joint.
    - 4) Interior Coating: Complying with AWWA C550.
- 2. Non-rising-Stem, Resilient-Seated Gate Valves:
  - a. Description: Gray- or ductile-iron body and bonnet; with bronze or gray- or ductile-iron gate, resilient seats, bronze stem, and stem nut.
    - 1) Standard: AWWA C509.
    - 2) Minimum Pressure Rating: 200 psig.
    - 3) End Connections: Mechanical joint.
    - 4) Interior Coating: Complying with AWWA C550.

## 2.4 GATE VALVE ACCESSORIES AND SPECIALTIES

### A. Tapping-Sleeve Assemblies:

- 1. Description: Sleeve and valve compatible with drilling machine.

- a. Standard: MSS SP-60.
  - b. Tapping Sleeve: Cast- or ductile-iron or stainless-steel, two-piece bolted sleeve with flanged outlet for new branch connection. Include sleeve matching size and type of pipe material being tapped and with recessed flange for branch valve.
  - c. Valve: AWWA, cast-iron, non-rising-stem, metal or resilient-seated gate valve with one raised face flange mating tapping-sleeve flange.
- B. Valve Boxes: Comply with AWWA M44 for cast-iron valve boxes. Include top section, adjustable extension of length required for depth of burial of valve, plug with lettering "WATER," and bottom section with base that fits over valve and with a barrel approximately 5 inches in diameter.
  - 1. Operating Wrenches: Steel, tee-handle with one pointed end, stem of length to operate deepest buried valve, and socket matching valve operating nut.
- C. Indicator Posts: UL 789, FMG-approved, vertical-type, cast-iron body with operating wrench, extension rod, and adjustable cast-iron barrel of length required for depth of burial of valve.

## 2.5 FIRE HYDRANTS

- A. All hydrants shall be of the City of Durham established standards.
- B. Dry-Barrel Fire Hydrants:
  - 1. Description: Freestanding, with one NPS 4-1/2 and two NPS 2-1/2 outlets, 5-1/4-inch main valve, drain valve, and NPS 6 mechanical-joint inlet. Include interior coating according to AWWA C550. Hydrant shall have cast-iron body, compression-type valve opening against pressure and closing with pressure.
    - a. Standard: AWWA C502.
    - b. Outlet Threads: NFPA 1963, with external hose thread used by local fire department. Include cast-iron caps with steel chains.
    - c. Operating and Cap Nuts: Pentagon, 1-1/2 inches point to flat.
    - d. Direction of Opening: Open hydrant valve by turning operating nut to left or counterclockwise.
    - e. Exterior Finish: Red alkyd-gloss enamel paint, unless otherwise indicated.

## 2.6 FIRE DEPARTMENT CONNECTIONS

- A. Fire Department Connections:
  - 1. Description: Freestanding, with cast-bronze body, thread inlets according to NFPA 1963 and matching local fire department hose threads, and threaded bottom outlet. Include lugged caps, gaskets, and chains; lugged swivel connection and drop clapper for each hose-connection inlet; 18-inch-high brass sleeve; and round escutcheon plate.

### **PART 3 - EXECUTION**

#### **3.1 EARTHWORK**

- A. Refer to Section 312000 "Earth Moving" for excavating, trenching, and backfilling.

#### **3.2 PIPING APPLICATIONS**

- A. General: Use pipe, fittings, and joining methods for piping systems according to the following applications.
- B. Transition couplings and special fittings with pressure ratings at least equal to piping pressure rating may be used, unless otherwise indicated.
- C. Do not use flanges or unions for underground piping.
- D. Flanges, unions, grooved-end-pipe couplings, and special fittings may be used, instead of joints indicated, on aboveground piping and piping in vaults.
- E. Underground water-service piping NPS 4 to NPS 8 shall be any of the following:
  - 1. Ductile-iron, push-on-joint pipe; ductile-iron, push-on-joint fittings; and gasketed or mechanical-joint pipe; ductile-iron, mechanical-joint fittings; and mechanical joints.
- F. Underground Fire-Service-Main Piping NPS 4 to NPS 12 shall be any of the following:
  - 1. Ductile-iron, push-on-joint pipe; ductile-iron, push-on-joint fittings; and gasketed or mechanical-joint pipe; ductile-iron, mechanical-joint fittings; and mechanical joints.

#### **3.3 VALVE APPLICATIONS**

- A. General Application: Use mechanical-joint-end valves for NPS 3 and larger underground installation. Use threaded- or flanged-end valves for installation in vaults.
- B. Drawings indicate valve types to be used. Where specific valve types are not indicated, the following requirements apply:
  - 1. Underground Valves, NPS 3 and Larger: AWWA, cast-iron, non-rising-stem, metal or resilient-seated gate valves with valve box.

#### **3.4 PIPING INSTALLATION**

- A. Water-Main Connection: Tap water main according to requirements of water utility company and of size and in location indicated.
- B. Make connections larger than NPS 2 with tapping machine according to the following:



1. Install tapping sleeve and tapping valve according to MSS SP-60.
  2. Install tapping sleeve on pipe to be tapped. Position flanged outlet for gate valve.
  3. Use tapping machine compatible with valve and tapping sleeve; cut hole in main. Remove tapping machine and connect water-service piping.
  4. Install gate valve onto tapping sleeve. Comply with MSS SP-60. Install valve with stem pointing up and with valve box.
- C. Comply with NFPA 24 for fire-service-main piping materials and installation.
- D. Install ductile-iron, water-service piping according to AWWA C600 and AWWA M41.
- E. Bury piping with a minimum depth of cover over top at least 36 inches.
- F. Install piping by tunneling or jacking, or combination of both, under streets and other obstructions that cannot be disturbed.
- G. Extend water-service piping and connect to water-supply source and building-water-piping systems at outside face of building wall in locations and pipe sizes indicated.
1. Terminate water-service piping at building wall until building-water-piping systems are installed. Terminate piping with caps, plugs, or flanges as required for piping material. Make connections to building-water-piping systems when those systems are installed.
- H. Install underground piping with restrained joints at horizontal and vertical changes in direction. Use restrained-joint piping, thrust blocks, anchors, tie-rods and clamps, and other supports.

### 3.5 JOINT CONSTRUCTION

- A. See Section 330500 "Common Work Results for Utilities" for basic piping joint construction.
- B. Make pipe joints according to the following:
1. Ductile-Iron Piping, Gasketed Joints for Water-Service Piping: AWWA C600 and AWWA M41.
  2. Ductile-Iron Piping, Gasketed Joints for Fire-Service-Main Piping: UL 194.
  3. Ductile-Iron Piping, Grooved Joints: Cut-groove pipe. Assemble joints with grooved-end, ductile-iron-piping couplings, gaskets, lubricant, and bolts according to coupling manufacturer's written instructions.

### 3.6 ANCHORAGE INSTALLATION

- A. Anchorage, General: Install water-distribution piping with restrained joints. Anchorages and restrained-joint types that may be used include the following:
1. Concrete thrust blocks.
  2. Locking mechanical joints.
  3. Set-screw mechanical retainer glands.
  4. Bolted flanged joints.

- B. Install anchorages for tees, plugs and caps, bends, crosses, valves, and hydrant branches. Include anchorages for the following piping systems:
  - 1. Gasketed-Joint, Ductile-Iron, Water-Service Piping: According to AWWA C600.
  - 2. Fire-Service-Main Piping: According to NFPA 24.
- C. Apply full coat of asphalt or other acceptable corrosion-resistant material to surfaces of installed ferrous anchorage devices.

### 3.7 VALVE INSTALLATION

- A. AWWA Gate Valves: Comply with AWWA C600 and AWWA M44. Install each underground valve with stem pointing up and with valve box.
- B. AWWA Valves Other Than Gate Valves: Comply with AWWA C600 and AWWA M44.

### 3.8 FIRE HYDRANT INSTALLATION

- A. General: Install each fire hydrant with separate gate valve in supply pipe, anchor with restrained joints or thrust blocks, and support in upright position.
- B. AWWA Fire Hydrants: Comply with AWWA M17.

### 3.9 FIRE DEPARTMENT CONNECTION INSTALLATION

- A. Install ball drip valves at each check valve for fire department connection to mains.
- B. Install protective pipe bollards as indicated in the drawings around each of the fire department connection. Pipe bollards are specified in Section 055000 "Metal Fabrications."

### 3.10 ALARM DEVICE INSTALLATION

- A. General: Comply with NFPA 24 for devices and methods of valve supervision. Underground valves with valve box do not require supervision.
- B. Supervisory Switches: Supervise valves in open position.
  - 1. Valves: Grind away portion of exposed valve stem. Bolt switch, with plunger in stem depression, to OS&Y gate-valve yoke.
  - 2. Indicator Posts: Drill and thread hole in upper-barrel section at target plate. Install switch, with toggle against target plate, on barrel of indicator post.
- C. Locking and Sealing: Secure unsupervised valves as follows:
  - 1. Valves: Install chain and padlock on open OS&Y gate valve.
  - 2. Post Indicators: Install padlock on wrench on indicator post.

- D. Connect alarm devices to building fire alarm system.

### 3.11 CONNECTIONS

- A. Connect water-distribution piping to existing water main. Use tapping sleeve and tapping valve unless otherwise identified in the drawings.
- B. Connect water-distribution piping to interior domestic water and fire-suppression piping.

### 3.12 FIELD QUALITY CONTROL

- A. Piping Tests: Conduct piping tests before joints are covered and after concrete thrust blocks have hardened sufficiently. Fill pipeline 24 hours before testing and apply test pressure to stabilize system. Use only potable water.
- B. Hydrostatic Tests: Test at not less than one-and-one-half times working pressure for two hours.
  - 1. Increase pressure in 50-psig increments and inspect each joint between increments. Hold at test pressure for 1 hour; decrease to 0 psig. Slowly increase again to test pressure and hold for 1 more hour. Maximum allowable leakage is 2 quarts per hour per 100 joints. Remake leaking joints with new materials and repeat test until leakage is within allowed limits.
- C. Prepare reports of testing activities.

### 3.13 IDENTIFICATION

- A. Install continuous underground detectable warning tape during backfilling of trench for underground water-distribution piping. Locate below finished grade, directly over piping. Underground warning tapes are specified in Section 312000 "Earth Moving."

### 3.14 CLEANING

- A. Clean and disinfect water-distribution piping as follows:
  - 1. Use purging and disinfecting procedure prescribed by authorities having jurisdiction or, if method is not prescribed by authorities having jurisdiction, use procedure described in AWWA C651 or do as follows:
    - a. Drain system or part of system of previous solution and refill with water/chlorine solution containing at least 200 ppm of chlorine; isolate and allow to stand for 3 hours.
    - b. After standing time, flush system with clean, potable water until no chlorine remains in water coming from system.
    - c. Submit water samples in sterile bottles to authorities having jurisdiction. Repeat procedure if biological examination shows evidence of contamination.

- B. Prepare reports of purging and disinfecting activities.

**END OF SECTION 221117**

**SECTION 251510 – ENERGY INFORMATION MANAGEMENT SYSTEMS**  
**(EMIS)**

**PART 1 - GENERAL**

**PART 1 – GENERAL**

**1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Section, apply to this Section.
- B. Section 230913, which specifies the requirements for sensors, devices, actuators, and final control elements utilized by the DDC system.
- C. Section 230510 – HVAC Basic Requirements
- D. Section 230923 – “Direct Digital Control Systems for HVAC” Sets forth the requirements of the System Integrator (Controls contractor) who shall work closely with the Master System Integrator to seamlessly integrate the enterprise BAS front end to the field controllers (and building supervisory controllers, when present).
- E. Section 230993 –Sequence of Operation.
- F. Section 260000 - “Electrical” specifies electrical power system, Lighting, Lighting control and other electrical systems.
- G. Section 270000 - “Data Communication Systems”

**1.02 DESCRIPTION**

- A. Scope: This section contains general requirements for providing Master System Integration and control programming elements for control systems provided elsewhere in these specifications. MSI is responsible for all alarming and trending including alarming as specified in 230993.
- B. Purpose: Energy monitoring, process control, remote start/stop and remote set point adjust control of exhaust fans and other items as specified and as shown on the drawings.  
The existing EMIS is thin-client architecture to provide operators complete access to the control system via a web browser.

Work Specified in this Section:

- a. Test, calibrate and commission entire control system and its components.
  - b. Train Owner personnel in the operation, maintenance and service of the control system as it pertains to the new systems installed by this project.
- C. The EMIS at Wake Tech shall be developed by an MSI via open collaboration with the BAS contractor. BAS/MSI milestones shall be included in construction schedules and in OAC meetings. EMIS consistency shall be maintained with every project integration. Wake Tech has developed a spreadsheet template that can help the Contractor to manage the coordination of this work. Appendix-A in specification 230923 has the WTCC BAS Guidelines. The contractor shall bring to the attention of the college and the engineer, any discrepancies between this specification or other parts of these contract documents and the current BAS guidelines for resolution. Some, but not all of the BAS guidelines are incorporated into this specification. All requirements of the guidelines are to be followed regardless of whether they are repeated in this specification. The MSI shall attend OAC meetings when required and/or requested to report on project progress and coordination between the BAS contractor and themselves.
- D. MSI shall hold a Controls Integration Meeting with the BAS contractor, all third party equipment manufacturers with controls to be integrated into the BAS. This meeting shall be held prior to the BAS control submittal. MSI shall meet regularly with BAS contractor to obtain network controller IP/MAC/BACnet ID info and point lists per device to perform integration. The MSI shall hold regularly scheduled progress meetings and include WTCC. MSI will perform turnover training for graphics, alarming, scheduling, trending, analytics, and O&M documents. MSI shall coordinate their training with BAS contractor. Prior to functional testing and to training, MSI shall integrate Project into SkySpark (See WTCC BAS Guidelines in Appendix A of Section 230923 for more requirements and information and Appendix A in this specification for current rules). Existing points for deleted controllers shall be deleted from database. MSI will use a mixture of existing rules and new rules to cover a Level 30 alarm requirement. EUI Dashboards shall be updated.

<b>Table 4.2 BACnet Alarm Level - Notification Table</b>		
<b>BACnet Alarm Level</b>	<b>WTCC Alarm Priority</b>	<b>Notification</b>
10	A1	Email sent to WTCC & MCSP, Call center notified.
15	A1 & IT	Email sent to WTCC & MCSP, Call center & IT notified.
20	A2	Email sent to WTCC & MCSP.
30	Default	No notification. Programmed as Skyspark rules and viewed on Spark or KPI Dashboard.

### 1.03 QUALITY ASSURANCE

- A. References: This section contains references to the following documents that are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section prevail:
1. ASHRAE Automatic Control Terminology for Heating, Ventilating, Air Conditioning
  2. ASHRAE BACnet Standard for Automation Protocol
  3. ASME MC85.1 Terminology for Automatic Control
  4. API RP 550-85 Installation of Instruments and Control Systems
  5. ISA S5.4-76 Diagram & Instrument Loop standards
  6. ISA S5H-79 Process Instrumentation Terminology
  7. NEMA EMC1 Energy Management System Definitions
  8. NEMA ICS 1-83 General Standards for Industrial Control and Systems
  9. NEMA ICS 2-83 Industrial Control Devices, Controllers, and Assemblies
  10. C2-90 National Electrical Safety Code
  11. Title 19 State Fire Marshall Regulations
  12. 70-93 National Electrical Code (NEC)
  13. NFPA 101-91 Life Safety Code
- B. Programmer: Company specializing in programming the work of this section with minimum three (3) years of application programming experience and start-up of the distributed digital control system proposed.
- C. Provide complete integration of equipment including serial digital equipment interfaces and software drivers to form a complete and comprehensive control environment.

### 1.04 DEFINITIONS

<b>Term</b>	<b>Definition</b>
MSI Contractor	Master Systems Integrator Contractor who is responsible for execution of the requirements contained in Division 25.
BACnet Interoperability Building Blocks (BIBB)	A BIBB defines a small portion of BACnet functionality that is needed to perform a particular task. BIBBS are combined to build the BACnet functional requirements for a device in a specification.
BACnet/BACnet Standard	BACnet communication requirements as defined by the latest version of ASHRAE/ANSI 135 and approved addenda.
Control Systems Server	A computer(s) that maintain(s) the system configuration and controller program database.
Controller	Intelligent stand-alone control device. Controller is a generic reference to system controllers, general application controllers, and configurable application controllers.
Distributed Digital Control	Microprocessor-based control including Analog/Digital conversion and program logic in a stand-alone networked environment.
Gateway	Bi-directional protocol translator connecting control systems that use different communication protocols.
Local Area Network	Computer or control system communication network limited to intranets (single building or campus of buildings).
Master-Slave/Token Passing	RS-485 based data link protocol as defined by the BACnet standard.
Point-to-Point	Serial communication as defined in the BACnet standard.

<b>Term</b>	<b>Definition</b>
Primary Control LAN	High speed, peer-to-peer controller LAN (Ethernet, ARCnet, other) connecting SCs and optionally AACs and ASCs. Refer to System Architecture below.
Protocol Implementation Conformance Statement	A written document that identifies the particular options specified by BACnet that are implemented in a device.
Router/Switch	A device that connects two or more networks at the network layer that can route data packets intelligently from one node to another.
Virtual Network	A LAN that runs over a standard Ethernet link using BACnet data packets wrapped in a cloak as if a separately wired network were applied. Used to separate control network traffic from enterprise network traffic when using the same hardwired or wireless link.
VPN	Virtual Private Network providing remote access to control intranets through firewalls from the internet using a secure interface.
Wiring	Raceway, fittings, wire, boxes and related items.

## **SUBMITTALS**

General: Submittals shall demonstrate compliance with technical requirements by reference to each subsection of this specification. Where a submitted item does not **comply fully** with each and every requirement of the Specifications, the submittal shall clearly indicate such deviations. Identification requirements for non-complying features of items are very specific. See Section 019913 for exact requirements.

Control Drawings: MSI Contractor submittal requirements. MSI will create submittal based on BAS contractor approved submittal to include the following:

1. Title Page
2. Database (points, trends, and alarms)
3. Graphics
4. Summaries
5. Schedules
6. Skyspark additions/changes

Graphic Displays: Include color prints or "screen shots" of each proposed graphic display proposed, complete with clear indication of (1) static components and dynamic components and (2) "on"/"off"/"alarm" condition designation convention.

## **PART 2 – PRODUCTS**

Approved Master System Integrators:

1. Essex Consulting Group
2. CMS
3. Building Control Solutions

## **EMIS – Energy Management Information Systems**

### EMIS Overview

Energy Management and Information Systems - a broad family of tools and services to manage commercial building energy use. These technologies include, for example, energy information systems, equipment-specific fault detection and diagnostic systems, benchmarking and utility tracking tools, automated system optimization tools, and building automation systems.

### Enterprise BAS Application

#### Overview

WTCC has chosen FIN Stack (FIN), developed by J2Innovations – a wholly owned subsidiary of Siemens AG, as the BAS enterprise software hosted on a WTCC server. FIN is designed to be open; supporting all

the major protocol standards used in buildings today, to enable integration with multiple building level systems and IoT deployments.

It is WTCC's goal to integrate from high level field controllers (e.g., a B-BC or B-AAC) to a FIN front end server to be a single location to view graphics, and interact through point overrides, and to manage alarming, scheduling and trending (AST). FIN leverages the project Haystack open-source metadata protocols by using tagging to automate configuration processes and deliver context-sensitive information to give a highly intuitive user experience. This allows building systems from various distributors to be integrated into a unified system in order to provide flexibility for expansion, maintenance, and service of the BAS system. The Owner, Wake Technical Community College, shall be the named license holder of all software associated with any and all incremental work on the projects.

Virtual Server Requirements (No new hardware, software, licenses are required. The following section supercedes the guidelines in the appendices.)

The Enterprise server is currently running Windows Server 2016.

#### FIN Stack Framework Software

#### **1. Scheduling/Calendars**

Primary schedules shall be written from FIN and pushed down to field controllers and building supervisory controllers.

- Event Schedules: Examples of what shall be programmed from FIN are; Holidays, Campus Closures, and Weather Calendar. For control option C2, the MSI shall coordinate with WTCC to set these schedules.

#### **2. Point Naming**

Use of WTCC preferred naming convention and Haystack 4.0 Naming Convention.

#### **3. Alarming**

All alarm logic shall be programmed in FIN. It shall be the responsibility of the MSI to program any new alarms associated with this project. Notifications will be provided by the front-end system.

- (BACnet Alarm Levels 10)
  - Immediate notifications sent to
    - 1. WTCC Facility Managers – 24/7
    - 2. MCSP technicians – 24/7
    - 3. On Call Center - M-F from 4pm to 7am. 24/7 weekends and holidays.
- (BACnet Alarm Levels 15)
  - 1. WTCC Facility Managers – 24/7
  - 2. MCSP technicians – 24/7
  - 3. WTCC IT Staff – 24/7
  - 4. On Call Center - M-F from 4pm to 7am. 24/7 weekends and holidays.
- (BACnet Alarm Levels 20)
  - 1. WTCC Facility Managers – 24/7
  - 2. MCSP technicians – 24/7
- Prior to building turnover to WTCC, the notifications shall be routed by a new SC-GC alarm topic. Alarm Classification/Priority  
Refer to [Table 4.2a-Critical Alarms](#) of Wake Tech's BAS Guideline
- Alarm Notifications  
Refer to the [Table 4.2 BACnet Alarm Level – Notification Table](#) Guideline for notification categories.

#### **4. Trending**

##### Digital Trends

- enable the history,
- allow the hisCollectCov
- hisType: Collected

##### Analog Trends

- enable the history type
- hisType: Collected
- hisCollectInt: set for 15 minutes

#### **Graphics**

The Master System Integrator (MSI) will define and create fully developed graphics for end user to operate, troubleshoot and maintain BAS controlled HVAC equipment.



## 5. Documentation

- Record mechanical, electrical, and BAS Documentation Drawings shall be loaded onto the Enterprise Server and be available in FIN through an O&M application on the Building SC Building Graphics. These documents shall be available on any screen of Building SC.

### FIN Action Categories and Permission Levels

Writable points in FIN are commanded through Actions. A gear symbol is used in graphics to show that a point has actions, and the gear can be clicked on to bring up the action choices for each point set as a "Set Value" choice in BAS software. An example is shown below for an AHU Supply Fan command.



Within FIN, Action categories are permissions with priority increasing in direct proportion to the number. That is, Permission 9 takes precedence over Permission 6 in FIN. Note that this is opposite from BACnet and Niagara where write level priority, a number from 1 to 16, is inversely proportional to the number (Niagara write level 9 overrides level 16).

The Contractor must understand that all values from FIN to the BAS are set to haystackWrite / bacnetWrite level in9.

Action category permissions work in conjunction with the user action access permission property tag which set users' permissions at "Set" (<=9), "Manual" (<=6), and "Emergency" (<=9). FIN users are only provided Actions that are at or below their username Access permission. For example, a user with Access Permission 6 does not have access to Permission 9 Actions.

The Master System Integrator (MSI) shall recognize the following FIN Action and Permission setup and use it to integrate buildings to FIN unless notified by the WTCC Project Manager or BAS Engineer to use other Action settings:

String Points		Bool Points	
Default Action Display	HVAC Permission	Default Action Display	HVAC Permission
Emergency Set	9	Emergency Active	9
Emergency Auto	9	Emergency Inactive	9
Manual Set	6	Emergency Auto	9
Manual Auto	6	Manual On	6
Set Default	9	Manual Off	6
Set Null	9	Manual Auto	6
		Set Default	9
Enum Points		Numeric Points	
Default Action Display	HVAC Permission	Default Action Display	HVAC Permission
Emergency Set	9	Emergency Set	9
Emergency Auto	9	Emergency Auto	9
Manual Set	6	Manual Set	6
Manual Auto	6	Manual Auto	6
Set Default	9	Set Default	9
Set Null	9	Set Null	9

Remember that no matter what the above FIN Action Permission levels are, all FIN Actions are written to building level BAS at haystackWrite / bacnetWrite level in9.

### PART 3 - EXECUTION

The Master System Integrator shall follow the requirements of the current version of the WTCC BAS guidelines Section 3 EMIS – Energy Management Information Systems and consult with the WTCC Project Manager and BAS Engineer when providing MSI services.

The EMIS at Wake Tech shall be developed by an MSI via open collaboration with the BAS contractor. BAS/MSI milestones should be included in construction schedules and in OAC meetings. EMIS consistency shall be maintained with every project integration. On all projects Wake Tech prefers one company, ideally either GC or Mechanical Contractor, to contract both BAS and MSI companies. Wake Tech has developed a spreadsheet template that can help either GC or Mechanical Contractor to manage the coordination of this work.

The MSI contractor is to review all contract documents including drawings, specifications, and submittals related to the BAS and associated equipment including but not limited to those referenced above and is responsible for the entire scope as it relates to the MSI contractor therein.

#### Graphics

The Master System Integrator (MSI) will define and create fully developed graphics for end user to operate, troubleshoot and maintain BAS controlled HVAC equipment.

- Documentation As built Documentation Drawings shall be loaded onto the Enterprise Server and be available in FIN through a hyperlink on Building Homepage Graphics.

## **Alarms**

All alarms are programmed by MSI.

Alarming Overview: (Contractor shall obtain Alarm priorities from the WTCC Project Manager) These alarms will be synched to the EMIS using standard BACnet protocol when the field controller is connected to the network. Notifications of these alarms will be sent out via FIN front end. Alarm extensions shall be created and prioritized according to (WTCC) BAS Alarm Standards. Operators with sufficient privilege shall be able to read and write alarm parameters for all standard BACnet alarm types. Operators with sufficient privilege shall be allowed to change routing (BACnet notification classes) for each alarm including the destination, time delay, priority class, day of week, time of day, and the type of transition involved. Alarms shall be programmed with time delays and other logic to prevent nuisance tripping. Elimination of nuisance alarm notifications is a priority at (WTCC).

In order for alarm notifications to be sent to the correct email recipients, the Designer and Contractor shall use BACnet alarm levels shown in the BACnet Alarm Level – Notification Table below.

**Table 4.2 BACnet Alarm Level – Notification Table**

BACnet Alarm Level	WTCC Alarm Priority	Notification
10	A1	Email sent to WTCC & MCSP. Call center notified.
15	A1 & IT	Email sent WTCC, MCSP. Call Center & IT notified.
20	A2	Email sent to WTCC & MCSP.
30	Default	No notification. Programmed as Skyspark rules and viewed on Spark or KPI dashboards.

Use BACnet notification class divisions to assign priorities to alarms and use the Alarm Level Mapping shown in [Table 4.2a](#) below for alarm notifications.

### **Critical Alarms**

(WTCC) maintains a Critical Alarm List. Contractors shall obtain the current list from the WTCC Project Manager. [Table 4.2a](#) below displays a list of Critical Alarms that shall be programmed into each B-AAC or B-BC.

Coordinate all critical alarms with WTCC, including critical alarms for the building.

**Table 4.2a Critical Alarms Table**

Miscellaneous	IT-MDF Room High Temp	Upon activation	None/None	A1
---------------	-----------------------	-----------------	-----------	----

### **Default Alarms**

Default alarms will be programmed and visualized in SkySpark. See WTCC BAS Guidelines in Appendix A for more information.

Closeout Submittals:

**Redlined as-built drawings with any changes made during integration. Any corrections requested by WTCC shall be made and resubmitted.**

#### **3.01 ADJUSTMENTS**

- A. Adjust controls and equipment to maintain the conditions indicated, to perform and to operate in the sequences specified.
- B. Adjust values after installation for optimal operation and intuitive manner.

#### **3.02 WORKSTATION DATABASE AND GRAPHICS GENERATION**

- A. Database: Prepare and enter database and complete the programming for automatic control functions for the owner as called for in the Sequence of Operation and Control Drawings.

- B. Color Graphics: Create and enter color graphics for each mechanical system including dynamic point database required for each input/output required.
  - 1. Color graphic screens shall be created to match existing graphics for similar equipment and systems currently on the EMIS, P&I diagrams and AHU airflow detail as shown on design Drawings.
  - 2. Generate color graphics showing system schematics for each building and for its respective heating and cooling plants.

Create floorplan graphics using the standard FIN graphic package based on approved control drawings. PDF or .dwg floor plans will be provided to the MSI.

Graphics Required:

- 1. Campus homepage (edit) to include bldg.
  - a. Bldg./Site will be referred to as EE.
  - b. Site description will be WTCC - WTE - 890-07088 - EF2-Fire & Rescue RR
- 2. Homepage graphic. (new) Coordinate with WTCC for Bldg. image.
- 3. Floorplan graphic. (new) Zones shall include temp and reference effective zone temp set point to allow for zone highlighting program to reflect warm/cold areas. Include DSSI-1info for room 105.
- 4. Equipment graphic. (new) Provide one template for room(s) 101, 102, 103, & 104. That includes info for both EF and temp, temp set point, occupancy.
- 5. **Fire and Rescue Training Facility shall be added to the existing energy dashboard to allow input of utility bill information similar to current buildings using the energy dashboard in Skyspark.**

### 3.03 TRENDING

#### **Native Trending**

At a minimum, provide programming and trending for Points as follows:

- 1) Create extensions for physical input and output in the system. The TL objects should reside in a B-BC, B-AAC or B-ASC field controller. Refer to Wake Tech's Points Library Table for list of points that shall be trended.
- 2) With the exception of points identified below, analog data shall be trended on a 15-minute interval. This includes but is not limited to analog inputs, outputs, and automatically resetting set-points. Examples include space temperatures, PID loop inputs and outputs,
- 3) Boolean data points shall be trended on change of value (CoV): inputs and outputs.
- 4) Each B-AAC and B-BC field controller shall be capable of storing all trend data locally for a minimum of 3 days and preferably for 5 days. Trend data for B-ASC devices must be stored in these high-level controllers if the B-ASC device cannot store and pass along trends to the EMIS server.
- 5) Trend data shall be synced to the EMIS server for input to the College's data historian. Currently the data historian resides on the SkySpark platform. Trend data may be pulled from field controllers by FIN or SkySpark or other applications.

Coordinate all trend times and storage durations with owner. Most stringent trend intervals (shortest interval) specified in the documents shall be maintained.

### 3.04 TESTING

Verify graphic display of each HVAC system and component. Confirm that the graphic is in accordance with the design data and reviewed submittals, includes all data points required, displayed data is correct and in the correct format and units, and changes in point conditions or status are accurately updated. Evaluate the refresh rate of data display.

Verify report generation (status, profile, energy, etc.) by entering commands to generate reports such as all points, trend, total display of a system, timed display, and other specified reports. Examine the report content for general format, system/point code, time interval of reporting, point status/value/unit, energy amount/rate/unit, status of control and set time (manual or automatic), and other specification required information.

Check for proper operation of system status reports, including point status reviews which would include information such as points currently in alarm, points removed from alarm checking, points off of scan, etc.

Test alarm reporting by initiating alarm conditions of different points at different alarm levels in sequence to examine alarm reports. The reports shall show alarm location and device, alarm time, cause of alarm,

current status of the point, etc. as required in the specifications. When alarm conditions are removed the printer shall print updated status report. Also verify audible alarm operations in accordance with specification requirements. Then initiate alarm conditions at different levels at the same time to check alarm priority.

Trending performance shall be tested by creating trend logs for each control sequence and monitoring the trend reports throughout the period that each control sequence is tested.

### 3.05 TRAINING

- A. Provide a training outline to the Owner prior to scheduling training sessions.
- B. Training sessions shall be provided for the Owner's personnel by factory trained control system engineers, programmers and technicians.
- C. Conduct training courses for the designated Owner's personnel in the maintenance and operation of the control system.
- D. Include instruction on specific systems and instructions for operating the installed system to include as a minimum:
  - 1. Sequence of operation.
  - 2. Operation of control system.
  - 3. Function of each component.
  - 4. System operating procedures.
  - 5. Programming procedures.
  - 6. Maintenance procedures.
  - 7. Alarm procedures.
  - 8. Trending procedures.
  - 9. Emergency restart and local override.
- E. Provide telephone support and answer questions throughout the two-year warranty period.

**END OF SECTION**

# APPENDIX A

# READ ME

	Topic	Notes	Notes cont'd
1	Rules-Enabled/Disabled	Rules Enabled developed by Essex. WTCC is interested in adding new Rules.	
2	Disabled Rules Tab.	Rules have not been verified.	First place to look to see if possible new rule is already in Skyspark, but just disabled.
3	New Rules	1. make up for default alarms in BAS 2. identify equipment underperformance from ASHRAE Guideline 36 3. Rule Type will need to be discussed with WTCC. (Wendell, Chris, & Brian) 4. Weights will need to be discussed with WTCC. (Wendell, Chris, & Brian)	
4			
5			
6			
7			
8			
9			
10			

# ENABLED RULES

id	color	dis	disabled	enabled	help	rule	sparkRule	weight	kpiRule	ruleCost	ruleFunc	ruleInUse	ruleOn	targetRule	mod
1- VAV Space Temp Within 70-73 Degree Range KPI	#34495e	1- VAV Space Temp Within 70-73 Degree Range KPI		✓	percentage of time that space temp is inside of 70-73 degree range (only during occupancy)	✓			✓		kpi_SpaceTempOutOfRange	✓	equip and (vav or (ahu and directZone))		16-Sep-2024 Mon 10:42:09AM UTC
2- VAV Space Temperature Within 4 Degrees of Setpoint KPI	#e74c3c	2- VAV Space Temperature Within 4 Degrees of Setpoint KPI		✓	percentage of time that the space temp is within 4 degreesof its specified setpoint (during occupied times)	✓			✓		spk_spaceTempPerformance(,,,false,4,0,true)	✓	equip and (vav or (ahu and directZone))		22-Aug-2024 Thu 4:04:17PM UTC
3- VAV Discharge Airflow Performance KPI	#16a085	3- VAV Discharge Airflow Performance KPI		✓	percentage of time that the discharge airflow is within 15% of its specified setpoint (during occupied times)	✓			✓		kpi_DischargeAirflowPerformance	✓	vav and equip		16-Sep-2024 Mon 11:36:48AM UTC
4- AHU Supply Air Temp Performance KPI	#9659b6	4- AHU Supply Air Temp Performance KPI		✓	percentage of time that the ahu supply air temperature is within 3 degrees of its specified setpoint (during occupied times)	✓			✓		kpi_AhuSATperformance	✓	equip and ahu		16-Sep-2024 Mon 11:41:24AM UTC
5- AHU Static Pressure Performance KPI	#95a5a6	5- AHU Static Pressure Performance KPI		✓	percentage of time that the static pressure of the discharge air is within 15% of its specified setpoint (during occupied times)	✓			✓		kpi_DischargeAirStaticPressurePerformance	✓	equip and ahu and vavZone		16-Sep-2024 Mon 11:45:14AM UTC
6- Chiller Plant Temperature Performance KPI	#3498db	6- Chiller Plant Temperature Performance KPI		✓	percentage of time that chilled water discharge temp is within 3 degrees of its specified setpoint (during occupied times)	✓			✓		spk_chillerDischargeTempPerformance(,,,false,3,0,true)	✓	equip and chiller		30-Aug-2024 Fri 8:06:46PM UTC
AHU Chilled Water Valve Failure (Stuck Closed)	#95a5a6	AHU Chilled Water Valve Failure (Stuck Closed)		✓	AHU Valve position was set to fully open (100%) and the discharge air temperature is more than the acceptable 3 degree differential from the setpoint.	✓	✓	1			ahuChwValveStuckClosed	✓	equip and ahu and chilledWaterCooling		16-Sep-2024 Mon 11:12:07AM UTC
AHU Chilled Water Valve Failure (Stuck Open)	#95a5a6	AHU Chilled Water Valve Failure (Stuck Open)		✓	AHU Valve position was set to fully closed (0%) and the discharge air temperature is less than the acceptable 3 degree differential from the mixed air temp.	✓	✓	1			ahuChwValveStuckOpen	✓	equip and ahu and chilledWaterCooling		16-Sep-2024 Mon 11:12:07AM UTC
AHU Fan Off While Occ	#3498db	AHU Fan Off While Occ		✓	AHU Fan Stopped While Occupied	✓	✓	10			ahuStoppedWhileOcc	✓	equip and ahu	✓	16-Sep-2024 Mon 11:27:25AM UTC
AHU Fan Running 24/7	#3498db	AHU Fan Running 24/7		✓	This spark finds all the instances where an ahu is running for 24 hrs	✓	✓	9			spark_AHUFanRunning	✓	equip and ahu	✓	16-Sep-2024 Mon 11:27:25AM UTC
AHU Running While Unocc	#3498db	AHU Running While Unocc		✓	AHU fan is on while occupied command is off.	✓	✓	8			ahuRunningUnocc	✓	equip and ahu	✓	22-Oct-2024 Tue 4:45:14PM UTC
AHU Static Pressure Performance	#9659b6	AHU Static Pressure Performance		✓	periods when the static pressure of the discharge air is outside 15% of its specified setpoint (during occupied times)	✓	✓				spk_dischargeAirStaticPressurePerformance(,,,false,0.15,false)	✓	equip and ahu and vavZone		30-Aug-2024 Fri 7:01:20PM UTC
Chiller Leaving Setpoint is Too High	#e74c3c	Chiller Leaving Setpoint is Too High		✓	The chiller leaving setpoint is set above the expected maximum.	✓	✓	9			spk_chwTooHigh	✓	equip and chiller		22-Aug-2024 Thu 3:59:16PM UTC
Chiller Leaving Setpoint is Too Low	#3498db	Chiller Leaving Setpoint is Too Low		✓	The chiller leaving setpoint is set below the expected minimum.	✓	✓	9			spk_chwTooLow	✓	equip and chiller		22-Aug-2024 Thu 3:59:16PM UTC
Chiller On but Insufficient Flow	#e844ad	Chiller On but Insufficient Flow		✓	Chiller Enable point is reading true while flow point is reading less than 50 gal/min	✓	✓				jg_chillerOnButNoFlow	✓	equip and (chillerPlant or chiller)		22-Aug-2024 Thu 3:19:51PM UTC
CHW Diff Pressure Varying from SP	#e844ad	CHW Diff Pressure Varying from SP		✓	CHW DP off by more than 7 psi of setpoint	✓	✓				jg_diffPress	✓	equip and (chillerPlant or chilled or equipRef->chillerPlant)		3-Jul-2024 Wed 10:55:00PM UTC
CHW Insufficient Cooling	#d35400	CHW Insufficient Cooling		✓	Chilled Water Secondary Return temperature is less that three degrees F above Chilled Water Secondary Supply temperature	✓	✓				jg_lowDeltaT	✓	equip and (chillerPlant or chilled or equipRef->chillerPlant)		3-Jul-2024 Wed 10:55:00PM UTC
Fan Running 24/7	#1abc9c	Fan Running 24/7		✓	This finds all fans that are running for more than 23hrs	✓	✓	9			spark_FanRunning	✓	(vav or fcu) and not underConstruction	✓	3-Jul-2024 Wed 10:55:00PM UTC
Faulty OAH Sensor	#3498db	Faulty OAH Sensor		✓	Outside Air Humidity is above 100% or below 0% for longer than 30 minutes	✓	✓	3			spark_faultyRelHumSensor	✓	outside and air and humidity and sensor and point and not underConstruction	✓	8-Aug-2024 Thu 1:09:06PM UTC
Faulty OAT Sensor	#3498db	Faulty OAT Sensor		✓	Sensor is more than 7 degrees off the weather data or > 120 degrees	✓	✓	4			faultyOATSensor	✓	ahu and not underConstruction	✓	3-Jul-2024 Wed 10:55:00PM UTC
High CO2	#c0392b	High CO2		✓	CO2 Point is above 1000 ppm for longer than 30 minutes consecutively.	✓	✓	4			spk_highCO2	✓	equip and (vav or ahu) and not underConstruction	✓	3-Jul-2024 Wed 10:55:00PM UTC
High Humidity	#c0392b	High Humidity		✓	Humidity Point is above 65% for longer than 30 minutes consecutively.	✓	✓	8			spk_highHumidity	✓	equip and (ahu or vav) and not underConstruction	✓	3-Jul-2024 Wed 10:55:00PM UTC
KPI AHU Discharge Temp	#e67e22	KPI AHU Discharge Temp		✓	KPI to find the min and max of the discharge air temp of any AHU	✓			✓		kpi_DischargeTemp	✓	equip and ahu		26-Aug-2024 Mon 6:13:33PM UTC
KPI AHU Fan Runtime		KPI AHU Fan Runtime		✓		✓			✓		kpi_FanRunTime	✓	ahu		3-Jul-2024 Wed 10:55:00PM UTC
KPI Boiler Discharge Max Temp	#c0392b	KPI Boiler Discharge Max Temp		✓	KPI Boiler Discharge Min and Max Temp	✓			✓		kpi_BoilerDischargeMaxTemp	✓	boiler		3-Jul-2024 Wed 10:55:00PM UTC
KPI Boiler Return Max Temp	#c0392b	KPI Boiler Return Max Temp		✓	Boiler Return Min and Max Temp	✓			✓		kpi_BoilerReturnMaxTemp	✓	boiler		3-Jul-2024 Wed 10:55:00PM UTC
KPI Chiller Discharge Min Max	#3498db	KPI Chiller Discharge Min Max		✓	KPI Chiller Discharge Temp Min Max	✓			✓		kpi_ChillerDischargeMax	✓	chiller		3-Jul-2024 Wed 10:55:00PM UTC
KPI Chiller Return Temp Max	#3498db	KPI Chiller Return Temp Max		✓	Chiller Return Temp Min and Max	✓			✓		kpi_ChillerReturnMaxTemp	✓	chiller		3-Jul-2024 Wed 10:55:00PM UTC
KPI FCU Fan Runtime		KPI FCU Fan Runtime		✓		✓			✓		kpi_FanRunTime	✓	fcu		3-Jul-2024 Wed 10:55:00PM UTC
KPI Standard Setpoint Compliance		KPI Standard Setpoint Compliance		✓	Setpoints for Summer >= 73 and Setpoints for Winter <= 70	✓			✓		kpi_StandardSetpointCompliance	✓	zone and air and temp and sensor and equipRef->vav and not discharge		3-Jul-2024 Wed 10:55:00PM UTC
KPI Supply and Return Delta	#3498db	KPI Supply and Return Delta		✓	Average delta between the supply and return air temp	✓			✓		kpi_SupplyReturnDelta	✓	equip and ahu		30-Aug-2024 Fri 10:41:15PM UTC
KPI Total Sparks for Site	#3498db	KPI Total Sparks for Site		✓	Total Sparks for Site	✓			✓		kpi_TotalSparks	✓	site		3-Jul-2024 Wed 10:55:00PM UTC
KPI VAV Discharge Temp		KPI VAV Discharge Temp		✓	The min and max discharge temp for any vav	✓			✓		kpi_DischargeTemp	✓	vav		3-Jul-2024 Wed 10:55:00PM UTC
KPI Zone Temp Avg.	#e67e22	KPI Zone Temp Avg.		✓	KPI Zone Temp Avg. When Occupied	✓			✓		kpi_ZoneTempAvgWhenOcc	✓	vav		3-Jul-2024 Wed 10:55:00PM UTC
KPI Zone Temp vs SP Delta	#f39c12	KPI Zone Temp vs SP Delta		✓	Zone Temp vs SP Delta	✓			✓		kpi_ZoneTempvsSP	✓	equip and vav		30-Aug-2024 Fri 3:45:43PM UTC
KPI Zone Temp When Occupied	#e67e22	KPI Zone Temp When Occupied		✓	Min and Max Zone Temp When Occupied	✓			✓		kpi_ZoneTempWhenOccupied	✓	vav		3-Jul-2024 Wed 10:55:00PM UTC
Possible Broken CHW Temp Sensor		Possible Broken CHW Temp Sensor			The returning water temperature from the building was 5 degrees below the leaving temperature from the CHWS.	✓	✓				jg_au_brokenDeltaT	✓	equip and (chillerPlant or chilled or equipRef->chillerPlant)		3-Jul-2024 Wed 10:55:00PM UTC
Secondary CHWS Too High	#f39c12	Secondary CHWS Too High		✓	Secondary CHW Leaving Temperature is above 55 °F for longer than 1 hour consecutively.	✓	✓	9			spk_secChwTooHi	✓	equip and (chillerPlant or equipRef->chillerPlant) and not underConstruction		3-Jul-2024 Wed 10:55:00PM UTC
Secondary CHWS Too Low	#f39c12	Secondary CHWS Too Low		✓	Secondary CHW Leaving Temperature is below 40 °F for longer than 1 hour consecutively.	✓	✓	9			spk_secChwTooLow	✓	equip and (chillerPlant or equipRef->chillerPlant) and not underConstruction		3-Jul-2024 Wed 10:55:00PM UTC
VAV Broken Zone Temp Sensor	#f1c40f	VAV Broken Zone Temp Sensor		✓	VAV Space Temp above 90°F or below 50°F for longer than 1 hour, or VAV Space Temp does not change value by more than 0.01°F for longer than 6 hours.	✓	✓	9			jg_vavZoneTempSensorBroken	✓	equip and vav	✓	22-Oct-2024 Tue 1:51:43PM UTC
VAV High Space Temp	#c0392b	VAV High Space Temp		✓	VAV Space Temp above 80 °F (but below 90 °F) for longer than 1 hour between 8am and 5 pm.	✓	✓	8			jg_highSpaceTemp	✓	equip and vav	✓	22-Aug-2024 Thu 4:01:50PM UTC
VAV Low Space Temp	#2980b9	VAV Low Space Temp		✓	VAV Space Temp below 60 °F (but above 50 °F) for longer than 1 hour between 8am and 5 pm.	✓	✓	8			jg_lowSpaceTemp	✓	equip and vav	✓	22-Aug-2024 Thu 4:01:50PM UTC

# DISABLED RULES

id	color	dis	disabled	enabled	help	rule	sparkRule	weight	kpiRule	ruleCost	ruleFunc	ruleInUse	ruleOn	targetRule	mod
AHU Discharge Airflow Performance	#9b59b6	AHU Discharge Airflow Performance	✓		periods when the discharge airflow is outside 15% of its specified setpoint (during occupied times)	✓	✓				spk_dischargeAirflowPerformance(...,false,0.15,false)		ahu		23-Nov-2021 Tue 7:12:22PM UTC
AHU Supply Air Temp Performance	#9b59b6	AHU Supply Air Temp Performance	✓		periods when the AHU supply air temperature is outside 3 degrees of its specified setpoint (during occupied times)	✓	✓				spk_ahuSATperformance(...,false,3.0,false)		ahu and not directZone		23-Nov-2021 Tue 7:12:22PM UTC
Chilled Water Setpoint Deviation		Chilled Water Setpoint Deviation	✓		Water leaving chiller is hotter than the acceptable threshold based on the effective set point.	✓	✓	6			chilledWaterSetPointDeviation		chiller		15-Aug-2022 Mon 4:59:27PM UTC
Chiller Plant Temperature Performance	#9b59b6	Chiller Plant Temperature Performance	✓		periods when the chiller supply water temperature is outside 3 degrees of its specified setpoint (during occupied times)	✓	✓				spk_chillerDischargeTempPerformance(...,false,3.0,false)		chiller and equip and not pump		23-Nov-2021 Tue 7:12:22PM UTC
CHW Waste	#3498db	CHW Waste	✓		periods when the ahu discharge temp is significantly lower than setpoint	✓	✓				spk_cost_chwWaste(...)		ahu and not directZone		23-Nov-2021 Tue 7:12:22PM UTC
Command Mismatch		Command Mismatch	✓		Equip commanded on or off but sensor indicates otherwise for over 10 minutes.	✓	✓				commandMismatch		equip and (chiller or ahu or pump)		29-Jun-2022 Wed 1:57:44AM UTC
Cooling When Econ Available	#2ecc71	Cooling When Econ Available	✓		periods when AHU is using mechanical cooling when it should be economizing	✓	✓				spk_coolingWhenEconAvailable		ahu and not directZone		23-Nov-2021 Tue 7:13:26PM UTC
Damper Always At 100	#c0392b	Damper Always At 100	✓		periods when damper is 100% open for at least 24 hours	✓	✓				spk_valveAlways100(...,24)		damper and unit == "%"		19-Aug-2022 Fri 3:58:59PM UTC
Economizing When Shouldnt	#2ecc71	Economizing When Shouldnt	✓		periods when AHU should not be economizing but is	✓	✓				spk_economizingWhenShouldnt		ahu and not directZone		23-Nov-2021 Tue 7:13:26PM UTC
Fan Signal Mismatch	#c0392b	Fan Signal Mismatch	✓		periods when the fan speed does not reflect the fan command	✓	✓				spk_fanSignalMismatch		ahu		29-Jun-2022 Wed 1:45:53AM UTC
Faulty AHU Discharge Air Static Pressure Sensor	#c0392b	Faulty AHU Discharge Air Static Pressure Sensor	✓		days when the sensor value didn't change at all	✓	✓				spk_faultySensor(...,"discharge and air and pressure and sensor and not alarmPoint",0.1,1day)		ahu and not directZone		19-Aug-2022 Fri 4:02:17PM UTC
Faulty AHU Supply Air Temp Sensor	#c0392b	Faulty AHU Supply Air Temp Sensor	✓		days when the sensor value didn't change at all	✓	✓				spk_faultySensor(...,"discharge and air and temp and sensor",0.1,1day)		ahu and not directZone		30-Nov-2021 Tue 8:18:19PM UTC
Faulty Chiller Discharge Water Temp Sensor	#c0392b	Faulty Chiller Discharge Water Temp Sensor	✓		days when the sensor value didn't change at all	✓	✓				spk_faultySensor(...,"chilled and water and not sp",0.1,1day)		chiller		30-Nov-2021 Tue 8:18:19PM UTC
Faulty Discharge Airflow Sensor	#c0392b	Faulty Discharge Airflow Sensor	✓		days when the sensor value didn't change at all	✓	✓				spk_faultySensor(...,"discharge and air and flow and sensor",0.1,1day)		vav and equip or (ahu and directZone)		19-Aug-2022 Fri 4:02:17PM UTC
Faulty Relative Humidity Sensor	#9b59b6	Faulty Relative Humidity Sensor	✓		Relative Humidity is over 100%	✓	✓				spark_faultyRelHumSensor		equip		19-Aug-2022 Fri 3:59:28PM UTC
Faulty Space Temp Sensor	#c0392b	Faulty Space Temp Sensor	✓		days when the sensor value didn't change at all	✓	✓				spk_faultySensor(...,"zone and air and temp and sensor and not discharge and not offset",0.1,1day)		vav and equip or (ahu and directZone)		24-Jan-2020 Fri 2:29:34PM UTC
Find Nulls	#2c3e50	Find Nulls	✓		Sensor data is null for this period of time.	✓	✓				stdQFindNulls		point and kind == "Number" and sensor		5-Mar-2020 Thu 1:39:58PM UTC
Find Outliers Based on StdDev	#2c3e50	Find Outliers Based on StdDev	✓		Outliers based on StdDev found.	✓	✓				stdQFindOutliers		point and kind == "Number" and hisDQAverage and hisDQstdDev		6-Mar-2020 Fri 4:47:20PM UTC
Flatlined Sensor	#c0392b	Flatlined Sensor	✓		periods when the value remained unchanged for at least 24 hours	✓	✓				spk_flatlinedSensor(...,0.1,1day)		point and kind == "Number" and sensor		5-Mar-2020 Thu 1:40:11PM UTC
High Pressure Drop	#8e44ad	High Pressure Drop	✓		High discharge air pressure drop. Greater than 2 inH2O for at least 30 minutes	✓	✓				jg_highDiffPress		ahu		29-Jun-2022 Wed 2:00:06AM UTC
KPI Total Arc Notes	#bdc3c7	KPI Total Arc Notes	✓	✓	Total Arc Notes Made per Site	✓			✓		kpi_TotalArcs	✓	site		26-Aug-2024 Mon 6:21:49PM UTC
KPI Total Energy Used	#1c40f	KPI Total Energy Used	✓	✓	Total Kwh Energy Used	✓			✓		kpi_TotalEnergyUsed	✓	site		26-Aug-2024 Mon 6:21:49PM UTC
Mixed Air Damper Leaking	#c0392b	Mixed Air Damper Leaking	✓		periods when ahu mixed air damper is leaking air	✓	✓				spk_mixedAirDamperLeaking		ahu and not directZone		23-Nov-2021 Tue 7:31:19PM UTC
OA Temp Sensor Needs Calibration		OA Temp Sensor Needs Calibration	✓		Outside Air Temp Sensor is outside of the acceptable deviation when compared against the reported weather service temperatures. Sensor likely needs calibration.	✓	✓				outsideAirTempCalibration		air and temp and sensor and outside		23-Nov-2021 Tue 7:30:34PM UTC
OAT vs Real OAT	#1c40f	OAT vs Real OAT	✓		OAT is more than 5 degrees off real outside air	✓	✓				spark_OATDiff		outside and air and temp		23-Nov-2021 Tue 7:30:34PM UTC
Preheat Waste	#3498db	Preheat Waste	✓		periods when AHU is preheating when it shouldn't be	✓	✓				spk_preheatWaste_func(...)		ahu and not directZone		23-Nov-2021 Tue 7:31:19PM UTC
Short Cycling	#95a5a6	Short Cycling	✓		Point is cycling on/off more often than its min on/off times.	✓	✓				shortCycling		point and kind=="Boot"		19-Aug-2022 Fri 3:58:35PM UTC
Simultaneous Heating and Cooling	#c0392b	Simultaneous Heating and Cooling	✓		periods when the heating and cooling valves are both open	✓	✓				spk_simultaneousHeatingAndCooling		ahu		19-Aug-2022 Fri 3:59:12PM UTC
SM Heating Command	#e67e22	SM Heating Command	✓			✓	✓				heatingCmdSM		equip and vav		29-Jun-2022 Wed 1:59:31AM UTC
TS Gap Too Large	#2c3e50	TS Gap Too Large	✓		There are gaps in your data	✓	✓				stdQTSGap		point and kind == "Number" and hisDQInterval and hisDQExpire		6-Mar-2020 Fri 2:08:54PM UTC
Valve Always At 100	#c0392b	Valve Always At 100	✓		periods when valve is open 100% for at least 24 hours	✓	✓	6			spk_valveAlways100(...,24h)		(water or preheat or cooling) and valve and unit == "%" and not position		18-Aug-2022 Thu 1:27:28PM UTC
Valve Stuck Open	#27ae60	Valve Stuck Open	✓		Valve status is 0% but there is a 4 degree difference between the return and supply temp	✓	✓				spark_ValveStuckOpen		ahu		18-Aug-2022 Thu 1:27:28PM UTC
VAV Discharge Airflow Performance	#9b59b6	VAV Discharge Airflow Performance	✓		periods when the discharge airflow is outside 15% of its specified setpoint (during occupied times)	✓	✓				spk_dischargeAirflowPerformance(...,false,0.15,false)		vav and equip		23-Nov-2021 Tue 7:12:51PM UTC
VAV Heating Coil Valve Leaking	#c0392b	VAV Heating Coil Valve Leaking	✓		periods when VAV SAT is greater than AHU SAT while the heating coil valve is closed	✓	✓				spk_vavHeatingCoilValveLeaking(...,5.0,0.5h)		vav and equip		19-Aug-2022 Fri 3:59:48PM UTC
VAV Heating Coil Valve Not Opening	#c0392b	VAV Heating Coil Valve Not Opening	✓		periods when the temperature gradient across the heating coil is low while the valve is opened	✓	✓				spk_vavHeatingValveBlocked		vav and equip		19-Aug-2022 Fri 3:59:48PM UTC
VAV Space Temperature Out of Range 65-75	#9b59b6	VAV Space Temperature Out of Range 65-75	✓		periods when the zone temp is outside of 65-75 degrees (during occupied times)	✓	✓				spk_spaceTempOutOfRange		vav and equip or (ahu and directZone)		14-Dec-2021 Tue 1:27:33PM UTC
VAV Space Temperature Outside 4 Degrees of Setpoint	#9b59b6	VAV Space Temperature Outside 4 Degrees of Setpoint	✓		periods when the zone temperature is greater than 4 degrees outside its specified setpoint (during occupied times)	✓	✓				spk_spaceTempPerformance(...,false,4.0,false)		vav and equip or (ahu and directZone)		23-Nov-2021 Tue 3:17:13PM UTC
Zone Temp and Sp Comparison Cool	#3498db	Zone Temp and Sp Comparison Cool	✓		Zone Temp is Off Sp by amount for too long	✓	✓				zoneTempVsSpVariationCooling		vav		15-Aug-2022 Mon 5:01:33PM UTC
Zone Temp and Sp Comparison Heat	#c0392b	Zone Temp and Sp Comparison Heat	✓		Zone Temp is Off Sp by amount for too long	✓	✓				zoneTempVsSpVariationHeating		vav		15-Aug-2022 Mon 5:01:24PM UTC
Zone Temp Out Of Range	#e67e22	Zone Temp Out Of Range	✓		Zone temp is above 110 or below 50	✓	✓				spark_zoneTempOutOfRange		vav		20-Dec-2021 Mon 2:23:27PM UTC



**SECTION 262713 – ELECTRICAL METERING EQUIPMENT**

**PART 1 - GENERAL**

**RELATED DOCUMENTS**

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

**QUALITY ASSURANCE**

**Manufacturers:** Firms regularly engaged in manufacture of electrical metering equipment, of types and ratings required in this Section, whose products are Listed and Labeled for the purpose intended. Subject to compliance with requirements provide equipment equivalent to that provided by the following manufacturers:

Electro-Industries  
Square D  
Cutler Hammer  
General Electric  
Siemens

**Codes and Standards:**

**Electrical Code Compliance:** Comply with applicable State code requirements of the authority having jurisdiction and appropriate NEC Article as applicable to the indicated equipment.

**Testing Laboratory Compliance:** Comply with applicable requirements of relevant UL standards. Provide equipment that is Listed and Labeled. Provide equipment with surge withstand ability conforming to IEEE C37.90.1.

**Special-Use Markings:** Provide equipment, constructed for special use, with appropriate Listed marks that indicate suitability for special type of use or application indicated.

**SUBMITTALS**

Submittals shall be made in strict accordance with the requirements of Section 019913. Specific submittal requirements are defined in each section of this Division.

**Product Data:** Submit manufacturer's technical product data, including specifications and installation instructions, for electrical metering equipment. Submit published documents for incidental metering equipment items including interconnection and connectivity cabling, display units, sensors, current and voltage transformers, and software packages.

**Shop Drawings:** Submit shop drawings showing equipment, device locations, and connecting wiring of entire electrical metering system. Shop drawings shall show connections to the Owner's LAN or intranet system where such connections are depicted on the Drawings. Copies of Project Construction Documents or details therefrom may not be a part of the shop drawing submittal.

**Installation Instructions:** Submit Manufacturer's detailed installation instructions for all electrical metering system components.

**PART 2 - PRODUCTS**

**EQUIPMENT**

General: Except as otherwise indicated, provide the specific item of equipment as described within the notes, reference or equipment schedules on the Drawings. Equipment shall be manufactured by the indicated manufacturer unless specific approval is obtained in writing from the Engineer.

**SWITCHBOARD OR MAIN DISTRIBUTION PANELBOARD POWER METERS**

The Meter shall accept current inputs from standard instrument transformers (5A secondary current transformers).  
The meter shall accept a voltage metering range of up to 250 volts, phase to phase.

Meter shall be multi-function 3 phase, solid-state, socket-mount design.

1. Meter shall be capable of connection to three-phase, four-wire or three-phase, three-wire circuits.
2. Voltage sensing provisions shall be connected to a dedicated, 3 pole circuit breaker in main distribution panelboards.
3. Voltage sensing provisions shall be connected to a dedicated leads with fused protection in switchboards.
4. Meter shall support meter form factor 9S.
5. Meter enclosure shall be ringless type.

The Meter shall have the following ratings and specifications:

The Meter shall withstand 200% rated current continuously. It shall withstand 10 times rated current for at least 3 seconds without damage.

Voltage inputs shall be optically isolated to 2500 volts DC.

The Meter shall be user programmable to any CT ratio. Programming data shall be password protected. DIP switches or designs that offer only fixed ratios shall not be acceptable.

Voltage and current connections shall be segregated from each other to provide safe connections.

**The Meter shall have Ethernet port and RS-485 terminals for communication to external devices.**

The Meter shall have an accuracy of  $\pm 0.15\%$  or better for Volts and Amps, and  $\pm 0.2\%$  for Watts.

The Meter shall provide true RMS measurements of voltage, phase to neutral, and phase to phase; current, per phase and neutral; real power, reactive power, apparent power, power factor and frequency.

Voltages and currents shall be sampled at a minimum rate of 128 samples per cycle.

The Meter must be capable of providing readings for both instantaneous and average readings.

The Meter must also be capable of providing all single phase real, apparent, reactive power and power factor values.

The Meter shall record and store total bi-directional energy. It shall include separate registers for positive and negative energy.

The Meter shall record and store total bi-directional accumulated energy, total accumulated apparent energy, and total accumulated reactive energy.

The Meter shall meter max/min average demand values for all current and power readings. The demand interval shall be user programmable.

Maximum and minimum values shall be stored with a date/time stamp.

### **PANELBOARD POWER METERS**

The Meter shall accept current inputs from standard instrument transformers (5A secondary current transformers). The meter shall accept a voltage metering range of up to 250 volts, phase to phase.

Meter shall be multi-function 3 phase, solid-state design, suitable for mounting in separate enclosure at panelboards.

1. Meter shall be capable of connection to three-phase, four-wire or three-phase, three-wire circuits.
2. Voltage sensing provisions shall be connected to a dedicated, 3 pole circuit breaker in panelboards.

The Meter shall have the following ratings and specifications:

The Meter shall withstand 100 amps for at least 10 seconds without damage.

Voltage inputs shall be galvanically isolated to 2500 volts DC.

The Meter shall be user programmable to any CT ratio. Programming data shall be password protected. DIP switches or designs that offer only fixed ratios shall not be acceptable.

Voltage and current connections shall be segregated from each other to provide safe connections.

**The Meter shall have Ethernet port and RS-485 terminals for communication to external devices.**

The Meter shall have an accuracy of  $\pm 0.2\%$  or better for Volts and Amps and Watts.

The Meter shall provide true RMS measurements of voltage, phase to neutral, and phase to phase; current, per phase and neutral; real power, reactive power, apparent power, power factor and frequency.

## **PART 3 - EXECUTION**

### **EXAMINATION**

Examine areas and conditions under which metering systems are to be installed, and notify Engineer in writing of conditions detrimental to proper completion of work. Do not proceed with work until unsatisfactory conditions have been corrected.

### **INSTALLATION OF METERING EQUIPMENT**

General: Install metering equipment as indicated, in accordance with manufacturer's written instructions, applicable requirements of NEC standards and NECA's "Standard of Installation," and in compliance with recognized industry practices to ensure that products fulfill requirements.

Tighten connectors and terminals, including screws and bolts, in accordance with equipment manufacturer's published torque tightening values for equipment connectors. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals to comply with tightening torques specified in UL Stds. 486A and B.

Provide properly wired electrical connections for all equipment.

Provide test switches for locations where meters are installed at switchboards. CT's shall be provided as part of the switchboard package. Test switches shall be installed in a separate enclosure, between the CT's and the meter base and permit single point field connection of meter leads at the test switches.

1 Provide CT's and plated test switches for locations where meters are installed at main distribution panelboards. CT's  
2 shall be XX:5 Amp ratio based on specific panelboard application, where XX represents the panelboard rating. CT's  
3 shall be installed in the panelboard in a manner that avoids interference with branch wiring. Test switches shall be  
4 installed in a separate enclosure, between the CT's and the meter base and permit single point field connection of  
5 meter leads at the test switches.

6  
7  
8 Provide CT's and plated test switches for locations where meters are installed at sub panelboards (lighting and  
9 mechanical). CT's shall be XX:5 Amp, based on specific panelboard application, where XX represents the  
10 panelboard rating. CT's shall be installed in the panelboard in a manner that avoids interference with branch wiring.  
11 Test switches shall be installed in a separate enclosure along with meter, arranged to permit single point field  
12 connection of meter leads at the test switches.

### 13 **GROUNDING**

14  
15  
16  
17 Provide equipment grounding connections for equipment as indicated. Tighten connections to comply with tightening  
18 torques specified in UL Std 486A to assure permanent and effective grounds. All equipment shall be grounded with  
19 an insulated grounding conductor routed with the equipment feeder. Grounding conductor shall be bonded to the  
20 equipment grounding bus.

### 21 **FIELD QUALITY CONTROL**

22  
23  
24  
25 Prior to energizing electrical circuitry, check all accessible connections to manufacturer's tightening torque  
26 specifications.

27  
28 Prior to energizing equipment, check with resistance tester phase-to-phase and phase-to-ground insulation  
29 combinations to ensure insulation and continuity requirements are fulfilled.

30  
31 Prior to energizing, check equipment for electrical continuity of internal circuits, and for short-circuits.

### 32 **METERING EQUIPMENT START-UP**

33  
34  
35  
36 Where such services are available from the manufacturer, factory personnel shall start-up and test all equipment.  
37 Such start-up services shall be properly coordinated with other construction activities and shall be accomplished in a  
38 timely manner. Factory start-up services shall be provided at no additional cost to the Owner.

### 39 **ADJUSTMENTS**

40  
41  
42  
43 Any necessary adjustments to equipment shall be made by factory trained personnel at the time of start-up.

### 44 **CLEANING**

45  
46  
47  
48 Touch-up scratched or marred surfaces to match original finishes.

### 49 **DEMONSTRATION**

50  
51  
52  
53 Subsequent to wire and cable hookups, energize metering equipment and demonstrate functioning in accordance  
54 with requirements. Verify that metering data is available by access to the Owner's LAN or intranet system. Where  
55 necessary, correct malfunctioning units, and then retest to demonstrate compliance.

### 56 **WARRANTY**

57  
58  
59  
60 Provide a complete unlimited one year factory warranty on all equipment installed under this Section. Warranty time  
61 period shall begin when each item of equipment is accepted by the Owner.

1  
2  
3

**END OF SECTION 262713**





ARCHITECTURE

1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Salas O'Brien  
North Carolina, Inc.  
702 Oberlin Road, Suite 300  
Raleigh, NC 27605  
919-852-8118  
salasobrien.com  
license (NC) F-1434

WTCC EWS - FIRE & RESCUE TRAINING CENTER

WAKE TECHNICAL COMMUNITY COLLEGE

5345 ROLESVILLE RD, WENDELL, NC 27591

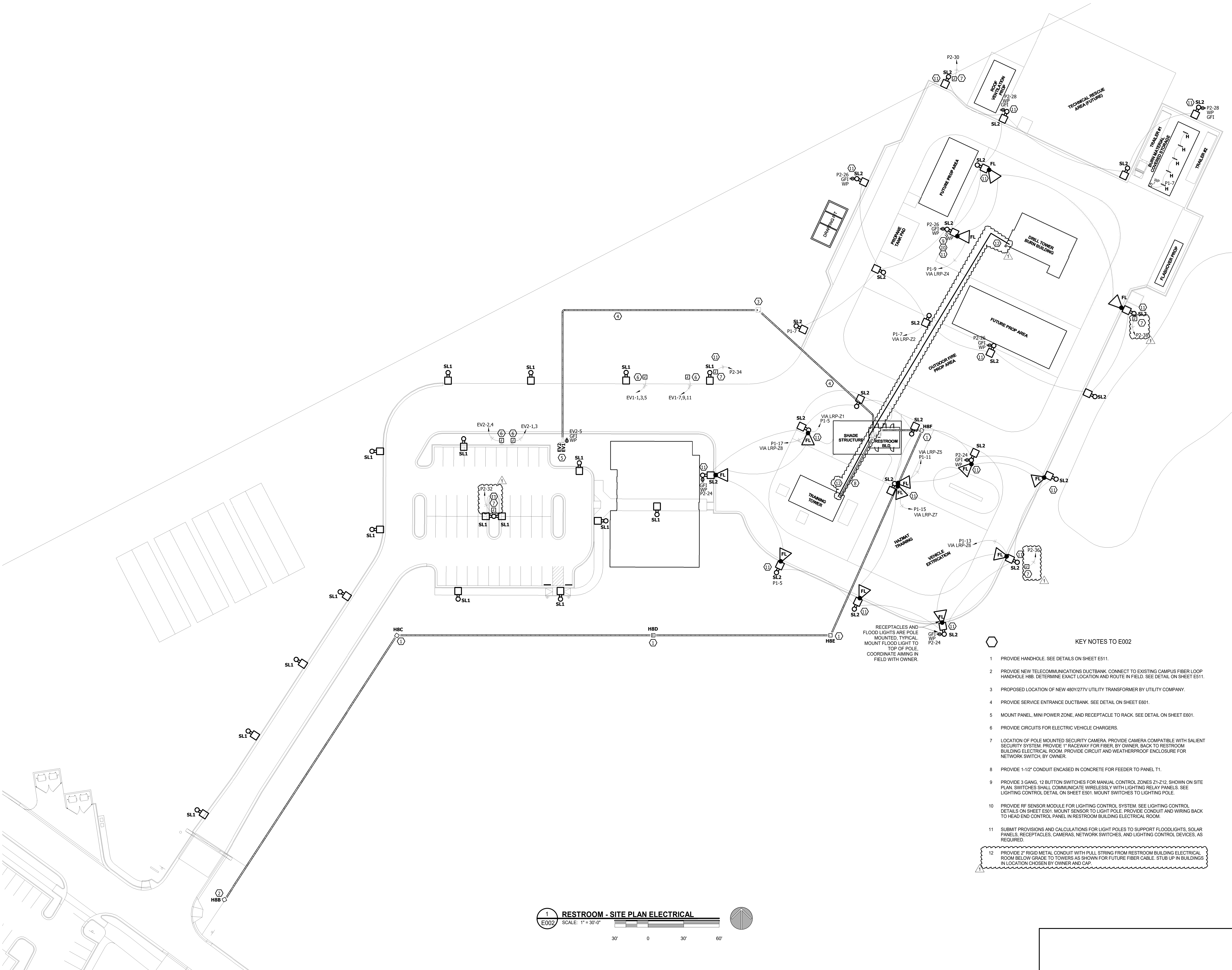
NCCCS NO. 2303



NO.	REVISION	DATE
1	ADDENDUM 01	04/14/25

JOB NUMBER  
**22-086**  
DATE ISSUED  
**03/14/2025**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**SITE PLAN**

E002



1 RESTROOM - SITE PLAN ELECTRICAL  
E002 SCALE: 1" = 30'-0"

KEY NOTES TO E002

- 1 PROVIDE HANDHOLE. SEE DETAILS ON SHEET E511.
- 2 PROVIDE NEW TELECOMMUNICATIONS DUCTBANK. CONNECT TO EXISTING CAMPUS FIBER LOOP HANDHOLE H8B. DETERMINE EXACT LOCATION AND ROUTE IN FIELD. SEE DETAIL ON SHEET E511.
- 3 PROPOSED LOCATION OF NEW 480Y/277V UTILITY TRANSFORMER BY UTILITY COMPANY.
- 4 PROVIDE SERVICE ENTRANCE DUCTBANK. SEE DETAIL ON SHEET E601.
- 5 MOUNT PANEL, MINI POWER ZONE, AND RECEPTACLE TO RACK. SEE DETAIL ON SHEET E601.
- 6 PROVIDE CIRCUITS FOR ELECTRIC VEHICLE CHARGERS.
- 7 LOCATION OF POLE MOUNTED SECURITY CAMERA. PROVIDE CAMERA COMPATIBLE WITH SALIENT SECURITY SYSTEM. PROVIDE 1" RACEWAY FOR FIBER, BY OWNER, BACK TO RESTROOM BUILDING ELECTRICAL ROOM. PROVIDE CIRCUIT AND WEATHERPROOF ENCLOSURE FOR NETWORK SWITCH, BY OWNER.
- 8 PROVIDE 1-1/2" CONDUIT ENCASED IN CONCRETE FOR FEEDER TO PANEL T1.
- 9 PROVIDE 3 GANG, 12 BUTTON SWITCHES FOR MANUAL CONTROL ZONES Z1-Z12, SHOWN ON SITE PLAN. SWITCHES SHALL COMMUNICATE WIRELESSLY WITH LIGHTING RELAY PANELS. SEE LIGHTING CONTROL DETAIL ON SHEET E501. MOUNT SWITCHES TO LIGHTING POLE.
- 10 PROVIDE RF SENSOR MODULE FOR LIGHTING CONTROL SYSTEM. SEE LIGHTING CONTROL DETAILS ON SHEET E501. MOUNT SENSOR TO LIGHT POLE. PROVIDE CONDUIT AND WIRING BACK TO HEAD END CONTROL PANEL IN RESTROOM BUILDING ELECTRICAL ROOM.
- 11 SUBMIT PROVISIONS AND CALCULATIONS FOR LIGHT POLES TO SUPPORT FLOODLIGHTS, SOLAR PANELS, RECEPTACLES, CAMERAS, NETWORK SWITCHES, AND LIGHTING CONTROL DEVICES, AS REQUIRED.
- 12 PROVIDE 2" RIGID METAL CONDUIT WITH PULL STRING FROM RESTROOM BUILDING ELECTRICAL ROOM BELOW GRADE TO TOWERS AS SHOWN FOR FUTURE FIBER CABLE. STUB UP IN BUILDINGS IN LOCATION CHOSEN BY OWNER AND CAP.





1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com

**Salas O'Brien**  
Salas O'Brien  
North Carolina, Inc.  
702 Oberlin Road, Suite 300  
Raleigh, NC 27605  
919-852-8118  
salasobrien.com  
license (NC): F-1434

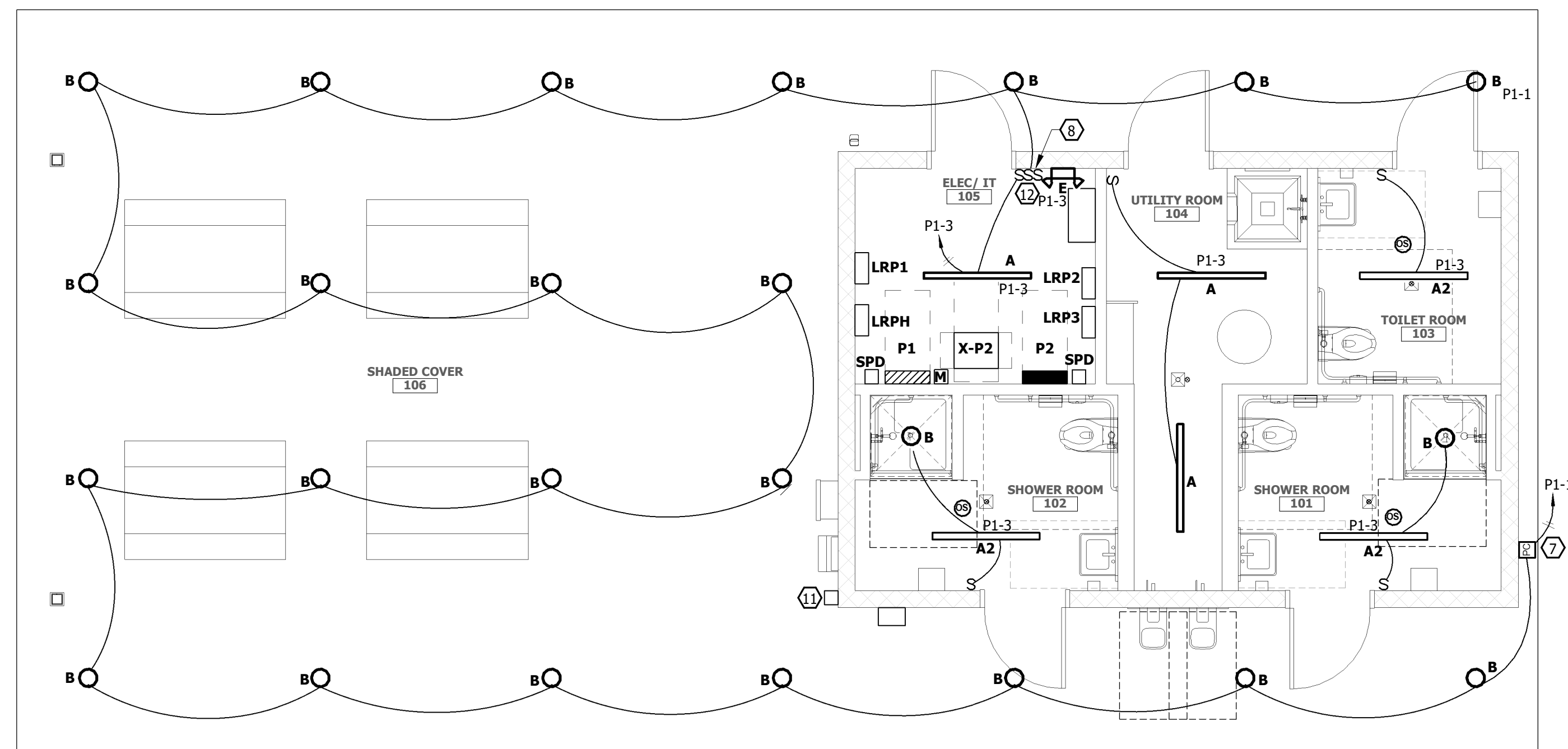
**WTCC EWS - FIRE & RESCUE TRAINING CENTER**  
WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



NO.	REVISION	DATE
1	ADDENDUM 01	04/14/25

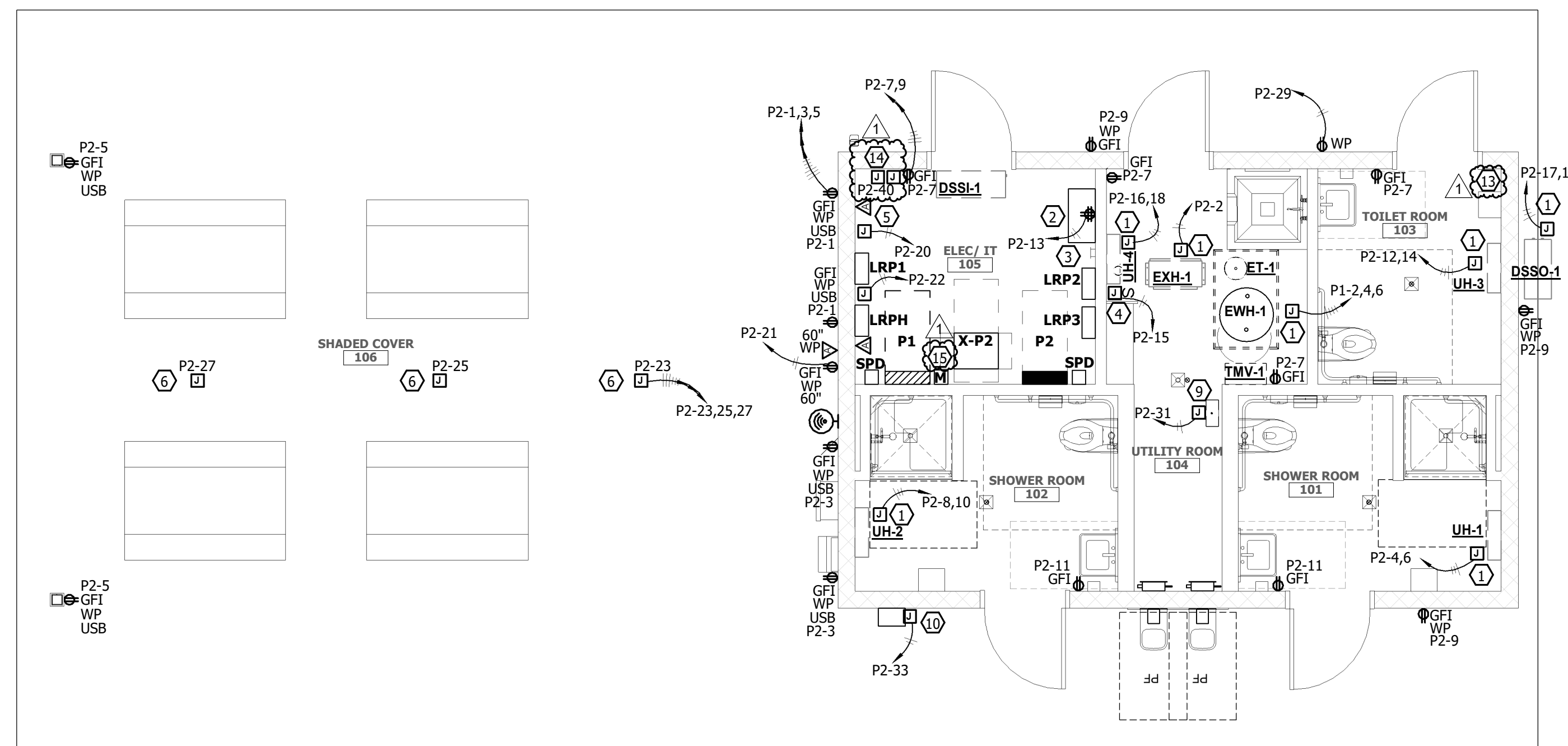
JOB NUMBER  
**22-086**  
DATE ISSUED  
**03/14/2025**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**PLANS - RESTROOM BUILDING**

**E111**

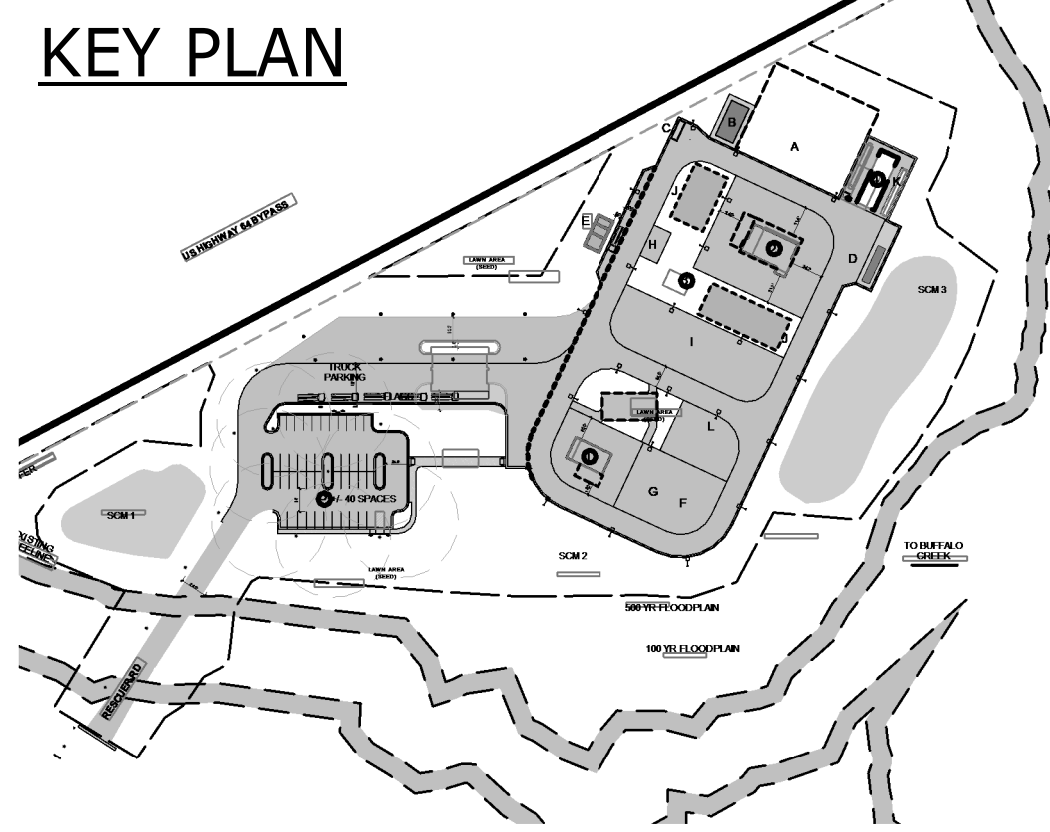


**2 FLOOR PLAN - RESTROOM/SHADE STRUCTURE - LIGHTING**  
SCALE: 1/4" = 1'-0"

- KEY NOTES TO E111**
- CONNECT CIRCUIT TO DISCONNECTING MEANS OF EQUIPMENT PROVIDED BY OTHER TRADES.
  - PROVIDE WALL MOUNTED TELECOMMUNICATIONS EQUIPMENT RACK. SEE DETAILS ON SHEET E511.
  - PROVIDE WALL MOUNTED GROUND BUS. SEE DETAIL ON SHEET E601.
  - PROVIDE LINE SIDE WIRING AND CONDUIT TO WALL MOUNTED SWITCH FOR PLUMBING VALVE TRANSFORMER. COORDINATE EXACT LOCATIONS AND CONNECTIONS WITH DIVISION 22.
  - PROVIDE CIRCUIT AND DATA FOR BAS PANEL. CONFIRM EXACT LOCATION WITH MECHANICAL CONTRACTOR.
  - PROVIDE CIRCUIT FOR CEILING FANS BY OWNER. COORDINATE EXACT LOCATION AND CONNECTIONS WITH OWNER.
  - PROVIDE 2000 WATT, WEATHERPROOF PHOTOCELL FOR OUTDOOR LIGHTING CONTROL. MOUNT AT 10' AFG AWAY FROM ARTIFICIAL LIGHT SOURCES.
  - PROVIDE 3 GANG, 12 BUTTON WALL SWITCHES FOR MANUAL CONTROL ZONES Z1-Z12, SHOWN ON SITE PLAN. SWITCHES SHALL COMMUNICATE WIRELESSLY WITH LIGHTING RELAY PANELS. SEE LIGHTING CONTROL DETAIL ON SHEET E501.
  - CONNECT CIRCUIT TO ELECTRIC TRAP PRIMER BY PLUMBING.
  - PROVIDE CIRCUIT FOR WALL MOUNTED AED DEVICE BY OWNER. COORDINATE CONNECTIONS WITH EQUIPMENT VENDOR.
  - PROVIDE RF SENSOR MODULE FOR LIGHTING CONTROL SYSTEM. SEE LIGHTING CONTROL DETAILS ON SHEET E501.
  - PROVIDE MANUAL SWITCH FOR CONTROL OF EXTERIOR LIGHTING IN SERIES WITH PHOTOCELL.
  - PROVIDE CAT6A DATA CABLE TO INTERIOR SIDE OF BUILDING CORNER. LEAVE 20' COIL OF CABLE AND LABEL FOR FUTURE CAMERA.
  - PROVIDE CIRCUIT, JUNCTION BOXES, AND RACEWAYS AS DESCRIBED IN DETAIL 10/E301 FOR FUTURE OWNER USE.
  - PROVIDE 1" CONDUIT FROM METER TO BAS FOR NETWORK CONNECTION BY MECHANICAL CONTRACTOR.



**1 FLOOR PLAN - RESTROOM/SHADE STRUCTURE - POWER**  
SCALE: 1/4" = 1'-0"





**GENERAL NOTES:**

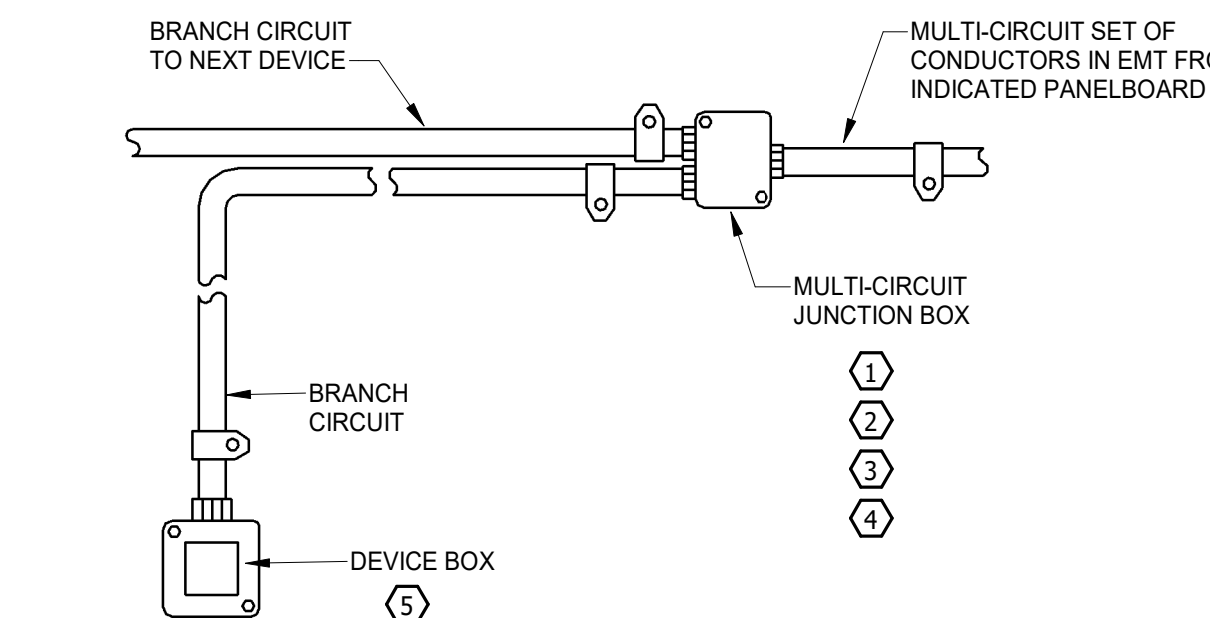
1. INSTALL NEW LABELS ON ALL PROJECT EQUIPMENT (PANELBOARDS, ENCLOSED BREAKERS, DISCONNECTS, TRANSFORMERS).
2. CONSTRUCT LABELS FROM 2 COLOR PLASTIC LAMINATE. DIMENSIONS ARE 5" WIDE X 1 1/2" HIGH. TEXT HEIGHT IS 3/16". EXCEPT AS NOTED OTHERWISE.
3. LABEL COLORS ARE TO BE SELECTED FROM THE FOLLOWING CHOICES:  
NORMAL SYSTEM 208Y/120V OR 240/120V: BLUE BACKGROUND/WHITE LETTER  
NORMAL SYSTEM 480Y/277V: BLACK BACKGROUND/WHITE LETTERS
4. SECURE TO TOP CENTER OF EQUIPMENT COVER WITH #4-40 STAINLESS STEEL SCREWS WITH MATCHING NUTS AND LOCKWASHERS. USE OF ADHESIVES TO SECURE LABEL TO EQUIPMENT IS NOT ACCEPTABLE.

**KEYED NOTES:**

1. INSERT EQUIPMENT DESIGNATION WHERE X'S ARE INDICATED.
2. INSERT VOLTAGE WHERE X'S ARE INDICATED. POSSIBLE VOLTAGES ARE:  
"480Y/277"  
"208Y/120"  
"240/120"  
"480: 208Y/120"  
"480: 240/120"
3. INSERT SUPPLY SOURCE DESIGNATION HERE.
4. INSERT SUPPLY SYSTEM WHERE X'S ARE INDICATED. POSSIBLE CHOICES ARE:  
"NORMAL POWER"
5. ADD THIS LABEL AT SERVICE EQUIPMENT, PANELBOARDS, MECHANICAL SYSTEM MOTOR CONTROLLERS (VARIABLE DRIVE UNITS).
6. INSERT VALUE INDICATED ON PROJECT ELECTRICAL DRAWINGS.
7. INSERT DATE OF PROJECT DRAWING BID SET.

**8 EQUIPMENT LABEL**

SCALE: NTS

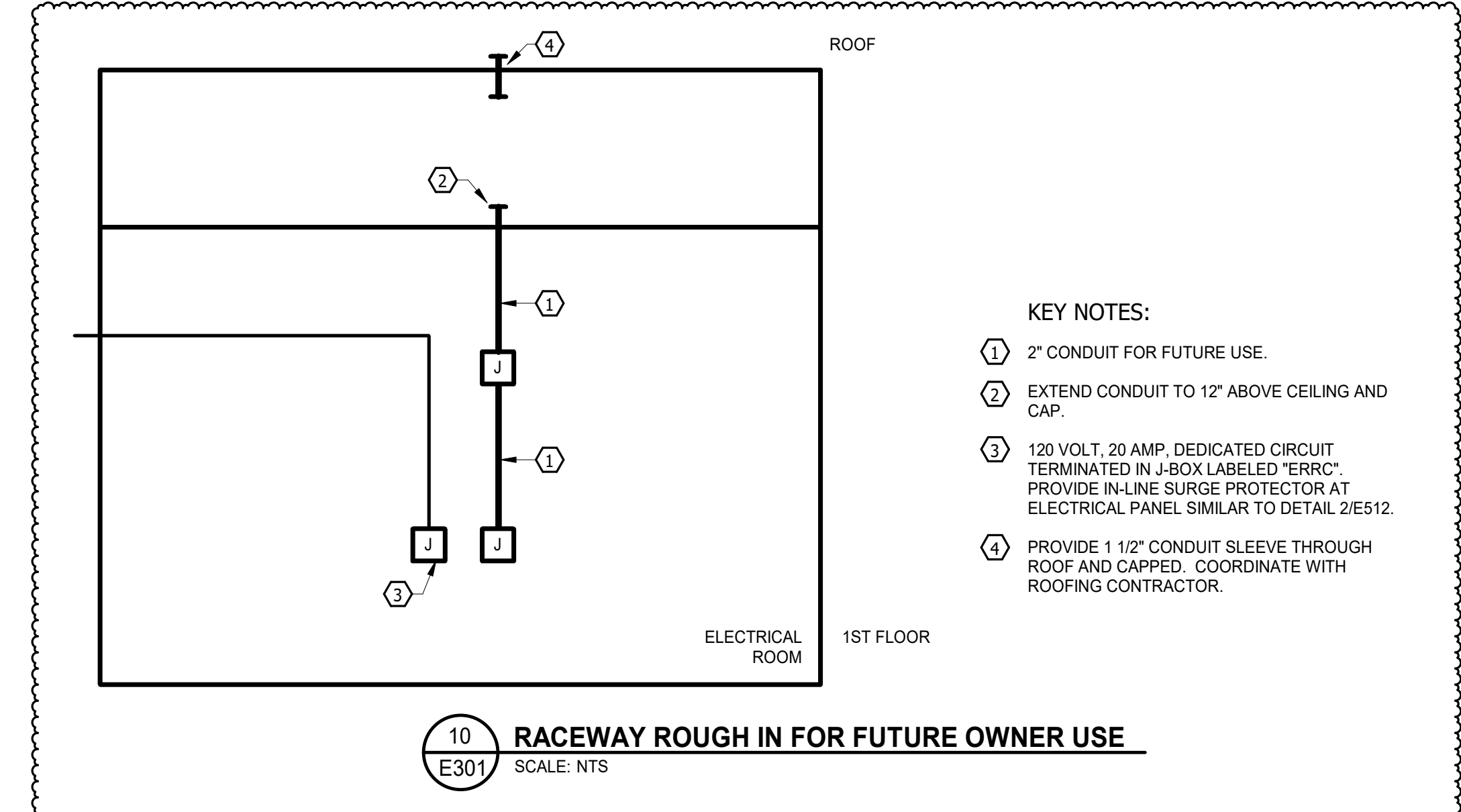


**KEYED NOTES:**

1. PROVIDE DEDICATED NEUTRAL CONDUCTOR WITH EACH PHASE CONDUCTOR.
2. LABEL EACH PHASE CONDUCTOR AND MATING NEUTRAL CONDUCTOR AT ALL BOX LOCATIONS FOR IDENTIFICATION.
3. BOND GROUND CONDUCTOR TO ALL BOXES.
4. MULTI-CIRCUIT JUNCTION BOXES SHALL NOT BE USED FOR DEVICE LOCATIONS.
5. DEVICE BOX SHALL NOT BE USED FOR MULTI-CIRCUIT DISTRIBUTION.

**9 MULTI-CIRCUIT HOMERUN WIRING DETAIL**

SCALE: NTS



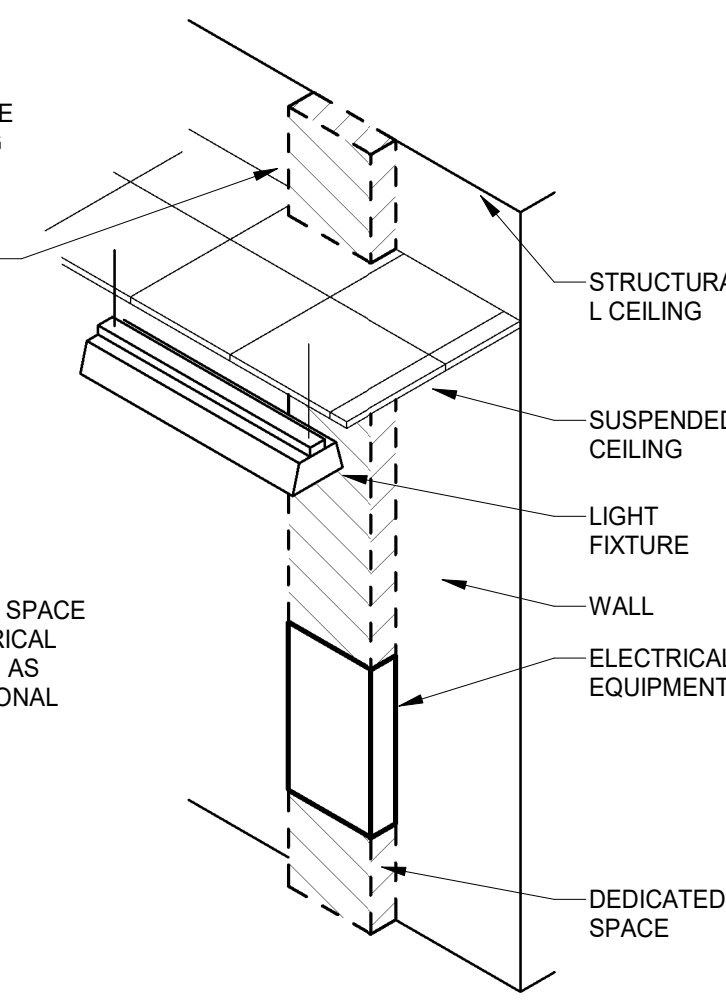
**KEY NOTES:**

1. 2" CONDUIT FOR FUTURE USE.
2. EXTEND CONDUIT TO 12" ABOVE CEILING AND CAP.
3. 120 VOLT, 20 AMP, DEDICATED CIRCUIT TERMINATED IN J-BOX LABELED "ERRC". PROVIDE IN-LINE SURGE PROTECTOR AT ELECTRICAL PANEL SIMILAR TO DETAIL 2E512.
4. PROVIDE 1 1/2" CONDUIT SLEEVE THROUGH ROOF AND CAPPED. COORDINATE WITH ROOFING CONTRACTOR.

**10 RACEWAY ROUGH IN FOR FUTURE OWNER USE**

SCALE: NTS

DEDICATED SPACE RUNS TO A HEIGHT OF 6'-0" ABOVE EQUIPMENT. DEDICATED SPACE CONTINUES THROUGH SUSPENDED CEILING OR UP TO STRUCTURAL CEILING. ANY FOREIGN SYSTEMS TO THE ELECTRICAL EQUIPMENT SHALL NOT RUN WITHIN THIS SPACE.



**GENERAL NOTES:**

1. THIS FIGURE ILLUSTRATES THE DEDICATED SPACE REQUIRED ABOVE AND BELOW THE ELECTRICAL EQUIPMENT FOR RACEWAYS, CABLES, ETC. AS REQUIRED BY SECTION 110.26 OF THE NATIONAL ELECTRICAL CODE.

**5 DEDICATED SPACE FOR ELECTRICAL EQUIPMENT**

SCALE: NTS

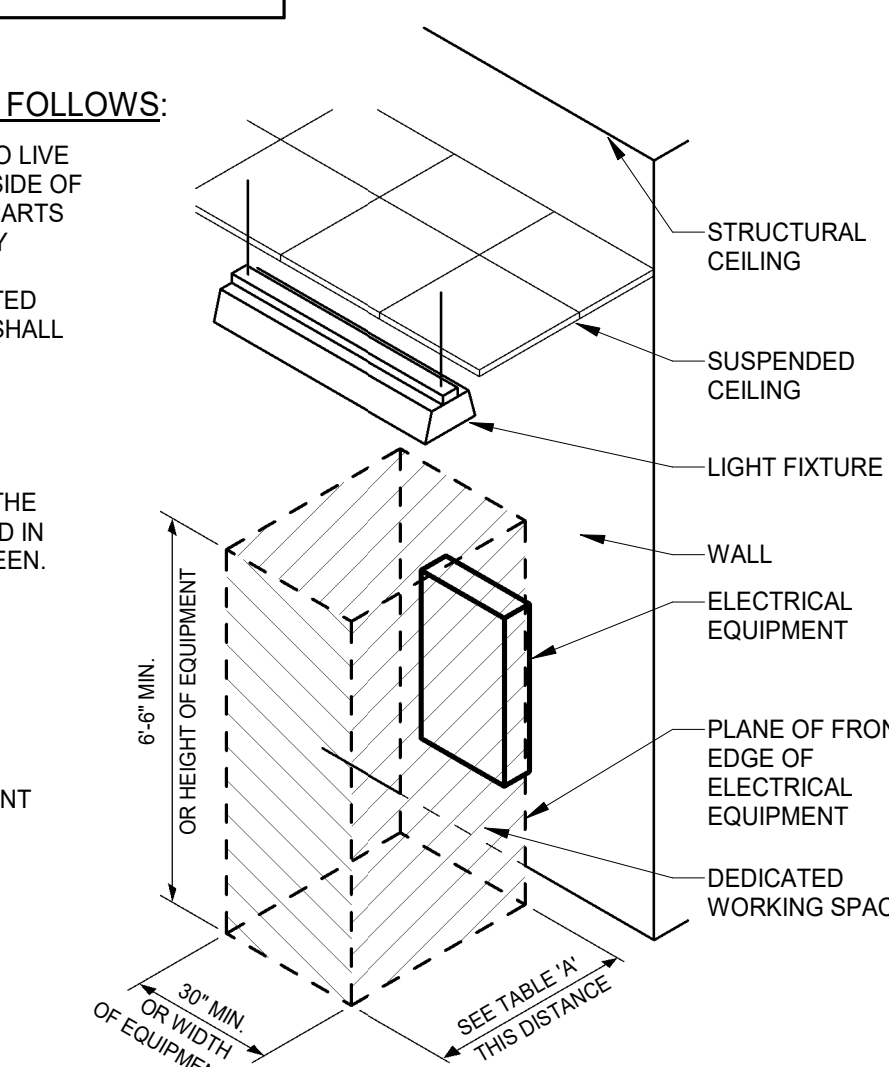
NOMINAL VOLTAGE TO GROUND	CONDITION 1	CONDITION 2	CONDITION 3
0-150	3	3	3
151-600	3	3 1/2	4

**WHERE THE CONDITIONS ARE AS FOLLOWS:**

1. EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR UNGROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR OTHER INSULATING MATERIALS. INSULATED WIRE OR INSULATED BUSBARS OPERATING AT NOT OVER 300V SHALL NOT BE CONSIDERED LIVE PARTS.
2. EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.
3. EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

**GENERAL NOTES:**

1. THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF ELECTRICAL EQUIPMENT AS REQUIRED BY SECTION 110.26 OF THE NATIONAL ELECTRICAL CODE.



**6 WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT**

SCALE: NTS

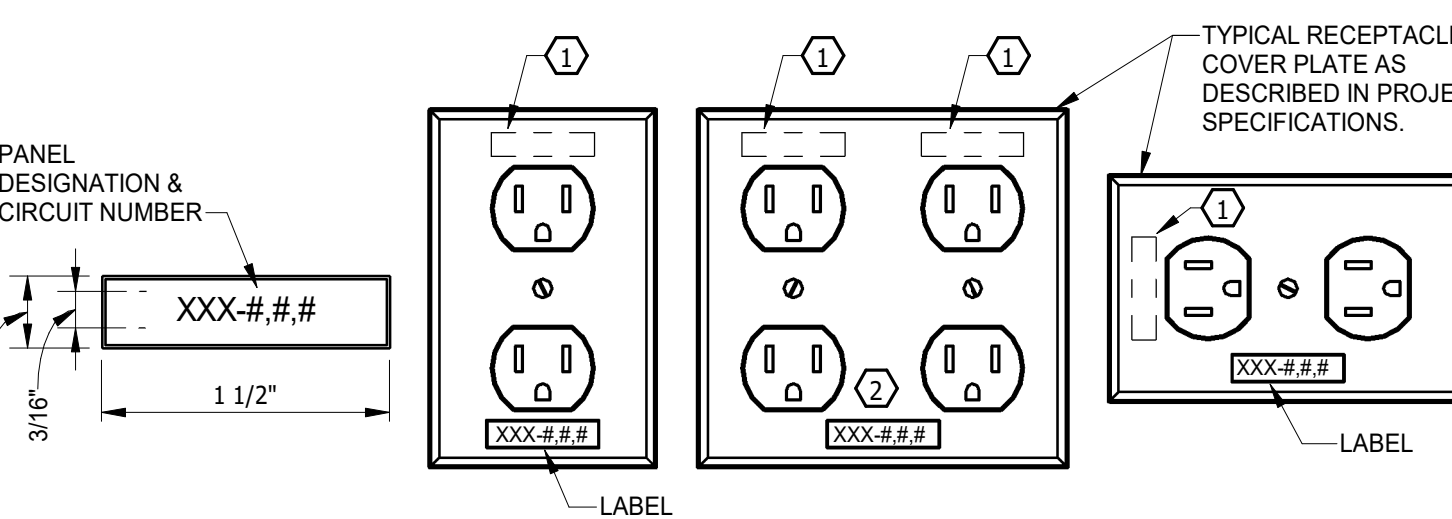


FIG. 1 - LABEL DIMENSIONS

FIG. 2 - LABEL LOCATION ON DEVICE PLATE

**KEYED NOTES:**

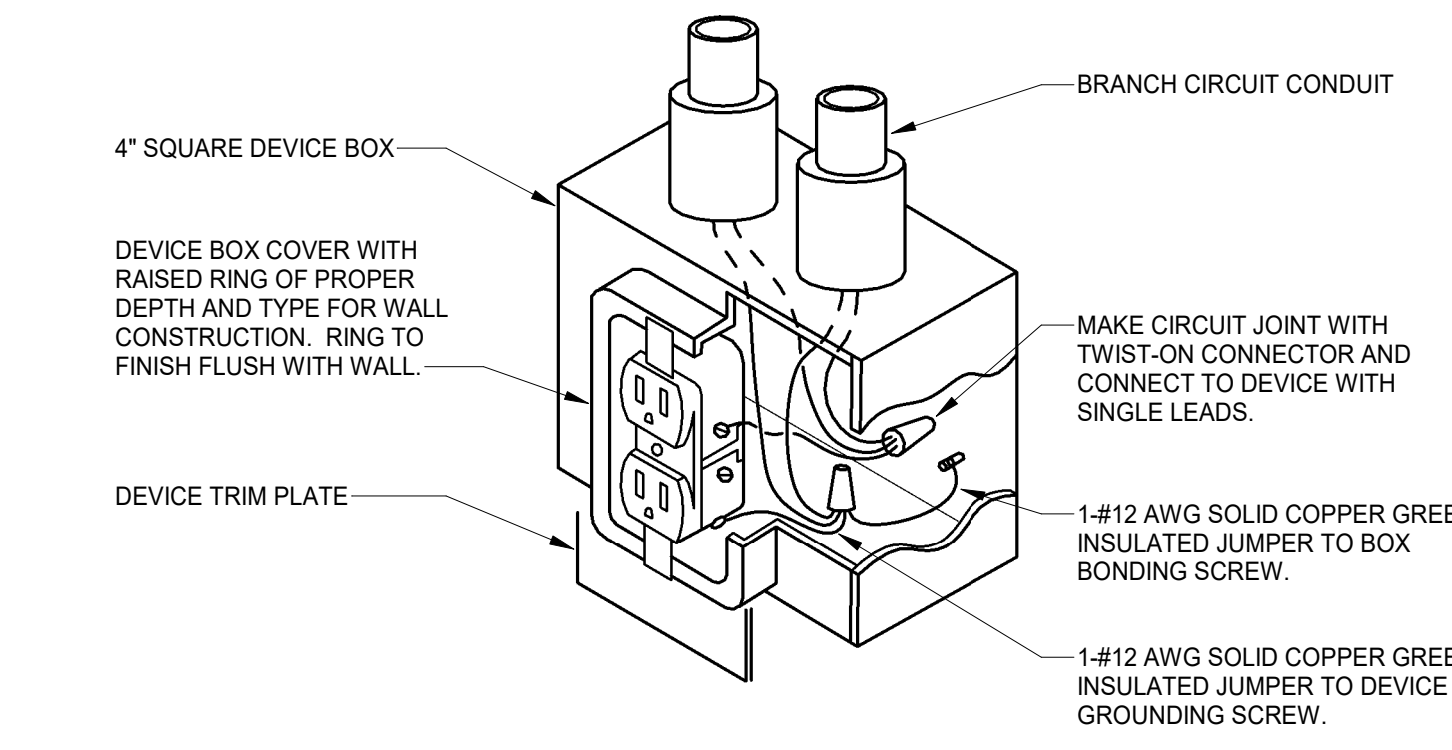
1. WRITE PANEL DESIGNATION NUMBER ON DEVICE YOKE WITH A FINE TIP, PERMANENT MARKER AS AN AID TO PROPER FACEPLATE LOCATION. ALL MARKING ON DEVICES MUST BE COVERED BY FACEPLATE.
2. FOR DUPLEX RECEPTACLES CENTER LABEL IF BOTH DEVICES ARE SUPPLIED BY THE SAME CIRCUIT. IF DEVICES ARE SUPPLIED BY DIFFERENT CIRCUITS PROVIDE A LABEL BELOW EACH RECEPTACLE.

**GENERAL NOTES:**

1. LABELS ARE TO BE MACHINE PRODUCED USING A THERMAL TRANSFER PROCESS WITH DIMENSIONS AS SHOWN ABOVE. LABELS ARE TO BE SUITABLE FOR EITHER INDOOR OR OUTDOOR USE.
2. LABEL COLOR TO BE CLEAR WITH BLACK LETTERING.
3. LABELS ARE TO BE ATTACHED AS INDICATED ABOVE TO ALL PROJECT RECEPTACLE COVER PLATES.

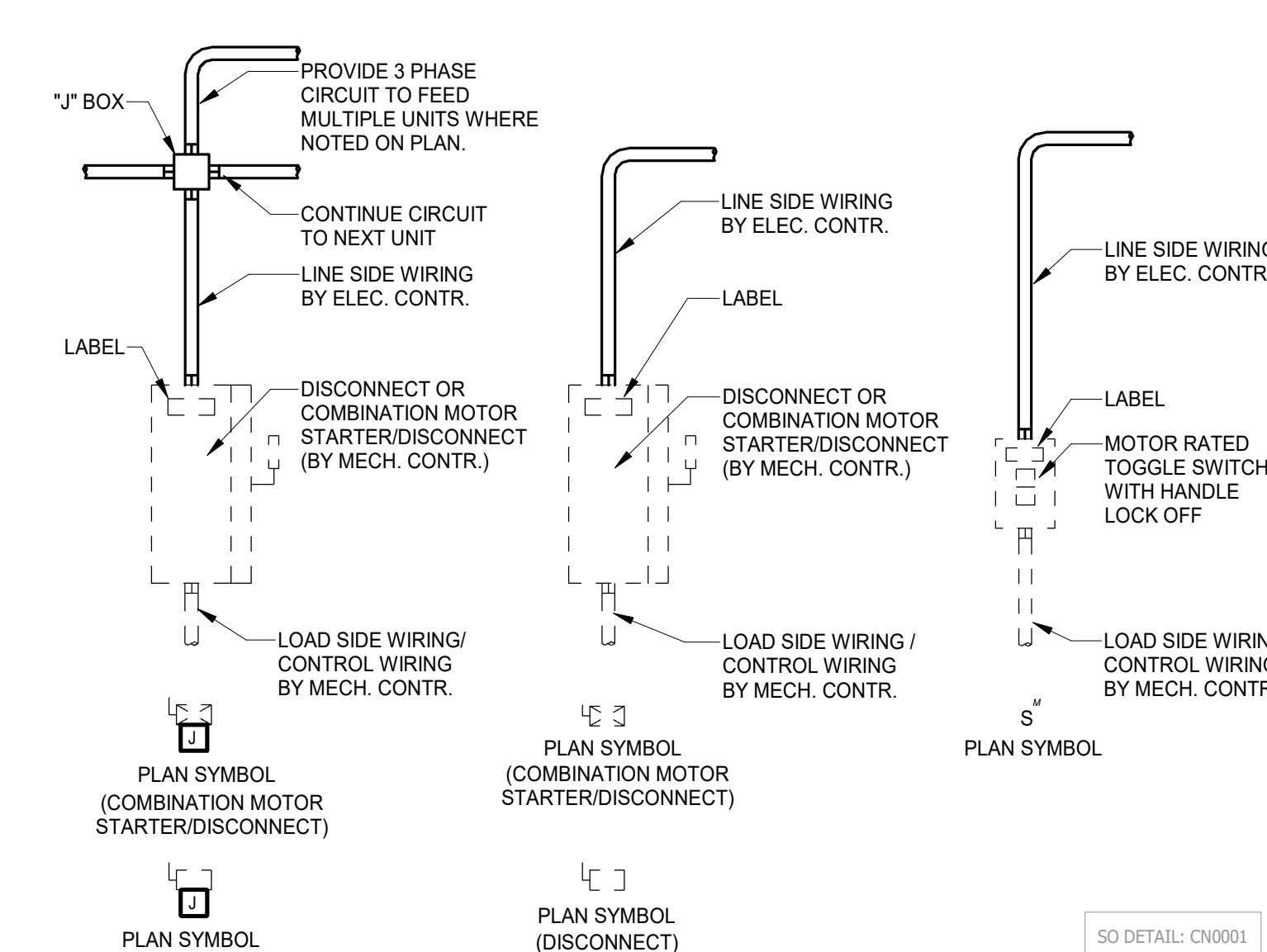
**7 DEVICE LABELS**

SCALE: NTS



**4 RECEPTACLE GROUNDING DETAIL**

SCALE: NTS

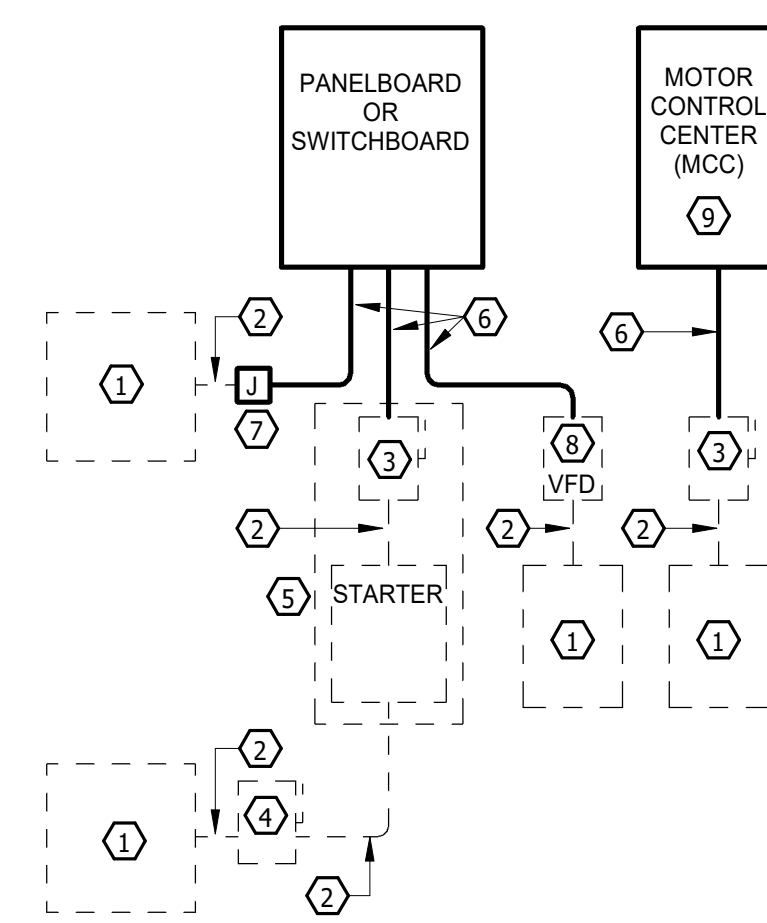


**1 MECHANICAL UNIT WIRING DETAILS**

SCALE: NTS

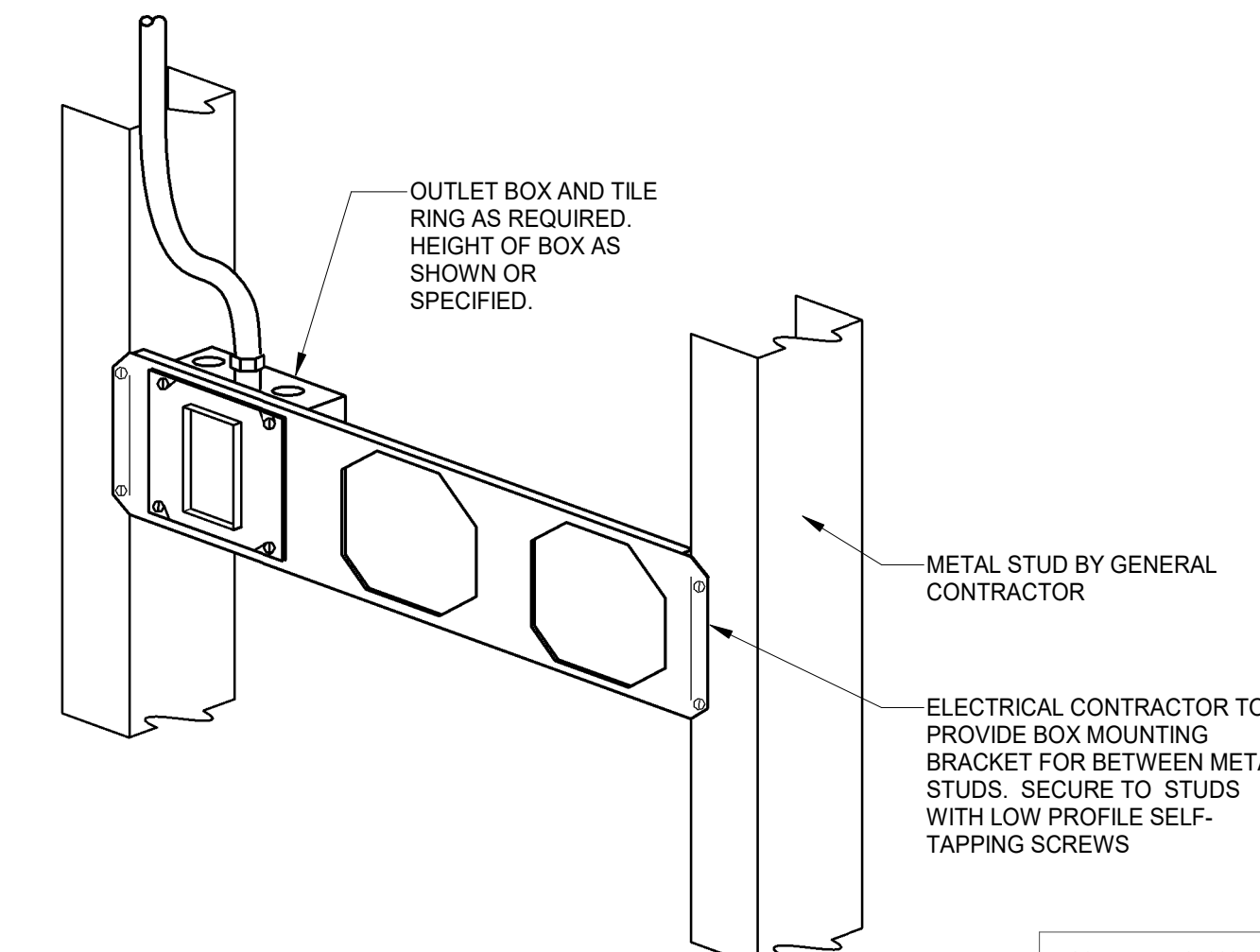
**KEYED NOTES:**

1. EQUIPMENT PROVIDED AND INSTALLED BY OTHER CONTRACTOR. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS, START UP AND TEST EQUIPMENT.
2. CONDUIT & WIRING BY OTHER CONTRACTOR PROVIDING EQUIPMENT.
3. DISCONNECT PROVIDED AND INSTALLED BY CONTRACTOR PROVIDING EQUIPMENT.
4. IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, IT SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR PROVIDING EQUIPMENT.
5. A COMBINATION STARTER MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. A COMBINATION STARTER SHALL BE PROVIDED AND INSTALLED BY THE OTHER CONTRACTOR PROVIDING THE EQUIPMENT.
6. FEEDER AND CONDUIT BY ELECTRICAL CONTRACTOR. SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES TO OTHER EQUIPMENT. TERMINATE FEEDER AT LINE SIDE OF DISCONNECTING MEANS.
7. JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT IF NO STARTER IS REQUIRED. INSTALL JUNCTION BOX ADJACENT TO THE EQUIPMENT AND PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. MOTOR RATED DISCONNECT SHALL BE PROVIDED BY CONTRACTOR PROVIDING EQUIPMENT WHERE REQUIRED BY CODE.
8. VARIABLE FREQUENCY DRIVE (VFD) PROVIDED AND INSTALLED BY OTHER CONTRACTOR PROVIDING EQUIPMENT. VFD IS SUPPLIED WITH INTEGRAL DISCONNECTING MEANS.
9. FOR PROJECTS UTILIZING A MOTOR CONTROL CENTER (MCC), THE STARTER, CIRCUIT BREAKER OR VFD IN THE MCC ARE PROVIDED BY THE ELECTRICAL CONTRACTOR.



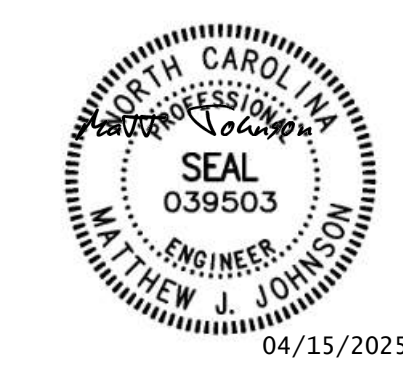
**2 MECHANICAL UNIT WIRING DETAILS**

SCALE: NTS



**3 OUTLET BOX SUPPORT**

SCALE: NTS



NO.	REVISION	DATE
1	ADDENDUM 01	04/14/25

JOB NUMBER  
**22-086**  
DATE ISSUED  
**03/14/2025**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**ELECTRICAL DETAILS**



PANEL ID: EV1		VOLTAGE: 480Y/277		SERVICE EQUIP: Yes		MOUNTING: RACK MOUNTED							
SOURCE: UTILITY		AMPS: 600		PANEL AIC: 10,000		TYPE: BOLT ON - NEMA 3R							
LOCATION: SITE		MAIN: MCB		CALC SCC: 5,379		APPROX. DIM: 20"W X 5.75"D X 50"H							
LOAD	NO TE	COND	Phase, Neu, Grd Size	PO LE	BKR CKT	A	B	C	CKT BKR	Phase, Neu, Grd Size	COND	NO TE	LOAD
EV APPARATUS CHARGER		3	3-#250, 1-#250, 1-#4	3	250	5	55400	--	55400	--	4	--	SPACE
					5				55400	--	6	--	SPACE
					7	55400	--				8	--	SPACE
EV APPARATUS CHARGER		3	3-#250, 1-#250, 1-#4	3	250	9	55400	--	55400	--	10	--	SPACE
					11				55400	--	12	--	SPACE
					13	4220	--				14	--	SPACE
EV2		3/4	3-#10, 1-#10, 1-#10	3	30	15	4220	--	4220	--	16	--	SPACE
					17				4220	--	18	--	SPACE
SPACE	--	--	--	1	19	--	--	--			20	--	SPACE
SPACE	--	--	--	1	21	--	--	--			22	--	SPACE
SPACE	--	--	--	1	23	--	--	--			24	--	SPACE
SPACE	--	--	--	1	25	--	--	--			26	--	SPACE
SPACE	--	--	--	1	27	--	--	--			28	--	SPACE
SPACE	--	--	--	1	29	--	--	--			30	--	SPACE
SPACE	--	--	--	1	31	--	--	--			32	--	SPACE
SPACE	--	--	--	1	33	--	--	--			34	--	SPACE
SPACE	--	--	--	1	35	--	--	--			36	--	SPACE
SPACE	--	--	--	1	37	--	0	--			38	--	SPACE
SPACE	--	--	--	1	39	--	--	0			40	--	SPD
SPACE	--	--	--	1	41	--	--	0			42	--	SPACE
						115020 VA 415 A		115020 VA 415 A		115020 VA 415 A			
Load Classification		Connected Load		Demand Factor		Estimated Demand				Panel Totals			
Power		345060 VA		100.00%		345060 VA				CONNECTED LOAD 345060 VA			
										DEMAND LOAD 345060 VA			
										AVG. DEMAND CURRENT 415 A			
										AVG. DEMAND CURRENT 415 A			
NOTES:													

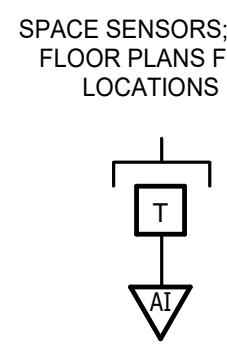


## STANDARD CONTROL SYMBOLS

CONTROLLERS / SENSORS	DDC I/O SYMBOLS	FINAL CONTROL ELEMENTS
SPACE THERMOSTAT OR TEMPERATURE SENSOR	DIGITAL (BINARY) INPUT POINT	TWO-WAY CONTROL VALVE, HYDRONIC OR STEAM
THERMOSTAT OR TEMPERATURE SENSOR WITH AIRFLOW AVERAGING ELEMENT	ANALOG INPUT POINT	THREE-WAY CONTROL VALVE, HYDRONIC
THERMOSTAT OR TEMPERATURE SENSOR WITH SENSING BULB IN HYDRONIC PIPE WELL	DIGITAL (BINARY) OUTPUT POINT	ELECTRIC MOTOR
THERMOSTAT OR TEMPERATURE SENSOR WITH SENSING BULB AND PROTECTIVE SHIELD	ANALOG OUTPUT POINT	FAN AND MOTOR
SPACE HUMIDISTAT OR HUMIDITY SENSOR		PUMP AND MOTOR
DUCT-MOUNTED HUMIDISTAT OR HUMIDITY SENSOR		ELECTRIC / ELECTRONIC DAMPER ACTUATOR
PRESSURE SENSOR		ELECTRIC / ELECTRONIC VALVE ACTUATOR
DIFFERENTIAL PRESSURE SENSOR		VARIABLE FREQUENCY DRIVE
AIR STATIC PRESSURE SENSOR		AIR FLOW MONITORING STATION
AIR VELOCITY PRESSURE SENSOR		
SPACE OCCUPANCY/VACANCY SENSOR		
CARBON DIOXIDE CONCENTRATION SENSOR		
DRAIN PAN CONDENSATE LEVEL SENSOR		
DUCT SMOKE DETECTOR		
REFRIGERANT CONCENTRATION SENSOR		
FLOW METER		
DEW POINT		
SWITCH		

SWITCHES	PNEUMATIC COMPONENTS
DAMPER END SWITCH	MAIN AIR SUPPLY, 20 PSIG
EMERGENCY START OR STOP SWITCH	MAIN AIR SUPPLY, 80 PSIG
MOTOR STARTER HOLDING COIL	DAMPER VALVE ACTUATOR WITH PILOT POSITIONER
CONTACTOR HOLDING COIL	CONTROL VALVE OPERATOR WITH PILOT POSITIONER
CONTROL RELAY HOLDING COIL	ELECTRONIC-TO-PNEUMATIC TRANSDUCER
CURRENT SWITCH	

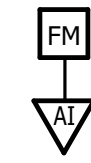
**DESCRIPTION**  
TEMPERATURE SENSOR FOR MONITORING IT ROOM SPACE TEMPERATURE



SEQUENCE OF OPERATIONS:  
IF SPACE TEMPERATURE EXCEEDS 85°F (ADJ.) AN ALARM SHALL BE INITIATED. ALARM SHALL BE SET UP AS A CRITICAL IT ALARM (BACNET PRIORITY LEVEL 15).

### 3FH401 IT ROOM MONITORING

**DESCRIPTION**  
DOMESTIC WATER FLOW METERING PROVIDED BY DIV 23. REFER TO DIV 22 DOCUMENTS FOR LOCATION.



### 2FH401 DOMESTIC WATER METERING

**DESCRIPTION**  
ENERGY METERING PROVIDED BY DIV 26. REFER TO DIV 26 DOCUMENTS FOR LOCATION. METER SHALL BE INTEGRATED TO.



### 6FH401 ENERGY METERING

### 5FH401 RESTROOM BUILDING POINTS LIST

INPUT / OUTPUT SUMMARY TABLE																
POINT DESCRIPTION	HARDWARE POINTS				SOFTWARE POINTS				ALARMS (BY DIV 25)					TREND (BY DIV 25)	SHOW ON GRAPHIC (BY DIV 25)	
	INPUTS		OUTPUTS		ANALOG VALUE	BINARY VALUE	SCHED.	HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAILURE				
	DIGITAL	ANALOG	DIGITAL	ANALOG												
HO POINT TOTAL	4	5	1	0	3	0	0	1	0	0	1	0	3	13		
POINT DESCRIPTION	DI	AI	DO	AO	AV	BV	SCHED	H.LIMIT	L.LIMIT	BINARY	LATCH	SENSOR FAIL	TREND	GRAPHIC		
105- ELECIT SPACE TEMPERATURE		X						X						X		
101- SHOWER ROOM SPACE TEMPERATURE		X												X		
102- SHOWER ROOM SPACE TEMPERATURE		X												X		
103- TOILET ROOM SPACE TEMPERATURE		X												X		
104- UTILITY ROOM SPACE TEMPERATURE		X												X		
101- SHOWER ROOM OCCUPANCY CONTACT		X												X		
102- SHOWER ROOM SPACE OCCUPANCY CONTACT		X												X		
103- TOILET ROOM SPACE OCCUPANCY CONTACT		X												X		
EXH-1 COMMAND			X											X		
EXH-1 STATUS		X												X		
DOMESTIC WATER METER FLOW					X						X			X		
ENERGY USAGE					X									X		
TOTAL ENERGY USAGE					X						X			X		

DUCTLESS SPLIT SYSTEM INDOOR UNIT SCHEDULE								
DESIGNATION	SERVICE	TYPE	SOURCE	MOUNTING	AIRFLOW (CFM)	CAPACITY		
DSS-1	ELEC/IT	SINGLE ZONE	DSSO-1	WALL	300	COOLING (MBH)	HEATING (MBH)	
						12	13.5	

NOTES:  
1 SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS.  
2 PROVIDE EXTERNAL DISCONNECT SWITCH AT OUTDOOR UNIT.  
3 PROVIDE EXTERNAL MOTOR RATED TOGGLE SWITCH AT INDOOR UNIT.  
4 INDOOR UNIT SHALL BE POWERED BY THE OUTDOOR UNIT.

LOUVER SCHEDULE					
DESIGNATION	SERVICE	TYPE	AIRFLOW (CFM)	APD (IN)	SIZE (INxIN)
L-1	EXH-1	SIDEWALL	550	0.1	24X16

NOTES:  
1 MINIMUM FREE AREA SHALL BE 0.7 SQFT.

DUCTLESS SPLIT SYSTEM OUTDOOR UNIT SCHEDULE											
DESIGNATION	TOTAL CAPACITY (MBH)	COOLING		AMBIENT TEMPERATURE (°F)	TOTAL CAPACITY (MBH)	HEATING		AMBIENT TEMPERATURE (°F)	ELEC		
		EFFICIENCY (SEER2)	EFFICIENCY (SEER2)			EFFICIENCY (COP)	EFFICIENCY (COP)		MCA	MOCP	VOLTAGE/PHASE
DSSO-1	12	21	21	95	13.5	3.8	3.8	5	9	15	208/1

FAN SCHEDULE											
DESIGNATION	SERVICE	TYPE	AIRFLOW (CFM)	ESP (IN)	DRIVE TYPE	FAN SPEED (RPM)	BRAKE MOTOR SIZE (HP)	FAN MOTOR SIZE (HP)	VOLTAGE/ PHASE	EXT START/DISCONNECT MEANS	MAX SOUND LEVEL (dBA)
EXH-1	RESTROOM BLD	INLINE CABINET	550	1.00	DIRECT	1035	0.14	1/2	120/1	MRT	38

NOTES:  
1 PROVIDE EXTERNAL STARTER/DISCONNECTING MEANS AS SCHEDULED. (C/P, MRT/MSD, VFD)

UNIT HEATER SCHEDULE				
DESIGNATION	SERVICE	TYPE	ELEC CAPACITY (KW)	VOLTAGE/ PHASE
UH-1	SHOWER ROOM	CABINET	5.0	208/1
UH-2	SHOWER ROOM	CABINET	5.0	208/1
UH-3	TOILET ROOM	CABINET	4.0	208/1
UH-4	UTILITY ROOM	CABINET	5.0	208/1

NOTES:  
1 PROVIDE ELECTRICAL UNIT HEATER WITH INTEGRAL THERMOSTAT.

AIR DISTRIBUTION SCHEDULE								
DESIGNATION	SERVICE	TYPE	MAX. AIRFLOW (CFM)	FACE SIZE (INxIN, ø IN)	NECK SIZE (INxIN, ø IN)	APD (IN)	MAX. NC	VOL. CONTROL DAMPER (Y/N)
V1	EXHAUST	STD BLADE SIDEWALL	150	12x8	10x6	0.1	20	No
Z1	EXHAUST	PERFORATED	200	24x24	8	0.1	20	No

NOTES:  
1 VERIFY MOUNTING FRAME STYLE WITH ARCHITECTURAL FINISH SCHEDULE.



1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com

**Salas O'Brien**  
Salas O'Brien  
North Carolina, Inc.  
702 Oberlin Road, Suite 300  
Raleigh, NC 27605  
919-852-8118  
salasobrien.com  
license (NC) F-1434

**WTCC EWS - FIRE & RESCUE TRAINING CENTER**  
WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303

*Kevin R. Allen*  
032567  
ENGINEER  
KEVIN R. ALLEN  
04/15/2025

NO.	REVISION	DATE
1	ADDENDUM 01	04/14/25

JOB NUMBER  
**22-086**  
DATE ISSUED  
**03/14/2025**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**CONTROLS & SCHEDULES**

**H401**



CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CRITERIA UNLESS OTHERWISE NOTED ON THE DRAWINGS. DO NOT USE THESE DRAWINGS WITHOUT THE ACCOMPANYING SPECIFICATIONS AND RELATED CIVIL AND M/E/P DRAWINGS. FOR ALL ITEMS, SEE THE SPECIFICATIONS FOR ADDITIONAL DETAILS AND REQUIREMENTS. THE MOST STRINGENT REQUIREMENTS GOVERN CONDITIONS COVERED BY BOTH THE DRAWINGS AND THE PROJECT SPECIFICATIONS OR BY CONFLICTING ITEMS.

A. STRUCTURE CLASSIFICATION

- THE BURN BUILDING WILL BE A TRAINING PROP USED BY THE OWNER TO TRAIN ABLE-BODIED FIREFIGHTERS UNDER LIVE FIRE AND OTHER TRAINING SCENARIOS.
- THE BURN BUILDING WILL NOT BE AN OCCUPIED STRUCTURE, EXCEPT DURING TRAINING EXERCISES.
- THE BURN BUILDING IS CLASSIFIED AS MISCELLANEOUS USE GROUP (USE GROUP U).

B. LIVE FIRE TRAINING DESIGN CRITERIA

THE BURN BUILDING HAS BEEN DESIGNED FOR THE FOLLOWING CRITERIA. THE OWNER/USER SHALL IMPLEMENT ADDITIONAL RESTRICTIONS TO ENSURE PERSONNEL SAFETY.

- MAXIMUM SUSTAINED TEMPERATURE DURING LIVE FIRE TRAINING IN BURN ROOMS = 1,000 DEGREES F AT CEILING.
- MAXIMUM TEMPERATURE SPIKE DURING LIVE FIRE TRAINING IN BURN ROOMS = 1,200 DEGREES F AT CEILING.
- ONLY "CLEAN "CLASS A" FUEL MATERIALS SHALL BE USED FOR LIVE FIRE TRAINING IN THE BURN BUILDING.
- LIVE FIRE TRAINING SHALL OCCUR IN BURN ROOMS ONLY. NO FIRES ARE ALLOWED ON THE INTERIOR OR EXTERIOR STAIRS AND LANDINGS, ON THE ROOFS, OR IN OTHER AREAS DESIGNATED AS "NO BURN" IN THE DRAWINGS.
- LIVE FIRE TRAINING SHALL BE IN ACCORDANCE WITH NFPA 1403.
- TRAINING THAT INCLUDES EXPLOSIVES, FIREARMS, OR TEAR GAS SHALL NOT BE PERMITTED WITHIN OR NEAR THE BURN BUILDING.
- ONCE ALL CONCRETE AND MASONRY WORK HAVE BEEN COMPLETED, THE BURN BUILDING SHALL STAND FOR A 2 MONTH MINIMUM CURING PERIOD BEFORE CONDUCTING THE FIRST LIVE FIRE TRAINING EVOLUTION. INSTALLATION OF OTHER TRADES MAY OCCUR DURING THE 2 MONTH CONCRETE AND MASONRY CURING PERIOD.
- THE STRUCTURAL ELEMENTS HAVE BEEN PROTECTED FROM HEAT AND THERMAL SHOCK WITH THERMAL LININGS WHERE SHOWN ON DRAWINGS. NON-BEARING MASONRY WALLS, OTHER NON-STRUCTURAL ITEMS, AND STRUCTURAL ELEMENTS AT SOME LOCATIONS ARE NOT PROTECTED WITH THERMAL LININGS, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- ITEMS NOT PROTECTED WITH THERMAL LININGS, BUT EXPOSED TO TEMPERATURES GREATER THAN 150 DEGREES F, ARE EXPECTED TO GRADUALLY DETERIORATE WITH EVERY EVOLUTION. MAINTENANCE WILL BE REQUIRED ON ALL COMPONENTS AND SHOULD BE INCLUDED IN ANNUAL BUDGETS.
- FIRES SHOULD BE PLACED AWAY FROM DOORS, SHUTTERS, AND ROOF OPENINGS TO REDUCE DETERIORATION OF THOSE ITEMS.
- FIRES SHOULD BE PLACED ON BURN RACKS, AS SHOWN IN DETAIL 3/BB610. THE INTENT IS TO MINIMIZE THE HEAT AT THE FLOOR LEVEL AND TO MINIMIZE THE AMOUNT OF FIRE AND COALS THAT SIT DIRECTLY ON THE FLOOR.
- THE TEMPERATURES AND HEAT ENERGY WITHIN THE BURN BUILDING DURING LIVE FIRE TRAINING EVOLUTIONS ARE EXPECTED TO BE HIGHER THAN THOSE FROM OTHER BUILDING FIRES. THE OWNER/USER SHALL ESTABLISH AND ENFORCE STANDARD OPERATING PROCEDURES THAT ADDRESS FUEL LOADS AND HEAT ENERGY, MAINTAIN A SAFE TRAINING ENVIRONMENT FOR PERSONNEL, MINIMIZE HEAT EXPOSURE AT STRUCTURAL ELEMENTS THAT ARE NOT PROTECTED WITH THERMAL LININGS, AND PROMOTE DURABILITY OF THE BURN BUILDING AND ITS COMPONENTS.
- IT IS ASSUMED THAT OWNER WILL TEST ROPE TIE-OFF POINTS PER OSHA REQUIREMENTS AND WILL VISUALLY CONFIRM THAT NUTS AND BOLTS ARE TIGHT AT ALL ROPE TIE-OFF ASSEMBLIES ON EACH TRAINING DAY THAT USES THOSE TIE-OFF POINTS.

C. CODES AND STANDARDS

THE FOLLOWING CODES AND STANDARDS GOVERN THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF STRUCTURAL WORK PERFORMED ON THIS PROJECT:

- 2018 NORTH CAROLINA STATE BUILDING CODE (BASED ON INTERNATIONAL BUILDING CODE (IBC-2015), INTERNATIONAL CODE COUNCIL (ICC).
- MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-10), AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)
- SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - AISC 360-10, AMERICAN INSTITUTE OF STEEL CONSTRUCTION, EXCEPT AS MODIFIED BY NCSBC.
- STRUCTURAL WELDING CODE - STEEL (AWS D1.4-2011), AMERICAN WELDING SOCIETY (AWS), EXCEPT AS MODIFIED BY NCSBC.
- BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI-318-14), AMERICAN CONCRETE INSTITUTE (ACI), EXCEPT AS MODIFIED BY NCSBC.
- SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301-16), AMERICAN CONCRETE INSTITUTE (ACI).
- MANUAL OF STANDARD PRACTICE (CRSI) CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
- BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES, THE MASONRY SOCIETY (TMS) TMS 402-13/TMS 602-13, AND BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, AMERICAN CONCRETE INSTITUTE (ACI) ACI 530-13, EXCEPT AS MODIFIED BY NCSBC.
- STANDARD ON FACILITIES FOR FIRE TRAINING AND ASSOCIATED PROPS (NFPA 1402-2019), NATIONAL FIRE PROTECTION ASSOCIATION.

D. DESIGN GRAVITY LOADS

LIVE LOADS:

- FLOORS: 50 PSF
- STAIRS: 100 PSF
- ROOFS: 50 PSF
- SLAB EDGES AND EAVES: NON-CONCURRENT POINT LOADS OF 750 POUNDS.
- NO LIVE LOAD REDUCTIONS TAKEN.

DEAD LOADS:

- CMU PARTITIONS: 80 PSF
- FIRE BRICK ON TOPS OF FLOORS: 25 PSF
- THERMAL LININGS ON CEILINGS, WALLS, AND COLUMNS: 30 PSF

E. DESIGN SNOW LOADS

- GROUND SNOW LOAD (Pg) = 15 PSF
- FLAT ROOF SNOW LOAD (Pf) = 15 PSF
- SNOW DRIFT LOAD (Ps) = 34.2 PSF
- SNOW EXPOSURE FACTOR (Ce) = 1.0
- THERMAL FACTOR (Ci) = 1.2
- SNOW LOAD IMPORTANCE FACTOR (Is) = 1.0

F. DESIGN WIND LOADS

- RISK CATEGORY II
- BASIC WIND SPEED = 115 MPH
- WIND LOAD IMPORTANCE FACTOR (Iw) = 1.0
- INTERNAL PRESSURE COEFFICIENT = +0.55 / -0.55
- WIND EXPOSURE CATEGORY = C
- WIND DESIGN PRESSURE (P) FOR THE MAIN WIND RESISTING SYSTEM = 41.4 PSF (WINDWARD & LEeward COMBINED) AT HIGHEST POINT.
- WIND DESIGN PRESSURE (P) FOR BUILDING COMPONENTS AND CLADDING = +49.5 PSF/-71.5 PSF ON CMU INFILL WALLS (50 SF).
- WIND DESIGN PRESSURE (P) FOR BUILDING COMPONENTS AND CLADDING = +49.5 PSF/-71.5 PSF ON CMU INFILL WALLS (50 SF).

G. SEISMIC DESIGN DATA

- RISK CATEGORY II
- SEISMIC IMPORTANCE FACTOR (Ie) = 1.0
- SITE CLASS = D
- SPECTRAL RESPONSE ACCELERATIONS: Ss 0.147, S1 = 0.074
- SPECTRAL RESPONSE COEFFICIENTS: Sds 0.157, S1 = 0.118
- SEISMIC DESIGN CATEGORY = B
- BASIC SEISMIC FORCE-RESISTING SYSTEM: BEARING WALL SYSTEM - ORDINARY REINFORCED CONCRETE SHEAR WALLS (A.2)
- RESPONSE MODIFICATION COEFFICIENT (R) = 4.0
- DEFLECTION AMPLIFICATION FACTOR (Cd) = 4.0
- OVERSTRENGTH FACTOR (Qs) = 2.5
- DESIGN BASE SHEAR (V) =0.0392 x W

H. DATUM AND BUILDING ELEVATIONS

- THE DATUM FOR THE BURN BUILDING IS THE TOP OF THE FIRST FLOOR CONCRETE SLAB AT THE EXTERIOR FACE OF THE EXTERIOR WALLS AT THE LOWEST POINT AND IS DESIGNATED ON THE DRAWINGS AS 0.00 FEET.
- THE DATUM ELEVATION IS 294.00 FEET.
- ALL TOP OF SLAB ELEVATIONS ARE SHOWN IN THE PLANS AS +XX.XX OR -XX.XX IN FEET RELATIVE TO THE DATUM.

I. SOILS INFORMATION

- THE FOLLOWING INFORMATION IS BASED ON THE GEOTECHNICAL REPORT ("SOILS REPORT") PREPARED BY NV5 ENGINEERS AND CONSULTANTS, INC. DATED JANUARY 11, 2024.
- ACCORDING TO THE SOILS REPORT, SOFT/LOOSE NEAR SURFACE SOILS (APPROXIMATELY 3 FEET DEEP) OVERLAY CLAYS, SILTS, AND SANDS (VARYING FROM 3 FEET TO 25 FEET) AND PARTIALLY WEATHERED ROCK AND ROCK (IN ONE BORING AT 8 FEET).
- ALLOWABLE SOIL BEARING VALUE FOR THE BURN BUILDING IS 2,500 PSF.
- ACCORDING TO THE SOILS REPORT, GROUND WATER WAS NOT OBSERVED WITHIN THE BORINGS AT THE BURN BUILDING (B-8 & B-9). SEE SOILS REPORT FOR DRAINAGE CONSIDERATIONS.
- SEE SPECIFICATIONS FOR EARTHWORK REQUIREMENTS, INCLUDING REPLACEMENT OF UNSUITABLE SOILS, MEASURES TO PREVENT INFILTRATION OF RUNOFF AND PRECIPITATION INTO UNDERLYING SOILS AND DEWATERING REQUIREMENTS IF GROUNDWATER IS ENCOUNTERED.

J. FOOTINGS

- EXTEND TOPS OF ALL FOOTINGS TO A MINIMUM OF 1'-6" BELOW EXTERIOR FINISHED GRADE, U.O.N.
- FOOTINGS SHALL BE SUPPORTED ON UNDISTURBED, NATURAL, ACCEPTABLE SOILS OR ON COMPACTED ENGINEERED FILL PLACED OVER THE NATURAL, ACCEPTABLE SOILS.
- ACCORDING TO THE SOILS REPORT, AS MUCH AS 3'-0" OF COMPACTED ENGINEERED FILL OR ABC STONE COULD BE REQUIRED BELOW FOUNDATIONS TO REPLACE SOFT/LOOSE NEAR SURFACE SOILS.
- EXTEND ANY OVER-EXCAVATION AND ENGINEERED FILL AREA LATERALLY BEYOND THE FOUNDATION FOOTPRINT TO A DISTANCE EQUAL TO THE DEPTH OF THE ENGINEERED FILL BENEATH THE FOOTING.
- FOOTING SUBGRADES AND ENGINEERED FILL SHALL BE APPROVED BY THE TESTING AGENCY GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE FOOTINGS AND ENGINEERED FILL.

K. BACKFILL COMPACTION

- EXCAVATE, PROOFROLL, BACKFILL, AND COMPACT FOUNDATION AND SLAB-ON-GRADE SUBGRADES PER THE EARTHWORK SPECIFICATION SECTIONS 312000.
- ALL PROOFROLLING AND ENGINEERED OR IMPORTED FILL MATERIALS AND PLACEMENT SHALL BE OBSERVED AND APPROVED BY THE TESTING AGENCY GEOTECHNICAL ENGINEER.
- PROVIDE FILL MATERIALS THAT ARE FREE OF DEBRIS, ORGANIC, AND DELETERIOUS MATERIALS AND THAT MEET THE REQUIREMENTS OF THE SPECIFICATIONS.
- PLACE ENGINEERED FILL MATERIAL IN MAXIMUM LEVEL LOOSE LIFTS OF 8 INCHES AND COMPACT TO 95% OF THE STANDARD PROCTOR TEST MAXIMUM DRY DENSITY (ASTM D-698).

L. CAST-IN-PLACE CONCRETE CONSTRUCTION

- CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318, ACI 301, AND THE ACI DETAILING MANUAL.
- PROVIDE CONCRETE WITH PROPERTIES THAT CONFORM TO THE CRITERIA SPECIFIED IN TABLE 1 ON SHEET BB002.
- PROVIDE NORMAL WEIGHT CONCRETE
- TESTING AGENCY SHALL TAKE CONCRETE TEST CYLINDERS IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318, CHAPTER 26 AND THE CONTRACT SPECIFICATIONS.
- SEE THE CONTRACT SPECIFICATIONS FOR ADDITIONAL CONCRETE TESTING REQUIREMENTS (AIR CONTENT, SLUMP, ETC.).
- TESTING AGENCY SHALL PERFORM REBAR INSPECTIONS OF ALL REINFORCING STEEL BEFORE ALL CONCRETE POURS.
- WHEN PLACING CONCRETE ON SLOPING FORMS AT CONCRETE STAIRS, PLACE CONCRETE AT LOWEST ELEVATION OF FORMS FIRST AND WORK UP TOWARD THE HIGHEST ELEVATION.
- APPLY (1) COAT OF BASF MASTERPROTECT H1000, BY BASF, OR APPROVED EQUAL BY EUCLID CHEMICAL COMPANY OR SIKA USA, TO TOP SURFACE OF INTERIOR ELEVATED FLOOR SLABS AFTER SLABS HAVE CURED FOR A MINIMUM OF 28 DAYS. PREPARE SURFACE AND APPLY COATING IN ACCORDANCE WITH REQUIREMENTS OF THE MANUFACTURER.
- PROVIDE CONTINUOUS DRIP ALONG EDGES OF ELEVATED CONCRETE SLABS AS SHOWN IN THE DRAWINGS.
- CHAMFER ALL EXPOSED CORNERS OF COLUMNS AND WALLS WITH 3/4" CHAMFER UNLESS OTHERWISE NOTED.
- AT LOCATIONS SHOWN ON THE DRAWINGS, CAST DOVETAIL ANCHOR SLOTS INTO CONCRETE. SEE GENERAL NOTE 0.15 FOR ADDITIONAL INFORMATION.
- FOR CAST-IN-PLACE CAPS ON MASONRY PARAPETS AND CUBICLE WALLS, PROVIDE EITHER:
  - 5,000 PSI, AIR-ENTRAINED, READY-MIX CONCRETE FROM THE CONCRETE SPECIFICATION, FOR WHICH PUMPING WOULD BE ALLOWED AS WELL AS OTHER MEANS & METHODS, AS LONG AS THE CONCRETE AND FINISH MEET THE REQUIREMENTS OF THE SPECIFICATIONS, OR
  - AIR-ENTRAINED QUICKRETE (QUICKRETE Q-MAX PRO), MIXED IN A MIXER ON SITE (NOT IN A WHEELBARROW), WITH THE FIBERS THAT PROJECT FROM THE SURFACE RUBBED OFF AFTER THE FINAL CURE AND WITH FINISH THAT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS.

M. CONCRETE REINFORCEMENT

- PROVIDE HIGH STRENGTH, NEW BILLET DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 FOR STEEL REINFORCEMENT IN CONCRETE.
- PROVIDE STEEL REINFORCEMENT DETAILS IN ACCORDANCE WITH ACI 318 AND CRSI STANDARDS.
- PROVIDE CONCRETE PROTECTION FOR STEEL REINFORCEMENT OF CAST-IN-PLACE CONCRETE AS SPECIFIED IN TABLE 2 ON SHEET BB002. IF OF REINFORCING AS CLOSE TO THE CONCRETE SURFACES AS POSSIBLE WITHOUT VIOLATING THE REQUIREMENTS SHOWN IN THE TABLE.
- COORDINATE REINFORCING PLACEMENT WITH ALL POST-INSTALLED ANCHORS AT GUARDRAILS, DOORS, SHUTTERS, SCUPPERS, ROPE TIE-OFF ANCHORS, ETC.

N. SLABS-ON-GRADE

- FOR ALL SLABS-ON-GRADE, PROVIDE A 6" MIN. THICK POURED CONCRETE SLAB-ON-GRADE, REINFORCED WITH WWR6x6-W2.9xW2.9 LOCATED IN THE UPPER THIRD PORTION OF SLAB THICKNESS.
- FOLLOW WRI STANDARDS FOR WELDED WIRE REINFORCEMENT PLACING, LAP, ETC.
- PROVIDE A MINIMUM OF 4" OF AGGREGATE BASE COURSE (ABC STONE) AS A BASE BELOW THE SLABS-ON-GRADE.
- PROVIDE A 15 MIL VAPOR BARRIER BELOW THE SLABS-ON-GRADE PER THE SPECIFICATIONS.
- PROVIDE A CONTINUOUS MANUFACTURED CRACK CONTROL JOINT (PREMOLDED PLASTIC STRIP) OR EARLY ENTRY SAW-CUT CONTROL JOINT IN THE TOP OF SLAB AT LOCATIONS SHOWN ON THE FOUNDATION PLANS. SEE SPECS. FOR REQUIREMENTS OF SAW-CUTTING.

O. MASONRY

- PROVIDE 2-CELL NORMAL WEIGHT CONCRETE BLOCK CONFORMING TO ASTM C-90.
- PROVIDE UNIT MASONRY THAT DEVELOPS INSTALLED COMPRESSIVE STRENGTHS (fm) AT 28 DAYS, BASED ON NET AREA, OF 2,000 PSI.
- PROVIDE MORTAR THAT CONFORMS TO ASTM C-270, TYPE S.
- ADD INTEGRAL WATER REPELLENT ADMIXTURE TO BLOCK AND MORTAR IN ALL MASONRY WALLS IN ACCORDANCE WITH THE SPECIFICATIONS.
- UNLESS OTHERWISE NOTED, PROVIDE HORIZONTAL JOINT REINFORCING AT 16" ON CENTER VERTICALLY IN ALL MASONRY WALLS.
- UNLESS OTHERWISE NOTED ON DRAWINGS, PROVIDE (1) #5 VERTICAL BAR AT ENDS OF WALLS, AT WALL CORNERS AND INTERSECTIONS, AT JAMBS OF OPENINGS, AND AT 24" O.C. MAXIMUM IN ALL MASONRY WALLS. SEE DRAWINGS FOR ADDITIONAL REINFORCING DETAILS, INCLUDING AT JOINTS.
- PROVIDE VERTICAL REINFORCING BARS FOR FULL HEIGHT OF WALL. DO NOT DOWEL BARS INTO CONCRETE SLABS AT TOPS OR BOTTOMS OF WALLS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- SEE DRAWINGS FOR ADDITIONAL DETAILS RELATING TO VERTICAL REINFORCING BARS, INCLUDING BARS AT DOOR, WINDOW, AND SCUPPER OPENINGS, AT OPEN VERTICAL JOINTS IN WALLS, AND AT OTHER LOCATIONS.
- KEEP CELLS TO RECEIVE BARS CLEAN OF MORTAR DROPPINGS.
- SECURE VERTICAL BARS WITH WIRE TIES AND SPACERS AT TOP AND BOTTOM TO ASSURE THAT BARS REMAIN IN POSITION DURING GROUTING.
- FILL ALL CELLS FULL HEIGHT WITH 3,000 PSI MASONRY GROUT PER ASTM C-476 AND THE SPECS.
- CLOSE CLEANOUTS AFTER GROUT FLOWS FULLY TO BOTTOM OF WALL. VIBRATE GROUT DURING PLACEMENT TO ELIMINATE AIR POCKETS.
- PROVIDE LOOSE-LAID FIRE BRICK ON FLOORS, WHERE INDICATED, THAT CONFORMS TO ASTM C-27, CLASSIFICATION: MEDIUM-DUTY.
- SEE THE CONTRACT SPECIFICATIONS FOR MASONRY TESTING AND INSPECTIONS REQUIRED, INCLUDING REINFORCING AND GROUTING INSPECTIONS.
- AT LOCATIONS INDICATED ON DRAWINGS, ANCHOR MASONRY TO CONCRETE WITH DOVETAIL ANCHORS AT 16" ON CENTER, UNLESS OTHERWISE NOTED. AND MORTAR MASONRY TIGHT TO FACES OF CONCRETE. PROVIDE S.S. 4" LONG NO. 103-C DOVETAIL TRIANGLE ANCHOR, EACH WITH 12 GA. DOVETAIL ANCHOR AND 3/16" DIA. WIRE TRIANGLE TIE, AND S.S. 22 GA. NO. 100 STANDARD DOVETAIL SLOTS BY HECKMAN BUILDING PRODUCTS, INC., OR AN EQUIVALENT BY HOHMANN & BARNARD OR DUR-O-WAL, APPROVED BY THE ENGINEER. SPACE ANCHORS AT 16" O.C. VERTICALLY AND, IF APPLICABLE, 24" O.C. HORIZONTALLY U.O.N. DO NOT ANCHOR MASONRY TO CONCRETE WHERE OPEN JOINTS ARE SHOWN NOR WHERE THERMAL LININGS SEPARATE CONCRETE FROM MASONRY.
- ALL MASONRY WALLS SHALL BE STANDARD GRAY COLOR WITH 8"(THICK) x 16"(LONG) x 8"(TALL) NOMINAL BLOCKS. ALL BLOCKS SHALL BE STANDARD SMOOTH FACE BLOCK.
- PROVIDE (2) COATS OF WATER REPELLENT SEALER, AS INDICATED IN SPECIFICATION SECTION 04 20 00, TO THE EXTERIOR FACE OF CMU WALLS WHERE INDICATED IN PLAN.
- SEE GENERAL NOTE L.12 FOR PARAPET & CUBICLE WALL CAPS.

P. ANCHORS

- INSTALL ADHESIVE ANCHORS, EXPANSION ANCHORS, SLEEVE ANCHORS, AND CONCRETE ANCHOR SCREWS PER THE TYPICAL ANCHOR SCHEDULES ON SHEET BB002.
- PROVIDE ANCHORS WITH MINIMUM EMBEDMENT AND ALLOWABLE CAPACITIES SHOWN IN THE SCHEDULES, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- IF MINIMUM REQUIREMENTS FOR ANCHORS CAN NOT BE ACHIEVED DUE TO FIELD CONDITIONS, NOTIFY THE ENGINEER.
- INSTALL ALL ANCHORS IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.
- DRILL HOLES FOR ANCHORS TO BE INSTALLED IN MASONRY WITH A ROTARY DRILL ONLY. NOT A ROTARY-HAMMER DRILL. DO NOT DAMAGE FACES OF WALLS, CEILINGS, SLABS, OR OTHER SUBSTRATES WHILE DRILLING.
- SUBMIT PROPOSED ANCHORS TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING WORK.
- DO NOT DAMAGE REINFORCING STEEL WHILE INSTALLING ANCHORS. COORDINATE REINFORCING PLACEMENT WITH ALL POST-INSTALLED ANCHORS AT GUARDRAILS, DOORS, SHUTTERS, SCUPPERS, ROPE TIE-OFF ANCHORS, ETC.
- ANCHORS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR RESPONSIBLE FOR THE SCOPE OF WORK BEING ANCHORED.

Q. STEEL SHAPES AND PLATES

- PROVIDE STEEL WITH PROPERTIES LISTED IN TABLE 3 ON SHEET BB002.
- SEE SPECIFICATIONS FOR REQUIREMENTS OF STAINLESS STEEL ANGLES AND PLATES.
- PROVIDE WELDED SHOP CONNECTIONS UNLESS OTHERWISE NOTED.
- MAKE FIELD CONNECTIONS WITH ASTM A-325N HIGH STRENGTH BOLTS TIGHTENED TO A SNUG TIGHT CONDITION, UNLESS OTHERWISE NOTED.
- PERFORM ALL WELDING WITH WELDERS QUALIFIED IN ACCORDANCE WITH AWS PROCEDURES FOR WELDER QUALIFICATION.
- PROVIDE GALVANIZING OR STEEL MEMBERS, UNLESS OTHERWISE NOTED ON THE DRAWINGS AS "PAINTED" OR "STAINLESS STEEL".
- AT GALVANIZING VENT HOLES IN PIPES AND TUBES IN RAILINGS, EXTERIOR STAIRS, ROPE FRAMES AND OTHER NOTED ITEMS, LOCATE VENT HOLES AT BOTTOM OF PIPE OR TUBE. PLUG ALL VENT HOLES AFTER GALVANIZING IN ONE OF THE FOLLOWING WAYS: HAMMER IN A ZINC GALVANIZING VENT HOLE PLUG, GRIND IT SMOOTH, AND TOUCH UP WITH GALVANIZING REPAIR PAINT. A SECOND OPTION IS TO PLUG WELD THE GALVANIZING VENT HOLES, GRIND THE WELDS SMOOTH, AND TOUCH UP WITH GALVANIZING REPAIR PAINT PER THE SPECIFICATIONS.
- WHERE INDICATED IN THE DRAWINGS AS "PAINTED", PROVIDE STEEL WITH ONE SHOP COAT OF RUST-INHIBITING PRIMER AND TWO FIELD COATS AS INDICATED IN THE SPECIFICATIONS.
- WHERE INDICATED IN THE DRAWINGS AS "STAINLESS STEEL", PROVIDE STAINLESS STEEL OF TYPE INDICATED IN THE SPECIFICATIONS.
- SEE THE CONTRACT SPECIFICATIONS FOR STEEL TESTING AND INSPECTIONS REQUIRED.

R. STEEL GRATING AND TREADS

- PROVIDE 2" DEEP, 13 GAUGE, GALVANIZED 'PERF-O GRIP' STEEL GRATING BY COOPER B-LINE, OR AN EQUIVALENT BY NUCOR GRATING OR METALEX, APPROVED BY THE ENGINEER. MAXIMUM PLANK WIDTH IS 12 INCHES. INSTALL GRATING IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS TO CREATE A TWO-SPAN CONDITION BY WELDING (SCREWS AND CLIPS NOT ALLOWED). PROVIDE GRATING PLANK LENGTHS THAT ARE AS LONG AS POSSIBLE TO MINIMIZE CUT PLANKS AND JOINTS WHERE CUT ENDS OF PLANKS ABUT ONE ANOTHER.
- PROVIDE 2" DEEP, 13 GAUGE, GALVANIZED 'PERF-O GRIP' STAIR TREADS BY COOPER B-LINE, OR AN EQUIVALENT BY NUCOR GRATING OR METALEX, APPROVED BY THE ENGINEER. INSTALL TREADS IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS USING STANDARD ZINC COATED BOLTS.
- PROVIDE A GALVANIZED 2" TALL VERTICAL END PLATE TO CLOSE OFF THE ENDS OF ALL GRATING PLANKS TO ELIMINATE JAGGED EDGES AND TO STRENGTHEN THE ENDS OF THE PLANKS. THIS INCLUDES ENDS OF PLANKS THAT ABUT ENDS OF ADJACENT PLANKS AND THAT ABUT FACE OF THE BUILDING.
- TOUCH UP ALL ABRASIONS AND WELDS WITH GALVANIZING REPAIR PAINT PER THE SPECIFICATIONS.

S. THERMAL LINING SYSTEM

- THE BASIS OF DESIGN FOR THE THERMAL LINING SYSTEM IS HTL SYSTEM 203, MANUFACTURED BY HIGH TEMPERATURE LININGS, INC. OF WHITESTONE, VIRGINIA AT (800) 411-6313. SEE SPECIFICATION SECTION 070001 FOR SYSTEM COMPONENT REQUIREMENTS, PERFORMANCE REQUIREMENTS, QUALIFICATION PROCEDURE, AND SUBMITTAL REQUIREMENTS.
- INSTALL THERMAL LININGS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER. INSTALLATION SHALL BE PERFORMED BY A MANUFACTURER-APPROVED INSTALLER.
- THE THERMAL LINING INSTALLER REQUIRES THE FOLLOWING SEQUENCE OF CONSTRUCTION TO COORDINATE INSTALLATION OF THERMAL LININGS AND MASONRY WALLS:
  - CONSTRUCT THE CONCRETE FRAME AND STRUCTURE.
  - CONSTRUCT EXTERIOR MASONRY WALLS.
  - INSTALL THERMAL LININGS ON CEILINGS AND CONSTRUCT INTERIOR MASONRY WALS IN THE SEQUENCES REQUIRED TO ACHIEVE THE TOP-OF-WALL BRACING DETAILS SHOWN ON THE DRAWINGS.
  - INSTALL BRACING ANGLES & BRACING ASSEMBLIES AT TOPS OF INTERIOR AND EXTERIOR WALLS.
- PER THE REQUIREMENTS OF THE LINING MANUFACTURER, THE OWNER/USER WILL PERFORM A "PRE-BURN" AT LEAST ONE DAY BEFORE TRAINING BEGINS TO PROPERLY DRY OUT AND CURE THE THERMAL LININGS. THE THERMAL LINING MANUFACTURER'S RECOMMENDATIONS ARE AS FOLLOWS:
  - BURN 2 WOOD PALLETES AND A BAIL OF STRAW IN EACH ROOM THAT CONTAINS THERMAL LINING TILES.
  - ALLOW THE FIRE TO BURN UNTIL NEARLY EXHAUSTED.
  - AT THIS POINT, ADD 2 MORE PALLETES AND BURN AGAIN UNTIL NEARLY EXHAUSTED.
  - REPEAT FOR A TOTAL OF 4 TIMES (8 PALLETES).
  - LET THE FIRE BURN OUT COMPLETELY WITHOUT THE USE OF WATER TO EXTINGUISH THE FIRE.
  - DO NOT BURN ALL 8 PALLETES AT THE SAME TIME.
- SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION ABOUT THERMAL LININGS. SEE DRAWINGS FOR DETAILS AND HOW LINING INSTALLATION MUST BE COORDINATED WITH CONCRETE, MASONRY, AND METALS INSTALLATION.

T. TESTING AND INSPECTIONS OF ROPE TIE-OFF POINTS

- OWNER'S TESTING AGENCY SHALL TEST EACH ROPE ANCHOR ASSEMBLY AND ROPE FRAME ASSEMBLY WITH A 5,000-POUND PULL TEST, AS FOLLOWS:
  - SURFACE-MOUNTED ROPE ANCHOR ASSEMBLY: PULL TEST ON HOIST RING PERPENDICULAR TO THE SLAB OR WALL SURFACE ON WHICH ASSEMBLY IS ATTACHED.
  - ROPE FRAME ASSEMBLY: PULL TEST AT TOP OF FRAME AT EACH CORNER OF FRAME PERPENDICULAR TO SLAB SURFACE, TESTING ONE CORNER AT A TIME.

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hnh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

WTC EWS - FIRE & RESCUE TRAINING CENTER

WAKE TECHNICAL COMMUNITY COLLEGE

5345 ROLESVILLE RD, WENDELL, NC 27591

NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET

BURN BUILDING -

GENERAL NOTES

BB001



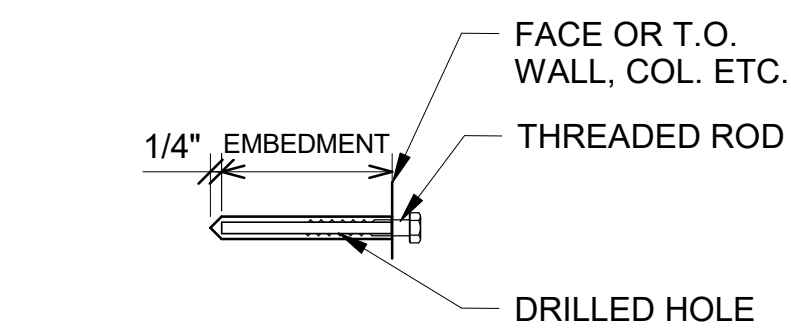
TABLE 1 - CONCRETE PROPERTIES			
STRUCTURE TYPE	f <sub>c</sub> (MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS) (psi)	MAXIMUM WATER/CEMENT RATIO	AIR RANGE (%)
ROOF & FLOOR SLABS, SLAB-ON-GRADE, COLUMNS, WALLS, PEDESTALS, FOOTINGS, & FOUNDATIONS	5,000	0.40	6% ± 1 1/2% (ENTRAINED)

TABLE 2 - CONCRETE PROTECTION FOR STEEL REINFORCEMENT	
STRUCTURE TYPE	MINIMUM CLEAR COVER (UNLESS OTHERWISE NOTED ON DRAWINGS)
ELEVATED SLABS & STAIRS	1 1/2" TO BOTTOM BARS 2" SIDE COVER FOR ALL BARS 2" TO TOP BARS
WALLS	FOR SINGLE LAYER, CENTER BARS IN WALLS. FOR DOUBLE LAYER, 2" TO OUTERMOST BARS.
COLUMNS & PEDESTALS	2" TO VERTICAL BARS 1 5/8" TO TIES
FOOTINGS AND OTHER EARTH FORMED CONCRETE	3"

TABLE 3 - STRUCTURAL STEEL PROPERTIES			
SHAPE	ASTM DESIGNATION	GRADE	MIN. YIELD STRENGTH (Fy)
PLATES & ANGLES	A-36	---	36 KSI
WIDE FLANGES	A-992	---	50 KSI
CHANNELS	A-572	---	50 KSI
HSS RECT.	A-500	C	50 KSI
HSS ROUND	A-53*	B	35 KSI

\* A-500, GRADE C, 46 KSI IS AN ACCEPTABLE ALTERNATE FOR A-53 AS LONG AS PIPE SIZES MEET REQUIREMENTS SHOWN ON DRAWINGS.

ADHESIVE ANCHOR SCHEDULE/EPOXY			
ANCHOR DIAMETER	EMBEDMENT DEPTH	MIN. ALLOWABLE LOADS IN GROUT-FILLED CMU	
		TENSION (lbs)	SHEAR (lbs)
3/8" (HY270)	3 3/8"	1,240	850
1/2" (HY270)	4 1/2"	2,035	1,495
5/8" (HY270)	5 5/8"	2,840	2,615
ANCHOR DIAMETER	EMBEDMENT DEPTH	FACTORED LOADS IN 4,000 PSI CRACKED CONCRETE	
		TENSION (lbs)	SHEAR (lbs)
3/8" (HY200)	3 3/8"	4,335	2,630
1/2" (HY200)	4 1/2"	6,670	4,815
5/8" (HY200)	5 5/8"	9,325	7,670
3/4" (HY200)	6 3/4"	12,255	11,330

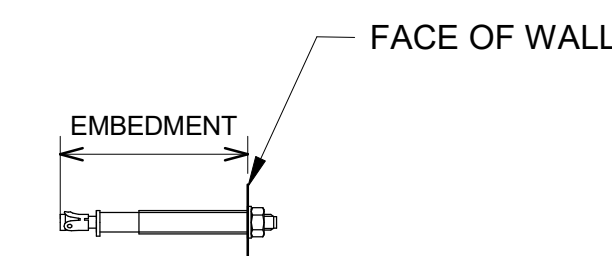


ADHESIVE ANCHOR

NOTES:

- WHERE INSTALLED IN HOLLOW, GROUTED OR SOLID CMU, PROVIDE HILTI HIT HY270 WITH HAS RODS, MANUFACTURED BY HILTI FASTENING SYSTEMS, OR AN APPROVED EQUIVALENT BY ITW RAMSET/REDHEAD OR POWERS FASTENERS, INC. (FORMERLY RAWL).
- WHERE INSTALLED IN CONCRETE, PROVIDE HILTI HIT HY200 WITH HIT-Z RODS, MANUFACTURED BY HILTI FABRICATING SYSTEMS, OR AN APPROVED EQUIVALENT BY ITW RAMSET/REDHEAD OR POWERS FASTENERS, INC. (FORMERLY RAWL).
- PROVIDE STAINLESS STEEL ADHESIVE ANCHORS UNLESS OTHERWISE NOTED.
- IF DRAWINGS CALL FOR EPOXYING REBAR INTO CONCRETE, USE ADHESIVE ANCHOR SCHEDULE/EPOXY TABLE.

SLEEVE ANCHOR SCHEDULE			
ANCHOR DIAMETER	EMBEDMENT DEPTH	MIN. ALLOWABLE LOADS IN HOLLOW CMU	
		TENSION (lbs)	SHEAR (lbs)
3/8"	1 1/2"	470	890



SLEEVE ANCHOR

NOTES:

- PROVIDE HILTI HLC-HX SS 304 SLEEVE ANCHORS MANUFACTURED BY HILTI FASTENING SYSTEMS, OR AN APPROVED EQUIVALENT BY ITW RAMSET/REDHEAD OR POWERS FASTENERS, INC. (FORMERLY RAWL).
- PROVIDE 304 STAINLESS STEEL ANCHORS, U.O.N.

LEGEND

CONCRETE

EARTH

GRAVEL

GROUT

FIRE BRICK

WOOD FRAMING

NORTH

PLYWOOD

RIGID INSULATION OR THERMAL LINING SYSTEM

THERMAL LINING IN PLAN OR SECTION

STEEL

CMU IN SECTION

GROUTED CMU IN SECTION

MASONRY IN ELEVATION

ELEVATION NUMBER

B100 | BB201

SHEET WHERE ELEVATION IS KEYED

SHEET WHERE ELEVATION IS DRAWN

SECTION NUMBER

B100 | BB201

SHEET WHERE SECTION IS KEYED

SHEET WHERE SECTION IS DRAWN

DETAIL NUMBER

B100 | BB201

SHEET WHERE DETAIL IS KEYED

SHEET WHERE DETAIL IS DRAWN

DETAIL KEY

100 ROOM NUMBER

1 DOOR TYPE

R ADDITIONAL REINFORCING

1 REVISION

CONCRETE ANCHOR SCREW SCHEDULE			
ANCHOR DIAMETER	EMBEDMENT DEPTH	MIN. ALLOWABLE LOADS IN 4,000 PSI CONCRETE	
		TENSION (lbs)	SHEAR (lbs)
1/4"	1 3/4"	255	540

CONCRETE SCREW ANCHOR

NOTES:

- UNLESS SHOWN AS STAINLESS STEEL, PROVIDE CONCRETE ANCHOR SCREWS THAT ARE MANUFACTURED FROM AISI 1022 STEEL WITH AN EXTENDED CORROSION RESISTANT COATING THAT IS COMPATIBLE WITH GALVANIZED STEEL.
- PROVIDE CONCRETE ANCHOR SCREWS MANUFACTURED BY ITW RAMSET/REDHEAD, OR AN APPROVED EQUIVALENT BY HILTI FASTENING SYSTEMS OR POWERS FASTENERS, INC. (FORMERLY RAWL).

ABBREVIATIONS

& L @ # e (E) A.F.F. A.F.G. ALT. APPROX. ARCH. B BLDG. BM. BOT. BRG. BSMT. CS C.C. C.E. C.I.P. C.J. CL. CLG. CLR. CMU C.O. COMP. COL. CONC. CONSTR. CONT. CTR. C.Y.

AND ANGLE AT NUMBER DIAMETER EXISTING ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ALTERATE APPROXIMATE ARCHITECTURAL BOTTOM BAR(S) BOTTOMMOST BAR(S) BUILDING BEAM(S) BOTTOM BEARING BASEMENT COLUMN STRIP COURSE(S) CENTER TO CENTER CONTINUOUS END CAST IN PLACE CONTROL JOINT CENTERLINE CEILING CLEAR CONCRETE MASONRY UNIT CLEAR OPENING COMPOSITE COLUMN CONCRETE CONSTRUCTION CONTINUOUS CENTER CUBIC YARD

D.E. DBL. DEMO. DIA. DIM. DN. D.P. DTL. DWG. EA. EE. EF. E.F.P. EJ. EL. ELEC. ENGR. EQ. EQUIP. EQUIV. E.W. EXIST. EXP. F.F. FDN. FLR. F.O. FT. FTG. FUT. G.B. GA. GALV. GEN.

DISCONTINUOUS END DOUBLE DEMOLISH, DEMOLITION DIAMETER DIMENSION DOWN DRILLED PIER DETAIL DRAWING(S) EACH EACH END EACH FACE EQUIVALENT FLUID PRESSURE EXPANSION JOINT ELEVATION ELECTRICAL ELEVATOR ENGINEER EQUAL EQUIPMENT EQUIVALENT EACH WAY EXISTING EXPANSION FINISH FLOOR FOUNDATION(S) FLOOR FACE OF FOOT OR FEET FOOTING(S) FUTURE GRADE BEAM GAUGE GALVANIZED GENERAL

H.A.S. HDR. HORIZ. HI. I.D. I.F. IN. INT. JT. K.S.F. K.S.I. L.E. LLH. LLV. LSH. LSV. LONG. LW. LO. MS. M.O. MAS. MAX. MECH. MTL. MFR. MIN. MISC. N. N.I.C. NO. OR # NOM. N.T.S.

HEADED ANCHOR STUD HEADER HORIZONTAL HIGH INSIDE DIAMETER INSIDE FACE INCH INTERMEDIATE JOINT KIPS PER SQUARE FOOT KIPS PER SQUARE INCH LEFT END LONG LEG HORIZONTAL LONG LEG VERTICAL LONG SIDE VERTICAL LONG SIDE VERTICAL LONGITUDINAL LIGHTWEIGHT LOW MIDDLE STRIP MASONRY OPENING MASONRY MAXIMUM MECHANICAL METAL MANUFACTURER MINIMUM MISCELLANEOUS NORTH NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE

O.C. O.D. O.F. OPNG. OPP. P.C. PL. PREFAB. P.S.F. P.S.I. P.T. PVC. PVMT. RAD. R.E. REINF. REV. SCHED. SECT. S.F. SIM. S.O.G. SPECS. S.S. STD. STL. STRUC. SYM. T TM T.&B. T.&G. T.L. T.O. T.O.C.

ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OPENING OPPOSITE PRE-CAST PLATE PREFABRICATED POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH POST-TENSIONED POLYVINYL CHLORIDE PAVEMENT RADIUS RIGHT END REINFORCING / REINFORCEMENT REVISION SCHEDULE SECTION SQUARE FEET SIMILAR SLAB-ON-GRADE SPECIFICATION(S) STAINLESS STEEL STANDARD STEEL STRUCTURAL SYMMETRICAL TOP BAR(S) TOPMOST BAR(S) TOP AND BOTTOM TONGUE AND GROOVE THERMAL LINING TOP OF TOP OF CONCRETE

T.O.F. T.O.P. T.O.S. T.O.W. TRANS. TYP. U.O.N. VERT. W/ W.O. W.P. WT. W.W.R.

TOP OF FOOTING TOP OF PARAPET TOP OF STEEL TOP OF WALL TRANSVERSE TYPICAL UNLESS OTHERWISE NOTED VERTICAL WITH WITHOUT WORK POINT WEIGHT WELDED WIRE REINFORCEMENT

EXPANSION ANCHOR SCHEDULE FOR THERMAL LINING SYSTEM ONLY			
ANCHOR DIAMETER	EMBEDMENT DEPTH	MIN. ALLOWABLE LOADS IN 4,000 PSI CONCRETE	
		TENSION (lbs)	SHEAR (lbs)
3/8"	2 1/2"	1,575	1,590

NOTES:

- PROVIDE STUD TYPE EXPANSION ANCHORS WITH A SINGLE THREE PIECE SECTION WEDGE THAT MEET THE DESCRIPTION IN FEDERAL SPECIFICATION A-A-1923A, TYPE 4.
- PROVIDE HILTI KWIK BOLT 3, MANUFACTURED BY HILTI FASTENING SYSTEMS, OR AN APPROVED EQUIVALENT BY ITW RAMSET/REDHEAD OR POWERS FASTENERS, INC. (FORMERLY RAWL).
- PROVIDE 316 STAINLESS STEEL ANCHORS, U.O.N.

EXPANSION ANCHOR

EXPANSION ANCHOR SCHEDULE					
ANCHOR DIAMETER	NOMINAL EMBEDMENT DEPTH	MIN. DESIGN STRENGTHS IN 4,000 PSI CRACKED CONCRETE BEFORE REDUCTIONS			
		TENSION (lbs) NON-SEISMIC LOADING	TENSION (lbs) SEISMIC LOADING	SHEAR (lbs) CONCRETE	SHEAR (lbs) STEEL STRENGTH ONLY, NON-SEISMIC LOADING
3/8"	3"	2,765	2,075	5,950	3,175
1/2"	3 3/4"	4,095	3,070	8,820	5,425
5/8"	4 1/2"	5,590	4,190	12,040	8,030
3/4"	5 1/2"	7,230	5,420	19,250	10,765

NOTES:

- THIS TABLE APPLIES TO ALL EXPANSION ANCHORS, EXCEPT FOR THOSE USED IN THE THERMAL LINING SYSTEM.
- PROVIDE STUD TYPE EXPANSION ANCHORS TESTED AND RATED FOR USE IN CRACKED CONCRETE AND LISTED IN ICC-ES EVALUATION REPORTS.
- PROVIDE HILTI KWIK BOLT T22, MANUFACTURED BY HILTI FASTENING SYSTEMS, SIMPSON STRONG-BOLT 2, MANUFACTURED BY SIMPSON STRONG-TIE, OR POWER-STUD+ SD4, MANUFACTURED BY DEWALT.
- PROVIDE 304 STAINLESS STEEL ANCHORS, U.O.N. AS ZINC-COATED. IN GENERAL, S.S. ANCHORS SHALL BE USED WITH S.S. ITEMS AND ZINC-COATED ANCHORS SHALL BE USED WITH GALV. ITEMS, U.O.N.
- FOR ALLOWABLE LOADS, MULTIPLY LISTED VALUES BY A FACTOR OF 0.65.

TYPICAL REINFORCING LAP SPlice SCHEDULE										
BAR SIZE	NORMAL WEIGHT CONCRETE								MASONRY	
	FOUNDATION		BEAM		SLAB		WALL		COL.	WALL
	BOT.	TOP	BOT.	TOP	INT.	EXT.	VERT.	HORIZ.	VERT	(1) BAR PER CELL VERT. HORIZ.
#3	1'-10"	2'-4"	1'-7"	2'-1"	1'-7"	1'-7"	1'-7"	1'-7"	1'-3"	1'-7"
#4	2'-5"	3'-2"	2'-1"	2'-8"	2'-1"	2'-1"	2'-1"	2'-1"	1'-7"	2'-1"
#5	3'-0"	3-11"	2'-7"	3'-5"	2'-7"	2'-7"	2'-7"	2'-7"	2'-0"	2'-7"
#6	3'-7"	4'-8"	3'-1"	4'-1"	3'-1"	3'-1"	3'-1"	3'-1"	2'-5"	4'-9"
#7	5'-3"	6'-9"	4'-6"	5'-11"	---	---	4'-6"	4'-6"	3'-6"	6'-7"
#8	6'-0"	7'-9"	5'-2"	6'-9"	---	---	5'-2"	5'-2"	4'-0"	---
#9	6'-9"	8'-9"	5'-10"	7'-7"	---	---	5'-9"	5'-9"	4'-6"	---
#10	7'-7"	9'-10"	6'-9"	8'-6"	---	---	---	---	---	---
#11	---	---	7'-3"	9'-5"	---	---	---	---	---	---

NOTES:

- VALUES SHOWN ARE MIN. LAP SPlice LENGTHS IN NORMAL WEIGHT CONC. OR GROUT FILLED MAS.
- TOP BARS ARE DEFINED AS BARS WITH MORE THAN 12" OF FRESH CONC. BELOW.
- FOR MIN. BAR DEVELOPMENT LENGTH, DIVIDE VALUES SHOWN IN LAP SPlice SCHED. BY 1.3.
- WHEN LAPPING TWO DIFFERENT SIZE BARS, USE THE LAP SPlice DIMENSION OF THE SMALLER BAR OR THE DEVELOPMENT LENGTH OF THE LARGER BAR, WHICHEVER IS LARGER.
- FOR BEAMS AND COLUMNS, VALUES SHOWN APPLY WHERE ALL PROVISIONS OF EITHER ONE OF THE FOLLOWING TWO CASES APPLY:

CASE 1

- MIN. CLR. SPACING OF BARS BEING DEVELOPED OR SPliced NOT LESS THAN ONE BAR DIAMETER, AND
- CLR. COVER NOT LESS THAN ONE BAR DIAMETER, AND
- STIRRUPS OR TIES ARE PROVIDED THROUGHOUT REQUIRED LENGTH OF LAP SPlice OR DEVELOPMENT LENGTH.

OR

CASE 2

- MIN. CLR. SPACING OF BARS BEING DEVELOPED OR SPliced NOT LESS THAN TWO BAR DIAMETERS.
- CLR. COVER NOT LESS THAN ONE BAR DIAMETER.
- STIRRUPS OR TIES ARE NOT PROVIDED THROUGHOUT REQUIRED LENGTH OF LAP SPlice OR DEVELOPMENT LENGTH.

WHERE ANY OF THESE PROVISIONS WITHIN THE APPLICABLE CASE ARE NOT MET, MULTIPLY VALUES SHOWN IN LAP SPlice SCHEDULE BY 1.5.

1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com

Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

WTCC EWS - FIRE & RESCUE TRAINING CENTER

WAKE TECHNICAL COMMUNITY COLLEGE

5345 ROLESVILLE RD, WENDELL, NC 27591

NCCCS NO. 2303

NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET

**BURN BUILDING - TABLES, LEGEND & ABBREVIATIONS**

BB002

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



NAME OF PROJECT: WTCC EWS - FIRE & RESCUE TRAINING CENTER ZIP CODE: 27603  
ADDRESS: 5345 ROLESVILLE RD, WENDELL, NC 27591  
OWNER/AUTHORIZED AGENT: WAKE TECHNICAL COMMUNITY COLLEGE PHONE: 919.866.6139 EMAIL: jfwicker@wakektech.edu  
OWNED BY: ☐ CITY/COUNTY ☐ PRIVATE ☐ STATE  
CODE ENFORCEMENT JURISDICTION: ☐ CITY ☒ COUNTY WAKE ☒ STATE

CONTACT: KRISTEN M. HESS, AIA					
DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
ARCHITECTURAL	HH ARCHITECTURE	KRISTEN M. HESS, AIA	9290	919.828.2301	khess@hh-arch.com
CIVIL	STEWART	ROY LORENZEN	15834	919.866.4813	rlorenzen@stewartinc.com
ELECTRICAL	-	-	-	-	-
FIRE ALARM	-	-	-	-	-
PLUMBING	-	-	-	-	-
MECHANICAL	-	-	-	-	-
SPRINKLER/SNOOPE	-	-	-	-	-
STRUCTURAL	ELA	ROGER LEBOEUF	928958	703.321.2100	rroger@elaengineers.com
RETAINING WALLS & HIGH	-	-	-	-	-
PRE-CAST	-	-	-	-	-
TRUSS	-	-	-	-	-
LANDSCAPE	-	-	-	-	-
HAZMAT	-	-	-	-	-

**2018 NC BUILDING CODE:**    ☐ NEW BUILDING    ☐ ADDITION    ☐ RENOVATION

☐ 1st TIME INTERIOR COMPLETION

☐ SHELL/CORE - CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS

☐ PHASED CONSTRUCTION - SHELL/CORE - CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS

**2018 NC EXISTING BUILDING CODE: EXISTING:** ☐ PRESCRIPTIVE ☐ REPAIR ☐ CHAPTER 14  
**ALTERATION:** ☐ LEVEL I ☐ LEVEL II ☐ LEVEL III  
☐ HISTORIC PROPERTY ☐ CHANGE OF USE

<b>CONSTRUCTED</b> (date): - <b>RENOVATED</b> (date): -		<b>CURRENT OCCUPANCY(S)</b> (Ch. 3): - <b>PROPOSED OCCUPANCY(S)</b> (Ch. 3): -	
<b>RISK CATEGORY</b> (Table 1604.5):		<b>CURRENT:</b> <input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV <b>PROPOSED:</b> <input type="checkbox"/> I <input checked="" type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV	

CONSTRUCTED (date): \_\_\_\_\_ ORIGINAL USE(S) (Ch. 3): \_\_\_\_\_ PROPOSED USE(S) (Ch. 3): \_\_\_\_\_  
RENOVATED (date): \_\_\_\_\_ CURRENT USE(S) (Ch. 3): \_\_\_\_\_

CONSTRUCTION TYPE: ☐ I-A ☐ II-A ☐ III-A ☐ IV-A ☐ V-A  
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☐ V-B  
SPRINKLERS: ☒ NO ☐ PARTIAL ☐ YES ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D  
STANDPIPS: ☐ NO ☐ YES ☐ CLASS ☐ I ☐ II ☐ III ☐ WET ☐ DRY  
FIRE DISTRICT: ☒ NO ☐ YES  
FLOOD HAZARD AREA: ☒ NO ☐ YES  
SPECIAL INSPECTIONS REQUIRED: ☐ NO ☒ YES (CONTACT THE LOCAL INSPECTION JURISDICTION FOR ADDITIONAL PROCEDURES AND REQUIREMENTS.)

GROSS BUILDING AREA TABLE			
FLOOR	(SQ FT)	SUB-TOTAL	
6th FLOOR	1,506	1,506	-
5th FLOOR	1,506	3,012	-
4th FLOOR	1,506	4,518	-
3rd FLOOR	1,506	6,024	-
2nd FLOOR	1,506	7,530	
1st FLOOR	1,506	9,036	
TOTAL	9,036	9,036	- SF

<b>PRIMARY OCCUPANCY CLASSIFICATION(S):</b>										
ASSEMBLY	<input type="checkbox"/> A-1	<input type="checkbox"/> A-2	<input type="checkbox"/> A-3	<input type="checkbox"/> A-4	<input type="checkbox"/> A-5					
BUSINESS	<input type="checkbox"/>									
EDUCATIONAL	<input type="checkbox"/>									
FACTORY	<input type="checkbox"/> F-1 MODERATE	<input type="checkbox"/> F-2 LOW								
HAZARDOUS	<input type="checkbox"/> H-1 DETRAGATE	<input type="checkbox"/> H-2 DEFLEGATE	<input type="checkbox"/> H-3 COMBUST	<input type="checkbox"/> H-4 HEALTH	<input type="checkbox"/> H-5 HPHM					
INSTITUTIONAL	<input type="checkbox"/> I-1 CONDITION	<input type="checkbox"/> 1	<input type="checkbox"/> 2							
	<input type="checkbox"/> I-2 CONDITION	<input type="checkbox"/> 1	<input type="checkbox"/> 2							
	<input type="checkbox"/> I-3 CONDITION	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5				
	<input type="checkbox"/> I-4									
MERCANTILE	<input type="checkbox"/>									
RESIDENTIAL	<input type="checkbox"/> R-1	<input type="checkbox"/> R-2	<input type="checkbox"/> R-3	<input type="checkbox"/> R-4						
STORAGE	<input type="checkbox"/> S-1 MODERATE	<input type="checkbox"/> S-2 LOW	<input type="checkbox"/> HIGH-PILED							
	<input type="checkbox"/> PARKING GARAGE	<input type="checkbox"/> OPEN	<input type="checkbox"/> ENCLOSED	<input type="checkbox"/> REPAIR GARAGE						
UTILITY AND MISCELLANEOUS	<input checked="" type="checkbox"/>									
<b>ACCESSORY OCCUPANCY CLASSIFICATION(S):</b>										
-										
-										
-										
<b>SPECIAL USES</b> (Chapter 4 - List Code Sections):										
<b>SPECIAL PROVISIONS</b> (Chapter 5 - List Code Sections):										
<b>MIXED OCCUPANCY:</b>	<input type="checkbox"/> NO	<input type="checkbox"/> YES								
SEPARATION:			-	HR.	EXCEPTION:		-			

☐ **NON-SEPARATED USE (508.3) -** THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.

☐ **SEPARATED USE (508.4) -** SEE BELOW FOR AREA CALCULATIONS FOR EACH STORY. THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1.00 \quad \text{AREA} \frac{\div}{\div} + \frac{\div}{\div} = X \leq 1.00$$

[illegible]

ALLOWABLE HEIGHTS							
	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE				
BUILDING HEIGHT (IN FEET (Table 504.3))	UL	70'-0"	NCIBC				
BUILDING HEIGHT IN STORIES (Table 504.4)	UL	7	NCIBC				

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS							
BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (w/_____" REDUCTION)				
STRUCTURAL FRAME, INCLUDING COLUMNS, GRIDERS, TRUSSES	-	-	-	-	-	-	-
BEARING WALLS	-	-	-	-	-	-	-
EXTERIOR							
NORTH	-	-	-	-	-	-	-
EAST	-	-	-	-	-	-	-
WEST	-	-	-	-	-	-	-
SOUTH	-	-	-	-	-	-	-
INTERIOR	-	-	-	-	-	-	-
NONBEARING WALLS AND PARTITIONS							
EXTERIOR WALLS							
NORTH							
EAST							
WEST							
SOUTH							
INTERIOR WALLS & PARTITIONS							
FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS							
FLOOR CEILING ASSEMBLY							
COLUMNS SUPPORTING FLOORS							
ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS							
ROOF CEILING ASSEMBLY							
COLUMNS SUPPORTING ROOF							
SHAFT ENCLOSURES - EXT							
SHAFT ENCLOSURES - OTHER							
CORRIDOR SEPARATION							
OCCUPANCY/FIRE BARRIER SEPARATION							
PARTY/FIRE WALL SEPARATION							
SMOKE BARRIER SEPARATION							
SMOKE PARTITION							
TENANT / DWELLING UNIT / SLEEPING UNIT SEPARATION							
INCIDENTAL USE SEPARATION							

NOT APPLICABLE

\* Indicates section number permitting reduction

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
-	-	-	-

EMERGENCY LIGHTING: ☐ NO ☐ YES

EXIT SIGNS: ☐ NO ☐ YES

FIRE ALARM: ☐ NO ☐ YES

SMOKE DETECTION SYSTEM: ☐ NO ☐ YES ☐ PARTIAL         

CARBON MONOXIDE DETECTION: ☐ NO ☐ YES

FIRE SAFETY PLAN SHEET # : \_\_\_\_\_

FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7)  
 ASSUMED AND REAL PROPERTY LINE LOCATIONS (IF N/A, SEE PLAN)  
 ASSUMED WALL OPENING AREA WITH RESPECT TO ASSUMED PROPERTY LINES (705.8)  
 OCCUPANCY USE FOR EACH AREA AS IT RELATES TO JOINT LOAD CALCULATION (TABLE 1004.1.2)  
 OCCUPANT LOADS FOR EACH AREA  
 EXIT ACCESS TRAVEL DISTANCES (1006.2.1)  
 COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1))  
 DEAD END LENGTHS (1020.4)  
 CLEAR EXIT WIDTHS FOR EACH EXIT DOOR  
 MAX. CALCULATED OCC. LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3)  
 ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR  
 A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION  
 LOCATION OF DOORS WITH PANIC HARDWARE (1010.1.10)  
 LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1010.1.9.7)  
 LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1010.1.9.9)  
 LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES  
 LOCATION OF EMERGENCY ESCAPE WINDOWS (1030)  
 THE SQUARE FOOTAGE OF EACH FIRE AREA (202)  
 THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT FOR OCCUPANCY CLASSIFICATION I-2 (407.5)  
 NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

ACCESSIBLE DWELLING UNITS (SECTION 1107)							
TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
0	0	0	0	0	0	0	0

ACCESSIBLE PARKING (SECTION 1106)					
LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 13' ACCESSIBLE	VAN SPACES WITH 8' ACCESSIBLE	
TOTAL					

[illegible]

SPECIAL APPROVAL: (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, OHHS, ICC, ETC., DESCRIBE BELOW)

**ENERGY REQUIREMENTS:**  
THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE PROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL ENERGY COST FOR THE STANDARD REFERENCE DESIGN VS ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.

EXISTING BUILDING COMPLIES WITH CODE:    ☐ NO    ☐ YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE)

EXEMPT BUILDING:                                ☐ NO    ☐ YES (PROVIDE CODE OR STATUTORY REFERENCE):    \_\_\_\_\_

CLIMATE ZONE:                                    ☐ 3A    ☐ 4A    ☐ 5A

<b>ROOF / CEILING ASSEMBLY (EACH ASSEMBLY)</b>	
DESCRIPTION OF ASSEMBLY:	_____
U-VALUE OF TOTAL ASSEMBLY:	_____
R-VALUE OF INSULATION:	_____
SKYLIGHTS IN EACH ASSEMBLY:	_____
U-VALUE OF SKYLIGHT:	_____
TOTAL SQUARE FOOTAGE OF SKYLIGHTS IN F <sup>2</sup> :	_____

<b>EXTERIOR WALLS (EACH ASSEMBLY)</b>	
DESCRIPTION OF ASSEMBLY:	<u>MASONRY CAVITY WALL w/ CONT. RIGID INSUL.</u>
U-VALUE OF TOTAL ASSEMBLY:	_____
R-VALUE OF INSULATION:	_____
OPENINGS (WINDOWS OR DOORS WITH GLAZING)	_____
U-VALUE OF ASSEMBLY:	_____
SOLAR HEAT GAIN COEFFICIENT:	_____
PROJECTION FACTOR:	_____
DOOR R-VALUES:	_____

DESCRIPTION OF ASSEMBLY:	-
U-VALUE OF TOTAL ASSEMBLY:	-
R-VALUE OF INSULATION:	-

**FLOORS OVER UNCONDITION SPACE (EACH ASSEMBLY)**

DESCRIPTION OF ASSEMBLY:	-
U-VALUE OF TOTAL ASSEMBLY:	-
R-VALUE OF INSULATION:	-

DESCRIPTION OF ASSEMBLY:	-
U-VALUE OF TOTAL ASSEMBLY:	-
R-VALUE OF INSULATION:	-
HORIZONTAL/VERTICAL REQUIREMENT:	-
SLAB HEATED:	-

### DESIGN LOADS:

IMPORTANCE FACTORS:	SNOW	(12)	1.0
	SEISMIC	(13)	1.0
LIVE LOADS:	ROOF	50	psf
	MEZZANINE	-	psf
	FLOOR	50	psf
GROUND SNOW LOAD:		15	psf
WIND LOAD:	ULTIMATE WIND SPEED	115	mph (ASCE-7)
	EXPOSURE CATEGORY	C	

**SEISMIC DESIGN CATEGORY:** ☐ A ☒ B ☐ C ☐ D

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:

**RISK CATEGORY (Table 1604.5)** ☐ I ☒ II ☐ III ☐ IV

**SPECTRAL RESPONSE ACCELERATION**  $S_s$  0.147 %g  $S_1$  0.074 %g

**SITE CLASSIFICATION (ASCE 7)** ☐ A ☐ B ☐ C ☐ D

**DATA SOURCE:** ☒ Field Test ☐ Presumptive ☐ Historical Data

**BASIC STRUCTURAL SYSTEM**

- ☒ Bearing Wall ☐ Dual w/ Special Moment Frame
- ☐ Building Frame ☐ Dual w/ Intermediate R/C
- ☐ Moment Frame ☐ Inverted Pendulum or Special Steel

**ANALYSIS PROCEDURE:** ☐ Simplified ☒ Equivalent Lateral Force ☐ Dynamic

**ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED?** ☐ YES ☐ NO

**LATERAL DESIGN CONTROL:** ☒ EARTHQUAKE ☐ WIND

**SOIL BEARING CAPACITIES**

FIELD TEST (provide copy of test report) \_\_\_\_\_ psf

PRESUMPTIVE BEARING CAPACITY \_\_\_\_\_ psf

PILE SIZE, TYPE, AND CAPACITY \_\_\_\_\_

<b>MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT</b>	
<b>THERMAL ZONE:</b>	
WINTER DRY BULB:	-
SUMMER DRY BULB:	-
<b>INTERIOR DESIGN CONDITIONS:</b>	
WINTER DRY BULB:	-
SUMMER DRY BULB:	-
RELATIVE HUMIDITY	-
<b>BUILDING HEATING LOAD:</b>	
	-
<b>BUILDING COOLING LOAD:</b>	
	-
<b>MECHANICAL SPACING CONDITIONING SYSTEM</b>	
<b>UNITARY</b>	
DESCRIPTION OF UNIT:	-
HEATING EFFICIENCY:	-
COOLING EFFICIENCY:	-
SIZE CATEGORY OF UNIT:	-
<b>BOILER</b>	
SIZE CATEGORY. IF OVERSIZED, STATE REASON:	-
<b>CHILLER</b>	
SIZE CATEGORY. IF OVERSIZED, STATE REASON:	-
<b>LIST EQUIPMENT EFFICIENCIES:</b>	
	-

**ELECTRICAL SYSTEMS AND EQUIPMENT:**

METHOD OF COMPLIANCE: ENERGY CODE ☐ PERFORMANCE ☐ PRESCRIPTIVE  
ASHRAE 90.1 ☐ PERFORMANCE ☐ PRESCRIPTIVE

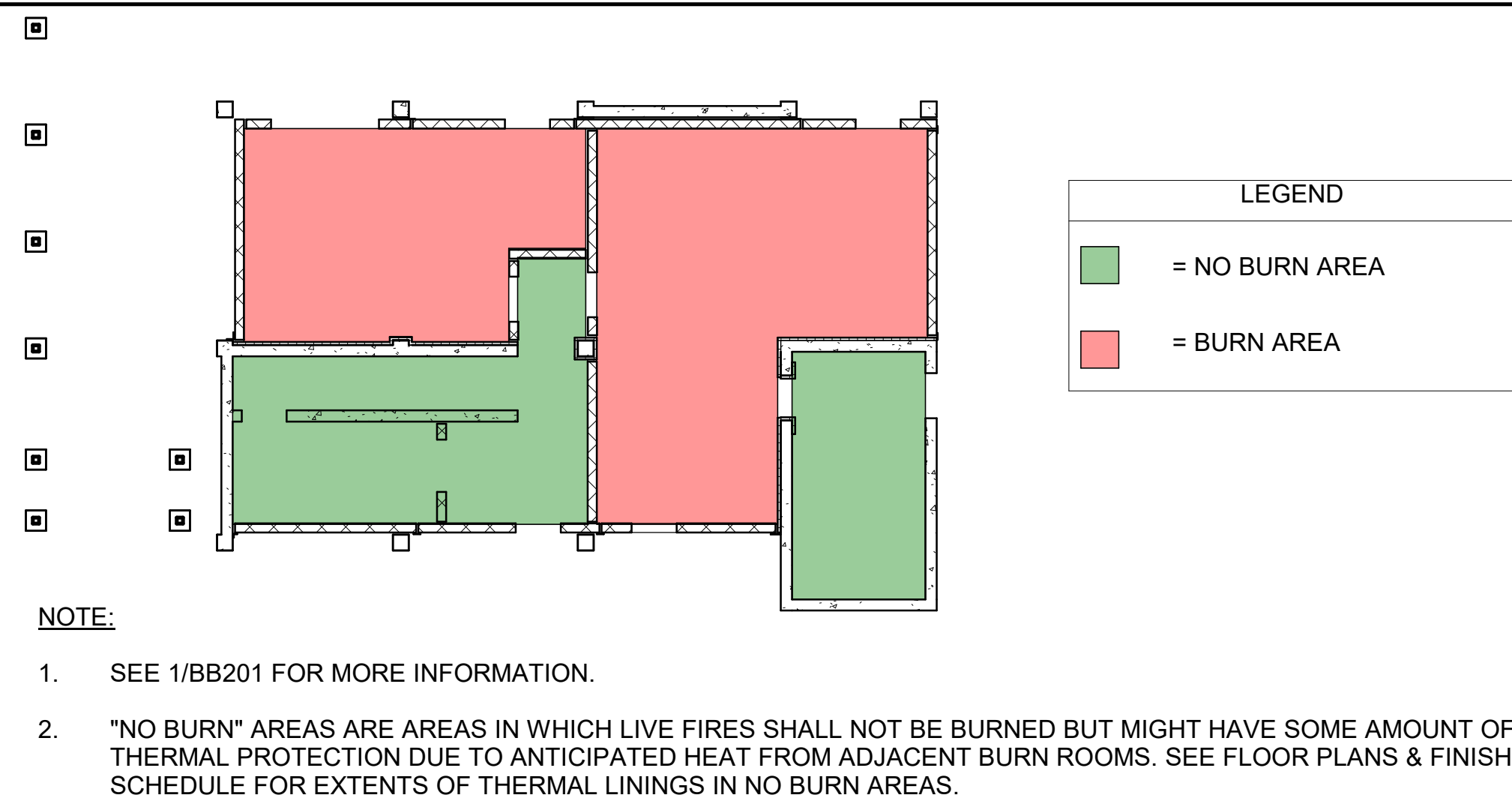
LIGHTING SCHEDULE: (each fixture)  
LAMP TYPE REQUIRED IN FIXTURE  
NUMBER OF LAMPS IN FIXTURE  
BALLAST TYPE USED IN THE FIXTURE  
NUMBER OF BALLASTS IN FIXTURE  
TOTAL WATTAGE PER FIXTURE  
TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED (WHOLE BUILDING OR SPACE BY SPACE)  
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED

(WHEN USING THE 2018 NCEC; NOT REQUIRED FOR ASHRAE 90.1)

- ☐ C406.2 MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE
- ☐ C406.3 REDUCED LIGHTING POWER DENSITY
- ☐ C406.4 ENHANCED DIGITAL LIGHTING CONTROLS
- ☐ C406.5 ON-SITE RENEWABLE ENERGY
- ☐ C406.6 DEDICATED OUTDOOR AIR SYSTEM
- ☐ C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING





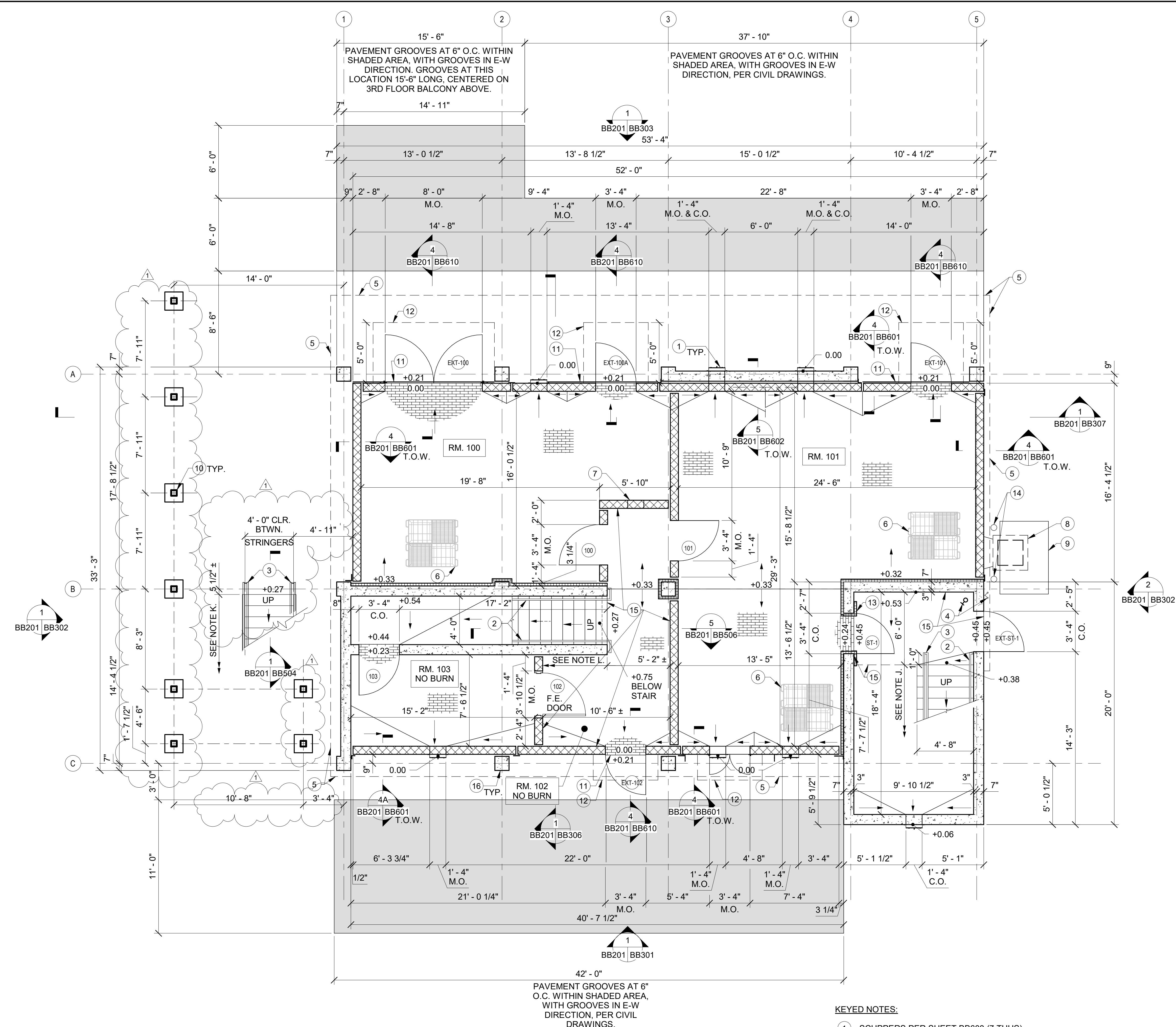


**2 FIRST FLOOR KEY PLAN**  
BB201 BB201 SCALE 3/32" = 1'-0"

FINISH SCHEDULE				
ROOM NOS.	CEILING FINISH	FLOOR FINISH	WALL FINISH	NOTES
100, 101	THERMAL LINING SYSTEM	FIRE BRICK	CMU & THERMAL LINING SYSTEM	SEE NOTES 1 & 2.
102	THERMAL LINING SYSTEM	FIRE BRICK	CMU & CONC.	SEE NOTE 1.
103	CONCRETE	FIRE BRICK	CMU & CONC.	SEE NOTE 1.
200, 205	THERMAL LINING SYSTEM	FIRE BRICK	CMU	SEE NOTES 1 & 3.
201, 202, 202A, 203, 204	THERMAL LINING SYSTEM	FIRE BRICK	CMU & THERMAL LINING SYSTEM	SEE NOTES 1, 2, & 3.
206	CONCRETE	FIRE BRICK	CMU & CONC.	SEE NOTE 1 & 3.
2ND FLOOR BALCONY	CONCRETE & THERMAL LINING ROLLOVER TILES	CONCRETE	CMU & CONC.	SEE NOTES 1 & 2.
300	THERMAL LINING SYSTEM	FIRE BRICK	CMU	SEE NOTES 1 & 3.
301, 302, 304	THERMAL LINING SYSTEM	FIRE BRICK	CMU & THERMAL LINING SYSTEM	SEE NOTES 1, 2, & 3.
303	THERMAL LINING SYSTEM	FIRE BRICK	CMU, CONC., & THERMAL LINING SYSTEM	SEE NOTES 1, 2, & 3.
INSET BALCONY	CONCRETE	CONCRETE	CMU & CONC.	SEE NOTE 1.
3RD FLOOR BALCONY	---	CONCRETE	CMU	SEE NOTE 1.
400, 406	THERMAL LINING SYSTEM	FIRE BRICK	CMU	SEE NOTES 1 & 3.
401, 407	THERMAL LINING SYSTEM	FIRE BRICK	CMU & THERMAL LINING SYSTEM	SEE NOTES 1, 2, & 3.
402, 403, 405	CONCRETE	FIRE BRICK	CMU & CONC.	SEE NOTES 1 & 3.
404	THERMAL LINING SYSTEM	FIRE BRICK	CMU & CONC.	SEE NOTES 1 & 3.
500, 501	THERMAL LINING SYSTEM	FIRE BRICK	CMU	SEE NOTES 1 & 3.
502, 503, 505, 507	CONCRETE	FIRE BRICK	CMU & CONC.	SEE NOTES 1 & 3.
504	THERMAL LINING SYSTEM	FIRE BRICK	CMU & CONC.	SEE NOTES 1 & 3.
506	CONCRETE	FIRE BRICK	CMU	SEE NOTES 1 & 3.
600	THERMAL LINING SYSTEM	FIRE BRICK	CMU & CONC.	SEE NOTES 1 & 3.
601	THERMAL LINING SYSTEM	FIRE BRICK	CMU	SEE NOTES 1 & 3.
602, 603	THERMAL LINING SYSTEM	FIRE BRICK	CMU & THERMAL LINING SYSTEM	SEE NOTES 1, 2, & 3.
604	CONCRETE	FIRE BRICK	CMU & CONC.	SEE NOTES 1 & 3.
INTERIOR STAIRS	CONCRETE & THERMAL LINING SYSTEM	CONCRETE	CONCRETE, EXCEPT CMU ABOVE 2ND FLOOR AT STRAIGHT RUN INTERIOR STAIR	SEE NOTES 1 & 4.

**FINISH SCHEDULE NOTES:**  
1. ALL EXPOSED CONCRETE AND CMU SURFACES ARE UNPAINTED.  
2. SEE PLANS FOR LOCATIONS AND EXTENTS OF THERMAL LINING SYSTEM ON CEILINGS AND WALLS.  
3. SEE SPECIFICATIONS FOR CONCRETE COATING/SEALER ON TOP OF CONCRETE SLAB (BELOW LOOSE Laid FIRE BRICK AT SECOND THRU SIXTH FLOORS ONLY, NOT AT FIRST FLOOR).  
4. PROVIDE THERMAL LINING SYSTEM AT CEILING AREA ABOVE MAIN LANDING IN STAIRWELL AT FIRST FLOOR ONLY AND AT ENTIRE CEILING OF STRAIGHT RUN STAIR.

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



**1 FIRST FLOOR PLAN**  
BB201 BB201 SCALE 1/4" = 1'-0"

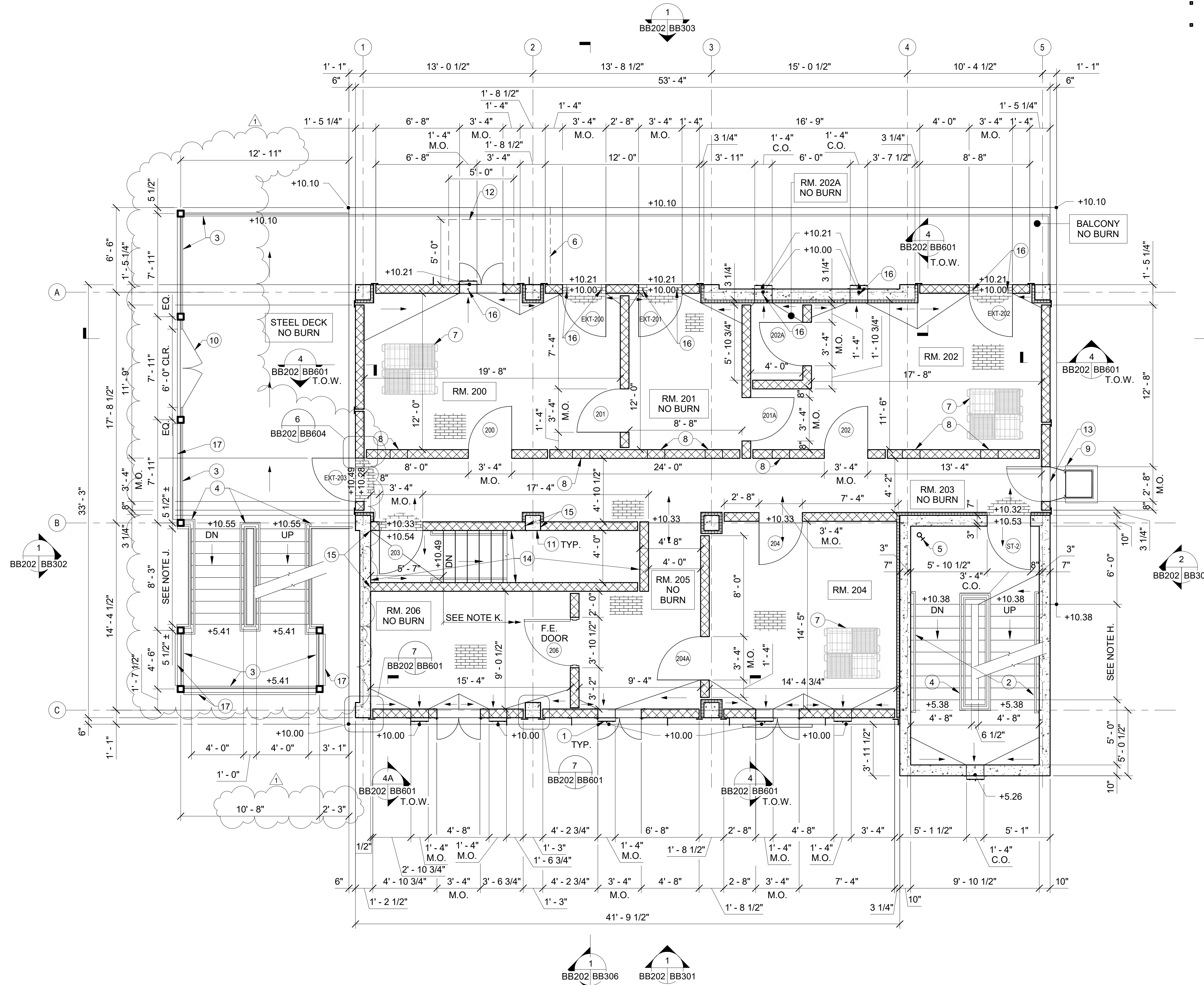
**NOTES:**

- A. DIRECTION OF DOWNWARD SLOPE OF TOP OF CONCRETE IS INDICATED WITH ———→.
- B. TOP OF FINISHED CONCRETE ELEVATION FOR THE BURN BUILDING SLAB IS INDICATED AS "X.XX" IN FEET ABOVE DATUM. DATUM IS AT ELEVATION 294.00'. FLOOR ELEVATIONS ARE NOTED AS +X.XX OR -X.XX IN FEET ABOVE OR BELOW DATUM.
- C. SEE SITE DRAWINGS FOR TOP OF EXTERIOR FINISHED GRADE AND OTHER SITE ELEVATIONS.
- D. ALL MASONRY WALLS SHALL BE 8" THICK (NOMINAL). ALL CONCRETE WALLS SHALL BE 10" THICK (ACTUAL).
- E. AT DOORWAYS WITHOUT DOORS, PROVIDE FULL-HEIGHT OPENING WITH NO LINTEL AND PROVIDE BULLNOSED CORNERS AT BOTH JAMBS. ALSO PROVIDE BULLNOSED CORNERS AT JAMBS OF ALL DOOR AND WINDOW OPENINGS, AT ENDS OF WALLS THAT DO NOT INTERSECT OTHER WALLS, AND AT CORNERS OF INTERIOR WALLS. CHAMFER CORNERS AT ENDS OF CONCRETE WALLS, AND BOTH WALL FACES AROUND PERIMETER OF ALL DOOR & WINDOW OPENINGS IN CONC. WALLS, EXCEPT WHERE THERE ARE THERMAL LININGS AT THAT WALL FACE.
- F. SEE SHEET BB604 & BB605 FOR DOOR DETAILS & SHEET BB606 FOR WINDOW DETAILS. XXX DENOTES DOOR MARK ON PLAN. SEE DOOR SCHEDULE ON SHEET BB605 FOR DETAILS.
- G. AT 20 LOCATIONS IN 8" NON-BEARING CMU WALLS, PROVIDE 1/2" OPEN VERTICAL WALL JOINT AT NEAREST HEAD JOINT LOCATIONS PER DETAIL 2/BB601 U.O.N.
- H. SEE GENERAL NOTES ON SHEET BB001 AND DETAILS ON SHEET BB602 FOR THERMAL LINING SYSTEM DETAILS.
- I. 8T @ 11" = 7'-4", 9R @ 6 11/16" = 5'-0"± FROM GROUND TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- J. 8T @ 11" = 7'-4", 9R @ 6 7/8" = 5'-1 3/4"± FROM GROUND TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- K. 17T @ 11" = 15'-7", 1R @ 9 3/16"±, 17R @ 6 11/16"± = 10'-2 5/8"±. PROVIDE EQUAL RISER HEIGHTS WITHIN FLIGHT.
- L. PROVIDE "CRICKETS" IN TOP SURFACE OF SLAB, INTEGRAL WITH SLAB (NOT A TOPPING) WITH A NON-SLOPING RIDGE TO ACHIEVE GRADUAL, POSITIVE DRAINAGE TOWARDS SCUPPERS AND DOORS AT LOCATIONS SHOWN IN PLANS AS: MAXIMUM SLOPE OF CRICKETS BETWEEN NON-SLOPING RIDGE AND FOOT, EXCEPT 1/8" PER FOOT AT STAIRWELL.
- M. LIVE FIRE TRAINING IS ALLOWED ONLY IN ROOMS 100 AND 101. NO BURNING IS ALLOWED IN ROOMS 102, 103, ON THE INTERIOR STAIRS, OR ON THE EXTERIOR STAIRS.
- N. SEE 1/BB601 AND 2, 2A, 2B/BB602 FOR TOP OF WALL CONDITIONS AT INTERIOR WALLS.

**KEYED NOTES:**

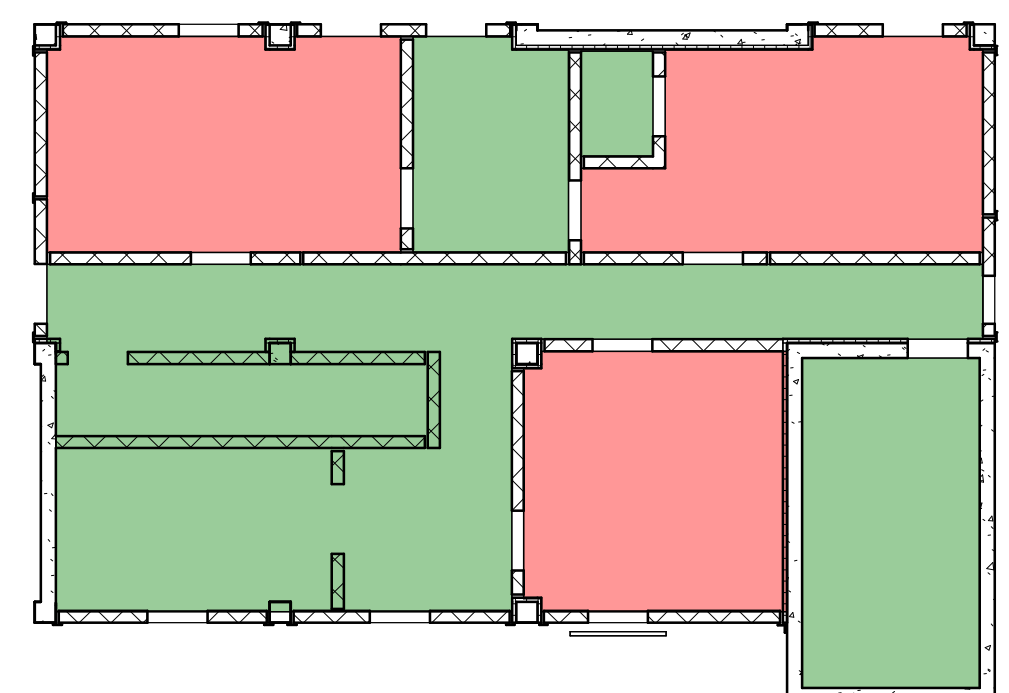
- 1 SCUPPERS PER SHEET BB603 (7 THUS).
- 2 HANDRAIL PER DETAIL 1/BB607.
- 3 FIXED GUARDRAIL W/ HANDRAIL PER DETAILS 1/BB504 AND 4/BB607.
- 4 F.D.C. & DRY STANDPIPE PER P DRAWINGS.
- 5 EDGE OF SECOND FLOOR SLAB ABOVE.
- 6 PROVIDE (3) TOTAL BURN RACKS IN BURN ROOMS PER DETAIL 3/BB610.
- 7 PROVIDE 16" (W) x 8" (H) OPENING AT BASE OF INTERIOR WALL FOR DRAINAGE PER DETAIL 6/BB603.
- 8 DEBRIS CHUTE ABOVE. ANGLE DEBRIS CHUTE AWAY FROM DOOR EXT-ST-1.
- 9 DUMPSTER BY OWNER (N.I.C.).
- 10 STEEL TUBE COLUMN ON CONCRETE PIER PER FOUNDATION PLAN (8 THUS). TOPS OF ALL PIERS SHALL BE AT THE SAME ELEVATION, 3" MIN A.F.G.
- 11 PROVIDE HORIZ. SLOT IN TOP OF EXTERIOR PAVING AT DOORWAY PER DETAIL 4/BB610.
- 12 THERMAL LINING ROLLOVER TILES AT UNDERSIDE OF SLAB ABOVE FOR EXTENTS SHOWN ON PLAN.
- 13 THERMAL LINING ROLLOVER TILES AT DOOR JAMBS, & HEAD, INCLUDING WALL FACE ABOVE DOOR.
- 14 BOLLARD PER CIVIL DWGS.
- 15 THERMAL LINING AT CEILING FOR EXTENTS SHOWN ON PLAN.
- 16 CONCRETE COLUMN PER DETAIL 1/BB501 (11 THUS).





1  
BB202/BB202 SCALE 1/4" = 1'-0"

SECOND FLOOR PLAN



LEGEND

■ = NO BURN AREA

■ = BURN AREA

NOTE:

1. SEE 1/BB202 FOR MORE INFORMATION.

2. "NO BURN" AREAS ARE AREAS IN WHICH LIVE FIRES SHALL NOT BE BURNED BUT MIGHT HAVE SOME AMOUNT OF THERMAL PROTECTION DUE TO ANTICIPATED HEAT FROM ADJACENT BURN ROOMS. SEE FLOOR PLANS & FINISH SCHEDULE FOR EXTENTS OF THERMAL LININGS IN NO BURN AREAS.

2  
BB202/BB202 SCALE 3/32" = 1'-0"

SECOND FLOOR KEY PLAN

NOTES:

- A. DIRECTION OF DOWNWARD SLOPE OF TOP OF CONCRETE AND TOP OF EXTERIOR STEEL DECK IS INDICATED WITH .
- B. TOP OF FINISHED CONCRETE ELEVATION FOR THE BURN BUILDING SLAB AND TOP OF EXTERIOR STEEL GRATING ARE INDICATED AS "X.XX" IN FEET ABOVE DATUM. SEE SHEET BB201 FOR DATUM.
- C. ALL MASONRY WALLS SHALL BE 8" THICK (NOMINAL). ALL CONCRETE WALLS SHALL BE 10" THICK (ACTUAL).
- D. AT DOORWAYS WITHOUT DOORS, PROVIDE FULL-HEIGHT OPENING WITH NO LINTEL AND PROVIDE BULLNOSED CORNERS AT BOTH JAMBS. ALSO PROVIDE BULLNOSED CORNERS AT JAMBS OF ALL DOOR AND WINDOW OPENINGS, AT ENDS OF WALLS THAT DO NOT INTERSECT OTHER WALLS, AND AT CORNERS OF INTERIOR WALLS. CHAMFER CORNERS AT ENDS OF CONCRETE WALLS, AND BOTH WALL FACES AROUND PERIMETER OF ALL DOOR & WINDOW OPENINGS IN CONC. WALLS, EXCEPT WHERE THERE ARE THERMAL LININGS AT THAT WALL FACE.
- E. SEE SHEET BB604 & BB605 FOR DOOR DETAILS & SHEET BB606 FOR WINDOW DETAILS. xxx DENOTES DOOR MARK ON PLAN. SEE DOOR SCHEDULE ON SHEET BB605 FOR DOORS.
- F. AT 37 LOCATIONS IN 8" NON-BEARING CMU WALLS, PROVIDE 1/2" OPEN VERTICAL WALL JOINT AT NEAREST HEAD JOINT LOCATIONS PER DETAIL 2/BB601 U.O.N.
- G. SEE GENERAL NOTES ON SHEET BB001 AND DETAILS ON SHEET BB602 FOR THERMAL LINING SYSTEM DETAILS.
- H. 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM SECOND FLOOR DOWN TO INTERMEDIATE LANDING BELOW. 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM SECOND FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- J. 8T @ 11" = 7'-4", 9R @ 6 7/8" ± = 5'-1 3/4" ± FROM SECOND FLOOR LANDING DOWN TO INTERMEDIATE LANDING BELOW. 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM SECOND FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- K. 17T @ 11" = 15'-7", 17R @ 9 3/16" ±, 17R @ 6 11/16" ± = 10'-2 5/8" ± PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- L. PROVIDE "CRICKETS" IN TOP SURFACE OF SLAB, INTEGRAL WITH SLAB (NOT A TOPPING) WITH A NON-SLOPING RIDGE TO ACHIEVE GRADUAL, POSITIVE DRAINAGE TOWARDS SCUPPERS AND DOORS AT LOCATIONS SHOWN IN PLANS AS: MAXIMUM SLOPE OF CRICKETS BETWEEN NON-SLOPING RIDGE AND SCUPPER OR DOOR = 1/4 INCH PER FOOT, EXCEPT 1/8" PER FOOT AT STAIRWELL.
- M. LIVE FIRE TRAINING IS ALLOWED ONLY IN ROOMS 200, 202 AND 204. NO BURNING IS ALLOWED IN ROOMS 201, 202A, 203, 205, 206, ON THE BALCONY, ON THE INTERIOR STAIRS, OR ON THE EXTERIOR STAIRS.
- N. SEE 1/BB601 AND 2, 2A, 2B/BB602 FOR TOP OF WALL CONDITIONS AT INTERIOR WALLS.

KEYED NOTES:

- ① SCUPPERS PER SHEET BB603 (9 THUS).
- ② HANDRAIL PER DETAIL 1/BB607.
- ③ FIXED GUARDRAIL PER DETAIL 2/BB607.
- ④ FIXED GUARDRAIL W/HANDRAIL PER DETAILS 1/BB504 AND 4/BB607.
- ⑤ DRY STANDPIPE PER P DRAWINGS.
- ⑥ EDGE OF THIRD FLOOR SLAB ABOVE.
- ⑦ PROVIDE (3) TOTAL BURN RACKS IN BURN ROOMS PER DETAIL 3/BB610.
- ⑧ PROVIDE 16" (W) x 8" (H) OPENING AT BASE OF INTERIOR WALL FOR DRAINAGE PER DETAIL 6/BB603.
- ⑨ DEBRIS CHUTE PER SHEET BB609.
- ⑩ DOUBLE-SWINGING GUARDRAIL GATE PER DETAIL 2/BB608.
- ⑪ CONCRETE COLUMN PER DETAIL 1/BB501 (11 THUS).
- ⑫ THERMAL LINING ROLLOVER TILES AT UNDERSIDE OF SLAB ABOVE FOR EXTENTS SHOWN ON PLAN.
- ⑬ SINGLE-SWING WINDOW SHUTTER PER DETAIL 8/BB606.
- ⑭ THERMAL LINING AT CEILING FOR EXTENTS SHOWN ON PLAN.
- ⑮ CONNECT END OF CMU WALL TO CONC. COLUMN W/ DOVETAIL ANCHORS PER GEN. NOTE O.15 AND MORTAR TIGHT.

KEYED NOTES:

- ⑮ PROVIDE WEEP PIPES BELOW FIRE BRICK AT NOTED DOOR AND SCUPPER OPENINGS PER DETAIL 8/BB603. PROVIDE (2) WEEP PIPES AT DOORWAYS WITH CENTER AT 6 3/4" INSIDE EACH DOOR JAMB AND PROVIDE (1) WEEP PIPE AT CENTER OF EACH SCUPPER OPENING. ALL WEEPS SHALL BE LOCATED AT EDGE OF SLAB STEP.
- ⑰ CROSS BRACING PER DETAIL 1/BB505.

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**

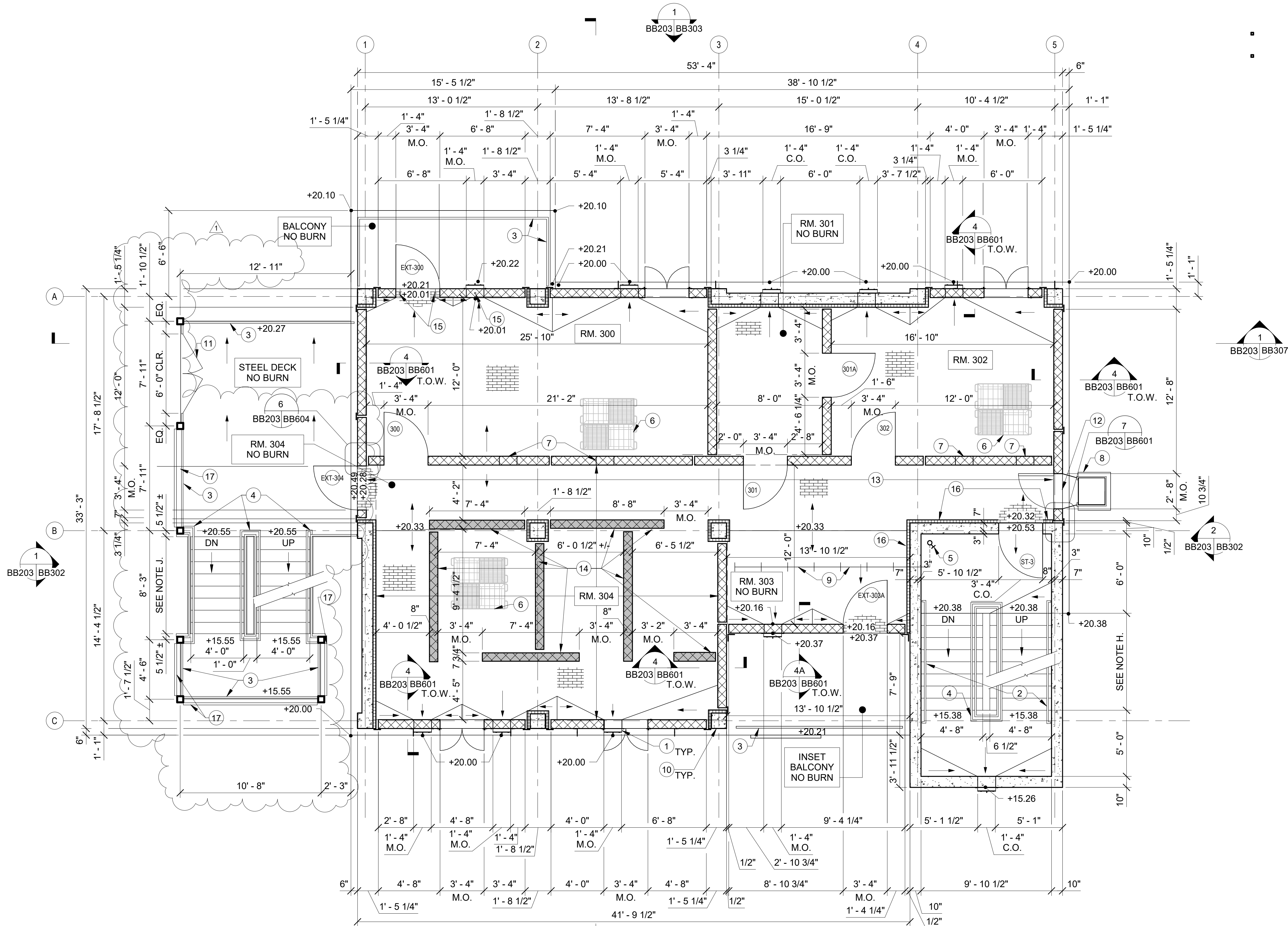
DATE ISSUED  
**03/14/25**

PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**

SHEET  
**BURN BUILDING - SECOND FLOOR PLAN**

BB202





1  
BB203 BB203 SCALE 1/4" = 1'-0"

THIRD FLOOR PLAN

NOTES:

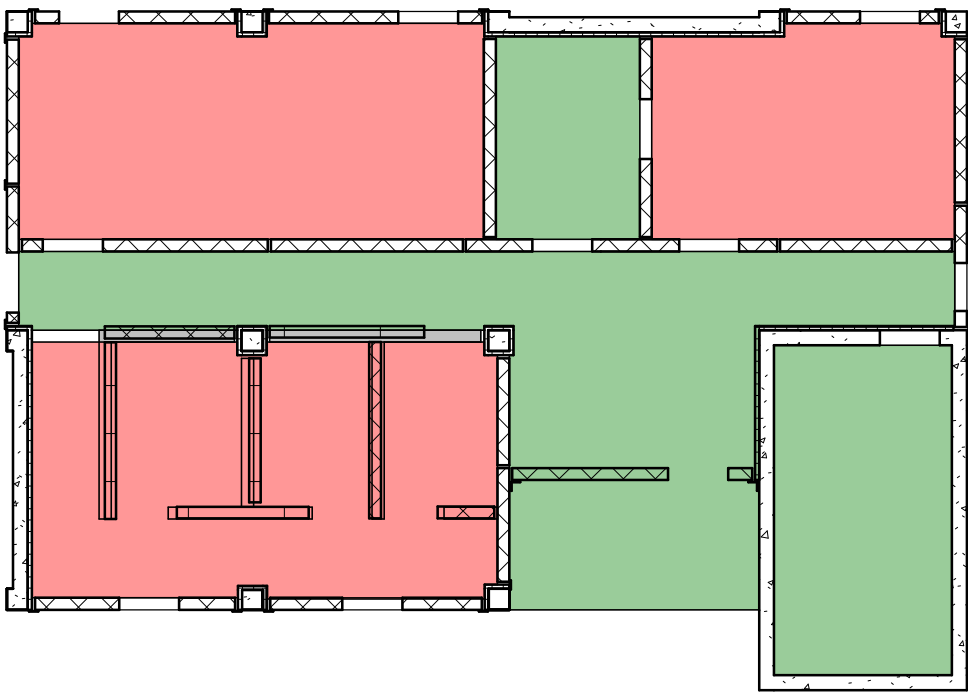
- A. DIRECTION OF DOWNWARD SLOPE OF TOP OF CONCRETE AND TOP OF EXTERIOR STEEL DECK IS INDICATED WITH
- B. TOP OF FINISHED CONCRETE ELEVATION FOR THE BURN BUILDING SLAB AND TOP OF EXTERIOR STEEL GRATING ARE INDICATED AS "X.XX" IN FEET ABOVE DATUM. SEE SHEET BB201 FOR DATUM.
- C. ALL MASONRY WALLS SHALL BE 8" THICK (NOMINAL). ALL CONCRETE WALLS SHALL BE 10" THICK (ACTUAL).
- D. AT DOORWAYS WITHOUT DOORS, PROVIDE FULL-HEIGHT OPENING WITH NO LINTEL AND PROVIDE BULLNOSED CORNERS AT BOTH JAMBS. ALSO PROVIDE BULLNOSED CORNERS AT JAMBS OF ALL DOOR AND WINDOW OPENINGS, AT ENDS OF WALLS THAT DO NOT INTERSECT OTHER WALLS, AND AT CORNERS OF INTERIOR WALLS. CHAMFER CORNERS AT ENDS OF CONCRETE WALLS, AND BOTH WALL FACES AROUND PERIMETER OF ALL DOOR & WINDOW OPENINGS IN CONC. WALLS, EXCEPT WHERE THERE ARE THERMAL LININGS AT THAT WALL FACE.
- E. SEE SHEET BB604 & BB605 FOR DOOR DETAILS & SHEET BB606 FOR WINDOW DETAILS. XXX DENOTES DOOR MARK ON PLAN. SEE DOOR SCHEDULE ON SHEET BB605 FOR DOORS.
- F. AT 37 LOCATIONS IN 8" NON-BEARING CMU WALLS, PROVIDE 1/2" OPEN VERTICAL WALL JOINT AT NEAREST HEAD JOINT LOCATIONS PER DETAIL 2/BB601 U.O.N.
- G. SEE GENERAL NOTES ON SHEET BB001 AND DETAILS ON SHEET BB602 FOR THERMAL LINING SYSTEM DETAILS.

- H. 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM THIRD FLOOR DOWN TO INTERMEDIATE LANDING BELOW, 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM THIRD FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- J. 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM THIRD FLOOR LANDING DOWN TO INTERMEDIATE LANDING BELOW, 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM THIRD FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- K. PROVIDE "CRICKETS" IN TOP SURFACE OF SLAB, INTEGRAL WITH SLAB (NOT A TOPPING) WITH A NON-SLOPING RIDGE TO ACHIEVE GRADUAL, POSITIVE DRAINAGE TOWARDS SCUPPERS AND DOORS AT LOCATIONS SHOWN IN PLANS AS: MAXIMUM SLOPE OF CRICKETS BETWEEN NON-SLOPING RIDGE AND FOOT, EXCEPT 1/8" PER FOOT AT STAIRWELL.
- L. LIVE FIRE TRAINING IS ALLOWED ONLY IN ROOMS 300, 302, AND 304. NO BURNING IS ALLOWED IN ROOMS 301, 303, ON THE BALCONY, ON THE INTERIOR STAIRS, OR ON THE EXTERIOR STAIRS.
- M. SEE 1/BB601 AND 2, 2A, 2B/BB602 FOR TOP OF WALL CONDITIONS AT INTERIOR WALLS.

KEYED NOTES:

- 1 SCUPPERS PER SHEET BB603 (10 THUS).
- 2 HANDRAIL PER DETAIL 1/BB607.
- 3 FIXED GUARDRAIL PER DETAIL 2/BB607.
- 4 FIXED GUARDRAIL W/HANDRAIL PER DETAILS 1/BB504 AND 4/BB607.
- 5 DRY STANDPIPE PER P DRAWINGS.
- 6 PROVIDE (3) TOTAL BURN RACKS IN BURN ROOMS PER DETAIL 3/BB610.
- 7 PROVIDE 16" (W) x 8" (H) OPENING AT BASE OF INTERIOR WALL FOR DRAINAGE PER DETAIL 6/BB603.
- 8 DEBRIS CHUTE PER SHEET BB609.
- 9 SPRINKLER LAB PER P DRAWINGS.
- 10 CONCRETE COLUMN PER DETAIL 1/BB501 (11 THUS).
- 11 DOUBLE-SWINGING GUARDRAIL GATE PER DETAIL 2/BB608.
- 12 SINGLE-SWING WINDOW SHUTTER PER DETAIL 8/BB606.
- 13 THERMAL LINING AT CEILING FOR EXTENTS SHOWN ON PLAN.
- 14 CUBICLE WALLS PER DETAIL 6/BB601.
- 15 PROVIDE WEEP PIPES BELOW FIRE BRICK AT NOTED DOOR AND SCUPPER OPENINGS PER DETAIL 8/BB603. PROVIDE (2) WEEP PIPES AT DOORWAYS WITH CENTER AT 6 3/4" INSIDE EACH DOOR JAMB AND PROVIDE (1) WEEP PIPE AT CENTER OF EACH SCUPPER OPENING. ALL WEEPS SHALL BE LOCATED AT EDGE OF SLAB STEP.
- 16 PROVIDE THERMAL LINING AT TOP 2'-0" OF WALL AT NOTED LOCATIONS.
- 17 CROSS BRACING PER DETAIL 1/BB505.

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



LEGEND  
= NO BURN AREA  
= BURN AREA

NOTE:

1. SEE 1/BB203 FOR MORE INFORMATION.
2. "NO BURN" AREAS ARE AREAS IN WHICH LIVE FIRES SHALL NOT BE BURNED BUT MIGHT HAVE SOME AMOUNT OF THERMAL PROTECTION DUE TO ANTICIPATED HEAT FROM ADJACENT BURN ROOMS. SEE FLOOR PLANS & FINISH SCHEDULE FOR EXTENTS OF THERMAL LININGS IN NO BURN AREAS.

2  
BB203 BB203 SCALE 3/32" = 1'-0"

THIRD FLOOR KEY PLAN

WTCC EWS - FIRE & RESCUE TRAINING CENTER

WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - THIRD FLOOR PLAN**

BB203





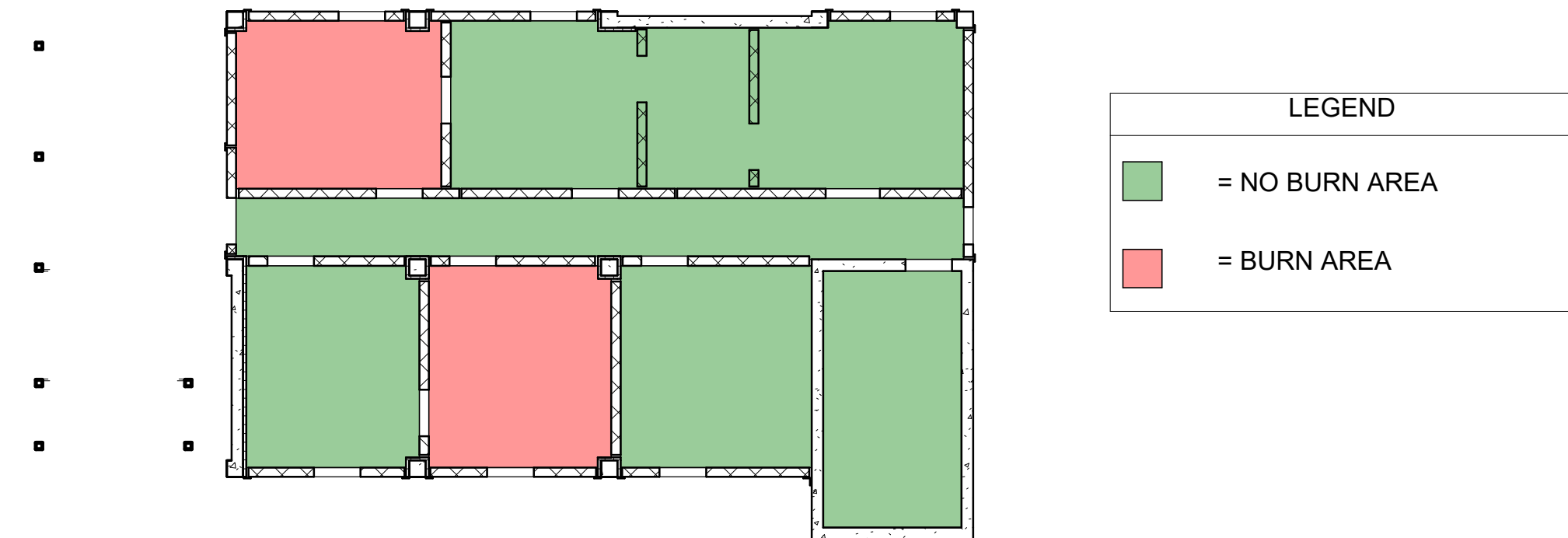
WTCC EWS - FIRE & RESCUE TRAINING CENTER

WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

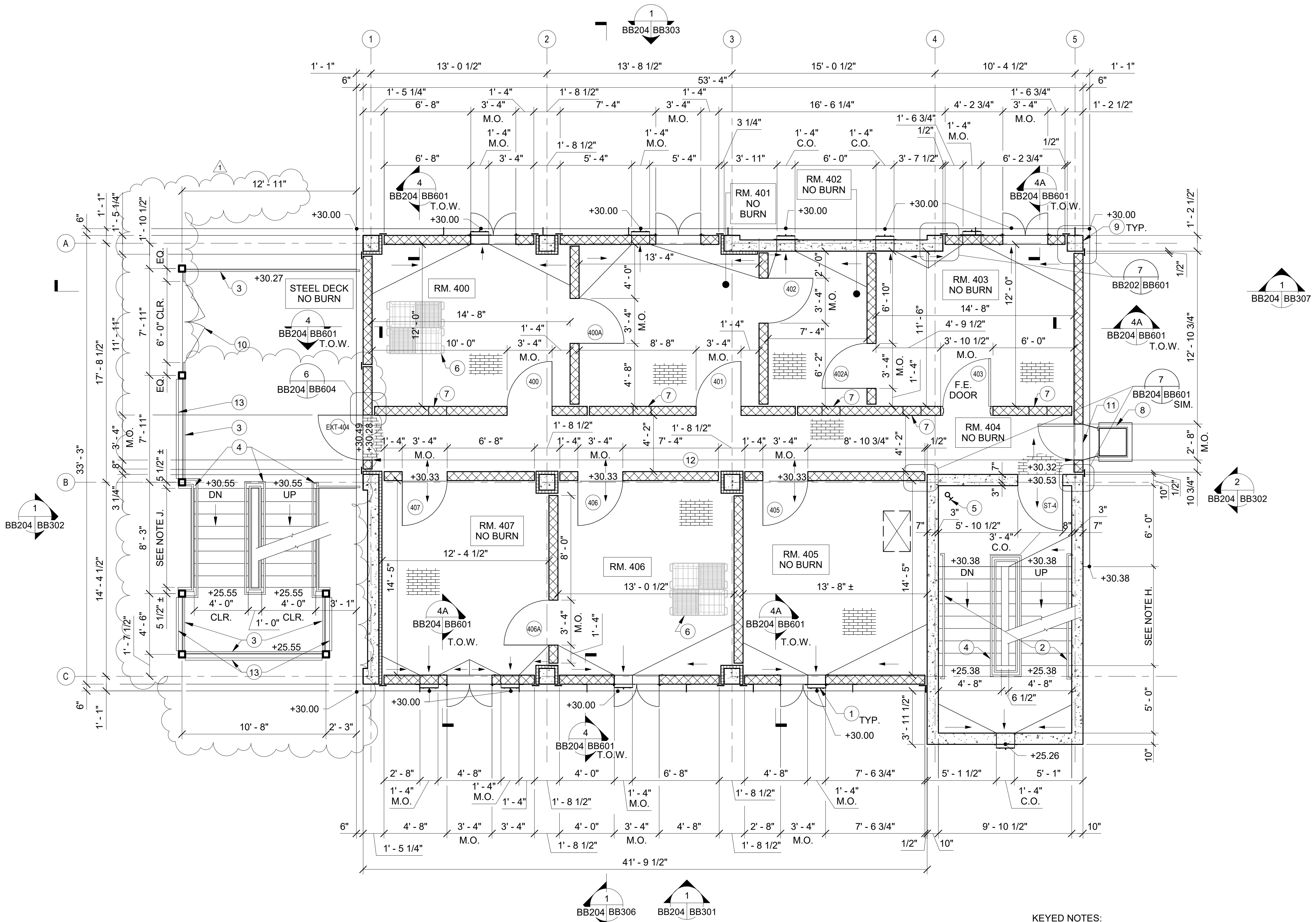
JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - FOURTH FLOOR PLAN**



NOTE:

- SEE 1/BB204 FOR MORE INFORMATION.
- "NO BURN" AREAS ARE AREAS IN WHICH LIVE FIRES SHALL NOT BE BURNED BUT MIGHT HAVE SOME AMOUNT OF THERMAL PROTECTION DUE TO ANTICIPATED HEAT FROM ADJACENT BURN ROOMS. SEE FLOOR PLANS & FINISH SCHEDULE FOR EXTENTS OF THERMAL LININGS IN NO BURN AREAS.

2  
FOURTH FLOOR KEY PLAN  
BB204 BB204 SCALE 3/32" = 1'-0"



NOTES:

- DIRECTION OF DOWNWARD SLOPE OF TOP OF CONCRETE AND TOP OF EXTERIOR STEEL DECK IS INDICATED WITH
- TOP OF FINISHED CONCRETE ELEVATION FOR THE BURN BUILDING SLAB AND TOP OF EXTERIOR STEEL GRATING ARE INDICATED AS "X.XX" IN FEET ABOVE DATUM. SEE SHEET BB201 FOR DATUM.
- ALL MASONRY WALLS SHALL BE 8" THICK (NOMINAL). ALL CONCRETE WALLS SHALL BE 10" THICK (ACTUAL).
- AT DOORWAYS WITHOUT DOORS, PROVIDE FULL-HEIGHT OPENING WITH NO LINTEL AND PROVIDE BULLNOSED CORNERS AT BOTH JAMBS. ALSO PROVIDE BULLNOSED CORNERS AT JAMBS OF ALL DOOR AND WINDOW OPENINGS, AT ENDS OF WALLS THAT DO NOT INTERSECT OTHER WALLS, AND AT CORNERS OF INTERIOR WALLS. CHAMFER CORNERS AT ENDS OF CONCRETE WALLS, AND BOTH WALL FACES AROUND PERIMETER OF ALL DOOR & WINDOW OPENINGS IN CONC. WALLS, EXCEPT WHERE THERE ARE THERMAL LININGS AT THAT WALL FACE.
- SEE SHEET BB604 & BB605 FOR DOOR DETAILS & SHEET BB606 FOR WINDOW DETAILS. XXX DENOTES DOOR MARK ON PLAN. SEE DOOR SCHEDULE ON SHEET BB605 FOR DOORS.
- AT 37 LOCATIONS IN INTERIOR 8" NON-BEARING CMU WALLS, PROVIDE 1/2" OPEN VERTICAL WALL JOINT AT NEAREST HEAD JOINT LOCATIONS PER DETAIL 2/BB601 U.O.N.
- SEE GENERAL NOTES ON SHEET BB001 AND DETAILS ON SHEET BB602 FOR THERMAL LINING SYSTEM DETAILS.

- 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM FOURTH FLOOR DOWN TO INTERMEDIATE LANDING BELOW, 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM FOURTH FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM FOURTH FLOOR LANDING DOWN TO INTERMEDIATE LANDING BELOW, 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM FOURTH FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- PROVIDE "CRICKETS" IN TOP SURFACE OF SLAB, INTEGRAL WITH SLAB (NOT A TOPPING) WITH A NON-SLOPING RIDGE TO ACHIEVE GRADUAL POSITIVE DRAINAGE TOWARDS SCUPPERS AND DOORS AT LOCATIONS SHOWN IN PLANS AS: MAXIMUM SLOPE OF CRICKETS BETWEEN NON-SLOPING RIDGE AND SCUPPER OR DOOR = 1/4 INCH PER FOOT, EXCEPT 1/8" PER FOOT AT STAIRWELL.
- LIVE FIRE TRAINING IS ALLOWED ONLY IN ROOMS 400 AND 406. NO BURNING IS ALLOWED IN ROOMS 401, 402, 403, 404, 405, 407, ON THE INTERIOR STAIRS, OR ON THE EXTERIOR STAIRS.
- SEE 1/BB601 AND 2, 2A, 2B/BB602 FOR TOP OF WALL CONDITIONS AT INTERIOR WALLS.

1  
FOURTH FLOOR PLAN  
BB204 BB204 SCALE 1/4" = 1'-0"

KEYED NOTES:

- SCUPPERS PER SHEET BB603 (10 THUS).
- HANDRAIL PER DETAIL 1/BB607.
- FIXED GUARDRAIL PER DETAIL 2/BB607.
- FIXED GUARDRAIL W/HANDRAIL PER DETAILS 1/BB504 AND 4/BB607.
- DRY STANDPIPE PER P DRAWINGS.
- PROVIDE (2) TOTAL BURN RACKS IN BURN ROOMS PER DETAIL 3/BB610.
- PROVIDE 16" (W) x 8" (H) OPENING AT BASE OF INTERIOR WALL FOR DRAINAGE PER DETAIL 6/BB603.
- DEBRIS CHUTE PER SHEET BB609.
- CONCRETE COLUMN PER DETAIL 1/BB501 (11 THUS).
- DOUBLE-SWINGING GUARDRAIL GATE PER DETAIL 2/BB608.
- SINGLE-SWING WINDOW SHUTTER PER DETAIL 8/BB606.
- THERMAL LINING AT CEILING FOR EXTENTS SHOWN ON PLAN.
- CROSS BRACING PER DETAIL 1/BB505.

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.





**WTCC EWS - FIRE & RESCUE TRAINING CENTER**

WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303

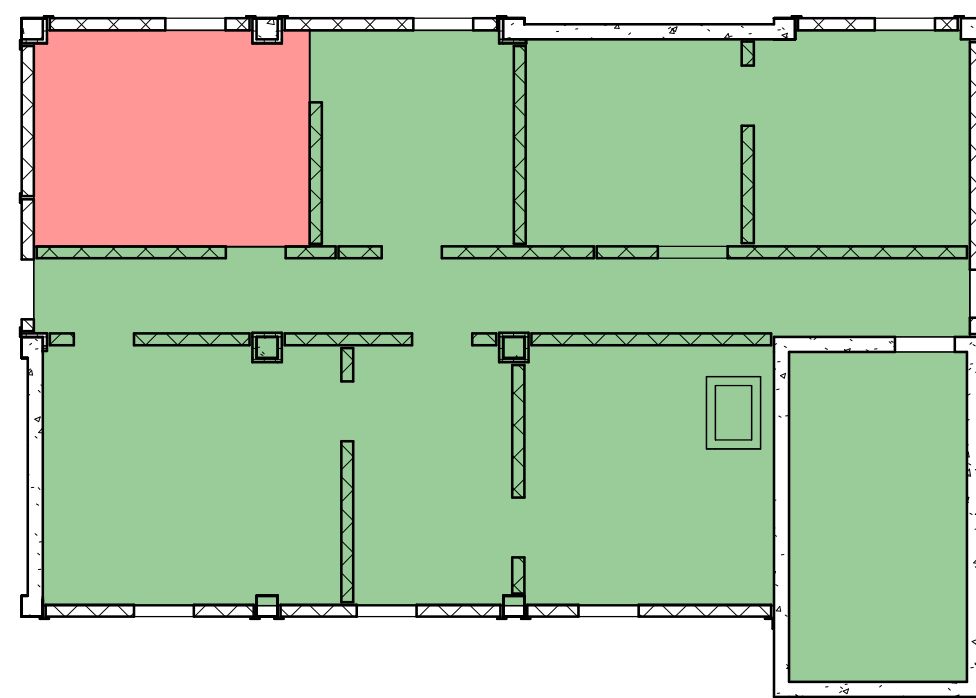


NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - FIFTH FLOOR PLAN**

**BB205**

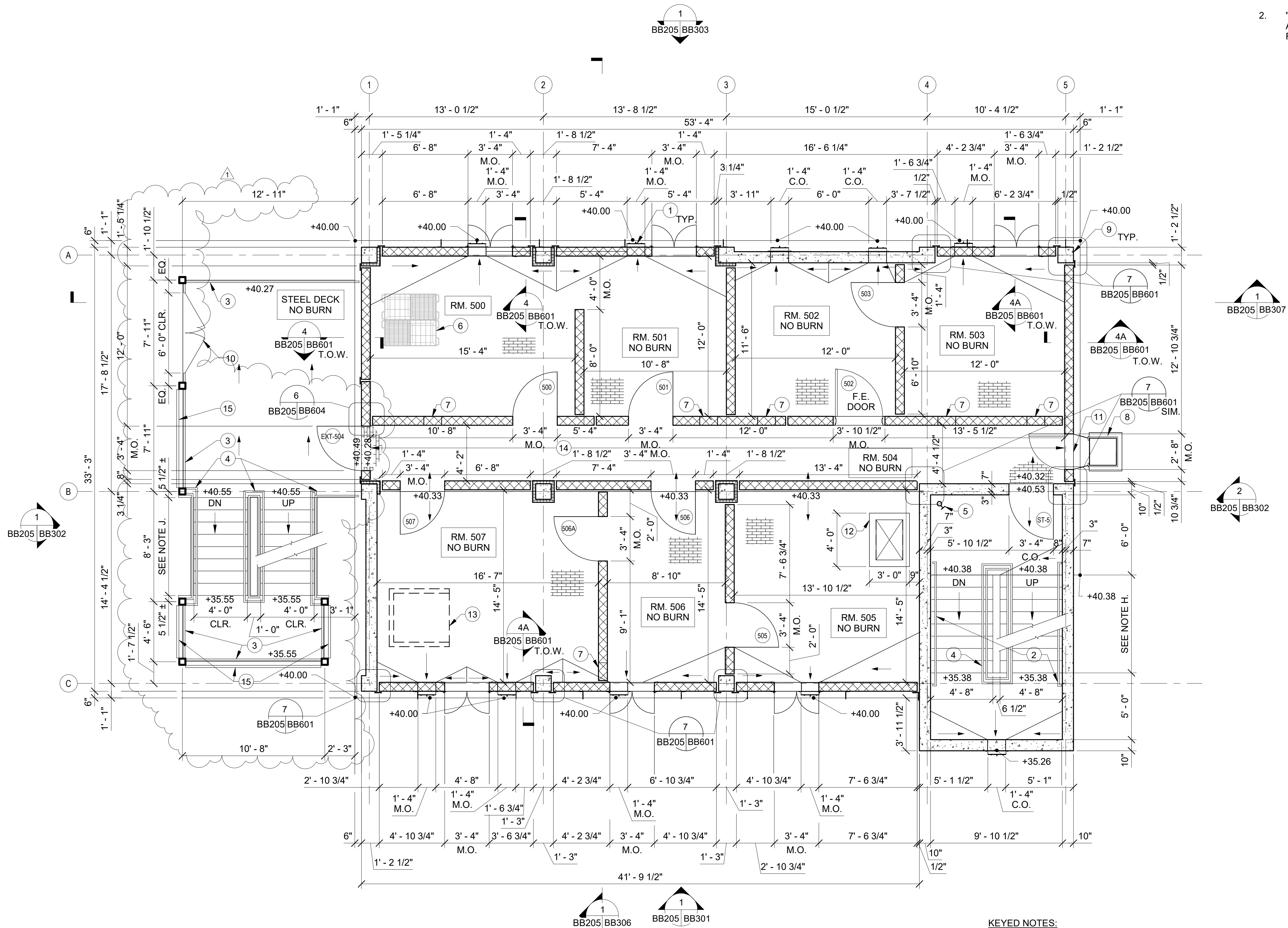
LEGEND	
	= NO BURN AREA
	= BURN AREA



**NOTE:**

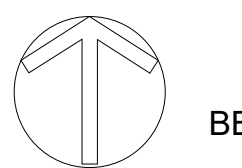
- SEE 1/BB205 FOR MORE INFORMATION.
- "NO BURN" AREAS ARE AREAS IN WHICH LIVE FIRES SHALL NOT BE BURNED BUT MIGHT HAVE SOME AMOUNT OF THERMAL PROTECTION DUE TO ANTICIPATED HEAT FROM ADJACENT BURN ROOMS. SEE FLOOR PLANS & FINISH SCHEDULE FOR EXTENTS OF THERMAL LININGS IN NO BURN AREAS.

**2 FIFTH FLOOR KEY PLAN**  
BB205 BB205 SCALE 3/32" = 1'-0"



**NOTES:**

- DIRECTION OF DOWNWARD SLOPE OF TOP OF CONCRETE AND TOP OF EXTERIOR STEEL DECK IS INDICATED WITH
- TOP OF FINISHED CONCRETE ELEVATION FOR THE BURN BUILDING SLAB AND TOP OF EXTERIOR STEEL GRATING ARE INDICATED AS "X.XX" IN FEET ABOVE DATUM. SEE SHEET BB201 FOR DATUM.
- ALL MASONRY WALLS SHALL BE 8" THICK (NOMINAL). ALL CONCRETE WALLS SHALL BE 10" THICK (ACTUAL).
- AT DOORWAYS WITHOUT DOORS, PROVIDE FULL-HEIGHT OPENING WITH NO LINTEL AND PROVIDE BULLNOSED CORNERS AT BOTH JAMBS. ALSO PROVIDE BULLNOSED CORNERS AT JAMBS OF ALL DOOR AND WINDOW OPENINGS. AT ENDS OF WALLS THAT DO NOT INTERSECT OTHER WALLS, AND AT CORNERS OF INTERIOR WALLS. CHAMFER CORNERS AT ENDS OF CONCRETE WALLS, AND BOTH WALL FACES AROUND PERIMETER OF ALL DOOR & WINDOW OPENINGS IN CONC. WALLS, EXCEPT WHERE THERE ARE THERMAL LININGS AT THAT WALL FACE.
- SEE SHEET BB604 & BB605 FOR DOOR DETAILS & SHEET BB606 FOR WINDOW DETAILS.  
XXX DENOTES DOOR MARK ON PLAN. SEE DOOR SCHEDULE ON SHEET BB605 FOR DOORS.
- AT 36 LOCATIONS IN INTERIOR 8" NON-BEARING CMU WALLS, PROVIDE 1/2" OPEN VERTICAL WALL JOINT AT NEAREST HEAD JOINT LOCATIONS PER DETAIL 2/BB601 U.O.N.
- SEE GENERAL NOTES ON SHEET BB001 AND DETAILS ON SHEET BB602 FOR THERMAL LINING SYSTEM DETAILS.
- 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM FIFTH FLOOR DOWN TO INTERMEDIATE LANDING BELOW, 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM FIFTH FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM FIFTH FLOOR LANDING DOWN TO INTERMEDIATE LANDING BELOW, 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM FIFTH FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- PROVIDE "CRICKETS" IN TOP SURFACE OF SLAB, INTEGRAL WITH SLAB (NOT A TOPPING) WITH A NON-SLOPING RIDGE TO ACHIEVE GRADUAL POSITIVE DRAINAGE TOWARDS SCUPPERS AND DOORS AT LOCATIONS SHOWN IN PLANS AS: MAXIMUM SLOPE OF CRICKETS BETWEEN NON-SLOPING RIDGE AND SCUPPER OR DOOR = 1/4 INCH PER FOOT, EXCEPT 1/8" PER FOOT AT STAIRWELL.
- LIVE FIRE TRAINING IS ONLY ALLOWED IN ROOM 500. NO BURNING IS ALLOWED IN ROOMS 501, 502, 503, 504, 505, 506, 507, ON THE INTERIOR STAIRS, OR ON THE EXTERIOR STAIRS.
- SEE 1/BB601 AND 2, 2A, 2B/BB602 FOR TOP OF WALL CONDITIONS AT INTERIOR WALLS.



**1 FIFTH FLOOR PLAN**  
BB205 BB205 SCALE 1/4" = 1'-0"

**KEYED NOTES:**

- SCUPPERS PER SHEET BB603 (10 THUS).
- HANDRAIL PER DETAIL 1/BB607.
- FIXED GUARDRAIL PER DETAIL 2/BB607.
- FIXED GUARDRAIL W/HANDRAIL PER DETAILS 1/BB504 AND 4/BB607.
- DRY STANDPIPE PER P DRAWINGS.
- PROVIDE (1) TOTAL BURN RACK IN BURN ROOM PER DETAIL 3/BB610.
- PROVIDE 16" (W) x 8" (H) OPENING AT BASE OF INTERIOR WALL FOR DRAINAGE PER DETAIL 6/BB603.
- DEBRIS CHUTE PER SHEET BB609.
- CONCRETE COLUMN PER DETAIL 1/BB501 (11 THUS).
- DOUBLE-SWINGING GUARDRAIL GATE PER DETAIL 2/BB608.
- SINGLE-SWING WINDOW SHUTTER PER DETAIL 8/BB606.
- ATTIC ACCESS HATCH PER DETAIL 7/BB501.
- SHEET ROCK PULLDOWN PROP PER DETAIL 5/BB610.
- THERMAL LINING AT CEILING FOR EXTENTS SHOWN ON PLAN.
- CROSS BRACING PER DETAIL 1/BB505.

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.





**WTCC EWS - FIRE & RESCUE TRAINING CENTER**

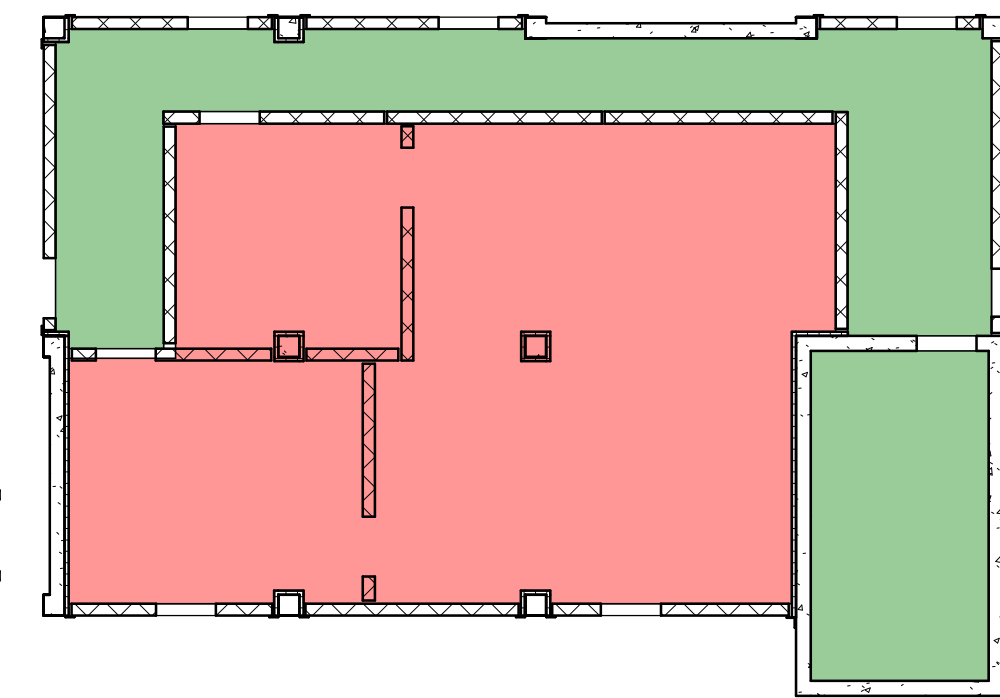
WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - SIXTH FLOOR PLAN**

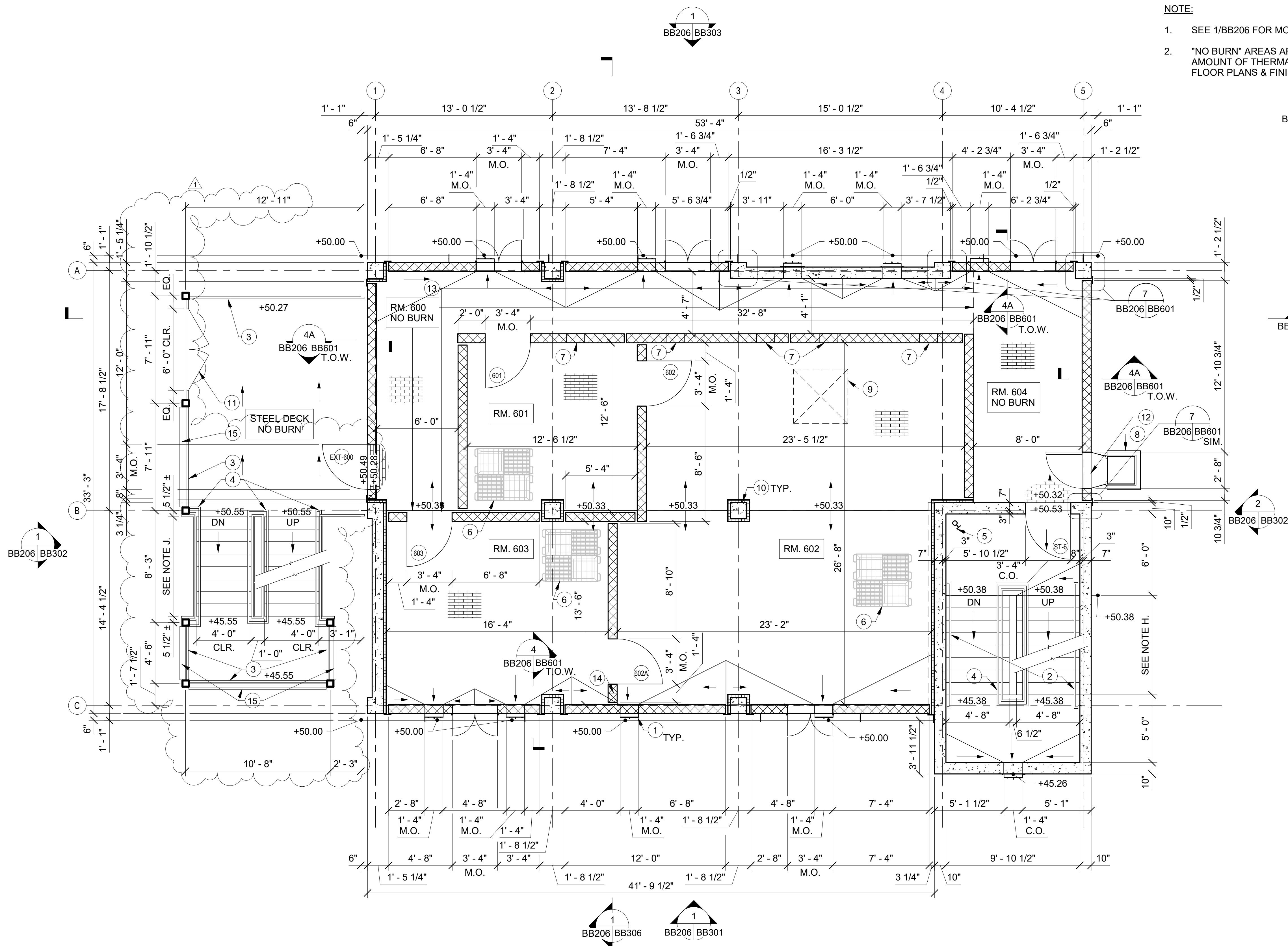
**BB206**



**NOTE:**

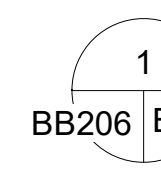
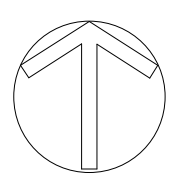
- SEE 1/BB206 FOR MORE INFORMATION.
- "NO BURN" AREAS ARE AREAS IN WHICH LIVE FIRES SHALL NOT BE BURNED BUT MIGHT HAVE SOME AMOUNT OF THERMAL PROTECTION DUE TO ANTICIPATED HEAT FROM ADJACENT BURN ROOMS. SEE FLOOR PLANS & FINISH SCHEDULE FOR EXTENTS OF THERMAL LININGS IN NO BURN AREAS.

**SIXTH FLOOR KEY PLAN**  
BB206 BB206 SCALE 3/32" = 1'-0"



**NOTES:**

- DIRECTION OF DOWNWARD SLOPE OF TOP OF CONCRETE AND TOP OF EXTERIOR STEEL DECK IS INDICATED WITH
- TOP OF FINISHED CONCRETE ELEVATION FOR THE BURN BUILDING SLAB AND TOP OF EXTERIOR STEEL GRATING ARE INDICATED AS "X.XX" IN FEET ABOVE DATUM. SEE SHEET BB201 FOR DATUM.
- ALL MASONRY WALLS SHALL BE 8" THICK (NOMINAL). ALL CONCRETE WALLS SHALL BE 10" THICK (ACTUAL).
- AT DOORWAYS WITHOUT DOORS, PROVIDE FULL-HEIGHT OPENING WITH NO LINTEL AND PROVIDE BULLNOSED CORNERS AT BOTH JAMBS. ALSO PROVIDE BULLNOSED CORNERS AT JAMBS OF ALL DOOR AND WINDOW OPENINGS. AT ENDS OF WALLS THAT DO NOT INTERSECT OTHER WALLS, AND AT CORNERS OF INTERIOR WALLS, CHAMFER CORNERS AT ENDS OF CONCRETE WALLS, AND BOTH WALL FACES AROUND PERIMETER OF ALL DOOR & WINDOW OPENINGS IN CONC. WALLS, EXCEPT WHERE THERE ARE THERMAL LININGS AT THAT WALL FACE.
- SEE SHEET BB604 & BB605 FOR DOOR DETAILS & SHEET BB606 FOR WINDOW DETAILS. XXX DENOTES DOOR MARK ON PLAN. SEE DOOR SCHEDULE ON SHEET BB605 FOR DOORS.
- AT 29 LOCATIONS IN INTERIOR 8" NON-BEARING CMU WALLS, PROVIDE 1/2" OPEN VERTICAL WALL JOINT AT NEAREST HEAD JOINT LOCATIONS PER DETAIL 2/BB601 U.O.N.
- SEE GENERAL NOTES ON SHEET BB001 AND DETAILS ON SHEET BB602 FOR THERMAL LINING SYSTEM DETAILS.
- 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM SIXTH FLOOR DOWN TO INTERMEDIATE LANDING BELOW, 8T @ 11" = 7'-4", 9R @ 6 9/16" ± = 4'-10 13/16" ± FROM SIXTH FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- 8T @ 11" = 7'-4", 9R @ 6 11/16" ± = 5'-0" FROM SIXTH FLOOR LANDING DOWN TO INTERMEDIATE LANDING BELOW, 8T @ 11" = 7'-4", 9R @ 6 9/16" ± = 4'-10 13/16" ± FROM SIXTH FLOOR LANDING UP TO INTERMEDIATE LANDING ABOVE. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- PROVIDE "CRICKETS" IN TOP SURFACE OF SLAB, INTEGRAL WITH SLAB (NOT A TOPPING) WITH A NON-SLOPING RIDGE TO ACHIEVE GRADUAL, POSITIVE DRAINAGE TOWARDS SCUPPERS AND DOORS AT LOCATIONS SHOWN IN PLANS AS: MAXIMUM SLOPE OF CRICKETS BETWEEN NON-SLOPING RIDGE AND SCUPPER OR DOOR = 1/4 INCH PER FOOT, EXCEPT 1/8" PER FOOT AT STAIRWELL.
- LIVE FIRE TRAINING IS ONLY ALLOWED IN ROOMS 601, 602, AND 603. NO BURNING IS ALLOWED IN ROOM 600, ON THE INTERIOR STAIRS, OR ON THE EXTERIOR STAIRS.
- SEE 1/BB601 AND 2, 2A, 2B/BB602 FOR TOP OF WALL CONDITIONS AT INTERIOR WALLS.



**SIXTH FLOOR PLAN**

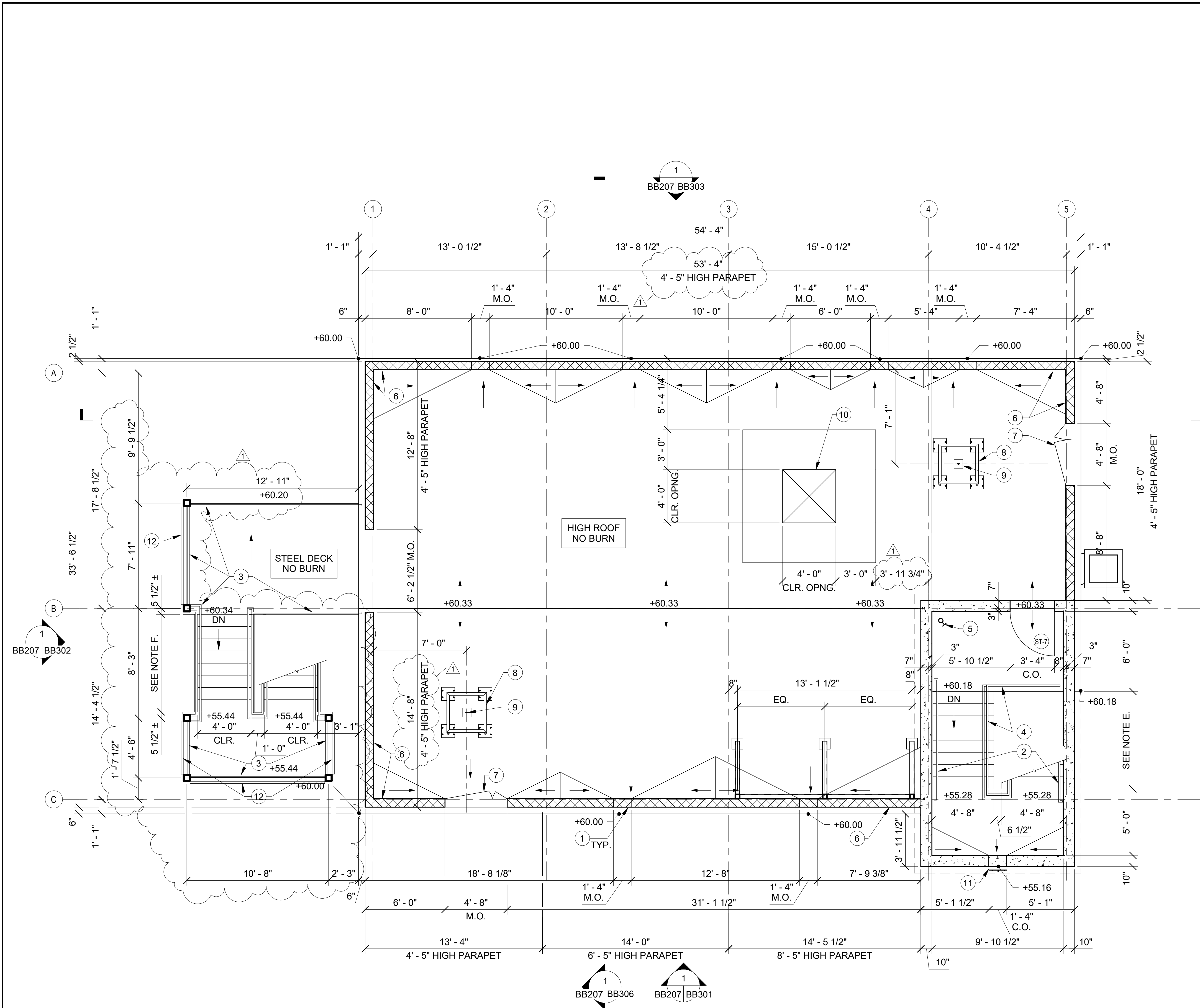
BB206 BB206 SCALE 1/4" = 1'-0"

**KEYED NOTES:**

- SCUPPERS PER SHEET BB603 (10 THUS).
- HANDRAIL PER DETAIL 1/BB607.
- FIXED GUARDRAIL PER DETAIL 2/BB607.
- FIXED GUARDRAIL W/HANDRAIL PER DETAILS 1/BB504 AND 4/BB607.
- DRY STANDPIPE PER P DRAWINGS.
- PROVIDE (3) TOTAL BURN RACKS IN BURN ROOMS PER DETAIL 3/BB610.
- PROVIDE 16" (W) x 8" (H) OPENING AT BASE OF INTERIOR WALL FOR DRAINAGE PER DETAIL 6/BB603.
- DEBRIS CHUTE PER SHEET BB609.
- VENTILATION OPENING ABOVE.
- CONCRETE COLUMN PER DETAIL 1/BB501 (11 THUS).
- DOUBLE-SWINGING GUARDRAIL GATE PER DETAIL 2/BB608.
- SINGLE-SWING WINDOW SHUTTER PER DETAIL 8/BB606.
- THERMAL LINING AT CEILING FOR EXTENTS SHOWN ON PLAN.
- PROVIDE 8"x8" OPENING AT BASE OF INTERIOR WALL FOR DRAINAGE SIM. TO DETAIL 6/BB603 BUT WITHOUT LINTEL PLATE.
- CROSS BRACING PER DETAIL 1/BB505.

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.





NOTES:

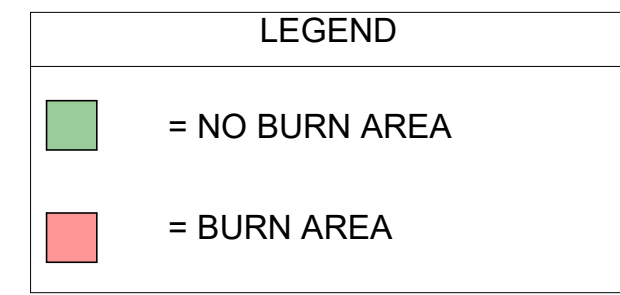
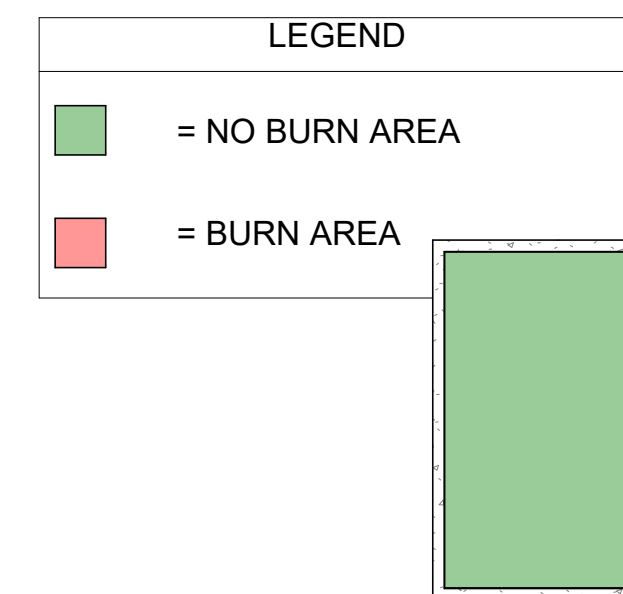
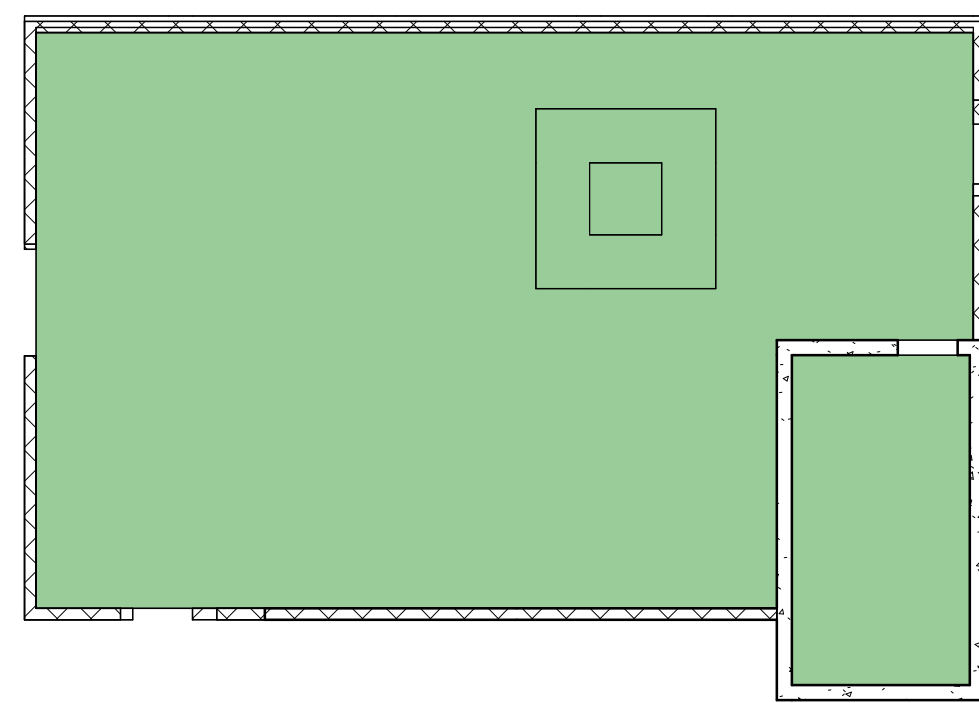
- A. DIRECTION OF DOWNWARD SLOPE OF TOP OF CONCRETE AND TOP OF EXTERIOR STEEL DECK IS INDICATED WITH
- B. TOP OF FINISHED CONCRETE ELEVATION FOR THE BURN BUILDING SLAB AND TOP OF EXTERIOR STEEL GRATING ARE INDICATED AS "X.XX" IN FEET ABOVE DATUM. SEE SHEET BB201 FOR DATUM.
- C. ALL MASONRY WALLS SHALL BE 8" THICK (NOMINAL). ALL CONCRETE WALLS SHALL BE 10" THICK (ACTUAL).
- D. SEE SHEET BB604 & BB605 FOR DOOR DETAILS & SHEET BB606 FOR WINDOW DETAILS. XXX DENOTES DOOR MARK ON PLAN. SEE DOOR SCHEDULE ON SHEET BB605 FOR DOORS.
- E. 8T @ 11" = 7'-4", 9R @ 6 17/32" ± = 4'-10 3/4" ± FROM HIGH ROOF DOWN TO INTERMEDIATE LANDING BELOW. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- F. 8T @ 11" = 7'-4", 9R @ 6 9/16" ± = 4'-10 3/4" ± FROM HIGH ROOF LANDING DOWN TO INTERMEDIATE LANDING BELOW. PROVIDE EQUAL RISER HEIGHTS WITHIN EACH FLIGHT.
- G. PROVIDE "CRICKETS" IN TOP SURFACE OF SLAB, INTEGRAL WITH SLAB (NOT A TOPPING) WITH A NON-SLOPING RIDGE TO ACHIEVE GRADUAL, POSITIVE DRAINAGE TOWARDS SCUPPERS AND DOORS AT LOCATIONS SHOWN IN PLANS AS: MAXIMUM SLOPE OF CRICKETS BETWEEN NON-SLOPING RIDGE AND FOOT, EXCEPT 1/8" PER FOOT AT STAIRWELL.
- H. NO BURNING IS ALLOWED ON THE HIGH ROOF.

KEYED NOTES:

- 1 PROVIDE 16" (W) x 8" (H) OPENING AT BASE OF PARAPET FOR DRAINAGE PER DETAIL 6/BB603 (7 THUS).
- 2 HANDRAIL PER DETAIL 1/BB607.
- 3 FIXED GUARDRAIL PER DETAIL 2/BB607.
- 4 FIXED GUARDRAIL W/HANDRAIL PER DETAILS 1/BB504 AND 4/BB607.
- 5 DRY STANDPIPE PER P DRAWINGS.
- 6 CMU PARAPET PER 3/BB601 (4'-5" AND 6'-5" HIGH PARAPETS) OR 3/BB602 (8' - 5" HIGH PARAPET ONLY).
- 7 DOUBLE-SWINGING GUARDRAIL GATE PER DETAIL 1/BB608.
- 8 ROPE FRAME PER DETAIL 1/BB610 (2 THUS).
- 9 ROPE ANCHOR PER DETAIL 2/BB610 (2 THUS).
- 10 VENTILATION OPENING WITH 3' - 0" CURB PER DETAIL 6/BB610.
- 11 SCUPPER PER SHEET BB603 (1 THUS).
- 12 CROSS BRACING PER DETAIL 1/BB505.

1  
BB207 | BB207 SCALE 1/4" = 1'-0"

HIGH ROOF PLAN



NOTE:

1. SEE 1/BB207 FOR MORE INFORMATION.

NOTE:

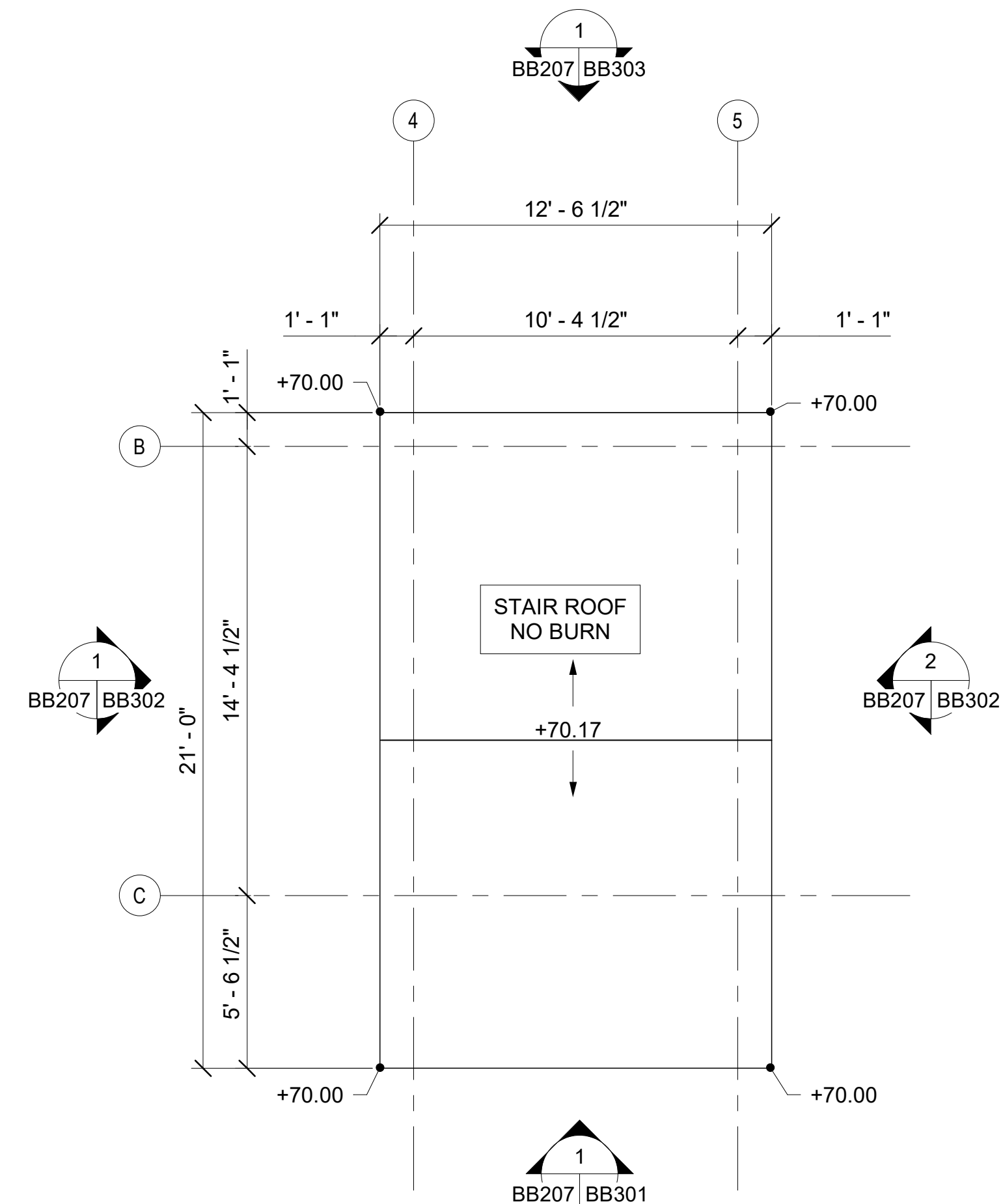
1. SEE 2/BB207 FOR MORE INFORMATION.

3  
BB207 | BB207 SCALE 3/32" = 1'-0"

HIGH ROOF KEY PLAN

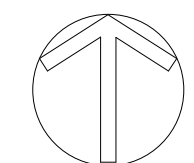
4  
BB207 | BB207 SCALE 3/32" = 1'-0"

STAIR ROOF KEY PLAN



NOTES:

- A. DIRECTION OF DOWNWARD SLOPE OF TOP OF CONCRETE IS INDICATED WITH
- B. TOP OF FINISHED CONCRETE ELEVATION FOR THE BURN BUILDING SLAB IS INDICATED AS "X.XX" IN FEET ABOVE DATUM. SEE SHEET BB201 FOR DATUM.
- C. NO BURNING ALLOWED ON THE STAIR ROOF.



2  
BB205 | BB207 SCALE 1/4" = 1'-0"

STAIR ROOF PLAN

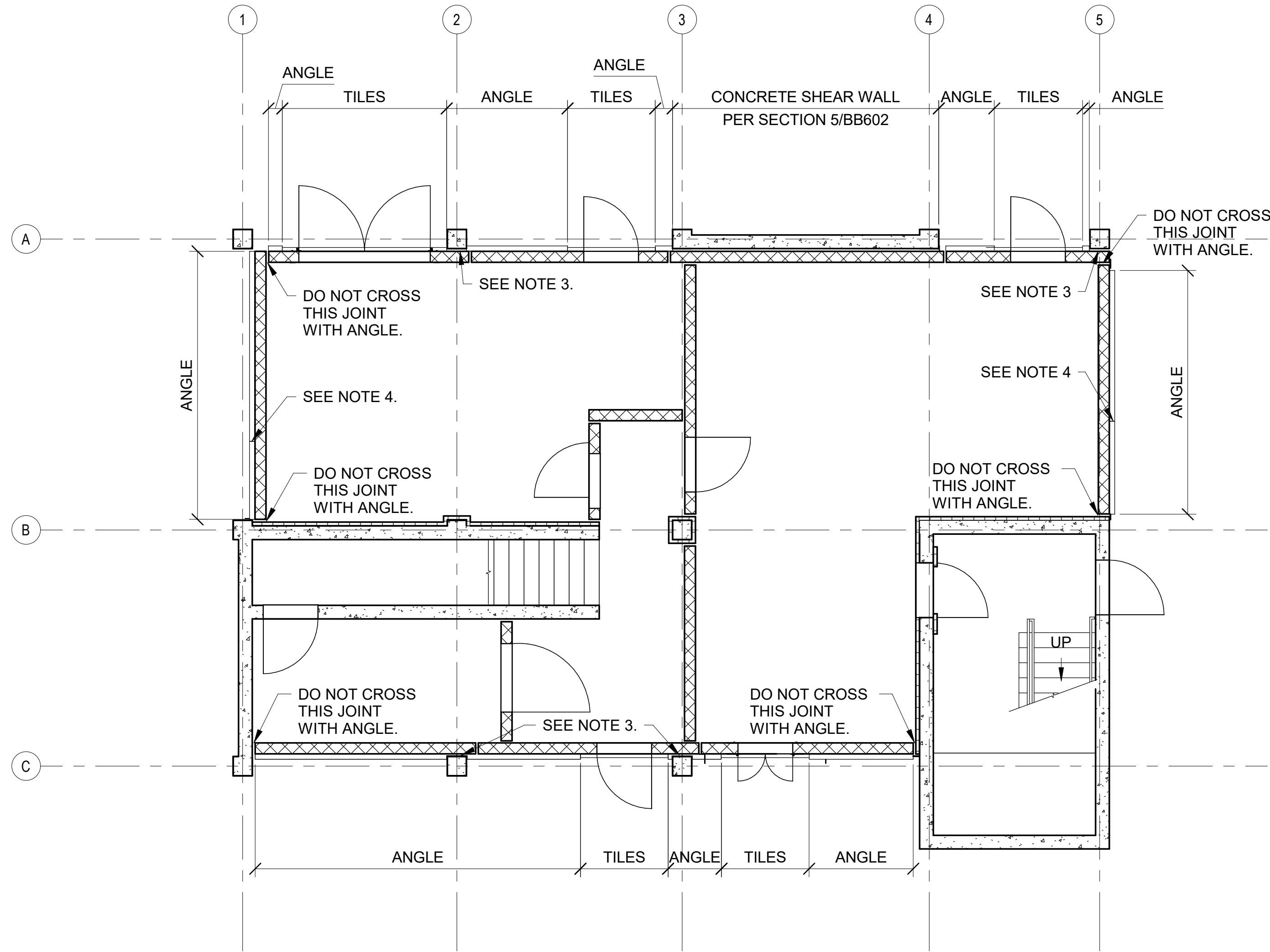
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



NO.	REVISION	DATE
1	Addendum #1	04/14/25

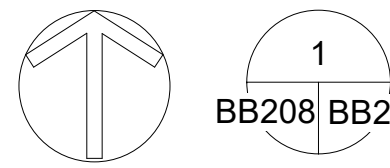
JOB NUMBER <b>22056</b>
DATE ISSUED <b>03/14/25</b>
PROJECT STATUS <b>ISSUE FOR CONSTRUCTION</b>
SHEET <b>BURN BUILDING - HIGH ROOF &amp; STAIR ROOF PLANS</b>





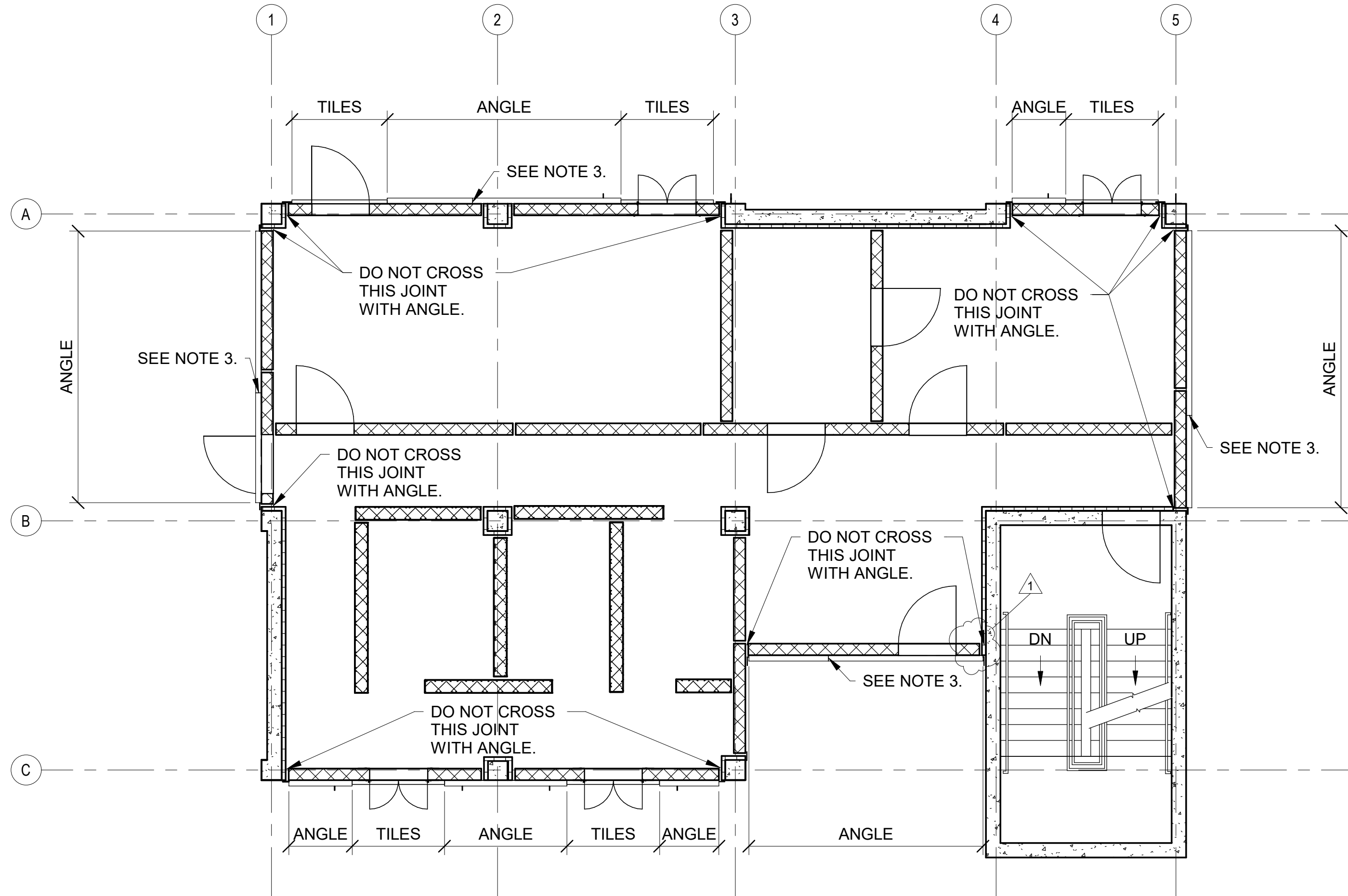
**NOTES:**

1. THIS PLAN SHOWS ONLY THE MEANS OF BRACING EXTERIOR FACES OF EXTERIOR MASONRY WALLS. SEE PLANS AND SECTIONS FOR ALL OTHER INFORMATION, INCLUDING SPECIFIC REQUIREMENTS FOR BRACING SHOWN ON THIS PLAN.
2. PROVIDE 1" GAP BETWEEN END OF TILE AND END OF ANGLE AT ALL ROLLOVER TILE LOCATIONS ABOVE EXTERIOR DOORS AND WINDOWS.
3. AT FOUR EXTERIOR COLUMNS (A2, A5, C2, AND C3), BRACING ANGLE IS CONTINUOUS BETWEEN COLUMN AND WALL PER DETAIL 4/BB601.
4. PROVIDE 1" GAP IN ANGLE AT NOTED LOCATIONS.



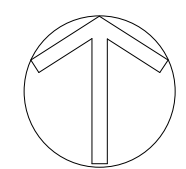
1  
BB208 BB208 SCALE 3/16" = 1'-0"

**FIRST FLOOR EXTERIOR WALL BRACING PLAN**



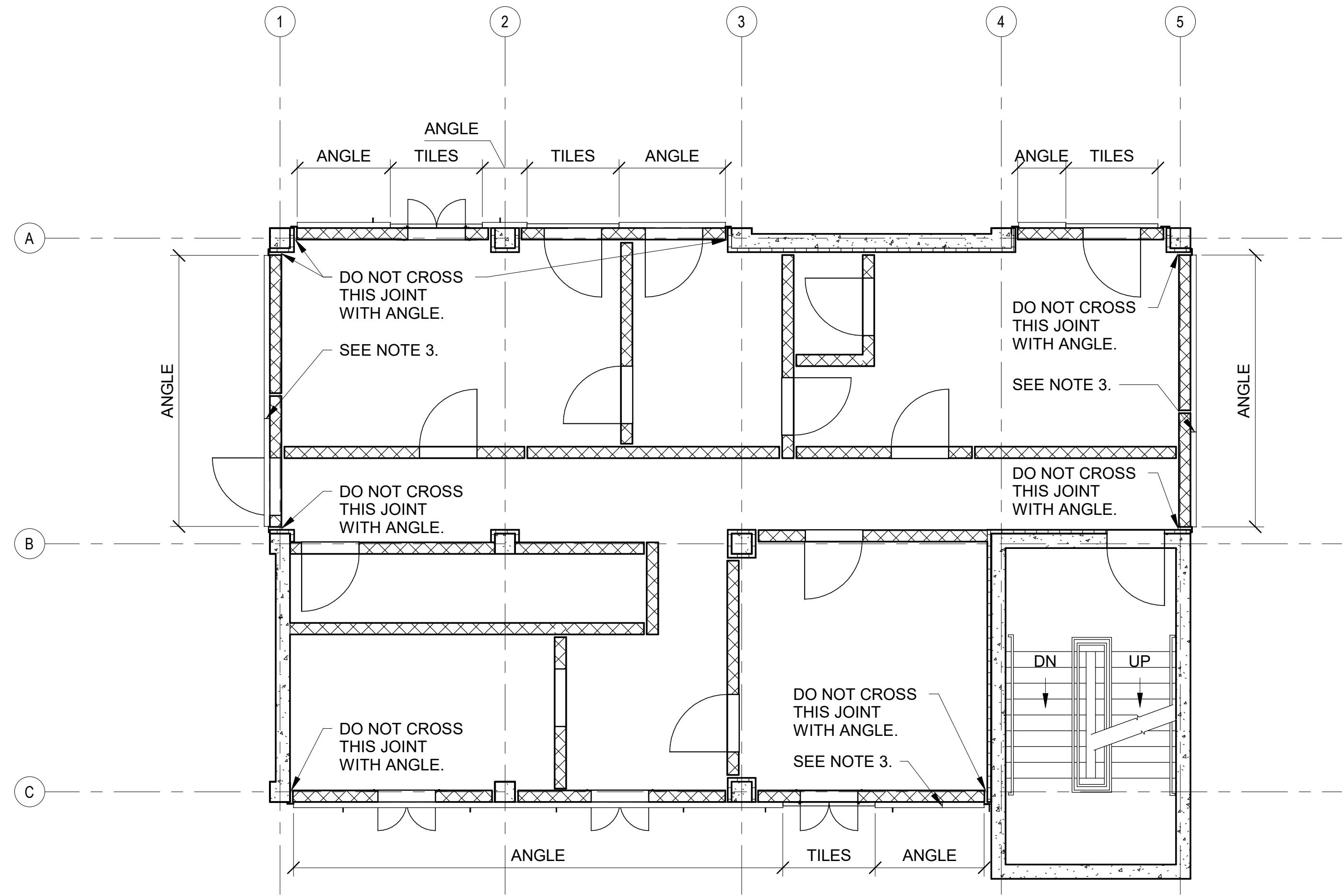
**NOTES:**

1. THIS PLAN SHOWS ONLY THE MEANS OF BRACING EXTERIOR FACES OF EXTERIOR MASONRY WALLS. SEE PLANS AND SECTIONS FOR ALL OTHER INFORMATION, INCLUDING SPECIFIC REQUIREMENTS FOR BRACING SHOWN ON THIS PLAN.
2. PROVIDE 1" GAP BETWEEN END OF TILE AND END OF ANGLE AT ALL ROLLOVER TILE LOCATIONS ABOVE EXTERIOR DOORS AND WINDOWS.
3. PROVIDE 1" GAP IN ANGLE AT NOTED LOCATIONS.



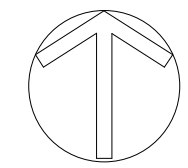
3  
BB208 BB208 SCALE 3/16" = 1'-0"

**THIRD FLOOR EXTERIOR WALL BRACING PLAN**



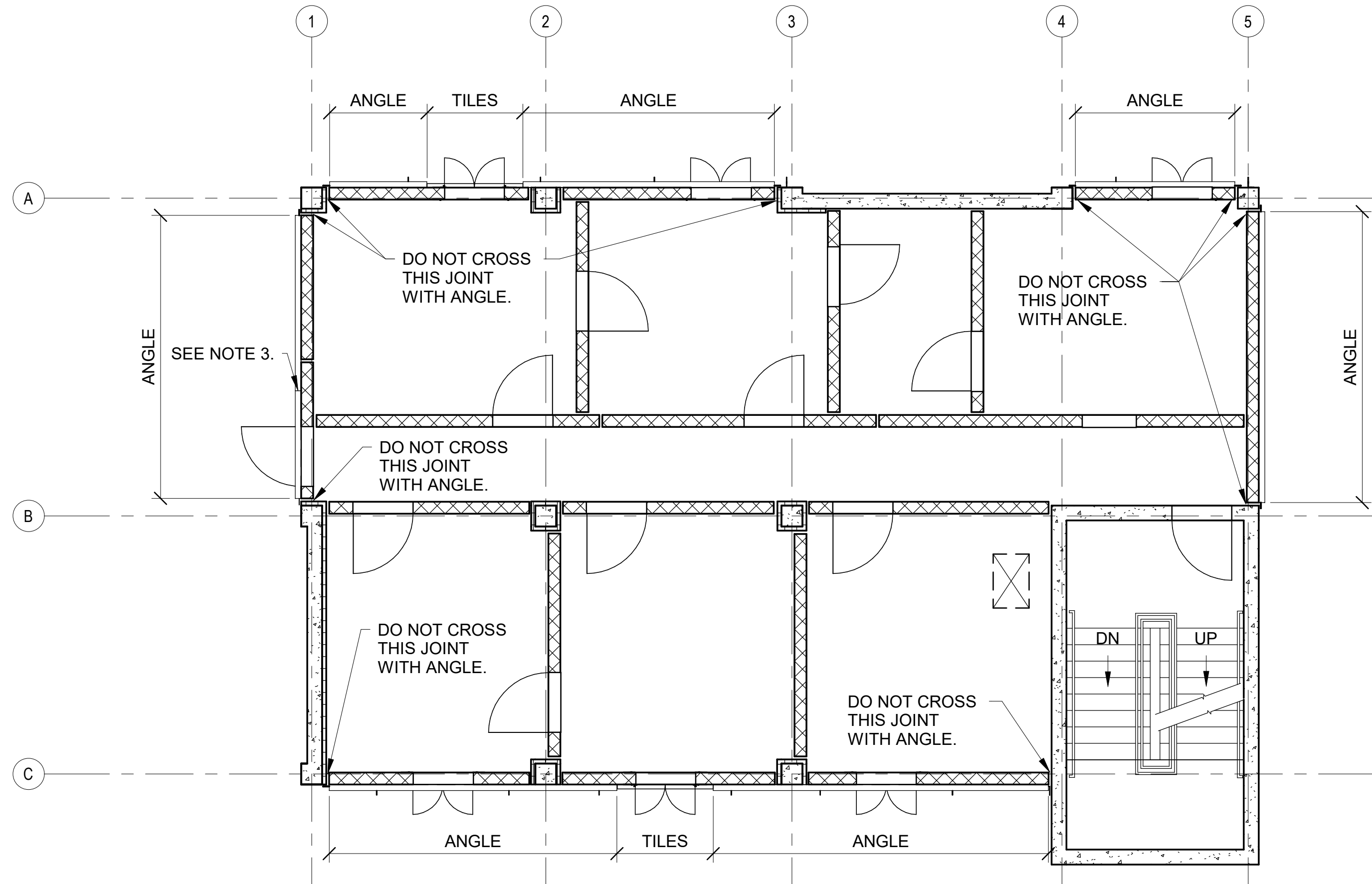
**NOTES:**

1. THIS PLAN SHOWS ONLY THE MEANS OF BRACING EXTERIOR FACES OF EXTERIOR MASONRY WALLS. SEE PLANS AND SECTIONS FOR ALL OTHER INFORMATION, INCLUDING SPECIFIC REQUIREMENTS FOR BRACING SHOWN ON THIS PLAN.
2. PROVIDE 1" GAP BETWEEN END OF TILE AND END OF ANGLE AT ALL ROLLOVER TILE LOCATIONS ABOVE EXTERIOR DOORS AND WINDOWS.
3. PROVIDE 1" GAP IN ANGLE AT NOTED LOCATIONS.



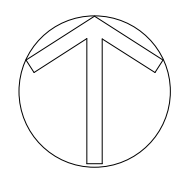
2  
BB208 BB208 SCALE 3/16" = 1'-0"

**SECOND FLOOR EXTERIOR WALL BRACING PLAN**



**NOTES:**

1. THIS PLAN SHOWS ONLY THE MEANS OF BRACING EXTERIOR FACES OF EXTERIOR MASONRY WALLS. SEE PLANS AND SECTIONS FOR ALL OTHER INFORMATION, INCLUDING SPECIFIC REQUIREMENTS FOR BRACING SHOWN ON THIS PLAN.
2. PROVIDE 1" GAP BETWEEN END OF TILE AND END OF ANGLE AT ALL ROLLOVER TILE LOCATIONS ABOVE EXTERIOR DOORS AND WINDOWS.
3. PROVIDE 1" GAP IN ANGLE AT NOTED LOCATIONS.



4  
BB208 BB208 SCALE 3/16" = 1'-0"

**FOURTH FLOOR EXTERIOR WALL BRACING PLAN**

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

**WTCC EWS - FIRE & RESCUE TRAINING CENTER**

WAKE TECHNICAL COMMUNITY COLLEGE

5345 ROLESVILLE RD, WENDELL, NC 27591

NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET

**BURN BUILDING - EXTERIOR WALL BRACING PLANS**

**BB208**





NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER	22056
DATE ISSUED	03/14/25
PROJECT STATUS	ISSUE FOR CONSTRUCTION
SHEET	

NOTE: MASONRY LINES  
SHOWN ON ELEVATIONS  
ARE DIAGRAMMATIC. THEY  
DO NOT REFLECT ACTUAL  
COURSING.



COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

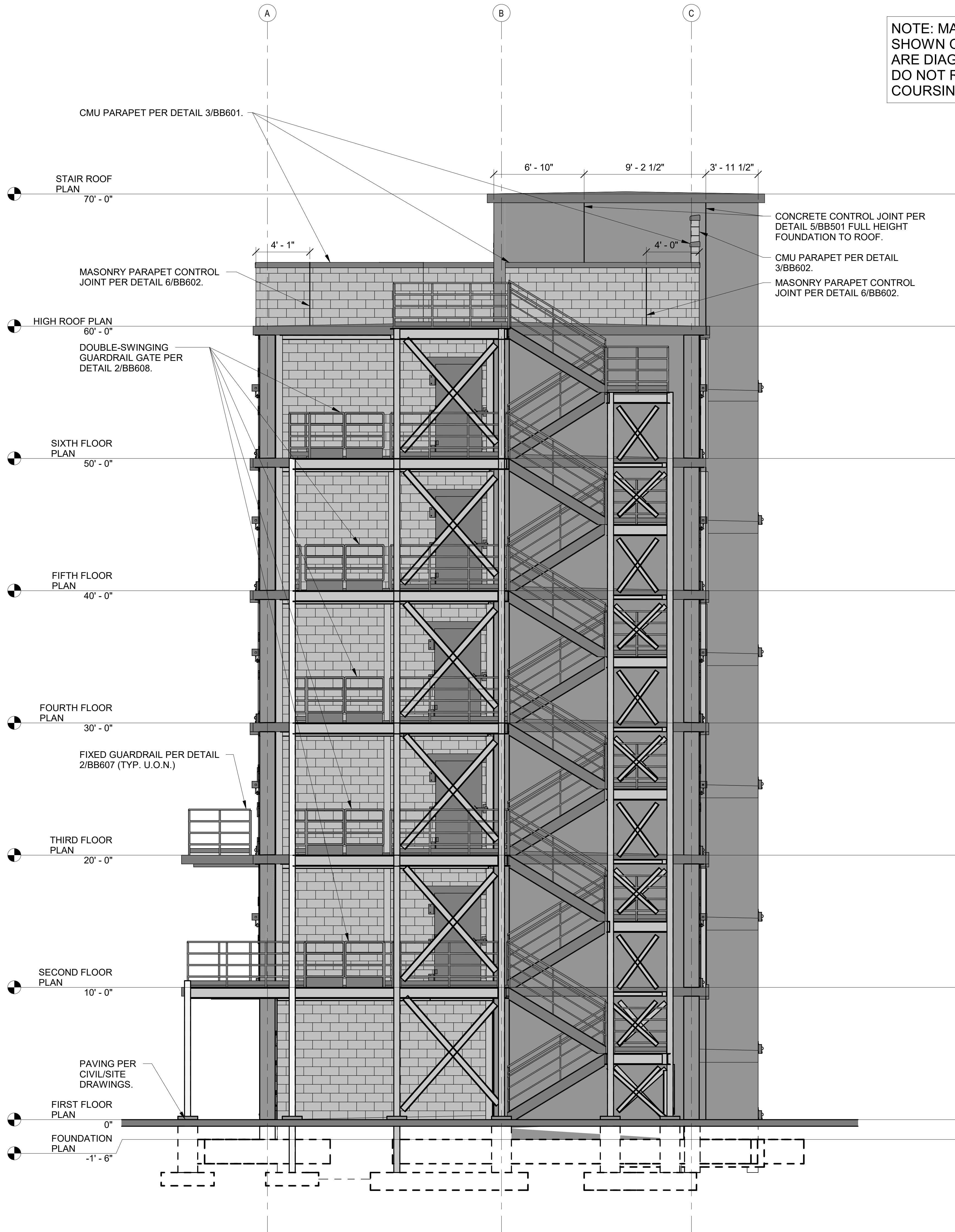




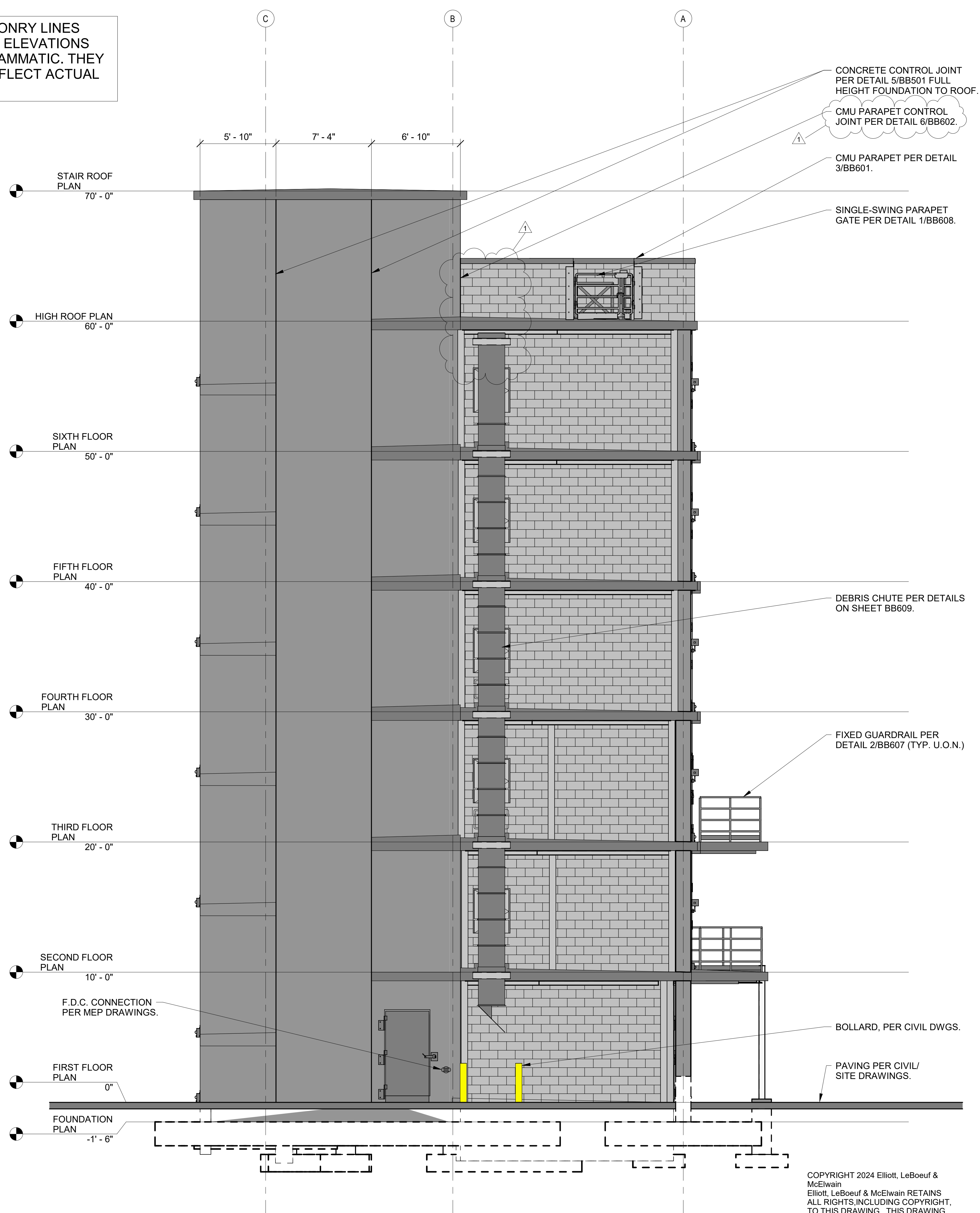
NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - WEST & EAST ELEVATIONS**

NOTE: MASONRY LINES SHOWN ON ELEVATIONS ARE DIAGRAMMATIC. THEY DO NOT REFLECT ACTUAL COURSING.



1 WEST ELEVATION  
BB201 - BB302 SCALE 1/4" = 1'-0"  
BB207

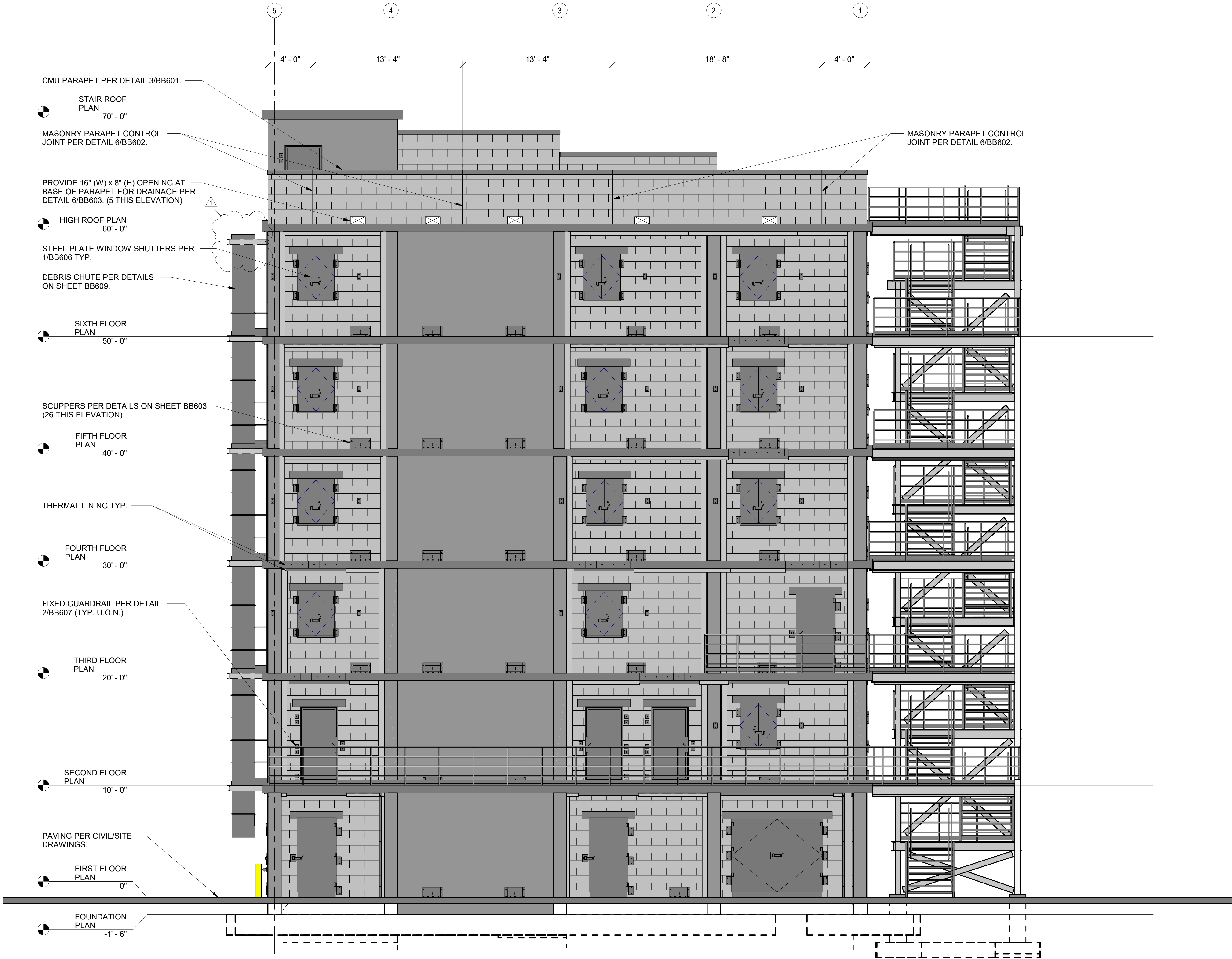


2 EAST ELEVATION  
BB201 - BB302 SCALE 1/4" = 1'-0"  
BB207

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



NOTE: MASONRY LINES SHOWN ON ELEVATIONS ARE DIAGRAMMATIC. THEY DO NOT REFLECT ACTUAL COURSING.



1 NORTH ELEVATION  
BB201 - BB303 SCALE 1/4" = 1'-0"  
BB207

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

NO.	REVISION	DATE
1	Addendum #1	04/14/25





1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

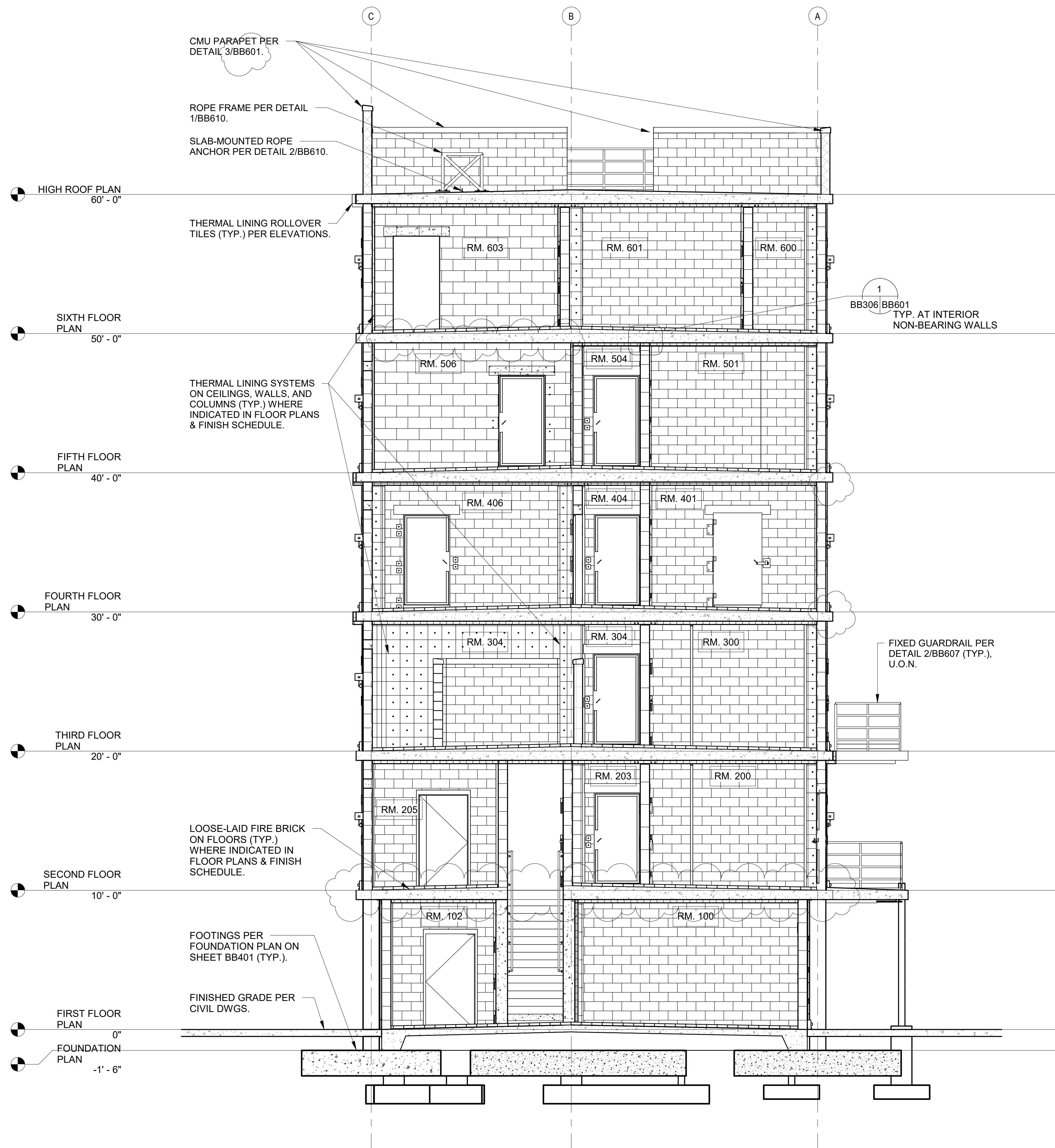
WTCC EWS - FIRE & RESCUE TRAINING CENTER  
WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - BUILDING SECTIONS**

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



1 BUILDING SECTION 1  
BB201- BB306 SCALE 1/4" = 1'-0"  
BB207



1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

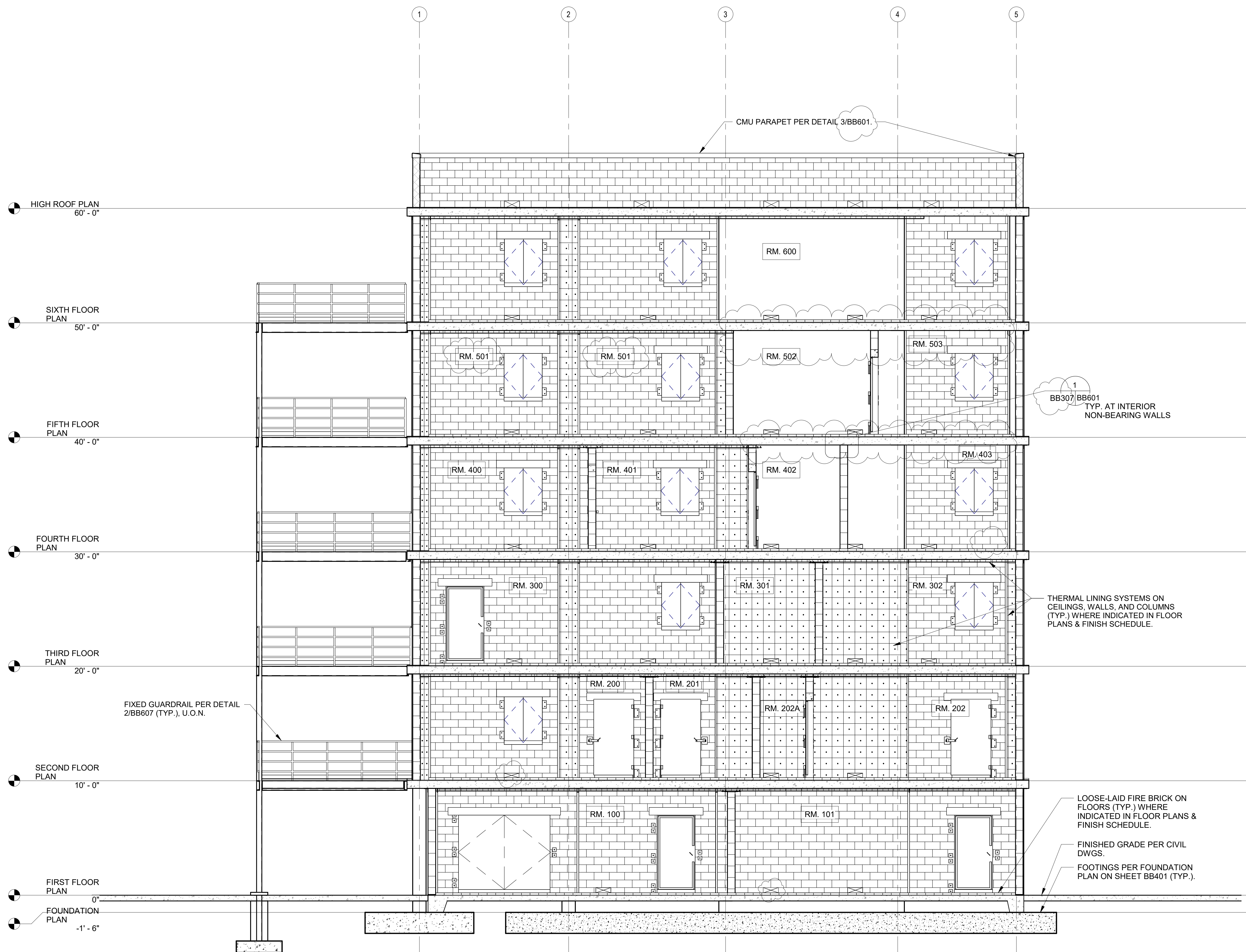
**WTCC EWS - FIRE & RESCUE TRAINING CENTER**  
WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - BUILDING SECTIONS**

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



**BUILDING SECTION 2**  
BB201 | BB307 | BB207 SCALE 1/4" = 1'-0"

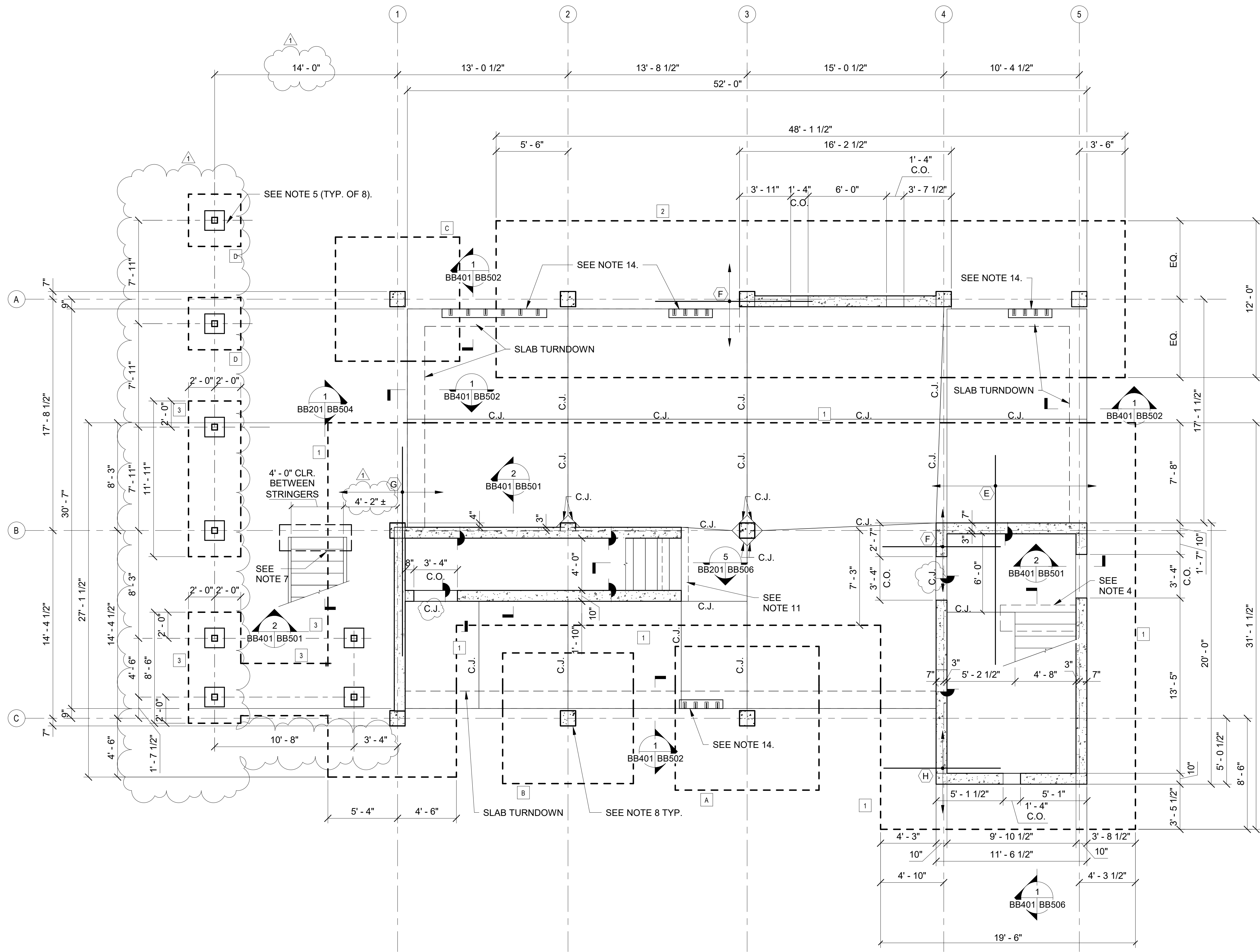
File: 11C-2025-4-29-01.dwg Date: 04/14/25 4:29:01 PM These drawings are the property of HH Architecture, P.A. They may not be used for any purpose without written permission. Copyright 2022 by HH Architecture, P.A. All rights reserved.



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER <b>22056</b>
DATE ISSUED <b>03/14/25</b>
PROJECT STATUS <b>ISSUE FOR CONSTRUCTION</b>
SHEET <b>BURN BUILDING - FOUNDATION PLAN</b>

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



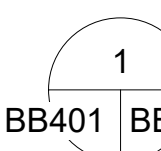
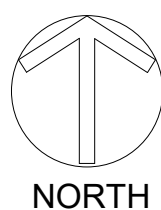
COLUMN FOOTING SCHEDULE				
MARK	WIDTH	LENGTH	THICKNESS	BOTTOM REINF.
A	11' - 0"	11' - 0"	2' - 1"	(11) #7 E.W.
B	10' - 0"	10' - 0"	1' - 10"	(10) #7 E.W.
C	9' - 6"	9' - 6"	1' - 10"	(9) #7 E.W.
D	4' - 0"	4' - 0"	1' - 0"	(5) #5 E.W.

WALL FOOTING SCHEDULE							
MARK	WIDTH	LENGTH	THICKNESS	BOTTOM REINF.		TOP REINF.	
				CONT. (B)	SHORT DIR. (BM)	CONT. (T)	SHORT DIR. (TM)
1	11' - 0"	11' - 0"	1' - 10"	#9@10" O.C. E.W.	-----	#9@10" O.C. E.W.	-----
2	12' - 0"	48' - 1 1/2"	1' - 10"	#8@12" O.C. E.W.	-----	#7@12" O.C. E.W.	-----
3	4' - 0"	CONT.	1' - 4"	(5) #6	#6@12" O.C.	(5) #6	#6@18" O.C.

\* MAT FOUNDATION IN UPSIDE-DOWN U SHAPE IN PLAN TO DIMENSIONS SHOWN. ALL FOOTING AREAS SHOWN AS 1 SHALL BE ONE LARGE MAT FOUNDATION.

#### NOTES:

- LOCATE TOPS OF FOOTINGS AT -1'-6" BELOW DATUM AND EXTERIOR FINISHED GRADE, U.O.N. SEE FIRST FLOOR PLAN BB201 FOR DATUM.
- SEE FOOTING SCHEDULE FOR FOOTINGS NOTED THUS [X]. WHERE WALL OR PEDESTAL FOOTINGS INTERSECT COLUMN OR MAT FOOTINGS, EXTEND WALL/PEDESTAL FOOTING BARS 4'-0" MIN. INTO COLUMN FOOTING.
- SEE FIRST FLOOR PLAN 1/BB201 FOR ALL SLAB ELEVATIONS AND SLOPES. SEE SECTION N OF THE GENERAL NOTES ON SHEET BB001 FOR SLAB THICKNESS AND REINFORCING.
- PROVIDE A 2'-0" WIDE x 5'-6" LONG THICKENED SLAB AT BASE OF STAIR PER SECTION 1/BB505.
- HSS 5 1/2x5 1/2x1/4 COLUMN ON 1'-6" SQ. CONCRETE PIER PER 2/BB504.
- CJ = CONTROL JOINT PER SPECIFICATIONS & GENERAL NOTES.
- PROVIDE A 2'-0" WIDE x 6'-0" LONG THICKENED SLAB AT BASE OF STAIR PER SECTION 1/BB504.
- 14" SQ. CONCRETE COLUMN PER 1/BB501.
- A 2 1/2" STEP IN TOP OF CONCRETE IS DESIGNATED WITH [H].
- SEE PLAN FOR ADDITIONAL REINFORCING:  
[E] = (16) #9 x 16' - 0" ADDITIONAL BOTTOM BARS AT 10" O.C.  
[F] = (6) #8 x 12' - 0" ADDITIONAL BOTTOM BARS AT 12" O.C.  
[G] = (7) #9 x 16' - 0" ADDITIONAL BOTTOM BARS AT 10" O.C.  
[H] = (6) #9 x 9' - 0" ADDITIONAL BOTTOM BARS AT 10" O.C.
- PROVIDE 2'-0" WIDE x 4'-0" LONG THICKENED SLAB AT BASE OF STAIR PER SECTION 5/BB506.
- SLAB-ON-GRADE SHALL BE CONTINUOUS THROUGH DOORWAY AND SCUPPER OPENINGS IN CONCRETE WALLS. SEE DETAIL 5/BB502 FOR ADDITIONAL SLAB REINFORCING AT DOOR & SCUPPER OPENINGS.
- ELEVATIONS TO DOOR HEADS VARY WITH FLOOR SLOPES AND SPOT ELEVATIONS. FORM CONCRETE WALL OPENINGS PER DETAILS RELATIVE TO FLOOR SPOT ELEVATION AT EACH LOCATION.
- CAST DOORWAY WELD PLATES INTO SLAB PER FIRST FLOOR PLAN AND DETAIL 4/BB610.



FOUNDATION PLAN

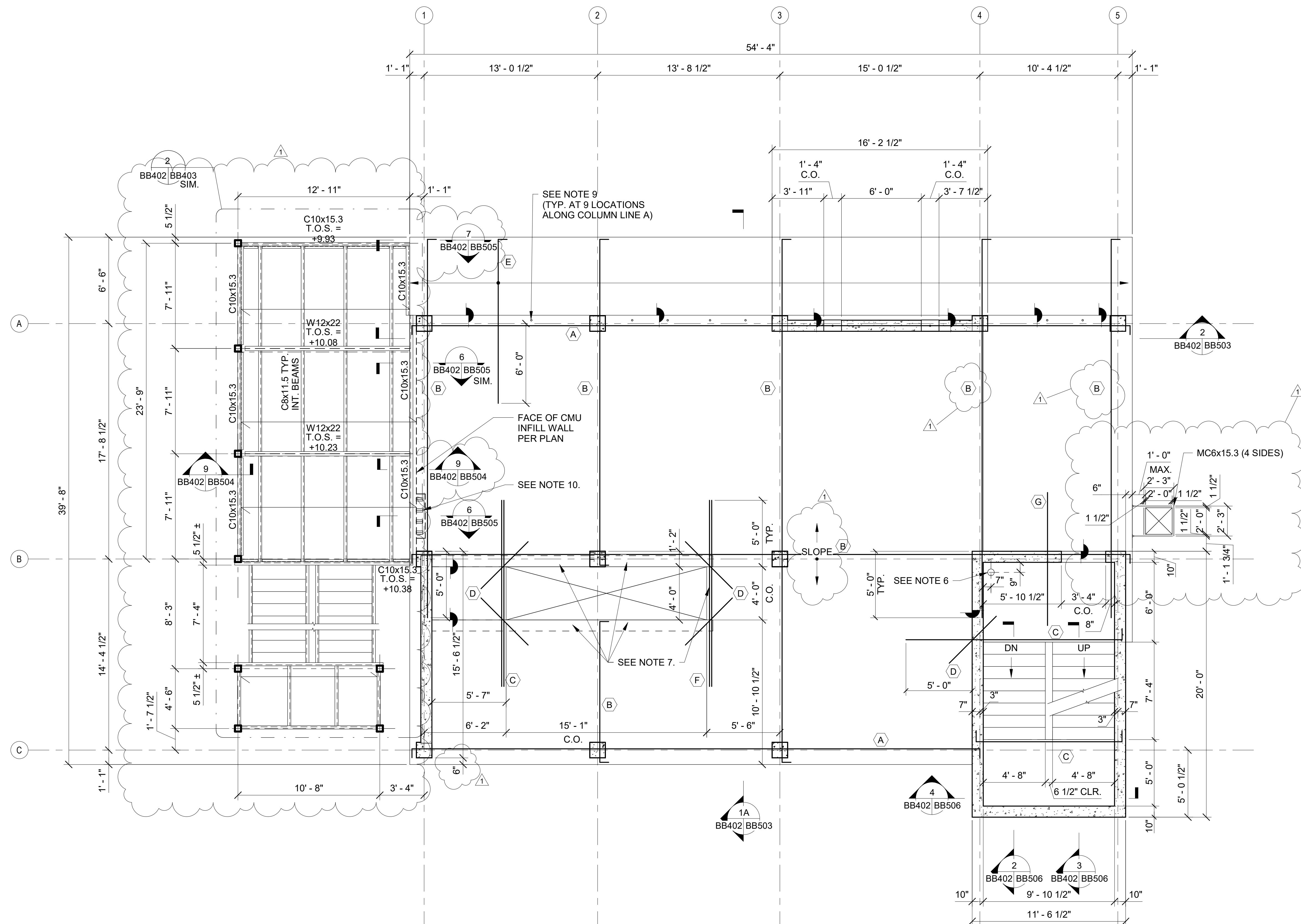
BB401 BB401 SCALE 1/4" = 1'-0"



NO.	REVISION	DATE
1	Addendum #1	04/14/25

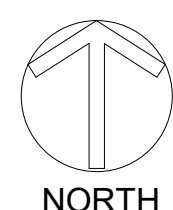
JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - SECOND FLOOR FRAMING PLAN**

**BB402**



**NOTES:**

- SLAB THICKNESS SHALL BE 8" MINIMUM. SLOPE TOP SURFACE ONLY. SEE SECOND FLOOR PLAN 1/BB202 FOR CONCRETE SLAB ELEVATIONS AND SLOPES. BOTTOM OF MAIN SLAB AT +9.33', U.O.N.
- SLAB REINFORCING SHALL BE #5 AT 12" O.C. CONTINUOUS BOTH WAYS TOP AND BOTTOM.
- OUTERMOST REINFORCING LAYERS SHALL BE IN THIS DIRECTION  $\rightarrow$  IN PLAN. SLOPE TOP BARS IN N-S DIRECTION WITH TOP OF SLAB TO MAINTAIN PROPER COVER OVER ENTIRE BAR LENGTH.
- SEE PLAN FOR ADDITIONAL REINFORCING:
  - (A) = (3) #5 AT 3" O.C. ADDITIONAL TOP AND BOTTOM BARS, CENTERED BETWEEN EACH MAIN TOP AND BOTTOM BAR, FOR A DISTANCE OF 3'-0" SLAB EDGE, SO THAT TOP AND BOTTOM BAR SPACING IS AT 3" O.C. IN COLUMN STRIP. SEE DETAIL 8/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (B) = (4) #5 ADDITIONAL TOP BARS AND BOTTOM BARS AT 12" O.C. CENTERED BETWEEN MAIN TOP BARS AND MAIN BOTTOM BARS AND CENTERED ON COLUMN LINE. AT LEAST (2) TOP AND BOTTOM BARS SHALL BE WITHIN 3" OF COLUMN GRID, ONE ON EACH SIDE OF COLUMN GRID. SEE DETAIL 9/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (C) = (4) #5 ADDITIONAL BOTTOM BARS AT EDGE OF STAIR LANDING.
  - (D) = (2) EACH, #5 x 5'-0" LONG DIAGONAL TOP & BOTTOM BARS AT CORNER OF OPENING.
  - (E) = #5 @ 12" O.C. ADDITIONAL TOP BARS CENTERED BETWEEN MAIN TOP BARS. (E) BARS DO NOT HAVE TO BE ADDED WHERE A OR B BARS HAVE ALREADY BEEN ADDED.
  - (F) = (2) EACH, #5 ADDITIONAL TOP & BOTTOM BARS AT EDGE OF OPENING.
  - (G) = (3) #5 x 10' - 0" LONG ADDITIONAL TOP BARS AT 12" O.C. CENTERED ON GRIDLINE B.
- PROVIDE STANDARD 90° END HOOKS ON ALL TOP AND BOTTOM BARS UNLESS OTHERWISE SHOWN. HOOKS DO NOT HAVE TO BE VERTICAL. HOOKS CAN BE ROTATED TO MAINTAIN PROPER COVER AT ENDS OF BARS.
- PROVIDE PERMANENT 8" DIA. SCHED. 40 PVC PIPE SLEEVE THROUGH SLAB FOR STANDPIPE CAST INTO SLAB. DO NOT CORE DRILL SLAB.
- PROVIDE WALL DOWELS PER DETAIL 1/BB601 ONLY FOR CMU WALLS ABOVE SECOND FLOOR SLAB AROUND INTERIOR STRAIGHT RUN STAIRS.
- A 2 1/2" STEP IN TOP OF CONCRETE IS DESIGNATED WITH  $\nabla$ .
- PROVIDE WEEPS THROUGH SLAB PER KEYED NOTE 16 ON 1/BB202.
- CAST DOORWAY WELD PLATES INTO SLAB PER FLOOR PLAN AND DETAIL 6/BB505.



1  
BB402 BB402 SCALE 1/4" = 1'-0"

**SECOND FLOOR FRAMING PLAN**

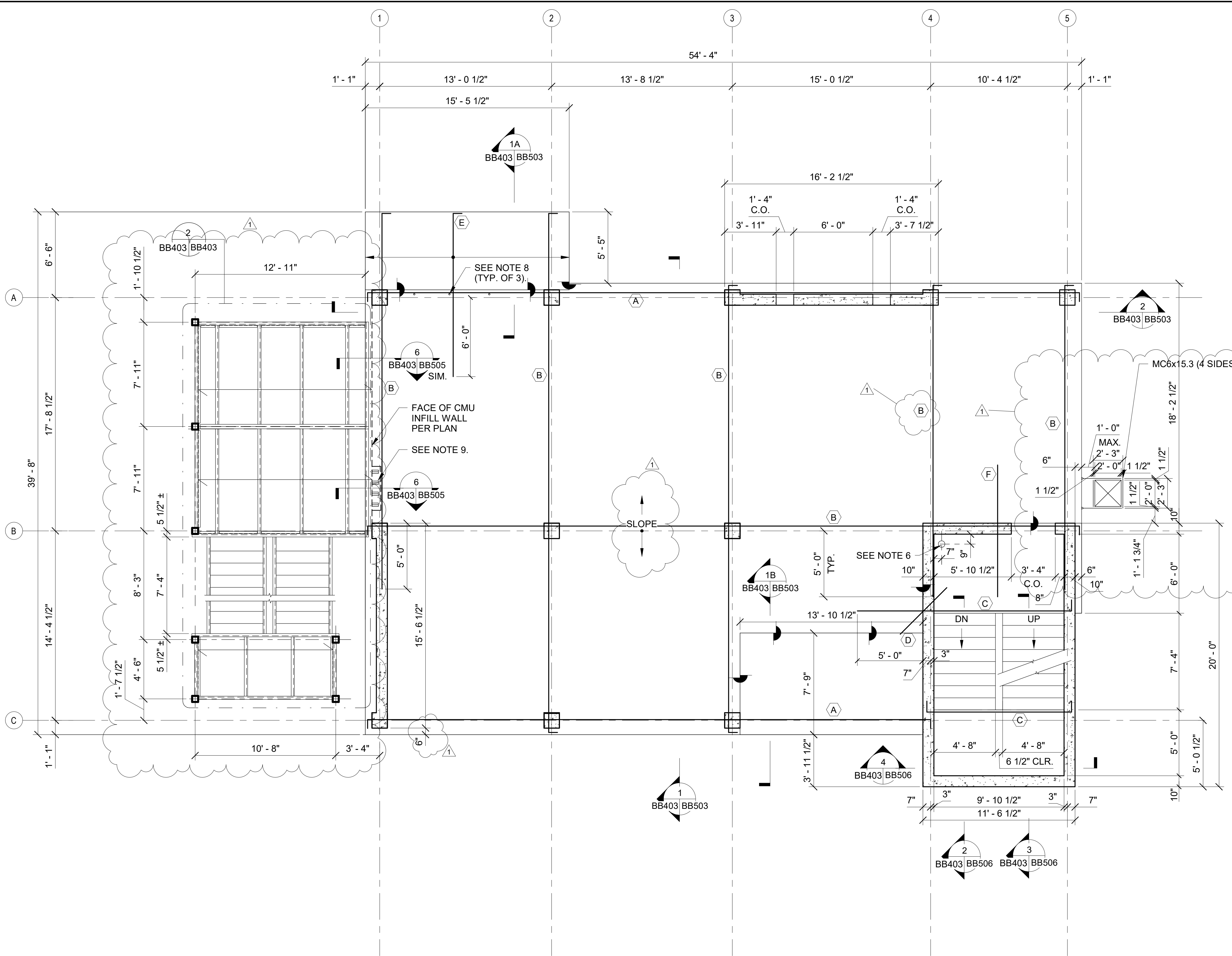
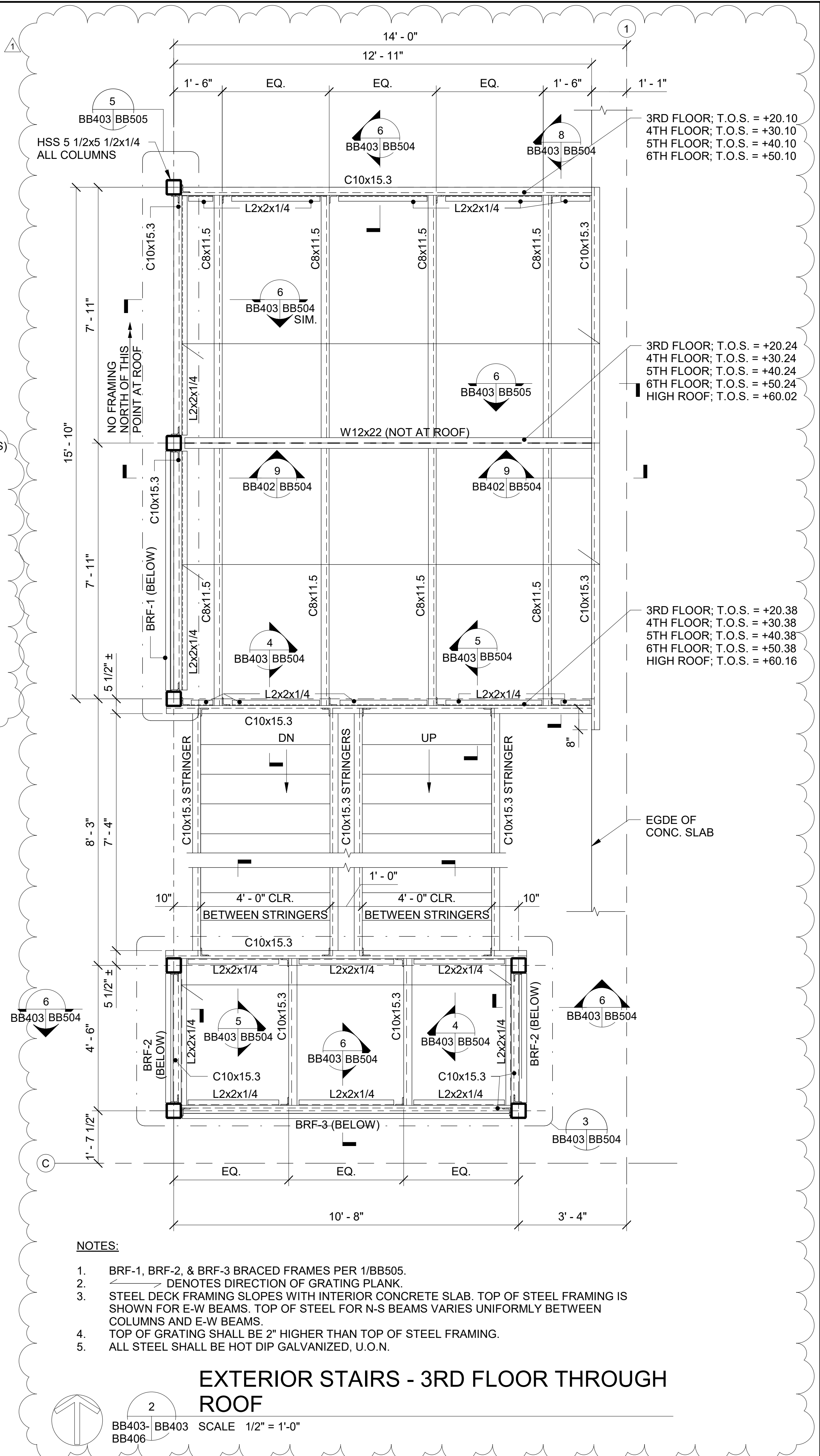
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



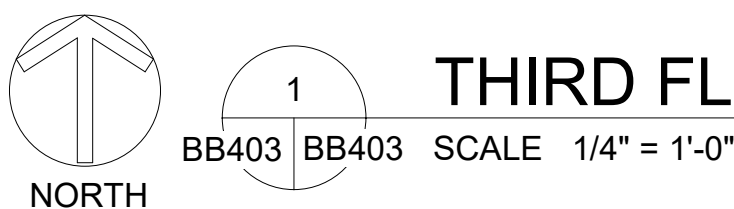
NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING -  
THIRD FLOOR  
FRAMING PLAN**

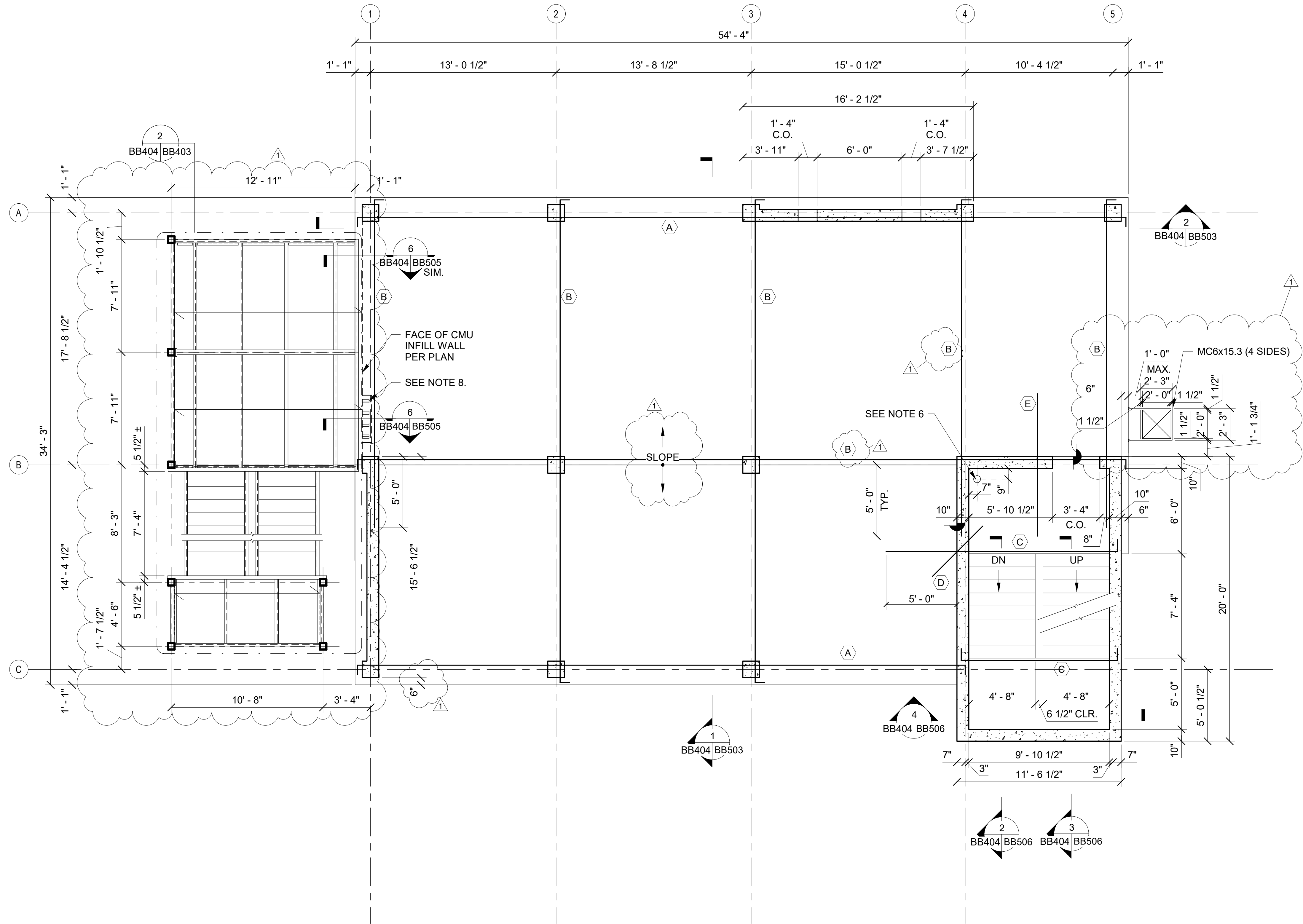
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



**THIRD FLOOR FRAMING PLAN**

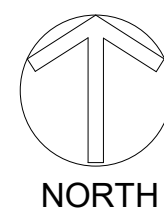






NOTES:

- SLAB THICKNESS SHALL BE 8" MINIMUM. SLOPE TOP SURFACE ONLY. SEE FOURTH FLOOR/LOW ROOF PLAN 1/BB204 FOR CONCRETE SLAB ELEVATIONS, AND SLOPES. BOTTOM OF MAIN SLAB AT +29.33', U.O.N.
- SLAB REINFORCING SHALL BE #5 AT 12" O.C. CONTINUOUS BOTH WAYS TOP AND BOTTOM.
- OUTERMOST REINFORCING LAYERS SHALL BE IN THIS DIRECTION  $\blacktriangleleft$  IN PLAN. SLOPE TOP BARS IN N-S DIRECTION WITH TOP OF SLAB TO MAINTAIN PROPER COVER OVER ENTIRE BAR LENGTH.
- SEE PLAN FOR ADDITIONAL REINFORCING:
  - (A) = (3) #5 AT 3" O.C. ADDITIONAL TOP AND BOTTOM BARS, CENTERED BETWEEN EACH MAIN TOP AND BOTTOM BAR, FOR A DISTANCE OF 3'-0" SLAB EDGE, SO THAT TOP AND BOTTOM BAR SPACING IS AT 3" O.C. IN COLUMN STRIP. SEE DETAIL 8/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (B) = (4) #5 ADDITIONAL TOP BARS AND BOTTOM BARS AT 12" O.C. CENTERED BETWEEN MAIN TOP BARS AND MAIN BOTTOM BARS AND CENTERED ON COLUMN LINE. AT LEAST (2) TOP AND BOTTOM BARS SHALL BE WITHIN 3' OF COLUMN GRID, ONE ON EACH SIDE OF COLUMN GRID. SEE DETAIL 9/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (C) = (4) #5 ADDITIONAL BOTTOM BARS AT EDGE OF STAIR LANDING.
  - (D) = (2) EACH, #5 x 5'-0" LONG DIAGONAL TOP & BOTTOM BARS AT CORNER OF OPENING.
  - (E) = (3) #5 x 10' - 0" LONG ADDITIONAL TOP BARS AT 12" O.C. CENTERED ON GRIDLINE B.
- PROVIDE STANDARD 90° END HOOKS ON ALL TOP AND BOTTOM BARS UNLESS OTHERWISE SHOWN. HOOKS DO NOT HAVE TO BE VERTICAL. HOOKS CAN BE ROTATED TO MAINTAIN PROPER COVER AT ENDS OF BARS.
- PROVIDE PERMANENT 8" DIA. SCHED. 40 PVC PIPE SLEEVE THROUGH SLAB FOR STANDPIPE CAST INTO SLAB. DO NOT CORE DRILL SLAB.
- A 2 1/2" STEP IN TOP OF CONCRETE IS DESIGNATED WITH  $\blacktriangledown$ .
- CAST DOORWAY WELD PLATES INTO SLAB PER FLOOR PLAN AND DETAIL 6/BB505.



1  
BB404 BB404 SCALE 1/4" = 1'-0"

FOURTH FLOOR FRAMING PLAN

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

WTCC EWS - FIRE & RESCUE TRAINING CENTER

WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET

**BURN BUILDING -  
FOURTH FLOOR  
FRAMING PLAN**

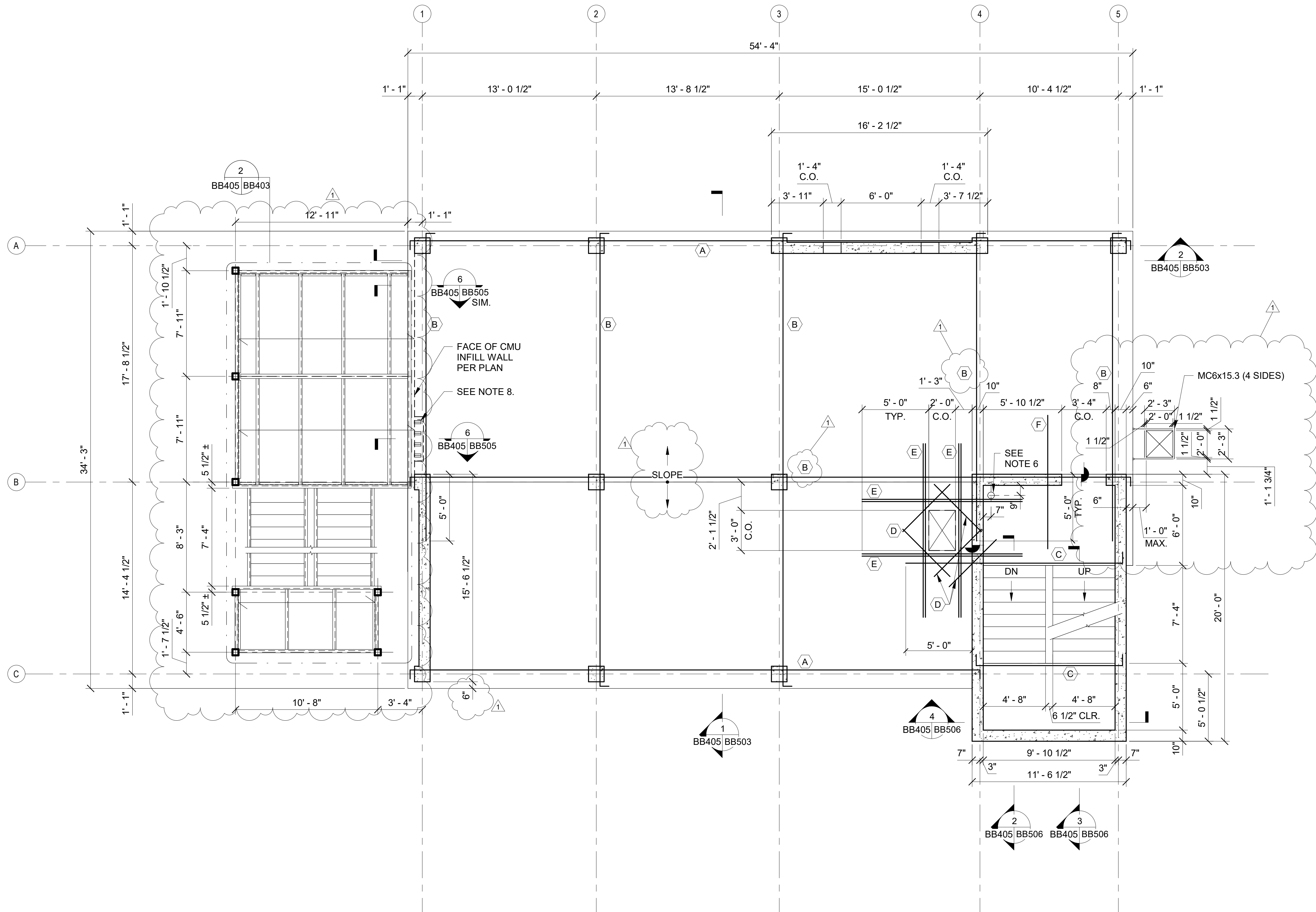
BB404



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - FIFTH FLOOR FRAMING PLAN**

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



**NOTES:**

- SLAB THICKNESS SHALL BE 8" MINIMUM. SLOPE TOP SURFACE ONLY. SEE FIFTH FLOOR PLAN 1/BB205 FOR CONCRETE SLAB ELEVATIONS, AND SLOPES. BOTTOM OF MAIN SLAB AT +39.33', U.O.N.
- SLAB REINFORCING SHALL BE #5 AT 12" O.C. CONTINUOUS BOTH WAYS TOP AND BOTTOM.
- OUTERMOST REINFORCING LAYERS SHALL BE IN THIS DIRECTION IN PLAN. SLOPE TOP BARS IN N-S DIRECTION WITH TOP OF SLAB TO MAINTAIN PROPER COVER OVER ENTIRE BAR LENGTH.
- SEE PLAN FOR ADDITIONAL REINFORCING:
  - (A) = (3) #5 AT 3" O.C. ADDITIONAL TOP AND BOTTOM BARS, CENTERED BETWEEN EACH MAIN TOP AND BOTTOM BAR, FOR A DISTANCE OF 3'-0" SLAB EDGE, SO THAT TOP AND BOTTOM BAR SPACING IS AT 3" O.C. IN COLUMN STRIP. SEE DETAIL 8/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (B) = (4) #5 ADDITIONAL TOP BARS AND BOTTOM BARS AT 12" O.C. CENTERED BETWEEN MAIN TOP BARS AND MAIN BOTTOM BARS AND CENTERED ON COLUMN LINE. AT LEAST (2) TOP AND BOTTOM BARS SHALL BE WITHIN 3" OF COLUMN GRID, ONE ON EACH SIDE OF COLUMN GRID. SEE DETAIL 9/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (C) = (4) #5 ADDITIONAL BOTTOM BARS AT EDGE OF STAIR LANDING.
  - (D) = (2) EACH, #5 x 5'-0" LONG DIAGONAL TOP & BOTTOM BARS AT CORNER OF OPENING.
  - (E) = (2) EACH, #5 ADDITIONAL TOP & BOTTOM BARS AT EDGE OF OPENING.
  - (F) = (3) #5 x 10' - 0" LONG ADDITIONAL TOP BARS AT 12" O.C. CENTERED ON GRIDLINE B.
- PROVIDE STANDARD 90° END HOOKS ON ALL TOP AND BOTTOM BARS UNLESS OTHERWISE SHOWN. HOOKS DO NOT HAVE TO BE VERTICAL. HOOKS CAN BE ROTATED TO MAINTAIN PROPER COVER AT ENDS OF BARS.
- PROVIDE PERMANENT 8" DIA. SCHED. 40 PVC PIPE SLEEVE THROUGH SLAB FOR STANDPIPE CAST INTO SLAB. DO NOT CORE DRILL SLAB.
- A 2 1/2" STEP IN TOP OF CONCRETE IS DESIGNATED WITH .
- CAST DOORWAY WELD PLATES INTO SLAB PER FLOOR PLAN AND DETAIL 6/BB505.



1  
BB405 BB405

**FIFTH FLOOR FRAMING PLAN**

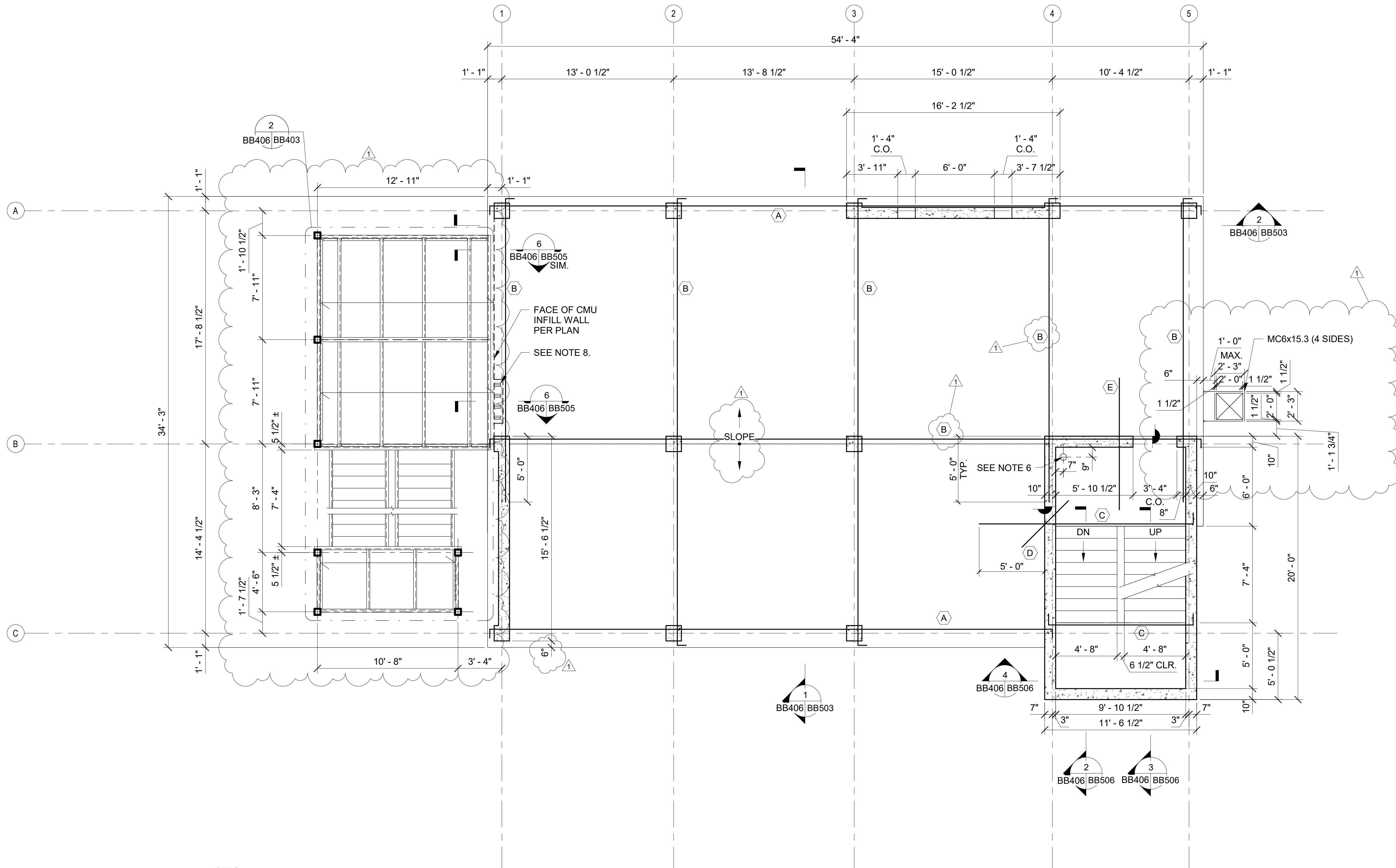
SCALE 1/4" = 1'-0"



NO.	REVISION	DATE
1	Addendum #1	04/14/25

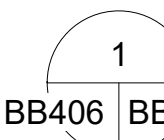
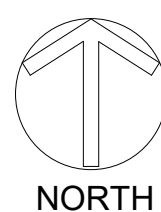
JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - SIXTH FLOOR FRAMING PLAN**

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



**NOTES:**

- SLAB THICKNESS SHALL BE 8" MINIMUM. SLOPE TOP SURFACE ONLY. SEE SIXTH FLOOR PLAN 1/BB206 FOR CONCRETE SLAB ELEVATIONS, AND SLOPES. BOTTOM OF MAIN SLAB AT +49.33', U.O.N.
- SLAB REINFORCING SHALL BE #5 AT 12" O.C. CONTINUOUS BOTH WAYS TOP AND BOTTOM.
- OUTERMOST REINFORCING LAYERS SHALL BE IN THIS DIRECTION  $\rightarrow$  IN PLAN. SLOPE TOP BARS IN N-S DIRECTION WITH TOP OF SLAB TO MAINTAIN PROPER COVER OVER ENTIRE BAR LENGTH.
- SEE PLAN FOR ADDITIONAL REINFORCING:
  - (A) = (3) #5 AT 3" O.C. ADDITIONAL TOP AND BOTTOM BARS, CENTERED BETWEEN EACH MAIN TOP AND BOTTOM BAR, FOR A DISTANCE OF 3'-0" SLAB EDGE, SO THAT TOP AND BOTTOM BAR SPACING IS AT 3" O.C. IN COLUMN STRIP. SEE DETAIL 8/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (B) = (4) #5 ADDITIONAL TOP BARS AND BOTTOM BARS AT 12" O.C. CENTERED BETWEEN MAIN TOP BARS AND MAIN BOTTOM BARS AND CENTERED ON COLUMN LINE. AT LEAST (2) TOP AND BOTTOM BARS SHALL BE WITHIN 3" OF COLUMN GRID, ONE ON EACH SIDE OF COLUMN GRID. SEE DETAIL 9/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (C) = (4) #5 ADDITIONAL BOTTOM BARS AT EDGE OF STAIR LANDING.
  - (D) = (2) EACH, #5 x 5'-0" LONG DIAGONAL TOP & BOTTOM BARS AT CORNER OF OPENING.
  - (E) = (3) #5 x 10' - 0" LONG ADDITIONAL TOP BARS AT 12" O.C. CENTERED ON GRIDLINE B.
- PROVIDE STANDARD 90° END HOOKS ON ALL TOP AND BOTTOM BARS UNLESS OTHERWISE SHOWN. HOOKS DO NOT HAVE TO BE VERTICAL. HOOKS CAN BE ROTATED TO MAINTAIN PROPER COVER AT ENDS OF BARS.
- PROVIDE PERMANENT 8" DIA. SCHED. 40 PVC PIPE SLEEVE THROUGH SLAB FOR STANDPIPE CAST INTO SLAB. DO NOT CORE DRILL SLAB.
- A 2 1/2" STEP IN TOP OF CONCRETE IS DESIGNATED WITH  $\nabla$ .
- CAST DOORWAY WELD PLATES INTO SLAB PER FLOOR PLAN AND DETAIL 6/BB505.



**SIXTH FLOOR FRAMING PLAN**

BB406 BB406 SCALE 1/4" = 1'-0"



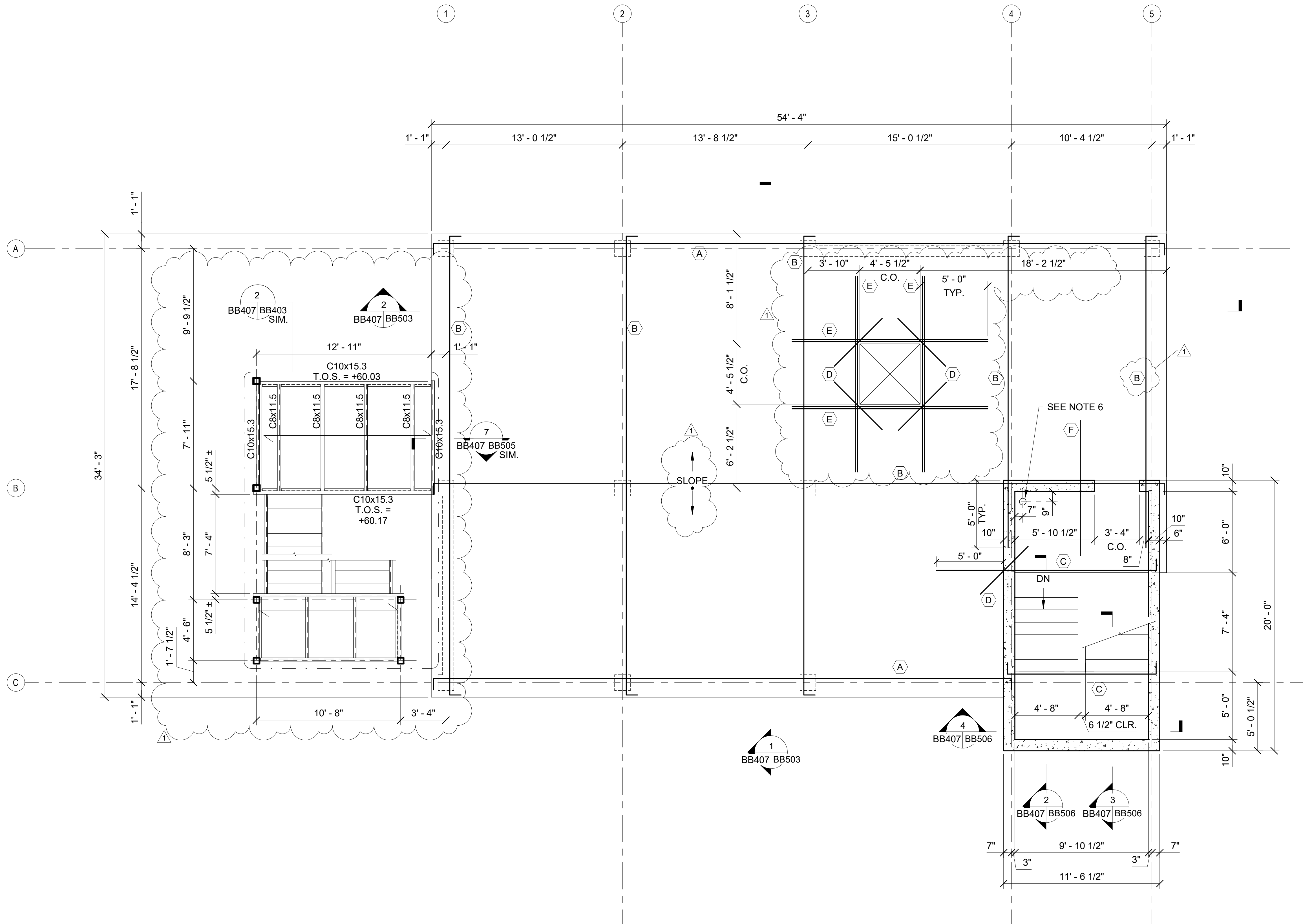
NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - HIGH ROOF & STAIR ROOF FRAMING PLANS**

**BB407**

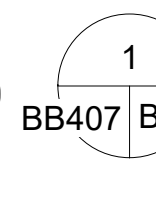
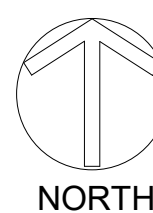
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

This drawing is the property of HH Architecture, P.A. They may not be used for any purpose without written permission. Copyright 2023 by HH Architecture, P.A. All rights reserved.  
P&L Date: 1/16/2025 4:29:07 PM



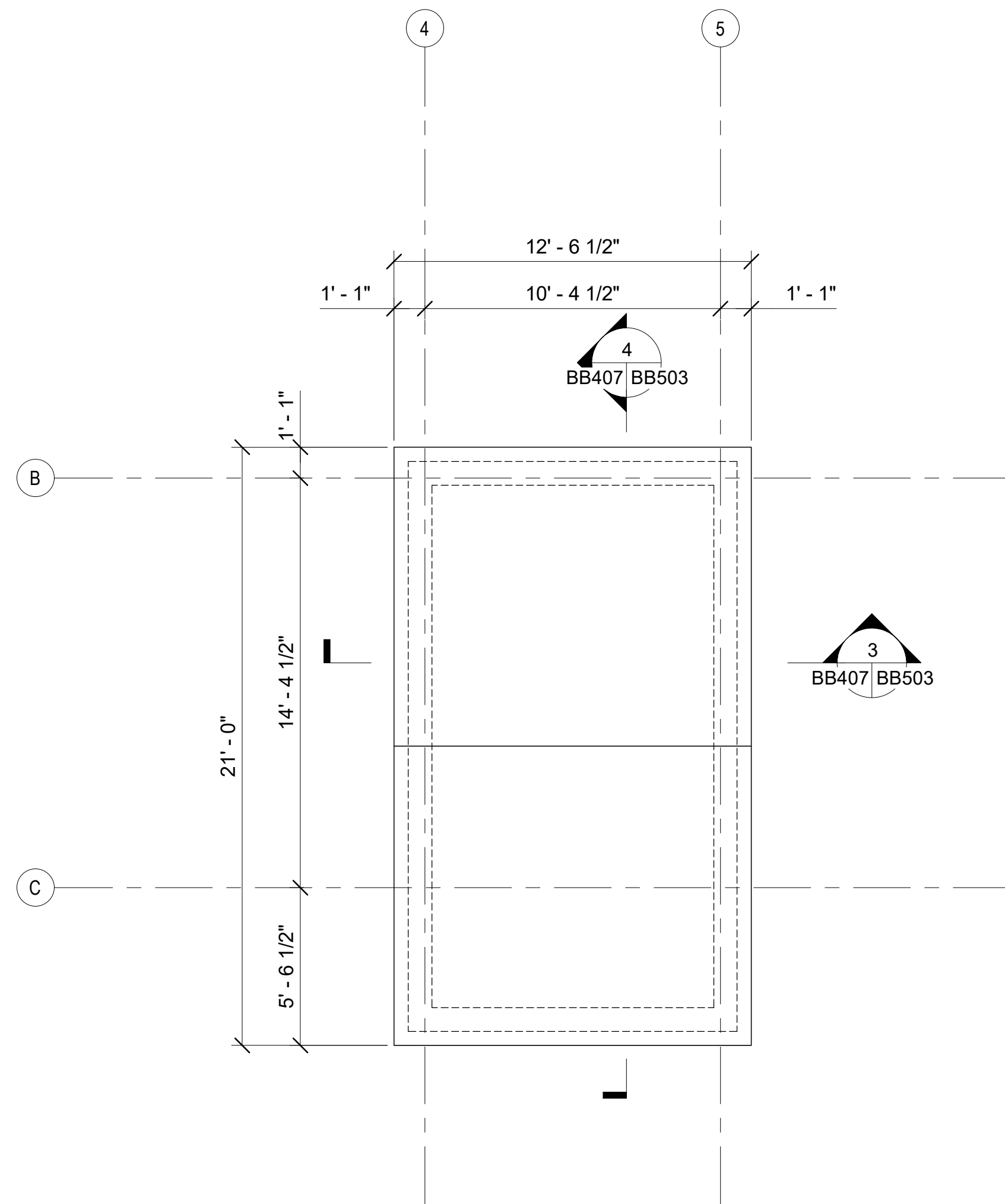
**NOTES:**

- SLAB THICKNESS OVER STAIRS SHALL BE 8" MINIMUM. SLOPE TOP SURFACE ONLY. SEE HIGH ROOF PLAN 1/BB207 FOR CONCRETE SLAB ELEVATIONS, AND SLOPES. BOTTOM OF MAIN SLAB AT +59.33'. U.O.N.
- SLAB REINFORCING SHALL BE #5 AT 12" O.C. CONTINUOUS BOTH WAYS TOP AND BOTTOM.
- OUTERMOST REINFORCING LAYERS SHALL BE IN THIS DIRECTION IN PLAN. SLOPE TOP BARS IN N-S DIRECTION WITH TOP OF SLAB TO MAINTAIN PROPER COVER OVER ENTIRE BAR LENGTH.
- SEE PLAN FOR ADDITIONAL REINFORCING:
  - (A) = (3) #5 AT 3" O.C. ADDITIONAL TOP AND BOTTOM BARS, CENTERED BETWEEN EACH MAIN TOP AND BOTTOM BAR, FOR A DISTANCE OF 3'-0" SLAB EDGE, SO THAT TOP AND BOTTOM BAR SPACING IS AT 3" O.C. IN COLUMN STRIP. SEE DETAIL 8/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (B) = (4) #5 ADDITIONAL TOP BARS AND BOTTOM BARS AT 12" O.C. CENTERED BETWEEN MAIN TOP BARS AND MAIN BOTTOM BARS AND CENTERED ON COLUMN LINE. AT LEAST (2) TOP AND BOTTOM BARS SHALL BE WITHIN 3" OF COLUMN GRID, ONE ON EACH SIDE OF COLUMN GRID. SEE DETAIL 9/BB502 FOR SPACING WITHIN COLUMN STRIP.
  - (C) = (4) #5 ADDITIONAL BOTTOM BARS AT EDGE OF STAIR LANDING.
  - (D) = (2) EACH, #5 x 5'-0" LONG DIAGONAL TOP & BOTTOM BARS AT CORNER OF OPENING.
  - (E) = (2) EACH, #5 ADDITIONAL TOP & BOTTOM BARS AT EDGE OF OPENING.
  - (F) = (3) #5 x 10' - 0" LONG ADDITIONAL TOP BARS AT 12" O.C. CENTERED ON GRIDLINE B.
- PROVIDE STANDARD 90° END HOOKS ON ALL TOP AND BOTTOM BARS UNLESS OTHERWISE SHOWN. HOOKS DO NOT HAVE TO BE VERTICAL. HOOKS CAN BE ROTATED TO MAINTAIN PROPER COVER AT ENDS OF BARS.
- PROVIDE PERMANENT 8" DIA. SCHED. 40 PVC PIPE SLEEVE THROUGH SLAB FOR STANDPIPE CAST INTO SLAB. DO NOT CORE DRILL SLAB.



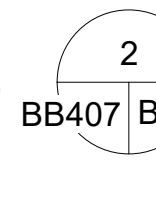
**HIGH ROOF FRAMING PLAN**

BB407 BB407 SCALE 1/4" = 1'-0"



**NOTES:**

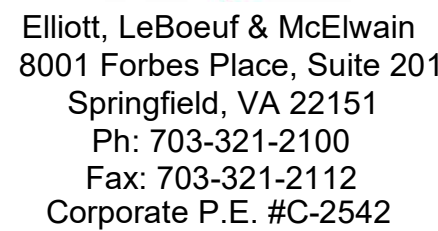
- SLAB THICKNESS OVER STAIRS SHALL BE 8" MINIMUM. SLOPE TOP SURFACE ONLY. SEE STAIR ROOF PLAN 2/BB207 FOR CONCRETE SLAB ELEVATIONS, AND SLOPES. BOTTOM OF MAIN SLAB AT +69.33'. U.O.N.
- SLAB REINFORCING SHALL BE #5 AT 12" O.C. CONTINUOUS BOTH WAYS TOP AND BOTTOM.
- OUTERMOST REINFORCING LAYERS SHALL BE IN THIS DIRECTION IN PLAN. SLOPE TOP BARS IN N-S DIRECTION WITH TOP OF SLAB TO MAINTAIN PROPER COVER OVER ENTIRE BAR LENGTH.
- PROVIDE STANDARD 90° END HOOKS ON ALL TOP AND BOTTOM BARS UNLESS OTHERWISE SHOWN. HOOKS DO NOT HAVE TO BE VERTICAL. HOOKS CAN BE ROTATED TO MAINTAIN PROPER COVER AT ENDS OF BARS.



**STAIR ROOF FRAMING PLAN**

BB407 BB407 SCALE 1/4" = 1'-0"





## NCCCS NO. 2303



JOB NUMBER  
**22056**

---

DATE ISSUED  
**03/14/25**

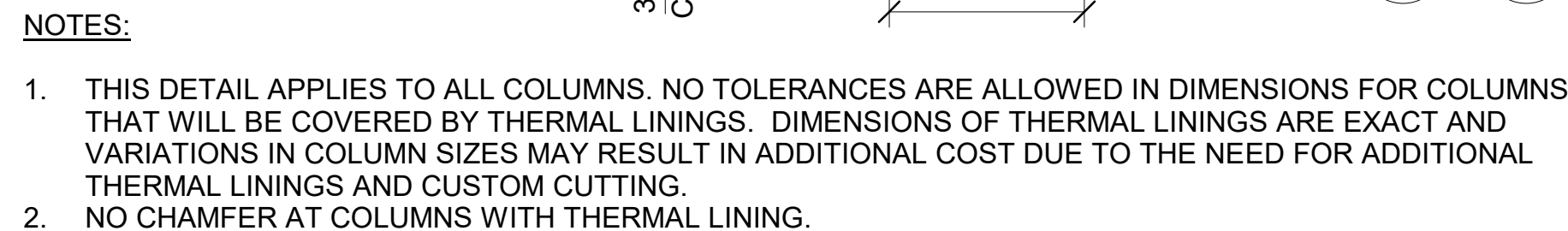
---

PROJECT STATUS  
**ISSUE FOR  
CONSTRUCTION**

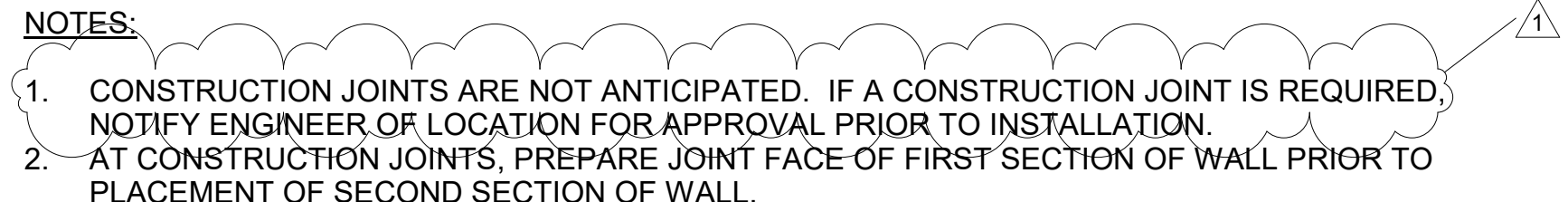
---

SHEET

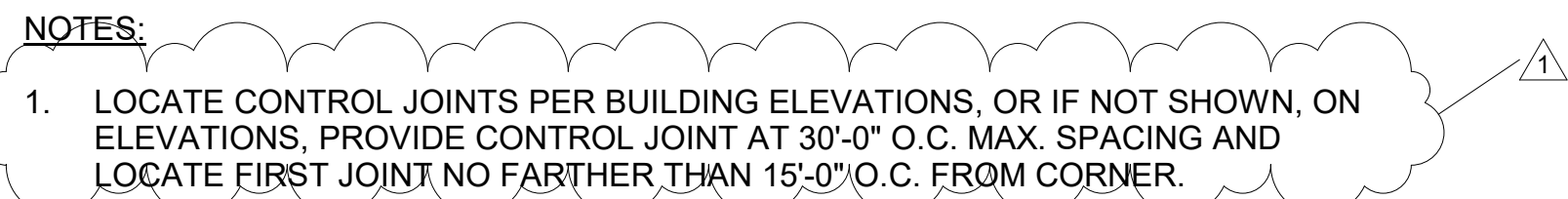
BB501



BB201 - BB501 SCALE 3/4" = 1'-0"



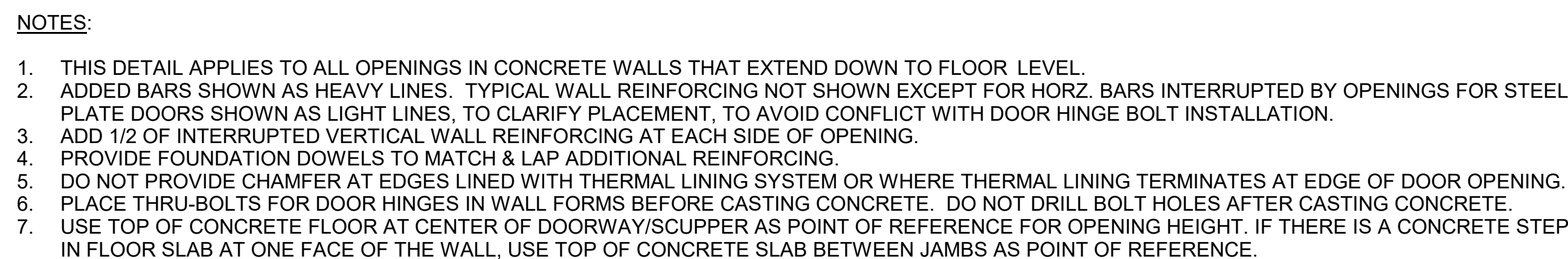
BB501 BB501 SCALE 3/4" = 1'-0"



BB501 BB501 SCALE 3/4" = 1'-0"



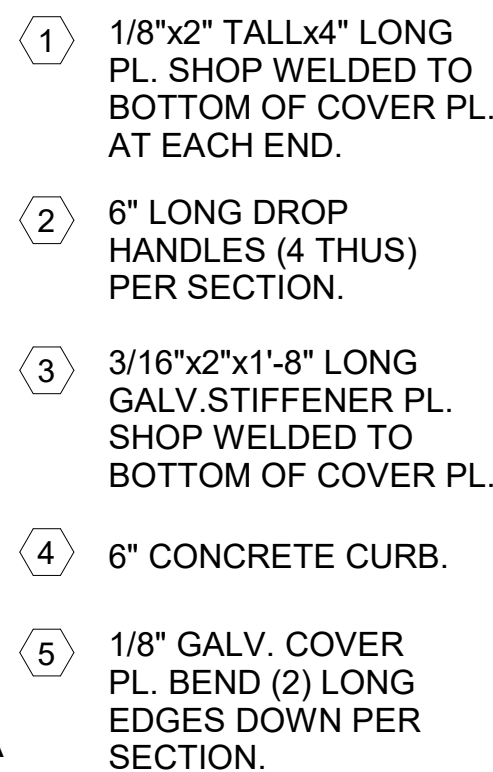
BB201 - BB501 SCALE 3/4" = 1'-0"



BB201- BB501 SCALE 3/4" = 1'-0"  
BB204



BB501 BB501 SCALE 3/4" = 1'-0"



**NOTES:**

1. ALL METAL PIECES IN THIS DETAIL SHALL BE GALVANIZED, U.O.N
2. SEE FRAMING PLAN & SLAB SECTIONS FOR SLAB REINFORCING.

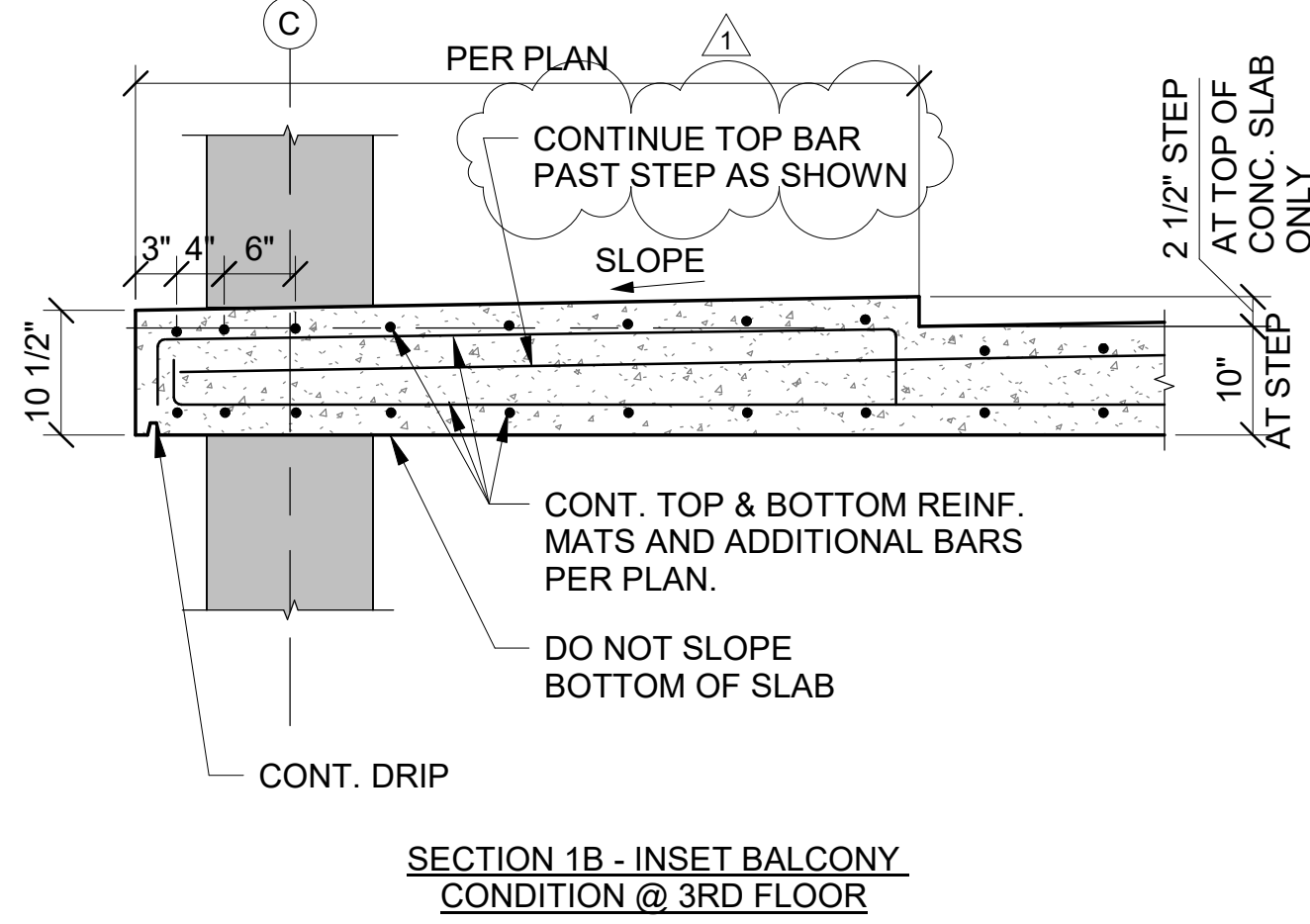
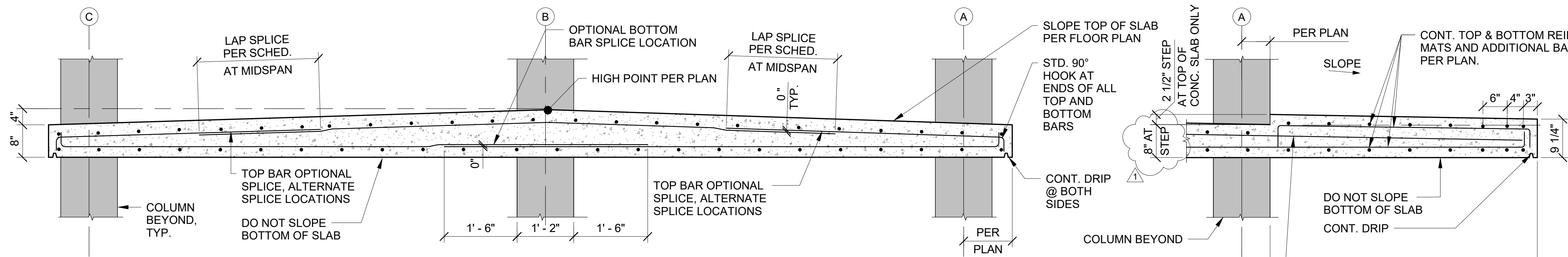
BB205 BB501 SCALE 1 1/2" = 1'-0"

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

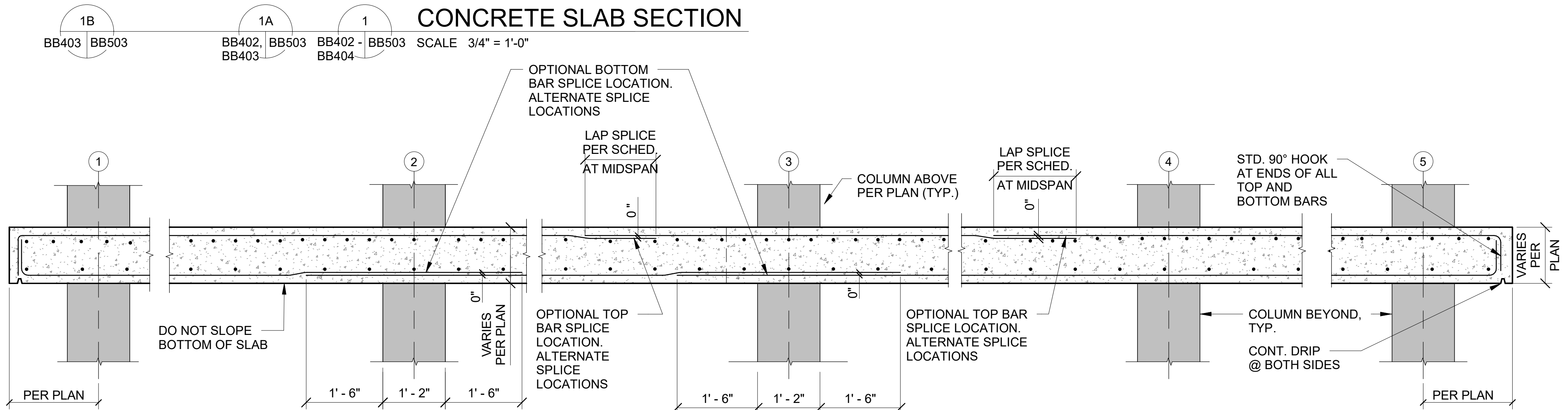




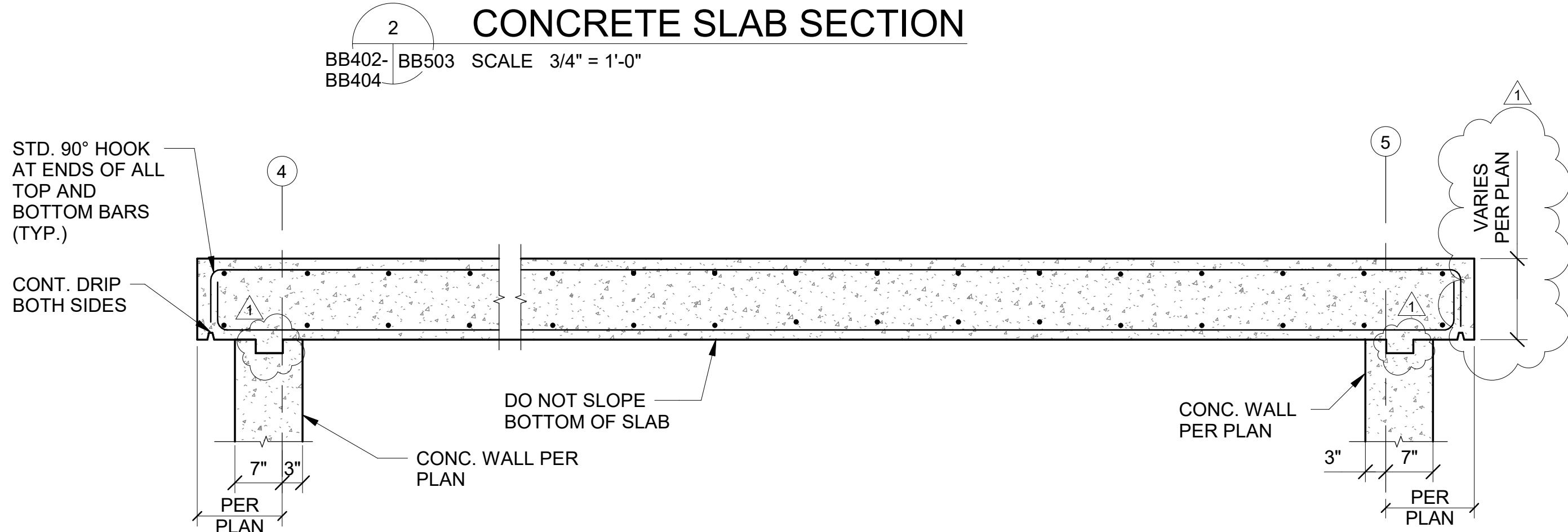




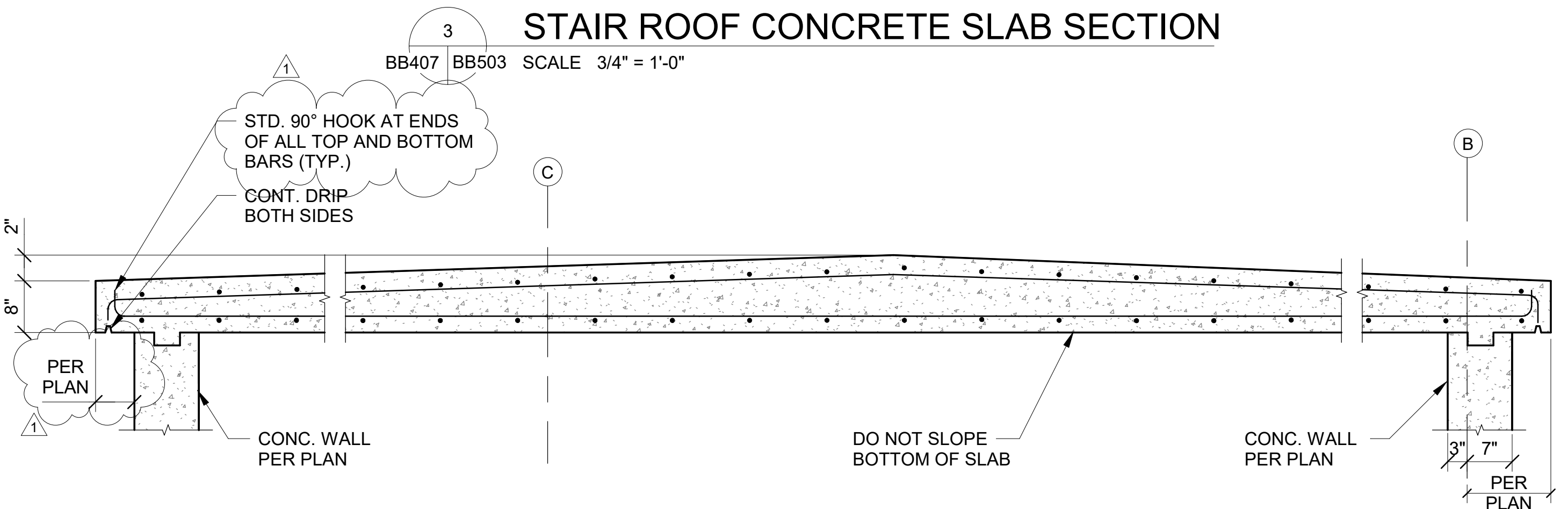
- NOTES:
1. SLOPE TOP BARS IN THIS  $\longleftrightarrow$  DIRECTION WITH TOP OF SLAB SO THAT PROPER COVER IS MAINTAINED OVER THE ENTIRE LENGTH OF THE BAR.
  2. STD. 90° END HOOKS MAY BE TURNED IN ANY DIRECTION SO THAT BARS FIT WITHIN SLAB DEPTHS AND MAINTAIN PROPER COVER. HOOKS ARE NOT REQUIRED TO BE VERTICAL.
  3. SEE SECTION 1/BB501 FOR TYPICAL CONCRETE COLUMN REINFORCING.
  4. SEE SECTION 2/BB501 FOR TYPICAL CONCRETE WALL REINFORCING.



- NOTES:
1. IN SLAB, SLOPE TOP BARS IN ORTHOGONAL DIRECTION PARALLEL WITH TOP OF SLAB SO THAT PROPER COVER IS MAINTAINED OVER THE ENTIRE LENGTH OF THE BAR.
  2. STD. 90° END HOOKS MAY BE TURNED IN ANY DIRECTION SO THAT BARS FIT WITHIN SLAB DEPTHS AND MAINTAIN PROPER COVER. HOOKS ARE NOT REQUIRED TO BE VERTICAL.
  3. SEE SECTION 1/BB501 FOR TYPICAL CONCRETE COLUMN REINFORCING.
  4. SEE SECTION 2/BB501 FOR TYPICAL CONCRETE WALL REINFORCING.



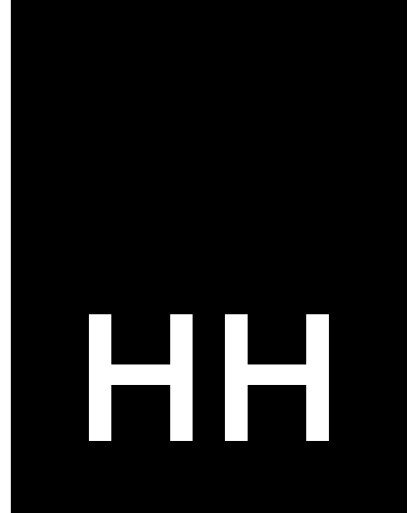
- NOTES:
1. IN SLAB, SLOPE TOP BARS IN ORTHOGONAL DIRECTION PARALLEL WITH TOP OF SLAB SO THAT PROPER COVER IS MAINTAINED OVER THE ENTIRE LENGTH OF THE BAR.
  2. STD. 90° END HOOKS MAY BE TURNED IN ANY DIRECTION SO THAT BARS FIT WITHIN SLAB DEPTHS AND MAINTAIN PROPER COVER. HOOKS ARE NOT REQUIRED TO BE VERTICAL.
  3. SEE SECTION 2/BB501 FOR TYPICAL CONCRETE WALL REINFORCING.



- NOTES:
1. SLOPE TOP BARS IN THIS  $\longleftrightarrow$  DIRECTION WITH TOP OF SLAB SO THAT PROPER COVER IS MAINTAINED OVER THE ENTIRE LENGTH OF THE BAR.
  2. STD. 90° END HOOKS MAY BE TURNED IN ANY DIRECTION SO THAT BARS FIT WITHIN SLAB DEPTHS AND MAINTAIN PROPER COVER. HOOKS ARE NOT REQUIRED TO BE VERTICAL.
  3. SEE SECTION 2/BB501 FOR TYPICAL CONCRETE WALL REINFORCING.



COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

**WTCC EWS - FIRE & RESCUE TRAINING CENTER**  
WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - CONCRETE SLAB SECTIONS**

BB503





NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**

---

DATE ISSUED  
**03/14/25**

---

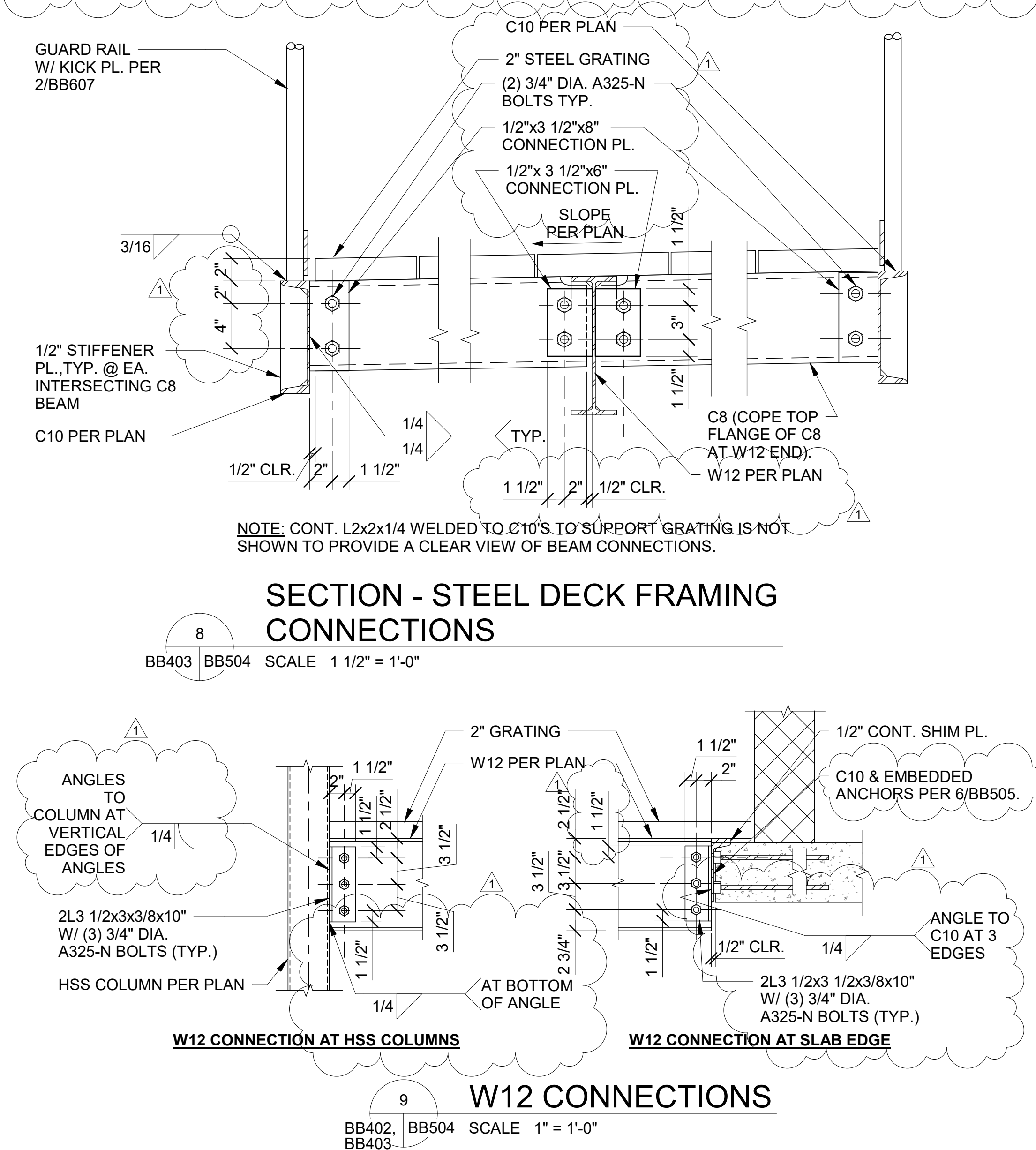
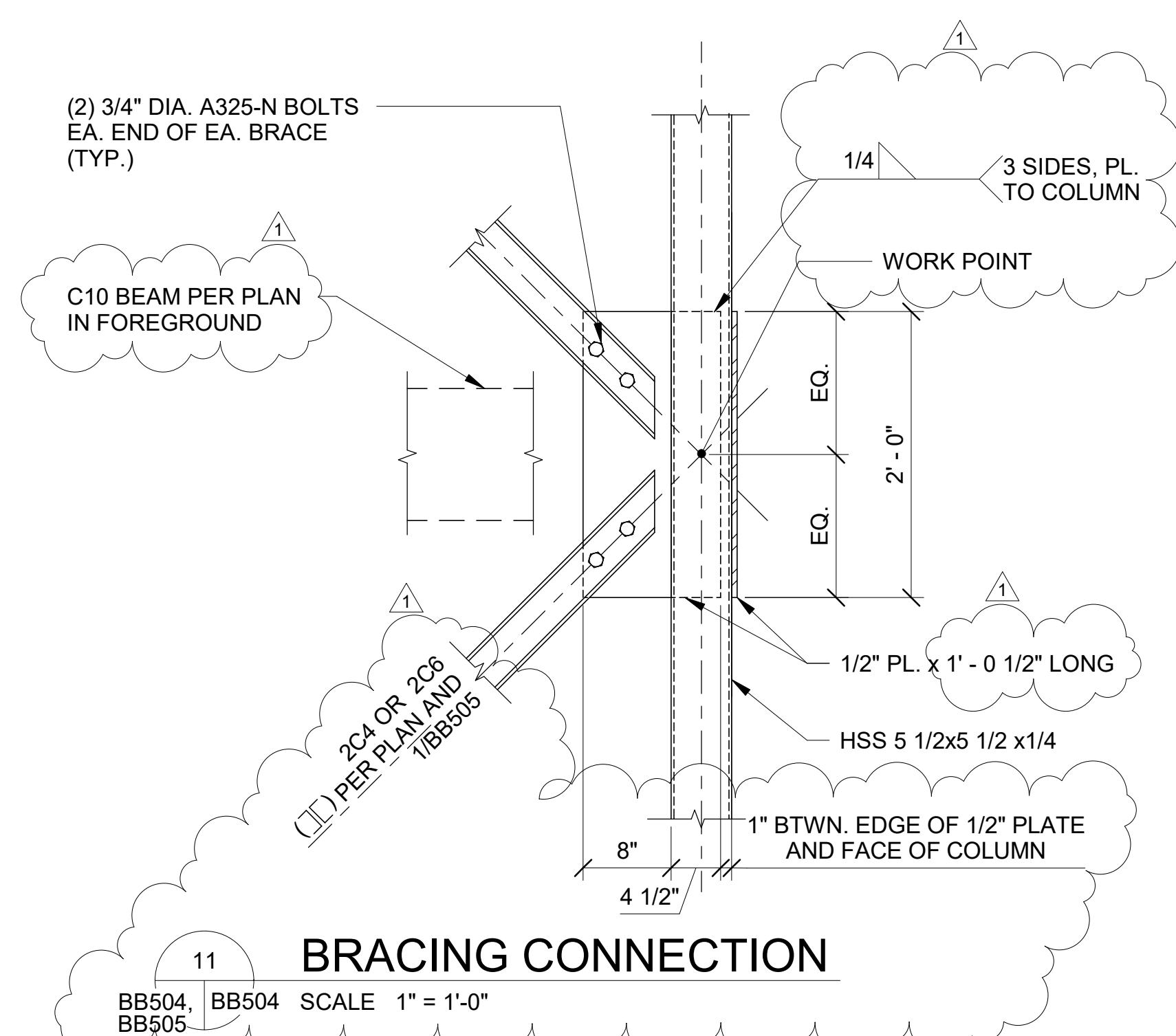
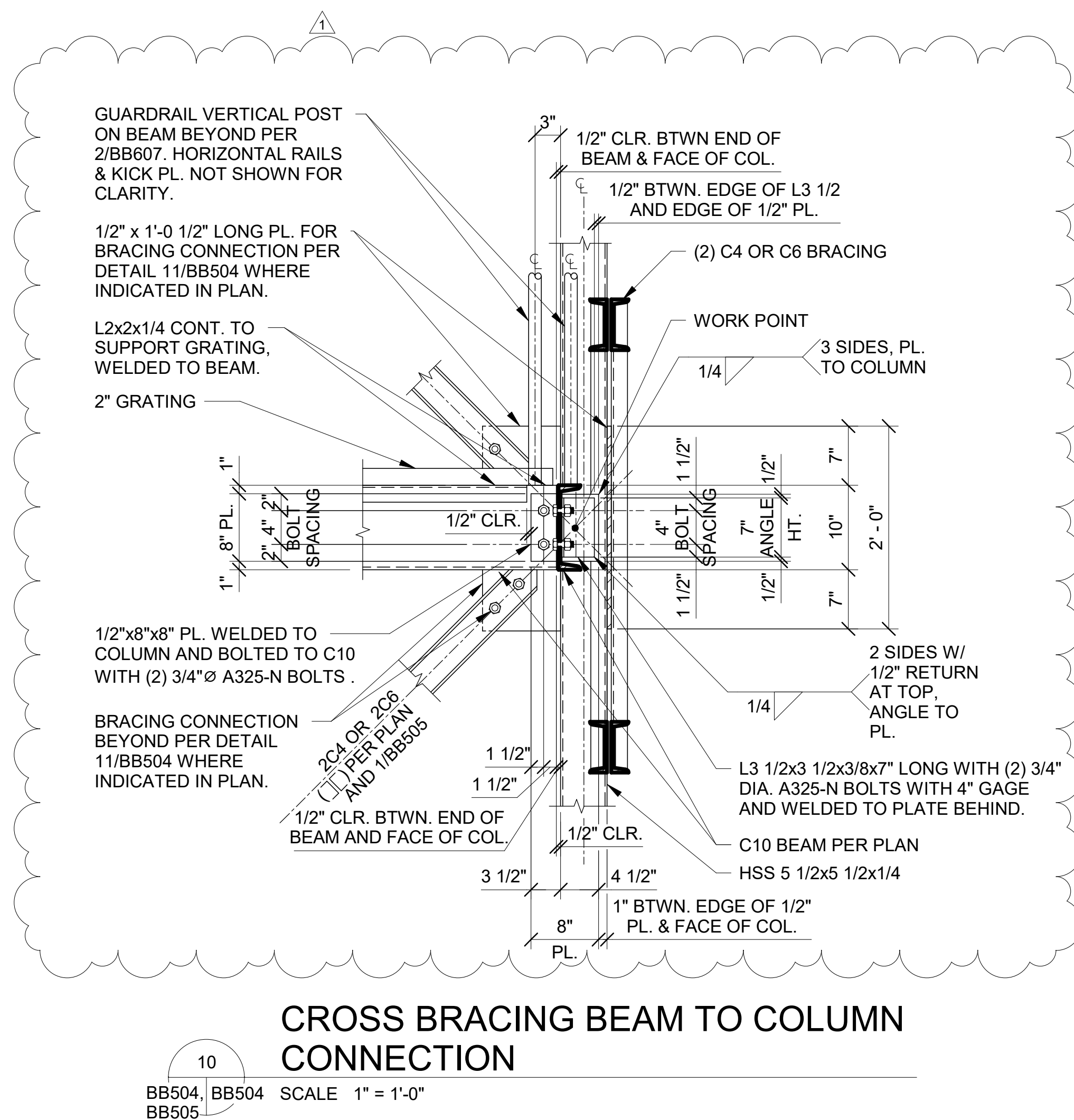
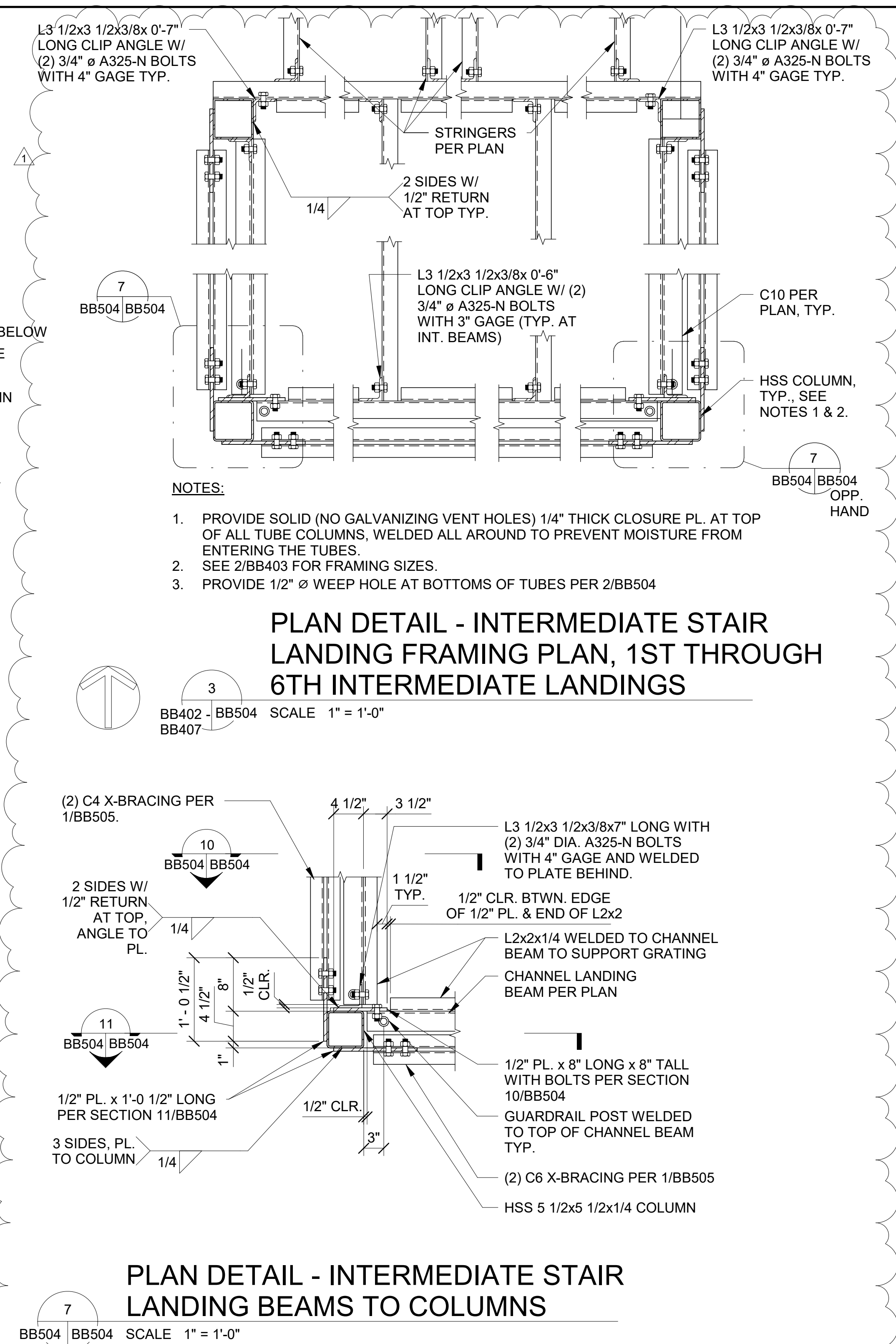
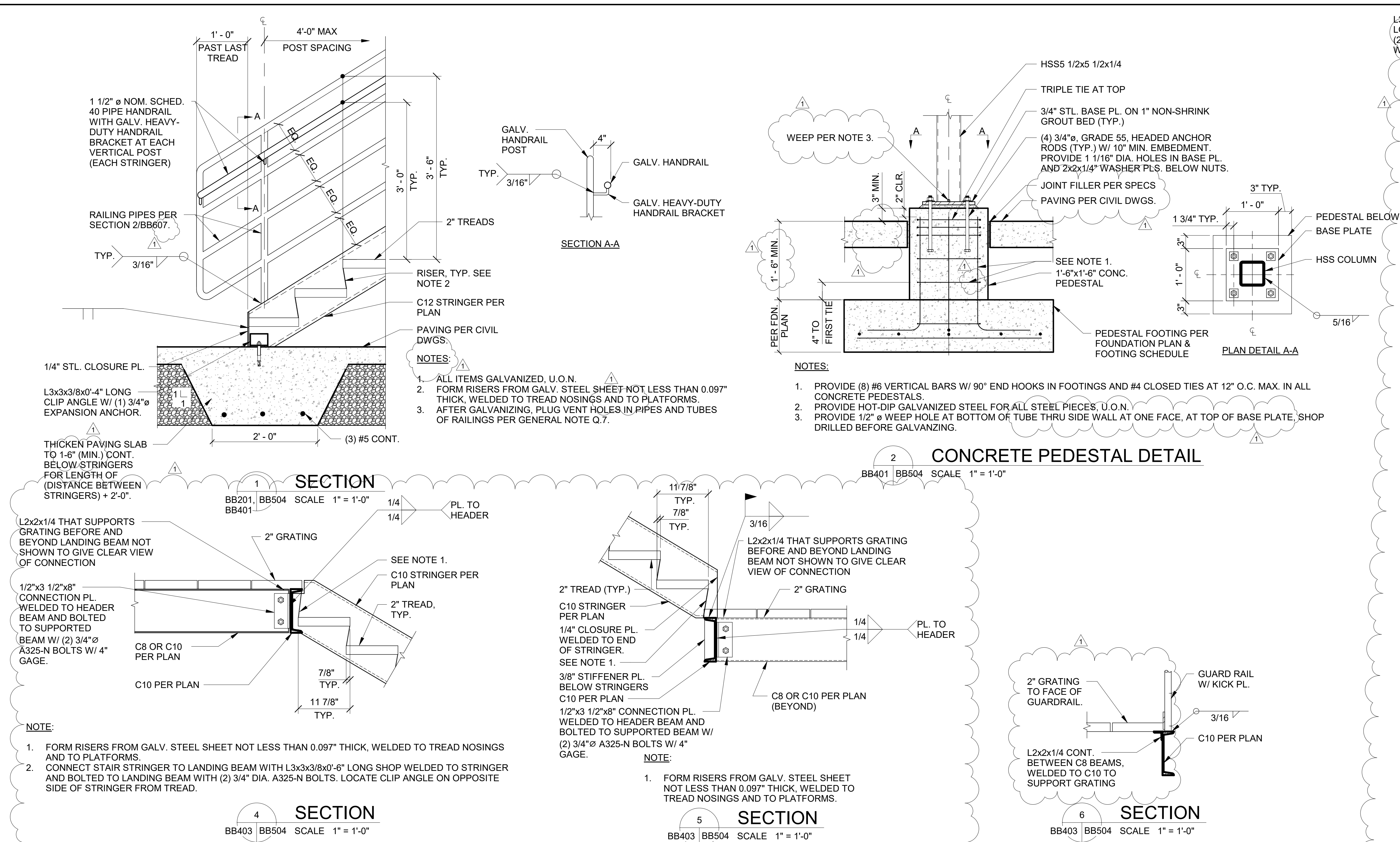
PROJECT STATUS  
**ISSUE FOR  
CONSTRUCTION**

---

SHEET

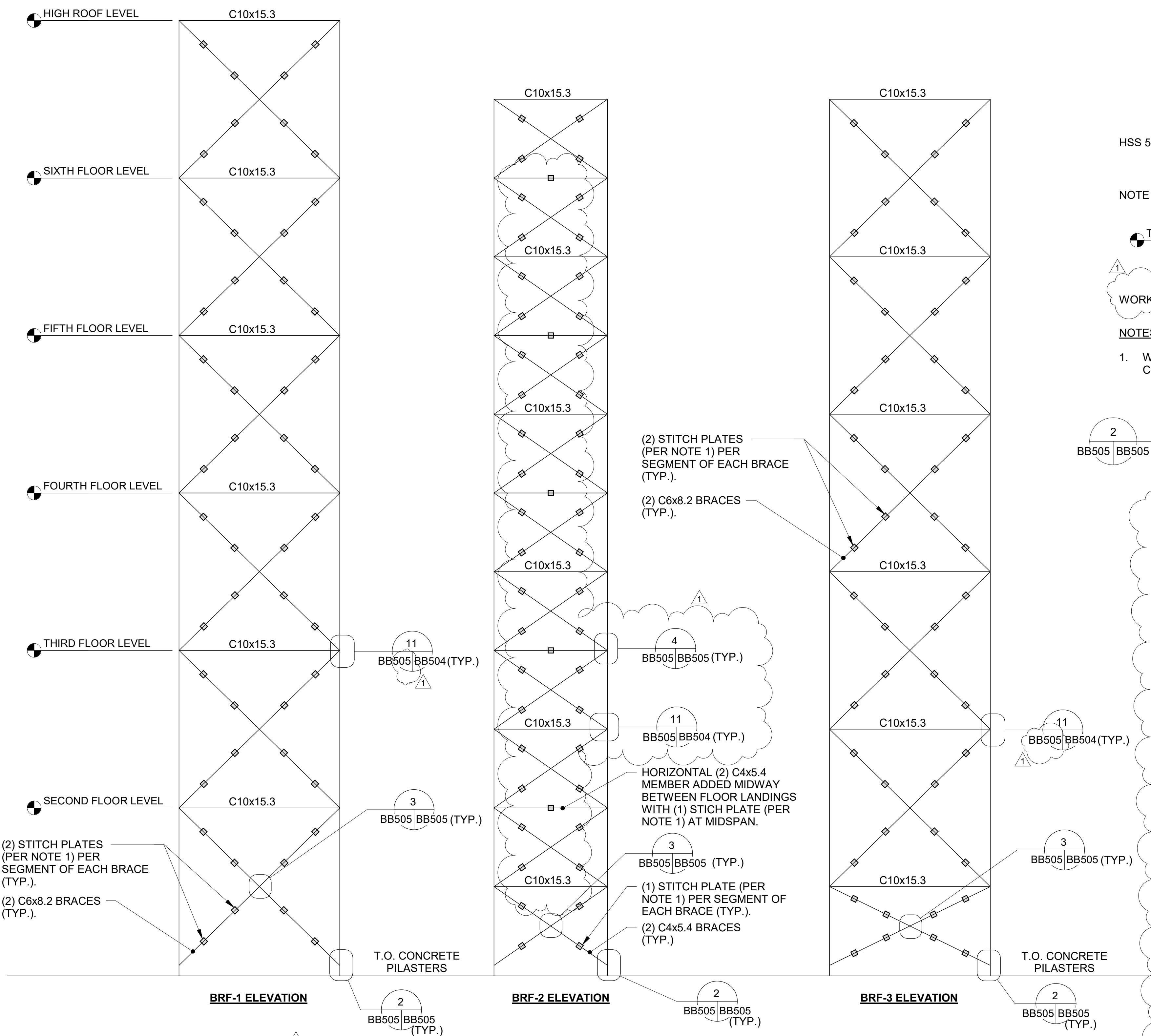
**BURN BUILDING  
EXTERIOR STEEL  
STAIR DETAILS**

BB504



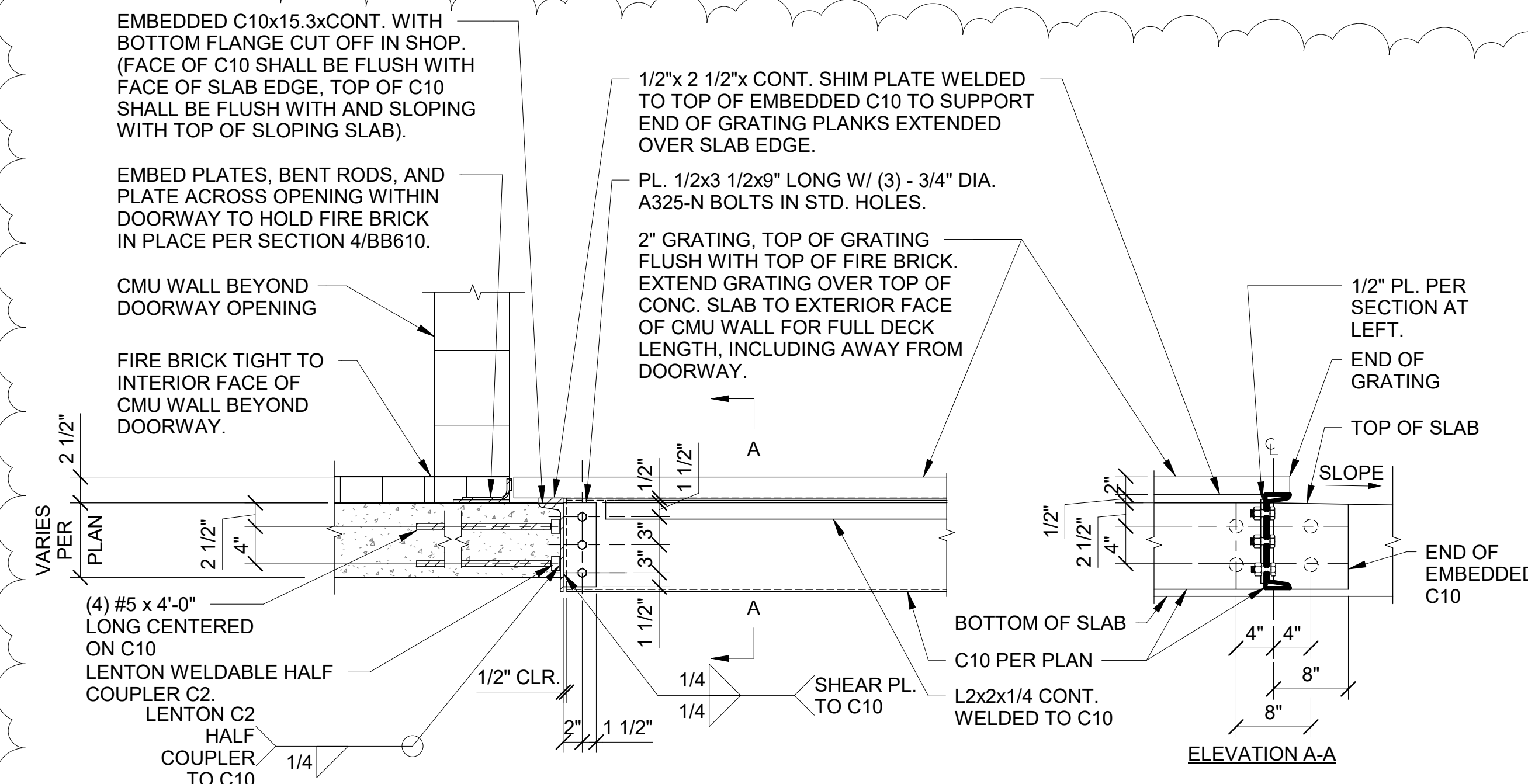
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.





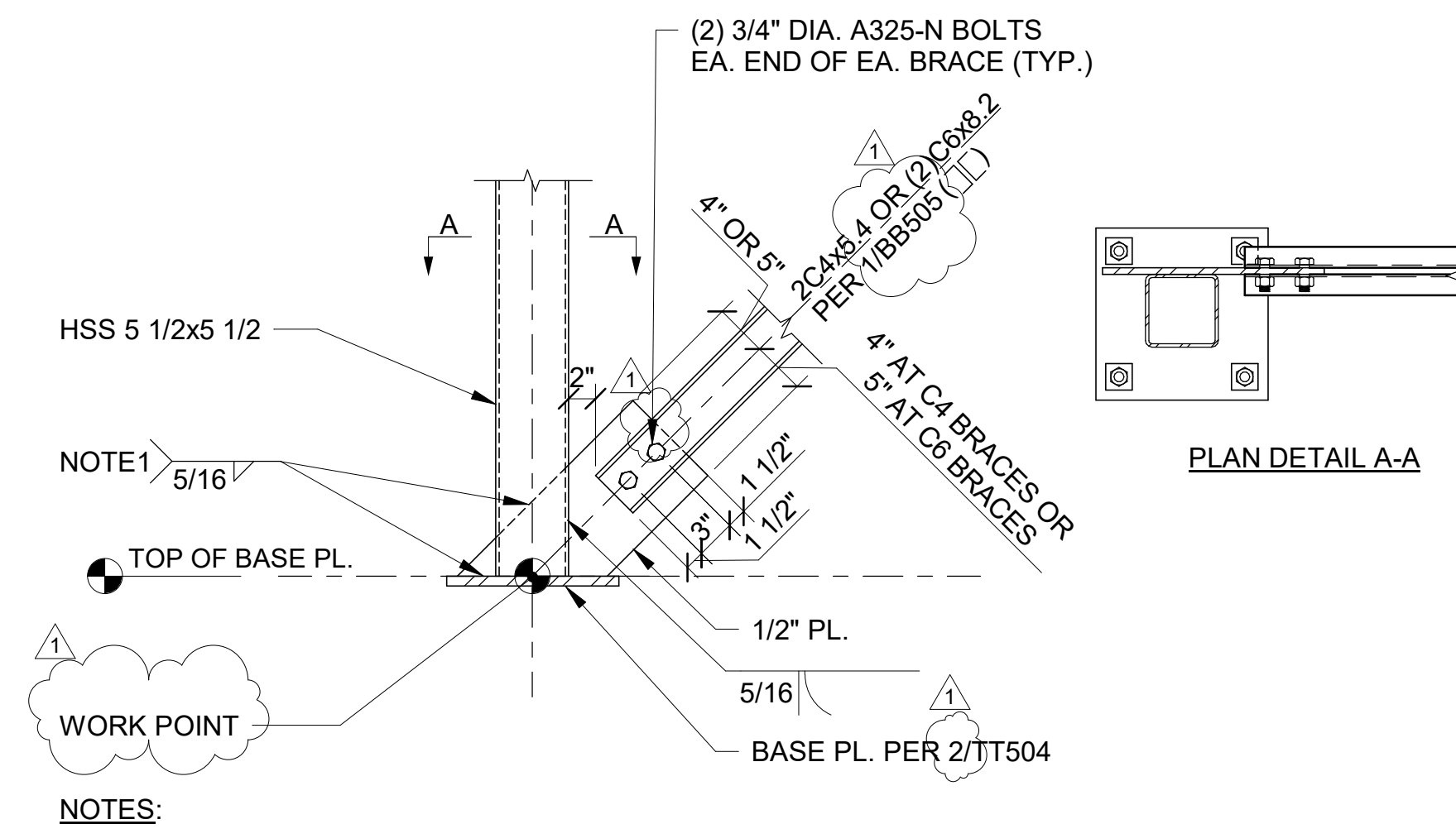
### EXTERIOR STEEL STAIR BRACED FRAMES

BB401- BB505 SCALE 1/2" = 1'-0"



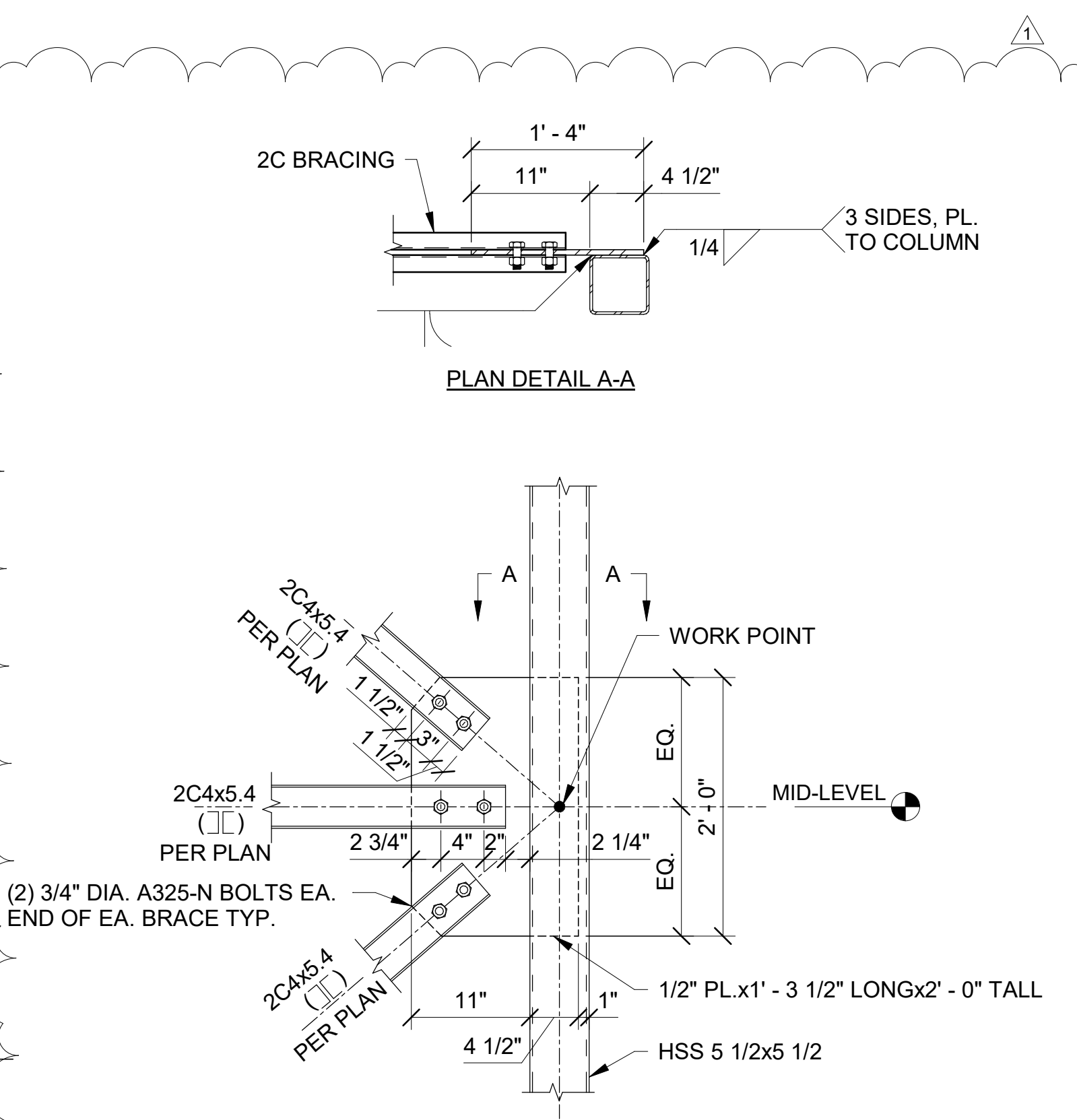
### EXTERIOR PLATFORM CONNECTION TO SLAB EDGE AT 2ND THROUGH 6TH FLOORS

BB402- BB505 SCALE 1" = 1'-0"



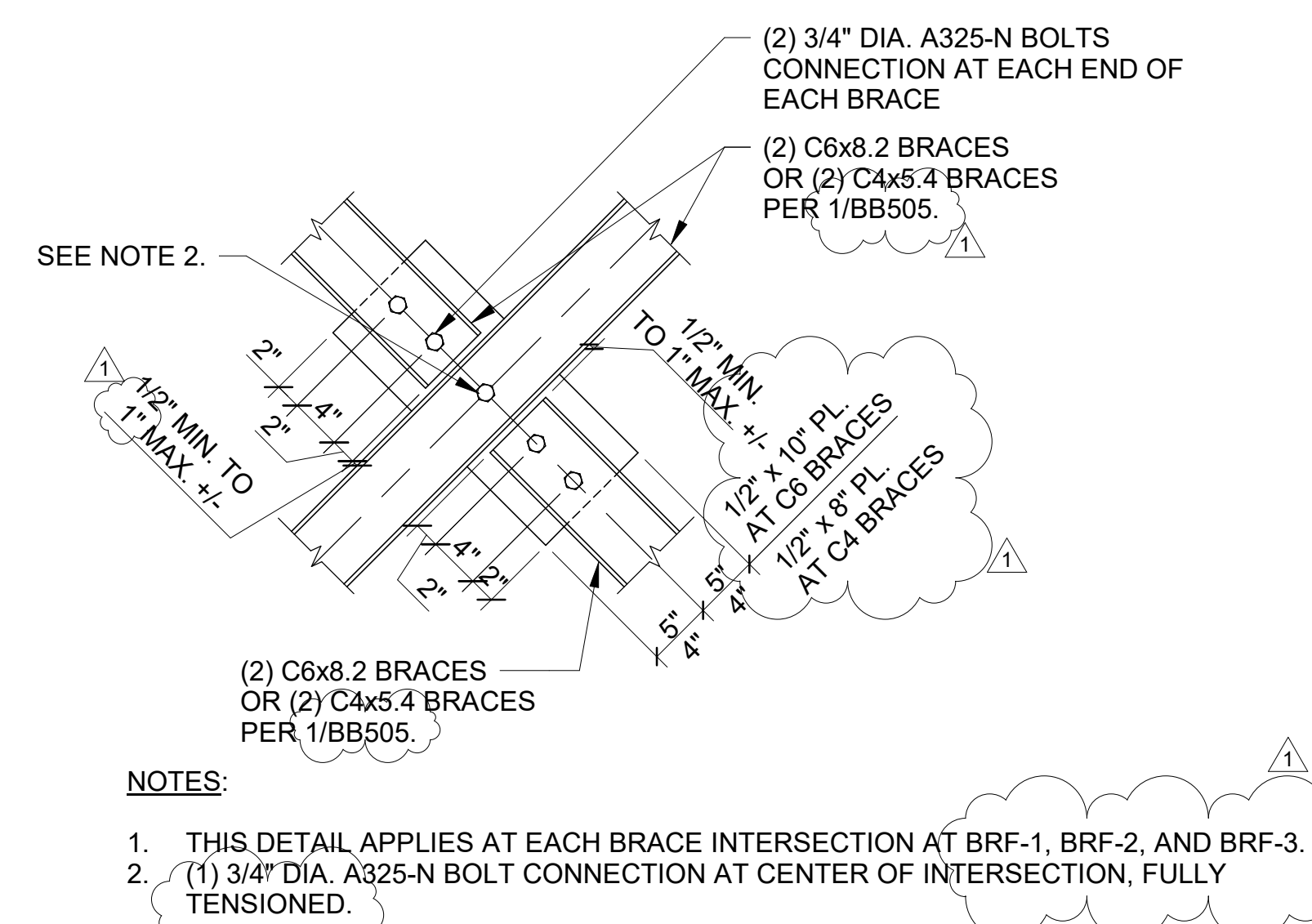
### TYPICAL BRACE CONNECTION AT COLUMN BASE PL.

BB505 BB505 SCALE 1" = 1'-0"



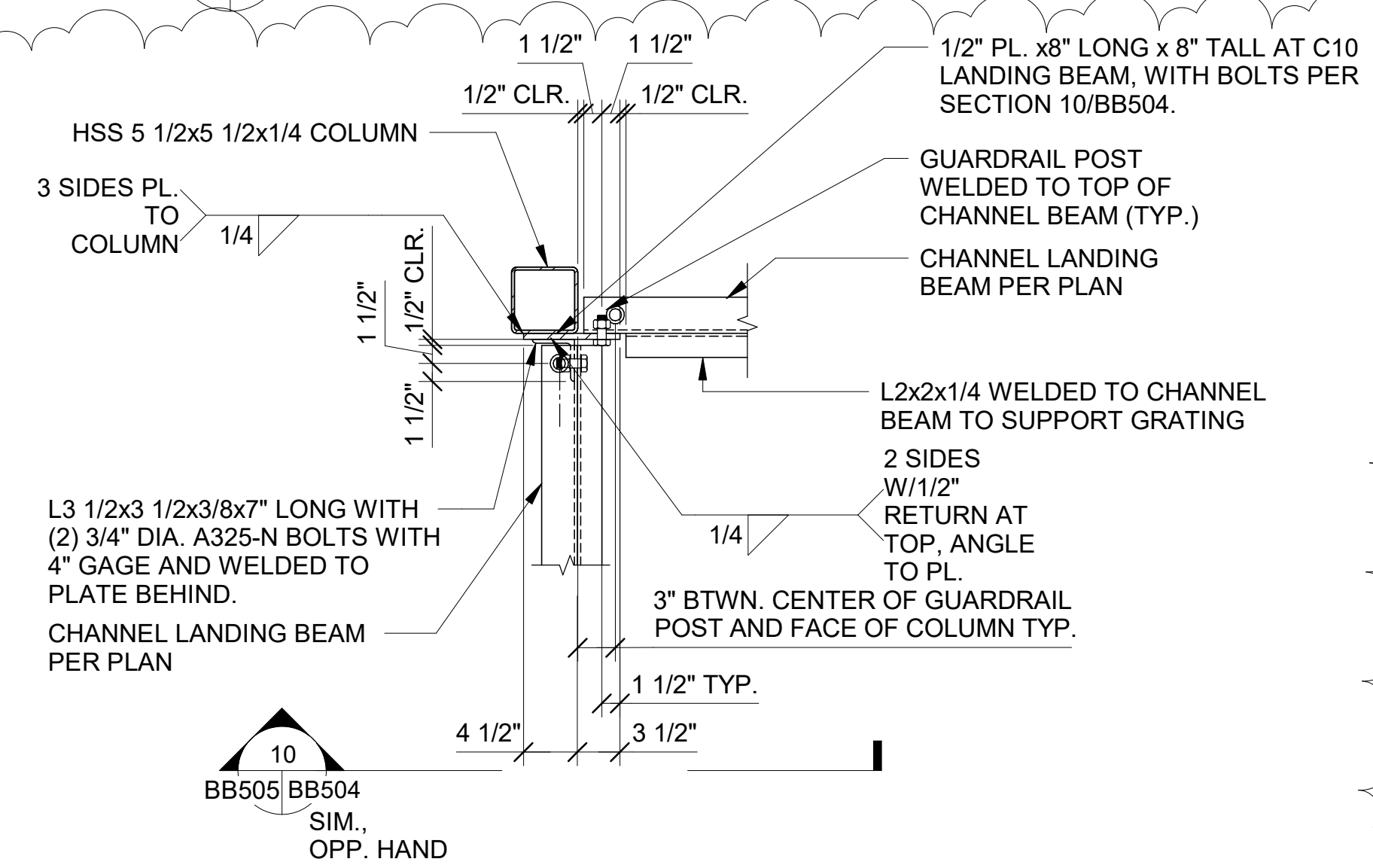
### TYPICAL BRF-2 CONNECTION AT MID-STORY LEVEL OF FRAME

BB505 BB505 SCALE 1" = 1'-0"

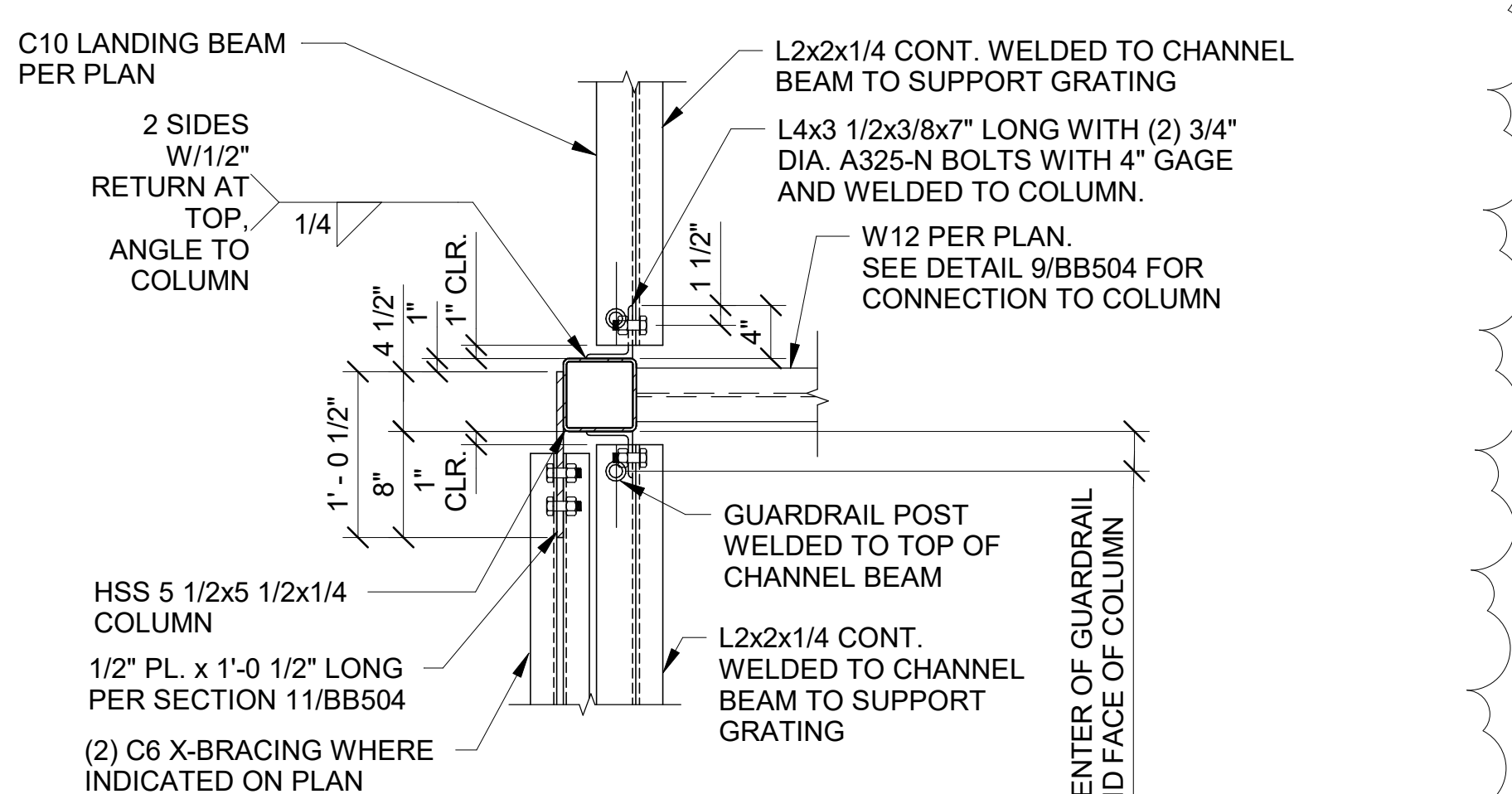


### TYPICAL VERTICAL BRACING INTERSECTION DETAIL

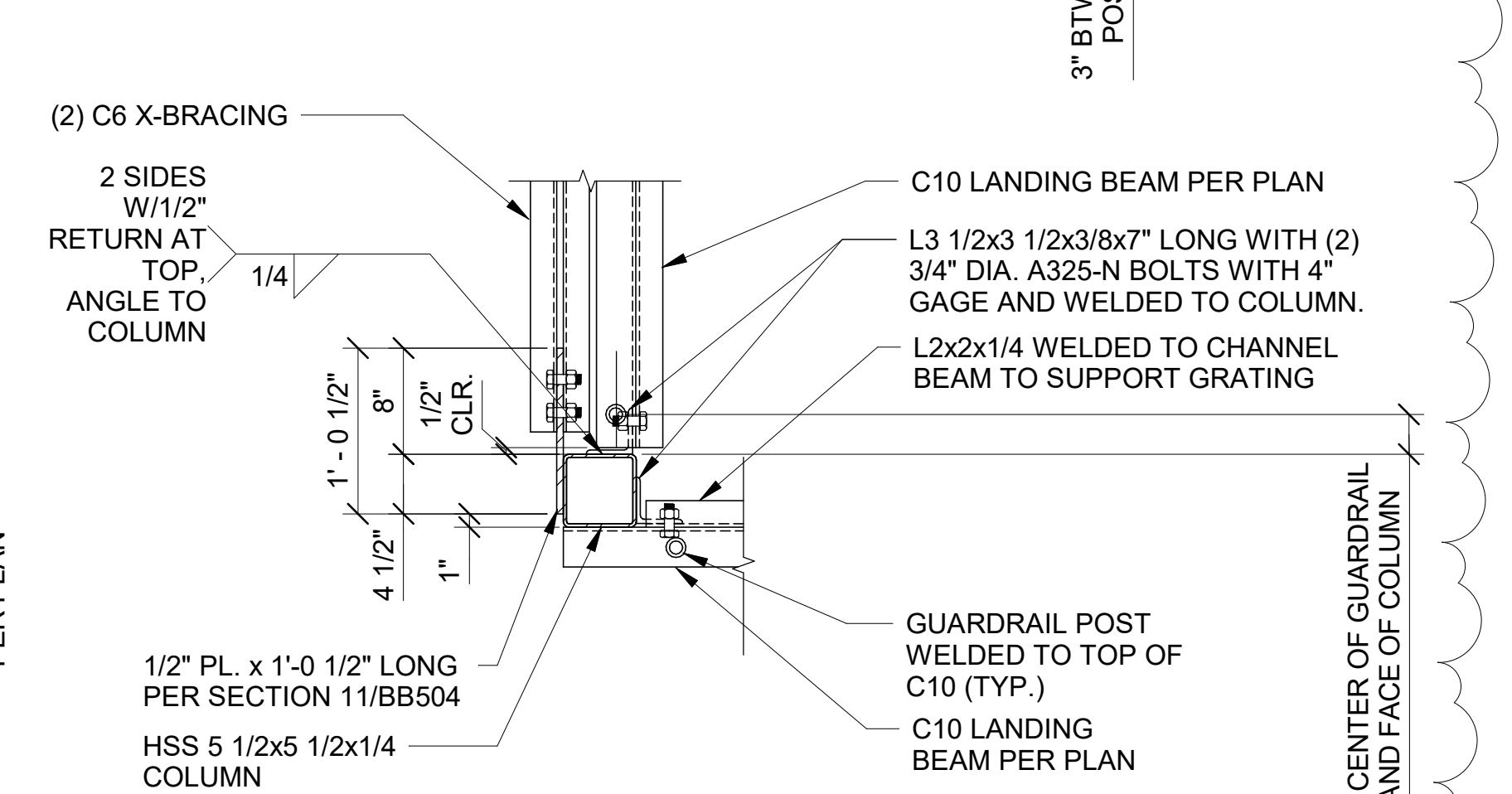
BB505 BB505 SCALE 1" = 1'-0"



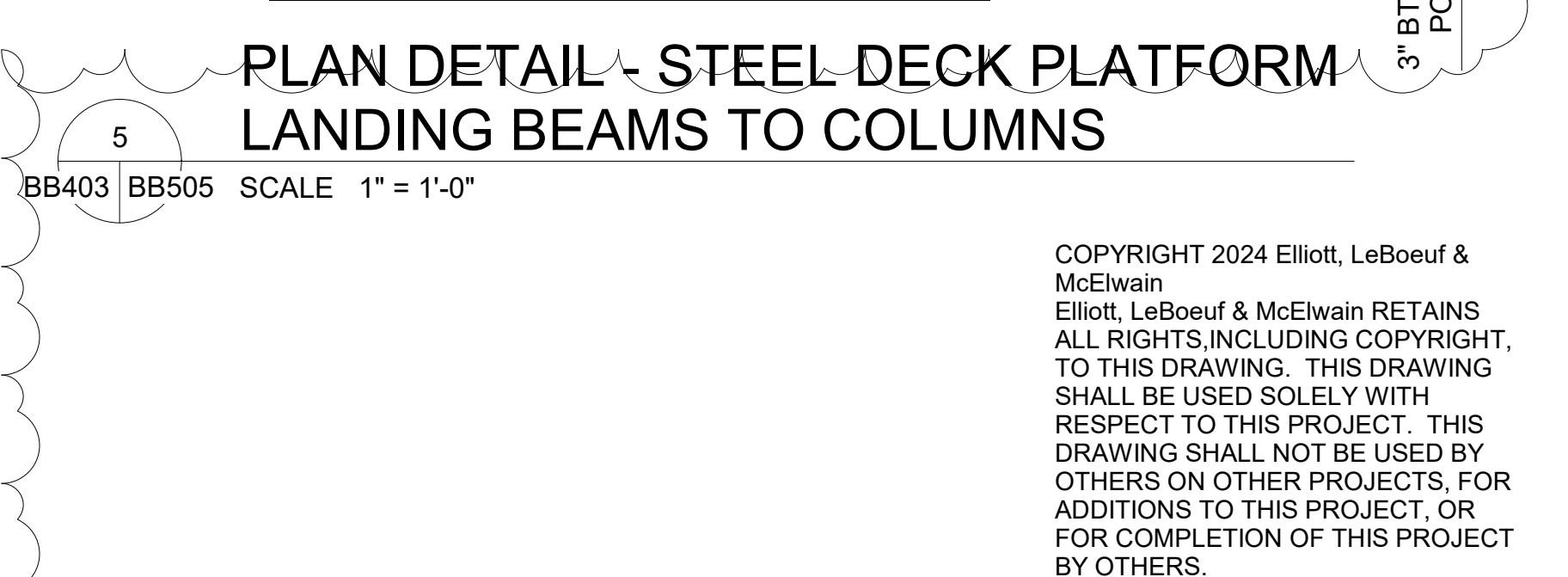
### NORTHWEST COLUMN AT STEEL DECK PLATFORM



### CENTER COLUMN AT STEEL DECK PLATFORM



### SOUTHWEST COLUMN AT STEEL DECK PLATFORM



### PLAN DETAIL - STEEL DECK PLATFORM LANDING BEAMS TO COLUMNS

BB403 BB505 SCALE 1" = 1'-0"

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

**HH**  
ARCHITECTURE

1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

### WTCC EWS - FIRE & RESCUE TRAINING CENTER

WAKE TECHNICAL COMMUNITY COLLEGE

5345 ROLESVILLE RD, WENDELL, NC 27591

NCCCS NO. 2303



NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - EXTERIOR STEEL STAIR DETAILS**

BB505





NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**

---

DATE ISSUED  
**03/14/25**

---

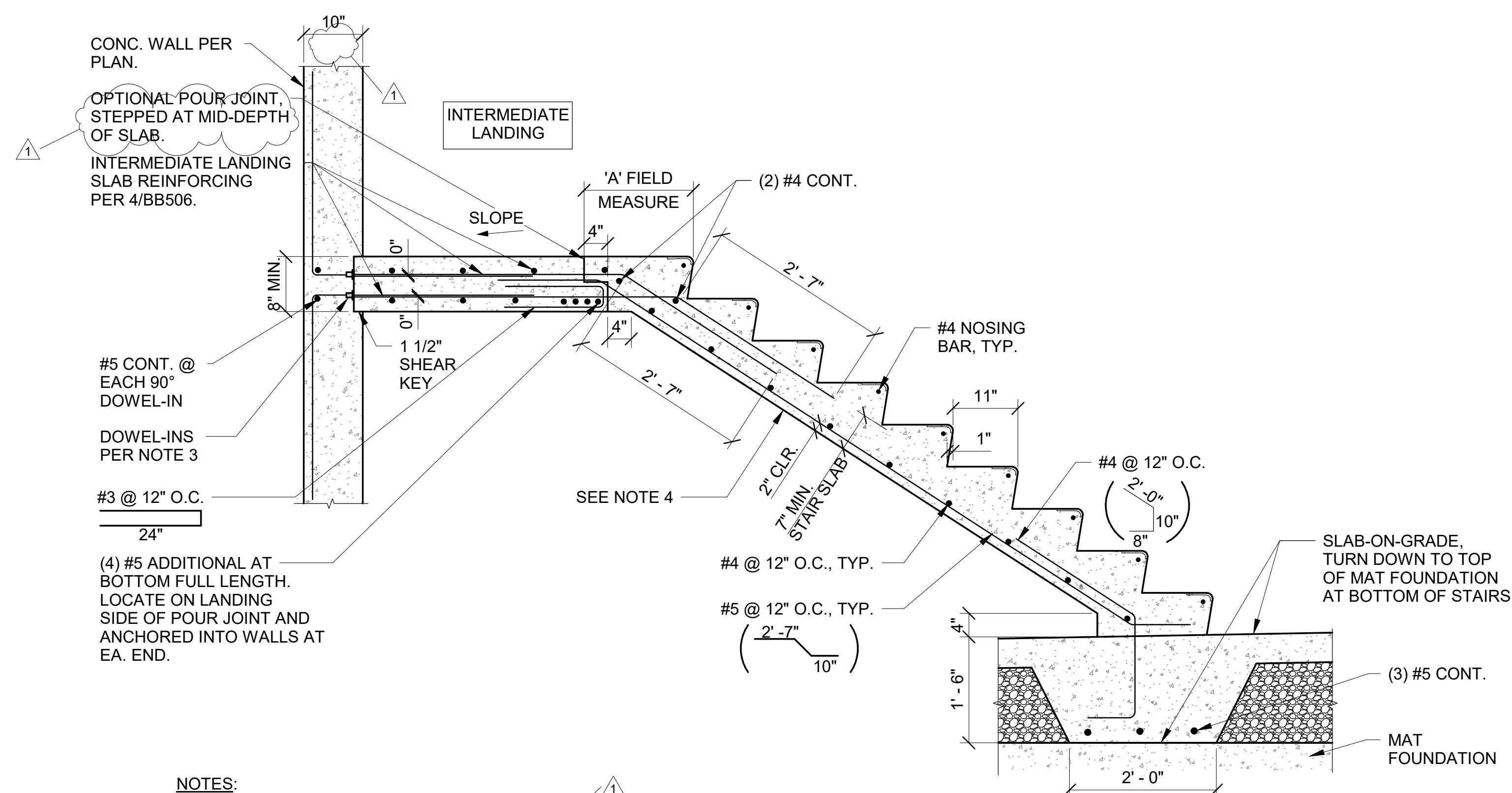
PROJECT STATUS  
**ISSUE FOR  
CONSTRUCTION**

---

SHEET

**BURN BUILDING -  
CONCRETE STAIR  
SECTIONS**

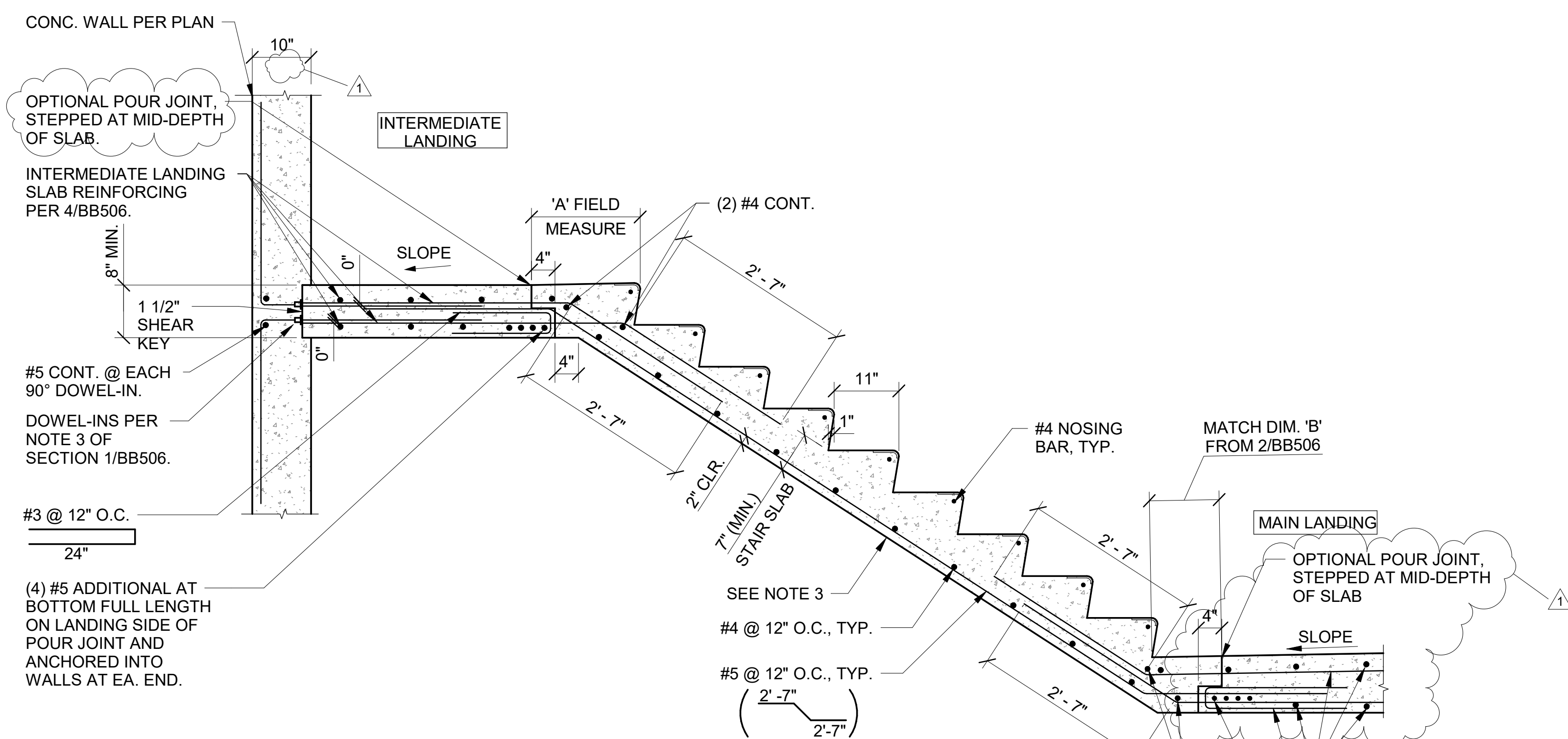
BB506



## NOTES

1. PROVIDE GALVANIZED, SLIP-RESISTANT-STAIR NOSING (TYP. AT ALL TREADS). PROVIDE 1/4" MIN. THICK, GRADE 2, ROUNDED-EDGE STAIR NOSING, 1 1/2" DEEP x 3" WIDE x 3'-11" LONG, TIGHT TO CONCRETE WALL TO AVOID GUARDRAIL BASE PLATE AT OPPOSITE END OF TREAD. PROVIDE SLIPNOT STAIR NOSING WITH J-HOOKS, AS MANUFACTURED BY SLIPNOT METAL SAFETY FLOORING AT (800) 754-7668 OR WWW.SLIPNOT.COM, OR AN EQUIVALENT APPROVED BY THE ENGINEER. INSTALL STAIR NOSINGS IN ACCORDANCE WITH REQUIREMENTS OF THE MANUFACTURER.
2. WALL REINFORCING HAS BEEN OMITTED FOR CLARITY.
3. CONNECT INTERMEDIATE LANDING SLAB TO CONCRETE WALLS USING DOWEL-IN SYSTEM BY DAYTON SUPERIOR, OR AN APPROVED EQUIVALENT/ ERICO OR BARSPLICE PRODUCTS, INC. FOR EACH REINFORCING BAR THAT PASSES FROM THE LANDING SLAB INTO WALL. PROVIDE A #5 D102A 90° HOOKED DOWEL BAR SPLICER CASTER INTO WALL, WITH DIMENSIONS A=5" & B=2" - 7", PLUS A #5 D-101 2" - 10" LONG DOWEL BAR CASTER SCREWED INTO THE SPLICER AND LAPPING THE SLAB REINFORCING WITH A 2" - 5" MIN. LENGTH.
4. WHERE CONCRETE STAIR SLABS INTERSECT CONCRETE WALLS, CONNECT STAIR SLABS TO CONCRETE WALLS USING DOWEL-IN SYSTEM DESCRIBED IN NOTE 3.

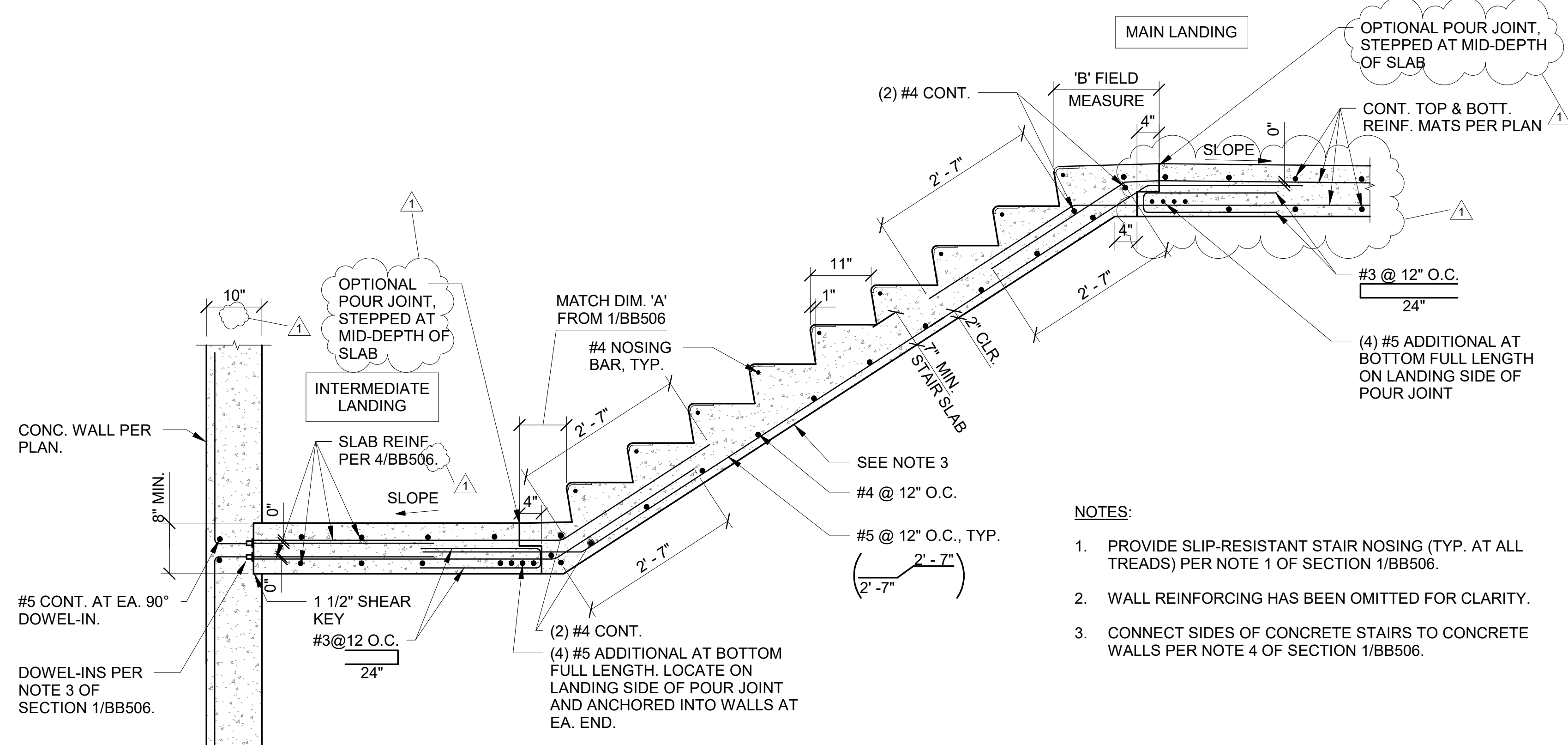
1 CONCRETE STAIR SECTION  
BB201, BB506 SCALE 3/4" = 1'-0"  
BB401



## NOTES

1. PROVIDE SLIP-RESISTANT STAIR NOSING (TYP. AT ALL TREADS) PER NOTE 1 OF SECTION 1/BB506.
2. WALL REINFORCING HAS BEEN OMITTED FOR CLARITY.
3. CONNECT SIDES OF CONCRETE STAIRS TO CONCRETE WALLS PER NOTE 4 OF SECTION 1/BB506.

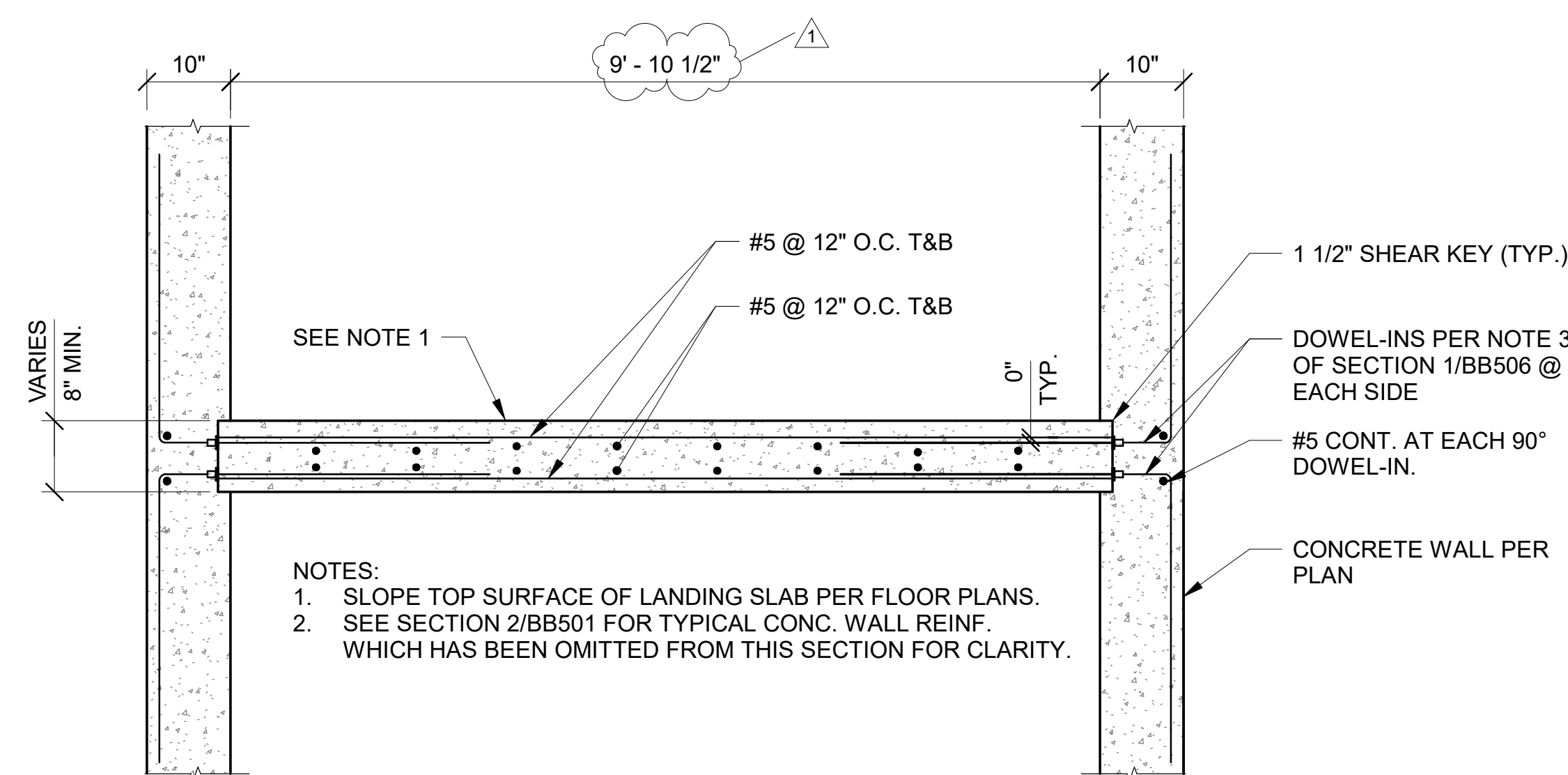
3 CONCRETE STAIR SECTION  
BB402 - BB506 SCALE 3/4" = 1'-0"  
BB407



NOTES:

1. PROVIDE SLIP-RESISTANT STAIR NOSING (TYP. AT ALL TREADS) PER NOTE 1 OF SECTION 1/BB506.
2. WALL REINFORCING HAS BEEN OMITTED FOR CLARITY.
3. CONNECT SIDES OF CONCRETE STAIRS TO CONCRETE WALLS PER NOTE 4 OF SECTION 1/BB506.

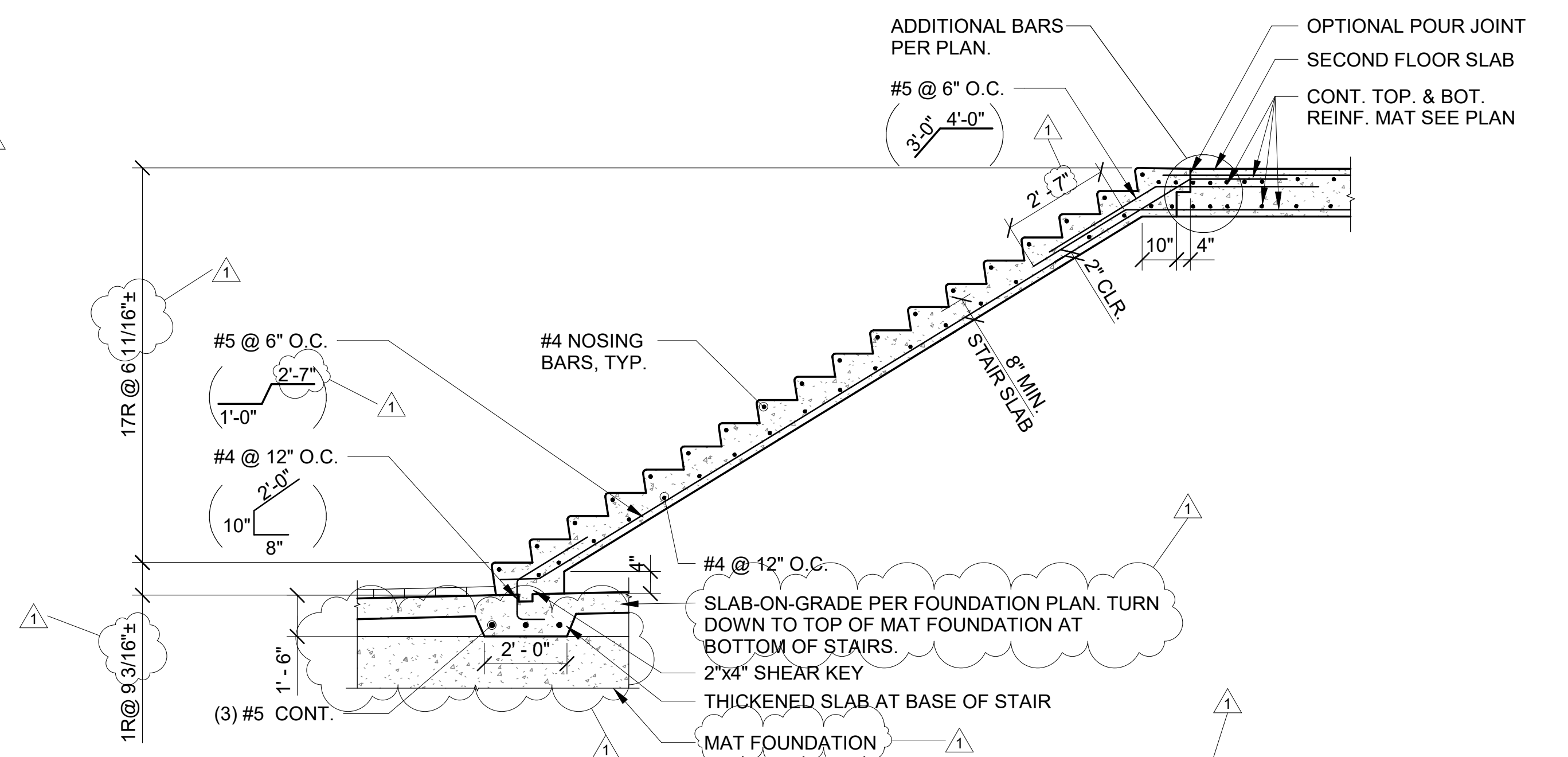
2 CONCRETE STAIR SECTION  
BB402 - BB506 SCALE 3/4" = 1'-0"  
BB407



NOTES:

1. SLOPE TOP SURFACE OF LANDING SLAB PER FLOOR PLANS.
2. SEE SECTION 2/BB501 FOR TYPICAL CONC. WALL REINF. WHICH HAS BEEN OMITTED FROM THIS SECTION FOR CLARITY

4 INTERMEDIATE STAIR LANDING SECTION  
BB402 - BB506 SCALE 3/4" = 1'-0"  
BB407



## NOTES

1. PROVIDE GALVANIZED, SLIP-RESISTANT STAIR NOSING CAST IN SLAB (TYP. AT ALL TREADS). PROVIDE 1/4" MIN. THICK, GRADE 2, ROUNDED-EDGE STAIR NOSINGS. 1 1/2" DEEP X 4" WIDE X 3'-8" LONG. PROVIDE SLIPNOT STAIR NOSINGS WITH HOOKS, AS MANUFACTURED BY SLIPNOT METAL SAFETY FLOORING AT (800) 754-7668 OR WWW.SLIPNOT.COM, OR AN EQUIVALENT APPROVED BY THE ENGINEER. INSTALL STAIR NOSINGS IN ACCORDANCE WITH REQUIREMENTS OF THE MANUFACTURER.
2. WHERE CONCRETE STAIR SIDES INTERSECT CONCRETE WALLS, CONNECT STAIR SLABS TO CONCRETE WALLS USING DOWEL-IN SYSTEM DESCRIBED IN NOTE 3 OF 1/BBS06.

5 CONCRETE STAIR SECTION  
BB201, BB506 SCALE 3/8" = 1'-0"  
BB401

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.







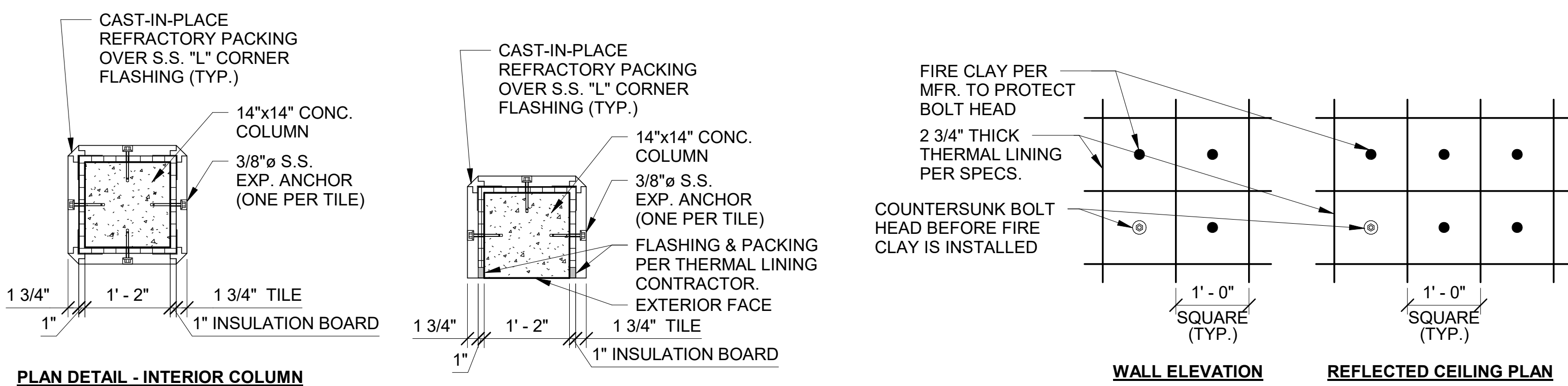


NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET

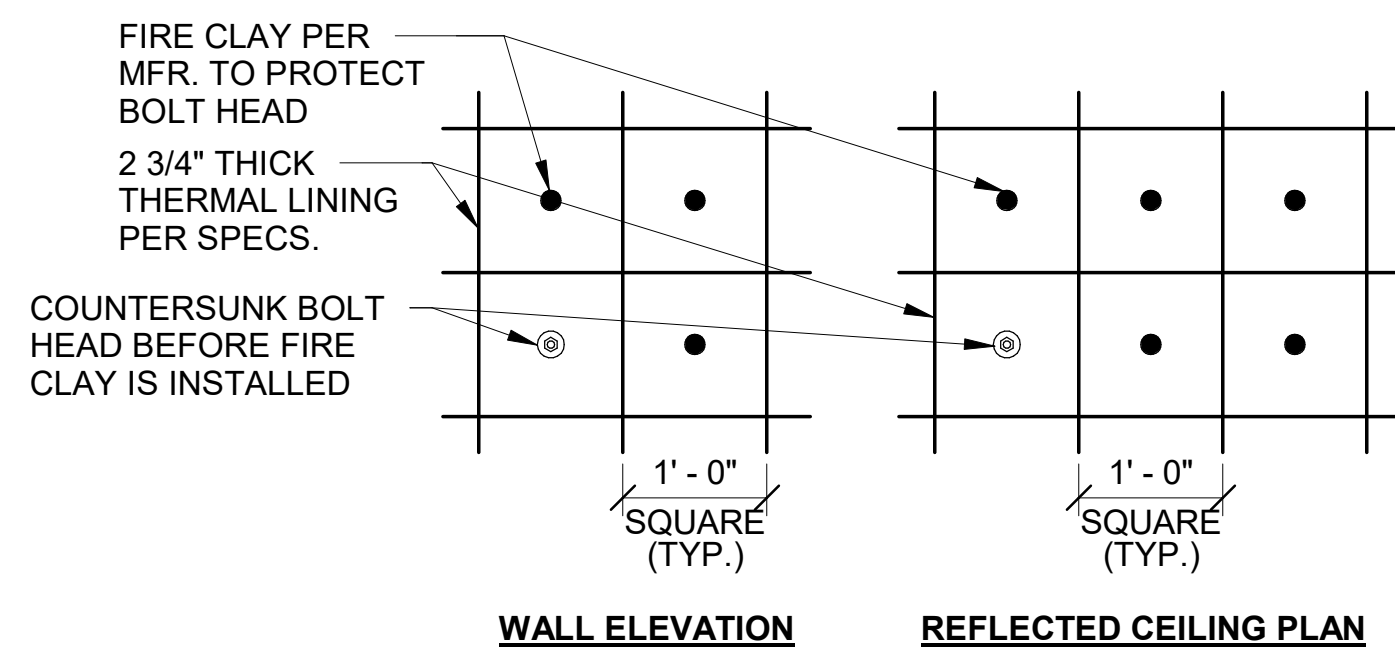
**BURN BUILDING - THERMAL LINING AND CMU PARAPET DETAILS**

BB602



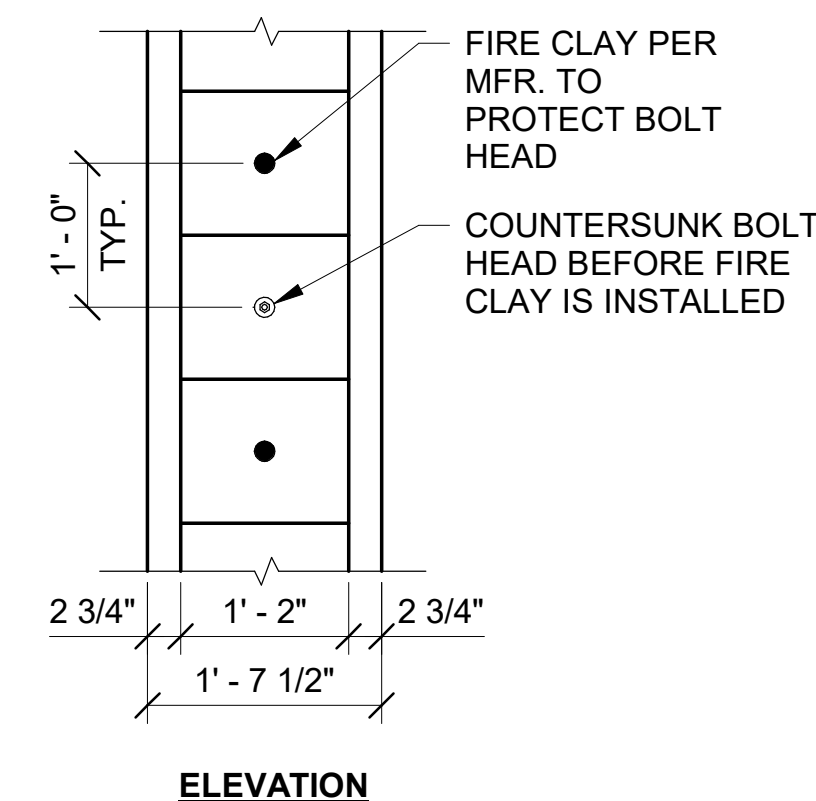
PLAN DETAIL - INTERIOR COLUMN

PLAN DETAIL - UPPER LEVEL EXTERIOR COLUMN

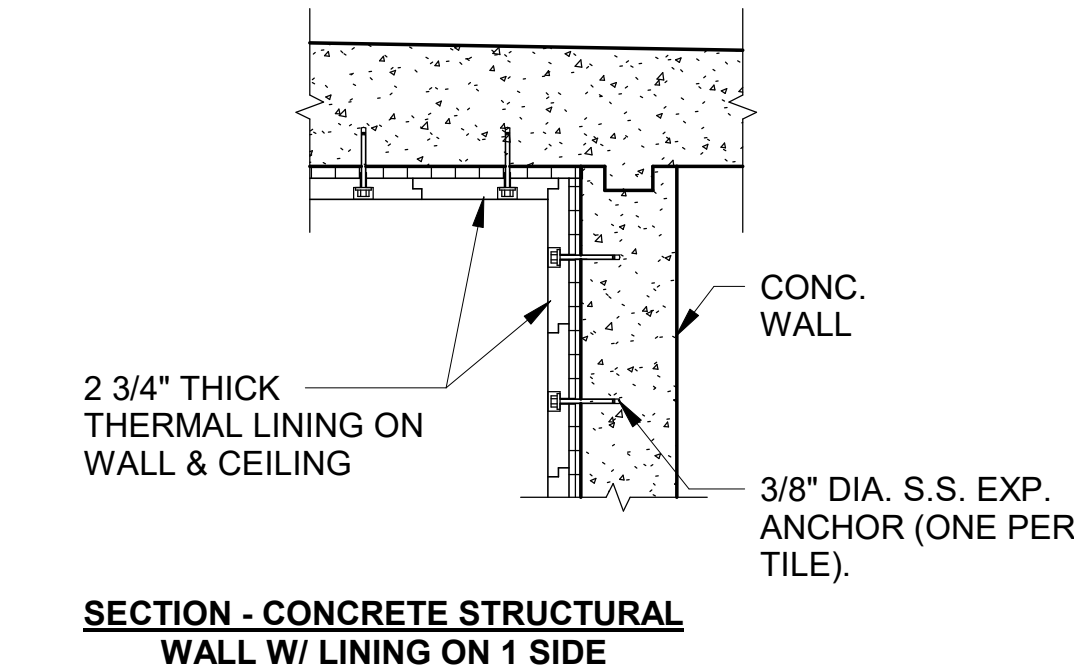


WALL ELEVATION

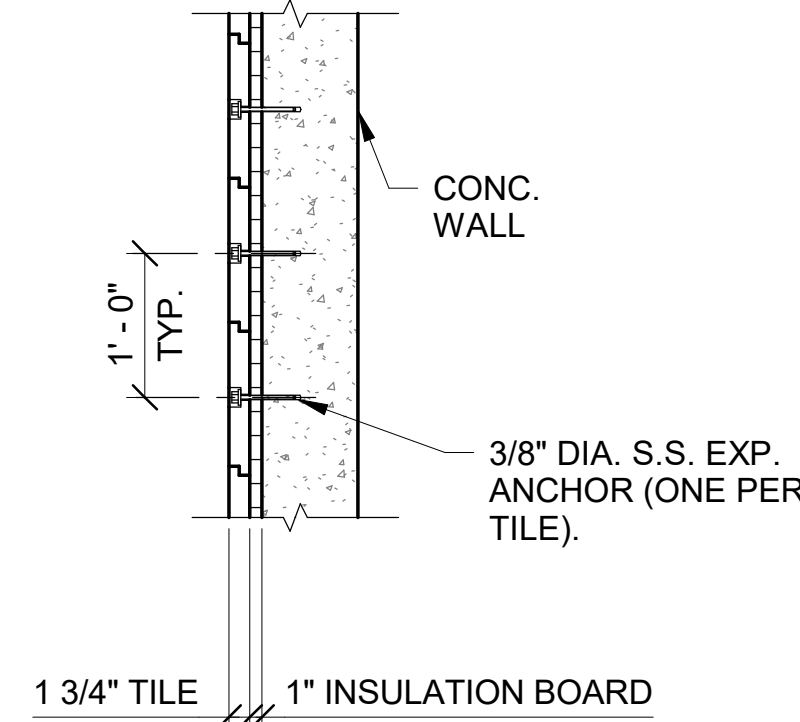
REFLECTED CEILING PLAN



ELEVATION



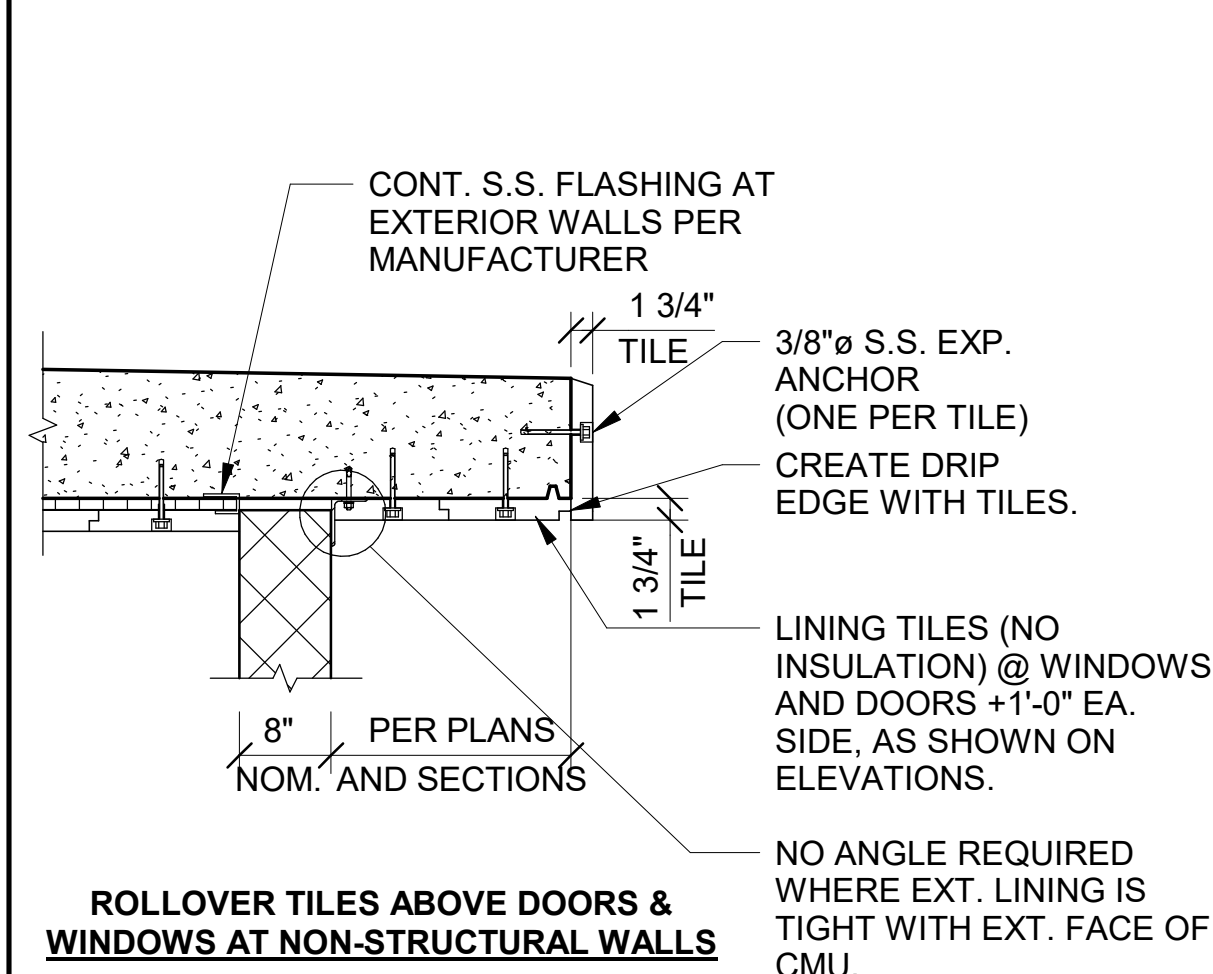
SECTION - CONCRETE STRUCTURAL WALL W/ LINING ON 1 SIDE



TYPICAL WALL SECTION

THERMAL LINING WALL & CEILING INSTALLATION

THERMAL LINING 14"x14" COLUMN INSTALLATION

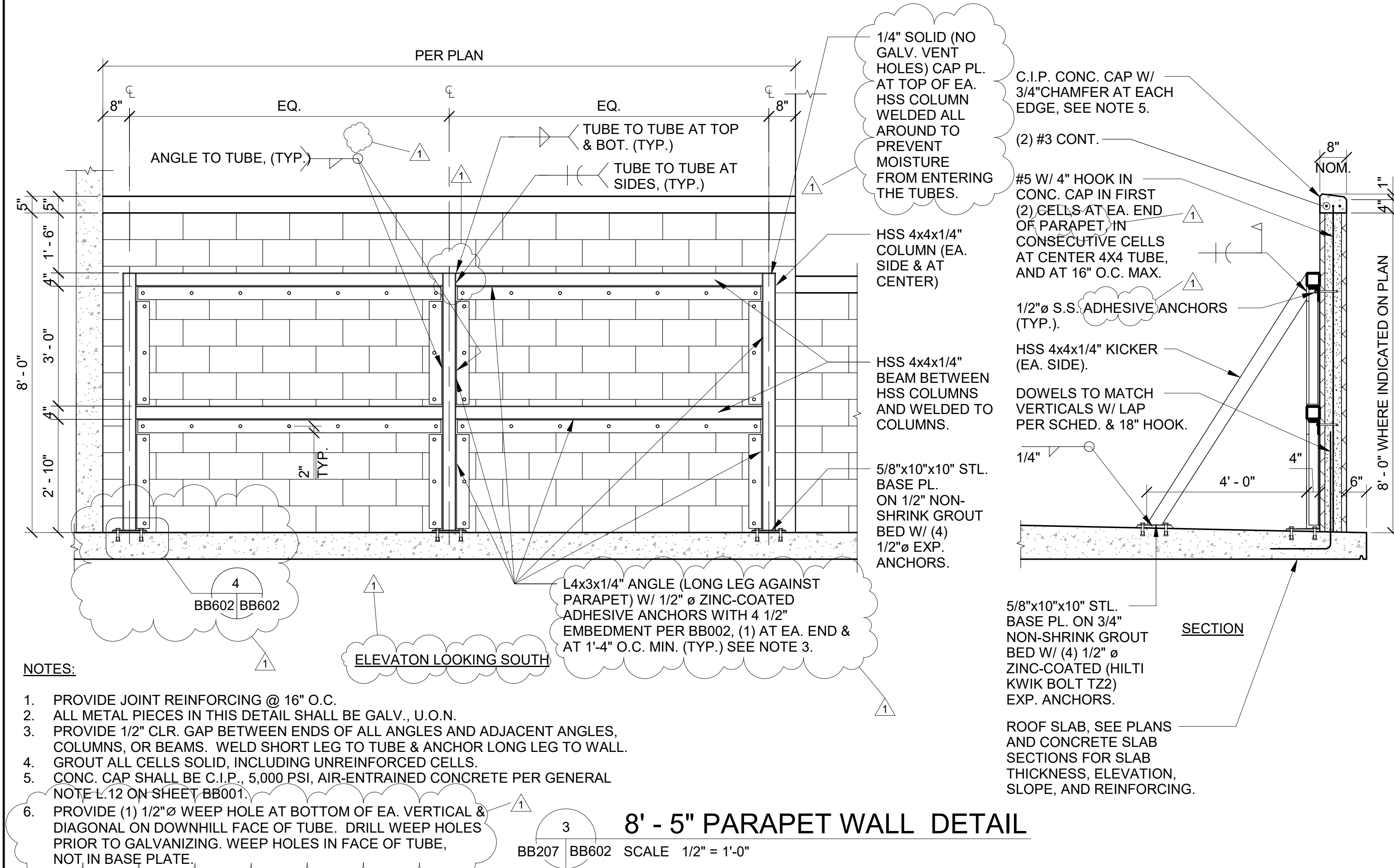


THERMAL LINING EXTERIOR ROLLOVER INSTALLATION

THERMAL LINING BALCONY CEILING

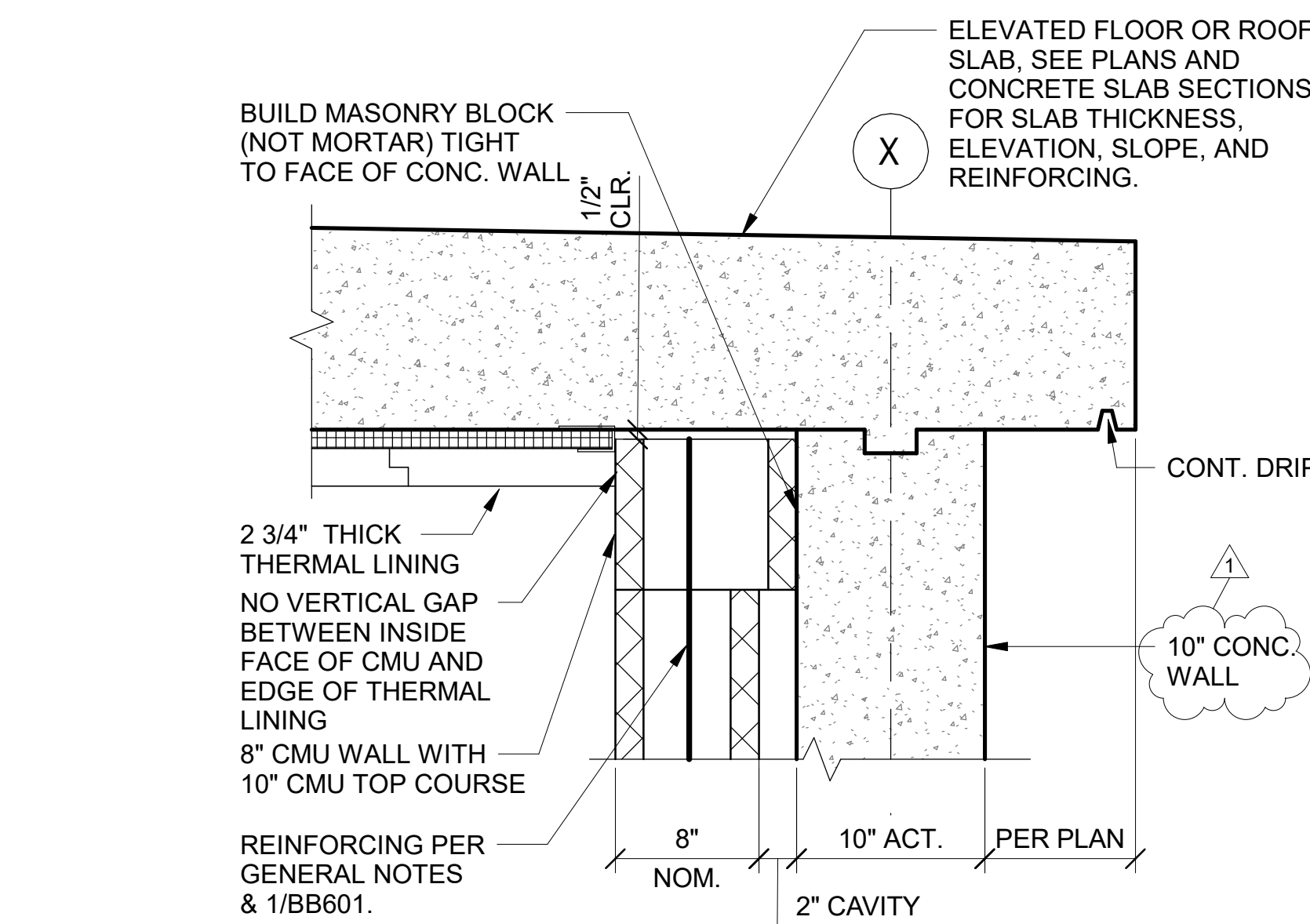
TYPICAL THERMAL LINING DETAILS

BB201 - BB602 SCALE 3/4" = 1'-0"



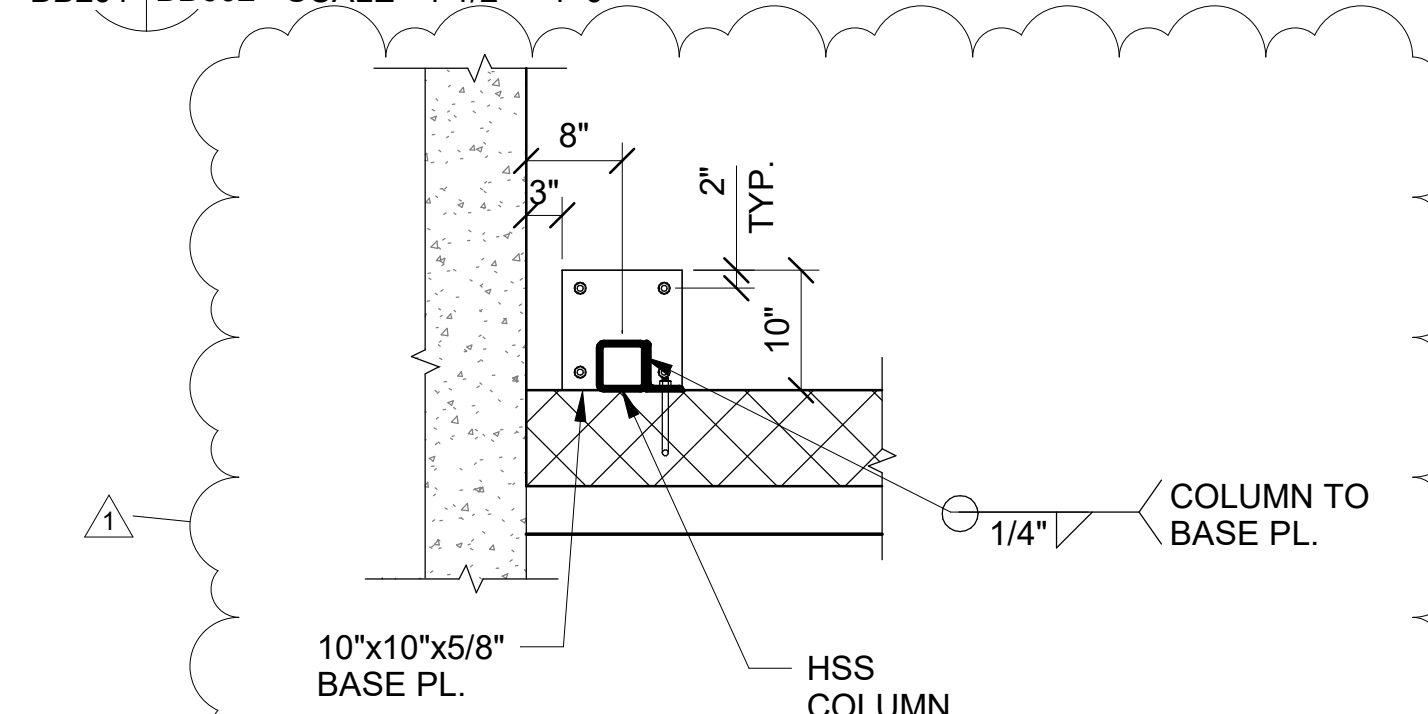
8' - 5" PARAPET WALL DETAIL

BB207 BB602 SCALE 1/2" = 1'-0"



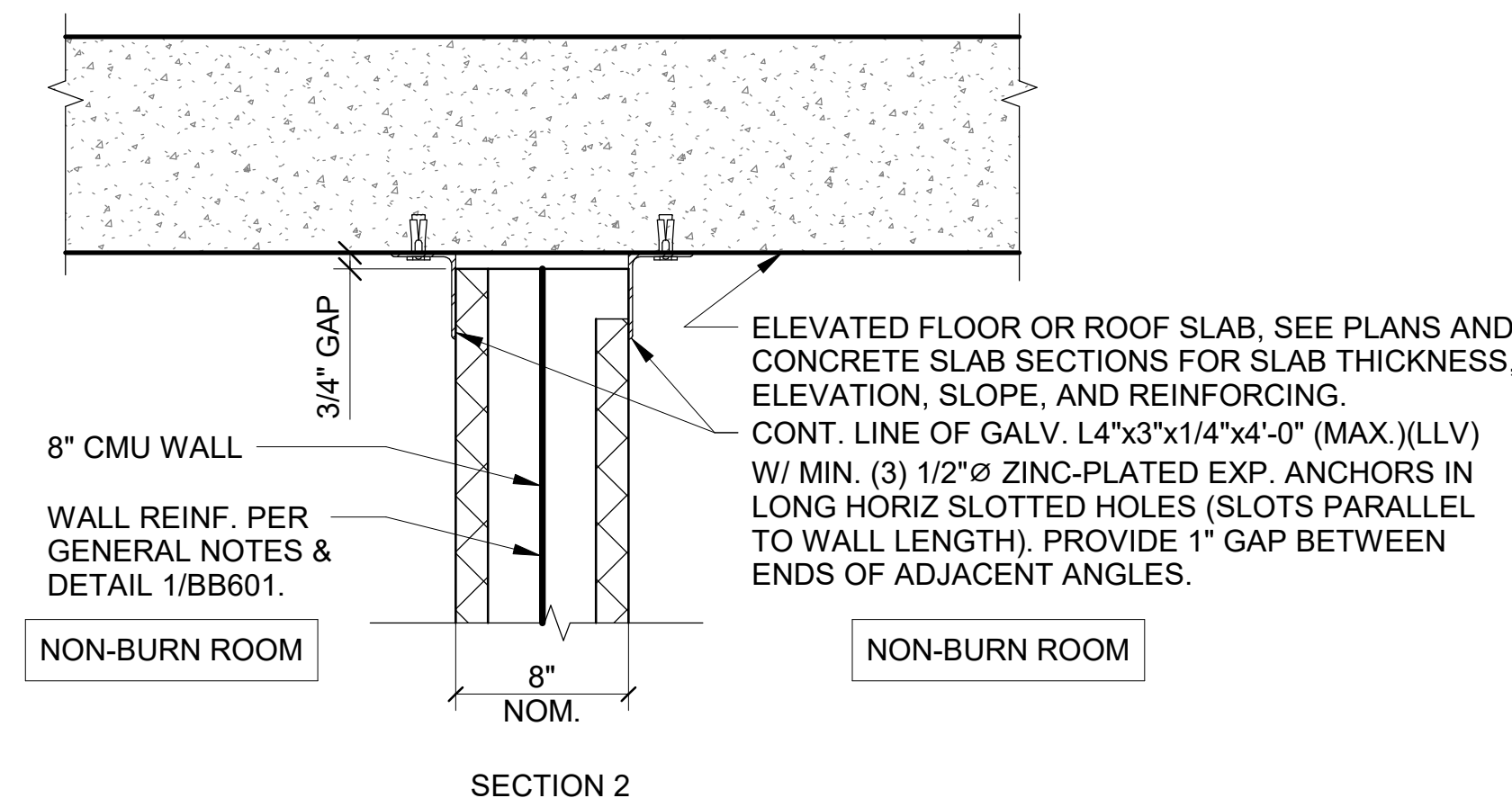
TYPICAL SECTION - TOP OF CMU PARTITION AT CONCRETE SHEAR WALL

BB201 BB602 SCALE 1 1/2" = 1'-0"

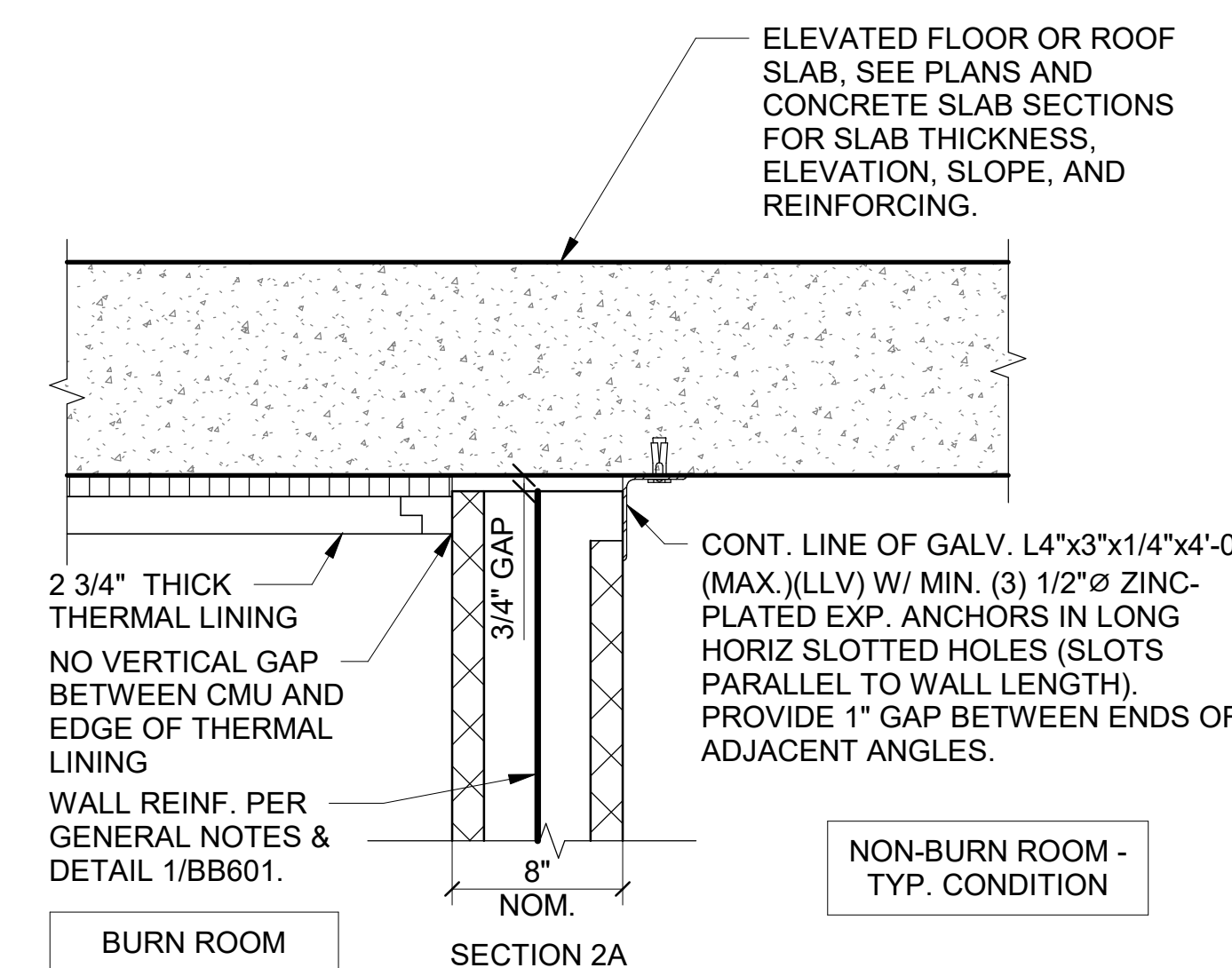


8' - 5" PARAPET WALL PLAN DETAIL

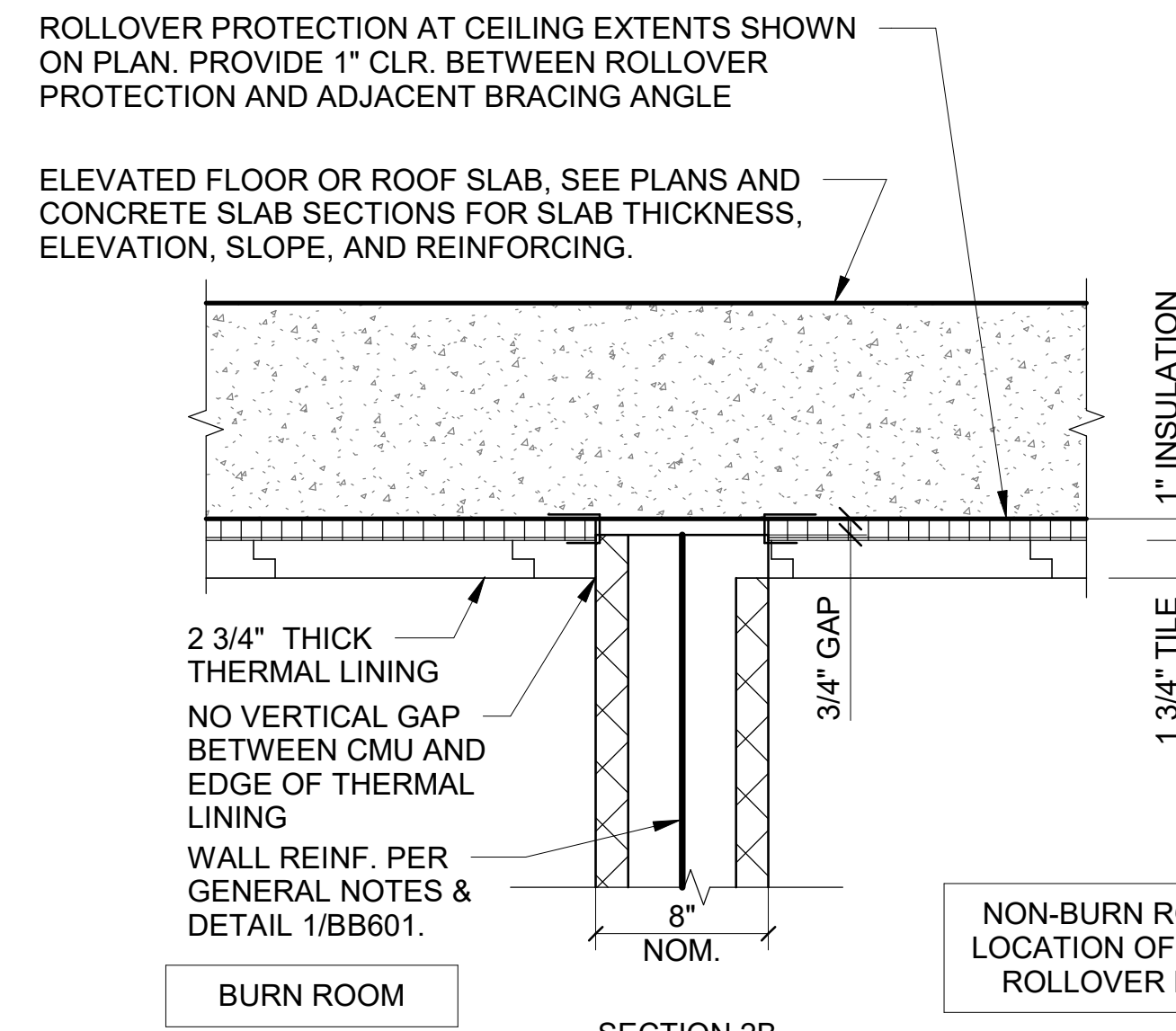
BB602 BB602 SCALE 3/4" = 1'-0"



SECTION 2



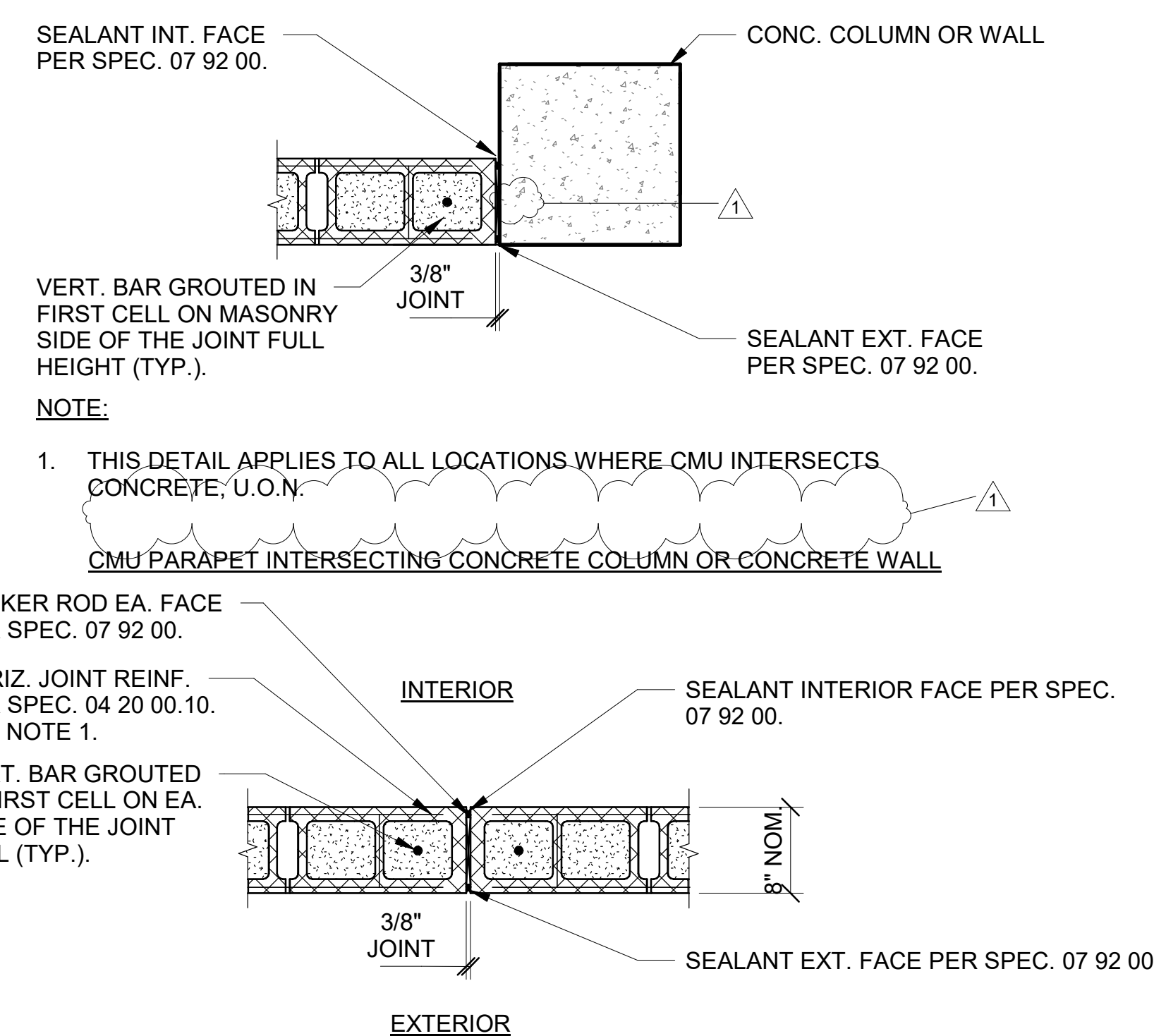
SECTION 2A



SECTION 2B

TYPICAL SECTION - TOP OF NON-BEARING MASONRY WALL, INTERIOR CONDITIONS

BB201 - BB602 BB206 BB602 BB206 BB201 - BB602 BB206 SCALE 1 1/2" = 1'-0"



STRAIGHT PARAPET PLAN DETAIL

NOTE:  
1. THIS DETAIL APPLIES ONLY WHERE SHOWN IN ELEVATION.

NOTES FOR ALL CONDITIONS:

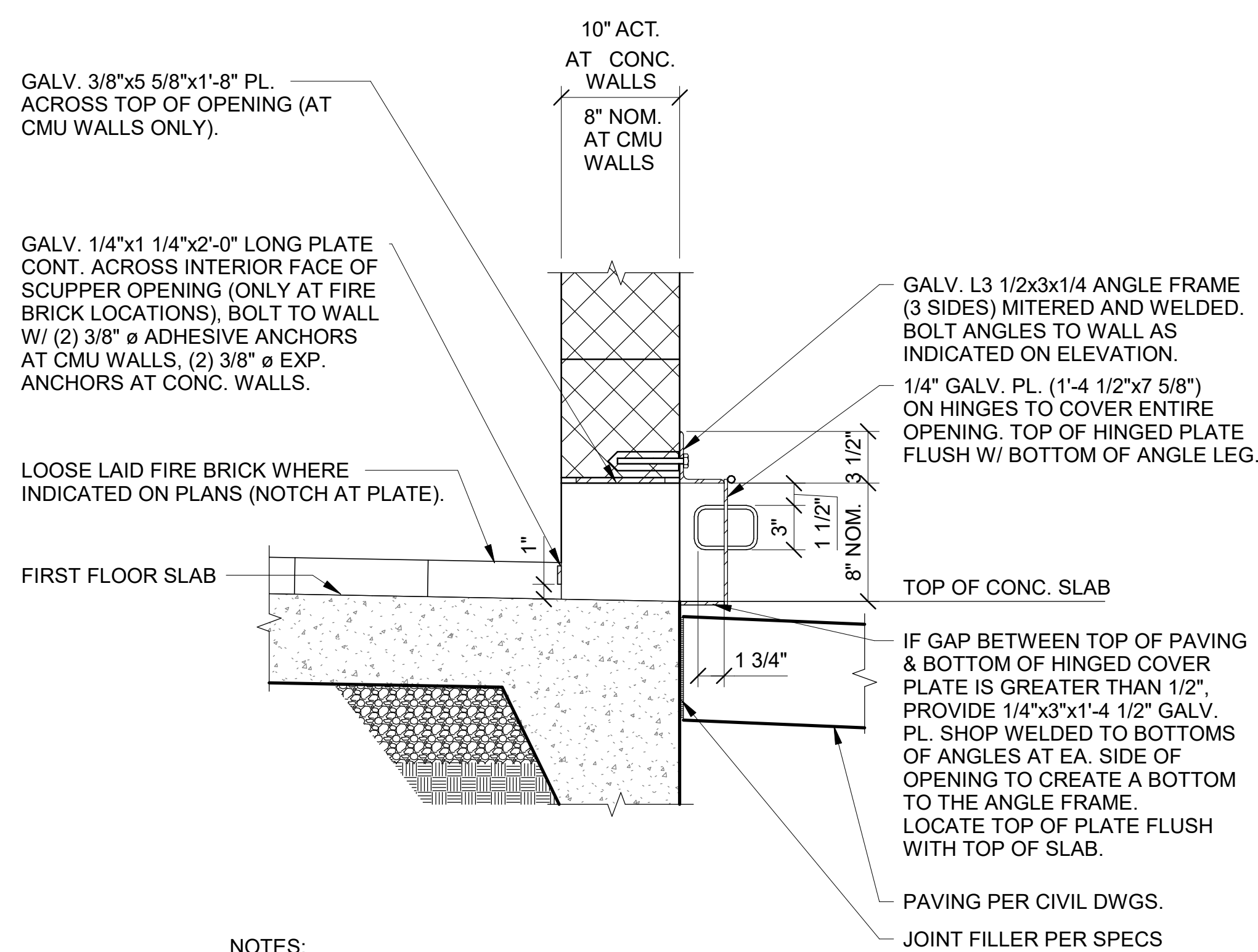
- STOP HORIZONTAL JOINT REINF. 2" FROM JOINT AT EA. SIDE OF JOINT.
- PLACE CONTROL JOINTS SO THEY ALTERNATE BETWEEN BEING IN A HEAD JOINT AND AT THE CENTER OF THE 16" LONG BLOCK FROM ONE COURSE TO THE NEXT. IGNORE THE DIAGRAMMATIC COUSING LINES ON THE ELEVATIONS BUT DO LOCATE THE JOINTS AT THE LOCATIONS SHOWN ON THOSE SHEETS. NOTIFY ENGINEER IF THERE IS ANY CONFLICT BETWEEN JOINT LOCATION AND REQUIREMENT FOR LOCATING JOINTS IN HEAD JOINTS.

MASONRY PARAPET CONTROL JOINT PLAN DETAILS

BB301 - BB602 BB303 SCALE 1" = 1'-0"

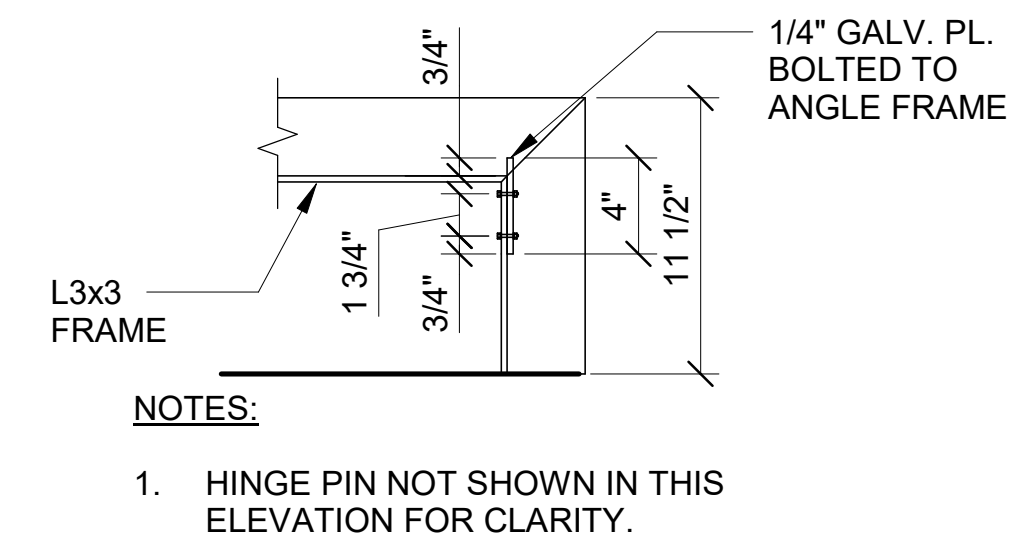
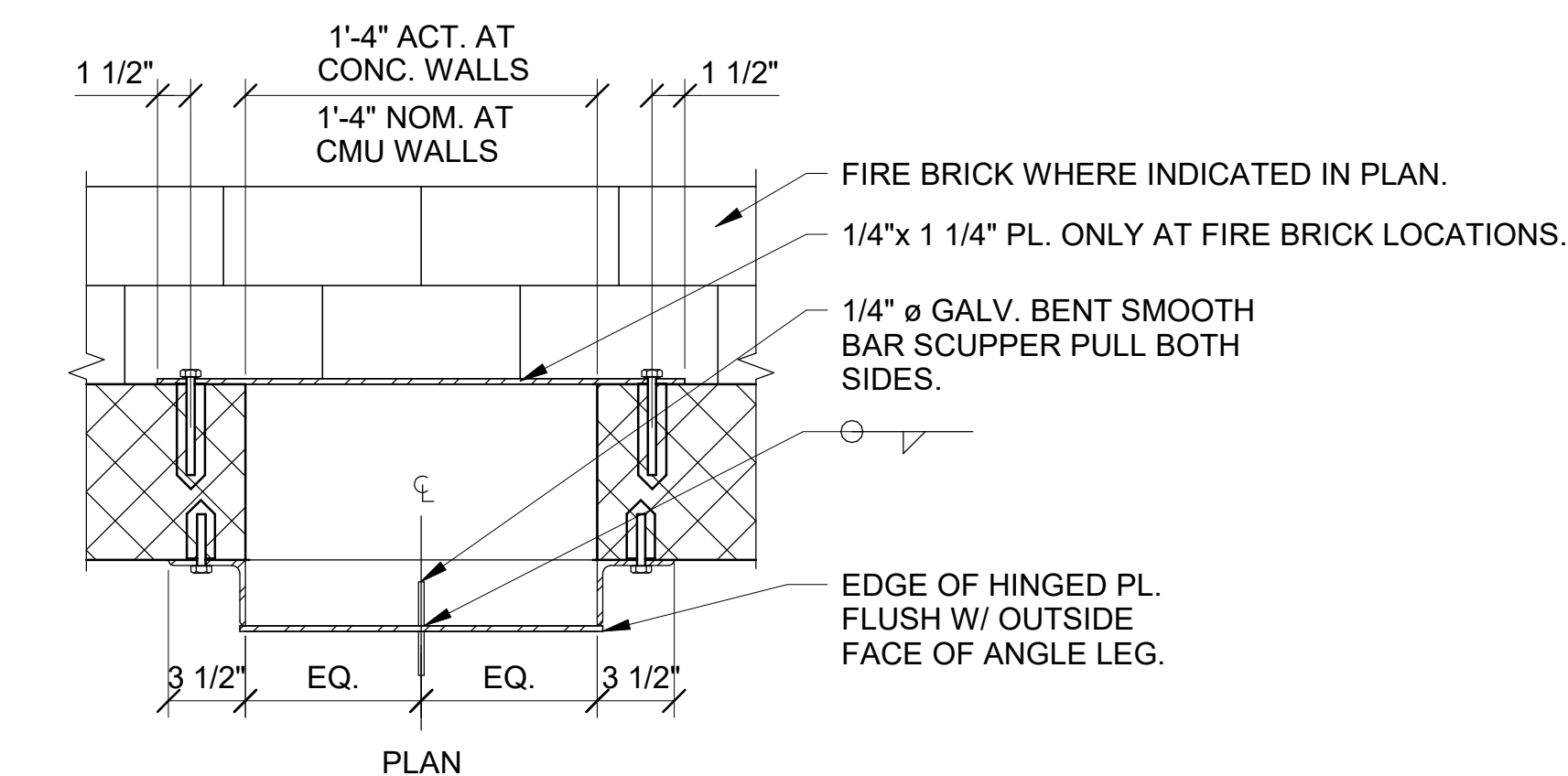
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.





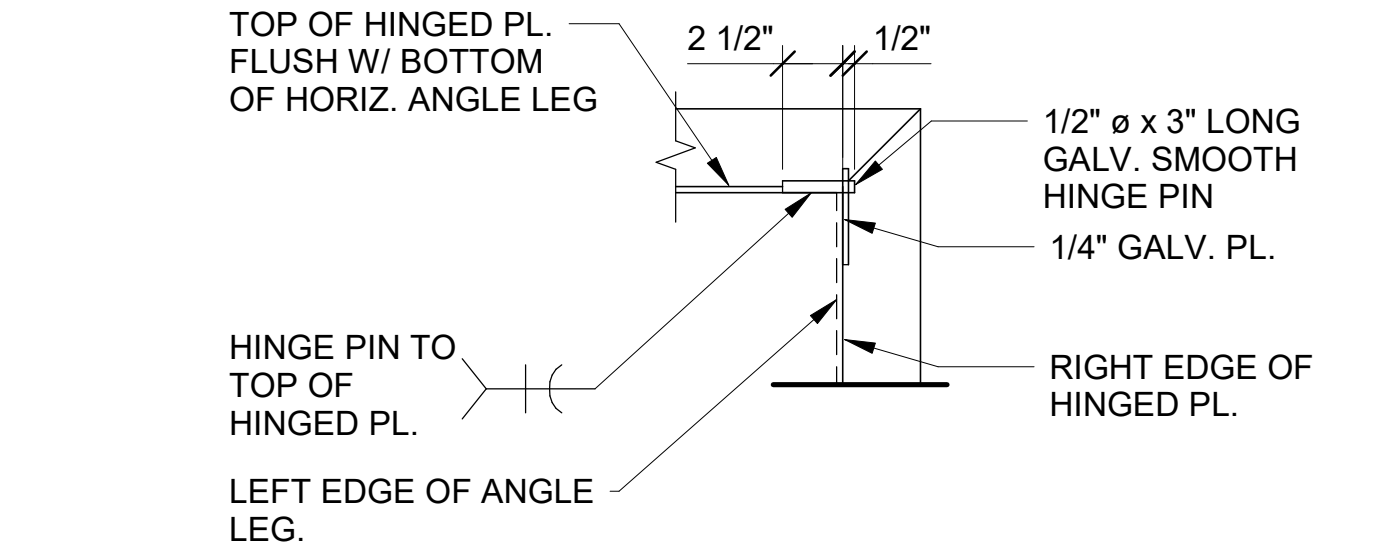
NOTES:

1. SEE DETAILS 2, 3, & 4 ON THIS SHEET FOR HINGES



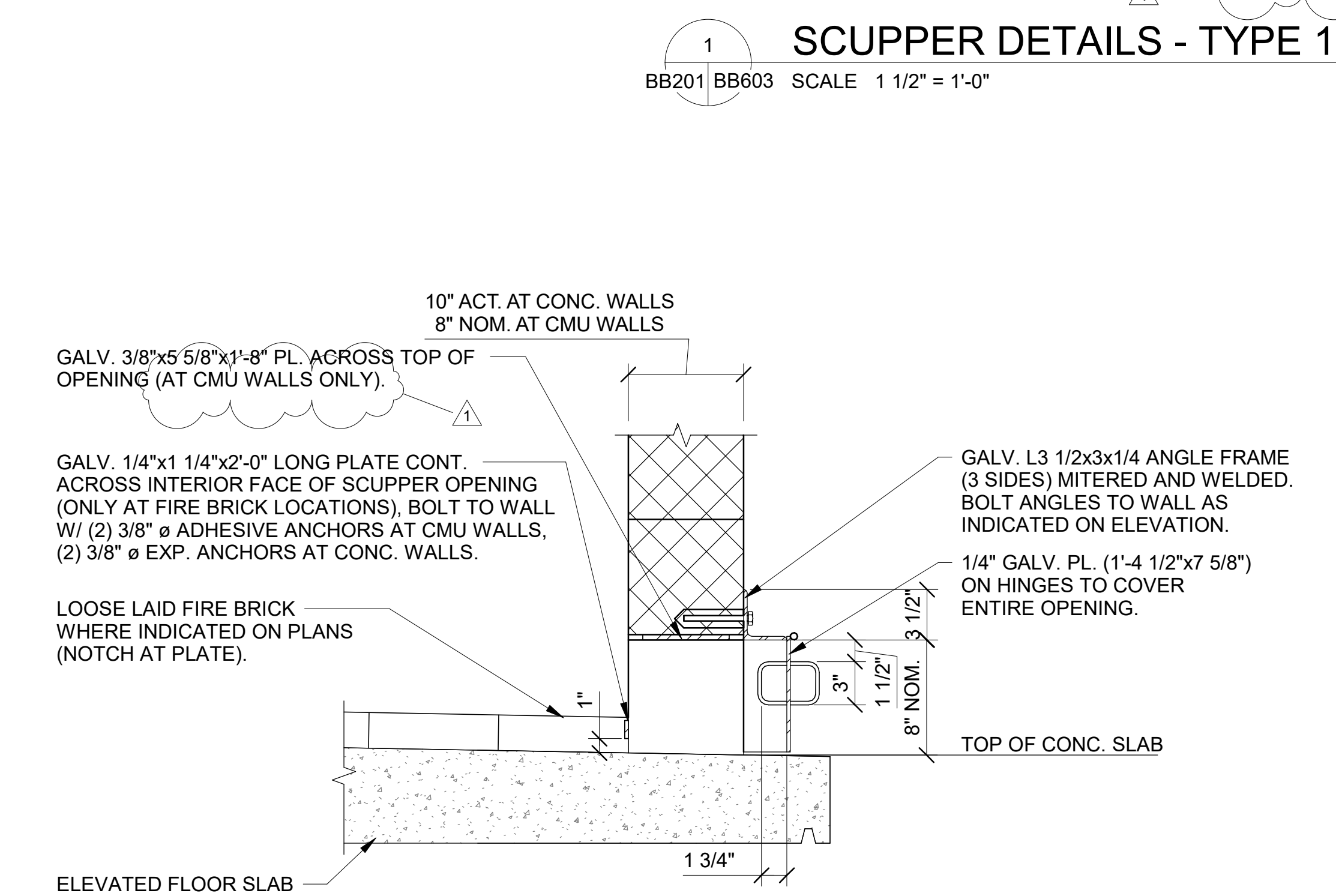
### ELEVATION - SCUPPER HINGE PLATE

BB603 BB603 SCALE 1 1/2" = 1'-0"



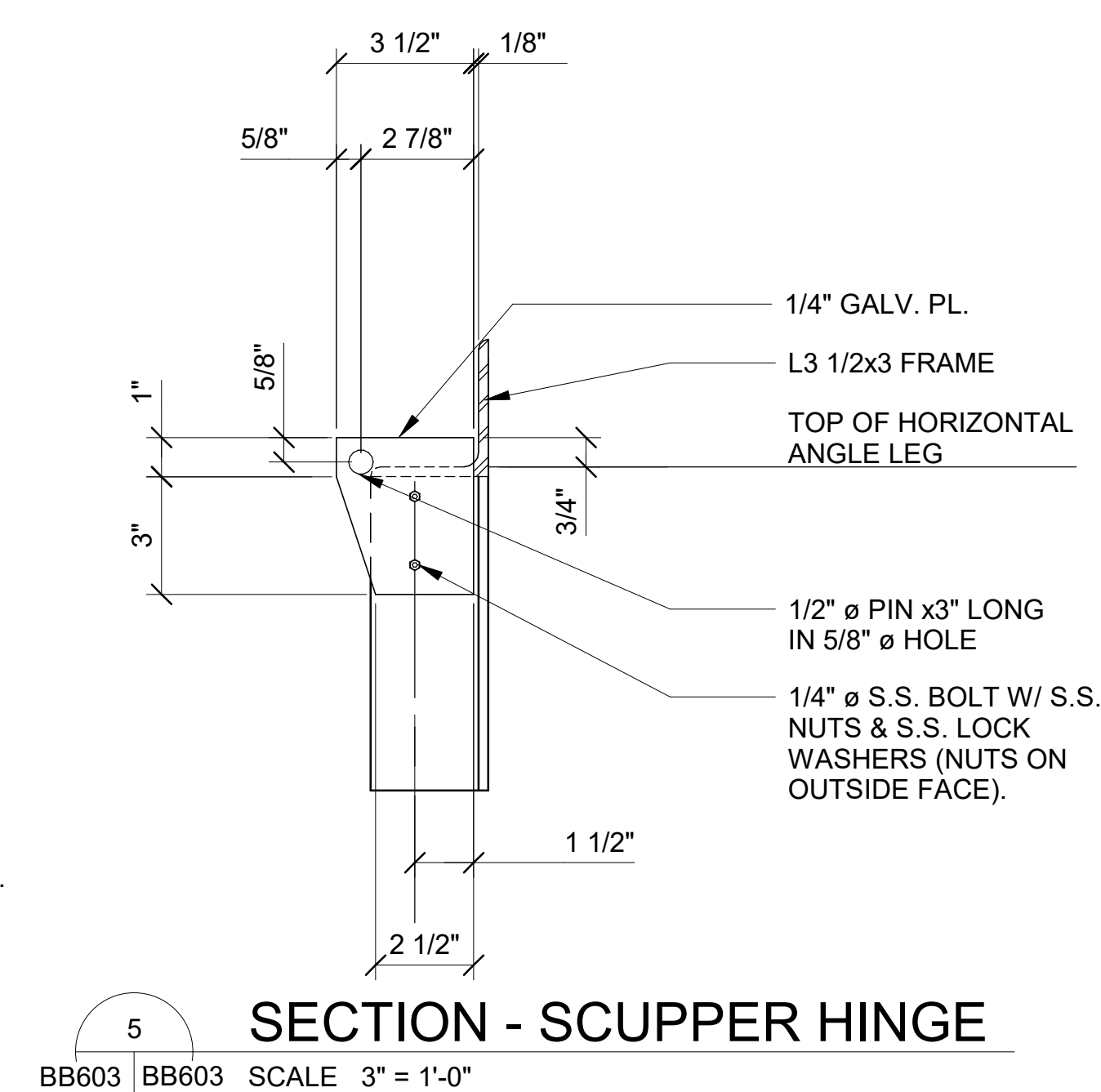
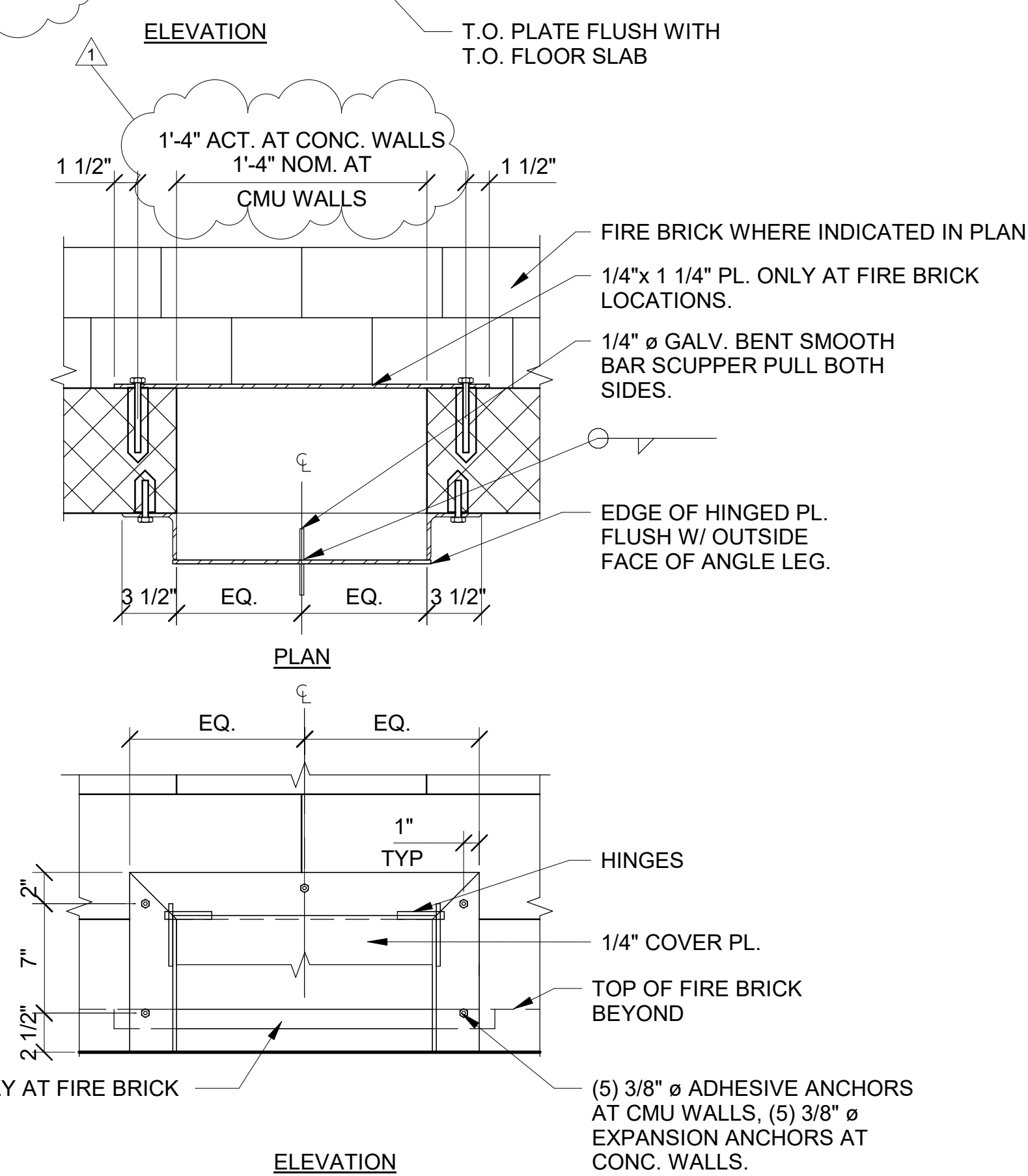
## ELEVATION - SCUPPER HINGE PIN

BB603 BB603 SCALE 1 1/2" = 1'-0"



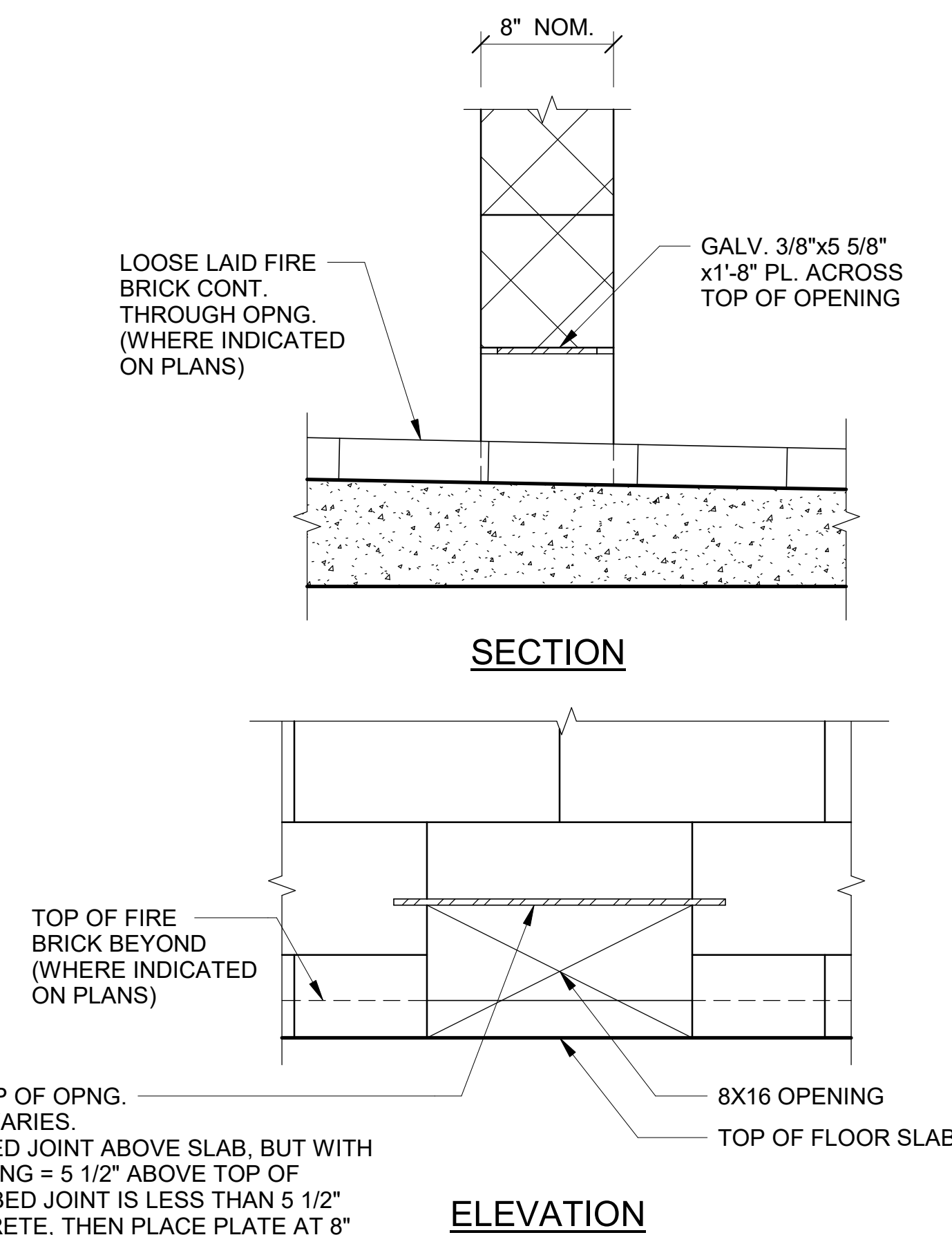
NOTES:

1. SEE DETAILS 2, 3, & 4 ON THIS SHEET FOR HINGES.



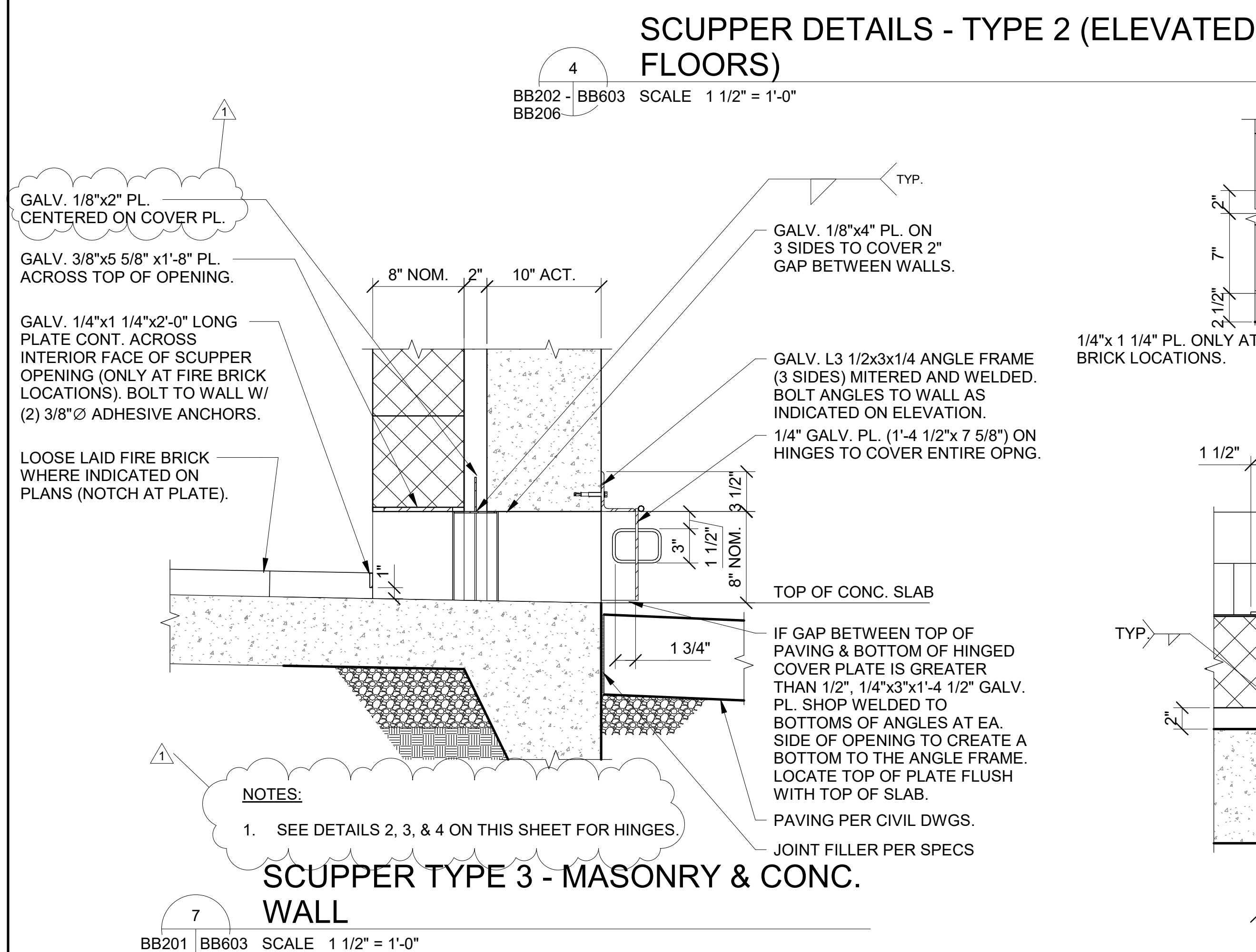
## SECTION - SCUPPER HINGE

BB603 BB603 SCALE 3" = 1'-0"



## OPENING AT BASE OF INTERIOR & PARAPET WALLS

BB201 - BB603 SCALE 1 1/2" = 1'-0"  
BB206

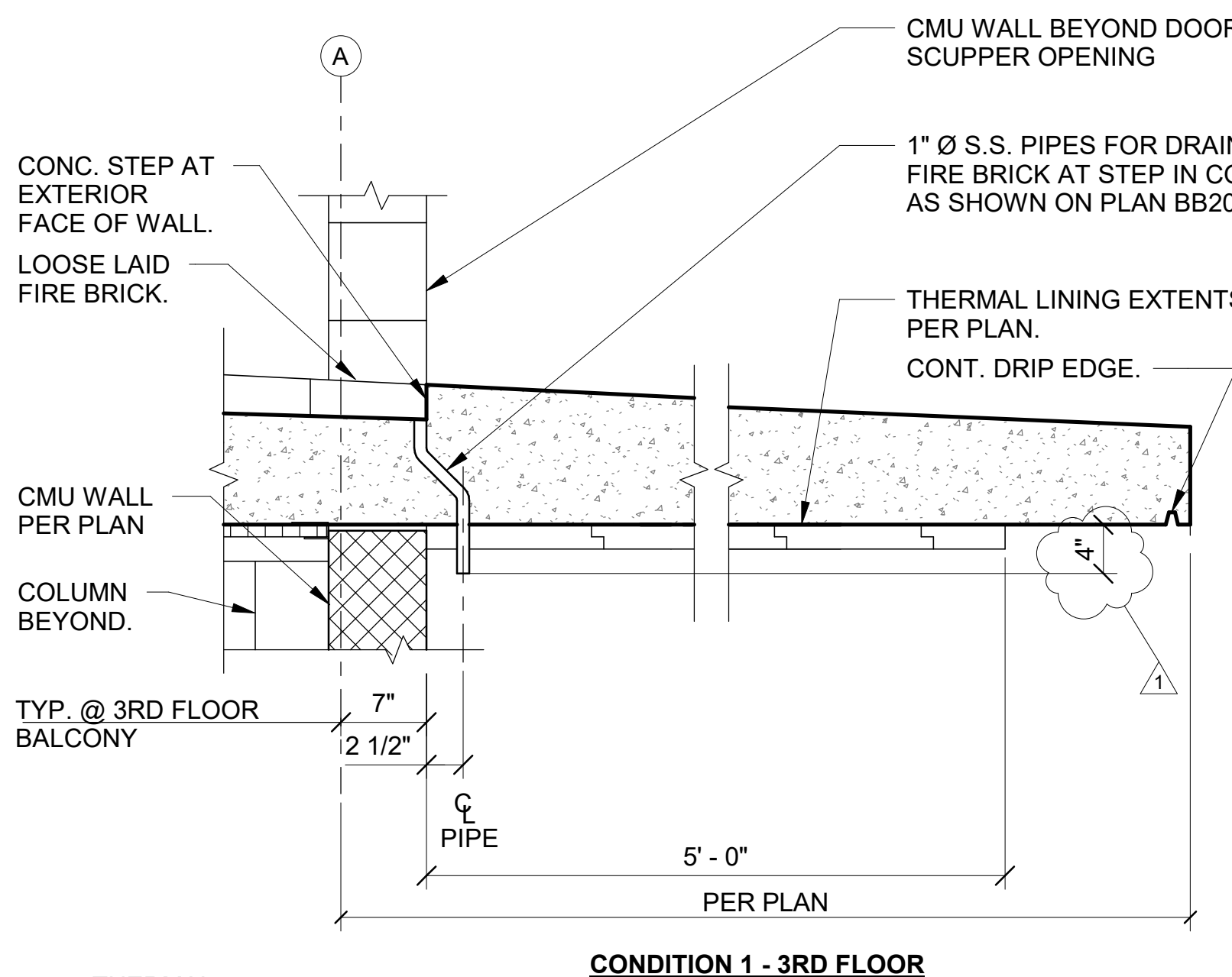
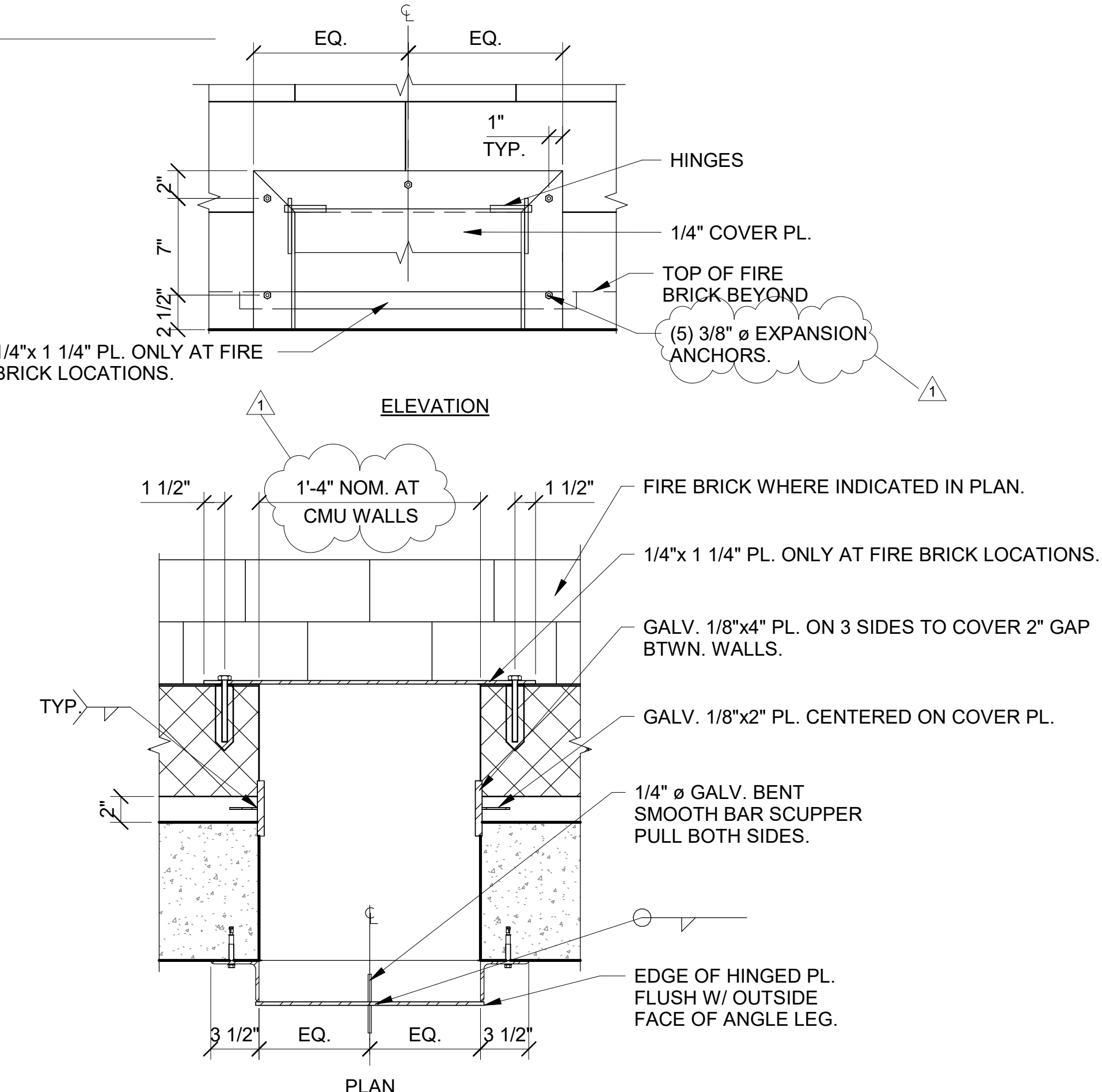


NOTES

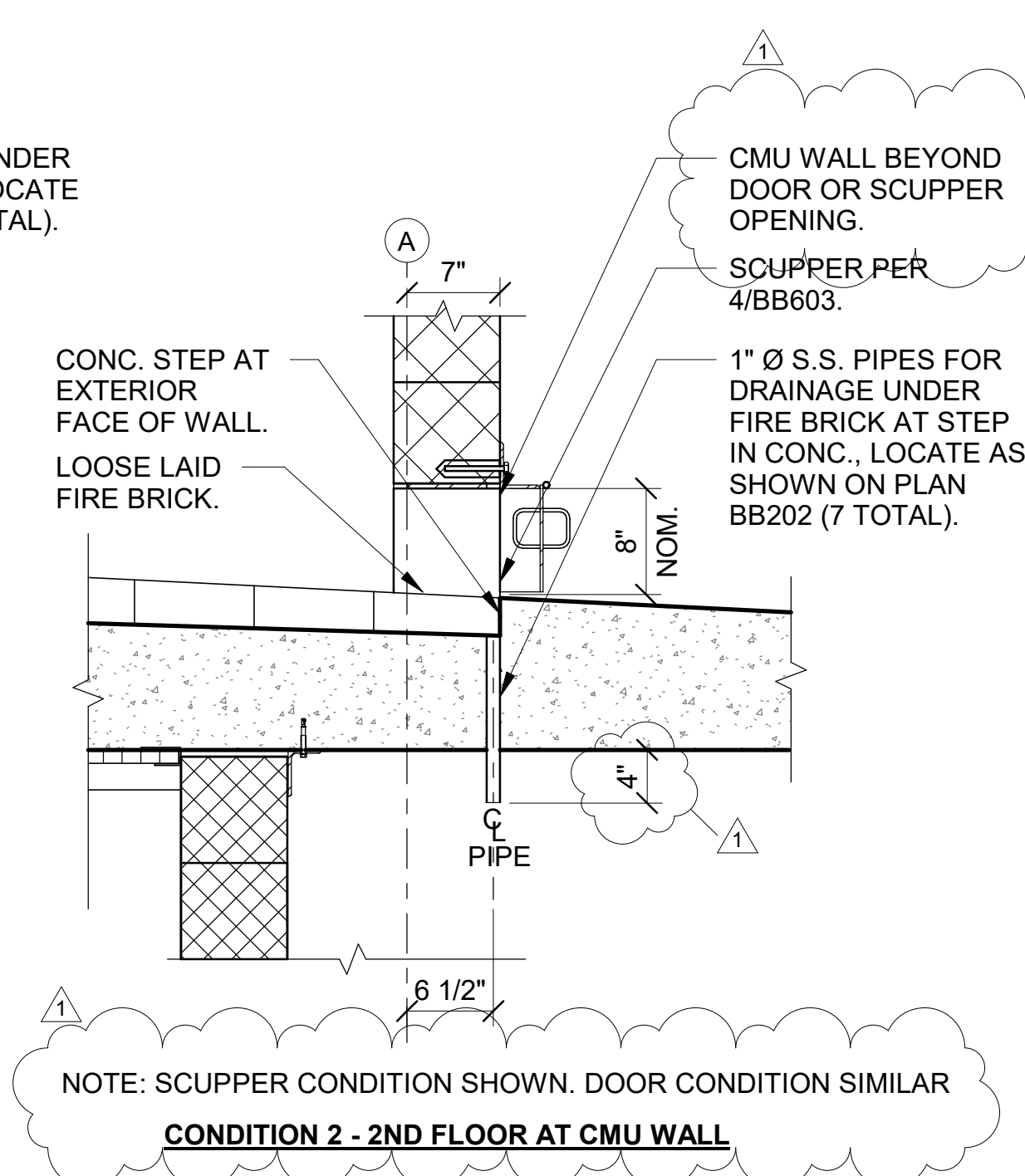
1. SEE DETAILS 2, 3, & 4 ON THIS SHEET FOR HINGES

SCUPPER TYPE 3 - MASONRY & CONC.  
WALL

BB201 BB603 SCALE 1 1/2" = 1'-0"

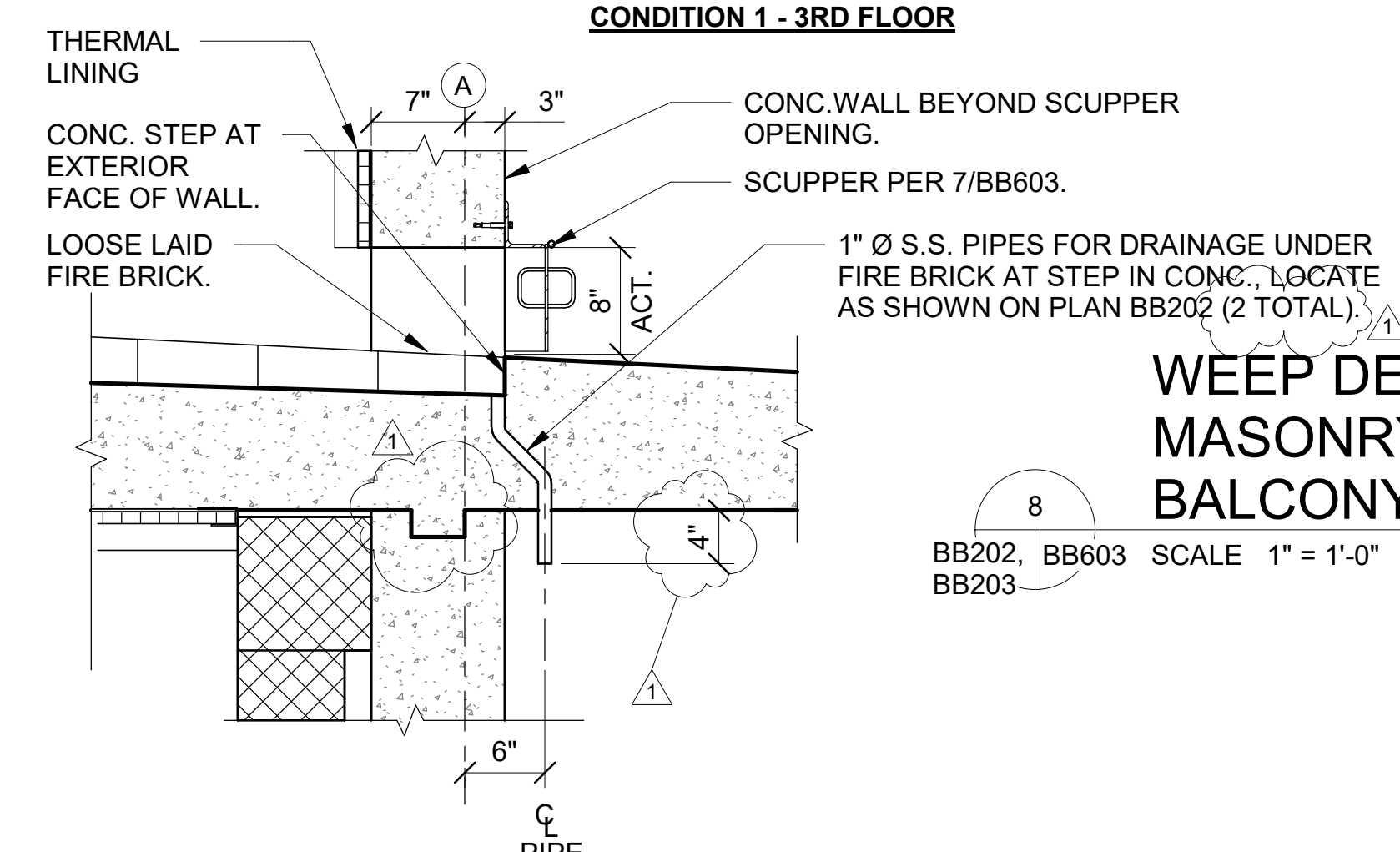


**CONDITION 1 - 3RD FLOOR**



NOTE: SCUPPER CONDITION SHOWN. DOOR CONDITION SIMILAR

CONDITION 2 - 2ND FLOOR AT CMU WALL

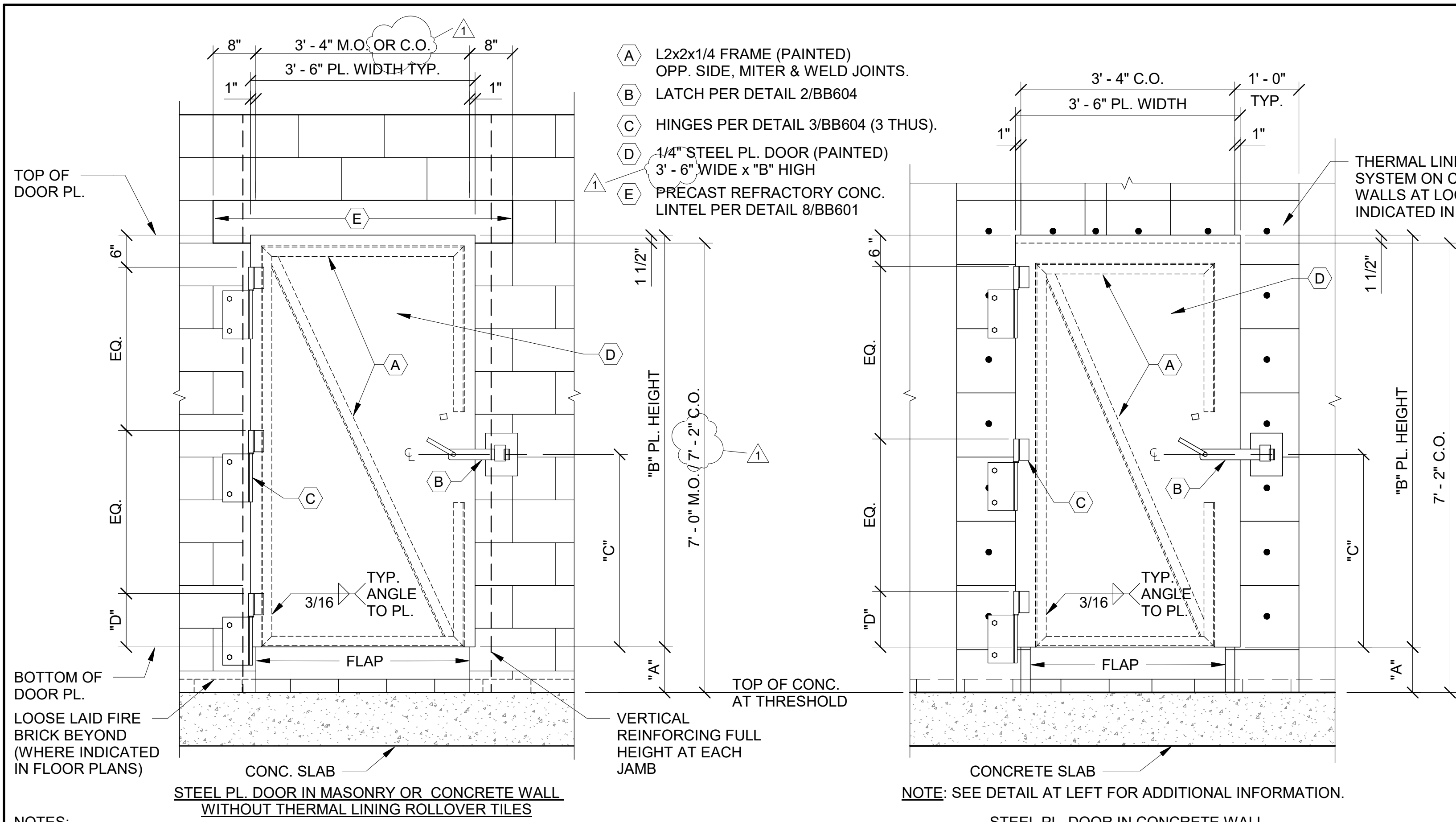


WEEP DETAIL AND SCUPPER TYPE 4 -  
MASONRY OR CONCRETE WALL AT  
BALCONY

BB202, BB603 SCALE 1" = 1'-0"  
BB203

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

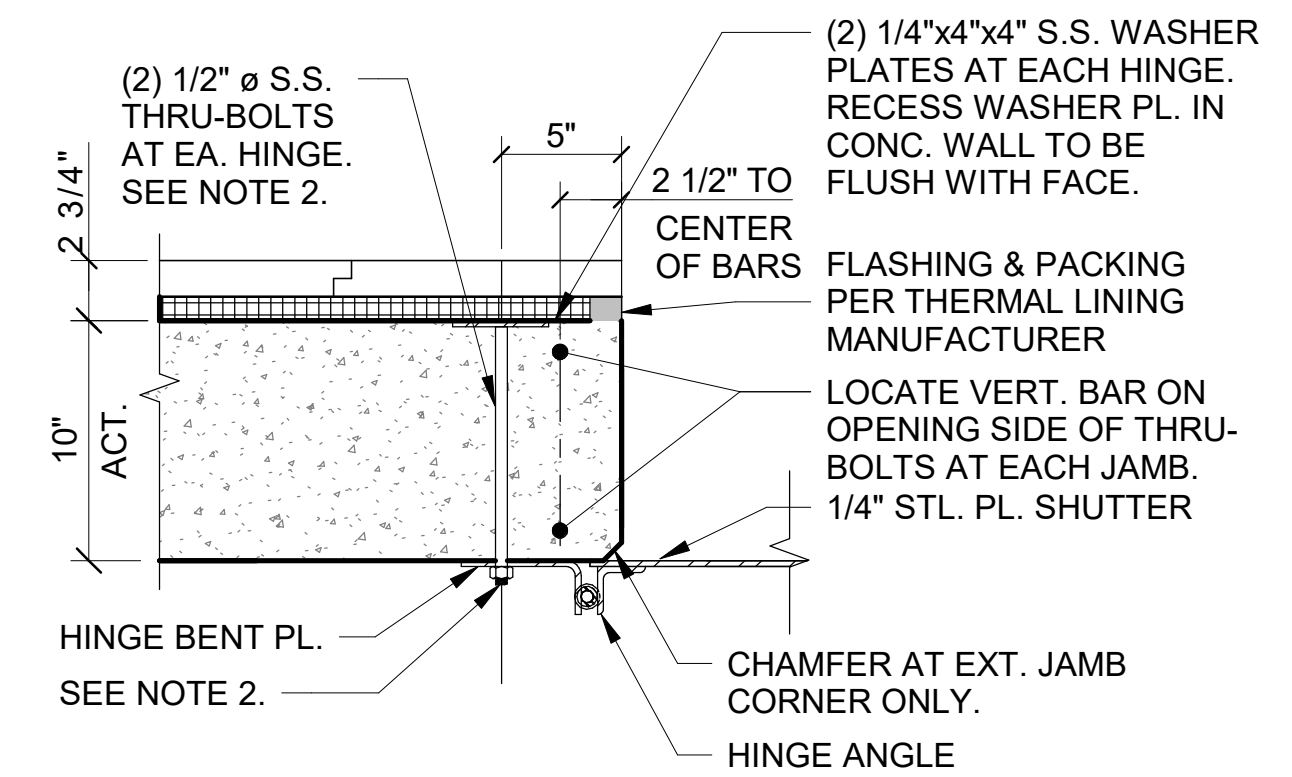




- NOTES:
- SEE FLOOR PLANS FOR DOOR SWING DIRECTION.
  - SEE DETAILS 4 & 5 ON THIS SHEET AND 3/BB606 FOR JAMB, SILL & HEAD DETAILS.
  - SEE DOOR SCHEDULE ON SHEET BB605 FOR DIMENSIONS "A", "B", "C" AND "D".
  - USE TOP OF CONCRETE FLOOR ELEVATION AT CENTER OF DOORWAY AS POINT OF REFERENCE FOR DOOR DIMENSIONS, INCLUDING OPENING HEIGHT, IF THERE IS A CONCRETE STEP IN THE FLOOR SLAB AT ONE FACE OF THE WALL AT DOORWAY, USE TOP OF CONCRETE BETWEEN JAMBS AS POINT OF REFERENCE.
  - FOR DOORS WITHOUT THERMAL LININGS AT THE DOORWAY, ALL DETAILS ON THIS SHEET SHOW THE CONDITIONS AT MASONRY WALLS. ALL DETAILS ARE THE SAME (RELATIONSHIPS OF DOOR COMPONENTS TO WALL) AT CONCRETE WALLS; NO PRECAST LINTEL REQUIRED AT CONCRETE WALLS. SEE DETAIL 6/BB501 FOR ADDED REINFORCING AT DOOR HEAD, AND JAMBS.

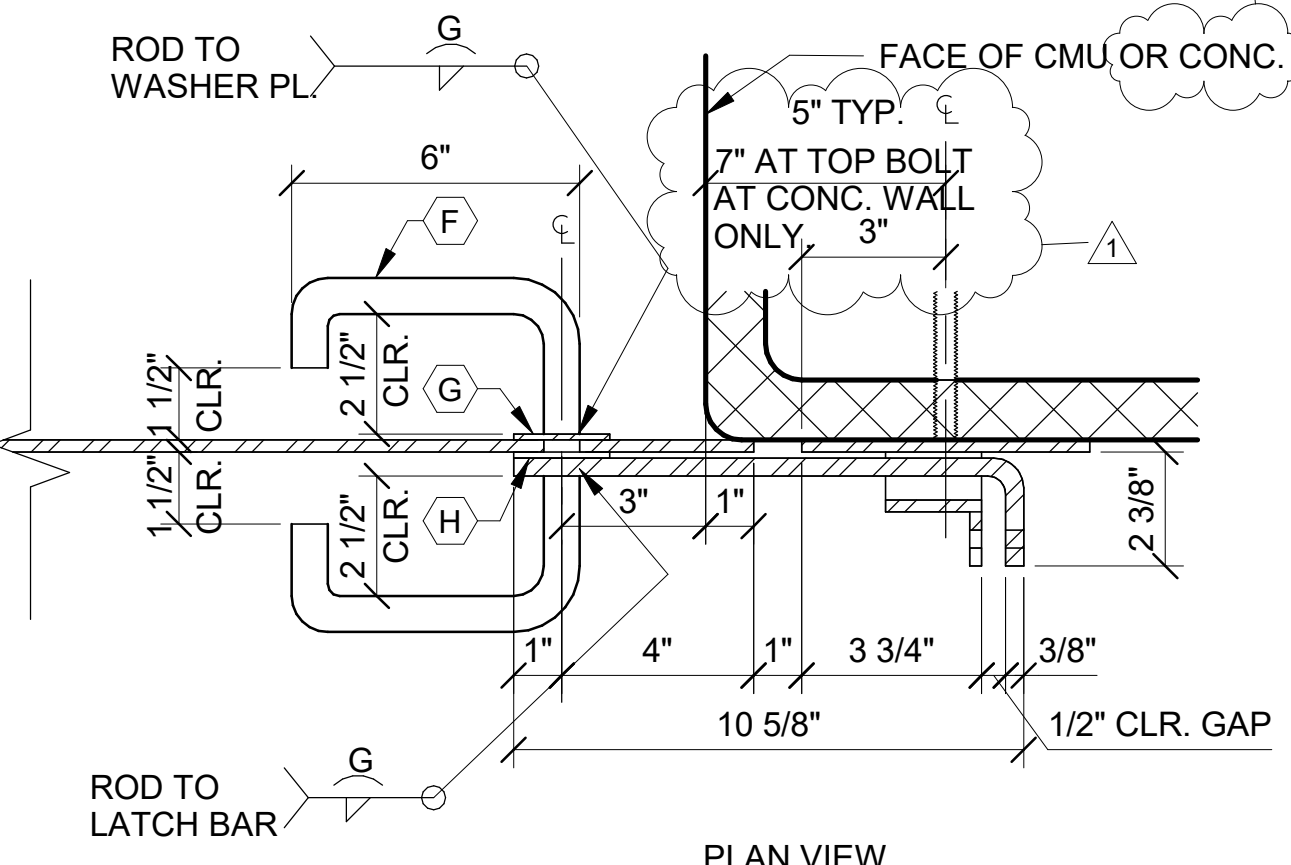
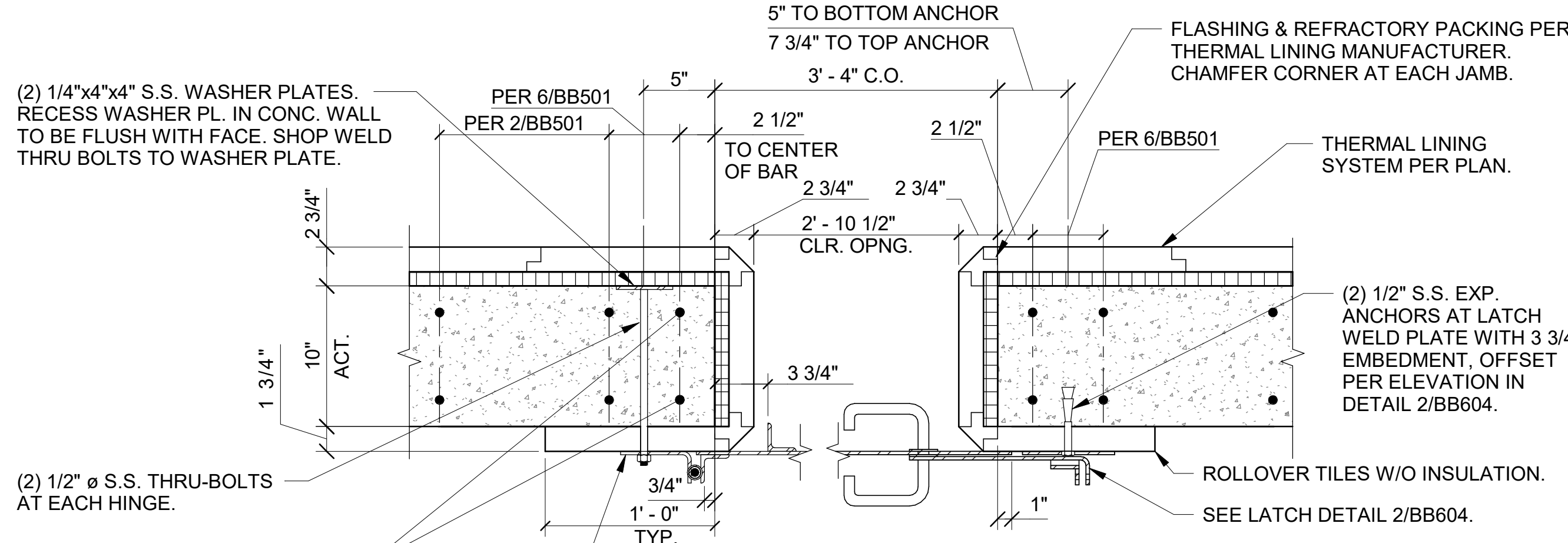
### ELEVATION - STANDARD STEEL PLATE DOOR

BB604 BB604 SCALE 3/4" = 1'-0"



- NOTES:
- SEE TYPICAL CONDITION FOR ADDITIONAL INFORMATION.
  - AT NOTED LOCATIONS, SHOP WELD THRU BOLTS TO BACK OF WASHER PLATES AND PROVIDE S.S. NUTS AND LOCK WASHERS AT HINGE BENT PLATES. TRIM EXCESS THREAD LENGTH TO WITHIN 1/4" OF END OF NUT AND GRIND END OF BOLT SMOOTH.

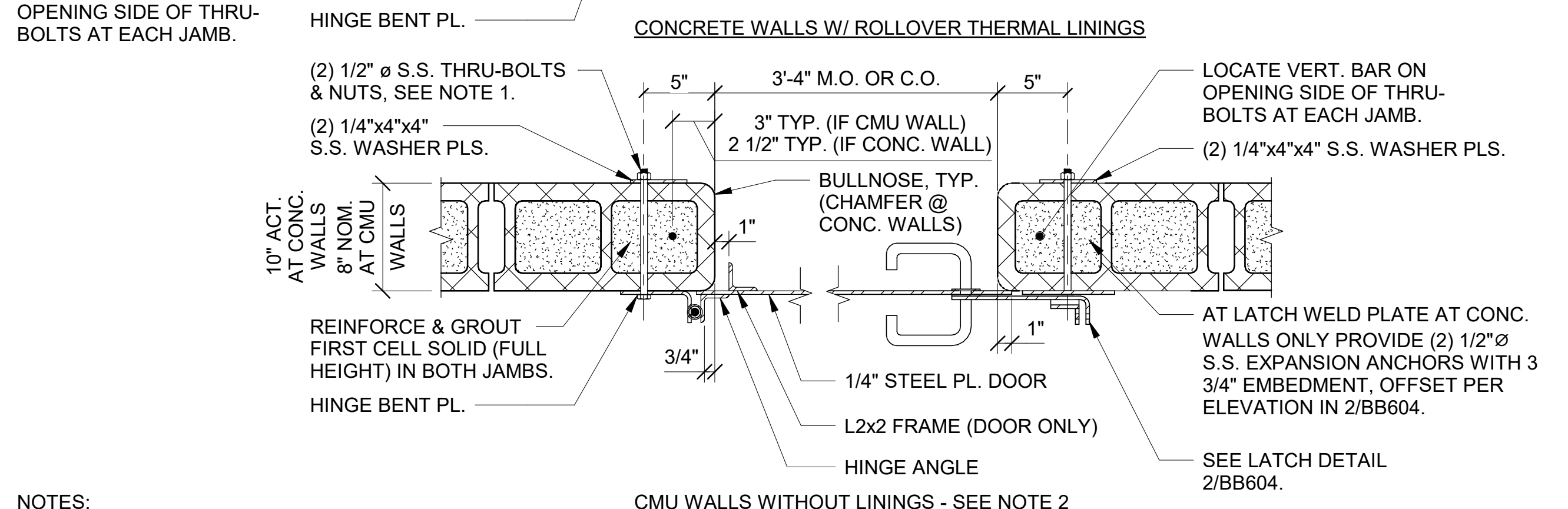
#### CONDITION WITH THERMAL LINING AT JAMB THAT DOESN'T WRAP JAMB



- SEQUENCE NOTES:
- PASS ROD THROUGH 7/8" Ø HOLE IN LATCH BAR.
  - PASS ROD THROUGH 7/8" Ø HOLE IN DOOR PLATE WITH WASHER BETWEEN LATCH BAR AND DOOR PLATE
  - WELD ROD TO LATCH BAR.
  - HOLD ASSEMBLY FIRMLY IN PLACE AND WELD ROD TO WASHER AT INTERIOR FACE OF DOOR. FINISHED ASSEMBLY SHALL NOT WOBBLE AND SHALL ROTATE EASILY WITHOUT SIGNIFICANT EFFORT.

### STANDARD STEEL PLATE DOOR LATCH DETAILS

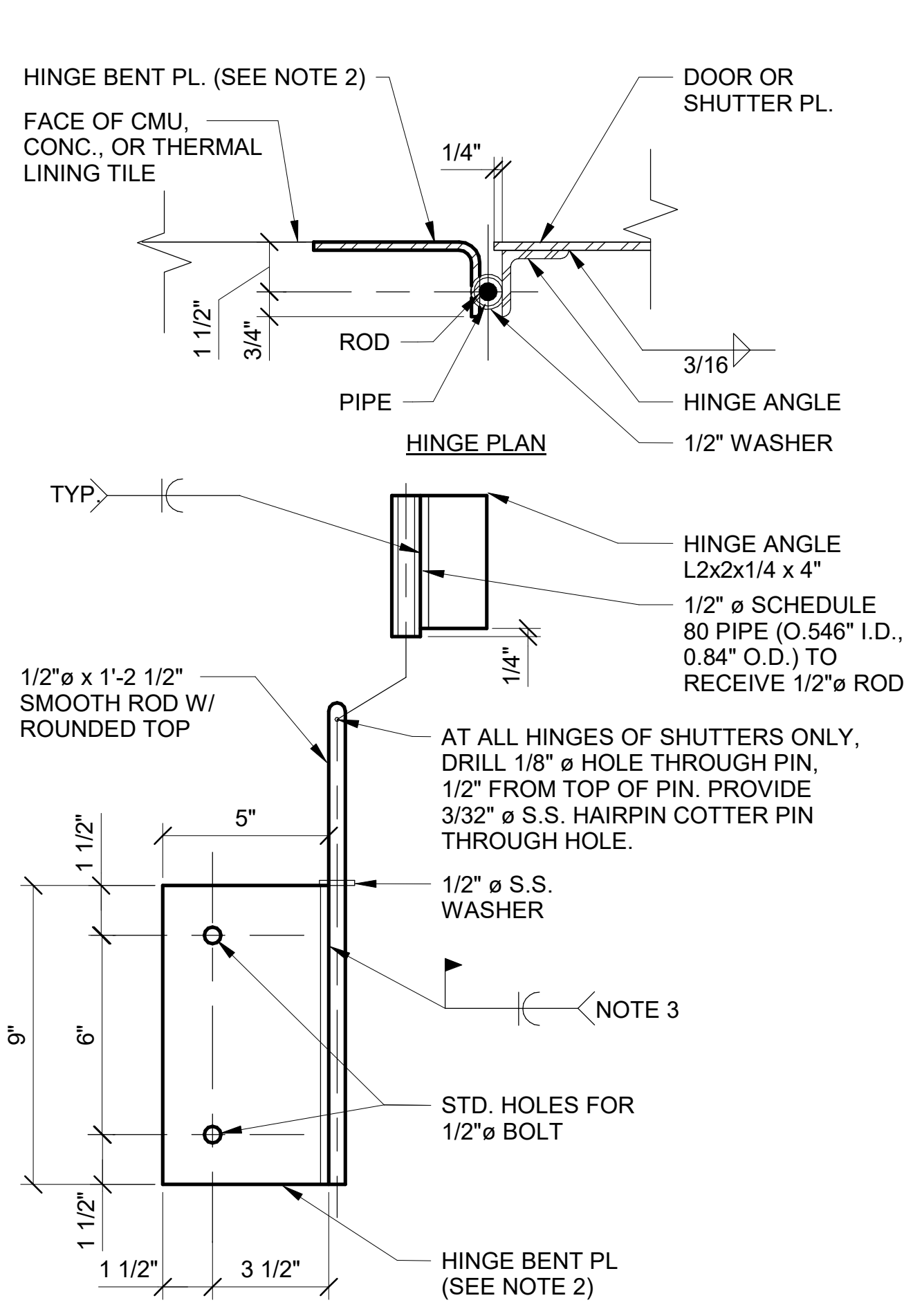
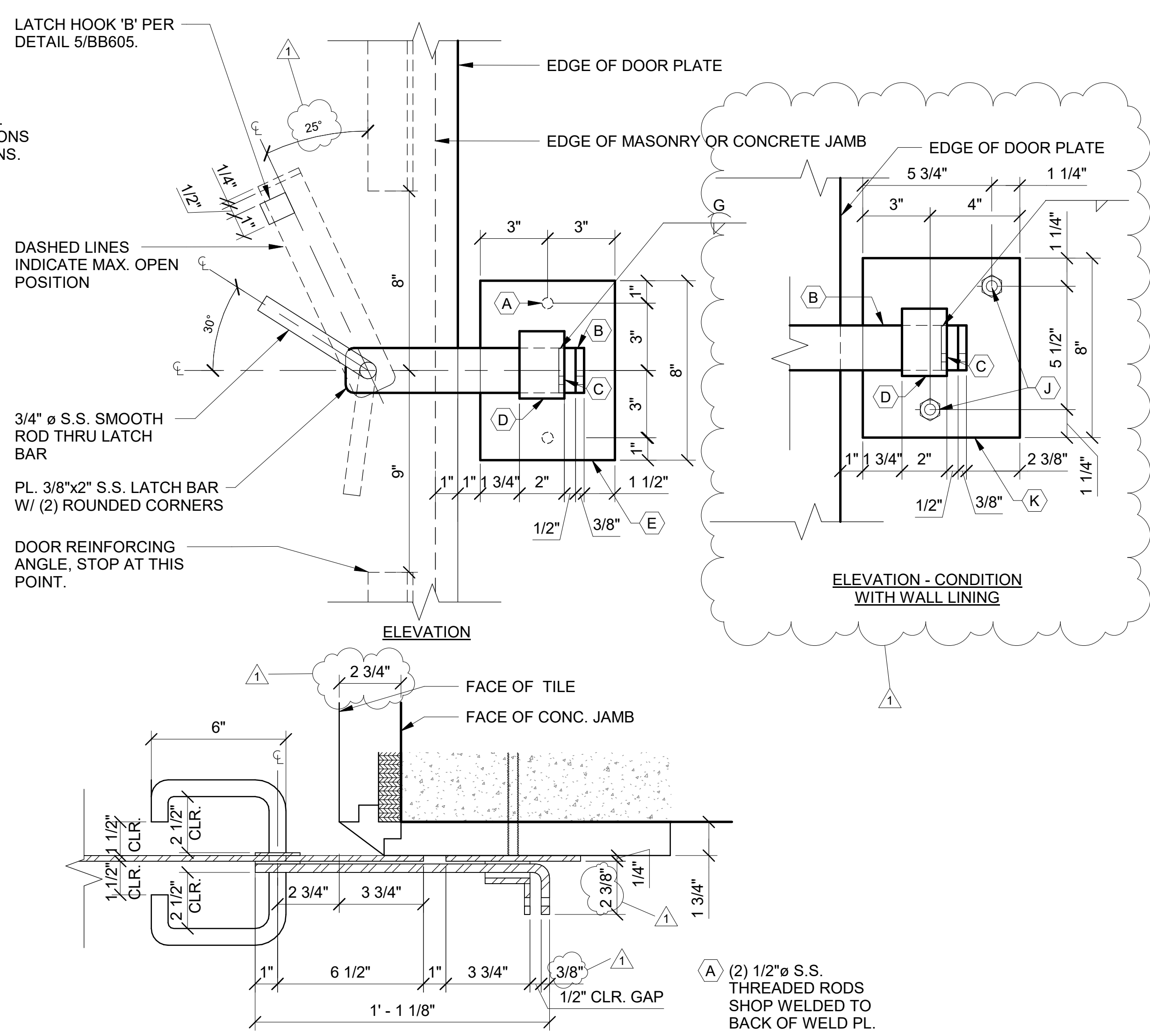
BB604 BB604 SCALE 3" = 1'-0"



- NOTES:
- INSTALL THRU-BOLTS BEFORE PLACING VERTICAL REINFORCING BAR AND GROUT IN JAMB CELLS (IF CMU WALL) OR CAST IN WALL (IF CONC. WALL). TRIM EXCESS THREAD LENGTH TO WITHIN 1/4" OF END OF NUT AND GRIND END OF BOLT SMOOTH (CONC. & CMU WALLS).
  - FOR CONDITION AT CONCRETE WALLS, PROVIDE DOOR OVERLAP PER THIS DETAIL AND JAMB REINFORCING PER DETAIL 6/BB501.
  - SEE PLANS FOR DOOR SWING.

### STANDARD STEEL PLATE DOOR JAMB PLAN DETAILS

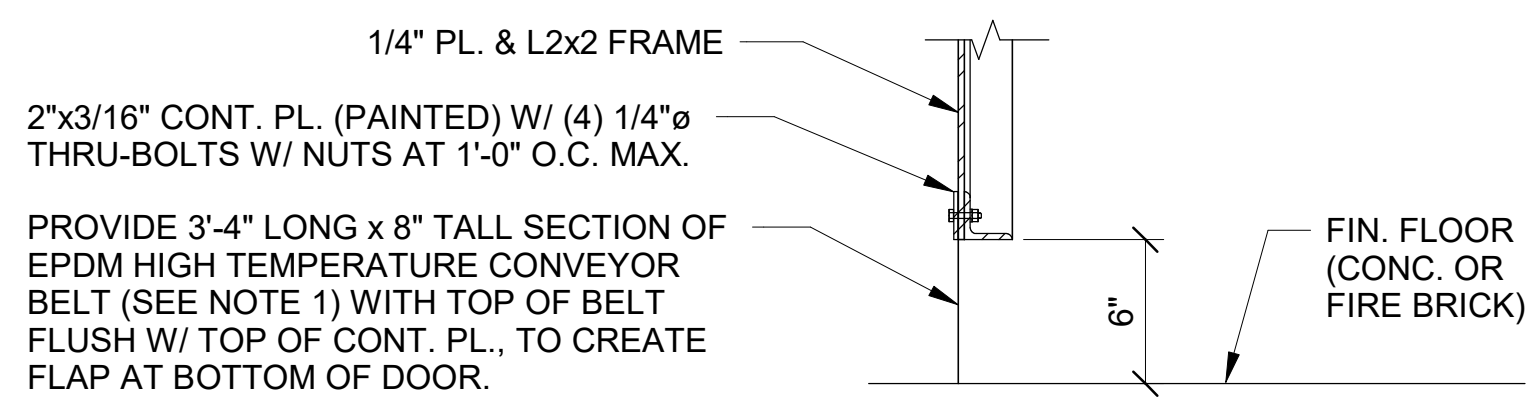
BB202-BB206 BB604 SCALE 1 1/2" = 1'-0"



- NOTES:
- ALL PIECES SHALL BE S.S.
  - BENT PL. 1/4x5x2 1/4x9 @ ALL STEEL PL. DOORS AND WINDOWS.
  - HOLD SHUTTER OR DOOR IN PLACE WHILE FIELD WELDING ROD TO ASSURE PROPER FIT AND OPERATION OF HUNG SHUTTER OR DOOR.
  - DRILL HOLES THROUGH WALLS FOR HINGE BOLTS W/ NON-IMPACT ROTARY DRILL. DO NOT DAMAGE FACES OF WALLS WHILE DRILLING HOLES.

### TYPICAL STEEL PL. DOOR & SHUTTER HINGE DETAILS

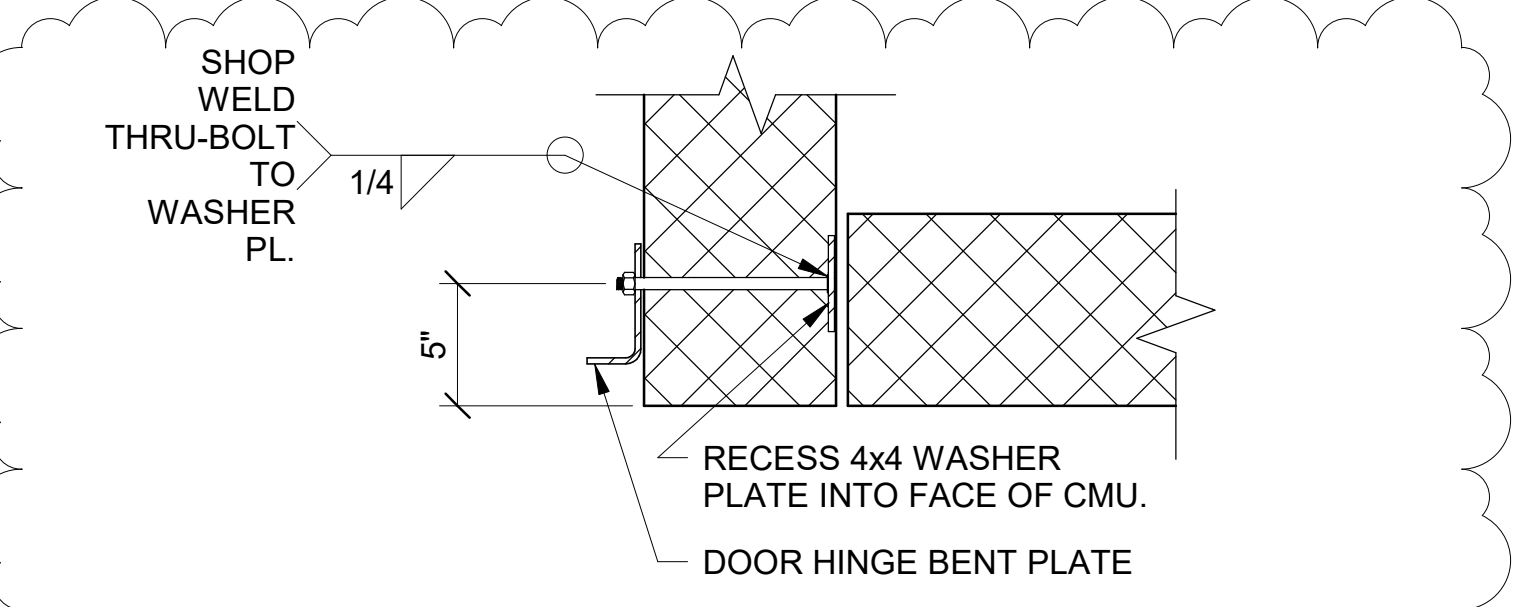
BB604 BB604 SCALE 3" = 1'-0"



- NOTE:
- PROVIDE EPDM HIGH TEMPERATURE CONVEYOR BELT, 3/8" GAUGE WITH POLYNYLON FABRIC TYPE AND A WORKING TEMPERATURE OF 0°-600°, WITH A PEAK TEMPERATURE OF 750° (2/220 3/16x1/16 EPDM HIGH TEMP BELT BY CONVEYORBELT.COM OR AN APPROVED EQUIVALENT). INSTALL SO TOP COVER OF BELT FACES INSIDE FACE OF DOOR.

### STEEL PLATE DOOR SILL DETAIL

BB604 BB604 SCALE 1 1/2" = 1'-0"



### DOOR HINGE DETAIL

BB202-BB206 BB604 SCALE 1 1/2" = 1'-0"

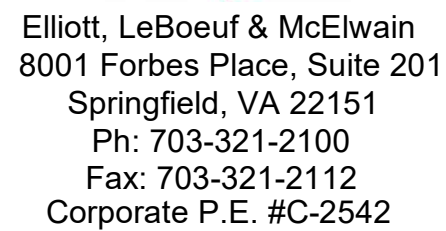
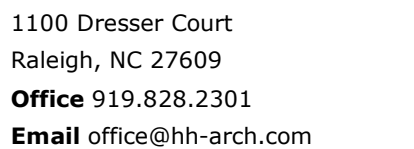
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

NO.	REVISION	DATE
1	Addendum #1	04/14/25

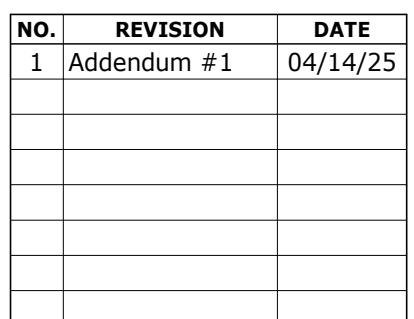








**NCCCS NO. 2303**



JOB NUMBER  
**22056**

---

DATE ISSUED  
**03/14/25**

---

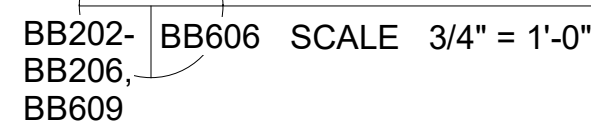
PROJECT STATUS  
**ISSUE FOR  
CONSTRUCTION**

---

SHEET

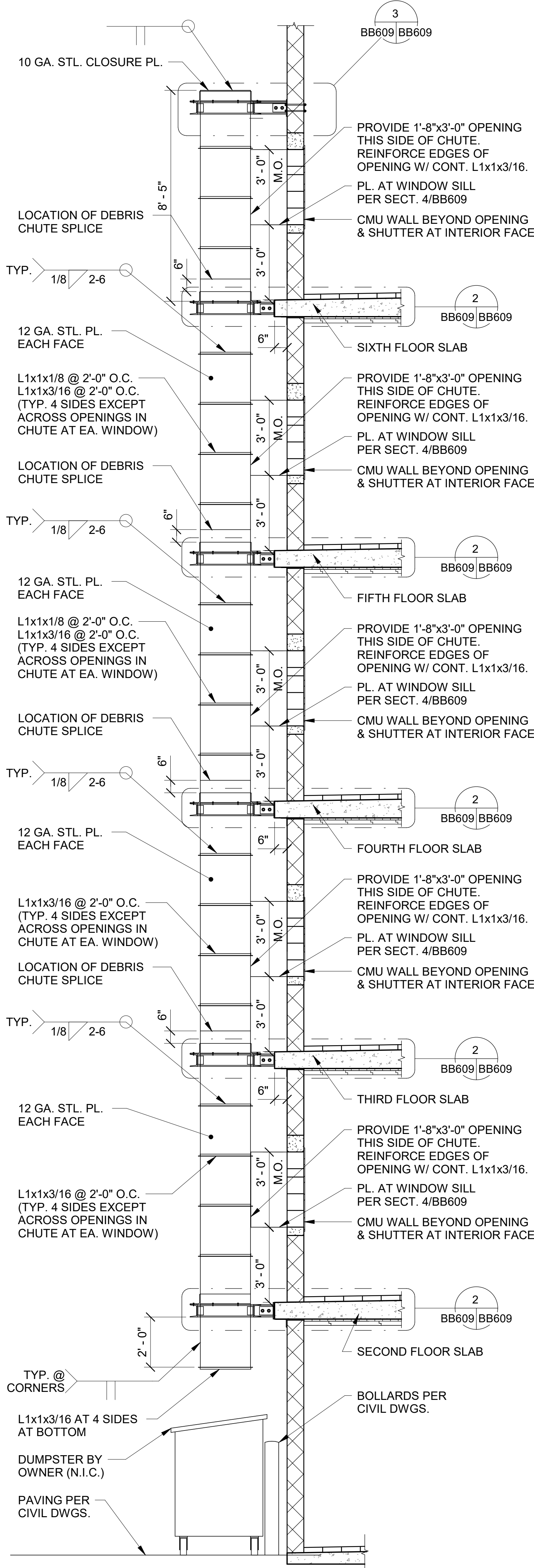
## BURN BUILDING - TYPICAL STEEL PLATE SHUTTER DETAILS

Plot Time: 4/16/2025 4:29:19 PM These drawings are the property of HH Architecture, P.A. They may not be used for any purpose without written permission. Copyright 2022 by HH Architecture, P.A. All rights reserved.



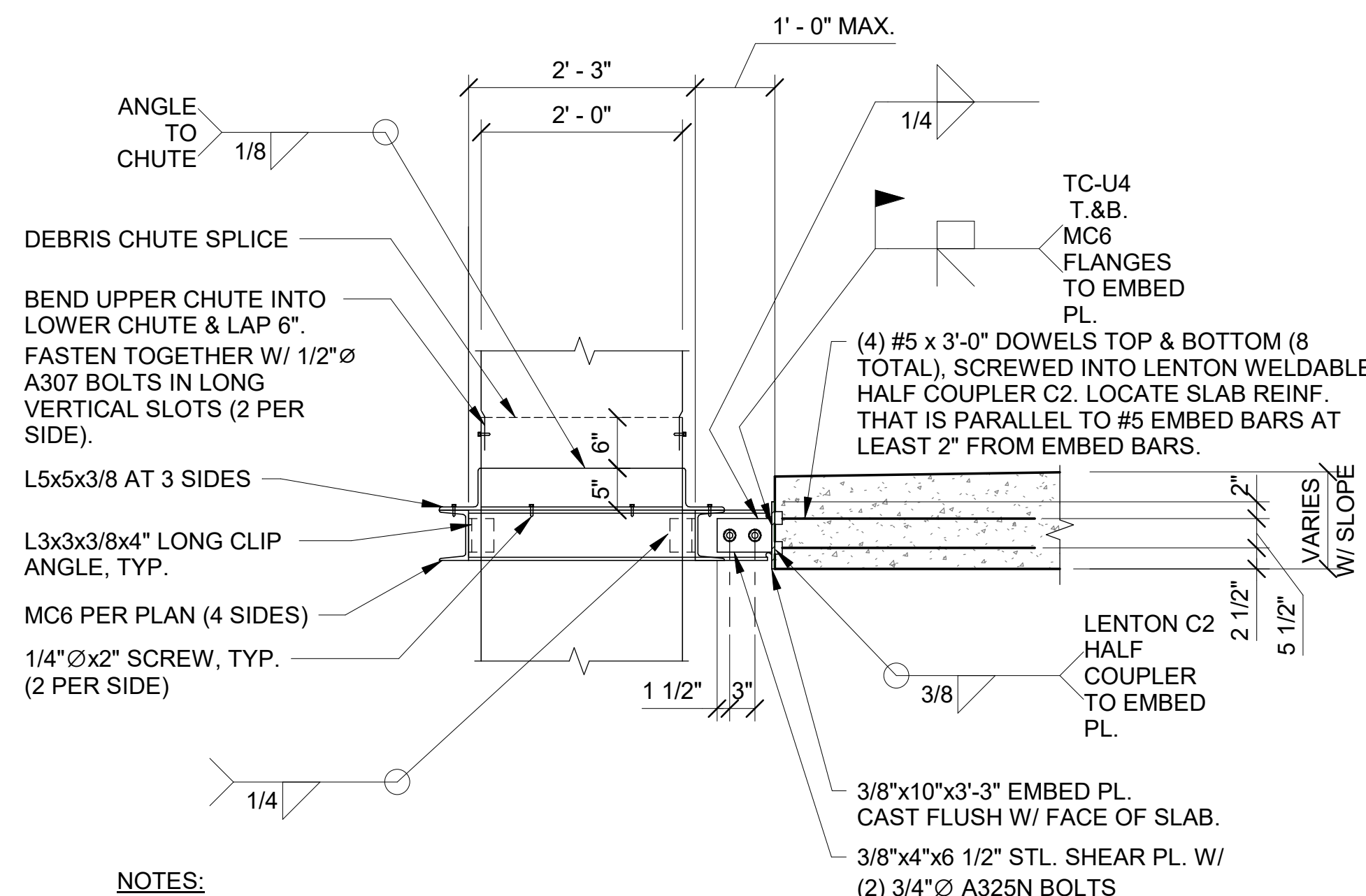
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS  
ALL RIGHTS, INCLUDING COPYRIGHT  
TO THIS DRAWING. THIS DRAWING  
SHALL BE USED SOLELY WITH  
RESPECT TO THIS PROJECT. THIS  
DRAWING SHALL NOT BE USED BY  
OTHERS ON OTHER PROJECTS, FOR  
ADDITIONS TO THIS PROJECT, OR  
FOR COMPLETION OF THIS PROJECT  
BY OTHERS.





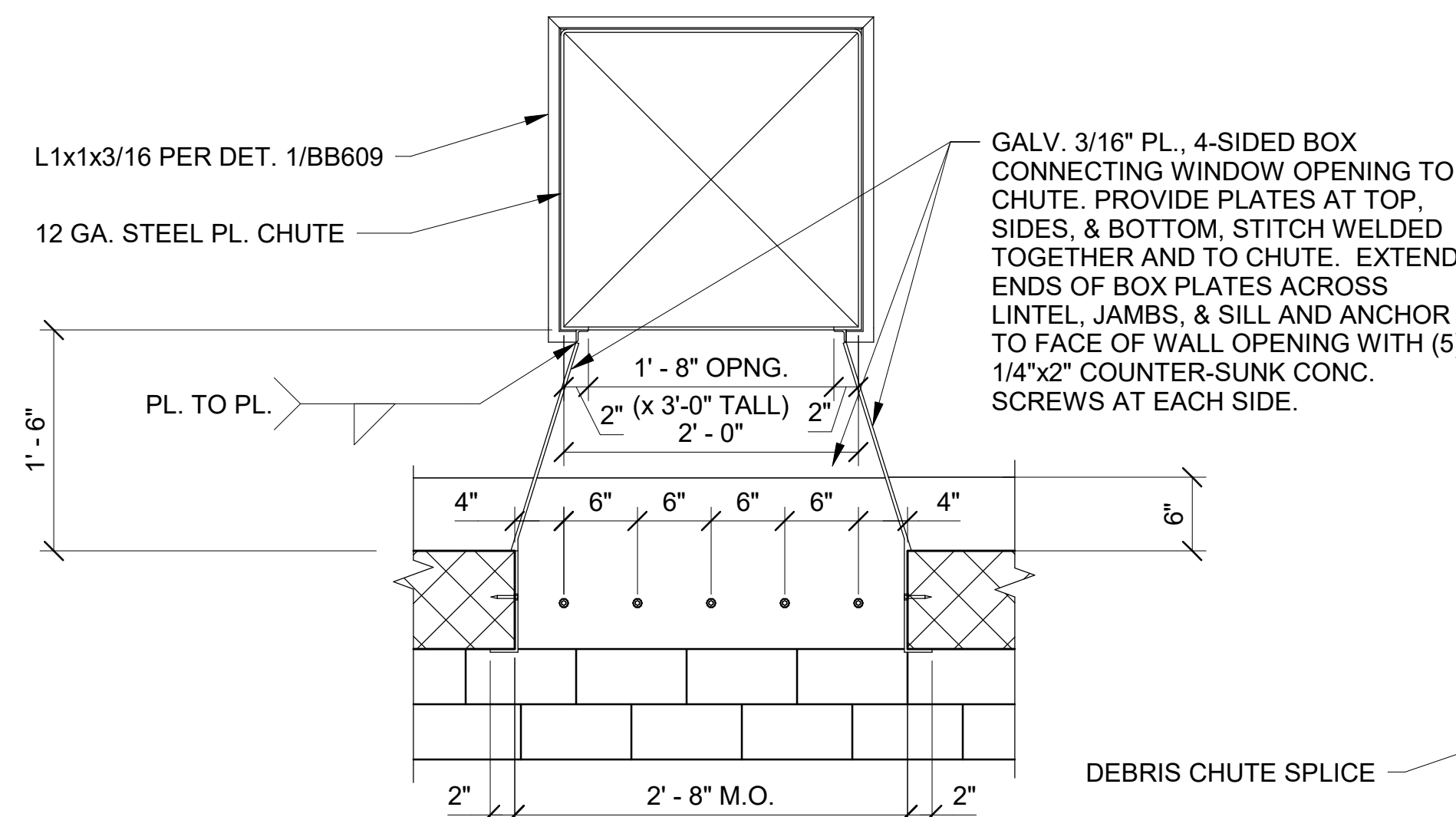
- NOTES:
- ALL PIECES SHALL BE GALV. U.O.N.

**1 DEBRIS CHUTE SECTION**  
BB202 - BB609 SCALE 3/8" = 1'-0"  
BB206

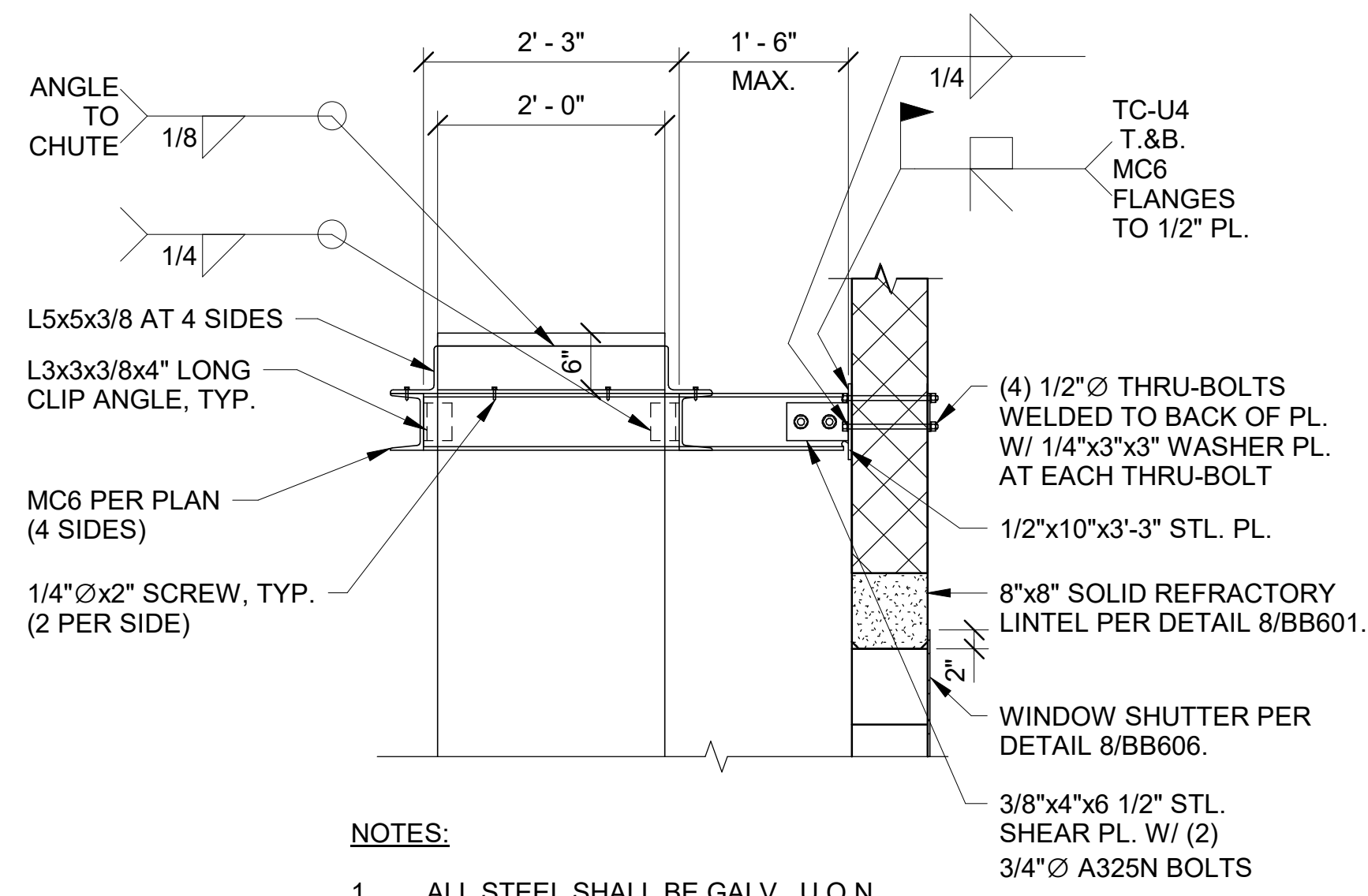


- NOTES:
- ALL STEEL SHALL BE GALV., U.O.N.
  - PROVIDE LENTON WELDABLE HALF COUPLER C2 OR APPROVED EQUAL.
  - DIP EMBED PL., LENTON WELDABLE HALF COUPLER, AND ATTACHED #5 BARS AS AN ASSEMBLY.
  - WRAP SLAB REINFORCING IN HEAVY-DUTY ELECTRICAL TAPE AT ALL LOCATIONS WHERE THEY GET WITHIN 1/2" OF GALV #5 EMBED BAR.

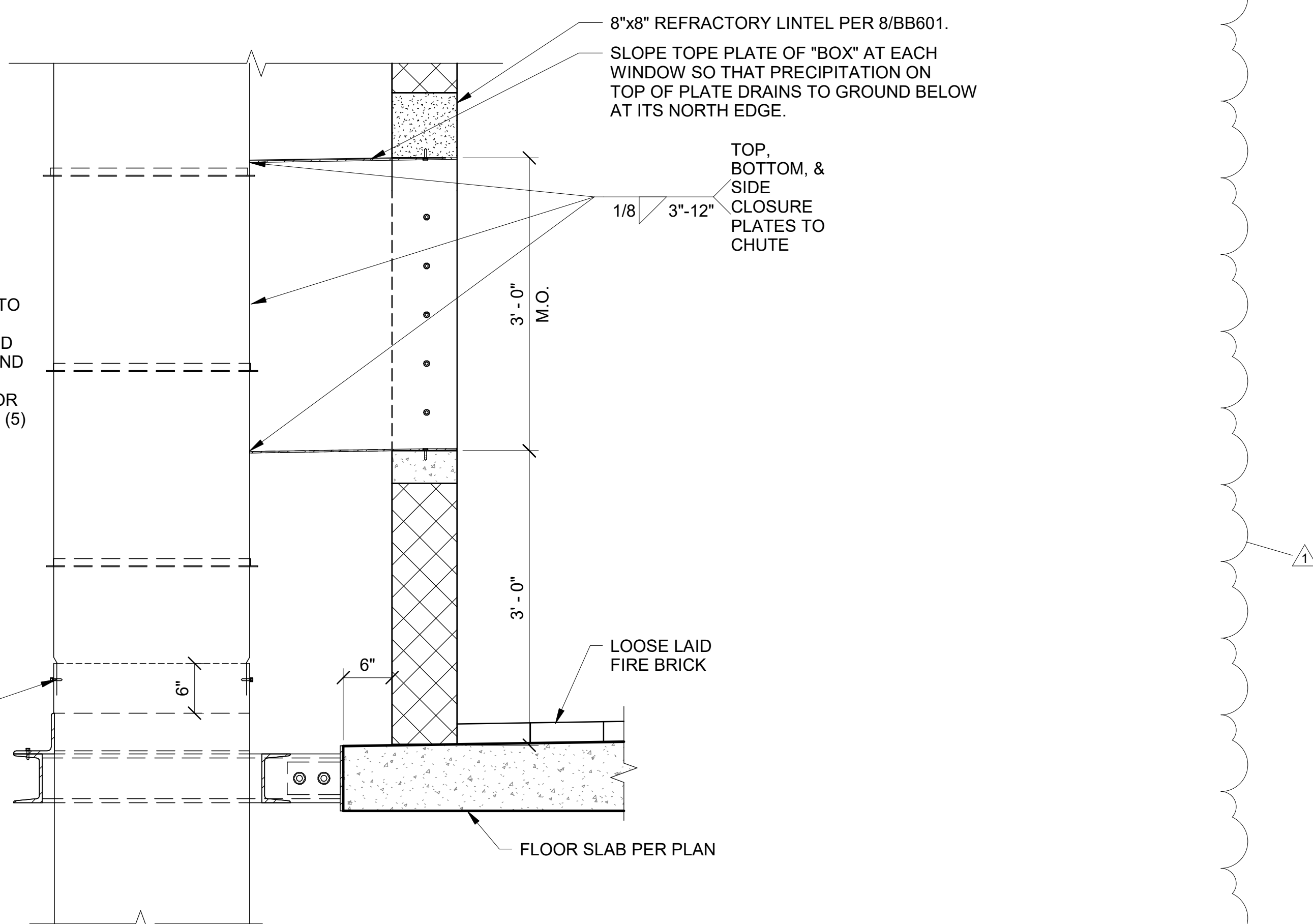
**2 DEBRIS CHUTE SUPPORT DETAIL - 2ND THRU 5TH FLOORS**  
BB202 - BB609 SCALE 3/4" = 1'-0"  
BB206, BB609



**4 DEBRIS CHUTE WINDOW "BOX"**  
BB202 - BB609 SCALE 1" = 1'-0"  
BB206, BB609



**3 TOP OF DEBRIS CHUTE DETAIL**  
BB202 - BB609 SCALE 3/4" = 1'-0"  
BB206, BB609



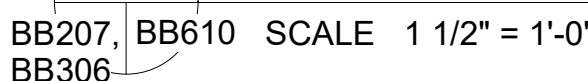
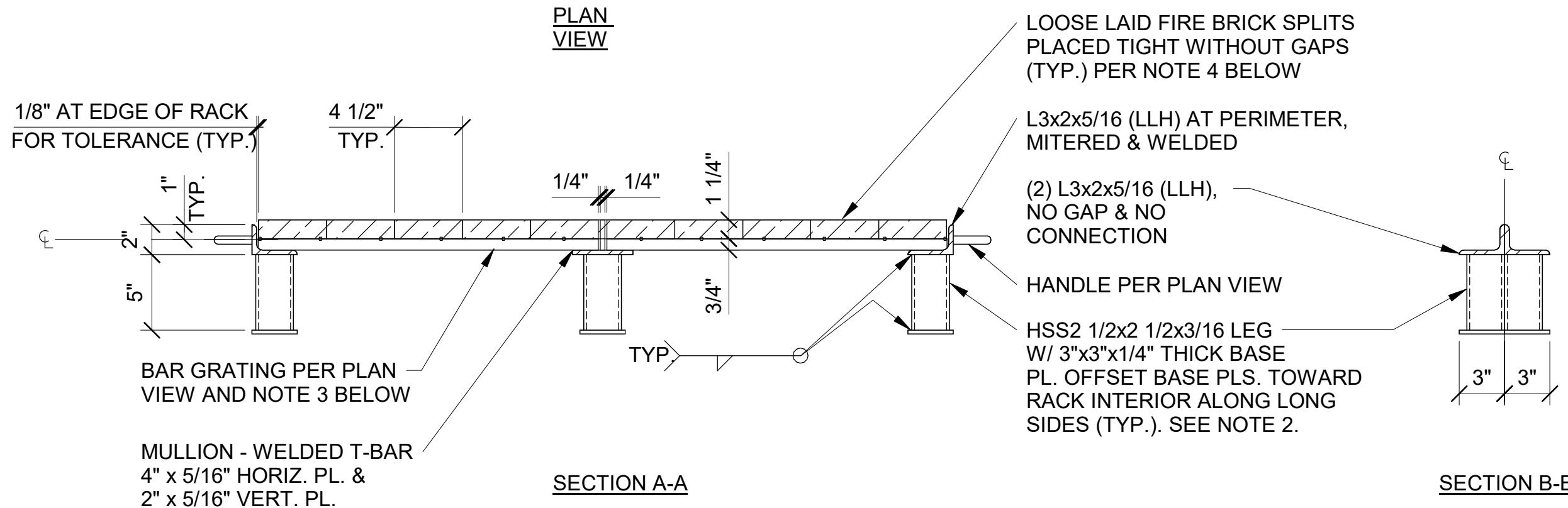
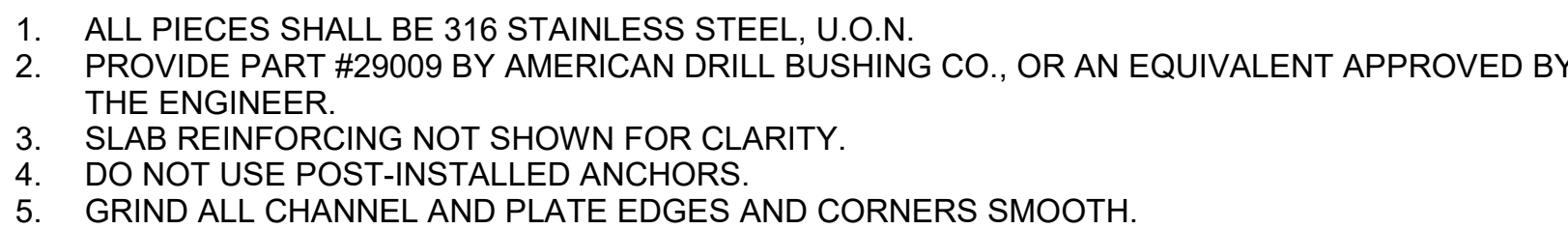
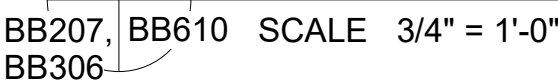
**4 DEBRIS CHUTE WINDOW "BOX"**  
BB202 - BB609 SCALE 1" = 1'-0"  
BB206, BB609

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/25**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET  
**BURN BUILDING - DEBRIS CHUTE DETAILS**





COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL  
COMMERCIAL PROJECTS

NAME OF PROJECT: WTCC EWS - FIRE & RESCUE TRAINING CENTER  
ADDRESS: 5345 ROLESVILLE RD, WENDELL, NC 27591  
OWNER/AUTHORIZED AGENT: WAKE TECHNICAL COMMUNITY COLLEGE  
OWNED BY: WAKE TECHNICAL COMMUNITY COLLEGE  
CODE ENFORCEMENT JURISDICTION: WAKE

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
ARCHITECTURAL	HH ARCHITECTURE	KRISTEN M. HESS, AIA	9290	919.828.2301	khess@hh-arch.com
CIVIL	STEWART	ROY LORENZEN	15834	919.866.4813	rlorenzen@stewartinc.com
ELECTRICAL	-	-	-	-	-
FIRE ALARM	-	-	-	-	-
PLUMBING	-	-	-	-	-
MECHANICAL	-	-	-	-	-
SPRINKLER/STANDPIPE	-	-	-	-	-
STRUCTURAL	EL&M	ROGER LEBOEUF	029858	703.321.2100	roger@elaengineers.com
RETAINING WALLS & HIGH	-	-	-	-	-
PRE-CAST	-	-	-	-	-
TRUSS	-	-	-	-	-
LANDSCAPE	-	-	-	-	-
HAZMAT	-	-	-	-	-

2018 NC BUILDING CODE: NEW BUILDING ADDITION RENOVATION  
1st TIME INTERIOR COMPLETION  
SHELL/CORE - CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS  
PHASED CONSTRUCTION - SHELL/CORE - CONTACT THE LOCAL INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES AND REQUIREMENTS

2018 NC EXISTING BUILDING CODE: EXISTING: PRESCRIPTIVE REPAIR CHAPTER 14  
ALTERATION: LEVEL I LEVEL II LEVEL III  
HISTORIC PROPERTY CHANGE OF USE

CONSTRUCTED (date): - CURRENT OCCUPANCY(S) (Ch. 3): -  
RENOVATED (date): - PROPOSED OCCUPANCY(S) (Ch. 3): -

RISK CATEGORY (Table 1604.5): CURRENT: I II III IV  
PROPOSED: I II III IV

CONSTRUCTED (date): - ORIGINAL USE(S) (Ch. 3): -  
RENOVATED (date): - CURRENT USE(S) (Ch. 3): -

BASIC BUILDING DATA  
CONSTRUCTION TYPE: I-A I-B I-II I-III I-IV I-V  
SPRINKLERS: NO PARTIAL YES  
STANDPIPES: NO YES CLASS I II III WET DRY  
FIRE DISTRICT: NO YES  
FLOOD HAZARD AREA: NO YES  
SPECIAL INSPECTIONS REQUIRED: NO YES (CONTACT THE LOCAL INSPECTION JURISDICTION FOR ADDITIONAL PROCEDURES AND REQUIREMENTS.)

FLOOR	(SQ FT)	SUB-TOTAL
5th FLOOR	257	-
4th FLOOR	620	877
3rd FLOOR	620	1,497
2nd FLOOR	907	2,404
1st FLOOR	907	3,311
TOTAL	3,311	3,311

ALLOWABLE AREA  
PRIMARY OCCUPANCY CLASSIFICATION(S):  
ASSEMBLY A-1 A-2 A-3 A-4 A-5  
BUSINESS  
EDUCATIONAL  
FACTORY F-1 MODERATE F-2 LOW  
HAZARDOUS H-1 DETONATE H-2 DEGRADATE H-3 COMBUST H-4 HEALTH H-5 HPM  
INSTITUTIONAL I-1 CONDITION I-2 I-3 CONDITION I-4  
MERCANTILE  
RESIDENTIAL R-1 R-2 R-3 R-4  
STORAGE S-1 MODERATE S-2 LOW  
UTILITY AND MISCELLANEOUS  
ACCESSORY OCCUPANCY CLASSIFICATION(S):  
INCIDENTAL USES (Table 509):  
SPECIAL USES (Chapter 4 - List Code Sections):  
SPECIAL PROVISIONS (Chapter 5 - List Code Sections):  
MIXED OCCUPANCY: NO YES  
SEPARATION: - HR. EXCEPTION: -

NON-SEPARATED USE (508.3) - THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.  
SEPARATED USE (508.4) - SEE BELOW FOR AREA CALCULATIONS FOR EACH STORY. THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

Actual Area of Occupancy A + Actual Area of Occupancy B  
Allowable Area of Occupancy A Allowable Area of Occupancy B ≤ 1.00 AREA + = X ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE 13	(D) ALLOWABLE AREA PER STORY OR UNLIMITED 13
-	-	-	-	-	-

1 Frontage area increases from Section 506.2 are computed thus:  
a. Perimeter which fronts a public way or open space having 20 feet minimum width = (P)  
b. Total building perimeter = (P)  
c. Ratio (F/P) = (F/P)  
d. W = Minimum width of public way = (W)  
e. Percent of frontage increase formula:  $F_r = 100(F/P - 0.25) \times W/30 = (\%)$   
2 Unlimited area applicable under conditions of section 507.  
3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).  
4 The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.  
5 Frontage increase is based on the unspinklered area value in Table 506.2.

ALLOWABLE HEIGHT	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
BUILDING HEIGHT IN FEET (Table 504.3)	160'-0"	60'-0"	NCSBC
BUILDING HEIGHT IN STORES (Table 504.4)	5	5	NCSBC

1 Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING	DETAIL # AND SHEET	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PER PARTITION	SHEET # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES	-	-	-	-	-	-
BEARING WALLS	-	-	-	-	-	-
EXTERIOR	-	-	-	-	-	-
NORTH	-	-	-	-	-	-
EAST	-	-	-	-	-	-
WEST	-	-	-	-	-	-
SOUTH	-	-	-	-	-	-
INTERIOR	-	-	-	-	-	-
NONBEARING WALLS AND PARTITIONS	-	-	-	-	-	-
EXTERIOR WALLS	-	-	-	-	-	-
NORTH	-	-	-	-	-	-
EAST	-	-	-	-	-	-
WEST	-	-	-	-	-	-
SOUTH	-	-	-	-	-	-
INTERIOR WALLS & PARTITIONS	-	-	-	-	-	-
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	-	-	-	-	-	-
FLOOR CEILING ASSEMBLY	-	-	-	-	-	-
COLUMNS SUPPORTING FLOORS	-	-	-	-	-	-
ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS	-	-	-	-	-	-
ROOF CEILING ASSEMBLY	-	-	-	-	-	-
COLUMNS SUPPORTING ROOF	-	-	-	-	-	-
SHAFT ENCLOSURES - EXIST	-	-	-	-	-	-
SHAFT ENCLOSURES - OTHER	-	-	-	-	-	-
CORRIDOR SEPARATION	-	-	-	-	-	-
OCCUPANCY/FIRE BARRIER SEPARATION	-	-	-	-	-	-
PARTY/FIRE WALL SEPARATION	-	-	-	-	-	-
SMOKE BARRIER SEPARATION	-	-	-	-	-	-
SMOKE PARTITION	-	-	-	-	-	-
TENANT / DWELLING UNIT / SLEEPING UNIT SEPARATION	-	-	-	-	-	-
INCIDENTAL USE SEPARATION	-	-	-	-	-	-

\* Indicates section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
-	-	-	-

LIFE SAFETY SYSTEM REQUIREMENTS  
EMERGENCY LIGHTING: NO YES  
EXIT SIGNS: NO YES  
FIRE ALARM: NO YES  
SMOKE DETECTION SYSTEM: NO YES PARTIAL  
CARBON MONOXIDE DETECTION: NO YES

LIFE SAFETY PLAN REQUIREMENTS  
LIFE SAFETY PLAN SHEET #: -  
FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7)  
ASSUMED AND REAL PROPERTY LINE LOCATIONS (IF APPLICABLE)  
EXTERIOR WALL OPENING AREA WITH RESPECT TO  
OCCUPANCY USE FOR EACH AREA AS IT RELATES TO  
OCCUPANT LOADS FOR EACH AREA  
EXIT ACCESS TRAVEL DISTANCES (1010.1.1 & 1006.2.1.2)  
COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1))  
DEAD END LENGTHS (1020.4)  
CLEAR EXIT WIDTHS FOR EACH EXIT DOOR  
MAX. CALCULATED OCC. LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3)  
ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR  
A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION  
LOCATION OF DOORS WITH PANIC HARDWARE (1010.1.10)  
LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1010.1.9.7)  
LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1010.1.9.9)  
LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES  
LOCATION OF EMERGENCY ESCAPE WINDOWS (1030)  
THE SQUARE FOOTAGE OF EACH FIRE AREA (407.5)  
THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT FOR OCCUPANCY CLASSIFICATION I-2 (407.5)  
NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

ACCESSIBLE DWELLING UNITS (SECTION 1107)							
TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
-	-	-	-	-	-	-	-

ACCESSIBLE PARKING (SECTION 1106)							
LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		REGULAR VEHICLES	VAN SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED	
	REQUIRED	PROVIDED		13' ACCESS AISLE	8' ACCESS AISLE		
-	-	-	-	-	-	-	
TOTAL	-	-	-	-	-	-	

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)														
USE		WATER CLOSETS			URINALS			WATER CLOSERS			SHOWERS / TUBS		DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX	REGULAR	ACCESSIBLE
SCALE	EXISTING	-	-	-	-	-	-	-	-	-	-	-	-	-
	NEW	-	-	-	-	-	-	-	-	-	-	-	-	-
	REQ'D	-	-	-	-	-	-	-	-	-	-	-	-	-

SPECIAL APPROVALS  
SPECIAL APPROVAL: LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, OPI, OHS, ICC, ETC., DESCRIBE BELOW

ENERGY SUMMARY
ENERGY REQUIREMENTS: THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE PROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL ENERGY COST FOR THE STANDARD REFERENCE DESIGN VS ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.

EXISTING BUILDING COMPLIES WITH CODE: NO YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE)  
EXEMPT BUILDING: NO YES (PROVIDE CODE OR STATUTORY REFERENCE):  
CLIMATE ZONE: 3A 4A 5A  
METHOD OF COMPLIANCE: ENERGY CODE PERFORMANCE PRESCRIPTIVE  
ASHRAE 90.1 PERFORMANCE PRESCRIPTIVE  
(IF "OTHER" SPECIFY SOURCE HERE)

THERMAL ENVELOPE (PRESCRIPTIVE METHOD ONLY)  
ROOF / CEILING ASSEMBLY (EACH ASSEMBLY)  
DESCRIPTION OF ASSEMBLY:  
U-VALUE OF TOTAL ASSEMBLY:  
R-VALUE OF INSULATION:  
SKYLIGHTS IN EACH ASSEMBLY:  
U-VALUE OF SKYLIGHT:  
TOTAL SQUARE FOOTAGE OF SKYLIGHTS IN EACH ASSEMBLY:

EXTERIOR WALLS (EACH ASSEMBLY)  
DESCRIPTION OF ASSEMBLY:  
U-VALUE OF TOTAL ASSEMBLY:  
R-VALUE OF INSULATION:  
OPENINGS (WINDOWS OR DOORS WITH GLAZING)  
U-VALUE OF ASSEMBLY:  
SOLAR HEAT GAIN COEFFICIENT:  
PROTECTION FACTOR:  
DOOR R-VALUES:

WALLS BELOW GRADE (EACH ASSEMBLY)  
DESCRIPTION OF ASSEMBLY:  
U-VALUE OF TOTAL ASSEMBLY:  
R-VALUE OF INSULATION:  
HORIZONTAL/VERTICAL REQUIREMENT:  
SLAB HEATED:

FLOORS OVER UNCONDITION SPACE (EACH ASSEMBLY)  
DESCRIPTION OF ASSEMBLY:  
U-VALUE OF TOTAL ASSEMBLY:  
R-VALUE OF INSULATION:

FLOORS SLAB ON GRADE  
DESCRIPTION OF ASSEMBLY:  
U-VALUE OF TOTAL ASSEMBLY:  
R-VALUE OF INSULATION:  
HORIZONTAL/VERTICAL REQUIREMENT:  
SLAB HEATED:

STRUCTURAL SUMMARY  
DESIGN LOADS:  
IMPORTANCE FACTORS: SNOW (I<sub>s</sub>) 1.0  
SEISMIC (I<sub>e</sub>) 1.0  
LIVE LOADS: ROOF 50 psf  
MEZZANINE 50 psf  
FLOOR 50 psf  
GROUND SNOW LOAD: 15 psf  
WIND LOAD: ULTIMATE WIND SPEED 115 mph (ASCE-7)  
EXPOSURE CATEGORY C  
SEISMIC DESIGN CATEGORY: A B C D  
PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:  
RISK CATEGORY (Table 1604.5): I II III IV  
SPECTRAL RESPONSE ACCELERATION S<sub>s</sub> 0.147 %g S<sub>1</sub> 0.074 %g  
SITE CLASSIFICATION (ASCE 7): A B C D  
DATA SOURCE: Field Test Presumptive Historical Data  
BASIC STRUCTURAL SYSTEM: Bearing Wall Dual w/ Special Moment Frame  
Building Frame Dual w/ Intermediate R/C  
Moment Frame Inverted Pendulum or Special Steel  
ANALYSIS PROCEDURE: Simplified Equivalent Lateral Force Dynamic  
ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED? YES NO  
LATERAL DESIGN CONTROL: EARTHQUAKE WIND  
SOIL BEARING CAPACITIES  
FIELD TEST (provide copy of test report) 2,500 psf  
PRESUMPTIVE BEARING CAPACITY psf  
PILE SIZE, TYPE, AND CAPACITY

MECHANICAL SUMMARY  
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT  
THERMAL ZONE: WINTER DRY BULB: -  
SUMMER DRY BULB: -  
INTERIOR DESIGN CONDITIONS: WINTER DRY BULB: -  
SUMMER DRY BULB: -  
RELATIVE HUMIDITY: -  
BUILDING HEATING LOAD: -  
BUILDING COOLING LOAD: -  
MECHANICAL SPACING CONDITIONING SYSTEM  
UNITARY  
DESCRIPTION OF UNIT: -  
HEATING EFFICIENCY: -  
COOLING EFFICIENCY: -  
SIZE CATEGORY OF UNIT: -  
BOILER  
SIZE CATEGORY, IF OVERSIZED, STATE REASON: -  
CHILLER  
SIZE CATEGORY, IF OVERSIZED, STATE REASON: -  
LIST EQUIPMENT EFFICIENCIES: -

ELECTRICAL SUMMARY  
ELECTRICAL SYSTEMS AND EQUIPMENT:  
METHOD OF COMPLIANCE: ENERGY CODE PERFORMANCE PRESCRIPTIVE  
ASHRAE 90.1 PERFORMANCE PRESCRIPTIVE  
LIGHTING SCHEDULE: (each fixture)  
LAMP TYPE REQUIRED IN FIXTURE  
NUMBER OF LAMPS IN FIXTURE  
BALLAST TYPE USED IN THE FIXTURE  
NUMBER OF BALLASTS IN FIXTURE  
TOTAL WATTAGE PER FIXTURE  
TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED (WHOLE BUILDING OR SPACE BY SPACE)  
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED

ADDITIONAL EFFICIENCY PACKAGE OPTIONS  
(WHEN USING THE 2018 NCECC, NOT REQUIRED FOR ASHRAE 90.1)  
C406.2 MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE  
C406.3 REDUCED LIGHTING POWER DENSITY  
C406.4 ENHANCED DIGITAL LIGHTING CONTROLS  
C406.5 ON-SITE RENEWABLE ENERGY  
C406.6 DEDICATED OUTDOOR AIR SYSTEM  
C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING



Elliott, LeBoeuf & McElwain

Phone (703) 321-2100  
Fax (703) 321-2112

8001 Forbes Place Suite 201  
Springfield, VA 22151  
www.elaengineers.com

April 8, 2025

James Briglia  
HH Architecture  
1100 Dresser Court  
Raleigh, NC 27609

RE: Wake Technical Community College Training Tower  
EL&M No.: 22056

Dear James,

This letter is to inform you of certain code compliance issues that are unique for the referenced project. We recommend you forward this information to the appropriate Government Reviewer, Building Official, and/or Permitting Office as soon as possible to make them aware of the unique nature of the intended design. We hope this information will assist them in their review of this project.

As we have discussed throughout the project, the Wake Technical Community College (WTCC) Training Tower will not be a "building" but rather a prop. It will be used by WTCC training center personnel to train able-bodied firefighters in non-live fire training scenarios. It will not be an occupied structure, except during training exercises.

The Training Tower will be used for specialized non-live fire and rescue training scenarios. This structure will not be exposed to live fires but will be used by WTCC training center personnel to instruct students in proper techniques for rappelling, ladder rescues at window openings, stairwell techniques, rescuing downed firefighters, and other skills.

Given these uses, many items usually included (and required) in building design will not be incorporated into the design of these props, such as:

- exit signage
- panic hardware on doors
- fire protection system, except for a dry standpipe and a few sprinkler heads to be used solely as training tools
- smoke detectors
- HVAC systems
- lighting, including emergency lighting (other than some lighting for training purposes)
- finishes (paint, carpeting, finished ceilings)
- ADA accessibility ramps, elevators, doorways, and automatic door openers
- glazing in window openings
- fire extinguishers.

Experience has shown that these items have no practical use and fail rapidly in the harsh fire training environments. In some cases, these items can create safety problems rather than improve safety.

We intend to design the structural components of the prop in accordance with the 2018 version of the North Carolina State Building Code (2015 International Building Code, with North Carolina Amendments), including those requirements for snow, wind, and seismic loads. As much as practical for a training prop, other items, such as guardrail heights and stair tread/riser dimensions, will also follow the 2018 version of the North Carolina State Building Code. However, we will not be able to classify the "building occupancy" or the "type of construction" in accordance with the 2018 version of the North Carolina State Building Code because the live fire training props do not come close to meeting any of the defined "building occupancies", especially considering they are not buildings.

We have provided this design concept for over 140 state/municipal live fire training props and training towers and have never been denied a permit nor required to provide "inappropriate code items", such as panic hardware, within the props. We would be happy to provide additional information or discuss this matter with the appropriate government officials, if further design concept explanations are required.

Please call us if you need further information or if you have any questions.

Sincerely,

Roger M. LeBoeuf

Roger M. LeBoeuf, P.E. (NC P.E. #029858)  
President

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

WTCC EWS - FIRE & RESCUE TRAINING CENTER

WAKE TECHNICAL COMMUNITY COLLEGE

5345 ROLESVILLE RD, WENDELL, NC 27591

NCCCS NO. 2303



NO.	REVISION	DATE

JOB NUMBER  
22056  
DATE ISSUED  
03/14/2025  
PROJECT STATUS  
ISSUE FOR CONSTRUCTION  
SHEET  
TRAINING TOWER - LIFE SAFETY PLAN

TT003





Piott, LeBoeuf & McElwain  
 101 Forbes Place, Suite 201  
 Springfield, VA 22151  
 Ph: 703-321-2100  
 Fax: 703-321-2112  
 Corporate P.E. #C-2542

**WICCEWS - FIRE & RESCUE TRAINING CENTER**

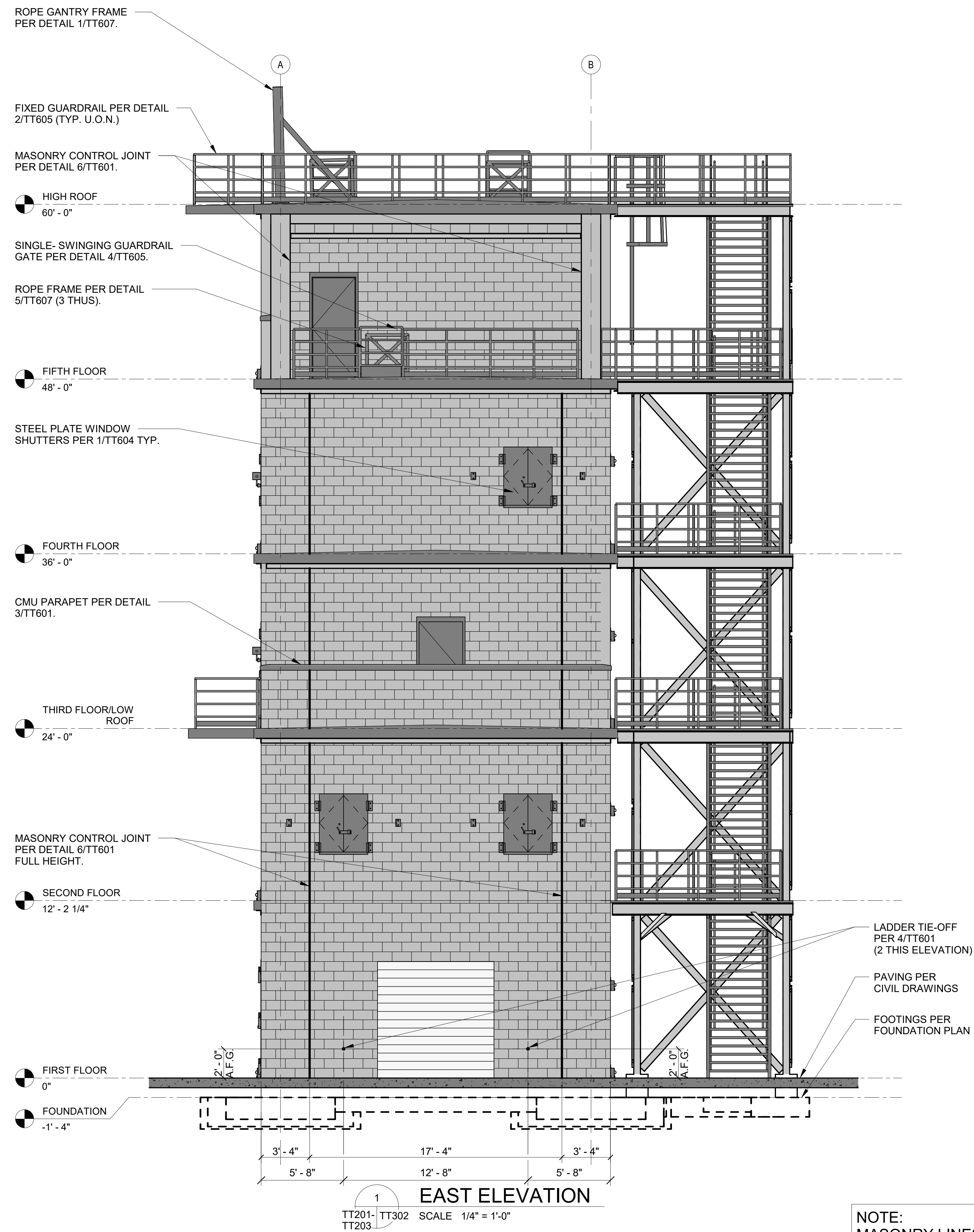
WAKE TECHNICAL COMMUNITY COLLEGE  
5345 ROLESVILLE RD, WENDELL, NC 27591  
NCCCS NO. 2303



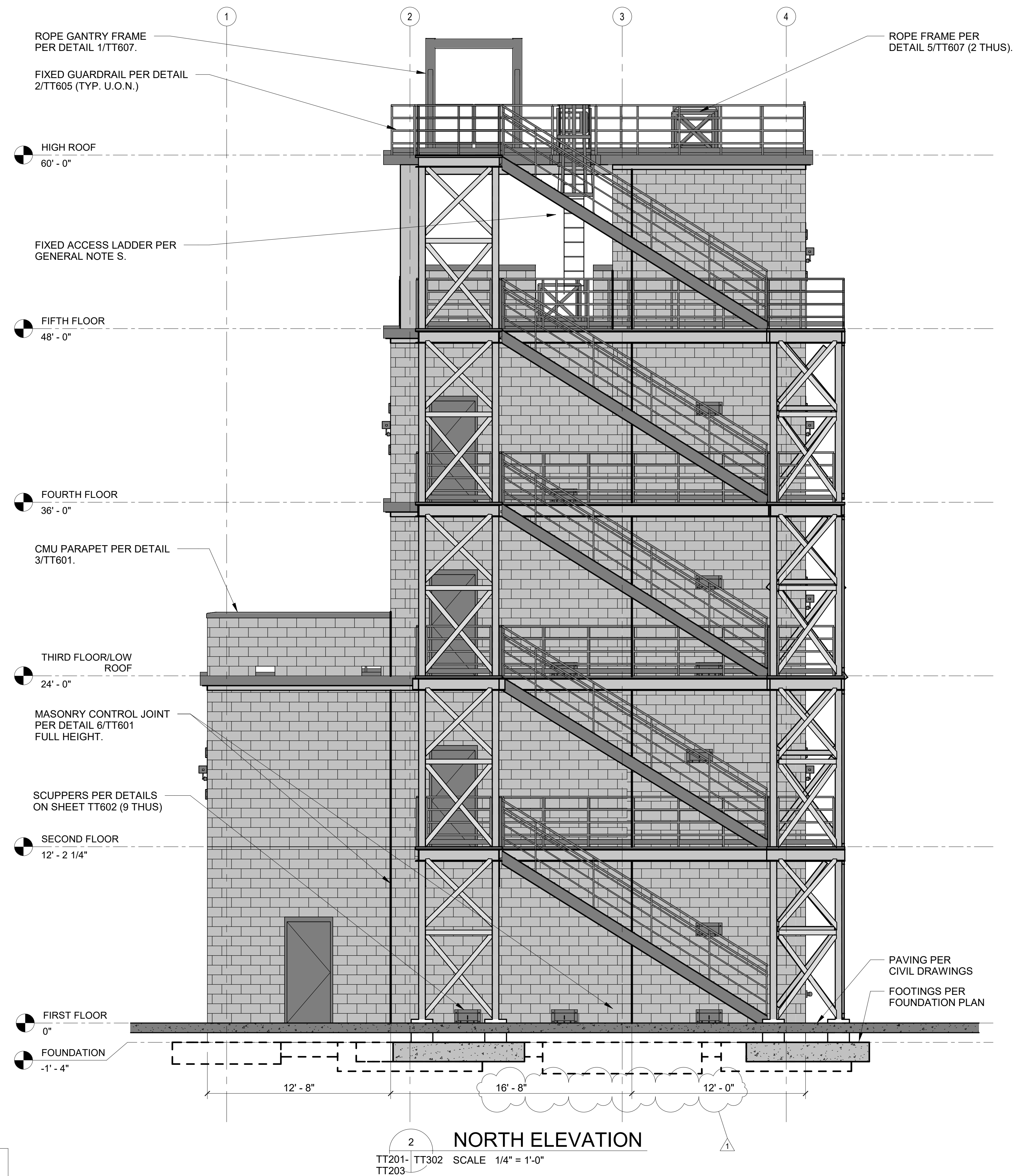
REVISION	DATE
Addendum #1	04/14/25

B NUMBER  
**2056**  
 DATE ISSUED  
**3/14/2025**  
 PROJECT STATUS  
**ISSUE FOR**  
**CONSTRUCTION**  
 SHEET  
**RAINING TOWER**  
**EAST & NORTH**  
**ELEVATIONS**

TT302

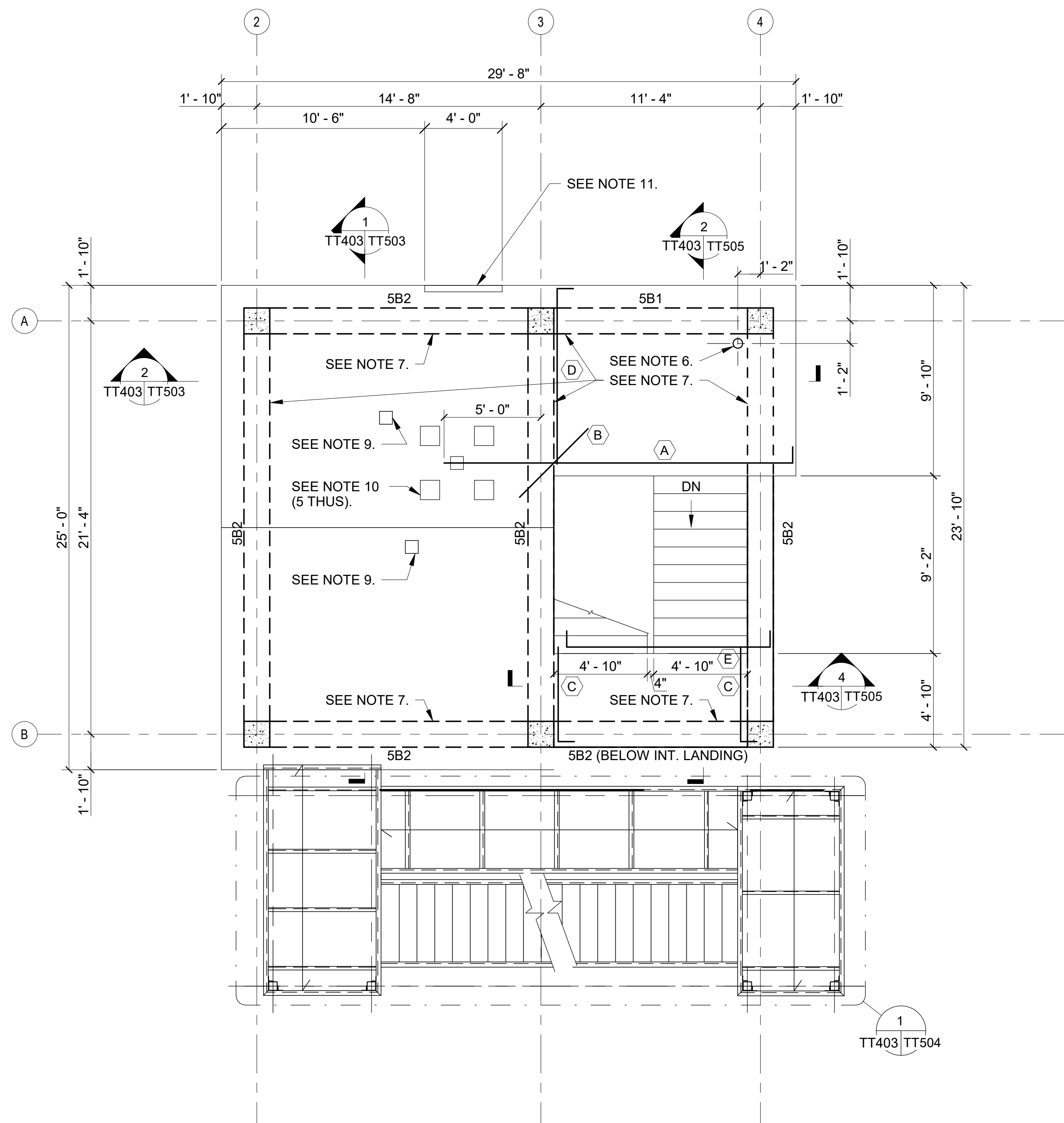


NOTE:  
MASONRY LINES SHOWN  
ON ELEVATIONS ARE  
DIAGRAMMATIC. THEY  
DO NOT REFLECT  
ACTUAL COURSING.



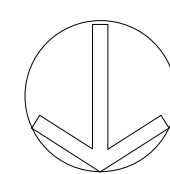
COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS  
ALL RIGHTS, INCLUDING COPYRIGHT,  
TO THIS DRAWING. THIS DRAWING  
SHALL BE USED SOLELY WITH  
RESPECT TO THIS PROJECT. THIS  
DRAWING SHALL NOT BE USED BY  
OTHERS ON OTHER PROJECTS, FOR  
ADDITIONS TO THIS PROJECT, OR  
FOR COMPLETION OF THIS PROJECT  
BY OTHERS.





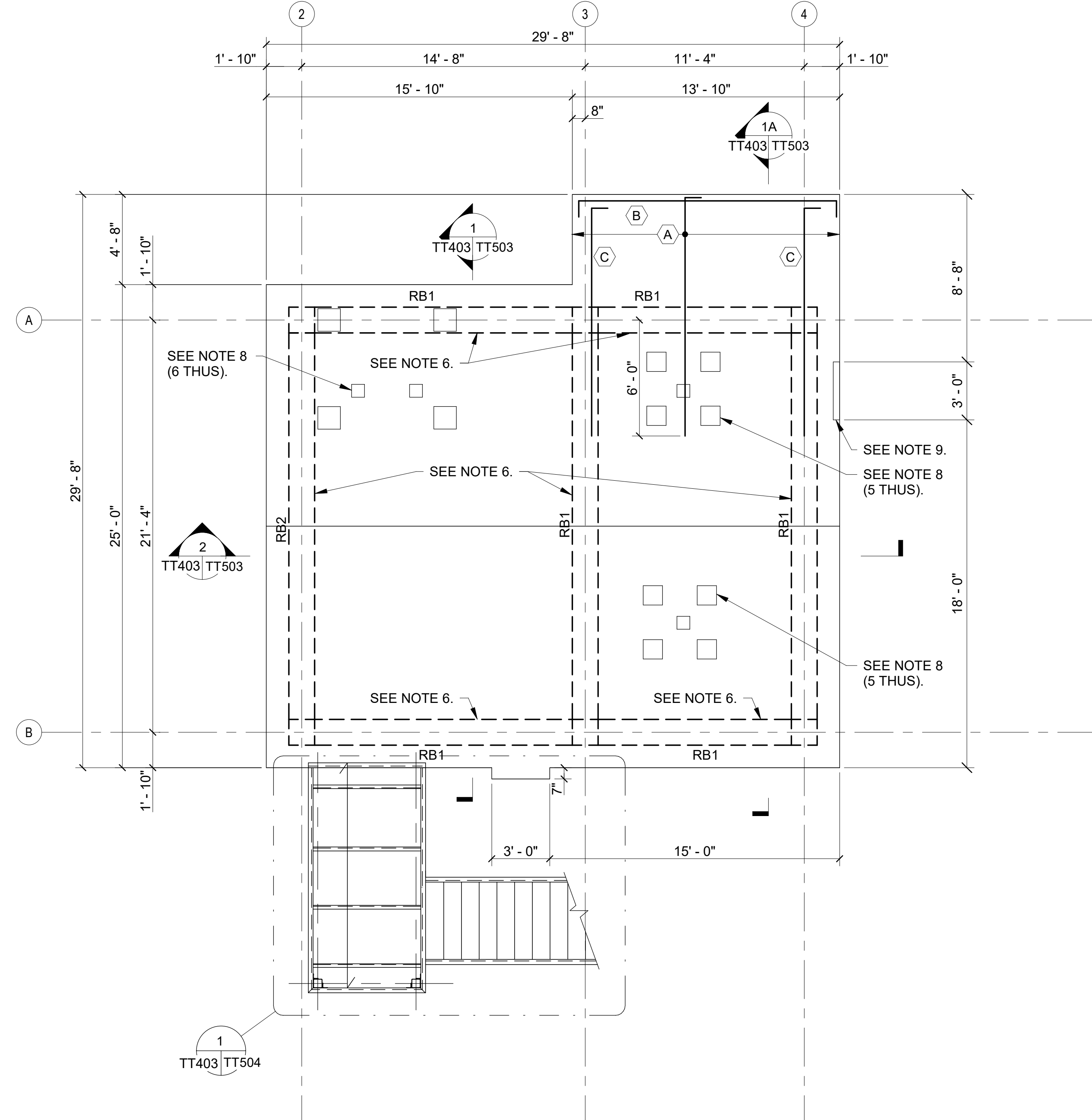
NOTES:

- SLAB THICKNESS SHALL BE 8" MINIMUM. SLOPE TOP SURFACE ONLY. SEE FIFTH FLOOR PLAN 1/TT203 FOR CONCRETE SLAB ELEVATIONS, AND SLOPES. BOTTOM OF MAIN SLAB AT +47.33', U.O.N.,
- SLAB REINFORCING SHALL BE #5 AT 12" O.C. CONTINUOUS BOTH WAYS TOP AND BOTTOM.
- OUTERMOST REINFORCING LAYERS SHALL BE IN THIS DIRECTION  $\longleftrightarrow$  IN PLAN. SLOPE TOP BARS IN N-S DIRECTION WITH TOP OF SLAB TO MAINTAIN PROPER COVER OVER ENTIRE BAR LENGTH.
- SEE PLAN FOR ADDITIONAL REINFORCING:
  - A = (6) #5 ADDITIONAL BOTTOM BARS AT EDGE OF STAIR LANDING.
  - B = (2) EACH, #5 x 5'-0" LONG DIAGONAL TOP & BOTTOM BARS AT CORNER OF OPENING.
  - C = (4) #5 ADDITIONAL TOP BARS @ 6" O.C. & (2) #5 BOTTOM BARS AT EDGE OF SLAB.
  - D = (2) #5 ADDITIONAL TOP BARS @ 12" O.C. AT EDGE OF SLAB.
  - E = (3) ADDITIONAL BOTTOM BARS AT EDGE OF STAIR LANDING.
- PROVIDE STANDARD 90° END HOOKS ON ALL TOP AND BOTTOM BARS UNLESS OTHERWISE SHOWN. HOOKS DO NOT HAVE TO BE VERTICAL. HOOKS CAN BE ROTATED TO MAINTAIN PROPER COVER AT ENDS OF BARS.
- PROVIDE PERMANENT 8" DIA. PVC SCH. 40 PIPE SLEEVE THROUGH SLAB FOR STANDPIPE CAST INTO SLAB. DO NOT CORE DRILL SLAB. NOTIFY ENGINEER IF SLEEVE MUST BE LARGER TO ACCOMMODATE STANDPIPE.
- CONCRETE BEAMS PER SCHEDULE ON SHEET TT503.
- $\longleftrightarrow$  DENOTES DIRECTION OF GRATING PLANK SPAN.
- CAST EMBEDDED ROPE ANCHOR ITEM INTO SLAB/BEAM PER FLOOR PLAN 2/TT202 AND REFERENCED DETAILS (CEILING ITEM BELOW).
- CAST EMBEDDED ROPE ANCHOR ITEM INTO SLAB/BEAM PER ROOF PLAN 1/TT203 AND REFERENCED DETAILS (ROOF ITEM AT TOP OF SLAB).
- AT NOTED LOCATION, CAST SLAB EDGE ROPE PROTECTION INTO SLAB PER DETAIL 3/TT403.



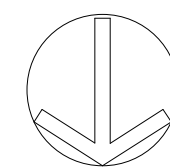
1  
TT403 TT403 SCALE 1/4" = 1'-0"

**FIFTH FLOOR/MAIN ROOF FRAMING PLAN**



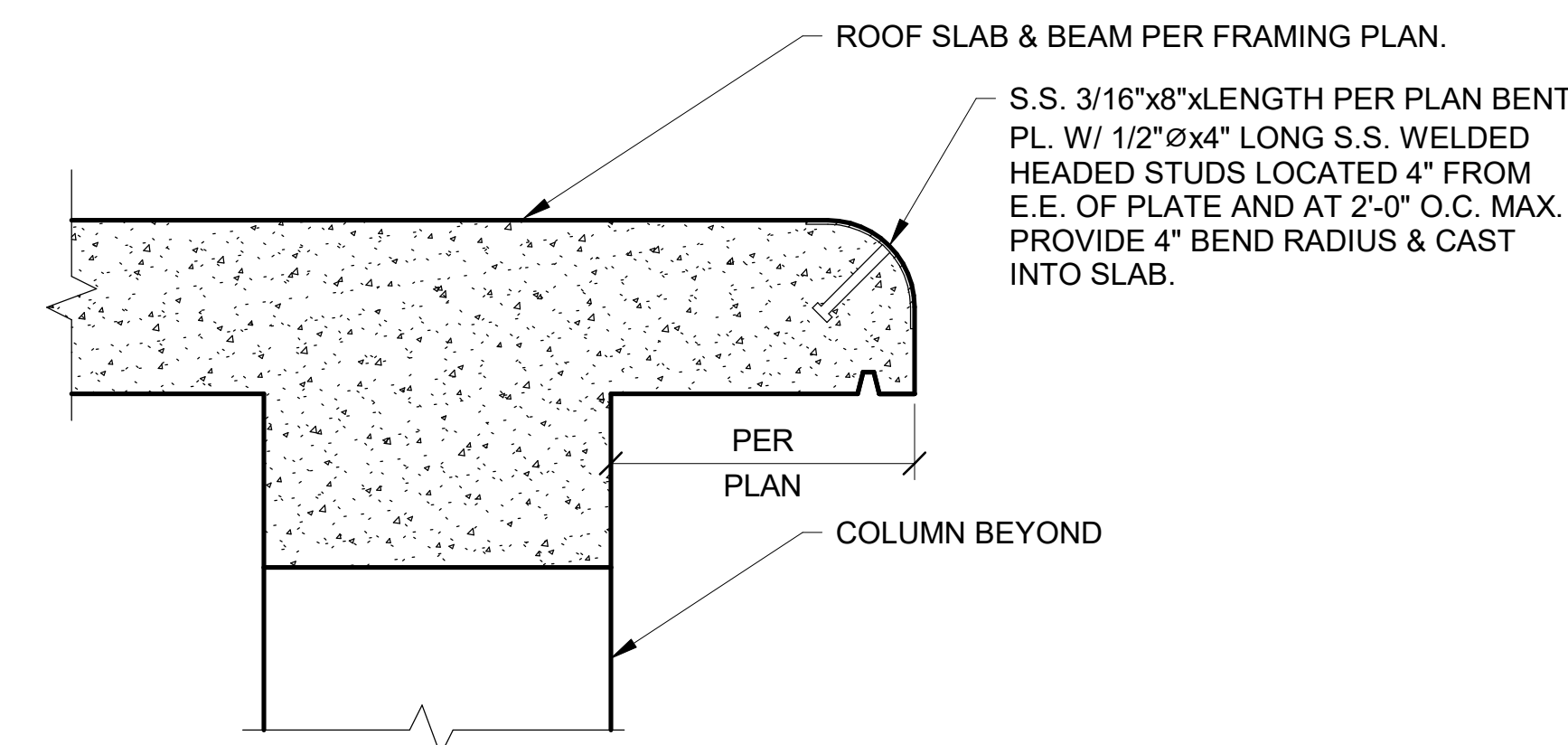
NOTES:

- SLAB THICKNESS OVER STAIRS SHALL BE 8" MINIMUM. SLOPE TOP SURFACE ONLY. SEE HIGH ROOF PLAN 2/TT203 FOR CONCRETE SLAB ELEVATIONS, AND SLOPES. BOTTOM OF MAIN SLAB AT +59.33', U.O.N.
- SLAB REINFORCING SHALL BE #5 AT 12" O.C. CONTINUOUS BOTH WAYS TOP AND BOTTOM.
- OUTERMOST REINFORCING LAYERS SHALL BE IN THIS DIRECTION  $\longleftrightarrow$  IN PLAN. SLOPE TOP BARS IN N-S DIRECTION WITH TOP OF SLAB TO MAINTAIN PROPER COVER OVER ENTIRE BAR LENGTH.
- SEE PLAN FOR ADDITIONAL REINFORCING:
  - A = #5 @ 12" O.C. ADDITIONAL TOP BARS CENTERED BETWEEN MAIN TOP BARS.
  - B = (2) #5 TOP & BOTTOM BARS WITHIN 6" OF BALCONY SLAB EDGE.
  - C = EXTEND RB1 TOP BARS TOP BARS TO EDGE OF CANTILEVERED SLAB.
- PROVIDE STANDARD 90° END HOOKS ON ALL TOP AND BOTTOM BARS UNLESS OTHERWISE SHOWN. HOOKS DO NOT HAVE TO BE VERTICAL. HOOKS CAN BE ROTATED TO MAINTAIN PROPER COVER AT ENDS OF BARS.
- CONCRETE BEAMS PER SCHEDULE ON SHEET TT503.
- $\longleftrightarrow$  DENOTES DIRECTION OF GRATING PLANK SPAN.
- CAST EMBEDDED ROPE ANCHOR ITEM INTO SLAB PER ROOF PLAN 2/TT203 AND REFERENCED DETAILS (ROOF ITEM AT TOP OF SLAB).
- AT NOTED LOCATION, CAST SLAB EDGE ROPE PROTECTION INTO SLAB PER DETAIL 3/TT403.

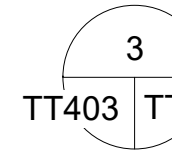


2  
TT403 TT403 SCALE 1/4" = 1'-0"

**HIGH ROOF FRAMING PLAN**



NOTE: SLAB REINFORCING NOT SHOWN FOR CLARITY.



3  
TT403 TT403 SCALE 1 1/2" = 1'-0"

**SLAB EDGE ROPE PROTECTION DETAIL**

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



1100 Dresser Court  
Raleigh, NC 27609  
Office 919.828.2301  
Email office@hh-arch.com



Elliott, LeBoeuf & McElwain  
8001 Forbes Place, Suite 201  
Springfield, VA 22151  
Ph: 703-321-2100  
Fax: 703-321-2112  
Corporate P.E. #C-2542

**WTCC EWS - FIRE & RESCUE TRAINING CENTER**

WAKE TECHNICAL COMMUNITY COLLEGE

5345 ROLESVILLE RD, WENDELL, NC 27591

NCCCS NO. 2303



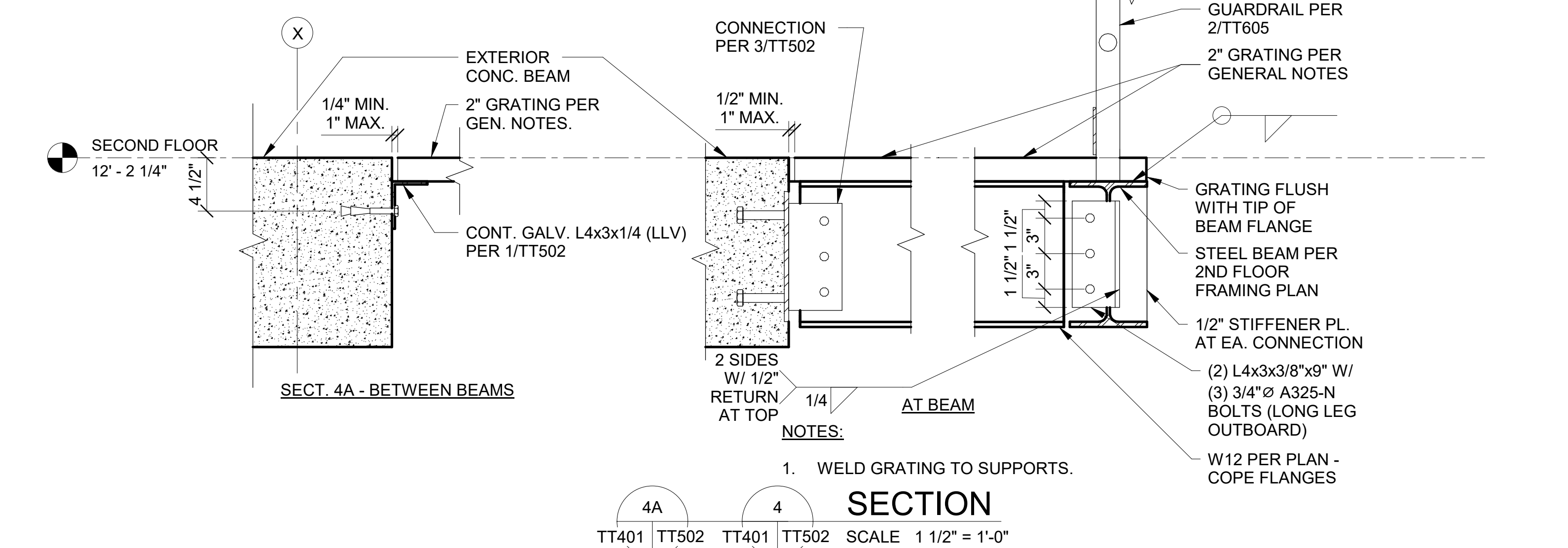
NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/2025**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET

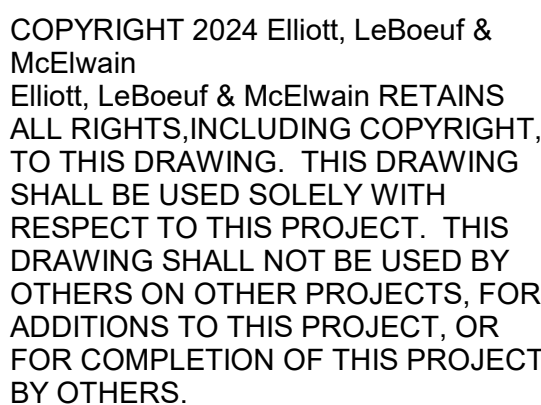
**TRAINING TOWER  
- FIFTH FLOOR &  
HIGH ROOF  
FRAMING PLANS**

**TT403**

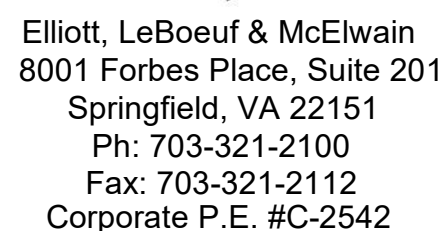












NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**

---

DATE ISSUED  
**03/14/2025**

---

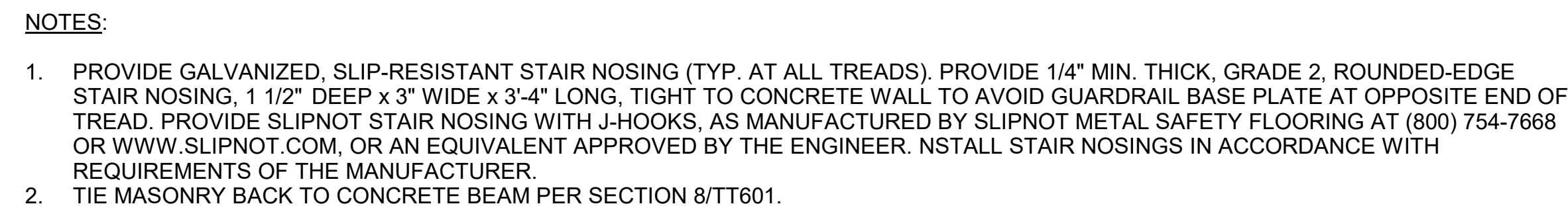
PROJECT STATUS  
**ISSUE FOR  
CONSTRUCTION**

---

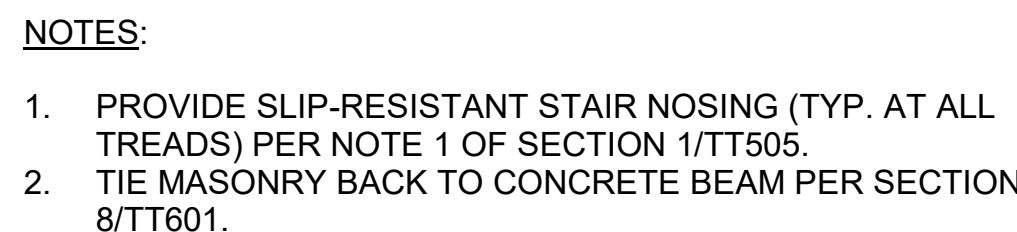
SHEET

## TRAINING TOWER - CONCRETE STAIR SECTIONS

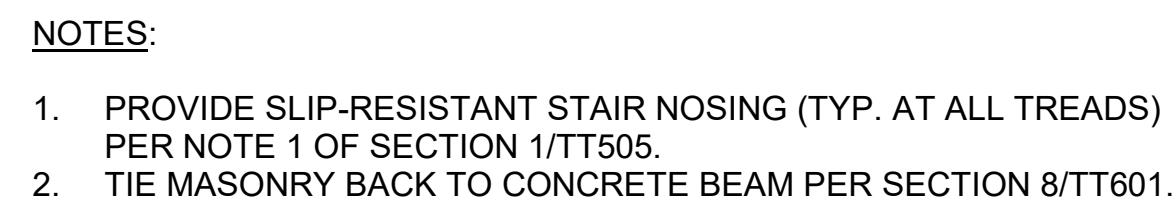
TT505



1 CONCRETE STAIR SECTION  
TT201, TT505 SCALE 3/4" = 1'-0"  
TT401



2 CONCRETE STAIR SECTION  
TT401- TT505 SCALE 3/4" = 1'-0"  
TT403



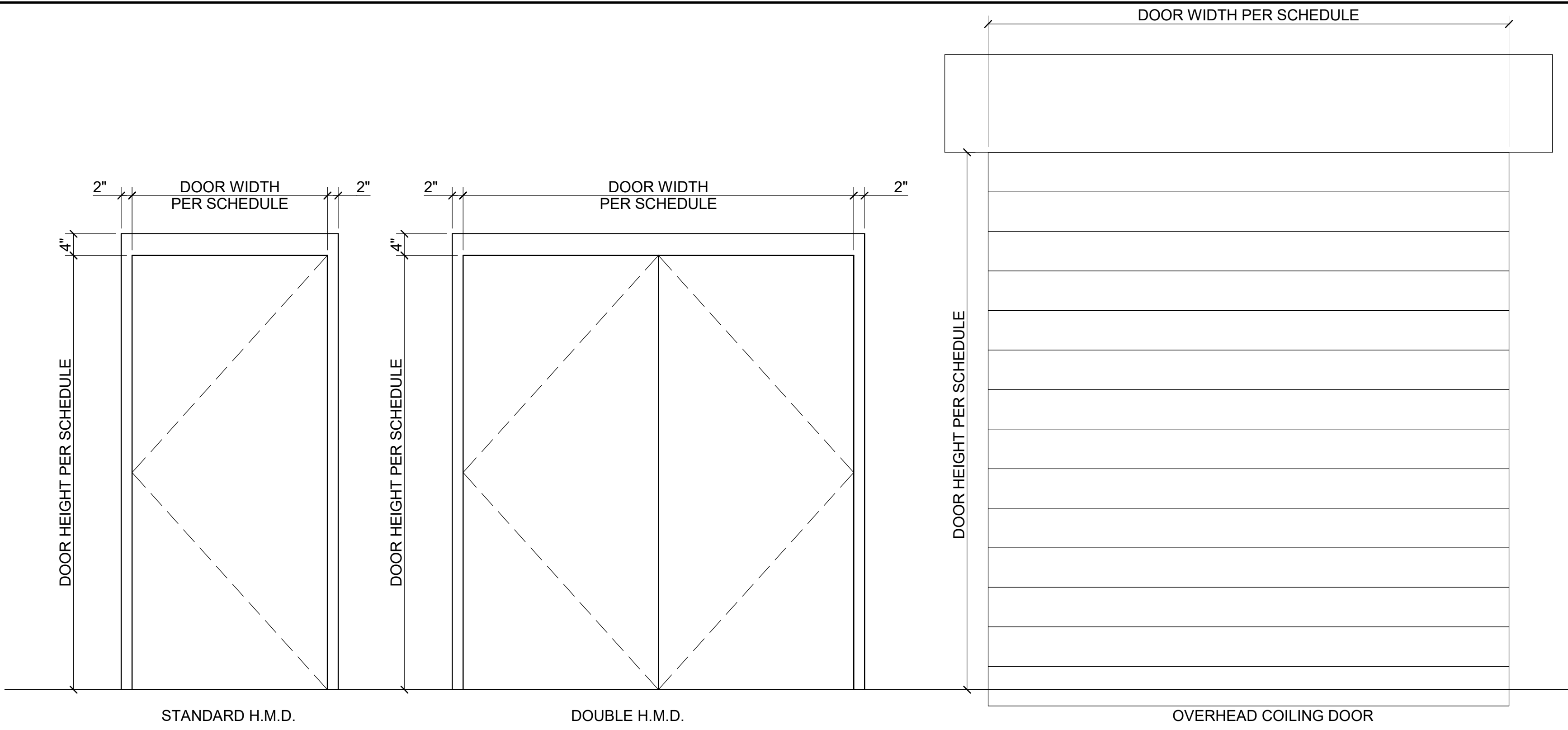
3 CONCRETE STAIR SECTION  
TT401-TT505 SCALE 3/4" = 1'-0"  
TT403



4 INTERMEDIATE STAIR LANDING SECTION  
TT401- TT505 SCALE 3/4" = 1'-0"  
TT403

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS, INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.



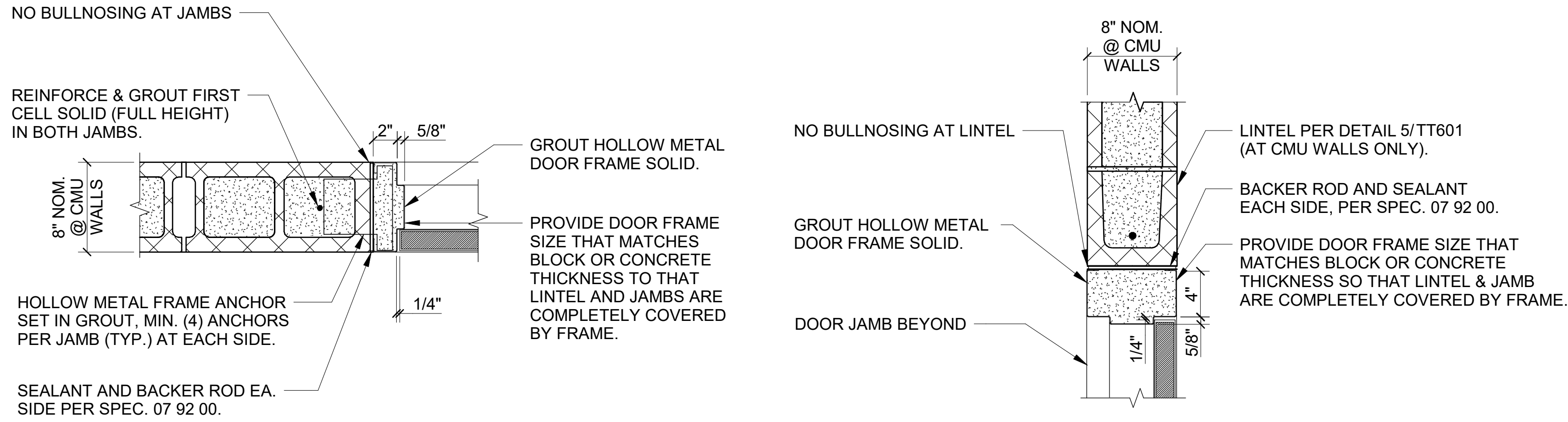


HOLLOW METAL DOOR SCHEDULE																	
DOOR NO.	INT/EXT	R.O. WIDTH	R.O. HEIGHT	DOOR		DOOR TYPE	DOOR FINISH	FRAME		DETAILS			HDW	THRESHOLD	SWEEP	REMARKS	
				DIMENSION	SS			FRAME TYPE	FRAME FINISH	HEAD	JAMB	SILL					
300	INT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	002	N	N	
301	INT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	002	N	N	
301A	EXT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	002	N	Y	
EXT-100A	EXT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	001	N	Y	
EXT-100B	EXT	8' - 0"	8' - 0"	8' - 0"	8' - 0"	OCD		PNT		PNT					N	N	SEE NOTE 8.
EXT-101	EXT	6' - 8"	7' - 4"	6' - 4"	7' - 0"	DHMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	003	N	Y	
EXT-200	EXT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	001	N	Y	
EXT-302	EXT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	001	N	Y	
EXT-400	EXT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	001	N	Y	
EXT-ST-1	EXT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	001	N	Y	
ST-1	INT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	002	N	N	
ST-2	INT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	002	N	N	
ST-3	INT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	002	N	N	
ST-4	INT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	002	N	N	
ST-5	EXT	3' - 4"	7' - 4"	3' - 0"	7' - 0"	HMD	G-90	PNT	G-90	PNT	3/TT603	2/TT603	4/TT603	001	N	Y	

- DOOR SCHEDULE NOTES:**
- REFERENCE SPEC. SECTION 08 11 13 FOR HOLLOW METAL DOORS AND FRAMES, INCLUDING MATERIALS AND FINISHES.
  - REFERENCE SPEC. SECTION 08 71 00 FOR DOOR HARDWARE INFORMATION.
  - PAINT ALL INTERIOR AND EXTERIOR HOLLOW METAL DOORS AND FRAMES PER DIVISION 09 SPECIFICATION SECTION "PAINTING".
  - ALL HOLLOW METAL DOOR FRAMES SHALL BE GROUT FILLED.
  - DOOR HEIGHT SHALL BE MEASURED FROM LOW SIDE ("TALL JAMB").
  - TRIM THE DOOR FRAME AT THE HIGH SIDE ("SHORT JAMB") SO IT WILL FIT IN OPENING SIZE. IF THE WALL IS PERPENDICULAR TO THE DIRECTION OF THE FLOOR SLOPE, BOTH JAMBS SHOULD BE THE SAME HEIGHT, AND THE DOOR FRAME SHOULD NOT REQUIRE TRIMMING TO FIT IN THE OPENING.
  - GRIND THE BOTTOM OF THE DOOR FRAME SMOOTH AT ANY CUT LOCATIONS.
  - PROVIDE 4" GAP AT BOTTOM OF DOORS PER DETAIL 5/TT603. NO GAP AT DOOR HEAD.
  - BASIS OF DESIGN FOR OVERHEAD COILING DOOR SHALL BE A MANUALLY-OPERATED GALVANIZED ROLLING SERVICE DOOR, SERIES 610, BY OVERHEAD DOOR CORPORATION. MOUNT DOOR TO EXTERIOR FACE OF CMU WALL. SIZE OF ROUGH OPENING IS APPROXIMATELY 8'-0" WIDE x 8'-0" HIGH. PROVIDE ALL COMPONENTS TO MAKE DOOR LOCKABLE WHEN IN CLOSED POSITION. SUBMIT SHOP DRAWINGS AND PRODUCT LITERATURE SHOWING COMPONENTS, SIZES AND ATTACHMENTS TO THE STRUCTURE TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
  - SEE DETAIL 5/TT603 FOR ELEVATOR DOOR DETAILS.

## HOLLOW METAL DOOR ELEVATIONS

TT201- TT603 SCALE 3/4" = 1'-0"  
TT203

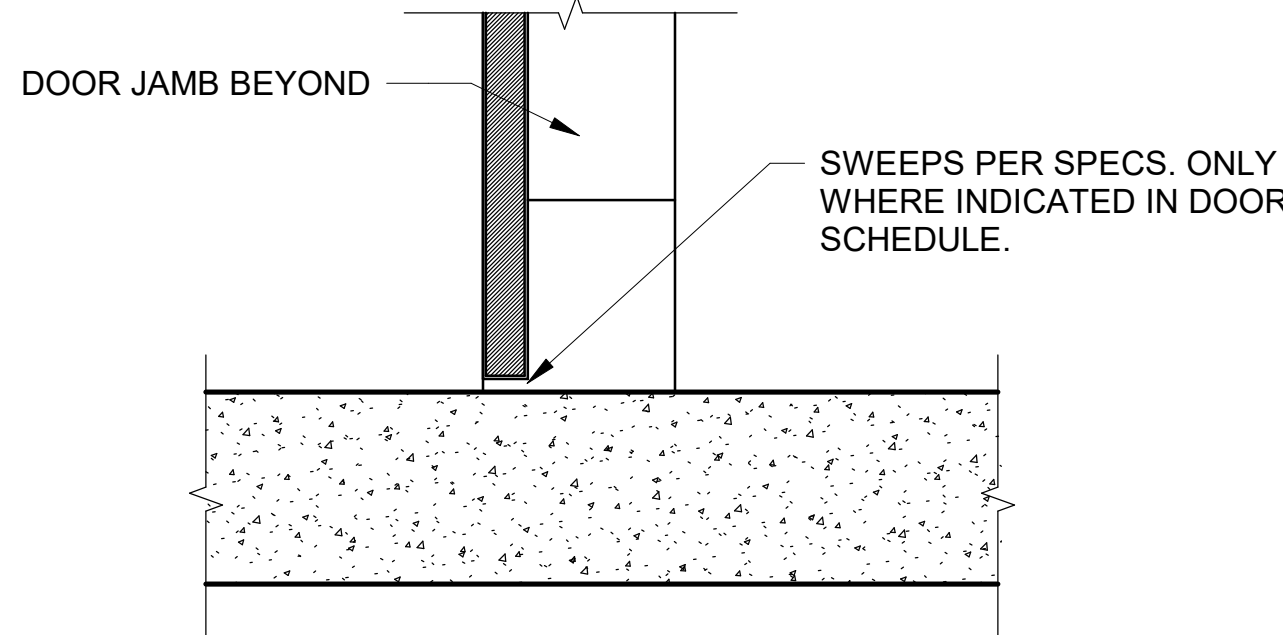


## HOLLOW METAL DOOR JAMB DETAIL

TT603 TT603 SCALE 1 1/2" = 1'-0"

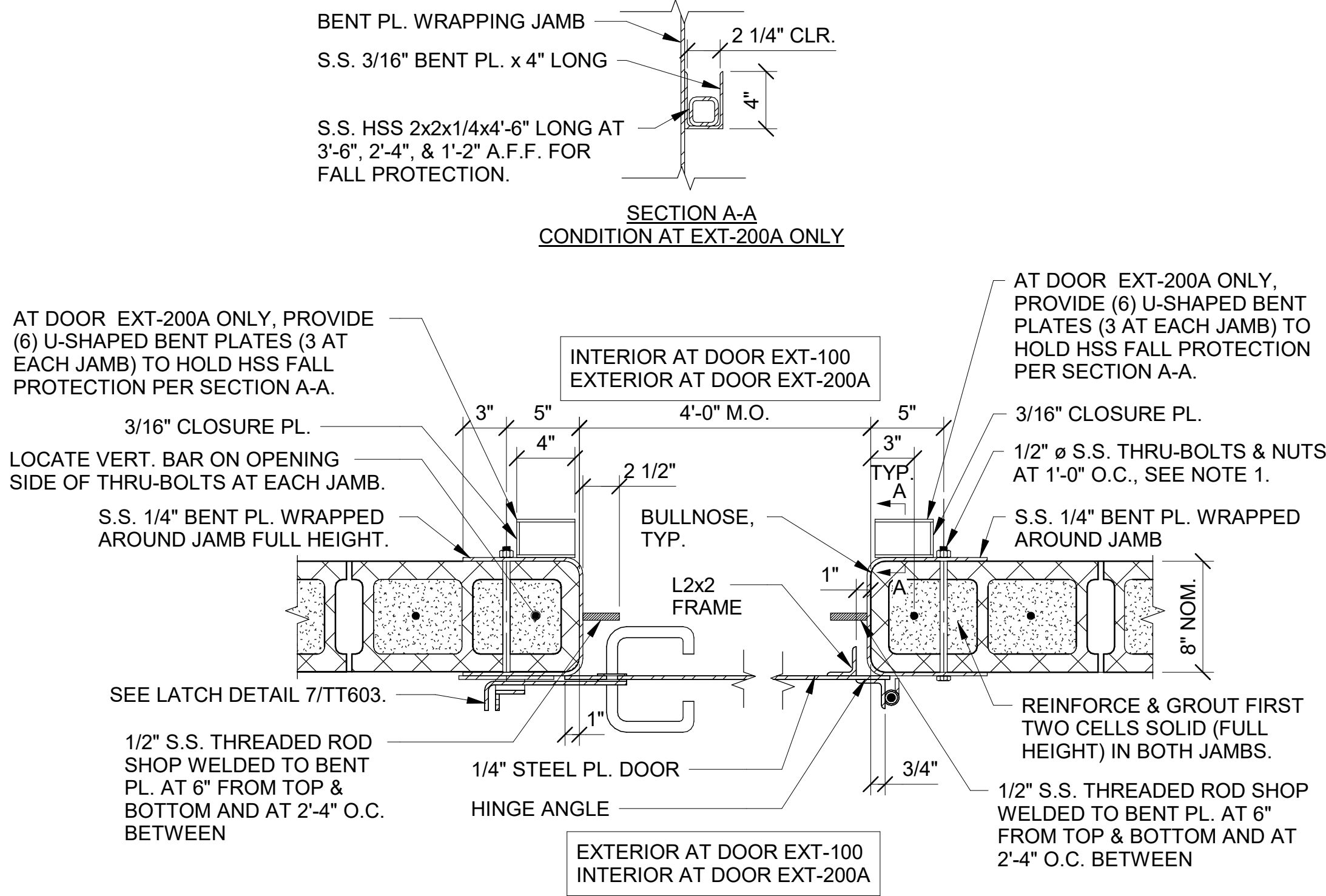
## HOLLOW METAL DOOR HEAD DETAIL

TT603 TT603 SCALE 1 1/2" = 1'-0"



## H.M.D. THRESHOLD DETAIL

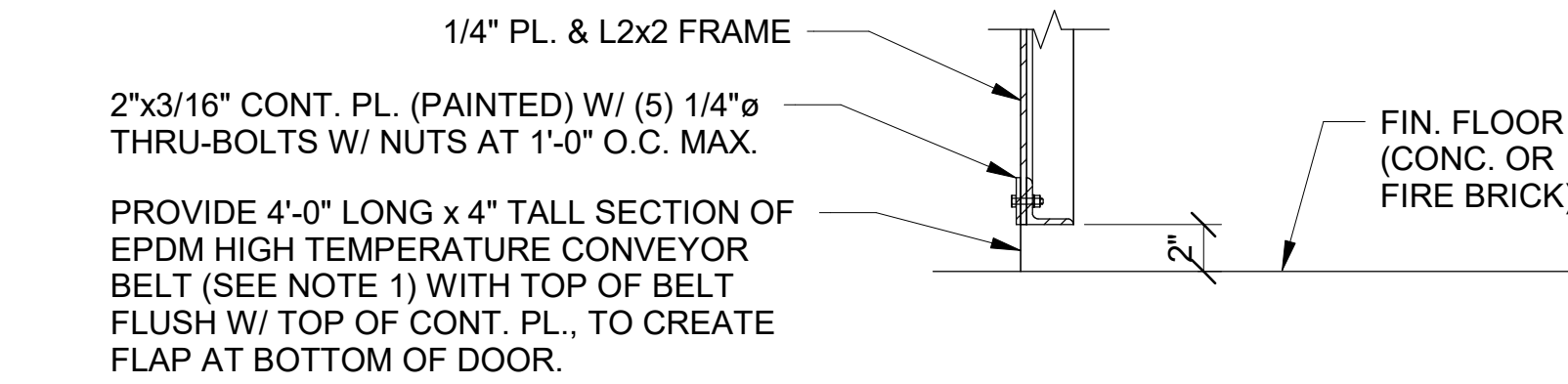
TT603 TT603 SCALE 1 1/2" = 1'-0"



- NOTES:**
- INSTALL BEFORE PLACING VERTICAL REINFORCING BAR AND GROUT IN JAMB CELLS. TRIM EXCESS THREAD LENGTH TO WITHIN 1/4" OF END OF NUTS AND GRIND END OF BOLT SMOOTH.

## STANDARD STEEL PLATE DOOR JAMB DETAIL

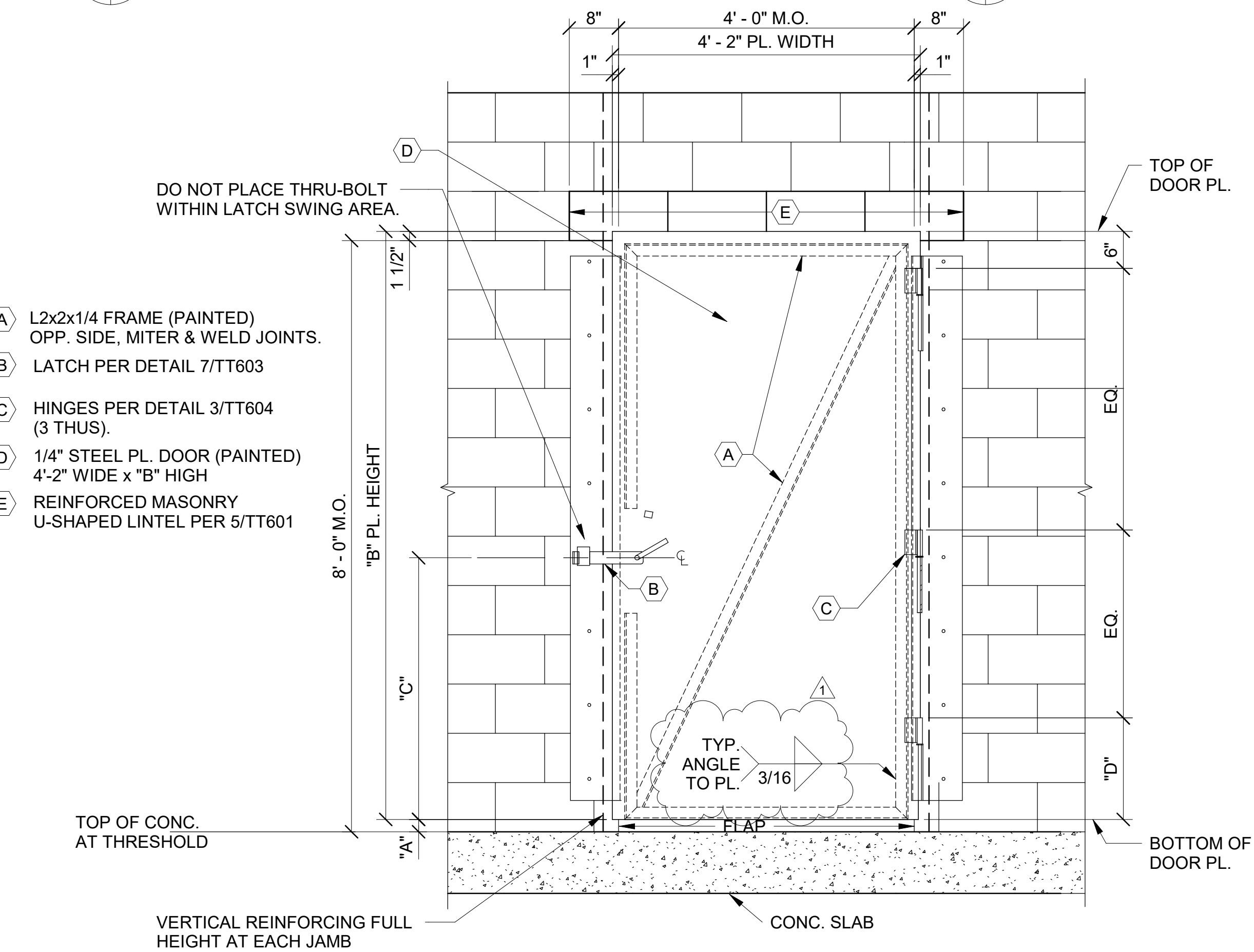
TT603 TT603 SCALE 1 1/2" = 1'-0"



- NOTE:**
- PROVIDE EPDM HIGH TEMPERATURE CONVEYOR BELT, 3/8" GAUGE WITH POLYNYLON FABRIC TYPE AND A WORKING TEMPERATURE OF 0°-600°, WITH A PEAK TEMPERATURE OF 750° (2/220 3/16x1/16 EPDM HIGH TEMP BELT BY CONVEYORBELT.COM OR AN APPROVED EQUIVALENT). INSTALL SO TOP COVER OF BELT FACES INSIDE FACE OF DOOR.

## STEEL PLATE DOOR SILL DETAIL

TT603 TT603 SCALE 1 1/2" = 1'-0"

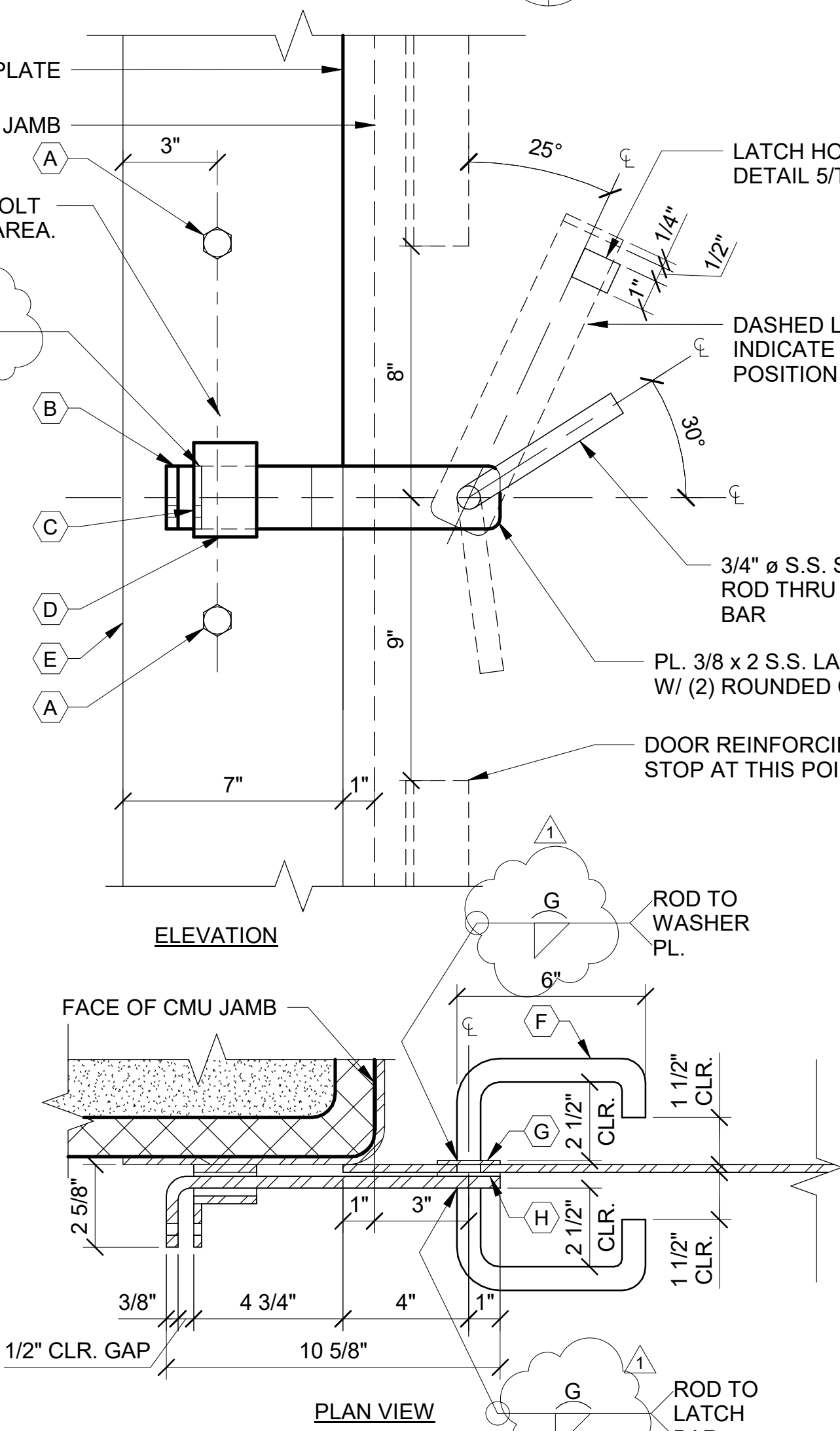


- NOTES:**
- SEE FLOOR PLANS FOR DOOR SWING DIRECTION.
  - SEE DETAILS 5 & 8 ON THIS SHEET AND DETAIL 6/TT604 FOR JAMB, SILL & HEAD DETAILS.
  - SEE DOOR DETAIL SCHEDULE ON THIS SHEET FOR DIMENSIONS "A", "B", "C" AND "D".
  - USE TOP OF CONCRETE FLOOR ELEVATION AT CENTER OF DOORWAY AS POINT OF REFERENCE FOR DOOR DIMENSIONS.

DOOR DETAIL SCHEDULE						
DOOR MARK	DIMENSION MARK				DOOR TYPE	PRIMARY DETAIL
	"A"	"B"	"C"	"D"		
EXT-100	2"	7'- 11 1/2"	3' - 0"	1' - 0"	STANDARD STEEL PL.	6/TT603
EXT-200A	2"	7'- 11 1/2"	3' - 0"	1' - 0"	STANDARD STEEL PL.	6/TT603

## ELEVATION - STANDARD STEEL PLATE DOOR

TT201 TT603 SCALE 3/4" = 1'-0"



## STANDARD STEEL PLATE DOOR LATCH DETAILS

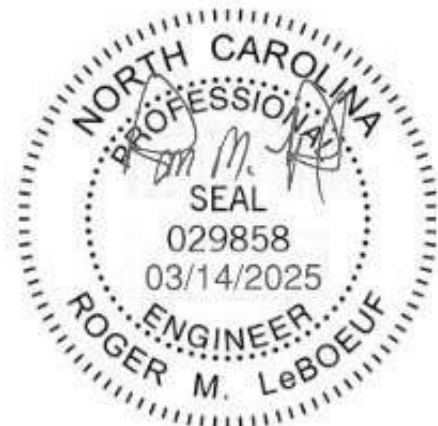
TT603 TT603 SCALE 3" = 1'-0"

- SEQUENCE NOTES:**
- PASS ROD THROUGH 7/8"Ø HOLE IN LATCH BAR.
  - PASS ROD THROUGH 7/8"Ø HOLE IN DOOR PLATE WITH WASHER BETWEEN LATCH BAR AND DOOR PLATE.
  - WELD ROD TO LATCH BAR.
  - HOLD ASSEMBLY FIRMLY IN PLACE AND WELD ROD TO WASHER AT INTERIOR FACE OF DOOR. FINISHED ASSEMBLY SHALL NOT WOBBLE AND SHALL ROTATE EASILY WITHOUT SIGNIFICANT EFFORT.

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.

NO.	REVISION	DATE
1	Addendum #1	04/14/25





NO.	REVISION	DATE
1	Addendum #1	04/14/25

JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/2025**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET

**TRAINING TOWER - TYPICAL WINDOW SHUTTER DETAILS**

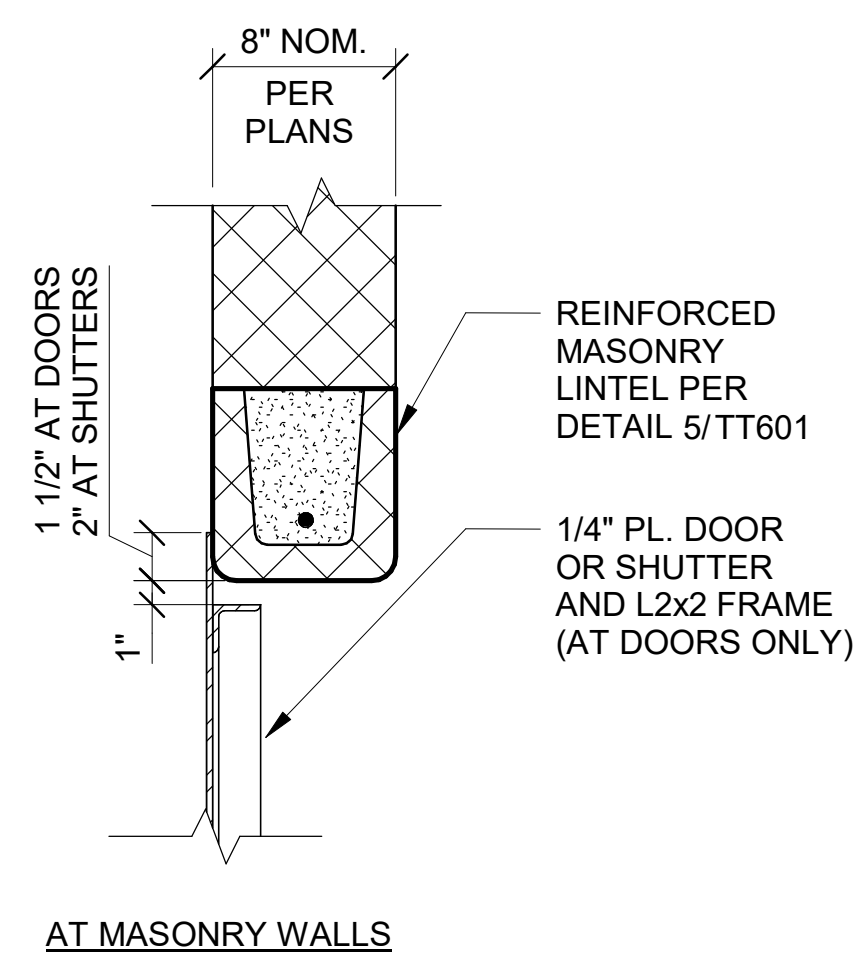
TT604

## NOTES:

- SEE DETAILS 8, 6 & 9 ON THIS SHEET FOR JAMB, HEAD, AND SILL DETAILS AND 10/TT604 FOR WINDOW SHUTTER CATCH DETAIL.
- USE TOP OF CONCRETE FLOOR ELEVATION AT CENTER OF WINDOW OPENING AS POINT OF REFERENCE FOR WINDOW DIMENSIONS.
- SEE FLOOR PLANS FOR WINDOW SHUTTER SWING DIRECTION.
- AT LOCATIONS WHERE A LADDER TIE-OFF POINT IS BELOW WINDOW, REINFORCE & GROUT EVERY CELL BELOW WINDOW SILL.

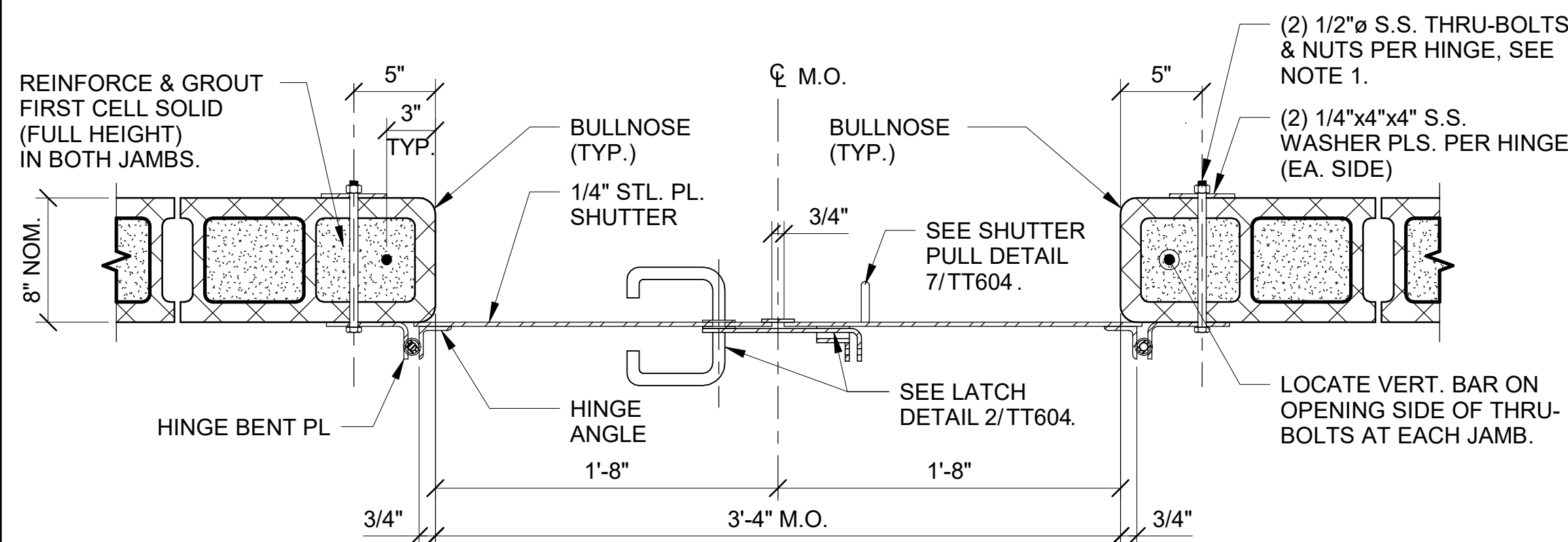
## 1 TYPICAL WINDOW EXTERIOR ELEVATION

TT604 TT604 SCALE 3/4" = 1'-0"



## 6 STEEL PL. DOOR AND WINDOW HEAD SECTIONS

TT603, TT604 SCALE 1 1/2" = 1'-0"



## NOTES:

- AT MASONRY WALLS, INSTALL THRU-BOLTS BEFORE PLACING VERTICAL REINFORCING BAR AND GROUT IN JAMB CELLS. TRIM EXCESS THREAD LENGTH TO WITHIN 1/4" OF ENDS OF NUTS. GRIND SMOOTH AFTER TIGHTENING.

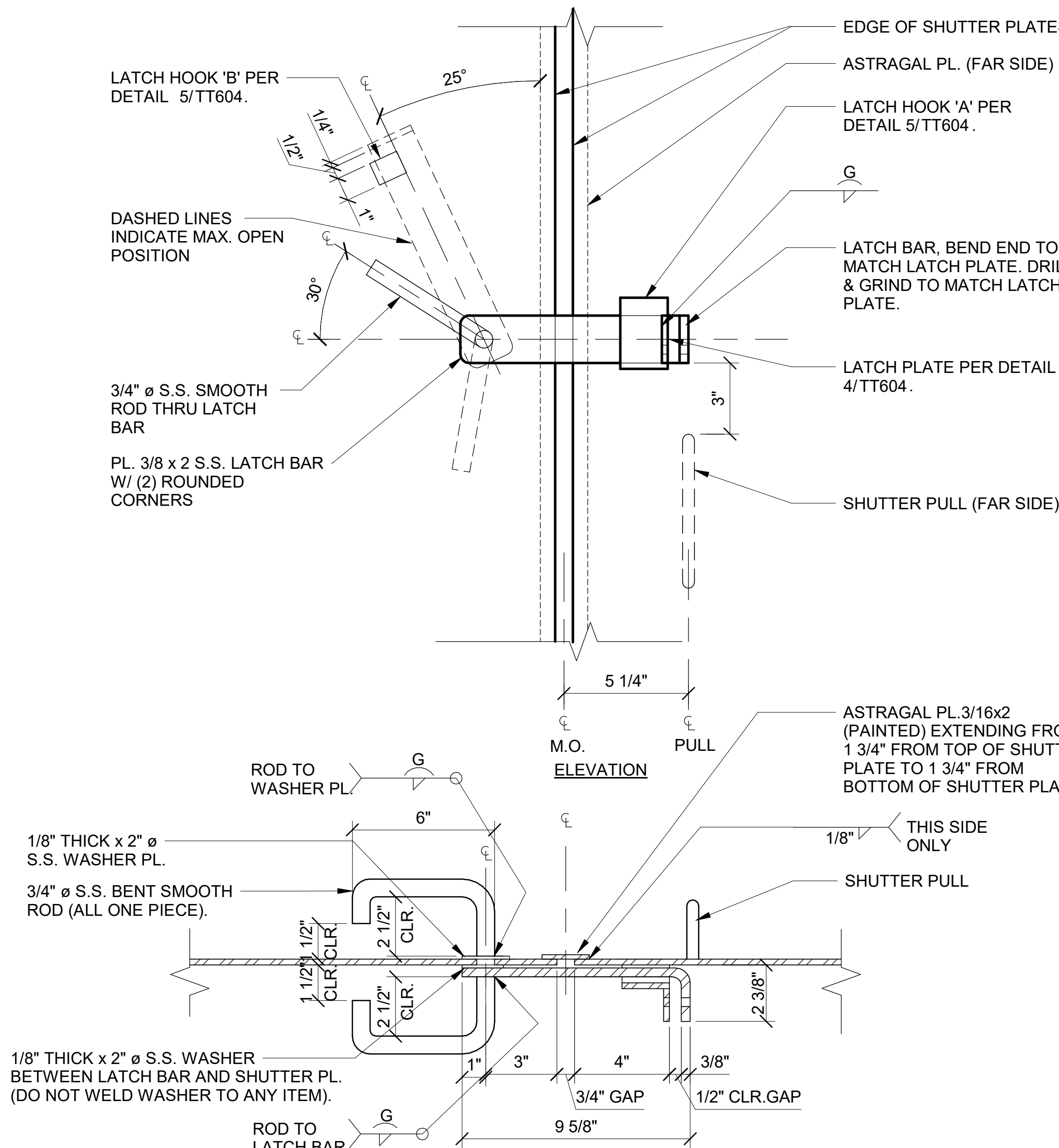
## 8 WINDOW JAMB PLAN DETAILS

TT604 TT604 SCALE 1 1/2" = 1'-0"

## SEQUENCE NOTES:

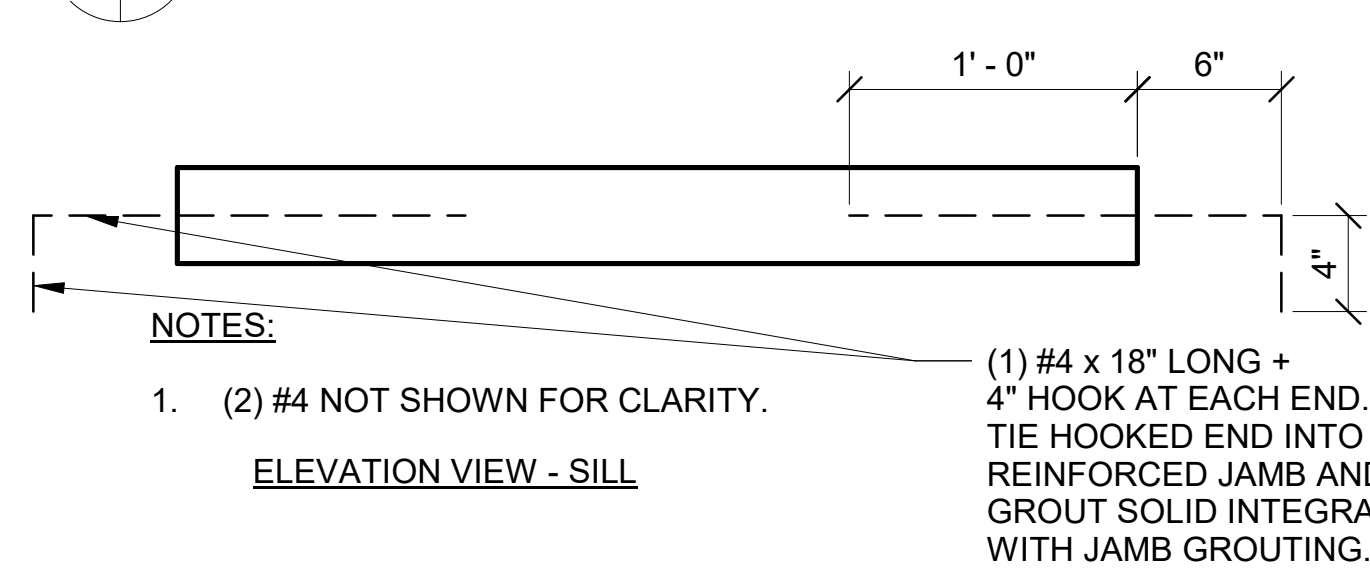
- PASS ROD THROUGH 7/8" Ø HOLE IN LATCH BAR.
- PASS ROD THROUGH 7/8" Ø HOLE IN SHUTTER PL. WITH WASHER BETWEEN LATCH BAR AND SHUTTER PL.
- WELD ROD TO LATCH BAR.
- HOLD ASSEMBLY FIRMLY IN PLACE AND WELD ROD TO WASHER AT INTERIOR FACE OF SHUTTER. FINISHED ASSEMBLY SHALL NOT WOBBLE AND SHALL ROTATE EASILY WITHOUT SIGNIFICANT EFFORT.

## PLAN VIEW



## 2 WINDOW SHUTTER LATCH DETAILS

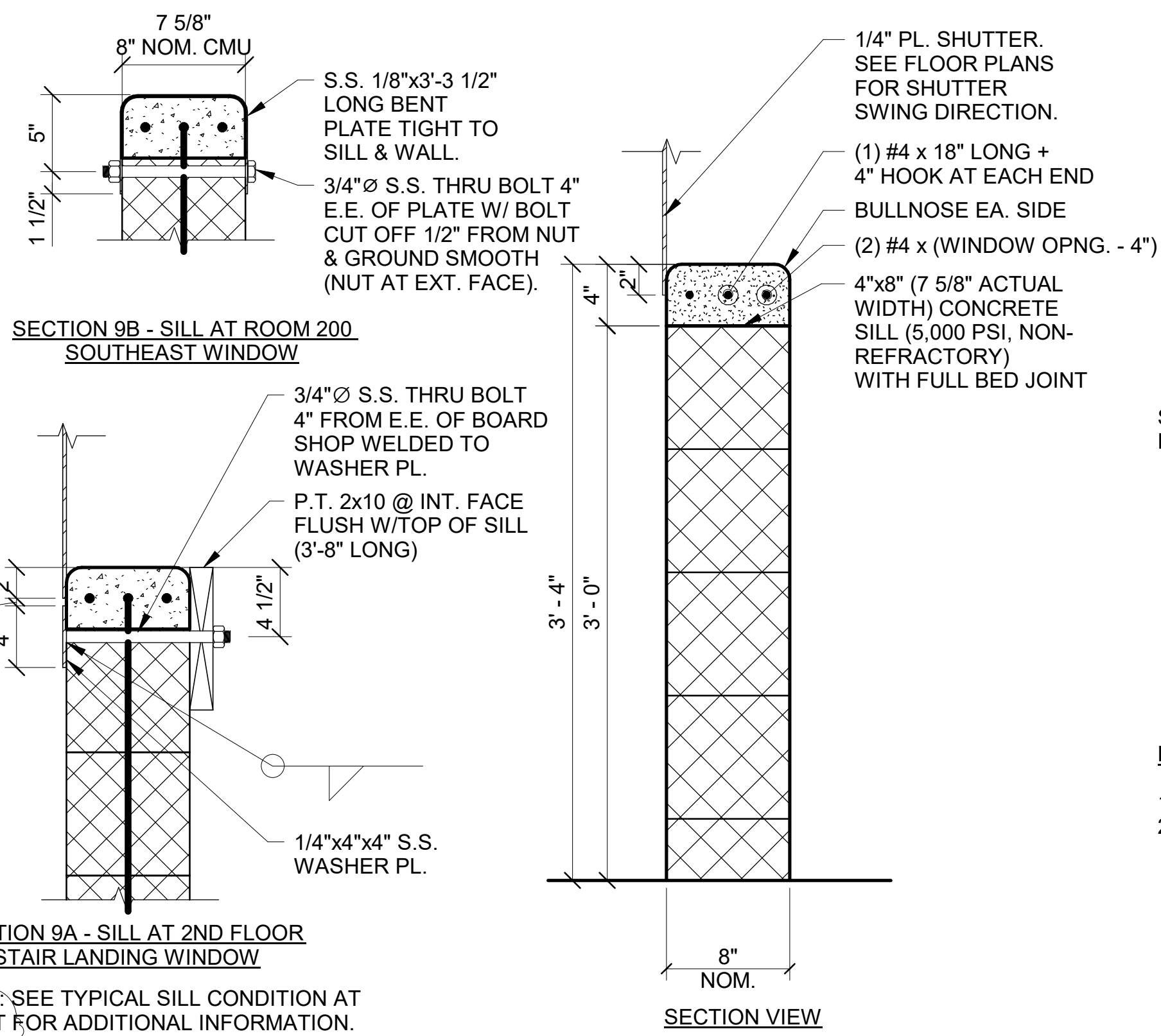
TT604 TT604 SCALE 3" = 1'-0"



## NOTES:

- (2) #4 NOT SHOWN FOR CLARITY.

## ELEVATION VIEW - SILL



## SECTION 9A - SILL AT 2ND FLOOR STAIR LANDING WINDOW

NOTE: SEE TYPICAL SILL CONDITION AT RIGHT FOR ADDITIONAL INFORMATION.

## 9 WINDOW SILL SECTIONS

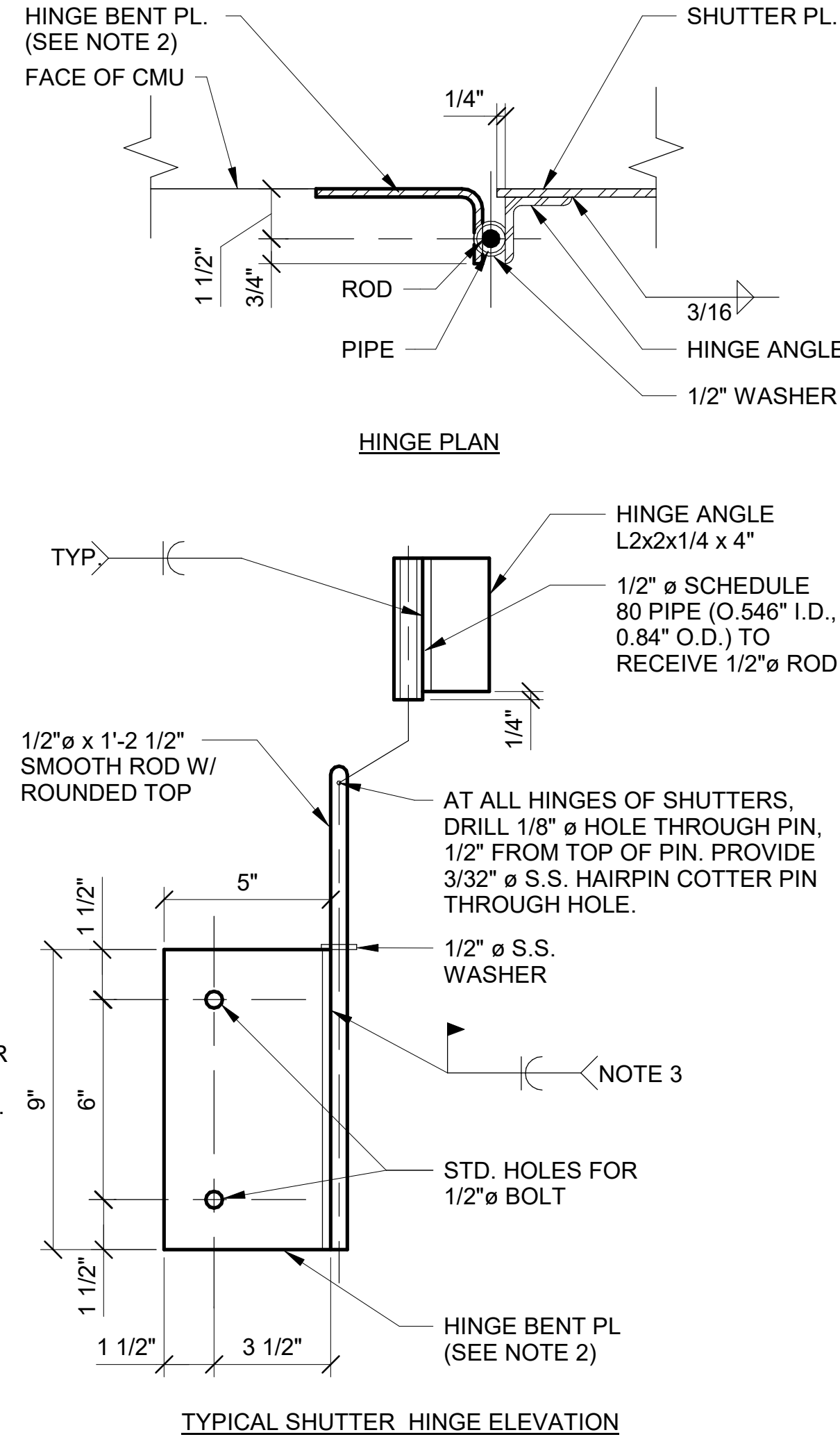
TT201 TT604 TT201 TT604 TT604 TT604 SCALE 1 1/2" = 1'-0"

## NOTES:

- ALL PIECES SHALL BE S.S.
- BENT PL. 1/4x5x2 1/4x9 @ ALL STEEL PL. WINDOWS.
- HOLD SHUTTER IN PLACE WHILE FIELD WELDING ROD TO ASSURE PROPER FIT AND OPERATION OF HUNG SHUTTER.

## TYPICAL SHUTTER & STEEL PL. DOOR HINGE DETAILS

TT603, TT604 SCALE 3" = 1'-0"

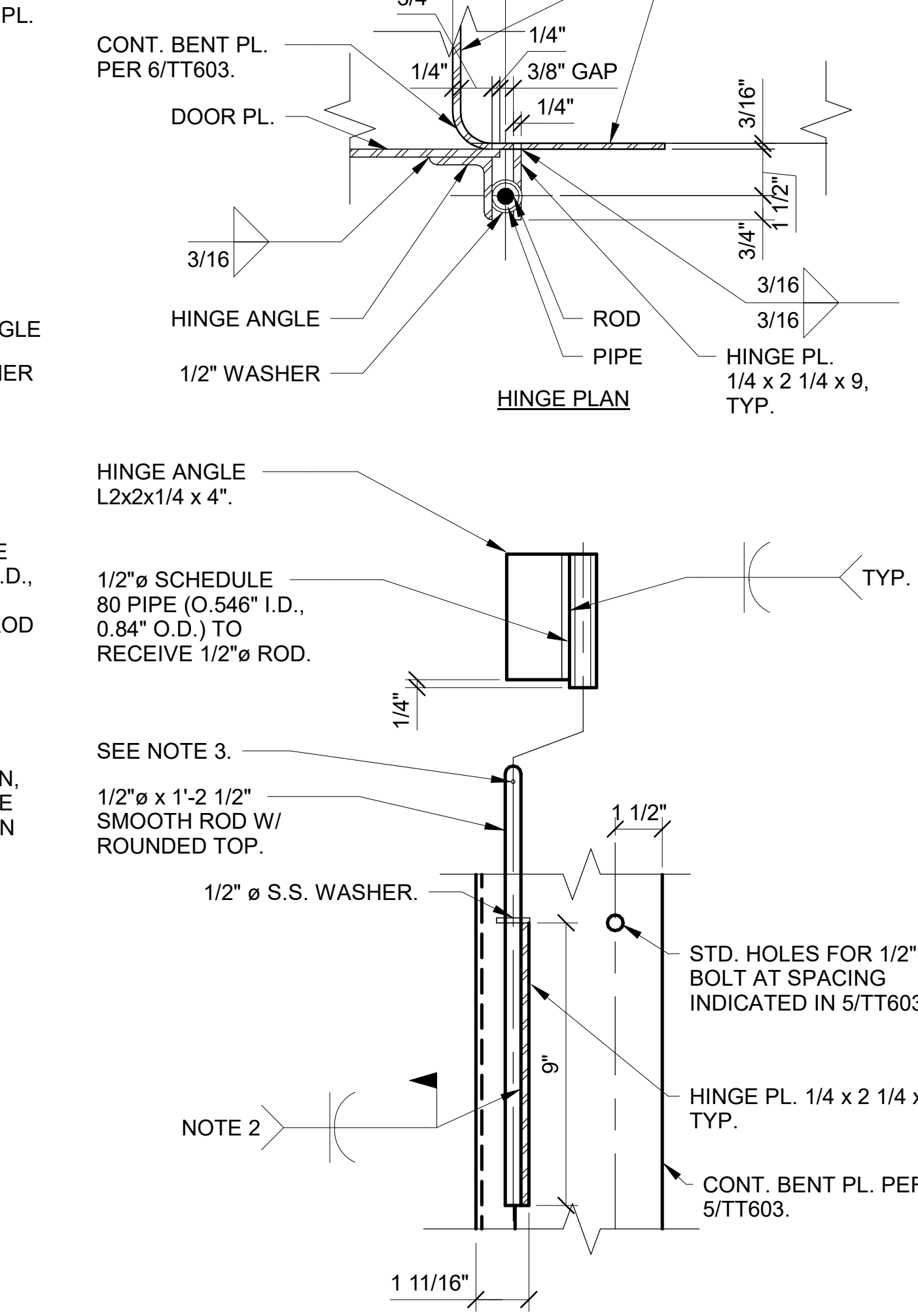


## TYPICAL SHUTTER HINGE ELEVATION

## NOTES:

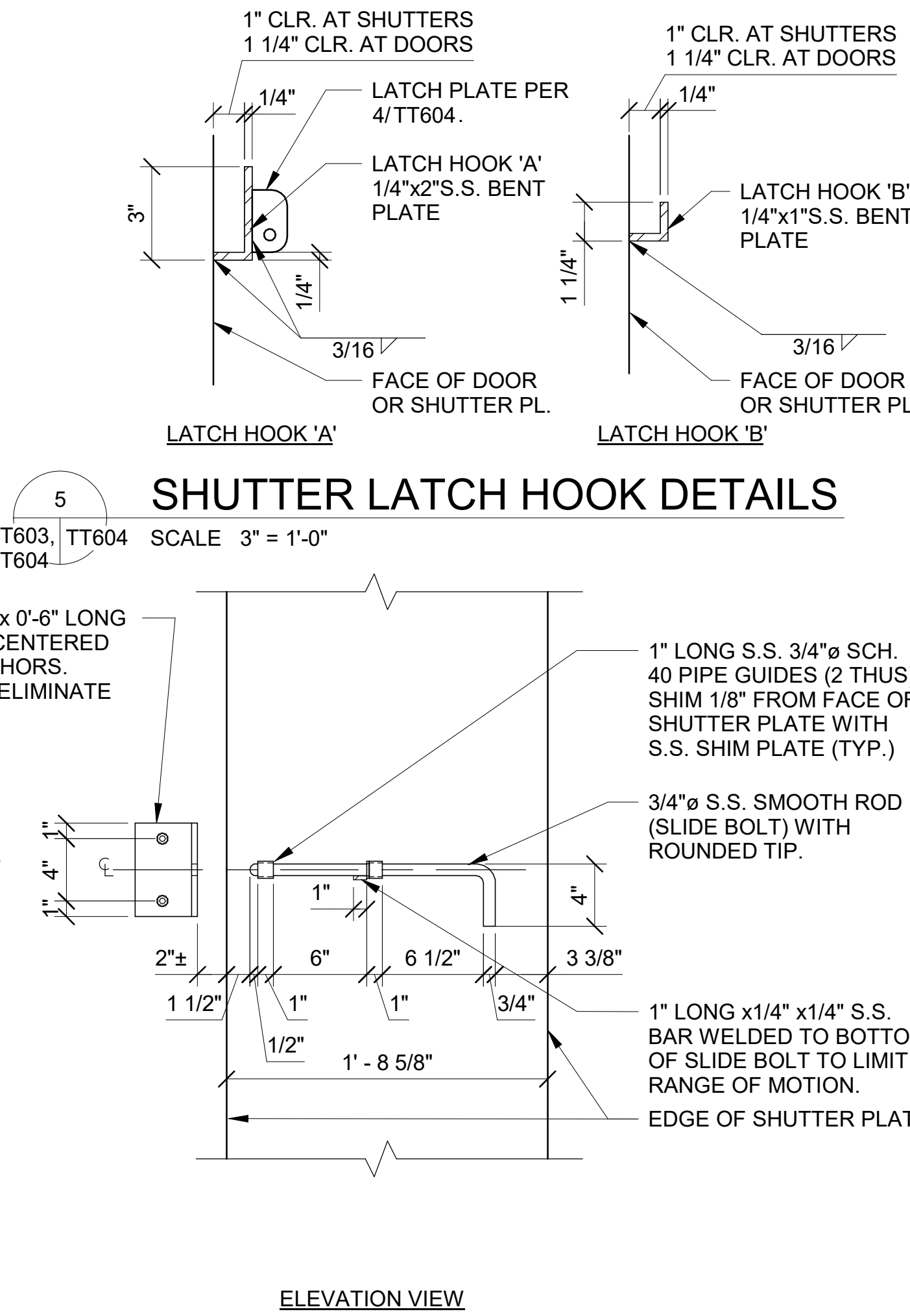
- ALL PIECES SHALL BE S.S.
- HOLD DOOR IN PLACE WHILE FIELD WELDING ROD TO ASSURE PROPER FIT AND OPERATION OF HUNG DOOR.
- AT TOP OF DOOR HINGES, DRILL 1/8" Ø HOLE THROUGH PIN, 1/2" FROM TOP OF PIN. PROVIDE 3/32" Ø S.S. HAIRPIN COTTER PIN THROUGH HOLE.

## TYPICAL STEEL PL. DOOR HINGE ELEVATION



## 5 SHUTTER LATCH HOOK DETAILS

TT603, TT604 SCALE 3" = 1'-0"



## NOTE: HINGES NOT SHOWN.

## PLAN VIEW

## NOTES:

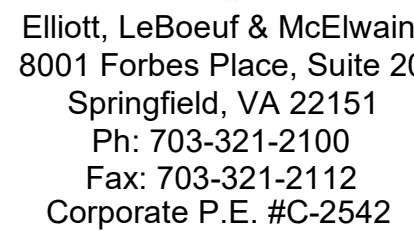
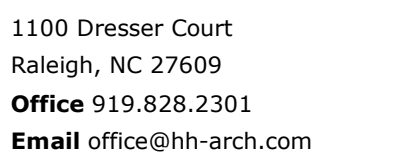
- SHUTTER PLATE IS SHOWN IN OPEN POSITION FROM EXTERIOR ELEVATION. LATCH BAR HAS BEEN OMITTED FROM THIS DETAIL.
- AFTER HANGING SHUTTERS, OPEN SHUTTERS AND LAY BACK AGAINST WALL. FIELD LOCATE AND INSTALL CATCH ANGLES ON BOTH SIDES SO THAT SLIDE BOLTS ALIGN WITH SLOTTED HOLES AND OPERATE SMOOTHLY.

## WINDOW SHUTTER CATCH ASSEMBLY DETAILS

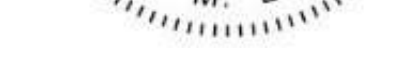
TT604 TT604 SCALE 1 1/2" = 1'-0"

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.





## NCCCS NO. 2303



JOB NUMBER  
**22056**

---

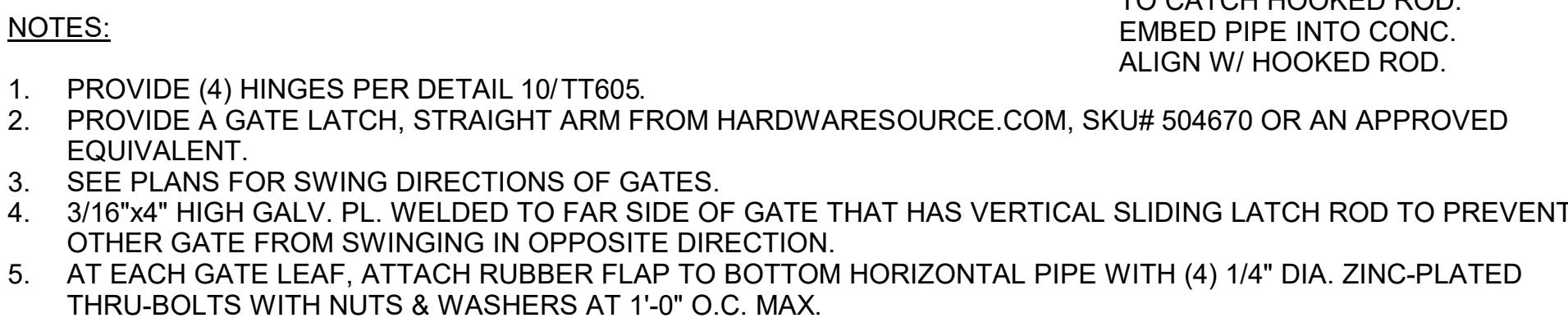
DATE ISSUED  
**03/14/2025**

---

PROJECT STATUS  
**ISSUE FOR  
CONSTRUCTION**

---

SHEET



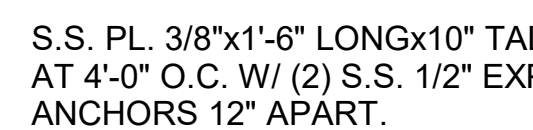
1 DETAILS  
TT203 TT606 SCALE 3/8" = 1'-0"



2 DETAIL  
TT606 TT606 SCALE 3" = 1'-0"



5 ELEVATO  
TT603 TT606 SCALE 1/2" = 1'-0"



1. PROVIDE (2) HINGES PER DETAIL 10/T605.
2. AT NOTED LOCATION, PROVIDE 3/16"x4" TALL GALV. PLATE WELDED TO FAR SIDE OF FIXED VERTICAL PIPE TO PREVENT GATE FROM SWINGING INTO THE SHAFT.
3. ATTACH RUBBER FLAP TO BOTTOM HORIZONTAL PIPE WITH (4) 1/4" DIA. ZINC-PLATED THRU-BOLTS WITH NUTS AND WASHERS AT 1'-0" O.C. MAX.
4. THIS ELEVATION LOOKS EAST

6 ELEVATO  
TT202, TT606 SCALE 1/2" = 1'-0"

COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS  
ALL RIGHTS, INCLUDING COPYRIGHT  
TO THIS DRAWING. THIS DRAWING  
SHALL BE USED SOLELY WITH  
RESPECT TO THIS PROJECT. THIS  
DRAWING SHALL NOT BE USED BY  
OTHERS ON OTHER PROJECTS, FOR  
ADDITIONS TO THIS PROJECT, OR  
FOR COMPLETION OF THIS PROJECT  
BY OTHERS.

Printed Time: 4/16/2025 1:48:59 PM These drawings are the property of HH Architecture, P.A. They may not be used for any purpose without written permission. Copyright 2022 by HH Architecture, P.A. All rights reserved.



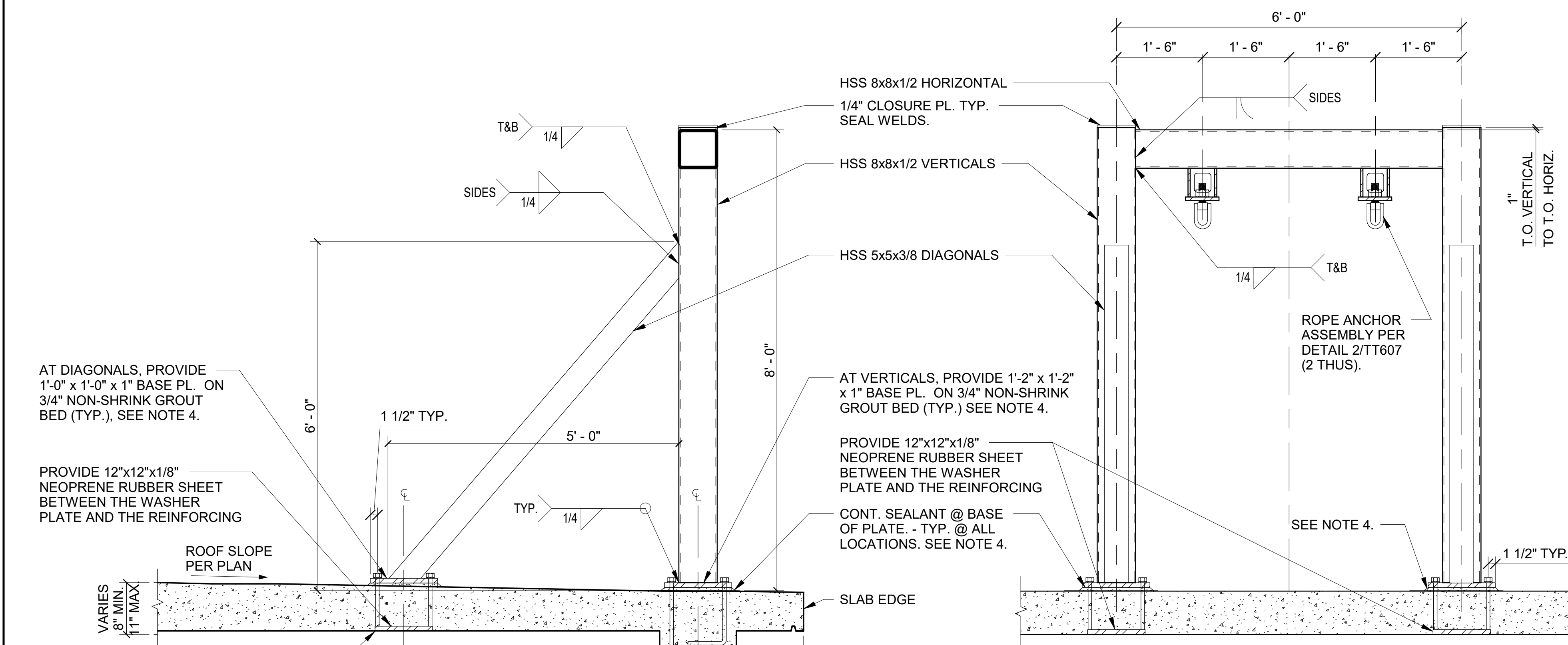


NO.	REVISION	DATE
1	Addendum #1	04/14/25

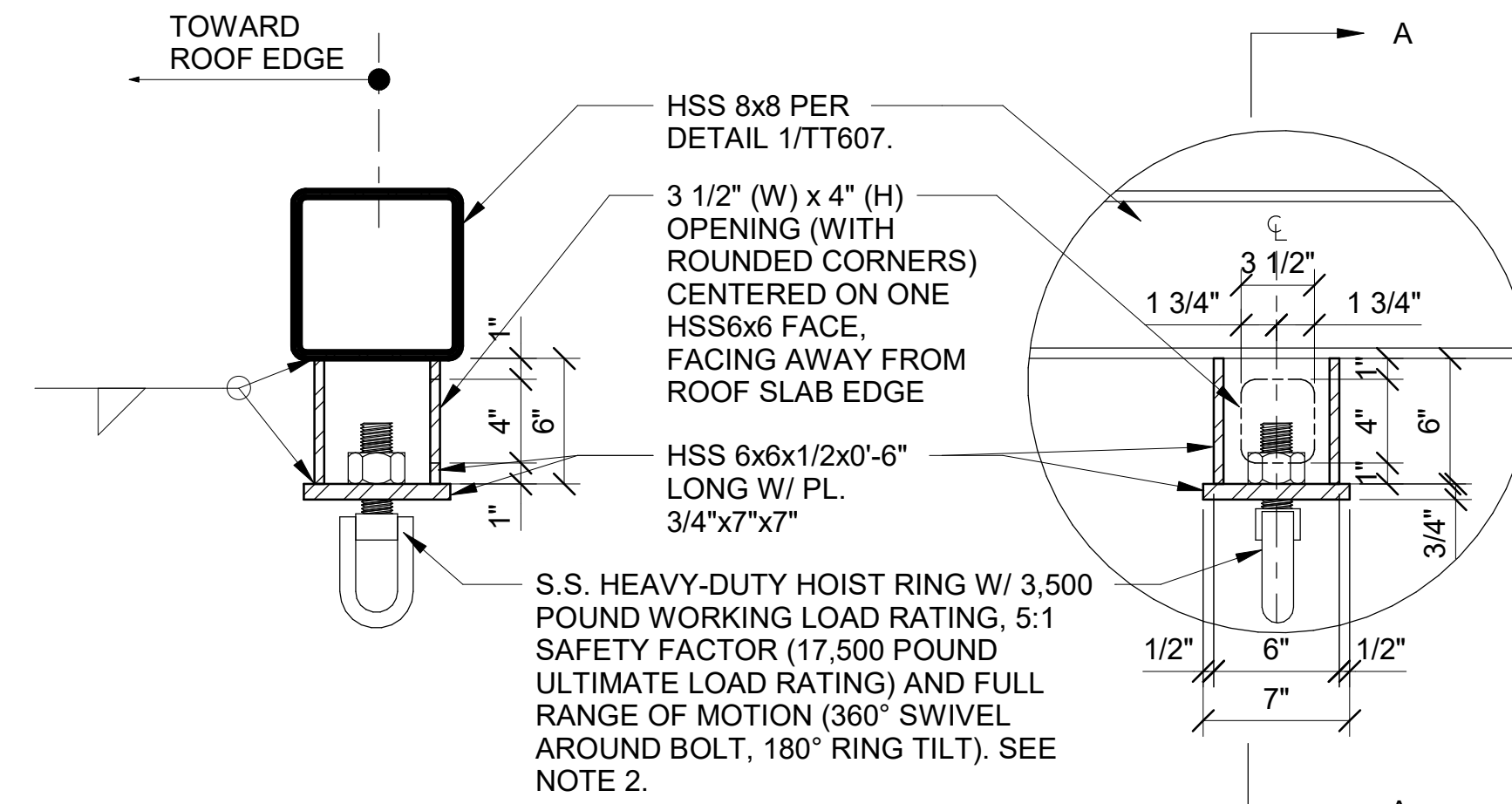
JOB NUMBER  
**22056**  
DATE ISSUED  
**03/14/2025**  
PROJECT STATUS  
**ISSUE FOR CONSTRUCTION**  
SHEET

**TRAINING TOWER -  
MISCELLANEOUS  
DETAILS**

TT607



REAR ELEVATION



SECTION A-A

ELEVATION

NOTES:

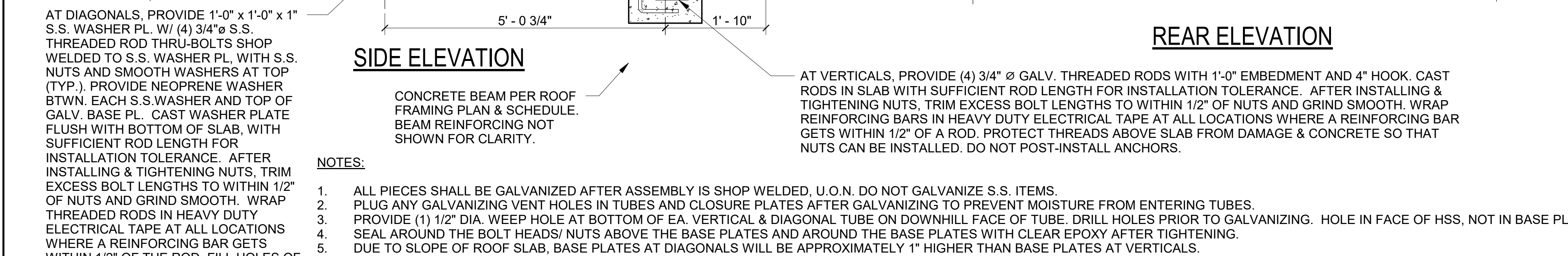
- ALL PIECES SHALL BE GALVANIZED, U.O.N.
- PROVIDE PART #29103 BY AMERICAN DRILL BUSHING CO. OR AN EQUIVALENT APPROVED BY THE ENGINEER BY ALL AMERICAN PRODUCTS GROUP OR BAIRSTOW LIFTING PRODUCTS CO.

GANTRY ROPE ANCHOR ASSEMBLY  
DETAILS

TT607 TT607 SCALE 1 1/2" = 1'-0"

MANHOLE SECTION DETAILS

TT202, TT607 TT402 SCALE 3/4" = 1'-0"



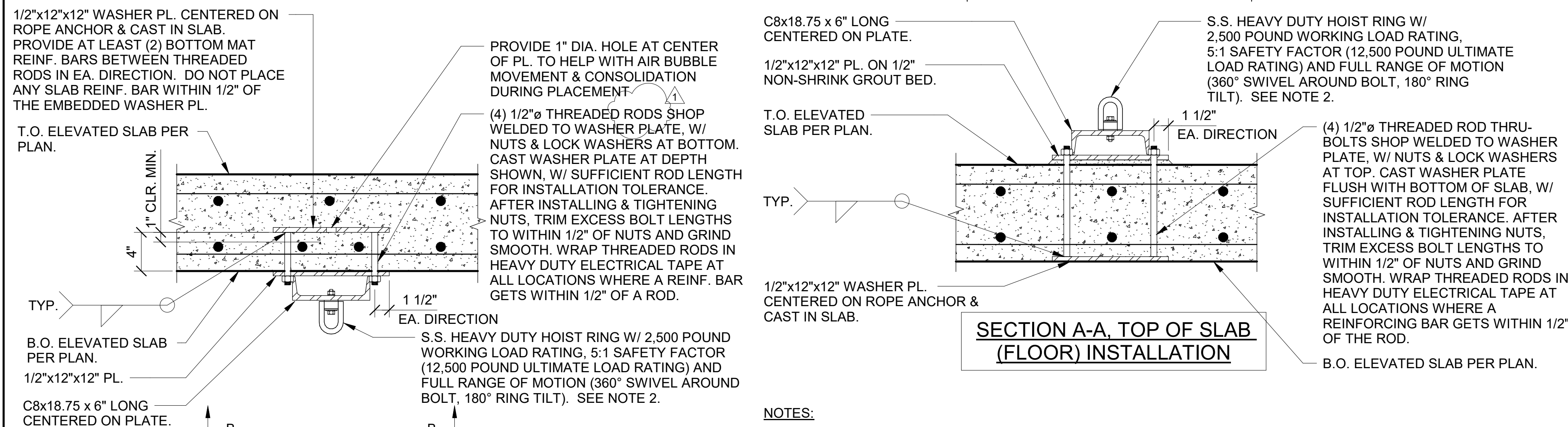
SIDE ELEVATION

NOTES:

- ALL PIECES SHALL BE GALVANIZED AFTER ASSEMBLY IS SHOP WELDED, U.O.N. DO NOT GALVANIZE S.S. ITEMS.
- PLUG ANY GALVANIZING VENT HOLES IN TUBES AND CLOSURE PLATES AFTER GALVANIZING TO PREVENT MOISTURE FROM ENTERING TUBES.
- PROVIDE (1) 1/2" DIA. WEEP HOLE AT BOTTOM OF EA. VERTICAL & DIAGONAL TUBE ON DOWNHILL FACE OF TUBE. DRILL HOLES PRIOR TO GALVANIZING. HOLE IN FACE OF HSS, NOT IN BASE PL.
- SEAL AROUND THE BOLT HEADS/ NUTS ABOVE THE BASE PLATES AND AROUND THE BASE PLATES WITH CLEAR EPOXY AFTER TIGHTENING.
- DUE TO SLOPE OF ROOF SLAB, BASE PLATES AT DIAGONALS WILL BE APPROXIMATELY 1" HIGHER THAN BASE PLATES AT VERTICALS.

ROPE GANTRY FRAME DETAILS

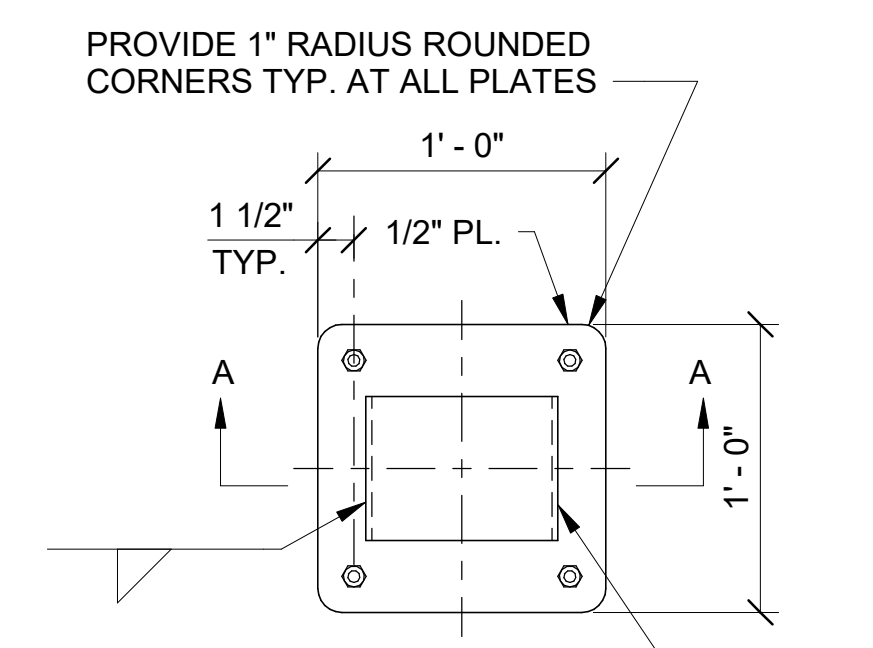
TT203, TT607 TT301, TT302 SCALE 3/4" = 1'-0"



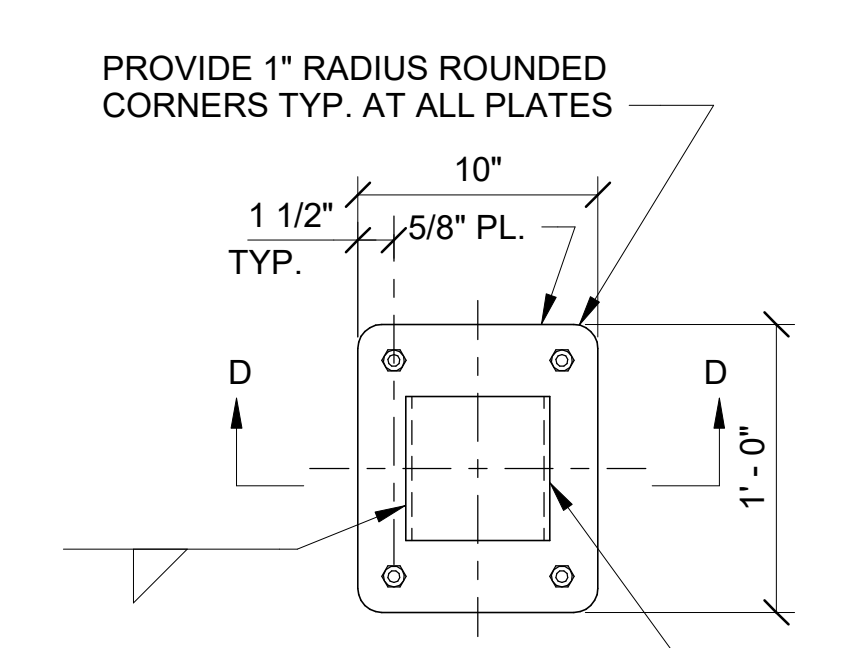
SECTION A-A, TOP OF SLAB  
(FLOOR) INSTALLATION

NOTES:

- ALL PIECES SHALL BE 316 STAINLESS STEEL, U.O.N.
- PROVIDE PART #29009 BY AMERICAN DRILL BUSHING CO. OR AN EQUIVALENT APPROVED BY THE ENGINEER BY ALL AMERICAN PRODUCTS GROUP OR BAIRSTOW LIFTING PRODUCTS CO.
- DO NOT USE POST-INSTALLED ANCHORS.
- GRIND ALL CHANNEL AND PLATE EDGES AND CORNERS SMOOTH.

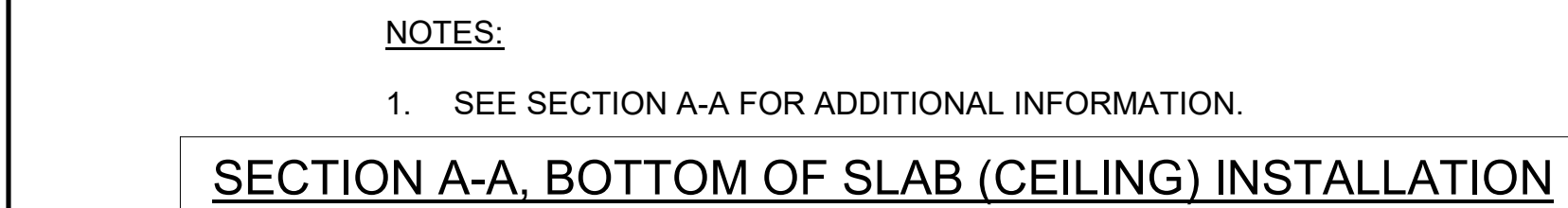


PLAN DETAIL AND REFLECTED  
CEILING PLAN DETAIL A-A, TYPICAL  
CONDITION ATTACHED TO SLAB



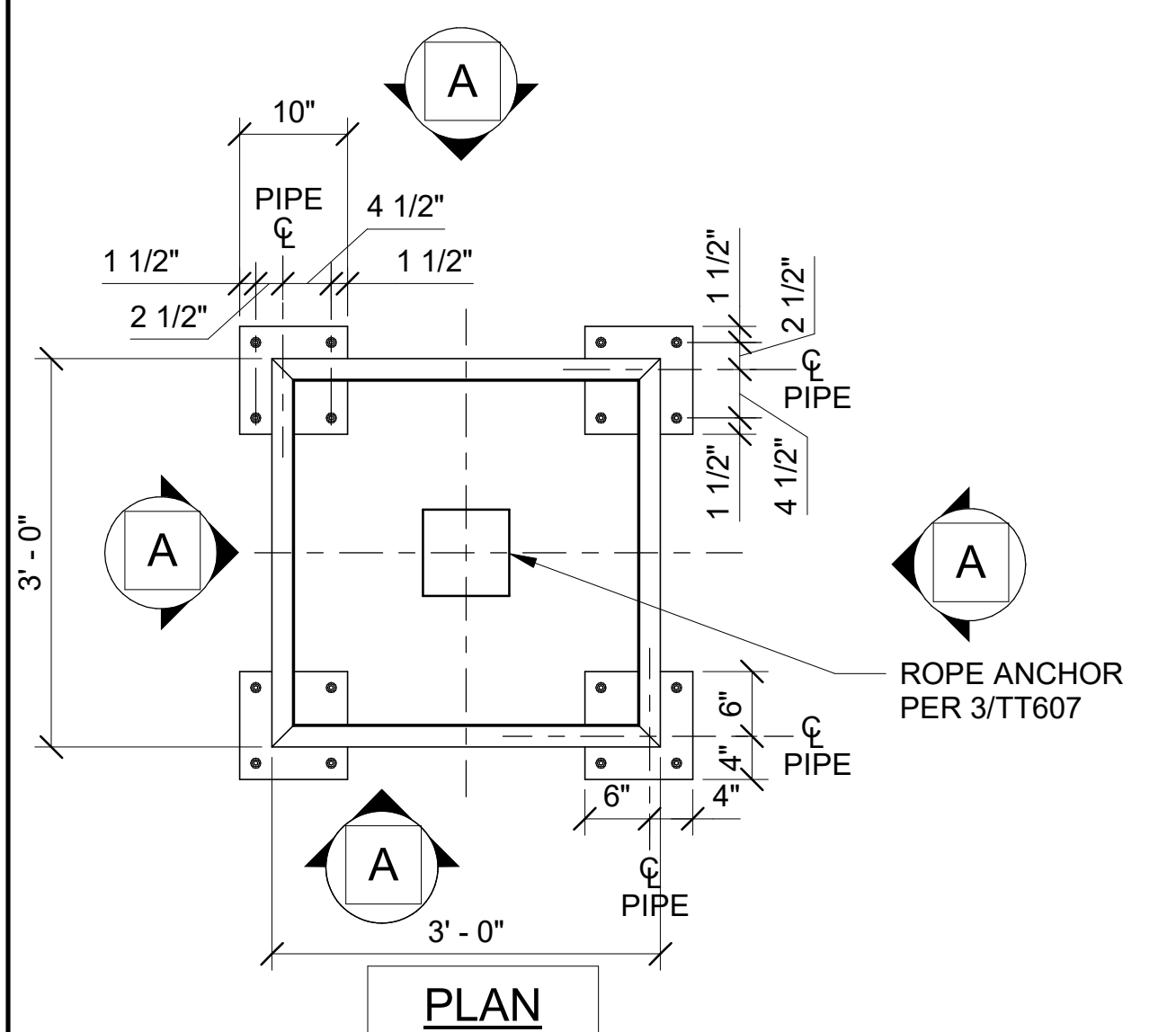
REFLECTED CEILING PLAN  
DETAIL C-C, CEILING CONDITION  
ATTACHED TO BOTTOM OF  
CONCRETE BEAM

SECTION D-D



SECTION A-A, BOTTOM OF SLAB (CEILING) INSTALLATION

- SEE SECTION A-A FOR ADDITIONAL INFORMATION.

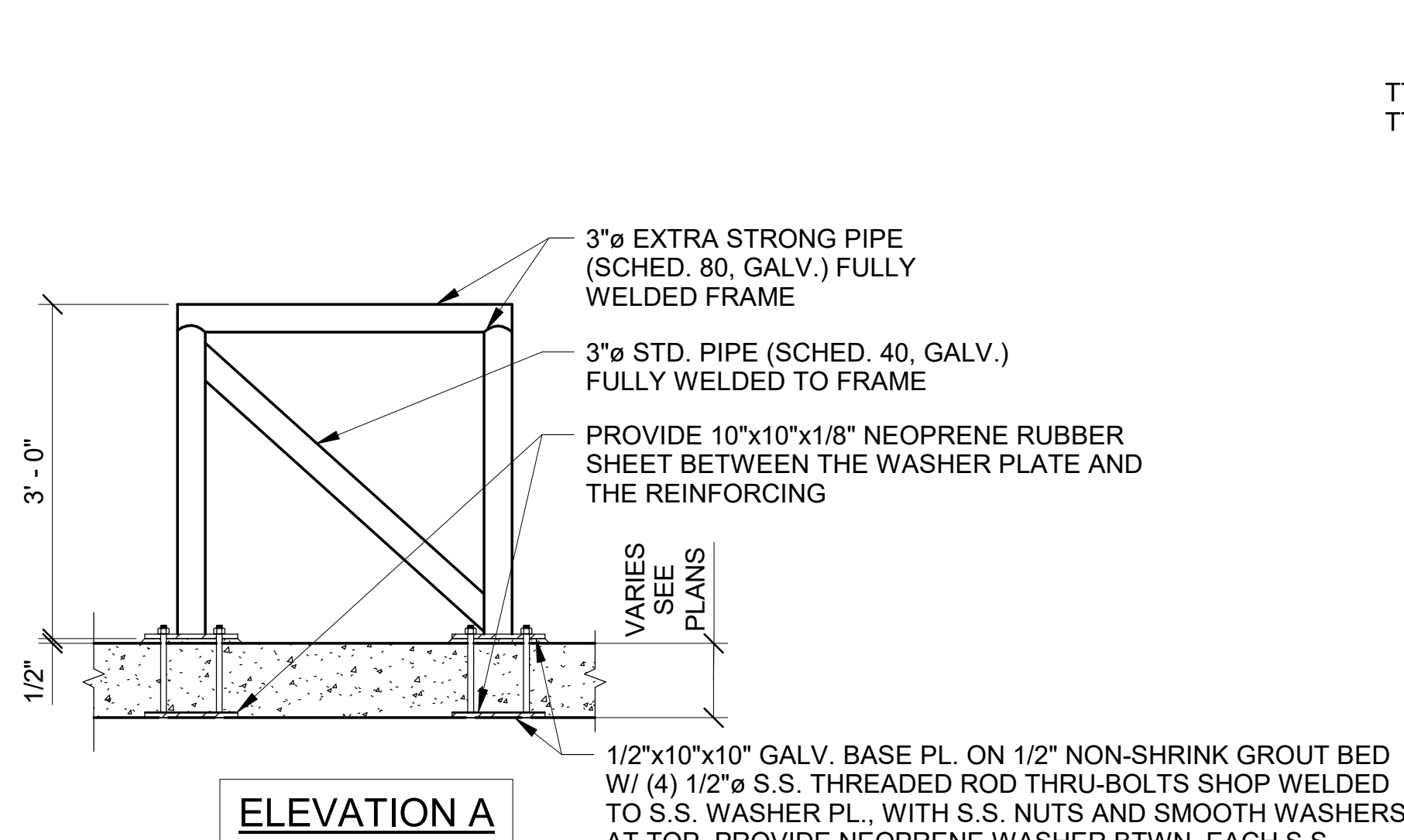


NOTES:

- ALL PIECES SHALL BE GALVANIZED, U.O.N. S.S. ITEMS SHALL BE 316.
- SEAL GALVANIZING VENT HOLES PER GENERAL NOTE Q.7 ON TT001.

SLAB-MOUNTED ROPE FRAME DETAIL

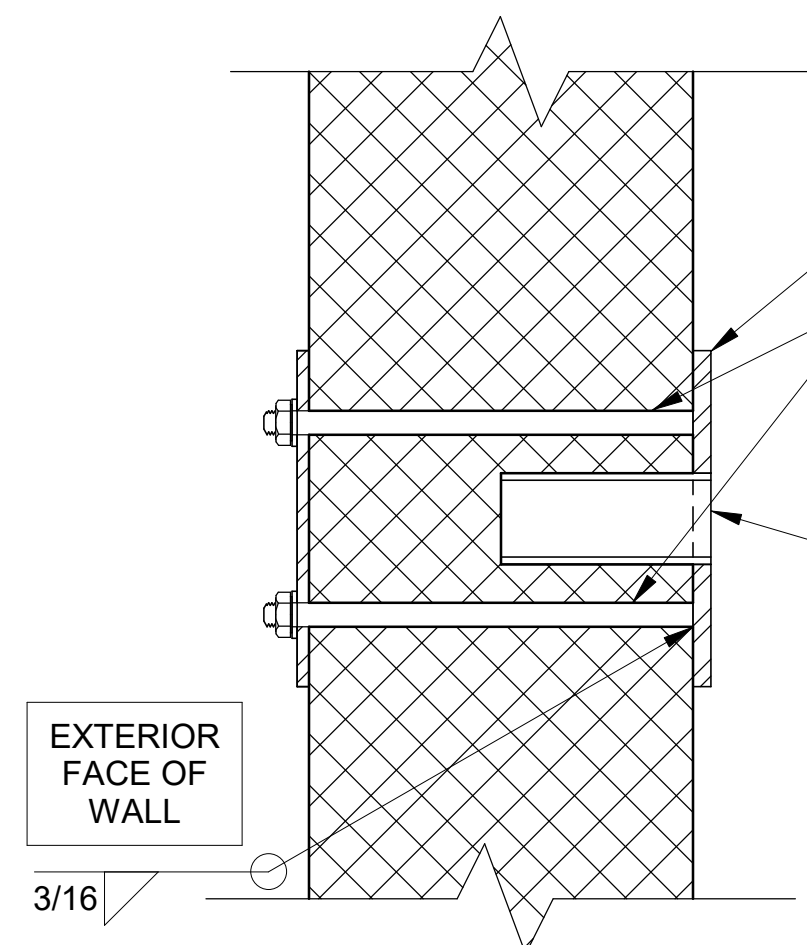
TT203, TT607 TT301, TT302 SCALE 3/4" = 1'-0"



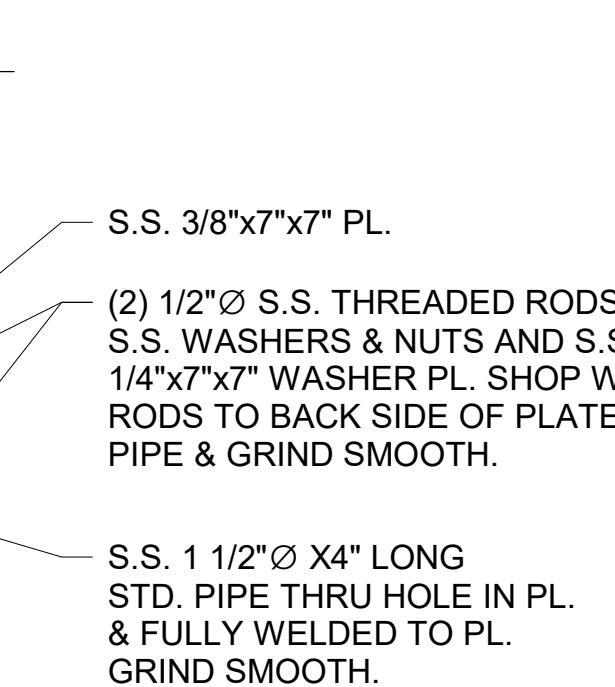
ELEVATION A

SLAB-MOUNTED AND BEAM-MOUNTED  
ROPE ANCHOR DETAIL

TT202, TT607 TT203 SCALE 1 1/2" = 1'-0"



SECTION VIEW



INTERIOR ELEVATION VIEW

NOTES:

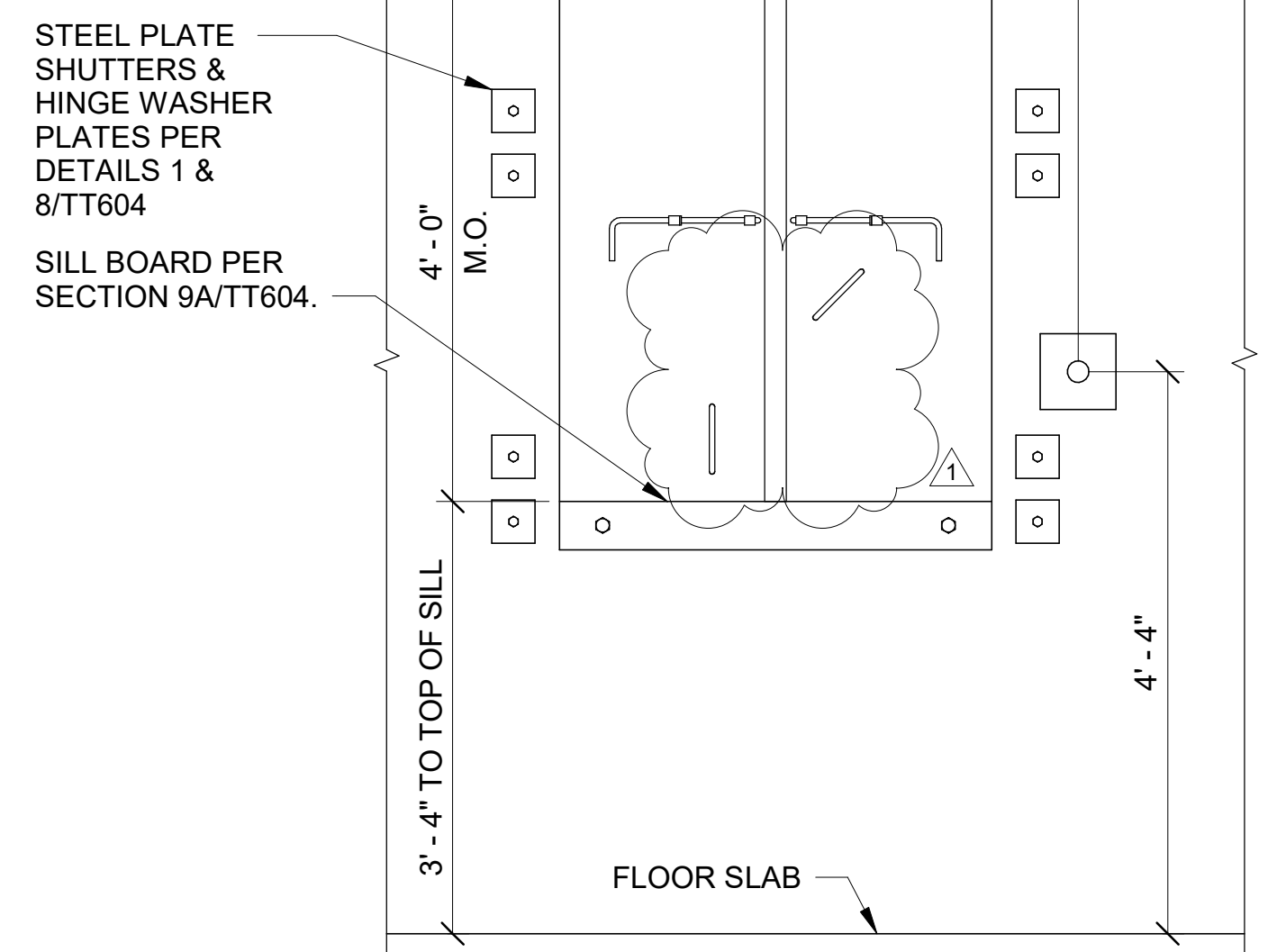
- THIS DETAIL APPLIES ONLY AT THE BAILOUT WINDOW AT THE 2ND FLOOR STAIR LANDING.
- LOCATE CENTER OF PIPE PER ELEVATION VIEW OF 7/TT607.

HALLIGAN SPIKE PIPE DETAILS

TT201 TT607 SCALE 3" = 1'-0"

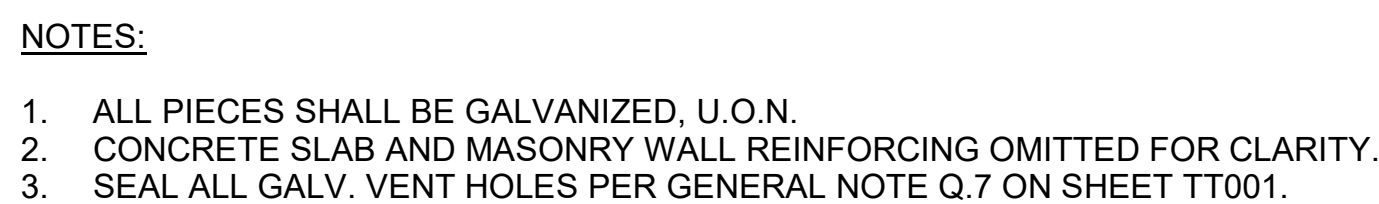
BAILOUT WINDOW INTERIOR ELEVATION

TT201 TT607 SCALE 3/4" = 1'-0"



COPYRIGHT 2024 Elliott, LeBoeuf & McElwain  
Elliott, LeBoeuf & McElwain RETAINS ALL RIGHTS INCLUDING COPYRIGHT, TO THIS DRAWING. THIS DRAWING SHALL BE USED SOLELY WITH RESPECT TO THIS PROJECT. THIS DRAWING SHALL NOT BE USED BY OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS.





NOTES:

1. ALL PIECES SHALL BE GALVANIZED U.O.N. S.S. PIECES SHALL BE 316 STAINLESS STEEL.

NOTES:

1. ALL PIECES SHALL BE 316 STAINLESS STEEL U.O.N.
2. THIS ANCHOR HAS BEEN DESIGNED FOR UPWARD LOAD ONLY.

1. THIS DETAIL APPLIES AT ALL LOCATIONS INDICATED BY KEYED NOTES IN FLOOR PLANS AND AS INDICATED IN FRAMING PLANS, AT FLOOR OF 2ND FLOOR STAIR LANDING, PROVIDE 9 1/2" LONG THROUGH-SLAB TUBE ASSEMBLY. AT FLOOR OF ROOM 301, PROVIDE 8 3/4" LONG THROUGH-SLAB TUBE ASSEMBLY.
2. CAST ASSEMBLIES INTO SLAB SO THAT TOPS OF TUBES ARE FLUSH WITH TOP OF SLAB. SHIM BELOW ASSEMBLIES, AS NECESSARY, AT BOTTOM OF SLAB TO ENSURE THAT TOPS OF TUBES ARE FLUSH WITH TOPS OF SLAB.
3. ASSEMBLIES MUST BE INSTALLED SO THAT SMOOTH BARS AT CENTER OF TUBE ARE PERPENDICULAR TO WALL THAT ANCHOR IS CLOSEST TO. SEE FLOOR AND FRAMING PLANS FOR LOCATIONS. SEE PLAN DETAIL ABOVE AND DETAIL 1/TT408 FOR ORIENTATION.
4. ALL PIECES SHALL BE S.S. U.O.N.
5. GRIND INSIDE LIPS OF TUBES SMOOTH ALL AROUND.
6. SLAB REINFORCING NOT SHOWN FOR CLARITY.

5  
TT201 TT608 SCALE 1/2" = 1'-0"





CM trade Package Manual  
Wake Technical Community College  
Fire and Rescue Training Center

CM Trade Pkgs  
Manual thru  
Addendum #1  
04/18/2025



CONSTRUCTION MANAGER:  
Samet Corporation  
5430 Wade Park Blvd, Suite 110  
Raleigh, NC 27607



OWNER:  
Wake Technical Community College  
4723 Advantage Way  
Raleigh, NC 27603



ARCHITECT:  
HH Architecture  
1100 Dresser Court  
Raleigh, NC 27609



CIVIL ENGINEER:  
NV5  
3300 Regency Parkway  
Cary, NC 27518



## **INDEX CM TRADE PACKAGE MANUAL**

### **PREPARED BY SAMET CORPORATION**

<u>Description</u>	<u>Pages</u>
1.00 CM Trade Package Manual Cover .....	1
1.01 Table of Contents .....	2
1.02 Form of Proposal (Bid Form) .....	3
1.03 North Carolina State M/WBE Forms .....	15
1.04 Allowances and Unit Prices .....	21
1.05 Project Construction Schedule.....	23
1.06 Logistics Plan .....	26
1.07 Report of Subsurface Exploration (for information / reference only) .....	28

#### **BID PACKAGE:**

##### **Trade Package Scope of Work:**

01A Final Clean  
01B General Trades  
03A Cast-in-Place Concrete  
04A Masonry  
05A Structural Steel, Metal Fabrications  
07A Waterproofing  
07C Metal Roofing & Metal Panels  
08A Doors, Frames, & Hardware  
08D Overhead Doors  
09A Drywall, Framing, Insulation  
09K Epoxy Flooring  
09M Painting and sealed Concrete  
10A Toilet Partitions & Accessories, Visual Display, FP Specialties  
10B Signage  
13A Special Construction (Fire Panels & Brick)  
21A Fire Protection  
22A Plumbing  
23A HVAC  
23B HVAC & Plumbing Combination  
26A Electrical & Fire Alarm  
31A Earthwork, Storm Drainage, Erosion Control, & Site Utilities  
31B Earthwork, Storm Drainage, Erosion Control, Site Utilities, Asphalt Paving, Curb & Gutter  
Combination  
32A Site Concrete  
32C Asphalt Paving, Curb & Gutter  
32D Fencing  
32E Landscaping

Scopes of Work are posted to Building Connected site at the 'Files' tab under the folder called: "03 Scopes of Work"





---

## FORM OF PROPOSAL

**Name of Firm:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone/Email:** \_\_\_\_\_

---

**(Contractor's License Number, if applicable)**

---

**(Trade Package Name)**

CONSTRUCTION MANAGER: Samet  
309 Gallimore Dairy Rd, Suite 102  
Greensboro, NC 27409

For

OWNER: Wake Technical Community College  
4723 Advantage Way  
Raleigh, NC 27603

The undersigned, having carefully and completely examined the Proposal Forms and Procedures, Contract Documents, Trade Package Scopes of Work, Other Bidding Requirements, and all subsequent addenda, and being familiar with all conditions and requirements of the Work for the **Wake Tech Fire and Rescue Training Center** agrees to furnish all materials, labor, equipment, taxes, insurance and services for the lump sum, BASE BID AMOUNT of:

\_\_\_\_\_(Words)

\$\_\_\_\_\_(Figures)

**Initial below to confirm:**

\_\_\_\_\_ Base bid amount includes the cost for the Insurance requirements in compliance with Exhibit of Subcontract Agreement

\_\_\_\_\_ Base Bid amount includes the cost for all Allowances identified in the Allowance section of the bid form.





---

**(List all Addenda along with the date of issue. If no additional Addenda are issued, write the word "NONE".)**

Addendum Number

Date

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## **UNIT PRICES**

Bidders are to provide unit prices for each item of work listed below. Each unit price provided shall include all profit, overhead, supervision, surveying/field engineering services, materials, labor, equipment, taxes, insurance, and any miscellaneous incidentals required to complete the unit price work activity. Unit prices shall be treated as a change to the Scope of Work and are subject to comply with all provisions outlined within the Contract Documents. Refer to 012200 "Unit Prices" within the Specifications for additional information related to each unit price. **Where noted below, the Unit Price(s) shall be the basis for determining a respective Subcontract allowance value(s). Additionally, the Unit Prices outlined herein shall be used as a basis of determining additions and/or deductions to the Subcontract Sum by change order.**

- A. Unit Price A: Unsuitable Soil – On-Site Disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soil for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  2. Unit of Measurement: Cubic Yards
  3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
  4. **Rate: \_\_\_\_\_ \$/CY**
- B. Unit Price B: Unsuitable Soil – On-site Disposal and Backfill with off Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement if unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances".
  4. **Rate: \_\_\_\_\_ \$/CY**
- C. Unit Price C: Unsuitable soil – Off-site disposal and Backfill with On-Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
  4. **Rate: \_\_\_\_\_ \$/CY**
- D. Unit Price D: Unsuitable Soil – Off-site disposal and Backfill with Off-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
  4. **Rate: \_\_\_\_\_ \$/CY**



- 
- E. Unit Price E: Unsuitable Trench Soil – On-site disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soils for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- F. Unit Price F: Unsuitable Trench Soil – Off-Site Disposal and Backfill with On-Site Source
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- G. Unit Price G: Unsuitable Trench Soil – Off-Site Disposal and Backfill with On-Site Source
1. Description: Removal unsuitable soil, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- H. Unit Price H: Unsuitable Trench Soil – Off-Site Disposal and Backfill with Off-Site Source
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- I. Unit Price I: Stream Crossing – Off-Site Disposal and Backfill with Class B Rip-Rap
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with an Approved Rip-Rap material.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**



- 
- J. Unit Price J: Stream Crossing – Off-Site Disposal and Backfill with #57 Stone
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with an Approved #57 Stone material.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- K. Unit Price K: Stream Crossing – Type 4 Geotextile Fabric
1. Description: Furnish and Install Type 4 Geotextile Fabric as required per the Specifications .
  2. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances".
- Rate:** \_\_\_\_\_ **\$/CY**
- L. Unit Price L: Rip Rock Excavation – Dispose of Off-Site
1. Description: Removal and disposal off-site, and replacement with a controlled backfill material per Specifications.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- M. Unit Price M: Rip Rock Excavation – Dispose of On-Site
1. Description: Removal, disposal of rip rock for re-use on-site, and replacement with a controlled backfill material per Specifications.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- N. Unit Price N: Trench Rock Excavation (Hammer) – Dispose of Off-Site
1. Description: Removal and disposal off-site, and replacement with a controlled backfill material per Specifications.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**



- O. Unit Price O: Trench Rock Excavation (Hammer) – Dispose of On-Site
1. Description: Removal, disposal of rip rock for re-use on-site, and replacement with a controlled backfill material per Specifications.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."  
**Rate:** \_\_\_\_\_ **\$/CY**
- P. Unit Price P: #57 Stone Backfill/Spread
1. Description: Provide and install #57 stone per Specifications.
  2. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances".  
**Rate:** \_\_\_\_\_ **\$/CY**
- Q. Labor Rates: Provide position and hourly rates for common cost of work positions such as laborer, carpenter, foreman, ect.

Position	Hourly Rate

### **ALLOWANCES**

Bidders are to provide allowances for each item of work listed below. Each allowance provided shall include all profit, overhead, supervision, surveying/field engineering services, materials, labor, equipment, taxes, insurance, and any miscellaneous incidentals required to complete the quantity allowance work activity. Allowances shall be included in the lump sum bid and are subject to comply with all provisions outlined within the Contract Documents. Refer to 012100 within the Specifications for additional information related to each allowance. (Verification of any allowance usage must be signed off on by the Contractor / Owner to be validated for billing purposes, and all unused portion(s) of these item(s) will be reconciled at the completion of the project via deductive change order)

- A. Allowance No. A: Unsuitable Soil – On-site Disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soil for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled back fill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 1,500 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- B. Allowance No. B: Unsuitable Soil – On-site Disposal and Backfill with off Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement if unsuitable soil and/or debris with a controlled backfill material from an off-site source.

- 
2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 1,500 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- C. Allowance No. C: Unsuitable soil – Off-site disposal and Backfill with On-Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 250 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- D. Allowance No. D: Unsuitable Soil – Off-site disposal and Backfill with Off-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 250 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- E. Allowance No. E: Unsuitable Trench Soil – On-site disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soils for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 250 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- F. Allowance No. F: Unsuitable Trench Soil – Off-Site Disposal and Backfill with On-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 100 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_



- 
- G. Allowance No. G: Unsuitable Trench Soil – Off-Site Disposal and Backfill with On-Site Source Suitable Soils.
1. Description: Removal unsuitable soil, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 50 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- H. Allowance No. H: Unsuitable Trench Soil – Off-Site Disposal and Backfill with Off-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 50 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- I. Allowance No. I: Stream Crossing – Off-Site Disposal and Backfill with Class B Rip-Rap
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with an Approved Rip-Rap material.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 500 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- J. Allowance No. J: Stream Crossing – Off-Site Disposal and Backfill with #57 Stone
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with an Approved #57 Stone material.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 200 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- K. Allowance No. K: Stream Crossing – Type 4 Geotextile Fabric
1. Description: Furnish and Install Type 4 Geotextile Fabric as required per the Specifications .
  2. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  3. Allowance Quantity: 1,500 square feet.
  4. Base Bid: Lump Sum.  
**Value: \$** \_\_\_\_\_

## **ALTERNATES**

The undersigned further agrees to perform the alternates for the sums herein stated resulting in additions to or deductions from the Base Bid Amount. Additions and deductions shall include any modifications of work or additional work that shall be reasonably included as a part of the alternate. Alternates within the Specifications for additional information and/or requirements related to each alternate. If any of the following alternates are accepted, the above stated lump sum (Base Bid Amount) will be revised by the amount(s) indicated below.

If you choose to bid an alternate but there is no change to the base bid amount, enter the term "NO CHANGE" after the dollar sign (\$). If you know an alternate below is not applicable to your scope of work, enter the term "NOT APPLICABLE" after the dollar sign (\$).

All North Carolina State Sales and Use Taxes or Local Sales and Use Taxes are included in the above Base Bid and Alternates (including taxes on purchase or rental of tools and equipment). Bidder agrees. that this Base Bid will remain good and may not be withdrawn for a period of (60) calendar days after receipt date of Bid Proposals

### **ALTERNATE NO. 1 – Payment and Performance Bond**

The cost of the Performance and Payment Bonds will be reimbursed to the Subcontractor based on the following revised contract review noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. NO mark-up, overhead, etc. shall be included as Samet will only reimburse the cost of the bond.

Add or Deduct \_\_\_\_\_ (Words)

\$ \_\_\_\_\_ (Figures) (in case of discrepancy, the amount shown in words shall govern)



---

### **BID SUBMITTAL CHECKLIST**

In addition to completing this Form of Proposal, the bidder recognizes the following items must be completed to submit a responsible and responsive bid for this project.

- a. All bids must be submitted on the Form of Proposal provided by the Construction Manager and marked accordingly to identify the Trade Package name being bid.
- b. Form of Proposal shall be signed by an officer of the company.
- c. When applicable to a particular trade package scope of work, the respective bidder must fill in all alternates or unit prices on the form of proposal being solicited for the project.
- d. Each bidder as applicable to its respective Trade Package shall include the value of each allowance within its base bid amount as further defined in 012100 – Allowances.
- e. Bids must be submitted in a sealed opaque envelope with the following marked on the front of the envelope:
  - (1) Bidder Name and Address
  - (2) Project Name – **WTCC Fire and Rescue Training Center**
  - (3) Trade Package Name (e.g. “02A Demolition”)
- f. A Bid Security of five percent (5%) of the Bid in Cashier’s Check, Certified Check, or a fully executed Bid Bond is required to accompany each Bid Proposal where designated on the Instructions to Bidder. Bids may not be withdrawn within sixty (60) days after the scheduled bid date and time, except as provided by law. Please reference Instructions to Bidders for specifics. (Required for packages that exceed \$300,000.00)
- g. As required, all bids must be accompanied with the following completed M/WBE Participation Forms.

ALL BIDDERS MUST SUBMIT TWO FORMS WITH THEIR BID:

1. Identification of Minority Business Participation” form

AND EITHER

2. Affidavit A – “Listing of Good Faith Efforts”

OR

2. Affidavit B – “Intent to Perform Contract with Own Workforce

(Required for Bidders who self-perform 100% percent of their contract value including material / equipment purchases (i.e. typically a labor only contract))

The above information must be provided as required. Failure to submit these documents is grounds for rejection of the bid. Bid amounts from rejected bids shall not be read aloud at public bid openings.

The bidder must identify on its bid (by using the “Identification of Minority Business Participation” form provided in the bid document), the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit (Affidavit A) listing good faith efforts **or** affidavit (Affidavit B) of self-performance of work, if the bidder will perform work under contract by its own workforce, as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).

---

An issuance of a Notice to Proceed shall be considered acceptance of this bid proposal sixty (60) calendar days after the date fixed for the opening of bid proposals. Furthermore, the undersigned agrees to execute and deliver the Contractor and Subcontractor Agreement, Performance and Payment Bonds (if applicable), Material Purchase Order Agreement (if applicable) and Certificate of Insurance within fourteen (14) calendar days after the Subcontractor or Supplier has received the said Contractor and Subcontractor Agreement and/or Purchase Order (if applicable), requiring execution. The undersigned agrees, if awarded the Subcontract, within sixty (60) calendar days from the fixed date for opening of the bids, to faithfully and properly complete the whole and several portions of the work within the specified time defined within the Contract Documents.

It is agreed that the undersigned has fulfilled and is in current compliance with all state licensing laws and will comply with all requirements concerning licensing with all other local and national laws and that no legal requirement has been or will be violated in making or accepting this bid proposal by awarding the Subcontract or Purchase Order to the firm and/or in the performance of the work required thereunder.

The undersigned declares that he/she is an officer of the firm listed and is authorized to sign the bid proposal and fully bind the said firm to all the conditions and provisions thereof.

Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_, 2025.

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name and Title)





## Identification of HUB Certified/ Minority Business Participation

I, \_\_\_\_\_  
(Name of Bidder)

do hereby certify that on this project, we will use the following HUB Certified/ minority business as construction subcontractors, vendors, suppliers or providers of professional services.

[illegible]

\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.**

**The total value of minority business contracting will be (\$)**\_\_\_\_\_.



# State of North Carolina AFFIDAVIT A – Listing of Good Faith Efforts

County of \_\_\_\_\_

(Name of Bidder)

Affidavit of \_\_\_\_\_

I have made a good faith effort to comply under the following areas checked:

**Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive.** (1 NC Administrative Code 30 I.0101)

- ☐ **1 – (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
- ☐ **2 --(10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
- ☐ **3 – (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- ☐ **4 – (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- ☐ **5 – (10 pts)** Attended prebid meetings scheduled by the public owner.
- ☐ **6 – (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- ☐ **7 – (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- ☐ **8 – (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- ☐ **9 – (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- ☐ **10 - (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

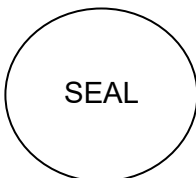
The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d) Failure to abide by this statutory provision will constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

# State of North Carolina --AFFIDAVIT B-- Intent to Perform Contract with Own Workforce.

County of \_\_\_\_\_

Affidavit of \_\_\_\_\_

(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the \_\_\_\_\_

\_\_\_\_\_ contract.

(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

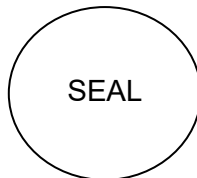
The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_



# State of North Carolina - AFFIDAVIT C - Portion of the Work to be Performed by HUB Certified/Minority Businesses

County of \_\_\_\_\_

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the portion of the work to be executed by HUB certified/minority businesses as defined in GS143-128.2(g) and 128.4(a),(b),(e) is equal to or greater than 10% of the bidders total contract price, then the bidder must complete this affidavit.

This affidavit shall be provided by the apparent lowest responsible, responsive bidder within **72 hours** after notification of being low bidder.

Affidavit of \_\_\_\_\_ I do hereby certify that on the \_\_\_\_\_  
(Name of Bidder)

(Project Name)  
Project ID# \_\_\_\_\_ Amount of Bid \$ \_\_\_\_\_

I will expend a minimum of \_\_\_\_\_ % of the total dollar amount of the contract with minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below.

Attach additional sheets if required

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

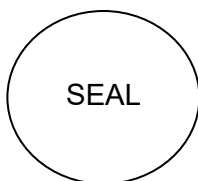
\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.**

Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_



Signature: \_\_\_\_\_

Title: \_\_\_\_\_

State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

# State of North Carolina AFFIDAVIT D – Good Faith Efforts

County of \_\_\_\_\_

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the goal of 10% participation by HUB Certified/ minority business **is not** achieved, the Bidder shall provide the following documentation to the Owner of his good faith efforts:

Affidavit of \_\_\_\_\_ I do hereby certify that on the \_\_\_\_\_  
(Name of Bidder)

Project ID# \_\_\_\_\_ (Project Name) Amount of Bid \$ \_\_\_\_\_

I will expend a minimum of \_\_\_\_\_% of the total dollar amount of the contract with HUB certified/ minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. (Attach additional sheets if required)

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.**

**Examples** of documentation that may be required to demonstrate the Bidder's good faith efforts to meet the goals set forth in these provisions include, but are not necessarily limited to, the following:

- Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- Copies of quotes or responses received from each firm responding to the solicitation.
- A telephone log of follow-up calls to each firm sent a solicitation.
- For subcontracts where a minority business firm is not considered the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- Copy of pre-bid roster
- Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- Letter detailing reasons for rejection of minority business due to lack of qualification.
- Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

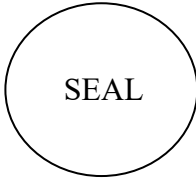


The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

These have also been updated in the Addendum #1 Design Documents (i.e., in the updated specs)

# **Wake Tech Fire & Rescue Training Center** **Updated List of Requested Bid Allowances & Unit Prices (Updated 04/16/2025)**

Allowance / Unit Price Letter	Allowance / Unit Price Description	Updated Qty to Bid	Unit of Measure
A	Unsuitable Soil – On-Site Disposal and Backfill with On-Site Suitable Soils	1,500	CY
B	Unsuitable Soil – On-site disposal and Backfill with off Site Source Suitable Soils	1,500	CY
C	Unsuitable soil – Off-site disposal and Backfill with On-Site Source Suitable Soils	250	CY
D	Unsuitable Soil – Off-site disposal and Backfill with Off-Site Source Suitable Soils	250	CY
E	Unsuitable Trench Soil – On-site disposal and Backfill with On-Site Suitable Soils	250	CY
F	Unsuitable Trench Soil – On-Site Disposal and Backfill with Off Site Source Suitable Soils	100	CY
G	Unsuitable Trench Soil – Off-Site Disposal and Backfill With On-Site Source Suitable Soils	50	CY
H	Unsuitable Trench Soil – Off-Site Disposal and Backfill with Off-Site Source Suitable Soils	50	CY
I	Stream Crossing – Off-Site Disposal and Backfill with Class B or Class A Rip-Rap.	500	CY
J	Stream Crossing – Off-Site Disposal and Backfill with #4 and/or #57 Stone.	200	CY
K	Stream Crossing – Type 4 Geotextile Fabric.	1,500	SF

## **Interested Bidders:**

Please find above the updated quantities to include as Allowances A through K within your sealed bid proposals.

These Allowance quantities should be included in your sealed bid Base proposal value with breakouts provided for each for complete proposal review/understanding.

Unit Prices for Items A through K should also be provided with your sealed bid package. Unit Prices are to be utilized if scope encountered in the field exceeds the included respective Allowance quantities.





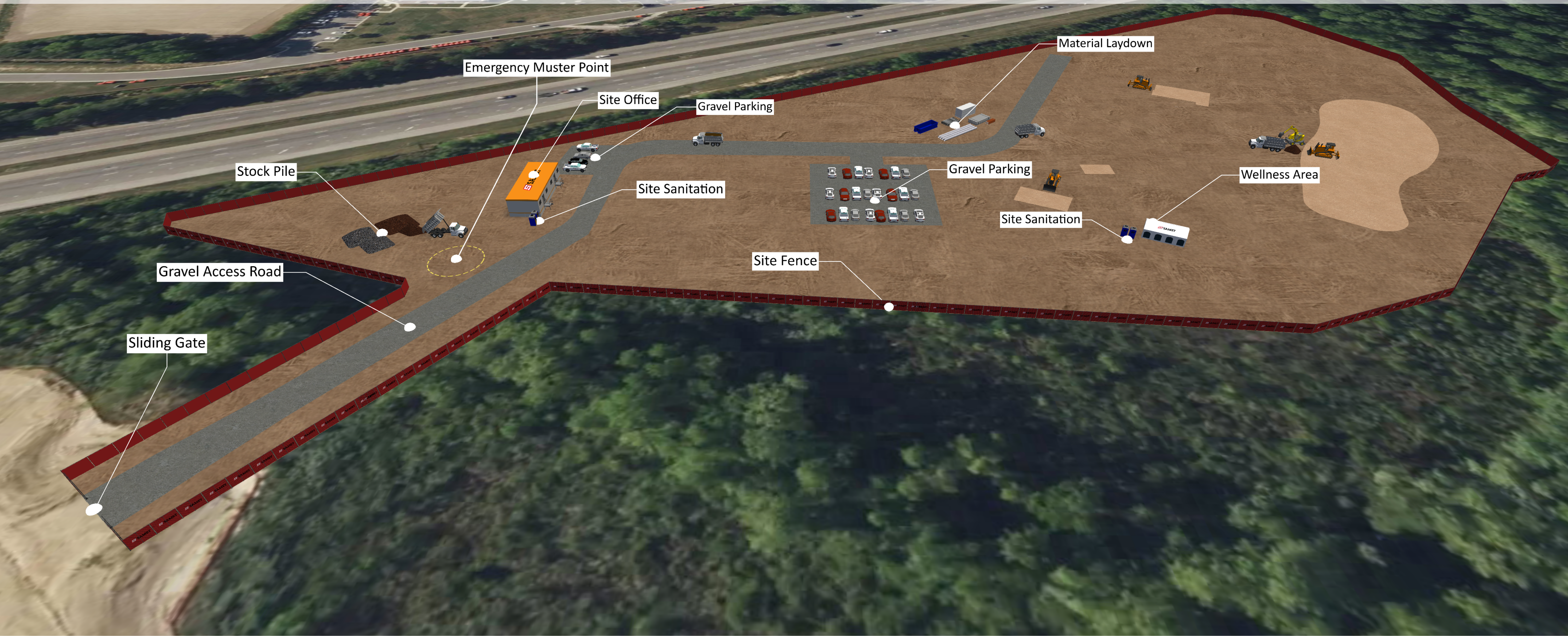
WTCC Fire Rescue Training Center - Precon Sched			01 Samet Standard WBS Layout						04-Apr-25																				
Activity ID	Activity Name	Original Duration	emaining Duration	Start	Finish	2025							2026																
						Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct					
A8230	NCDEQ Erosion Control - Final Approval	0	0		24-Jul-25	◆ NCDEQ Erosion Control - Final Approval																							
Site Permitting		0	0																										
Building Permitting		60	60	28-Mar-25	25-Jun-25	25-Jun-25, Building Permitting																							
A3120	Submit for Building Permit (from 100% CD's)	0	0		28-Mar-25	◆ Submit for Building Permit (from 100% CD's)																							
A4100	Bldg Permit Process: Review / Corrections / Resubmit / 2nd Revie	60	60	31-Mar-25	25-Jun-25	Bldg Permit Process: Review / Corrections / Resubmit / 2nd Review																							
A4110	Anticipated Receipt of Bldg Permit	0	0		25-Jun-25	◆ Anticipated Receipt of Bldg Permit																							
Subcontractor Prequal / Bidding / Award & GMP		120	103	19-Nov-24 A	07-Aug-25	07-Aug-25, Subcontractor Prequal / Bidding / Award & GMP																							
Building and Site Packages		0	0																										
P-GMP and GMP		120	103	19-Nov-24 A	07-Aug-25	07-Aug-25, P-GMP and GMP																							
A8000	Subcontractor Prequal	35	36	19-Nov-24 A	01-May-25	Subcontractor Prequal																							
A8890	Assemble and submit Pre-GMP to WTCC	5	5	31-Mar-25	04-Apr-25	Assemble and submit Pre-GMP to WTCC																							
A8040	Bidding Period	23	23	07-Apr-25	08-May-25	Bidding Period																							
A8920	WTCC Review of Pre-GMP & Issue CMAR Contract (required to	15	15	07-Apr-25	28-Apr-25	WTCC Review of Pre-GMP & Issue CMAR Contract (required to open bids)																							
A8960	Bid Period RFI Deadline	0	0		24-Apr-25	◆ Bid Period RFI Deadline																							
A8970	Final Bid Addenda Deadline	0	0		01-May-25	◆ Final Bid Addenda Deadline																							
A8060	BID DUE DATE (1st Round)	0	0		08-May-25	◆ BID DUE DATE (1st Round)																							
A8880	2nd Round of Bidding	10	10	09-May-25	22-May-25	2nd Round of Bidding																							
A8080	CMAR Analyze Bldg Bids & Submit GMP Amendment	10	10	13-May-25	27-May-25	CMAR Analyze Bldg Bids & Submit GMP Amendment																							
A8100	WTCC & A/E Review/Approval of GMP Amendment	5	5	28-May-25	03-Jun-25	WTCC & A/E Review/Approval of GMP Amendment																							
A8340	Notice to Proceed	0	0		03-Jun-25	◆ Notice to Proceed																							
A8120	Subcontractor Awards	45	45	04-Jun-25	07-Aug-25	Subcontractor Awards																							
Procurement		95	95	26-Jun-25	07-Nov-25	07-Nov-25, Procurement																							
Submittals & Shops		35	35	26-Jun-25	14-Aug-25	14-Aug-25, Submittals & Shops																							
B1000	Sitework Submittal & Shops	25	25	26-Jun-25	31-Jul-25	Sitework Submittal & Shops																							
B1100	A/E Review & Release of Sitework Shops	20	20	18-Jul-25	14-Aug-25	A/E Review & Release of Sitework Shops																							
Lead Times & Delivery		60	60	15-Aug-25	07-Nov-25	07-Nov-25, Lead Times & Delivery																							
B5000	Utility Structure Lead Time	45	45	15-Aug-25	17-Oct-25	Utility Structure Lead Time																							
B5100	Ductile Iron Lead Time & Delivery	60	60	15-Aug-25	07-Nov-25	Ductile Iron Lead Time & Delivery																							
CONSTRUCTION PHASE		325	325	18-Jun-25	06-Oct-26																								
Sitework		275	275	18-Jun-25	27-Jul-26	27-Jul-26, Sitework																							
A8380	Mobilize to Site - Construction Entrance/Temp Stream Crossing/Ei	15	15	18-Jun-25	10-Jul-25	Mobilize to Site - Construction Entrance/Temp Stream Crossing/Erosion Control																							
A8390	Remaining Erosion Control Measures and Temp Diversions for Di	10	10	11-Jul-25	24-Jul-25	Remaining Erosion Control Measures and Temp Diversions for Diversion Pond																							
A8400	Diversion Pond	15	15	18-Jul-25	07-Aug-25	Diversion Pond																							
A8410	Remaining Tree Clearing and Site Grading	25	25	08-Aug-25	12-Sep-25	Remaining Tree Clearing and Site Grading																							
A8540	Perminent Stream Crossing with Utilities	10	10	15-Aug-25	28-Aug-25	Perminent Stream Crossing with Utilities																							
A8550	Construct access on site	5	5	29-Aug-25	05-Sep-25	Construct access on site																							
A8420	Building Pad for Burn Building	5	5	08-Sep-25	12-Sep-25	Building Pad for Burn Building																							
Remaining Level of Effort						Page 2 of 4														Construction Schedule									
Actual Level of Effort																				© Oracle Corporation									
Remaining Work																													
Milestone																													
Milestone																													



WTCC Fire Rescue Training Center - Precon Sched			01 Samet Standard WBS Layout						04-Apr-25															
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	2025								2026										
						Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
A8430	Site Utilities (Sewer, Storm, Electric, Water at entrance road)	45	45	15-Sep-25	14-Nov-25																			
A8460	Mobilize Construction Office	5	5	15-Sep-25	19-Sep-25																			
A8440	Building pads for Training Tower and Shade Structure	5	5	29-Sep-25	03-Oct-25																			
A8450	Prep Parking lot area	10	10	20-Oct-25	31-Oct-25																			
A8470	Asphalt Binder - Parking Lot	3	3	03-Nov-25	05-Nov-25																			
A8600	Site Lighting	15	15	03-Nov-25	21-Nov-25																			
A8560	Install Site Water lines	20	20	01-Apr-26	29-Apr-26																			
A8480	Road Prep and Curb and Gutter	20	20	30-Apr-26	28-May-26																			
A8570	Concrete Paving and Flatwork	20	20	29-May-26	26-Jun-26																			
A8580	Ashpalt Paving (Light Duty and Heavy Duty)	15	15	29-Jun-26	20-Jul-26																			
A8860	Landscpaing and Stabilization of Soil	20	20	29-Jun-26	27-Jul-26																			
A8590	Striping/Markings/Road Signage	5	5	21-Jul-26	27-Jul-26																			
Burn Building		200	200	15-Sep-25	06-Jul-26																			
BB1010	Foundations	10	10	15-Sep-25	26-Sep-25																			
BB1020	CIP Concrete Structure	50	50	29-Sep-25	09-Dec-25																			
BB1030	Thermal Lining on Columns	12	12	10-Dec-25	30-Dec-25																			
BB1040	CMU Exterior Walls	35	35	17-Dec-25	10-Feb-26																			
BB1050	Thermal Ceiling Panels	60	60	13-Jan-26	08-Apr-26																			
BB1060	Install Stair Tower	15	15	11-Feb-26	03-Mar-26																			
BB1070	Install Steel Plate Window Shutters and Doors	10	10	04-Mar-26	17-Mar-26																			
BB1080	Interior CMU Walls	40	40	18-Mar-26	13-May-26																			
BB1090	Thermal Flooring Pavers	30	30	16-Apr-26	28-May-26																			
BB1100	Interior Doors and Misc Metal Fabrications	20	20	29-May-26	26-Jun-26																			
BB1105	Fire Protection Standpipe riser and Branch Line	5	5	29-May-26	04-Jun-26																			
BB1110	Install Debris Chute	5	5	29-Jun-26	06-Jul-26																			
Training Tower		163	163	06-Oct-25	02-Jun-26																			
A8490	Foundations	10	10	06-Oct-25	17-Oct-25																			
A8500	CIP Concrete Structure	45	45	20-Oct-25	23-Dec-25																			
A8510	Exterior and Interior CMU Walls (included MEP Rough)	45	45	29-Dec-25	03-Mar-26																			
A8530	Install Stair Tower and Roof Guard Rail	20	20	04-Mar-26	31-Mar-26																			
A8800	Install 2nd floor steel grating walkway	5	5	01-Apr-26	08-Apr-26																			
A8810	Install Steel Plate Window Shutters and Doors	8	8	09-Apr-26	20-Apr-26																			
A8830	Install roof level Guardrails, Rope frames& Ganrty, and Vertical ac	5	5	21-Apr-26	27-Apr-26																			
A8840	Install Interior Doors and interior Misc Metals	20	20	28-Apr-26	26-May-26																			
A8850	Fire Protection Standpipe riser and Branch Line	5	5	27-May-26	02-Jun-26																			
RR Building & Shade Structure		86	86	29-Dec-25	30-Apr-26																			
A8630	Foundations	5	5	29-Dec-25	05-Jan-26																			
Remaining Level of Effort		Actual Work		Critical Remaining Work		Page 3 of 4								Construction Schedule										
Actual Level of Effort		Remaining Work		Milestone										© Oracle Corporation										

WTCC Fire Rescue Training Center - Precon Sched			01 Samet Standard WBS Layout						04-Apr-25																				
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	2025												2026											
						Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct					
MEP	A8680	MEP Underground	5	5	06-Jan-26	12-Jan-26																							
	A8690	Slab on Grade	3	3	13-Jan-26	15-Jan-26																							
	A8640	Construct CMU Walls and MEP in-wall	5	5	16-Jan-26	23-Jan-26																							
	A8650	Structural Steel	3	3	26-Jan-26	28-Jan-26																							
	A8660	Cold Form Form Metal Framing	5	5	29-Jan-26	04-Feb-26																							
	A8670	Metal Roofing	5	5	05-Feb-26	11-Feb-26																							
	A8700	Interior Framing	5	5	12-Feb-26	18-Feb-26																							
	A8710	MEP Rough (in-wall, overhead, mech room)	10	10	19-Feb-26	04-Mar-26																							
	A8720	Drywall	5	5	05-Mar-26	11-Mar-26																							
	A8730	Remaining MEP Devices/Fixtures/ and Interior Finishes	20	20	12-Mar-26	09-Apr-26																							
	A8740	Metal Panel Soffit/ceiling	5	5	10-Apr-26	16-Apr-26																							
	A8750	Set IT/Elec Equipment	5	5	10-Apr-26	16-Apr-26																							
	A8760	Start-up/TAB/CX	10	10	17-Apr-26	30-Apr-26																							
	Covered Storage		35	35	06-Jan-26	24-Feb-26																							
	A8620	Foundations and SOG	10	10	06-Jan-26	20-Jan-26																							
A8770	Structural Steel and Decking	10	10	21-Jan-26	03-Feb-26																								
A8780	Roofing and Metal Panels	10	10	04-Feb-26	17-Feb-26																								
A8790	Painting	5	5	18-Feb-26	24-Feb-26																								
Drafting Pit		30	30	21-Jan-26	03-Mar-26																								
A8610	Construct Drafting Pit	30	30	21-Jan-26	03-Mar-26																								
Testing and Inspections		40	40	29-Jun-26	24-Aug-26																								
PC1000	Inspections and Testing	25	25	29-Jun-26	03-Aug-26																								
PC1010	Start-up and Commisioning	10	10	29-Jun-26	13-Jul-26																								
PC1020	Balancing	5	5	14-Jul-26	20-Jul-26																								
PC1030	MEP Pre-test	5	5	21-Jul-26	27-Jul-26																								
PC1040	Final Approval - C of O	20	20	28-Jul-26	24-Aug-26*																								
Project Closeout		30	30	25-Aug-26	06-Oct-26																								
A8360	Closeout and Punchlist	30	30	25-Aug-26	06-Oct-26																								
A8370	Project complete	0	0		06-Oct-26																								









WTCC FIRE & RESCUE TRAINING CENTER

PROJECT COMPLETE



RECEIVED  
03/25/2025  
SAMET



**Report of Subsurface Investigation and  
Geotechnical Engineering Evaluation  
Wake Technical Community College  
Fire and Rescue Training Center  
Wendell, North Carolina  
prepared for  
Wake Technical Community College**

Prepared by

NV5 Engineers and Consultants, Inc.  
NC Engineering Corporation F-1333  
3300 Regency Parkway #100 | Cary, N  
919-876-9799

RECEIVED  
03/25/2025  
SAMET

N|V|5

January 11, 2024

Mr. Walter Lennon  
Wake Technical Community College  
[wlennon@waketech.edu](mailto:wlennon@waketech.edu)

**Report of Subsurface Investigation  
and Geotechnical Engineering Evaluation  
Wake Technical Community College  
Fire and Rescue Training Center  
Wendell, North Carolina  
Our Project Number 121-23-113900**

Dear Mr. Lennon:

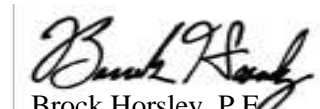
NV5 Engineers and Consultants, Inc. has completed the authorized subsurface investigation and engineering evaluation for the above referenced project. The enclosed report describes our investigative procedures and presents the results of our testing and evaluation along with comments regarding the geotechnical aspects of this project.

We appreciate the opportunity to work with you on this subsurface investigation and engineering evaluation and are prepared to follow up with the recommended construction materials testing services.

If you have any questions concerning this report, please contact us.

Sincerely,  
NV5 Engineers and Consultants, Inc. (F-1333)

  
Jalen G. Deatherage  
Associate Project Manager

  
Brock Horsley, P.E.  
Principal Geotechnical Engineer

NV5 Engineers and Consultants, Inc.  
NC Engineering Corporation F-1333  
4905 Professional Court, Raleigh, North Carolina 27609  
(919) 876-9799



### **SCOPE OF SERVICES**

The scope of this study was outlined in our proposal dated October 18, 2023. The main objective of the study was to evaluate the subsurface conditions at the subject site and to make recommendations regarding the geotechnical aspects of site preparation, foundation design, and construction. More specifically, the scope of this investigation included the following objectives:

- (1) To evaluate the existing subsurface soil and groundwater conditions within the planned construction area.
- (2) To provide general recommendations for site preparation and site grading, including our evaluation of the potential for rock excavation.
- (3) To provide recommendations for foundation design, including evaluation of the sustainability suitability of the expected shallow foundations, and the allowable soil bearing pressure for support of shallow foundations.
- (4) To make recommendations concerning control of groundwater during construction and on a permanent basis, if necessary.
- (5) To evaluate the suitability of shallow foundation systems for support of the planned construction, and to provide recommendations for a design allowable bearing pressure.
- (6) To provide an evaluation of the Seismic Site Classification.
- (7) To provide recommendations for material types and thicknesses for the planned bituminous concrete pavement systems in the planned parking and driving areas.
- (8) To provide recommendations for achieving high density structural fill capable of satisfactorily supporting the proposed construction.
- (9) To provide pertinent recommendations for construction quality control measures.

## **INVESTIGATIVE PROCEDURES**

### **Field Investigation**

Our subsurface investigation consisted of twenty-two (22) soil test borings within the proposed construction areas (B-1 to B-22). The test boring locations are approximately shown on Figure 1 included in the Appendix. The test borings were performed to approximate depths of 10 feet (B-16 to B-22), 15 feet (B-12 to B-15), and 25 feet (B-1 to B-11) below the existing ground surface.

The locations of the test borings were identified in the field by our representative by using GPS coordinates, a handheld GPS receiver, and measuring distances and angles from known references points. Our scope of services did not include surveying of the planned construction areas or the locations of the test borings. In general, the locations of the test borings should be considered approximate. Ground surface elevations of the test borings were not available.

The test borings were performed using the procedures described in ASTM D-1586. Drilling was completed with an ATV-mounted drill rig equipped with an automatic hammer at 85.4% efficiency. Standard Penetration Testing (SPT) was performed at selected intervals in the test borings to evaluate the strength, relative density and consistency of the soils encountered. The penetration resistance, in conjunction with soil classifications, provides some indication of the engineering characteristics of the soils encountered. ***The standard penetration resistances (N-values) in this report have been energy-corrected for the specific automatic hammer used in this evaluation to a standard penetration resistance of a hammer operating at 60% efficiency (N<sub>60</sub>).***

Detailed descriptions of the soils encountered in each of the test borings are provided in the Test Boring Records included in the Appendix. Groundwater conditions, penetration resistances, and other pertinent information are also included. Since our samples are taken at discrete locations and depths, variations in the materials could be present that are not detected by our industry standard testing procedures used for this project and cannot be delineated in the Test Boring Records.

### **Laboratory Investigation**

The laboratory investigation consisted of a physical examination and classification of all samples obtained from the drilling operation. Classification of the soil samples was performed in general accordance with ASTM D-2488 (Visual-Manual Procedure for Description of Soils). Soil classifications include the use of the Unified Soil Classification System described in ASTM D-2487 (Classification of Soils for Engineering Purposes). The Visual-Manual procedure used for soil classification is a qualitative analysis performed in conjunction with the education, experience and professional judgment of our geotechnical engineer. Quantitative analysis of soil properties, such as those referenced in ASTM D-2487, could result in different soil classifications. In these instances, adjustments to the design and construction may be necessary, depending on the actual conditions. The soil classifications also include our evaluation of the geologic origin of the soils. Evaluations of geologic origin are based on our experience and interpretation and may be subject to some degree of error.



## **GENERAL SITE AND SUBSURFACE CONDITIONS**

### **Site Location and Description**

The site is in the northeast portion of the planned Wake Tech East campus at 5403 Rolesville Road in Wendell, North Carolina. The area southwest of the site consists of completed and ongoing construction for the planned campus. The site consists of a wooded area to the northeast of Inspiration Circle. US-64 is present along the northwest side of the site. Buffalo Creek is present along the east side of the site, and an unnamed stream is present along the south side of the site. A residential subdivision is present to the east, commercial buildings are present to the south and west, and commercial and wooded areas are present to the north.

Based on our review of information available on the Wake County GIS website and observations during our site walkover, the site generally slopes downward from a knoll in the north-central portion of the site toward the south and east with an overall relief of approximately 24 feet.

### **Regional Geology**

Based on a review of geologic maps, it appears that the site is located within the Raleigh Belt of the Piedmont Geologic Province of North Carolina. Soils in this area have been formed by the in-place weathering of the underlying igneous crystalline rock, which accounts for their classification as "residual" soils. Soils in this area generally consist of sandy silts, silts and clays. However, pockets of relatively plastic silts and clays have been encountered within less plastic, coarser grained soils, in many instances. Boulders are commonly encountered within the residual soil mass in this area. Alluvial deposits are common in the areas of creeks and streams.

The residual soils typically become less weathered, coarser grained, and much harder with increased depth. When the residual materials have a standard penetration resistance of 100 blows per foot or greater, they are referred to as partially weathered rock. The transition from soil to partially weathered rock is usually a gradual one and may occur at a wide range of depths. Lenses or layers of partially weathered rock are not unusual in the soil profile.

Partially weathered rock represents the zone of transition between the soil and the underlying rocks from which the soils are derived. The subsurface profile is, in fact, a history of the weathering process. The degree of weathering is most advanced at the ground surface, where fine grained soil may be present. The weathering process is in its early stages immediately above the surface of relatively sound rock, where partially weathered rock may be found.

The thickness of the zone of partially weathered rock and the depth to the rock surface have both been found to vary considerably over relatively short distances. The depth to the rock surface in the area has generally been found to range from about 10 to 60 feet below the ground surface.

Stream valleys in this area often contain alluvial (water deposited) soils, depending on ground surface topography, stream flow characteristics, and other factors. By nature, alluvial soils can be highly variable depending upon the energy regime at the time of deposition. Coarse materials such as sand or gravel are deposited in higher energy environments, while fine grained materials such as silt and clay are deposited in low energy environments. Alluvial soils may also contain significant amounts of organic materials, and are frequently in a loose, saturated condition. In many cases, fine grained alluvial soils will be highly compressible and have relatively low shear strength.

### **General Subsurface Conditions**

Approximately 7 to 8 inches of topsoil were encountered in all of the test borings. The thickness of topsoil materials may be quite variable and could be significantly different at other locations on the site. This is

especially true in wooded areas, where our experience indicates that topsoil thicknesses are typically greater. Therefore, the reported topsoil thickness should not be used for detailed quantity estimates.

Beneath the topsoil in all soil test borings, residual soils were encountered. The residual soils consisted of sandy and silty clays (CL), sandy silts (ML), silty sands (SM), and elastic silts (MH) that extended to boring termination depths of approximately 5.5 to 25 feet below the existing ground surface. The elastic silts were encountered in test borings B-11 and B-14 at depths of approximately 5.5 to 25 feet and 8 to 20 feet, respectively. The energy-corrected standard penetration resistances ( $N_{60}$  values) in the elastic silts ranged from weight of hammer (0) to 4 blows per foot. In the upper approximate 3 feet of test borings B-2, B-6 to B-12, B-14, B-15, and B-20 to B-22,  $N_{60}$  values ranged from 3 to 10 blows per foot. In test borings B-9, B-11, B-14, and B-17,  $N_{60}$  values ranged from weight of hammer (0) to 46 blows per foot throughout the depths explored. In the other test borings and below the upper approximate 3 feet in the above mentioned test borings,  $N_{60}$  values ranged from 11 to 98 blows per foot.

Partially weathered rock was encountered in B-2 to B-8, B-10, B-12, B-13, B-15, and B-19. Partially weathered rock denotes residual material which has a standard penetration resistance of 100 blows per foot or greater. The depth to the surface of the partially weathered rock ranged from 3 to 12 feet below the existing ground surface.

Auger refusal was encountered in test borings B-3, B-4, B-6, B-7, B-8, B-10, B-13, and B-19 at depths of approximately 5 to 23.5 feet below the existing ground surface. Auger refusal is the depth at which the boring cannot be further advanced using conventional soil drilling techniques. The materials causing auger refusal may consist of a boulder, a lens or layer of rock, the upper surface of relatively massive rock, or other hard material.

At the time of the drilling operation, groundwater was encountered in test borings B-1, B-4, B-11, and B-14 at depths of approximately 9 to 16 feet below the existing ground surface. It should be noted that groundwater levels will fluctuate, depending on seasonal variations of precipitation and other factors, and may occur at higher elevations at some time in the future. For more detailed descriptions of subsurface soil and groundwater conditions, please refer to the Test Boring Records included in the Appendix.

### **Proposed Construction**

Project information has been provided by Mr. Michael Allen with NV5 Engineers and Consultants, Inc., we understand that construction will consist of a planned fire rescue and training center for the Wake Tech East campus which will include several structures, associated parking and drive areas, and three (3) stormwater ponds. The planned construction will include an auxiliary building, an apparatus bay, a burn materials covered storage, a training tower, a burn building, and a shade structure. Additional site features include a technical rescue area, a roof ventilation prop, a dumpster pad, a flashover prop, a drafting pit, a vehicle extraction, a hazmat training pad, a propane tank storage area, an outdoor fire prop pad, a future prop area, and a mechanical yard. The planned parking areas include approximately 40 automobile parking spaces and 5 fire truck parking spaces. For purposes of this report, we have estimated traffic of 200 automobiles per day, 1 dumpster truck per week, 1 delivery truck per week, and 25 fire trucks per day. If actual traffic volumes are greater than these assumed maximums, please contact us and we will review our recommendations for their applicability. Provided loading information is shown in the following table.

Planned Structure	Provided Column Loads	Provided Wall Loads
Auxiliary Building	30 kips (max)	--
Apparatus Bay	--	7.5 kips per lin. ft. (max)
Shade Structure	--	4 kips per lin. ft. (max)
Burn Materials Covered Storage	10 kips (max)	--
Burn Building	284 kips (max), 169 kips (typical)	--
Training Tower	253 kips (max), 177 kips (typical)	--



## **EVALUATIONS AND RECOMMENDATIONS**

The following recommendations are based on the information available on the proposed construction, the data obtained from our field and laboratory investigation, and our experience with soils and subsurface conditions similar to those encountered at this site. Please note that the soil test borings represent a very small statistical sampling of subsurface conditions. Therefore, conditions may be encountered during construction that are substantially different than those indicated by the borings. In these instances, adjustments to the design and construction may be necessary depending on actual conditions.

### **General Site Preparation**

All trees, underbrush, weeds, grass, topsoil, roots, and other deleterious materials should be removed from the proposed construction area. Special attention should be given to the removal of tree stumps within the proposed construction area. Extensive root systems and localized soft soils are commonly encountered during removal of large tree stumps. Site clearing, grubbing, and stripping should be performed only during dry weather conditions. Operation of heavy equipment on the site during wet conditions could result in excessive mixing of topsoil and organic debris with clean underlying soils.

Soft/loose near surface soils were encountered in the upper approximate 3 feet of test borings B-2, B-6, B-7, B-8, B-9, B-20, B-21, and B-22, and it is possible that soft/loose near surface soils could be encountered in unexplored portions of the site, especially near the low-lying portions of the site. Depending on the conditions encountered at the time of construction and the planned grading, it is possible that excavation and replacement of the soft/loose near surface soils with structural fill soils will be required. As an alternative, where the soft, wet soils do not extend to depths greater than 2 feet below the ground surface, drying and recompacting the soils in-place may reduce the volume of undercut required.

Elastic silts were encountered at approximate depths of 5.5 to 25 feet in soil testing boring B-11 and at approximate depths of 8 to 20 feet in soil testing boring B-14. These soils are typically difficult to work with when wet, and equipment mobility on the site will be limited during times of wet weather. Elastic silts may be encountered in unexplored portions of the site. We suggest that site grading operations occur during dry weather conditions. In general, we recommend that if any elastic silts are encountered that they be removed in the upper 3 feet in building and pavement areas. Elastic silts can possibly be used as fill in areas to be landscaped, in areas where at least 3 to 5 feet of low plasticity soils can be placed above them, and within pond dam construction.

After completion of site clearing, we recommend that proofrolling operations be performed. All areas of the site which are to receive fill should be proofrolled prior to placement of structural fill. Areas of proposed excavation should be proofrolled after rough finished subgrade is achieved. Proofrolling should be performed using a loaded dump truck weighing at least 25 tons. Proofrolling should be accomplished by performing at least 3 passes in each of two perpendicular directions within entire construction areas, and 10 feet beyond. Any unsuitable materials that may be present, and any low consistency soils that are encountered which cannot be adequately densified in place, should generally be removed and replaced with well compacted fill material placed in accordance with the Structural Fill section of this report. Proofrolling should facilitate the identification of soft surficial soils but should not be expected to reveal soft conditions more than 2 feet below the ground surface at the time of proofrolling.

We recommend that site preparation operations be performed during times of dry weather. While wet weather can occur at any time during the year, the summer and early fall are times when drier weather is generally prevalent. Scheduling site grading during this time frame would reduce the probability of softening of the near surface soils from inclement weather conditions. If the existing soils at the site become softened from exposure to inclement weather, they should be dried, if necessary, and compacted to a minimum of 95 percent of their standard Proctor maximum dry density prior to fill placement operations or roadway construction.

During site preparation, burn pits or trash pits may be encountered. On sites located in developed areas, this is not an unusual occurrence. All too frequently, such buried material occurs in isolated areas which are not detected by the soil test borings. Any buried waste, construction debris, or trash which is found during the construction operation should be thoroughly excavated and removed from the site.

### **Excavation Characteristics**

For the purpose of discussing excavation characteristics, the materials found in the previous and recent test borings and/or expected at the site may be placed into three broad categories: (1) residual soils, (2) partially weathered rock, and (3) rock.

The majority of the residual soils at the project site should generally be excavatable with conventional soil excavation equipment, such as scrapers, loaders, etc. However, harder residual soils (penetration resistances above 50 blows per foot) may be difficult to excavate. Ripping of harder soils may be required to efficiently achieve excavation.

Partially weathered rock was encountered in B-2 to B-8, B-10, B-12, B-13, B-15, and B-19 to depths of approximately 3 to 25 feet below the existing ground surface. Although materials identified as partially weathered rock may in some cases be excavatable with conventional soil excavation equipment, we believe that it is wise to assume that partially weathered rock will require ripping to efficiently achieve excavation. The thickness and the continuity of partially weathered rock should be expected to vary widely even over a relatively short distance. Additionally, it would not be unusual to find additional lenses of partially weathered rock within more weathered residual soils. It should be noted that some of the test borings encountered zones of partially weathered rock which allowed little or no penetration of our sampling equipment. These zones are indicated on the Test Boring Records by penetration resistances of 50 blows for 6 inches or less. It is likely that these zones of partially weathered rock cannot be efficiently pre-loosened by ripping. In such instances, blasting will be necessary.

Ripping can probably best be achieved with a single-tooth ripper mounted on a large tractor such as a Caterpillar D-8 or larger. In small area excavations, such as footing and utility trenches, excavation of partially weathered rock may require the use of heavy excavators or pneumatic jackhammers.

Rock was encountered in our test borings B-3, B-4, B-6, B-7, B-8, B-10, B-13, and B-19, to the boring termination depths of 5 to 23.5 feet below the existing ground surface. Rock, as used in this report, is defined as auger refusal of our conventional soil drilling equipment. For planning purposes, we believe it would be prudent to assume that blasting or other methods will be required for excavations below these depths.

We recommend that the project specifications include a clear definition of excavation types to prevent field discussions regarding excavation of hard materials. We have enclosed our standard Rock Excavation Specifications for your use. We recommend that these be incorporated into the project earthwork specifications.

It is important to note that the depth to rock or partially weathered rock may vary quite rapidly even over relatively short distances. It would not be unusual for rock or partially weathered rock to occur at higher elevations between or around the soil test borings. Additionally, it is important to realize that groundwater levels will fluctuate and could occur at significantly higher elevations at some time in the future.

### **Earth Slopes**

Temporary construction slopes should be designed in strict compliance with the most recent OSHA regulations. The test borings indicate that there are Type B (clay and silt) and Type C (sand) materials as defined in the *Occupational Safety and Health Standards for the Construction Industry (29 CFR, Part 1926, Subpart P), July 1, 2001*. This dictates that temporary construction slopes for excavation depths up to 20 feet can be no steeper than the following horizontal (H) to vertical (V) ratios:



OSHA Soil Type	USCS Soil Classification	Maximum Temporary Slope (H:V)
Type B	ML, MH, and CL	1:1
Type C	SM	1.5:1

Any otherwise unsuitable soils may require flatter excavation slopes. We note that blasted rock should not be considered stable rock and will likely require flatter excavation slopes. A competent person as defined by OSHA guidelines should be present to determine the type of material exposed during trench excavations. Temporary construction slopes should be closely observed for signs of mass movement: tension cracks near the crest, bulging at the toe of the slope, etc. If potential stability problems are observed, the geotechnical engineer should be immediately contacted. The responsibility for excavation safety and stability of construction slopes should lie solely with the contractor.

We recommend that permanent cut or fill slopes be no steeper than 2.5 (H) to 1.0 (V) to maintain long term stability and to provide ease of maintenance. Slopes constructed steeper than 2.5 (H) to 1.0 (V) could be highly susceptible to erosion, will be difficult to maintain, and could experience large scale slope failure in some instances. The crest or toe of cut or fill slopes should be no closer than 15 feet to any building foundation. The crest or toe should be no closer than 5 feet to the edge of any pavements.

### **Groundwater Control**

As noted above, groundwater was encountered in our test borings B-1, B-4, B-11, and B-14. Perched groundwater conditions were present in test borings B-2, B-4 through B-10, B-12 through B-15, and B-22. Perched groundwater conditions consist of sandy soils on top of impermeable layers such as clay or partially weathered rock. If groundwater is encountered in shallow excavations, including foundation and utility trench excavations, construction dewatering may be performed by pumping directly from the trench excavations. If pumping from trench excavations proves to be ineffective, then the use of well points or other methods may be required. Pumping from dewatering trenches should be done with care to prevent loss of soil fines, boils, or instability of slopes. In certain cases, gravity flow in a trench may be sufficient for effective dewatering.

We must emphasize that dewatering requirements will be dictated by groundwater conditions at the time of construction. The contractor should use a technique or combination of techniques which achieves the desired result under actual field conditions.

### **Seasonal High Water Table Evaluation**

#### **SCM #1**

We evaluated the depth to the seasonal high-water table (SHWT) in the area of the planned pond SCM #1 (B-12). Residual soils consisting of sandy silts (ML) were encountered at this location in the upper approximate 5.5 feet. Residual soils consisting of silty sands (SM) were encountered at this location from a depth of 5.5 to 12 feet. Layers of partially weathered rock were below this depth to the boring termination depth of approximately 15 feet below the existing ground surface. Groundwater was not encountered in test boring B-12. A review of soil information available from the USDA Web Soil Survey indicates that in the area of test boring B-12, Rawlings (RgC) series soils are present. The RgC soils have a reported water table of greater than 80 inches. Based on the review of soil test boring B-12 groundwater was not encountered to the termination depth of 15 feet. Therefore, it is our opinion that the SHWT for SCM #1 is greater than 80 inches below the existing ground surface.

#### **SCM #2**

We evaluated the depth to the seasonal high-water table (SHWT) in the area of the planned pond SCM #2 (B-13). Residual soils consisting of silty sands (SM) were encountered at this location in the upper

approximate 3 feet. Layers of partially weathered rock were below this depth to the boring termination depth of approximately 5.5 feet below the existing ground surface. Groundwater was not encountered in test boring B-13. A review of soil information available from the USDA Web Soil Survey indicates that in the area of test boring B-13, Rawlings (RgC) series soils are present. The RgC soils have a reported water table of greater than 80 inches. Based on the review of soil test boring B-13 groundwater was not encountered to the termination depth of 5.5 feet. Therefore, it is our opinion that the SHWT for SCM #2 is greater than 80 inches below the existing ground surface.

### SCM #3

We evaluated the depth to the seasonal high-water table (SHWT) in the area of the planned pond SCM #3 (B-14 and B-21). For test boring B-14, residual soils consisting of sandy clays (CL) were encountered at this location in the upper approximate 3 feet, silty sands from 3 to 5.5 feet, silty clays (CL) from 5.5 to 8 feet, and elastic silts (MH) from 8 to the termination depth of 20 feet below the existing ground surface. Groundwater was encountered in test boring B-14 at approximately 9 feet below the existing ground surface. For test boring B-21, residual soils consisting of silty sands (SM) were encountered at this location in the upper approximate 3 feet and sandy silts were encountered from 3 feet to the termination depth of approximately 10 feet below the existing ground surface. Groundwater was not encountered in test boring B-21. A review of soil information available from the USDA Web Soil Survey indicates that in the area of test boring B-14 and B-21, Chewacla and Wehadkee (ChA) series soils are present. The ChA soils have a reported seasonal high water table of 0 to 12 inches. Our experience indicates that this is likely due to the presence of floodplain soils associated with the adjacent stream and is a perched groundwater condition. Therefore, it is our opinion that the SHWT for SCM #3 is within the upper foot of the existing ground surface.

### Foundation Design

After the above-described site preparation and site grading are complete, it is our opinion that the proposed structures may be supported on conventional shallow foundations. Based on the test boring results, provided structural loading conditions, and our past experience, ***we recommend that the shallow foundations be designed using an allowable soil bearing pressure of 2,500 pounds per square foot (psf) for all proposed structures. It is important to note that our allowable soil bearing pressure is based on the provided structural loading conditions for each structure. If any loads for any structure exceeds the provided maximums, please contact us for reevaluation.*** The use of this allowable soil bearing pressure assumes that any soft/loose soils in the upper approximate 3 feet of finished grades will be removed and replaced with suitable compacted structural fill or ABC stone. This also assumes that finished site grades in the planned building area will be at or above the existing site grades. Based on our assumed site preparation, loading conditions, and the site elevation information above, the estimated total foundation settlement is expected to be less than 1 and differential settlement less than ¼ inch if the recommended foundation bearing pressure is used. Please contact us to reevaluate our recommendations if actual loads are greater than the provided anticipated loads.

We recommend a minimum width of 18 inches for continuous wall footings and 24 inches for isolated column footings to prevent localized shear failure. Footings should bear at a minimum depth of 18 inches below the prevailing exterior ground surface elevation to provide the recommended bearing capacity and to avoid potential problems due to frost heave.

Detailed footing examinations should be performed in each footing excavation prior to placement of reinforcing steel. These examinations should be performed by our representative to confirm that the design allowable soil bearing pressure is available. The footing examinations should be performed using a combination of visual observation, hand rod probing, and dynamic cone penetrometer testing. Dynamic cone penetrometer testing, as described in ASTM STP-399, should be performed at no greater than 20-foot intervals in continuous wall footings. If the shallow subsurface conditions are not suitable for the recommended design bearing capacity, our representative will review the conditions with our project



Geotechnical Engineer. Recommendations will be developed to be immediately implemented in order to minimize construction delays.

Soft/loose soils were encountered in the upper approximate 3 feet of test borings B-2, B-6, B-7, B-8, B-9, B-20, B-21, and B-22, and it is possible that some soft/loose near surface soils may also be encountered in unexplored portions of the site. If these soils are not removed and replaced during site grading operations, remedial measures will likely be required during foundation construction.

We must emphasize the importance of quality control during the placement of structural fill. Performance of building foundations which are supported by structural fill material will depend largely on achieving the recommended level of compaction on fill materials. Compacted soil densities less than the recommended percentage of the standard Proctor maximum dry density could result in excessive foundation settlement.

Exposure to the environment may weaken the soils at the foundation bearing surface if they are exposed for extended periods of time. If the foundation bearing surface becomes softened due to exposure, the soft soils should be removed prior to placement of concrete.

### **Concrete Slabs-On-Grade**

Based on our test boring results, and the anticipated site grading operations, we recommend that a design modulus of subgrade reaction (k) value of 100 pounds per cubic inch (pci) be used for concrete slabs-on-grade. We note that this modulus of subgrade reaction value is the expected value for a 1 foot by 1-foot loaded area. If the structural design of the slab requires a subgrade reaction modulus value adjusted for the size or shape of the subject slab, please contact us for re-evaluation. This recommended value also assumes that any fill soils will consist of sandy silts and that the subgrade soils and fill soils will be compacted to a minimum of 98 percent of their standard Proctor (ASTM D-698) maximum dry density in the upper 12 inches.

In order to provide a stable working platform, we recommend that all slab-on-grade construction be underlain by a minimum 4-inch thickness of compacted ABC stone. We also recommend that a plastic vapor barrier be utilized.

Construction activities and exposure to the environment often cause deterioration of the prepared slab-on-grade subgrade. Therefore, we recommend that the subgrade soils be evaluated by our representative immediately prior to floor slab construction. This evaluation may include a combination of visual observations, proofrolling observations, and field density tests to verify that the subgrade has been properly prepared. If soft areas are encountered, recommendations for remedial measures should be provided by our project geotechnical engineer.

### **Pavement Design Recommendations**

Based on the above-described site preparation recommendations, we anticipate that the pavement area subgrade soils will consist primarily of sandy silts and silty sands. Based on our experience, these materials may reasonably have a California Bearing Ratio (CBR) ranging from approximately 5 to 15, if compacted to at least 100% of the standard Proctor maximum dry density in the top 8 inches. The CBR could be different than these assumed values if off-site fill materials are imported.

For purposes of pavement design, we have used a California Bearing Ratio of 5 for the pavement subgrade soils and the loading conditions described previously in this report. Based on the AASHTO design method, a 20-year design life, and our past experience, we suggest the following design pavement sections for the planned development:

Pavement Type	Heavy Duty Flexible	Heavy Duty Flexible (Alternate)	Light Duty Flexible
Surface Course	2 inches S9.5B (two 1-inch lifts)	1.5 inches S9.5B (one lift)	3 inches S9.5B (two 1.5-inch lifts)
Intermediate Course	4 inches I19.0B	2.5 inches I19.0B	--
Base Course	8 inches ABC	10 inches ABC	8 inches ABC

The bituminous concrete surface course should be type S9.5B (2022), and the bituminous concrete intermediate course should be type I19.0B (2022) in accordance with Division 6 of the current NCDOT Standard Specifications. Aggregate base course (ABC) stone should be in accordance with Division 5 of the current NCDOT Standard Specifications. Proper subgrade compaction and adherence to the NCDOT and project specifications, along with pavement maintenance operations, are critical to proper pavement performance.

Pavement Type	Heavy Duty Rigid	Light Duty Rigid
Portland Cement Concrete (PCC)	6 inches NCDOT Class AA PCC (4500 psi at 28-days)	4 inches NCDOT Class A PCC (3000 psi at 28 days)
Base Course	6 inches ABC stone	4 inches ABC stone

Construction joints and other design details should be in accordance with guidelines provided by the Portland Cement Association and the American Concrete Institute. The rigid pavement system should be constructed in accordance with section 700 of the NCDOT Standard Specifications.

The recommended pavement sections are designed to support the traffic volumes expected after completion of the planned construction. If construction traffic is allowed to use the recommended pavement sections, some damage requiring repair should be expected.

### **Seismic Site Classification**

We have reviewed our test boring results and pertinent geological maps to determine a seismic site classification in accordance with the International Building Code (IBC). The IBC provides a method to estimate a site's seismic classification based on the average standard penetration resistances of the upper 100 feet of a soil profile. Our maximum test boring depth was to an approximate depth of 25 feet below the existing ground surface. We have also used the results of test borings performed on other sites in the area, as well as our experience with similar conditions, to estimate the seismic classification for the subject site. Based on our review, experience, and the results of our test borings, the site should be classified as **Type D** in accordance with the IBC. If the Seismic Site Classification is critical to design, consideration should be given to performing shear wave testing at the site to confirm the Seismic Site Classification.

### **Suitability of Excavated Material for Reuse as Structural Fill**

Based on the field and laboratory investigation performed, the residual sandy clays (CL), sandy silts (ML), and silty sands (SM) should generally be suitable for use as structural fill on the site. The elastic silts (MH) may only be used as structural fill 3 feet below the finish grades. The in-place maximum dry density of structural fill soils should be no less than 90 pounds per cubic foot. Some moisture conditioning will likely be required to obtain the recommended level of compaction.



**Structural Fill**

In order to achieve high density structural fill, the following recommendations are offered:

- (1) Materials selected for use as structural fill should be free of vegetable matter, waste construction debris, and other deleterious materials. The material should not contain rocks having a diameter over 3 inches. It is our opinion that the following soils represented by their USCS group symbols will typically be suitable for use as structural fill: (ML), (CL), (SM), and (SC). Due to the potential for developing a perched groundwater condition, the following soils should be considered unsuitable as structural fill: (SW), (SP), (SP-SM), and (SP-SC). At depths greater than 3 feet below finished grades, the following soil types will typically be suitable for use as structural fill: (CH) and (MH). The following soil types are considered unsuitable: (OL), (OH), and (Pt).
- (2) Laboratory Proctor compaction tests and classification tests should be performed on representative samples obtained from the proposed borrow material to provide data necessary to determine acceptability and for quality control. The moisture content of suitable borrow soils should generally not be more than 3 percentage points above or below optimum at the time of compaction. Tighter moisture limits may be necessary with certain soils.
- (3) Suitable fill material should be placed in thin lifts (lift thickness depends on type of compaction equipment, but in general, lifts of 8 inches loose measurement are recommended). The soil should be compacted by mechanical means such as steel drum or sheepsfoot rollers. Proofrolling with rubber tired, heavily loaded vehicles may be desirable at approximately every third lift to bind the lifts together and to seal the surface of the compacted area thus reducing potential for absorption of surface water following a rain. This sealing operation is particularly important at the end of the workday and at the end of the week. Within small excavations, we recommend the use of "wacker packers" or diesel sled tamps and loose lift thicknesses of 4 to 6 inches to achieve the specified compaction.
- (4) We recommend that structural fill be compacted to a minimum of 95% of the standard Proctor maximum dry density (ASTM Specification D-698). Additionally, the in-place maximum dry density of structural fill should be no less than 90 pounds per cubic foot (pcf). The upper 12 inches of floor slab subgrades should be compacted to at least 98% of the standard Proctor maximum dry density (ASTM D-698). Fill materials in pavement areas should be placed and compacted in accordance with NCDOT Standards and Specifications.
- (5) An experienced soil engineering technician should take adequate density tests throughout the fill placement operation to verify that the specified compaction is achieved. It is particularly important that this be accomplished during the initial stages of the compaction operation to enable adjustments to the compaction operation, if necessary.

**ADDITIONAL SERVICES RECOMMENDED**

Additional engineering and testing services recommended for this project are summarized below:

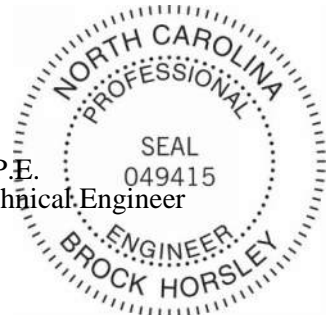
- (1) Site Preparation Observations: Proofrolling should be observed by our representative to determine if remedial measures are necessary in certain instances. Removal of any encountered unsuitable soils should be monitored by our representative to verify that adequate, but not excessive, removal is accomplished.
- (2) Quality Control of Fill Placement and Compaction: We recommend that an experienced engineering technician witness all required filling operations and take sufficient in-place density tests to verify that the specified degree of compaction has been achieved. Soil engineering judgments will be involved and should be made by our project geotechnical engineer with information provided by our engineering technician.
- (3) Footing and Slab Evaluations: Footing and slab areas for this project should be evaluated by our representative. The purpose of these evaluations will be to verify that the design soil bearing pressure is available and that subgrade areas are properly prepared.
- (4) Pavement Components Testing and Inspection: Pavement components should be tested and inspected during and following construction to verify compliance with project plans and NCDOT Standard Specifications.

The attached Appendix completes this report.

Sincerely,  
NV5 Engineers and Consultants, Inc. (F-1333)

  
Jalen G. Deatherage  
Associate Project Manager

Brock Horsley, P.E.  
Principal Geotechnical Engineer





RECEIVED  
03/25/2025  
SAMET

N|V|5

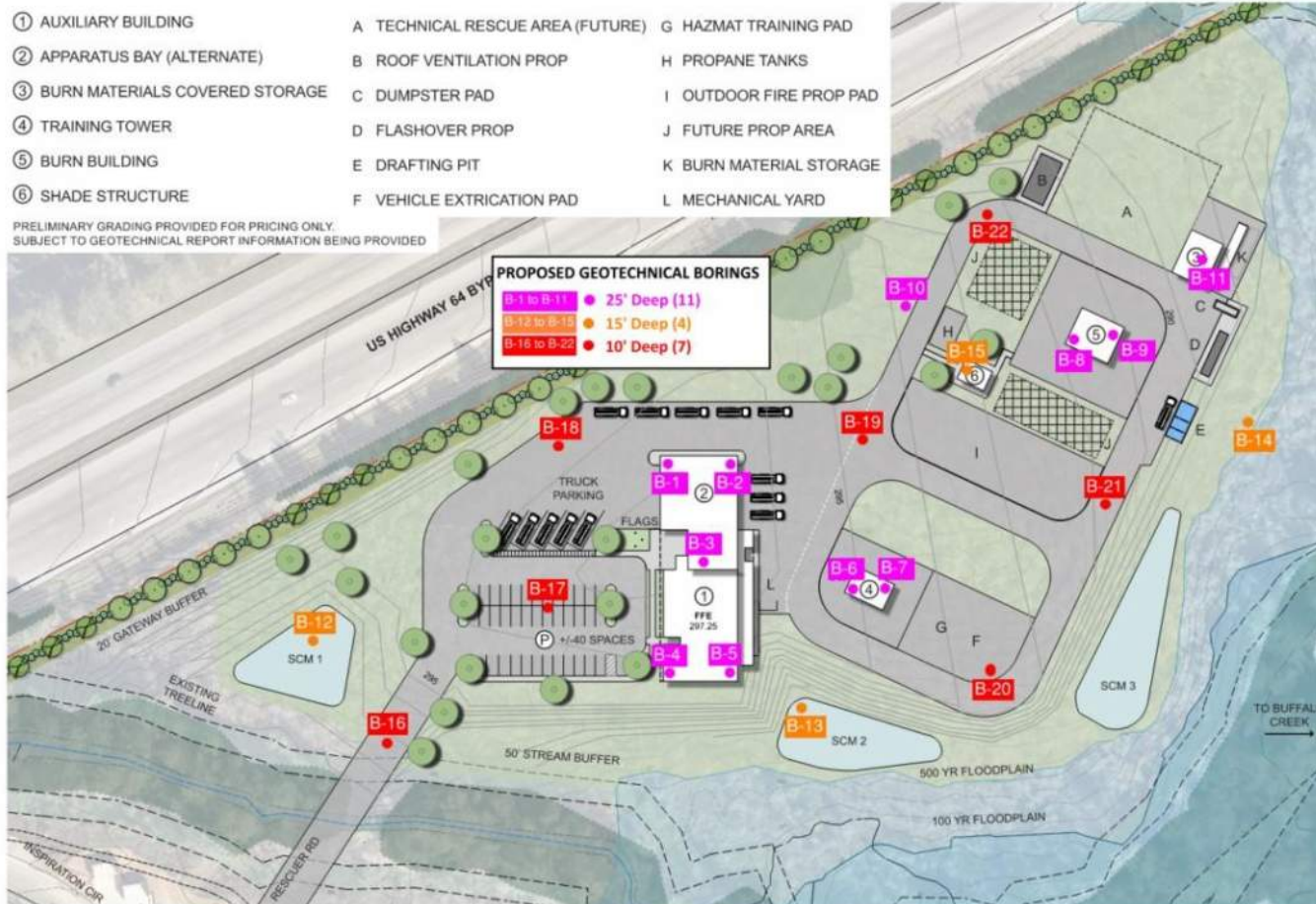
## APPENDIX

### **Rock Excavation Specifications**

Excavation Classifications: The classifications of excavation below will be made when rock excavation is encountered in work. Do not perform such work until material to be excavated has been cross-sectioned and classified by the Geotechnical Engineer. Such excavation will be paid on basis of contract conditions relative to changes in work.

1. Earth excavation includes removal and disposal of pavements and other obstructions visible on surface; underground structures and utilities indicated to be demolished and removed; along with earth and other materials encountered that are not classified as rock or unauthorized excavation.
2. Rippable rock excavation consists of removal and disposal of a formation that can not be removed with standard soil excavation equipment such as backhoes and pans, but can be removed with a Caterpillar D-8 or equivalent bulldozer mounted with a single tooth ripper. Mass rock excavation consists of the removal and disposal of a formation that cannot be excavated with a Caterpillar D-8 bulldozer or equivalent, mounted with a single tooth ripper. Trenches in excess of 10 feet in width and pits in excess of 30 feet high in either length or width are classified as mass rock excavation.
3. In trench excavations for footings and utilities, trench rippable rock excavation shall be the removal and disposal of a formation that can not be excavated using standard soil excavation equipment such as a backhoe, but can be removed with a Caterpillar 322 track mounted excavator or similar equipment, equipped with a  $\frac{3}{4}$  cubic yard bucket equipped with rock teeth.. In trench excavations for footings and utilities, trench rock excavation shall be the removal and disposal of a formation that cannot be excavated with a Caterpillar 322 track mounted excavator or equivalent, equipped with a  $\frac{3}{4}$  cubic yard bucket equipped with rock teeth.
4. The owner's testing agency or architect shall be the final judge as to what is to be classified as rock excavation. The contractor shall provide the specified equipment at the site to confirm rock excavation.
5. Intermittent ripping or drilling and blasting to increase production and not necessary to permit excavation will be classified as earth excavation.
6. Rippable rock and rock payment lines are as follows:
  - A. Two feet outside of concrete work for which forms are required, except footings.
  - B. One foot outside perimeter of footings.
  - C. In pipe trenches, 6 inches below invert elevation of pipe and two feet wider than inside diameter of pipe, but not less than 3 feet minimum trench width.
  - D. For drainage structures, 18 inches outside of structure dimension, and 6 inches below bottom of structure.
  - E. Neat outside dimensions of concrete work where no forms are required.
  - F. Under slabs-on-grade, 6 inches below bottom of concrete slab.
  - G. Under pavements, 6 inches below planned subgrade elevation.
7. Field verification of rippable rock and rock quantities shall be performed by the owner's testing agency or a registered land surveyor.
8. Remove all excavated material classified as rock from the site.
9. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of the architect. Unauthorized excavation, as well as remedial work associated with unauthorized excavation, shall be at Contractor's expense.





Not to Scale

Figure 1. Approximate Boring Locations

## Symbols and Nomenclature

I	Undisturbed Sample (UD)
●	Standard penetration resistance (ASTM D-1586)
100/2"	Number of blows (100) to drive the spoon a number of inches (2)
W-O-H, R	Weight of Hammer, Weight of Rods
AX, BX, NX	Core barrel sizes for rock cores
65%	Percentage of rock core recovered
RQD	Rock quality designation - % of core 4 or more inches long
▼	Water table at least 24 hours after drilling
▼	Water table one hour or less after drilling Loss of drilling water
△	A Atterberg Limits test performed
C	Consolidation test performed
GS	Grain size test performed
T	Triaxial shear test performed
P	Proctor compaction test performed
18	Natural moisture content (percent)

## Penetration Resistance Results








Sands	SPT N-60-Value Penetration (blows/ft)	Relative Density Descriptor
	0-4	Very Loose
	5-10	Loose
	11-20	Firm
	21-30	Very Firm
	31-50	Dense
	Over 50	Very Dense
Silts and Clays	SPT N-60-Value Penetration (blows/ft)	Relative Density Descriptor
	0-1	Very Soft
	2-4	Soft
	5-8	Firm
	9-15	Stiff
	16-30	Very Stiff
	31-50	Hard
	Over 50	Very Hard

## Drilling Procedures





Soil sampling and standard penetration testing performed in accordance with ASTM D-1586. The standard penetration resistance is the number of blows of a 140 pound hammer falling 30 inches to drive a 2 inch O.D., 1.4 inch I.D. split spoon sampler one foot. Core drilling performed in accordance with ASTM D-2113. Undisturbed sampling performed in accordance with ASTM D-1587.



### SAMPLE/SAMPLER TYPE GRAPHICS

	AUGER SAMPLE
	STANDARD PENETRATION SPLIT SPOON SAMPLER
	BULK / GRAB SAMPLE
	MODIFIED CALIFORNIA SAMPLER
	SHELBY TUBE SAMPLER
	HQ ROCK CORE SAMPLE
	NQ ROCK CORE SAMPLE


























### GROUNDWATER LEVEL GRAPHICS

	WATER LEVEL (during drilling operations)
	WATER LEVEL (immediately after drilling completion)
	WATER LEVEL (additional levels after drilling completion)
	OBSERVED SEEPAGE

### NOTES

- The report and graphics key are an integral part of these logs. All data and interpretations in this log are subject to the explanations and limitations stated in the report.
- Lines separating strata on the logs represent approximate boundaries only. Actual transitions may be gradual or differ from those shown.
- No warranty is provided as to the continuity of soil or rock conditions between individual sample locations.
- In general, Unified Soil Classification System (USCS) designations presented on the logs were based on visual classification in the field and were modified where appropriate based on gradation and index property testing.
- If sampler is not able to be driven at least 6 inches then Y/X indicates Y number of blows required to drive the identified sampler X inches with a 140 pound hammer falling 30 inches.

### UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487)

GRAVELS (More than half of coarse fraction is larger than the #200 sieve)	CLEAN GRAVEL WITH <5% FINES	$Cu \geq 4$ and $1 \leq Cc \leq 3$		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
		$Cu < 4$ and/or $1 > Cc > 3$		GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
	GRAVELS WITH 5 TO 12% FINES	$Cu \geq 4$ and $1 \leq Cc \leq 3$		GW-GM	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES
		$Cu < 4$ and/or $1 > Cc > 3$		GW-GC	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES
		$Cu < 4$ and/or $1 > Cc > 3$		GP-GM	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES
				GP-GC	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES
	GRAVELS WITH >12% FINES			GM	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
				GC-GM	CLAYEY GRAVELS, GRAVEL-SAND-CLAY-SILT MIXTURES
COARSE GRAINED SOILS (More than half of coarse fraction is smaller than the #4 sieve)	CLEAN SANDS WITH <5% FINES	$Cu \geq 6$ and $1 \leq Cc \leq 3$		SW	WELL GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
		$Cu < 6$ and/or $1 > Cc > 3$		SP	POORLY-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
	SAND WITH 5 TO 12% FINES	$Cu \geq 6$ and $1 \leq Cc \leq 3$		SW-SM	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES
				SW-SC	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES
		$Cu > 6$ and/or $1 < Cc > 3$		SP-SM	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES
				SP-SC	POORLY-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES
	SANDS WITH >12% FINES			SM	SILTY SANDS, SAND-GRAVEL-SILT MIXTURES
				SC	CLAYEY SANDS, SAND-GRAVEL-CLAY MIXTURES
				SC-SM	CLAYEY SANDS, SAND-SILT-CLAY MIXTURES
FINE GRAINED SOILS (More than half of material is smaller than the #200 sieve)	SILTS AND CLAYS (Liquid Limit less than 50)		ML	INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT PLASTICITY	
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
			CL-ML	INORGANIC CLAYS-SILTS OF LOW PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
			OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY	
	SILTS AND CLAYS (Liquid Limit greater than 50)		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT	
			CH	INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS	
			OH	ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY	

Date	Started: 11/28/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-1							
	Completed: 11/28/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
												16		
										Visual Classification				
0										TOPSOIL 0.2' Topsoil (Approximately 2 inches)				
SPT- 1 5-5-5 N60=14										ML				
SPT- 2 4-6-8 N60=20										Stiff to very stiff brown orange fine to medium micaceous sandy silt (ML) (RESIDUUM)				
5										5.5'				
SPT- 3 7-9-13 N60=31										SM				
SPT- 4 5-4-6 N60=14										Dense tan brown fine to medium micaceous silty sand (SM)				
10										8.0'				
SPT- 5 3-4-4 N60=11														
15										SM				
SPT- 6 4-4-4 N60=11										Firm tan brown fine to medium micaceous silty sand (SM)				
20														
SPT- 7 3-7-5 N60=17														
25										25.0'				
Notes: Boring terminated at approx. depth of 25.0 feet. Groundwater at 16 feet and Cave in at 16.5 feet														



Date		Started: 11/28/23		Project Number 121-23-113900						Project Wake Tech Fire & Rescue						Boring No. B-2	
		Completed: 11/28/23								Drilling Method: HSA						Logged By: JGD	
		Hammer Type: Automatic		Longitude:												Surface Elevation:	
Latitude:		Longtitude:								Location: See Figure 1							
Groundwater Depth (ft.)	Depth (ft.)							Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Sample Type G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts	
		Depth (ft)			Hour		Date										
		Visual Classification															
0										TOPSOIL	0.2'	Topsoil (Approximately 2 inches)					
				SPT- 1	4-2-3 N60=7					SM		Loose brown orange fine to medium silty sand (SM) (RESIDUUM)					
				SPT- 2	4-7-8 N60=21					ML	3.0'	Very stiff red orange fine to medium micaceous sandy silt (ML)					
5											5.5'						
				SPT- 3	9-13-18 N60=44												
				SPT- 4	13-27-24 N60=73					SM		Dense to very dense tan orange fine to medium silty sand (SM)					
10											12.0'						
				SPT- 5	6-7-9 N60=23					SM		Very firm to firm brown gray fine to medium micaceous silty sand (SM)					
15																	
				SPT- 6	3-7-7 N60=20												
20											22.0'						
										PWR		Partially weathered rock sampled as brown gray fine to medium silty sand (SM)					
25				SPT- 7	50/1 N60=100						25.0'						

Notes:  
Boring terminated at approx. depth of 25.0 feet.  
Cave in at 15 feet

Date	Started: 11/28/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue			Boring No. B-3					
	Completed: 11/28/23												
	Hammer Type: Automatic		Drilling Method: HSA			Logged By: JGD		Reviewed By: BPH					
Latitude:		Longitude:			Surface Elevation:								
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1			
										Sample Type G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts	Groundwater		
											Depth (ft)	Hour	Date
											Visual Classification		
0													
				SPT- 1	3-4-8 N60=17				ML	Very stiff orange brown fine to medium sandy silt (ML) with trace organics (RESIDUUM)			
										3.0'			
				SPT- 2	50/4 N60=100								
5				SPT- 3	50/5 N60=100								
				SPT- 4	50/5 N60=100								
10									PWR	Partially weathered rock sampled as white tan fine to coarse silty sand (SM)			
				SPT- 5	50/5 N60=100								
15													
										18.5'			

Notes:

Auger refusal at approx. depth of 18.5 feet.  
Cave in at 15.5 feet



Date	Started: 11/28/23		Project Number 121-23-113900				Project Wake Tech Fire & Rescue				Boring No. B-4			
	Completed: 11/28/23													
	Hammer Type: Automatic		Drilling Method: HSA				Logged By: JGD				Reviewed By: BPH			
Latitude:		Longitude:				Surface Elevation:								
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
												15.5		
										Visual Classification				
<div> <div> <div>0</div> <div>5</div> <div>10</div> <div>15</div> <div>20</div> </div> <div> <div>TOPSOIL</div> <div>SPT-1 4-4-6 N60=14</div> <div>SPT-2 3-6-9 N60=21</div> <div>SPT-3 5-7-7 N60=20</div> <div>SPT-4 5-7-7 N60=20</div> <div>SPT-5 8-9-11 N60=28</div> <div>SPT-6 50/4 N60=100</div> </div> <div> <div>0.2'</div> <div>12.0'</div> <div>17.0'</div> <div>23.5'</div> </div> <div> <div>Stiff to very stiff orange brown fine to medium sandy silt (ML) (RESIDUUM)</div> <div>Very firm orange brown fine to medium silty sand (SM)</div> <div>Partially weathered rock sampled as orange brown fine to medium silty sand (SM)</div> </div> </div>														

Notes:

Auger refusal at approx. depth of 23.5 feet.  
Groundwater at 15.5 feet and Cave in at 17 feet

Date	Started: 11/28/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-5							
	Completed: 11/28/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
										Visual Classification				
0										0.1' Topsoil (Approximately 1 inch)				
				SPT- 1	4-6-6 N60=17				SM	Firm red brown fine to medium silty sand (SM) (RESIDUUM)				
										3.0'				
				SPT- 2	7-8-5 N60=19				ML	Very stiff orange brown fine to medium sandy silt (ML)				
										5.5'				
				SPT- 3	6-9-14 N60=33				SM	Dense orange brown fine to medium silty sand (SM)				
										8.0'				
				SPT- 4	50/2 N60=100					Partially weathered rock sampled as orange brown fine to medium silty sand (SM)				
									PWR					
				SPT- 5	50/1 N60=100					15.0'				

Notes:  
Auger refusal at approx. depth of 15.0 feet.  
Cave in at 12.5 feet



Date	Started: 11/29/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-6							
	Completed: 11/29/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
										Visual Classification				
0										TOPSOIL 0.2' Topsoil (Approximately 2 inches)				
				SPT- 1	2-4-2 N60=9				SM	Loose brown fine to medium silty sand (SM) with rock fragments and trace organics (RESIDUUM)				
				SPT- 2	23-19-28 N60=67				SM	Very dense white fine to coarse silty sand (SM) with rock fragments				
5				SPT- 3	29-50/4 N60=100				PWR	Partially weathered rock sampled as white fine to coarse silty sand (SM)				
										8.0'				

Notes:  
Auger refusal at approx. depth of 8.0 feet.  
Cave in at 4.5 feet

Date	Started: 11/29/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-7							
	Completed: 11/29/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
										Visual Classification				
0										0.1'	Topsoil (Approximately 1 inch)			
				SPT- 1	4-2-2 N60=6				SM		Loose brown fine to medium silty sand (SM)			
										3.0'				
5				SPT- 2	50/0.5 N60=100				PWR		Partially weathered rock sampled as gray fine to medium silty sand (SM)			
										5.0'				

Notes:

Auger refusal at approx. depth of 5.0 feet.  
Cave in at 4 feet



Date	Started: 12/1/23		Project Number 121-23-113900				Project Wake Tech Fire & Rescue				Boring No. B-8	
	Completed: 12/1/23						Logged By: JGD				Reviewed By: BPH	
	Hammer Type: Automatic		Drilling Method: HSA				Surface Elevation:					
Latitude:		Longitude:				Location: See Figure 1						
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Groundwater		
										Sample Type		
										Depth (ft)	Hour	Date
										Visual Classification		
0										0.2'	Topsoil (Approximately 2 inches)	
				SPT- 1	3-3-3 N60=9				SM		Loose gray fine to medium silty sand (SM) (RESIDUUM)	
										3.0'		
				SPT- 2	4-5-6 N60=16				ML		Very stiff gray brown black fine to medium sandy silt (ML)	
5										5.5'		
				SPT- 3	5-6-8 N60=20				SM		Firm tran gray fine to medium silty sand (SM)	
										8.0'		
				SPT- 4	33-50/5 N60=100						Partially weathered rock sampled as brown fine to medium silty sand (SM)	
10									PWR			
				SPT- 5	50/0 N60=100					13.5'		

Notes:

Auger refusal at approx. depth of 13.5 feet.  
Cave in at 9.5 feet

[illegible]

Notes:  
Boring terminated at approx. depth of 25.0 feet.  
Cave in at 19.5 feet



Date	Started: 12/1/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-10							
	Completed: 12/1/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
										Visual Classification				
0										0.2'	Topsoil (Approximately 2 inches)			
				SPT- 1	1-4-3 N60=10				CL		Stiff gray fine to medium sandy clay (CL) with trace organics (RESIDUUM)			
										3.0'				
				SPT- 2	3-5-7 N60=17				CL		Very stiff brown tan silty clay (CL)			
5										5.5'				
				SPT- 3	23-20-30 N60=71				SM		Very dense brown tan fine to coarse silty sand (SM)			
										8.0'				
				SPT- 4	7-10-50/6 N60=100									
10									PWR		Partially weathered rock sampled as brown tan black fine to medium silty sand (SM)			
				SPT- 5	18-39-33 N60=100									
15										16.5'				

Notes:  
Auger refusal at approx. depth of 16.5 feet.  
Cave in at 14 feet

Date	Started: 11/29/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-11							
	Completed: 11/29/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
												15.5		
										Visual Classification				
										0.1' Topsoil (Approximately 1 inches)  CL Stiff to firm brown gray fine to medium sandy clay (CL) with trace organics (RESIDUUM)  5.5'  MH Very soft brown gray clayey silt (MH)  12.0'  MH Soft red tan clayey silt (MH)  25.0'				

Notes:  
Boring terminated at approx. depth of 25.0 feet.  
Groundwater at 15.5 feet and Cave in at 17.5 feet



Date	Started: 11/28/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue			Boring No. B-12					
	Completed: 11/28/23												
	Hammer Type: Automatic		Drilling Method: HSA			Logged By: JGD		Reviewed By: BPH					
Latitude:			Longitude:			Surface Elevation:							
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1			
										Sample Type G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts	Groundwater		
											Depth (ft)	Hour	Date
											Visual Classification		
0										0.1' Topsoil (Approximately 1 inch)			
				SPT- 1	4-2-2 N60=6				ML	Firm brown black fine to medium sandy silt (ML) (RESIDUUM)			
				SPT- 2	2-3-5 N60=11				ML	Stiff brown red fine to medium micaceous sandy silt (ML) with trace organics			
5				SPT- 3	4-6-7 N60=19								
				SPT- 4	6-7-7 N60=20				SM	Firm brown red fine to medium micaceous silty sand (SM)			
10													
				SPT- 5	10-22-50/5 N60=100				PWR	Partially weathered rock sampled as brown red fine to medium micaceous silty sand (SM)			
15										15.0'			

Notes:  
Boring terminated at approx. depth of 15.0 feet.  
Cave in at 11.5 feet

Date	Started: 11/28/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-13							
	Completed: 11/28/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
										Visual Classification				
0										TOPSOIL	0.2'	Topsoil (Approximately 2 inches)		
				SPT- 1	3-7-29 N60=51					SM		Very dense brown fine to coarse silty sand (SM) with trace organics and rock fragments (RESIDUUM)		
											3.0'			
				SPT- 2	50/5 N60=100					PWR		Partially weathered rock sampled as white tan fine to coarse silty sand (SM)		
5											5.5'			

Notes:

Auger refusal at approx. depth of 5.5 feet.



Date	Started: 11/29/23		Project Number 121-23-113900				Project Wake Tech Fire & Rescue				Boring No. B-14		
	Completed: 11/29/23		Drilling Method: HSA				Logged By: JGD				Reviewed By: BPH		
	Hammer Type: Automatic												
Latitude:			Longitude:				Surface Elevation:						
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
									Sample Type G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3 " O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Groundwater		
											Depth (ft)	Hour	Date
											9		
Visual Classification													
0									TOP SOIL	0.1'	Topsoil (Approximately 1 inch)		
			SPT- 1	2-2-4 N60=9				CL		3.0'	Stiff orange brown fine to medium sandy clay (CL) (RESIDUUM)		
5			SPT- 2	3-5-5 N60=14				SM		5.5'	Firm tan brown fine to coarse silty sand (SM)		
			SPT- 3	2-1-4 N60=7				CL		8.0'	Firm tan brown silty clay (CL)		
10													
			SPT- 4	WOH N60=0									
15								MH			Very soft red orange clayey silt (MH)		
20			SPT- 5	WOH- WOH-1 N60=1						20.0'			

Notes:

Boring terminated at approx. depth of 20.0 feet.  
Groundwater at 9 feet and Cave in at 10 feet

Date	Started: 12/1/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-15							
	Completed: 12/1/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
										Visual Classification				
0										0.1' Topsoil (Approximately 1 inch)				
				SPT- 1	4-2-4 N60=9				ML	Stiff brown tan fine to medium sandy silt (ML) (RESIDUUM)				
				SPT- 2	22-50/2 N60=100				PWR	Partially weathered rock sampled as tan fine to medium silty sand (SM)				
5				SPT- 3	27-15-16 N60=44					5.5'				
				SPT- 4	39-17-19 N60=51				SM	Dense and very dense brown tan fine to medium silty sand (SM)				
10				SPT- 5	15-17-17 N60=48					15.0'				
15														

Notes:  
Boring terminated at approx. depth of 15.0 feet.  
Cave in at 11 feet



Date	Started: 11/29/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue			Boring No. B-16					
	Completed: 11/29/23												
	Hammer Type: Automatic		Drilling Method: HSA			Logged By: JGD		Reviewed By: BPH					
Latitude:		Longitude:			Surface Elevation:								
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1			
										Sample Type G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts	Groundwater		
											Depth (ft)	Hour	Date
Visual Classification													
0										0.1' Topsoil (Approximately 1 inch)			
				SPT- 1	3-4-4 N60=11				ML	Stiff brown fine to medium sandy silt (ML) with trace organics (RESIDUUM)			
				SPT- 2	4-5-7 N60=17				ML				
5				SPT- 3	3-7-9 N60=23					Very stiff brown orange fine to medium sandy silt (ML)			
				SPT- 4	4-5-8 N60=19				SM	Firm brown orange micaceous fine to medium silty sand (SM)			
10										10.0'			

Notes:

Boring terminated at approx. depth of 10.0 feet.  
Cave in at 7 feet

Date	Started: 11/28/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-17							
	Completed: 11/28/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
Visual Classification														
0										0.1'	Topsoil (Approximately 1 inch)			
				SPT- 1	4-4-7 N60=16				ML		Very stiff brown fine to medium micaceous sandy silt (ML) (RESIDUUM)			
				SPT- 2	WOH-1-2 N60=4					3.0'				
5				SPT- 3	2-1-2 N60=4				SM		Very loose red brown tan fine to medium micaceous silty sand (SM)			
				SPT- 4	2-1-1 N60=3									
10										10.0'				
Notes: Boring terminated at approx. depth of 10.0 feet. Cave in at 7 feet														



Date	Started: 11/28/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-18							
	Completed: 11/28/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
Visual Classification														
0										0.1' Topsoil (Approximately 1 inch)				
				SPT- 1	3-3-5 N60=11				CL	Stiff red brown fine to medium micaceous sandy clay (CL)				
				SPT- 2	4-6-7 N60=19									
5				SPT- 3	2-6-6 N60=17				SM	Firm to very firm red brown tan fine to medium micaceous silty sand (SM)				
				SPT- 4	6-9-10 N60=27									
10										10.0'				

Notes:  
Boring terminated at approx. depth of 10.0 feet.  
Cave in at 7 feet

Date	Started: 12/1/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-19							
	Completed: 12/1/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
										Visual Classification				
0										0.2'	Topsoil (Approximately 2 inches)			
				SPT- 1	4-4-4 N60=11				SM		Firm brown fine to medium silty sand (SM) with rock fragments (RESIDUUM)			
										3.0'				
5				SPT- 2	20-34-50/5 N60=100				PWR		Partially weathered rock sampled as red tan fine to medium silty sand (SM)			
										6.5'				

Notes:  
Auger refusal at approx. depth of 6.5 feet.  
Cave in at 5 feet



Date	Started: 11/29/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue		Boring No. B-20							
	Completed: 11/29/23													
	Hammer Type: Automatic		Drilling Method: HSA		Logged By: JGD		Reviewed By: BPH							
Latitude:		Longitude:		Surface Elevation:										
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1				
										Sample Type		Groundwater		
										G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts		Depth (ft)	Hour	Date
										Visual Classification				
0										TOPSOIL 0.1' Topsoil (Approximately 1 inch)				
				SPT- 1	2-1-2 N60=4				ML	Soft brown orange fine to medium sandy silt (ML) (RESIDUUM)				
				SPT- 2	4-5-6 N60=16				ML	Very stiff brown orange fine to medium sandy silt (ML)				
5				SPT- 3	3-6-8 N60=20					8.0'				
				SPT- 4	30-41-28 N60=98				SM	Very dense brown orange fine to medium silty sand (SM)				
10										10.0'				

Notes:  
Boring terminated at approx. depth of 10.0 feet.  
Cave in at 5.5 feet

Date	Started: 11/29/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue			Boring No. B-21					
	Completed: 11/29/23												
	Hammer Type: Automatic		Drilling Method: HSA			Logged By: JGD		Reviewed By: BPH					
Latitude:			Longitude:			Surface Elevation:							
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1			
										Sample Type G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts	Groundwater		
											Depth (ft)	Hour	Date
											Visual Classification		
0										0.2' Topsoil (Approximately 2 inches)			
				SPT- 1	3-3-3 N60=9				SM	Loose tan orange fine to medium silty sand (SM) (RESIDUUM)			
5				SPT- 2	5-8-7 N60=21								
				SPT- 3	4-4-6 N60=14				ML	Stiff and very stiff tan orange fine to medium sandy silt (ML)			
10				SPT- 4	5-6-5 N60=16								
										10.0'			

Notes:

Boring terminated at approx. depth of 10.0 feet.  
Cave in at 5 feet



Date	Started: 12/1/23		Project Number 121-23-113900		Project Wake Tech Fire & Rescue			Boring No. B-22					
	Completed: 12/1/23												
	Hammer Type: Automatic		Drilling Method: HSA			Logged By: JGD		Reviewed By: BPH					
Latitude:			Longitude:			Surface Elevation:							
Groundwater Depth (ft.)	Depth (ft.)	Graphical Log	Sample Taken	Sample ID	SPT N-Value	Moisture Content (%)	% Passing No. 200	Other Tests and Remarks	USCS Class.	Location: See Figure 1			
										Sample Type G - Bulk / Grab Sample SPT - 2" O.D. 1.4" I.D. Tube Sample MC - 3" O.D. 2.4" I.D. Ring Sample NR - No Recovery * - Uncorrected Blow Counts	Groundwater		
											Depth (ft)	Hour	Date
											Visual Classification		
0										0.1' Topsoil (Approximately 1 inch)			
				SPT- 1	2-3-4 N60=10				SM	Loose brown fine to medium silty sand (SM) (RESIDUUM)			
				SPT- 2	4-6-6 N60=17				CL	Very stiff orange gray silty clay (CL) with trace organics			
5				SPT- 3	3-3-4 N60=10				ML	Stiff orange brown fine to medium sandy silt (ML)			
				SPT- 4	3-4-3 N60=10								
10										10.0'			

Notes:

Boring terminated at approx. depth of 10.0 feet.  
Cave in at 7.5 feet



# Construction Manager General Requirements Manual

## Wake Technical Community College

### Fire and Rescue Training Center

CM Gen Reqs  
Manual thru  
Addendum #1  
04/18/2025



CONSTRUCTION MANAGER:  
Samet Corporation  
5430 Wade Park Blvd, Suite 110  
Raleigh, NC 27607



OWNER:  
Wake Technical Community College  
4723 Advantage Way  
Raleigh, NC 27603



ARCHITECT:  
HH Architecture  
1100 Dresser Court  
Raleigh, NC 27609



CIVIL ENGINEER:  
NV5  
3300 Regency Parkway  
Cary, NC 27518



---

**INDEX TO CONSTRUCTION MANAGER GENERAL REQUIREMENTS MANUAL**

PREPARED BY: SAMET CORPORATION

<u>Description</u>	<u>Pages</u>
2.00 Project Manual Cover .....	1
2.01 Index to CM General Requirements Manual .....	2
2.02 Instructions and Notice to Bidders .....	3
2.03 NC Notice of Project Statement.....	10
2.04 Substitution Request form.....	11
2.05 Samet Bid Bond Form .....	15
2.06 Form of Agreement between Construction Manager and Subcontractor (Example Subcontract Agreement) .....	17
2.07 Sample Subcontractor COI.....	104
2.08 Trade Package General Scope Requirements.....	118
2.09 Housekeeping Commitment Agreement .....	153
2.10 Site Specific Safety Plan .....	154
2.11 Above OSHA Requirements .....	175
2.12 Samet Quality Control Plan.....	177
2.13 Schedule Requirements .....	188
 01600 Forms:	
01600.1 Subcontract Performance Bond Form .....	189
01600.2 Subcontract Payment Bond Form .....	190
01600.3 Quick Pay Agreement Form .....	191
01600.4 Joint Check Agreement between Subcontractor and Sub-subcontractor .....	192
01600.5 Joint Check Agreement between Subcontractor and Supplier .....	193
01600.6 Subcontractor Daily Report Form .....	194
01600.7 Filed Work Ticket Form .....	195

---

## NOTICE TO BIDDERS / ADVERTISEMENT FOR BIDS

### Wake Technical Community College – Fire and Rescue Training Center

- Samet Corporation as Construction Manager for Fire and Rescue Training Center will open sealed bid proposals from **Prequalified Bidders** at **2:00pm on May 8<sup>th</sup> 2025** for the Trade Packages enumerated below.
- On Bid Day - Sealed bids shall be addressed to Samet Corporation and will be received at the **Wake Tech Education & Innovation Center (building C) located at 1100 Innovation Circle Wendell, NC** from 8 AM to 2 PM. At the time enumerated above all sealed bids received will be opened publicly and read aloud. Please be early; any bids received after 2:00 PM EST on 5/8/2025 will be rejected and will not be opened. It is the responsibility of bidders to turn in their bid on time and at the correct location as per the instructions provided.
- Prior to Bid Day - Sealed bid proposals may be delivered to **Samet Corporation's Raleigh office located at 5430 Wade Park Blvd, Suite 110, Raleigh, NC**. "Early bird" sealed bid packages may be delivered during regular business hours, from 8 AM to 5 PM Monday through Friday.
- Regardless of when and where you deliver, all proposal packages must be in a sealed envelope clearly marked with your company name, address and contact person, the project name, and the bid package(s) included in your bid.
- Plans and specifications can only be obtained by prequalified subcontractors.
- Bidders are strongly encouraged to include opportunities for minority business participation wherever possible in their respective bid submission. Minority Business is a part of this contract and must comply with the State of North Carolina General Statutes. The CM and owner reserve the right to reject all proposals.
- Should you need additional information, contact Zach Anderson ([zanderson@sametcorp.com](mailto:zanderson@sametcorp.com)) or Corey Shearer ([cshearer@sametcorp.com](mailto:cshearer@sametcorp.com)).

### **BUILDING TRADE PACKAGES:**

01A Final Clean  
01B General Trades  
03A Cast-in-Place Concrete  
04A Masonry  
05A Structural Steel, Metal Fabrications  
07A Waterproofing



---

07C Metal Roofing & Metal Panels  
08A Doors, Frames, & Hardware  
08D Overhead Doors  
09A Drywall, Framing, Insulation  
09K Epoxy Flooring  
09M Painting and sealed Concrete  
10A Toilet Partitions & Accessories, Visual Display, FP Specialties  
10B Signage  
13A Special Construction (Fire Panels & Brick)  
21A Fire Protection  
22A Plumbing  
23A HVAC  
23B HVAC & Plumbing Combination  
26A Electrical & Fire Alarm  
31A Earthwork, Storm Drainage, Erosion Control, & Site Utilities  
31B Earthwork, Storm Drainage, Erosion Control, Site Utilities, Asphalt Paving, Curb & Gutter Combination  
32A Site Concrete  
32C Asphalt Paving, Curb & Gutter  
32D Fencing  
32E Landscaping

### **PRE-BID CONFERENCE MEETING**

A Pre-Bid Conference will be held virtually at 9:00am **on April 17<sup>th</sup> 2025.**

Questions from all interested bidders or their sub-subcontractors will be clarified during this meeting. The attendance at this Pre-bid Conference is not mandatory, but all attendance is encouraged by the Construction Manager.

The Pre-Bid Conference Meeting is also to identify preferred brand alternates and their performance standards that the Owner will consider for approval on this project.

In accordance with General Statute GS 133-3, Specifications may list one or more preferred brands as an alternate to the base bid in limited circumstances. Specifications containing a preferred brand alternate under this section must identify the performance standards that support the preference. Performance standards for the preference must be approved in advance by the owner in an open meeting. Any alternate approved by the owner shall be approved only where (i) the preferred alternate will provide cost savings, maintain or improve the functioning of any process or system affected by the preferred item or items, or both, and (ii) a justification identifying these criteria is made available in writing to the public.

Justification of any approvals will be made available to the public in writing no later than seven (7) days prior to bid date.

### **PROJECT LOCATION / SCOPE**

The aforementioned bid packages are part of the construction of the Fire and Rescue Training Center. Bid packages being solicited at this time consist of all packages/trades for the construction of the project.

### **BIDDER PREQUALIFICATION PROCESS**

In accordance with N.C. General Statute 143-129, all bidders must be prequalified by the Construction Manager in order to submit a sealed bid proposal for this project. All 1st tier subcontractors or suppliers are required regardless of current standing with Samet Corporation to complete this prequalification process. When requested by Samet Corporation, all trade subcontractors previously prequalified or not must submit updated financial statements, surety's letter of bondability, reference / bonding ability confirmation letter from surety agent (if applicable) and certificate(s) of insurance in order to remain prequalified by Samet Corporation. This prequalification process starts by completing the "Samet Standard Prequalification" via Trade Tapp / Building Connected here. Once completed, all Trade Partner's prequalification status will remain effective for 16 months after the date of the most recently submitted year-end financial documents.

Additional steps to the process are as follows:

- Each Trade Partner shall pay close attention to the Project Specific Prequalification Form, found on Building Connected under Bid Form, with respect to potential bonding, insurance and previous experience requirements, all of which may be a key component of becoming a prequalified Trade Partner.
- Samet's Standard Prequalification and the Project Specific Prequalification Form must be received by Samet **on or before 5:00pm on May 1<sup>st</sup> 2025**. Failure to submit this information on or before the aforementioned date and time may result in your company not being prequalified by Samet, thus not allowing the company to participate in the bid process.
- Bidders with questions regarding the prequalification process are encouraged to contact Andrew Gotschall via email at [agotschall@sametcorp.com](mailto:agotschall@sametcorp.com).
- Upon submission of all required documents via Trade Tapp / Building Connected, a Samet Prequalification Specialist will review for approval. Each Subcontractor /



Supplier will be notified by Samet of its qualification status no later than three (3) business days following the expiration of the Prequalification Period.

### **SELECT TRADE PACKAGE BONDING REQUIREMENTS**

Prequalified bidders **for select bid packages** shall be **capable of providing** a Payment and a Performance Bond to the Construction Manager in the sum equal to 100% of their Subcontract Amount. The surety / bonding company must be licensed to do business in the State of North Carolina. **Trade packages requiring bonding are enumerated below and are further defined on the Subcontractor / Supplier Supplemental Qualification Form. Prior to Subcontract Award, the Construction Manager reserves the right to require a Performance and Payment Bond(s) on any Trade Package defined below. Additionally, the Construction Manager shall require a Performance and Payment Bond(s) of any prospective bidder who was informed of this requirement during the Subcontractor Prequalification Process as a condition for prequalification approval. Should a Performance and Payment Bond(s) be required, the Construction Manager shall request the cost of the Performance and Payment Bond(s) prior to Subcontract Award.**

- 01A Final Clean
- 01B General Trades
- 03A Cast-in-Place Concrete
- 04A Masonry
- 05A Structural Steel, Metal Fabrications
- 07A Waterproofing
- 07C Metal Roofing & Metal Panels
- 08A Doors, Frames, & Hardware
- 08D Overhead Doors
- 09A Drywall, Framing, Insulation
- 09K Epoxy Flooring
- 09M Painting and sealed Concrete
- 10A Toilet Partitions & Accessories, Visual Display, FP Specialties
- 10B Signage
- 13A Special Construction (Fire Panels & Brick)
- 21A Fire Protection
- 22A Plumbing
- 23A HVAC
- 23B HVAC & Plumbing Combination
- 26A Electrical & Fire Alarm
- 31A Earthwork, Storm Drainage, Erosion Control, & Site Utilities
- 31B Earthwork, Storm Drainage, Erosion Control, Site Utilities, Asphalt Paving, Curb & Gutter Combination
- 32A Site Concrete

32C Asphalt Paving, Curb & Gutter  
32D Fencing  
32E Landscaping

### **SELECT BID SECURITY / TIME LIMITATION**

A Bid Security of five percent (5%) of the bid in cash, cashier's check, certified check, or a fully executed Bid Bond is required to accompany each proposal **over the amount of \$300,000**. Bids may not be withdrawn within sixty (60) days after the scheduled bid date and time, except as provided by law.

### **DRAWING AND SPECIFICATION AVAILABILITY**

Complete plans, specifications and contract documents will be open for inspection through SAMET's Internet / Web Based Plan Room as powered by *Building Connected* via issuance of an Invitation to Bid by Samet to the prequalified bidder.

### **LICENSING**

All trade subcontractors must have proper license in accordance with state laws governing **their respective trades** in accordance with General Statutes of North Carolina Chapter 87. General Statutes of North Carolina Chapter 87 will be observed in receiving and awarding all Contracts.

### **EVALUATION OF BID AMOUNTS**

Following the opening of the bids on the pre-determined date(s), the Construction Manager's determination that the low bidder's bid is responsible and responsive and the Construction Manager's receipt of approval from the Owner, the Construction Manager will award each respective trade package to the lowest responsible and responsive bidder. The lowest bid amount will be determined by evaluating the best combination of the pricing received for each bid package with respect to evaluating individual bid package amounts submitted versus combined bid package amounts submitted. For example, if a combination bid package being solicited is submitted and is less than the sum of the individual bid package amounts received for this same work, then the combination package bidder will be named apparent low bidder. This same evaluation process will be employed by the Construction Manager when evaluating bid alternates and various combinations thereof which are accepted by the Owner.

### **BID PREPARATION**

All bids must be submitted on the standard forms provided by the Construction Manager and marked accordingly to identify the Trade Package name being bid. Bids must be



submitted in a sealed opaque envelope with the following marked on the front of the envelope: (1) Bidder Name and Address, (2) Project Name - "Fire and Rescue Training Center" and Trade Package Name (e.g. "32A Asphalt Paving, Curb & Gutter"). Bidders shall be required to review and use complete sets of bid documents to prepare bids. Neither the Construction Manager, Owner nor Designer assumes responsibility for errors or misinterpretations resulting from the use of incomplete bid document sets.

### **MINORITY OWNED AND WOMEN OWNED BUSINESS ENTERPRISES**

Minority owned and women owned businesses are encouraged to submit bids for this construction project. Samet Corporation and Wake technical Community College awards public contracts without regard to race, religion, color, creed, national origin, sex, age, or handicapping condition as defined by North Carolina General Statutes, Section 168A-3.

**In accordance with N.C. General Statute 143-128.2, Samet Corporation is specifically encouraging participation of Minority or Women Owned Business Enterprises / Historically Underutilized Businesses (MWBE / HUB) on this project. Each prequalified bidder shall make a good faith effort to recruit and select MWBE / HUB companies to participate in this project. As part of the requirements for submitting a bid, each prequalified bidder must submit the proper documentation substantiating their adherence to the requirements depicted within N.C. General Statute 143-128.2 and the bid documents. Bidders who fail to submit the required documents with their bid may result in their bid being rejected by the Construction Manager. Our goal for this project is 25%.**

**NOTE:** The bidder shall include with the bid proposal the form *Identification of Minority Business Participation* identifying the minority business participation it will use on the project and shall include either *Affidavit A* or *B* as applicable. Forms and instructions are included within the Proposal Form in the bid documents. Please reference the form of proposal for further direction on the exact items required to be included within your bid.

### **BIDDER QUESTIONS**

All bidders shall note that the Construction Manager and/or Designer shall answer only questions that are submitted in writing via e-mail to the Construction Manager's office. All questions during the bid period shall be directed to the attention of Zach Anderson ([zanderson@sametcorp.com](mailto:zanderson@sametcorp.com)) or Corey Shearer ([cshearer@sametcorp.com](mailto:cshearer@sametcorp.com)).

Specific questions, when warranted by the Construction Manager will be addressed to all bidders in the form an addendum. **All questions must be received by Samet on or before April 24<sup>th</sup> 2025** All bidders shall note that no questions will be answered regarding any aspect of the project after the expiration of the aforementioned ten (10) calendar day cut off period in order to enable the Construction Manager and/or Designer to issue a final addendum, if necessary, to equitably inform all bidders.

### **MATERIAL AND EQUIPMENT SUBSTITUTION REQUEST FORMS**

**Material or equipment substitution requests must be received by Samet on or before April 24<sup>th</sup> 2025** . Following review of the specifications or drawings, any prospective bidder or supplier thereof may submit a Material and Equipment Substitution Request Form directly to the Construction Manager for review prior to sending to the Designer for review and approval. A Material and Equipment Substitution Request Form will be available from Samet upon request and will also be included as part of the Construction Documents. Material and equipment requests shall be submitted on the aforementioned form only and shall be accompanied with any further information necessary to ascertain that the particular product, equipment, etc. is equal to the one(s) specified. Material and substitution request forms may be obtained from or submitted to the attention of Zach Anderson ([zanderson@sametcorp.com](mailto:zanderson@sametcorp.com)) or Corey Shearer ([cshearer@sametcorp.com](mailto:cshearer@sametcorp.com)). approved material and equipment substitutions will be addressed to all bidders in the form an Addendum.

### **BID INFORMALITIES**

The Construction Manager and/or Owner reserves the rights to accept or reject any or all bids and waive any or all informalities or irregularities in the bid process in order to accept bids in the best interest of the Owner or Construction Manager.

**Notice: The above bids are being solicited under N.C.G.S. § 143-128 and 143-129 respectively.**



---

**PROJECT STATEMENT**

**NOTICE OF PROJECT STATEMENT**

- A. Name of Project:  
WTCC Fire & Rescue Training Center
- B. Physical Address of the Project:  
5345 Rolesville RD  
Wendell, NC 27591
- C. Contracting Body:  
Wake Technical Community College
- D. Name of Construction Manager:  
Samet  
309 Gallimore Dairy Road, Suite 102, Greensboro, NC 27409
- E. The name, phone number, and mailing address of an agent authorized by the Construction Manager to accept service of the requests for payment bond, the notice of public subcontract, and the notice of claim on payment bond referenced in subsection(b) of this section:

Douglas A Beane, CFO  
Samet Corporation  
P.O. Box 8050  
Greensboro, NC 27419  
(336) 544-2600

- F. The name and address of the principal place of business of the surety issuing the payment bond required by G.S. 44A—26(a) for the construction contract:

Liberty Mutual Insurance  
Attn: Surety Claims Department  
1001 4<sup>th</sup> Avenue  
Suite 1700  
Seattle, WA 98154

Project Name: WTCC Fire & Rescue Training Center  
Project #: 23-878



---

### SUBSTITUTION REQUEST FORM

Date: \_\_\_\_\_

Contractor:

Bid Package #:

Owner: Wake Technical Community College  
4723 Advantage way  
Raleigh, NC 27603

Architect: HH Architecture  
1100 Dresser Court  
Raleigh, NC 27609

CM@R: Samet  
5430 Wade Park Blvd, Suite 110  
Raleigh, NC 27607



## Substitution Request Form

### CONTRACTOR'S REQUEST, WITH SUPPORTING DATA:

1. Section of the Specifications to which this request applies:
  - I. Product data for proposed substitution is attached  
(description of product, reference standards,  
performance, and test data).
  - II. Sample is attached.
  - III. Sample will be sent if requested by Architect.
2. Itemized comparison of proposed substitution with specified product is clearly defined, items that do not fully conform to the specification need to be specifically highlighted or approval may later be rejected due to non-conformance.

	Original Product	Substitution
Name, Brand:	_____	_____
Catalog Number:	_____	_____
Manufacturer:	_____	_____
Significant Variations:	_____ _____	

3. Unit costs of the original product and proposed substitution

\$ \_\_\_\_\_ per \_\_\_\_\_ Substitution: \$ \_\_\_\_\_ per \_\_\_\_\_

4. State whether cost is for: \_\_\_\_\_ Material Only or \_\_\_\_\_ Material Installed

Credit to Owner: \$ \_\_\_\_\_

Additional Cost to Owner: \$ \_\_\_\_\_

5. Proposed Change in Contract Time:

Reduce/Increase Contract Time by \_\_\_\_\_ days.

6. Effect of the proposed substitution on other parts of the Work, or on other contracts:

---

---

---

7. Reason for requesting substitution:

---

---

---

**CONTRACTOR'S STATEMENT OF CONFORMANCE OF PROPOSED SUBSTITUTION  
TO CONTRACT REQUIREMENTS:**

We have investigated the proposed substitution and:

1. Believe that it is equal or superior in all respects to the originally specified product, except as stated in #2 above.
2. Shall provide the same warranty as required in General Conditions.
3. Shall provide the same special warranty or guaranty as specified.
4. Have included all cost data and cost implications of the proposed substitutions.
5. Shall pay review, redesign and special inspection costs caused by the use of this product.
6. Shall pay additional costs to other contractors caused by the substitution.
7. Shall coordinate the incorporation of the proposed substitution in the Work.
8. Shall modify other parts of the Work as may be needed to make all parts of the Work complete and functioning.
9. Waive future claims for added cost to Contractor caused by the proposed substitution.

Contractor (Signature): \_\_\_\_\_ Date: \_\_\_\_\_



Project Name: WTCC Fire & Rescue Training Center  
Project #: 23-878



**ARCHITECT'S REVIEW AND ACTION:**

\_\_\_\_\_ Rejected

\_\_\_\_\_ Provide more information in the following categories. Resubmit.

\_\_\_\_\_ Sign contractor's Statement of Conformance. Resubmit.

\_\_\_\_\_ The Proposed substitution is approved, with the following conditions:

---

---

---

The following changes will be made by Change Order number: \_\_\_\_\_

Addition/Deduction from the Contract Sum: \$ \_

---

Addition/Deduction from the Contract Time: \_\_\_\_\_ Days

---

---

---

Date

---

**BID BOND FORM**

KNOW ALL MEN BY THESE PRESENTS, That we,

\_\_\_\_\_

(Bidder's Name)

\_\_\_\_\_, of \_\_\_\_\_ (Street Address)

(City, State, Zip)

Hereinafter called the principal, and

\_\_\_\_\_

(Surety's Name)

A corporation organized and existing under the Laws of the State of \_\_\_\_\_,  
and authorized to transact business in the State of \_\_\_\_\_, as Surety, hereinafter  
called Surety, are held and firmly bound unto the **Samet and Wake Technical Community college.**

Hereinafter called Oblige, in the Penal sum of five percent (5%) of the amount bid, good and lawful  
money of the United States of America, for the payment of which the Principal and Surety bind  
themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly  
by these presents.

The Condition of this Obligation is such, that, WHEREAS the Principal has submitted a proposal to  
the Oblige on a contract for the construction.

NOW THEREFORE, if the Oblige shall accept the bid of the Principal and the Principal shall enter  
into a contract with the Oblige in accordance with the terms of such bid, and give such bond or  
bonds as may be specified in the Bidding or Contract Documents with good and sufficient surety for  
the faithful performance of such construction for the prompt payment of labor and material furnished  
in the prosecution thereof, or in the event of the failure of the Principal to enter such contract and  
give such bond or bonds, if the Principal shall pay to the Oblige the difference not to exceed the  
penalty hereof between the amount specified in said bid and such larger amount for which the Oblige  
may in good faith contract with another party to perform the Work covered by said bid, then this  
obligation shall be null and void; otherwise to remain in full force and effect.



In witness whereof, we have hereunto set our signatures and seal this \_\_\_\_\_  
day of \_\_\_\_\_, 20\_\_\_\_\_, all pursuant to due authorization.

\_\_\_\_\_  
Principal (Seal)

\_\_\_\_\_  
By Surety

\_\_\_\_\_  
By  
Attorney-in-Fact in accordance with the attached Power of Attorney

STATE OF \_\_\_\_\_)

ss:

COUNTY OF \_\_\_\_\_)

I, \_\_\_\_\_, a Notary Public in and for the State and County  
aforesaid, do hereby certify that \_\_\_\_\_, and  
\_\_\_\_\_, whose names are signed to the foregoing bond, this day  
personally appeared before me in my State and County aforesaid and acknowledged the  
same.

Given under my hand seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public (Seal)

My Commission expires:



**THIS AGREEMENT IS SUBJECT TO ARBITRATION PER APPLICABLE LAW  
SUBCONTRACT AGREEMENT**

**Contractor:**  
Samet Corporation

**Subcontractor:**

Phone:

**Designated Representative:**

Title:  
Phone:  
Email:

**Designated Representative:**

Title:  
Phone:  
Email:

**Subcontract #:**  
**Samet Phase Code:**  
**Samet Job #:**

**Subcontract Date:**  
**Subcontract For:**

**Project Name:**  
**Job Site Address:**

**Subcontract Amount:** \$0.00

**Project Owner:**  
**Project Architect:**  
**Lien Agent:**

**Submit Pay Requests to:** [accts@sametcorp.com](mailto:accts@sametcorp.com)

**Subcontract Addenda:**

Addendum 1 Insurance and Bonds  
Addendum 2 Work Rules and Safety Policy  
Addendum 3 Application for Payment  
Addendum 4 Affidavit of Capital Improvement

**Subcontract Exhibits:**

Exhibit A Detailed Scope of Work  
Exhibit B List of Contract Documents  
Exhibit C Project Schedule  
Exhibit D MWBE Documentation  
Exhibit E Pre-Award Meeting Minutes  
Exhibit F Notice of Project Statement

THIS SUBCONTRACT AGREEMENT (hereinafter "Agreement") is made and entered as of the Subcontract Date above, by and between Samet Corporation (hereinafter "Contractor") and the above-named Subcontractor (hereinafter "Subcontractor") and, together Contractor and Subcontractor are hereinafter the "Parties". This Agreement is contingent upon the Contractor entering into a Prime Contract with the Owner and the Owner's approval of the Subcontractor. Subcontractor is not authorized to perform any Work hereunder until this Agreement is signed and returned to the Contractor, along with a current Certificate of Insurance and any required bonds. If Subcontractor begins Work prior to signing this Agreement, such action shall constitute acceptance of all terms and conditions tendered herein. Contractor, however, shall have no obligation to make payment for work performed by Subcontractor without a signed Agreement.





Samet Corporation

By: Sample - Do Not Sign

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

By: Sample - Do Not Sign

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

EXAMPLE

## **TABLE OF ARTICLES**

- 1 CONTRACT DOCUMENTS**
  - 2 SCOPE OF WORK**
  - 3 EXECUTION AND PROGRESS OF SUBCONTRACTOR'S WORK, DELAYS**
  - 4 SUBCONTRACT AMOUNT**
  - 5 SUBMITTALS, AS-BUILT DRAWINGS, ELECTRONIC DATA**
  - 6 DESIGN WORK AND PROFESSIONAL SERVICES**
  - 7 WARRANTY**
  - 8 QUALITY, MATERIALS, EQUIPMENT AND CLEAN UP**
  - 9 VERIFICATION OF PROJECT CONDITIONS, APPLICABLE LAW AND CONTRACT DOCUMENTS**
  - 10 SUPERINTENDENCE, COOPERATION, SUBCONTRACTING, PROJECT MEETINGS**
  - 11 MEANS, METHODS AND SAFETY**
  - 12 CHANGES**
  - 13 PROGRESS PAYMENTS, RETAINAGE, FINAL PAYMENT**
  - 14 SUSPENSION, DEFAULT AND TERMINATION**
  - 15 SUBCONTRACTOR CLAIMS AND DISPUTES**
  - 16 PROTECTION AND CORRECTION OF WORK**
  - 17 DEFENSE AND INDEMNITY**
  - 18 INSURANCE AND BONDS**
  - 19 LABOR**
  - 20 MISCELLANEOUS**
- 

The Contractor and Subcontractor hereby agree as follows:

### **ARTICLE 1. CONTRACT DOCUMENTS**

#### **1.1 The Contract Documents consist of:**

- (1) this Agreement, including the Exhibits and Addenda identified on page 1 of this Agreement, and
- (2) the Prime Contract between the Owner and Contractor, including all exhibits, attachments, drawings, plans and specifications, and other contract documents enumerated or incorporated therein, along with all Addenda and Modifications to the Prime Contract, which Prime Contract (excluding Contractor's compensation and confidential business terms) shall be kept on file in the office of the Contractor and made available to the Subcontractor for inspection upon reasonable request.

Together, these Contract Documents form this Subcontract. Subcontractor agrees to all terms of this Subcontract. This Subcontract represents the entire and integrated agreement between the Parties hereto and supersedes all prior agreements and representations, written or oral. The Contract Documents are complementary and what is required by one shall be as binding as if required by all. In the event of a conflict between any of the provisions of the Contract Documents, the Subcontractor shall be deemed to have agreed to provide the greater quantity and better quality of work called for in any of the conflicting provisions.

**1.2** Contractor and Subcontractor shall be mutually bound by the terms of this Subcontract. To the extent that the provisions of the Prime Contract apply to the Subcontractor's Work, the Subcontractor shall assume toward the Contractor all obligations that the Contractor assumes toward the Owner and any design professionals under the Prime Contract.

### **ARTICLE 2. SCOPE OF WORK**

**2.1** Subcontractor agrees to furnish all labor, materials, equipment, and supervision required by **Exhibit A** or reasonably inferable therefrom in order to provide a complete and functioning installation, except to the extent specifically indicated in this Subcontract to be the responsibility of others ("Work"). Subcontractor shall secure and pay for all permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work. Subcontractor shall comply with the requirements of all governmental or quasi-governmental authorities having jurisdiction over the Work, including Building Departments, and shall give these authorities requisite notices relating to its Work.

**2.2** Subcontractor's Work shall conform to the Plans, Specifications, Drawings and Addenda included in the Contract Documents defined in ARTICLE 1, subject to Modifications, as set forth in **Exhibit B**.

### **ARTICLE 3. EXECUTION AND PROGRESS OF SUBCONTRACTOR'S WORK, DELAYS**

**3.1** Time is of the essence of this Subcontract, and any time specified for completion of the Subcontractor's Work or any portion thereof is a material provision of this Subcontract.

**3.2** The Schedule is attached to this Agreement as **Exhibit C**. By executing this Agreement, Subcontractor agrees that the sequences and durations reflected in the Schedule are reasonable and appropriate for the completion of its Work and that Subcontractor has taken into consideration all reasonably foreseeable delays and disruptions incident to its Work, including weather conditions, the availability and cost of labor, materials, tools, and equipment, Owner's and Contractor's scheduling requirements, and potential Project congestion caused by simultaneous work of Subcontractor and others.

**3.3** Unless otherwise expressly provided in this Subcontract, Subcontractor shall begin its Work in accordance with the Schedule or as otherwise directed in any written notice by Contractor. Subcontractor shall furnish at its own expense sufficient labor, materials, equipment, and supervision to assure proper performance of its Work in strict compliance with



the Schedule. Subcontractor shall diligently and continuously prosecute its Work in an efficient fashion and take all necessary actions to assure completion of the Project within the time specified in the Schedule.

**3.4** Subcontractor shall at all times give due consideration to the fact that other work is dependent upon Subcontractor's proper and timely completion of its Work. Subcontractor shall perform and coordinate its Work with that of Contractor and all other subcontractors for the most efficient construction of the Project and at a rate that will not cause delay or disruption to the completion of the Project, or any portions thereof, including portions performed by Contractor or others.

**3.5** Subcontractor shall continuously monitor the Schedule and advise Contractor of the status of its progress, including providing updates on its Submittals, and any materials or equipment that may be in preparation or manufacture. Subcontractor shall comply with any schedule and reporting requirements imposed upon Contractor in the Prime Contract and shall furnish Contractor any additional information reasonably required by Contractor during the performance of Subcontractor's Work.

**3.6** Subcontractor shall immediately notify Contractor of any circumstances known or reasonably foreseeable which may impact the times and sequences in the Schedule and shall make all requests for time extensions in writing pursuant to the provisions of ARTICLE 15 so as to allow Contractor sufficient time to forward the request to Owner as required by the Prime Contract.

**3.7** Subcontractor recognizes that revisions in the Schedule are inherent in the nature of construction. Contractor shall have the right, in its sole discretion, to decide the time, order, priority and other matters relative to the performance and orderly conduct of Subcontractor's Work and to modify the Schedule so as to suspend, delay, resequence or accelerate, in whole or in part, the commencement or execution of Subcontractor's Work, all without additional compensation to Subcontractor. No Schedule modification, suspension, delay, resequencing, acceleration, interference, or inefficiency shall relieve Subcontractor of its duty to perform hereunder.

**3.8** Should the Subcontractor's Work be delayed, re-sequenced, accelerated, or otherwise disrupted in any way by the act or omission of the Contractor or other subcontractor, or by any cause beyond the Subcontractor's control and not due to any fault, act or neglect on its part, then the time for completion of Subcontractor's Work ("Subcontract Time") shall be extended for a period equivalent to the time lost by any of the aforesaid causes, as determined by Contractor, provided that Subcontractor provides written notice of the same to Contractor in strict accordance with ARTICLE 15. Such extension of time shall be Subcontractor's sole and exclusive remedy for any such occurrence or occurrences, and Subcontractor shall have no claim for damages against Contractor for any such occurrence or occurrences or the cumulative impact of the same.

**3.9** Should Contractor's, or any other subcontractor's, work be stopped or delayed due to Subcontractor's failure to provide sufficient and properly skilled labor, materials, or equipment, or should Subcontractor fail to properly perform its Work in a timely manner resulting in a delay in the Schedule, Contractor shall have the right, in addition to any and all other rights hereunder, upon seventy-two (72) hours' written notice and opportunity to cure to Subcontractor, to (a) employ whatever labor, materials and equipment as Contractor deems appropriate to complete the requirements of this Subcontract, and/or (b) direct Subcontractor to promptly increase its labor force, accelerate its performance, re-sequence Work, increase the number of shifts, work overtime operations, and submit for Contractor's approval a schedule demonstrating the method under which Subcontractor will regain the required rate of progress, and/or (c) take other steps Contractor deems necessary to improve the Subcontractor's rate of progress. Subcontractor shall be responsible for all costs incurred by Contractor in completing the Subcontractor's Work and/or regaining the proper rate of progress of the Subcontractor's Work.

**3.10** Subcontractor shall be responsible for and shall reimburse Contractor for all damages suffered by Contractor resulting from delays caused by or contributed to by Subcontractor, including any liquidated damages and other delay damages recovered by the Owner from Contractor, and Contractor's own costs. Contractor shall have the right to reasonably apportion such damages among Subcontractor and any other subcontractor or other party responsible for such damages, and such apportionment shall be binding upon Subcontractor.

#### **ARTICLE 4. SUBCONTRACT AMOUNT**

**4.1** Contractor shall pay Subcontractor the Subcontract Amount set forth on page 1 of this Agreement, subject to additions and deletions as provided for in ARTICLE 12. The Subcontract Amount includes all transportation tax, sales and use taxes, tariffs, duties, licenses, permits, bonds and inspections, royalties, other taxes or escalation that might accrue through the purchase of materials, and other fees required for the Work, to the extent legally enacted as of the Subcontract Date, whether or not yet effective or merely scheduled to go into effect, and any amounts paid for labor or services by Subcontractor and any employment or other taxes or fringe benefits related thereto.

**4.2** To the extent that any materials or equipment to be provided by Subcontractor as part of its Work require an advanced payment prior to fabrication or shipment of materials ("Deposit"), Subcontractor shall advise Contractor in writing of such Deposit prior to execution of this Agreement to allow Contractor to seek Owner's prior approval for payment of such Deposit.

**4.3** To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth on **Exhibit A**. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor,

supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

**4.4** To the extent that the Subcontract Amount includes allowances, the allowances shall be as set forth on **Exhibit A**. Allowances shall cover the cost of all materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses associated with stated allowance amounts shall be included in the Subcontract Amount but not in the allowances. Whenever costs are more than or less than an allowance amount, the Subcontract Amount shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances.

#### **ARTICLE 5. SUBMITTALS, AS-BUILT DRAWINGS, ELECTRONIC DATA**

**5.1** Subcontractor shall prepare and submit to Contractor all shop drawings, product data, samples, test results, installer's instructions, certificates, and other required documents ("Submittals"), and obtain all required approvals, permits, and licenses necessary or required related to the Work with reasonable promptness and in such sequence so as not to cause a delay in the Subcontractor's Work or in the activities of the Contractor or other subcontractors unless agreed to otherwise by Contractor in writing. In no event shall said items be submitted to Contractor later than thirty (30) days following Subcontractor's receipt of the Notice to Proceed or Subcontract Date, whichever occurs first.

**5.2** All Submittals shall be made in an electronic media and format acceptable to Contractor with the exception of samples. Contractor's written review and/or approval of Submittals is required prior to fabrication of any items to be furnished under this Subcontract. All deviations by this Subcontractor from the Contract Documents shall be explicitly noted on the reviewed Submittal. Contractor's review and/or approval of any of Subcontractor's Submittals shall not relieve the Subcontractor of any of its duties under the Subcontract nor relieve the Subcontractor of any liability for any deviations from the requirements of the Subcontract. Subcontractor shall provide final "field use" shop drawings incorporating all Submittal comments in electronic and hard copy.

**5.3** Subcontractor shall maintain as-built drawings weekly depicting any deviations between its installed Work and the Subcontract and deliver the final as-built drawings to Contractor within fifteen (15) days of completion of Subcontractor's Work. Updates to the Contractor's as-built drawings within the Contractor's field office shall also be maintained by Subcontractor on a weekly or other consistent basis as agreed to by the Contractor.

**5.4** In the event the Parties intend to (1) develop, use, transmit and exchange Digital Data on the Project, (2) utilize a centralized electronic document management system on the Project, and/or (3) develop, share, use and rely upon three-dimensional Building Information Modeling ("BIM"), the Parties shall agree in writing upon protocols governing the development, use, management, maintenance, storage, transmission, reliance upon and exchange of such information, which writing shall be known as the "BIM Exhibit" and shall become a part of this Subcontract.

#### **ARTICLE 6. DESIGN WORK AND PROFESSIONAL SERVICES**

**6.1** Subcontractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Subcontract or unless required for Subcontractor to provide the services necessary to carry out Subcontractor's responsibilities for its own construction means, methods, techniques, sequences or procedures.

**6.2** All designs, calculations, models, schedules or specifications or other design information created for the Project that were created by, for or on behalf of the Subcontractor (collectively, "Subcontractor Design Material") shall be deemed owned by Contractor. Subcontractor hereby assigns all intellectual property rights, including copyrights and rights related thereto, in the Subcontractor Design Material to Contractor. Subcontractor shall obtain similar assignments from its sub-consultants. The Subcontractor Design Material is created for the specific use of Contractor, and any re-use or adaptation of the same for any other project or client of Subcontractor is expressly prohibited without Contractor's prior written approval.

**6.3** In the performance of any design work, Subcontractor shall:

**6.3.1** perform its services consistent with the professional skill and care ordinarily provided by design professionals practicing in the same or similar locality under the same or similar circumstances;

**6.3.2** cause any design or engineering services to be performed as part of Subcontractor's Work to be provided by a properly licensed, qualified and independent design professional for the State in which the Project is located, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, shop drawings and other submittals prepared by such professional and shall bear the professional's written approval when submitted to Contractor.

**6.3.3** give all notices and comply with all Applicable Law;

**6.3.4** submit for Contractor's and Owner's approval in accordance with the Schedule, design development documents, working drawings, specified shop drawings and samples, and data and specifications of materials proposed to be incorporated in the Work.

**6.4** Subcontractor's design work performed under this Subcontract shall be coordinated by Subcontractor with the design and construction work performed by others outside of this Subcontract. Sufficient plans and specifications prepared by Subcontractor under this Subcontract will be furnished for coordination, construction, and permit purposes. Subcontractor shall provide copies of approved drawings in the form and quality specified by Contractor. Subcontractor



shall notify Contractor and other affected trades of all design development changes in sufficient time to preclude additional costs and conflicts with work of others on the Project. Subcontractor may be liable for the extra costs incurred for its failure to provide such timely notice.

**6.5** Subcontractor shall maintain professional liability insurance covering negligent acts, errors and omissions in the performance of professional design or engineering services as set forth on **Addendum 1**.

**6.6** The Subcontractor shall include all of the provisions of this ARTICLE 6 into its agreement with any design professional it engages as set forth herein.

## **ARTICLE 7. WARRANTY**

Subcontractor warrants to the Owner and Contractor that the materials and equipment furnished under this Subcontract will be of good quality and new. Subcontractor further warrants that the Work will be executed in strict conformance with the Subcontract, and all Federal, state and local laws, ordinances, rules, regulations, codes and orders of any public authority bearing on the performance of the Work of this Subcontract in effect as of the Subcontract Date ("Applicable Law"), and in the most sound and workmanlike manner and will otherwise be free from defects. Work, materials and or equipment not conforming to these requirements may be considered defective. Subcontractor's warranty obligations shall survive completion of the Project, Owner's acceptance and the making of final payment. These warranties shall be in addition to, and not a limitation of, all other warranties, implied or express, allowed, required or granted by law, the Prime Contract, or other provisions of this Subcontract.

## **ARTICLE 8. QUALITY, MATERIALS, EQUIPMENT AND CLEANUP**

**8.1** Subcontractor is responsible for continuously monitoring, planning, establishing, and executing the quality of its Work and that of its employees, lower tier subcontractors and suppliers and shall immediately report any quality issues to Contractor. All Work shall be done to the final approval of Contractor, Architect and/or Owner, and to their decision as to the performance of the Work in accordance with the Subcontract and manufacturer's recommendations. Subcontractor agrees that Contractor, Architect and/or Owner each have the authority to reject Subcontractor's Work that does not conform to the Subcontract. The Owner's or Architect's final decision on matters relating to aesthetic effect shall be binding on Subcontractor.

**8.2** Should any of Subcontractor's Work and/or materials furnished be rejected, defective, or deemed nonconforming by Contractor, Architect and/or Owner (the "Rejected Work"), Subcontractor shall, within seventy-two (72) hours of receipt of written notice from Contractor of such rejection and opportunity to cure, proceed to remove and replace all Rejected Work and any other work damaged or destroyed in removing and replacing the Rejected Work. All costs associated with correcting, removing or replacing Rejected Work, including additional testing and inspections, shall be borne by Subcontractor without any increase in the Subcontract Amount. If Subcontractor fails to promptly correct or remove and replace the Rejected Work, Contractor may at its option do so on Subcontractor's behalf and at Subcontractor's expense.

**8.3** Contractor's failure to discover or notify Subcontractor of defective or nonconforming Work, or any portion thereof, at the time the Work is performed shall not relieve Subcontractor of its full responsibility for correction or replacement of the defective or non-conforming Work and all damages resulting therefrom.

**8.4** If Owner elects to accept any defective or nonconforming Work performed by Subcontractor, rather than requiring removal or correction, the Subcontract Amount shall be reduced to compensate Owner for the diminished value of Subcontractor's defective or nonconforming work.

**8.5** Subcontractor shall be responsible for the proper receipt, delivery, unloading, handling, hoisting, storage, protection, installation, and all risk of loss associated with any materials or equipment it is to furnish, install, utilize, or provide, or have provided to it for the performance of Subcontractor's Work. Materials or equipment which become damaged in any way through no fault of Contractor during storage, delivery or installation shall not be used and shall be replaced by Subcontractor at its expense.

**8.6** Subcontractor agrees that any materials or equipment of Contractor or Owner, which are not to be incorporated into Subcontractor's Work, and any labor of Contractor or Owner, will be available to Subcontractor only with the express prior written permission of Contractor and in accordance with Contractor's terms and conditions of use. By using such labor, materials, or equipment, including tools, scaffolding, hoists, lifts or other similar items owned, leased or under the control of Contractor, Subcontractor shall, to the maximum extent allowed by law, indemnify, defend and be liable to Contractor for any loss or damage, including bodily injury or death, arising, or alleged to arise, from such use.

**8.7** No substitutions shall be made in Subcontractor's Work unless permitted by the Subcontract and only then upon receiving all prior approvals required under the Subcontract. Subcontractor shall indemnify Contractor for any increased costs incurred by Contractor resulting from any unauthorized substitutions.

**8.8** Cleanup of the Work and daily removal of debris from Work areas are mandatory. Subcontractor shall during the performance of its Work keep the Project site clean and free from debris resulting from Subcontractor's Work. Before discontinuing Work in an area, Subcontractor shall clean the area and remove all rubbish and its construction equipment, tools, machinery, waste, and surplus materials. Subcontractor shall make provisions to minimize and confine dust and debris resulting from its construction activities. Subcontractor is required to participate in the clean-up of any common areas in the building or Project site jointly used by Subcontractor, Contractor, and other subcontractors. Fire exits, corridors, ladderways, doorways, and exit paths in general shall be clear of all debris and always open to pedestrian and wheelchair traffic, including nights and weekends. If Subcontractor fails to comply with cleanup duties within twenty-four

(24) hours after receipt of written notice from Contractor of non-compliance, which notice may be delivered to Subcontractor's field supervisor, Contractor shall have the right, at its option, to perform appropriate cleanup measures without further notice to Subcontractor. Subcontractor shall pay Contractor all costs incurred by Contractor in performing the cleanup measures or Contractor may deduct the costs incurred from any amounts due or to become due Subcontractor. In the event a dispute arises among the Subcontractor and any others as to the responsibility for such cleanup, the Contractor may allocate reasonably the cost among the responsible parties and the allocation thus made shall be binding on the Subcontractor.

#### **ARTICLE 9. VERIFICATION OF PROJECT CONDITIONS, APPLICABLE LAW AND CONTRACT DOCUMENTS**

**9.1** Subcontractor represents it has visited the Project site and adjoining premises as applicable to its Work, is familiar with the conditions under which the Work is to be performed, is familiar with all Applicable Law, has correlated its personal observations with the requirements of the Subcontract, is capable of performance by reason of experience and expertise, is duly licensed to perform the Work, and is able to perform and staff the Work with an appropriate number of qualified personnel.

**9.2** Subcontractor agrees that Contractor has made no representations of any kind or nature as to the conditions or limitations of the Project site and/or Subcontractor's Work other than those contained in the Subcontract. If the Subcontractor discovers or should have discovered any defect in any work or materials provided by others that would make it unsuitable for the installation of its Work, then Subcontractor shall promptly, and before executing the Work, notify Contractor of the same in writing. Subcontractor shall be solely responsible for all costs, including the cost of changing the subsequent work of others, necessitated by Subcontractor's failure to report any error, omission, or defect which Subcontractor discovered or reasonably should have discovered before executing the Work.

**9.3** If Subcontractor discovers or reasonably should have discovered any error, omission or variance between the Contract Documents and any Applicable Law, Subcontractor shall notify Contractor promptly in writing prior to proceeding with said Work. In the event Subcontractor fails to so notify Contractor, Subcontractor shall be solely responsible for all resulting costs and damages.

**9.4** If Subcontractor determines the Contract Documents do not contain sufficient detail on any matters relating to its Work, Subcontractor shall request Contractor to furnish such other and further drawings and explanations as may be necessary, and Subcontractor shall conform to the same without additional compensation provided such information does not materially change the Subcontractor's Scope of Work.

**9.5** Contractor shall establish principal axis lines of the building and site and benchmarks. Subcontractor is solely responsible for the proper layout of its Work and responsible for any loss to Contractor or others due to Subcontractor's failure to lay out its Work correctly. Subcontractor shall exercise prudence so that actual final conditions and details shall result in proper alignment of finished surfaces. Prior to the commencing its Work, Subcontractor shall thoroughly and accurately: (a) review all Submittals and Contract Documents referring to items requiring integration, coordination and compatibility with Subcontractor's Work; (b) observe and verify all previous and surrounding work performed and surfaces provided by others and determine the location, condition, and correctness of the same, to the extent necessary to assure that the Work can be performed as intended; and (c) measure all field conditions relating to its Work.

**9.6** The exactness of grades, elevations, dimensions, clearances or locations given on any Contract Documents, or the work installed by other contractors, is not guaranteed by the Contractor. Subcontractor shall be responsible to field verify all existing conditions and perform all necessary field dimensioning as required to ensure that all materials are fabricated to fit properly and to ensure the proper fitting of Subcontractor's Work with the work of Contractor and others. All field dimensions should be verified prior to Subcontractor's Submittals or at the earliest possible time after field conditions allow the dimensions to be taken. "Long lead" items may be released for fabrication prior to field dimensioning only when authorized by Contractor in writing and only after all critical dimensions have been agreed to in writing by all involved Parties. Subcontractor shall be fully responsible for all fabrication errors, including costs to rebuild or modify completed Work, resulting from Subcontractor's failure to obtain precise field dimensioning where required.

**9.7** If a condition encountered is (a) a subsurface or other physical condition materially different from those indicated in the Contract Documents, or (b) an unusual or unknown physical condition materially different from conditions ordinarily encountered and generally recognized as inherent in Subcontractor's Work, Subcontractor shall stop the affected Work as soon as the condition is first observed, immediately notify the Contractor, and subsequently give written notice to Contractor of the condition no later than seventy-two (72) hours after discovery and prior to any disturbance of the condition. Subcontractor shall be responsible for all costs to change subsequent work of others, or for any damages arising out of Subcontractor's failure to give prompt notice to Contractor.

#### **ARTICLE 10. SUPERINTENDENCE, COOPERATION, SUBCONTRACTING, PROJECT MEETINGS**

**10.1** Subcontractor shall supervise and direct Subcontractor's Work and provide continuous, adequate and competent fulltime on-site supervision during the performance of its Work.

**10.2** Subcontractors' Designated Representative shall be satisfactory to Contractor and shall have the authority to carry out direction from Contractor relating to Subcontractor's Work or responsibilities. Subcontractor's Designated Representative shall be a fulltime employee on-site who can speak the English language fluently and translate and communicate with all on-site employees who cannot speak the English language fluently so that all field personnel are able to receive immediate verbal direction from Subcontractor or Contractor. If Subcontractor does not have a translator



on-site, any employees on-site who are incapable of speaking the English language fluently shall, upon request of Contractor, be immediately removed from the Project site.

**10.3** Subcontractor shall provide technical services as required to effect the operation of any equipment and/or material furnished under this Subcontract, including performance of specific testing, if any, and shall instruct the Owner's personnel on the operation, maintenance, and control of such equipment.

**10.4** Subcontractor shall enter into written agreements with sub-subcontractors performing any portions of the Work of this Subcontract, wherein Subcontractor and sub-subcontractor are mutually bound, to the extent of the Work to be performed by the sub-subcontractor, assuming toward each other all obligations and responsibilities that Contractor and Subcontractor assume toward each other, and having all rights, remedies and redress against each other that the Contractor and Subcontractor have under this Subcontract. Prior to Contractor's payment of Subcontractor's first requisition, Subcontractor shall provide Contractor a sworn statement of all lower tier subcontractors and suppliers/vendors that it intends to use to perform or provide any portion of its Work.

**10.5** Subcontractor will be required to attend a pre-construction meeting which shall be scheduled and conducted by the Contractor. Subcontractor's Designated Representative is required to attend all jobsite meetings as scheduled by the Project Superintendent during the time that Subcontractor is actively working on the Project. Subcontractor shall comply with any Project-specific meeting requirements set forth in **Exhibit A**.

#### **ARTICLE 11. MEANS, METHODS AND SAFETY**

**11.1** Contractor shall not have control over or charge of and shall not be responsible for the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs relating to Subcontractor's Work. Subcontractor shall be solely responsible for the safety of its employees, sub-subcontractors, suppliers and any other person or entity for whom Subcontractor is responsible. Subcontractor shall perform its Work in a safe and reasonable manner and shall continuously maintain its Work area in such a manner to provide a safe working environment. Subcontractor shall, at its own expense, implement appropriate safety programs pertaining to its Work, including establishing safety rules, posting appropriate warnings and notices, and establishing proper notice procedures to protect persons and property at the Project site and adjacent to the Project from injury, loss or damage. Subcontractor shall review and comply with Contractor's Work Rules and Safety Policy, attached to this Agreement as **Addendum 2**.

**11.2** Subcontractor shall conform with all safety and record keeping requirements imposed by the Prime Contract or Applicable Law, including the Occupational Safety and Health Act of 1970 and industry specific regulations. Subcontractor shall directly receive, respond to, defend and be solely responsible for all citations, assessments, fines or penalties which may be received or incurred by either Party by reason of Subcontractor's failure, or the failure on the part of its agents, employees, suppliers or sub-subcontractors, to comply with any Law and further shall indemnify and hold harmless Contractor and Owner from and against any such claims, damages, loss, cost or expense, including reasonable attorneys' fees, relating thereto.

**11.3** Subcontractor shall notify Contractor immediately and in no event later than twenty-four (24) hours following any injury to an employee or anyone for whom Subcontractor is responsible which occurred at the Project or of any damage to the Project, Work or other property damage at the Project. Subcontractor shall reasonably cooperate with Contractor in the event of any accident or other event that may give rise to a claim against Contractor or Owner. To the fullest extent possible, Subcontractor shall preserve all evidence related to any accident or event until Contractor, and/or the Owner and/or any insurance carrier providing coverage for such accident or event, has had the opportunity to investigate and to inspect the evidence.

**11.4** To the fullest extent permitted by law, Subcontractor shall indemnify and hold harmless Contractor and Owner, their affiliates, parents, subsidiaries, officers, directors, employees, success and assigns (all collectively "Indemnitees"), from and against all claims, damages, losses, costs and expenses, including without limitation reasonable attorney's fees, fines and/or penalties incurred by the Indemnitees arising out of or resulting from the performance of the Subcontractor's Work under this Subcontract.

#### **ARTICLE 12. CHANGES**

**12.1** If the Owner makes changes in the Work by issuing modifications to the Prime Contract, Contractor shall notify the Subcontractor of any such modifications. Unless otherwise directed by Contractor, Subcontractor shall not thereafter order materials or perform Work that would be inconsistent with the changes made by any modification to the Prime Contract.

**12.2** In the event Contractor requests Subcontractor to review a proposed modification to the Prime Contract which may affect Subcontractor's Work, Subcontractor shall respond in writing prior to commencing any modified work and within seven (7) days after receipt of such request, or other reasonable time as the Parties may agree, stating the effect of the proposed modification upon its performance, including details of costs and time thereof. If Subcontractor fails to properly or timely respond to Contractor's request, Subcontractor shall accept the determination of Contractor as to the effect of the proposed modification. To the extent the Prime Contract provides for changes to be computed based on mutually agreed lump sum, unit price, cost plus fee basis, or otherwise, these obligations are hereby imposed upon Subcontractor.

**12.3** Subcontractor may be ordered in writing by Contractor, without notice to Subcontractor's Surety and without invalidating this Subcontract or any bond hereunder, to make changes in the Work consisting of additions, deletions or

other revisions, with the Subcontract Amount and the Subcontract Time adjusted accordingly by written directive which shall be promptly enacted upon by Subcontractor and shall be followed by a formal written change order representing the changes to the Work ("Change Order"). At Contractor's option, the amount of any increase in the Subcontract Amount shall be calculated based on: (a) an agreed upon lump sum; (b) any Unit Prices set forth in **Exhibit A** to this Agreement or otherwise agreed to by the Parties; or (c) the documented direct costs of labor, materials, and equipment actually and reasonably incurred by the Subcontractor in the performance of the changed Work ("Direct Costs") plus the maximum Overhead and Profit Rate set forth in the Prime Contract.

**12.4** If the Parties are unable to agree as to whether any work directed by the Contractor entitles Subcontractor to a Change Order, or as to the value of such changed Work, Subcontractor shall proceed under the written directive from Contractor, from which the adjustment of the Subcontract Amount and/or the Subcontract Time shall be omitted, and shall keep accurate, detailed and itemized records of the Direct Costs incurred in completing the work directed including without limitation, timesheets, payrolls, inspection records, invoices, vouchers and other records to substantiate the cost of changed Work, and shall submit a Claim for resolution pursuant to the provisions of ARTICLE 15.

**12.5** Subcontractor shall be entitled to an adjustment of the Subcontract Amount or Subcontract Time only to the same extent and according to the same provisions as Contractor's adjustment from Owner. Subcontractor's allocable share of Contractor's adjustment shall be fairly and reasonably determined by Contractor after allowance for Contractor's cost of presenting and recovering the Claim, including legal fees, normal overhead and profit and apportionments to other affected subcontractors. Under no circumstance shall Subcontractor's entitlement exceed Contractor's entitlement after deduction of the expenses and costs described herein.

**12.6** Contractor's, or Owner's, receipt or acknowledgement of Subcontractor's Change Order request, or any other Claim, notice or report, including reports of cost and time, or any payments made, shall not be construed as Contractor's, or Owner's, acceptance of the accuracy or validity thereof until such time as a Change Order is signed by Contractor.

**12.7** No Change Order shall be valid unless Contractor's Designated Representative, or higher-level representative, has signed the same. Contractor's Superintendent(s) are not authorized to approve any additional Work and may not sign any field or office work order authorizing or approving any additional Work for which Subcontractor expects payment. No course of conduct or dealings between the Parties, nor express or implied acceptance of alterations or additions to the Work, and no claim that Owner or Contractor have been unjustly enriched by any alteration of or addition to the Work, whether or not there is, in fact, any unjust enrichment, shall be the basis of any claim to a change in the Subcontract Amount or the Subcontract Time.

**12.8** Agreement on any Change Order shall constitute a final settlement of all matters relating to the change in the Work that is the subject of the Change Order, including, but not limited to, all direct and indirect costs and consequential damages or cumulative impact associated with such change and any and all adjustments to the Subcontract Amount and Contract Time.

### **ARTICLE 13. PROGRESS PAYMENTS, RETAINAGE, FINAL PAYMENT**

**13.1** Subcontractor shall be entitled to apply for progress payments for that portion of its Work performed during the payment periods established in the Prime Contract, but not more frequently than monthly. Contractor shall make progress payments on the Subcontract Amount to Subcontractor as provided below and elsewhere in the Subcontract.

**13.2** As a condition precedent to payment of the first requisition, Subcontractor shall submit to Contractor: (i) a sworn statement of all subcontractors and suppliers as set forth in Section 10.4 herein; (ii) if not previously provided to Contractor, a schedule of values allocating the entire Subcontract Amount among the various portions of Subcontractor's Work, in a form acceptable to Contractor; (iii) if not previously provided to Contractor, a current financial statement or other evidence of financial stability, and (iv) a fully executed Agreement with a current Certificate of Insurance meeting or exceeding the requirements of **Addendum 1** and any required bonds. Contractor shall have no obligation to make payment for Work performed by Subcontractor unless and until these items are submitted to Contractor.

**13.3** As a further condition precedent to receiving any progress payments from Contractor, Subcontractor agrees that it shall execute and deliver to Contractor with each of Subcontractor's payment requisitions, a full and complete partial lien waiver and release of all claims and causes of action which Subcontractor may have or claims to have against Contractor, Owner or the Project ("Partial Waiver") through the date of the Partial Waiver, excepting only those claims for which Subcontractor has previously notified Contractor and which Subcontractor has specifically listed on the Payment Application, and conditioned only upon receipt of the payment identified therein. The Partial Waiver shall be on a form approved by Contractor and shall cover all work for which payment is requested. If requested by Contractor, as a further condition precedent to receiving any progress payment, Subcontractor shall also provide fully executed Partial Waivers from Subcontractor's lower tier subcontractors and suppliers.

**13.4** Unless the Prime Contract provides for a different schedule, by the 20th day of each month Subcontractor shall submit to Contractor a written application, on Contractor's form (see **Addendum 3**), or other form approved in advance by Contractor, showing the value of Work performed and completed since the preceding pay period ("Payment Application"), along with all substantiating information required by the Subcontract. Provided the Payment Application is timely received, Contractor shall include the Subcontractor's Work covered by that Payment Application in its application for payment to Owner for the same period. If the Subcontractor's Payment Application is received after the application date fixed above, Subcontractor's Work shall be included by Contractor in its next application for payment to Owner. Contractor shall have



no obligation to delay its monthly application for payment to Owner due to Subcontractor's delay in submission of its Payment Application to Contractor.

**13.5** The amount of each progress payment shall be calculated as follows:

- (1) Take that portion of the Subcontract Amount properly allocable to completed Work; and
- (2) Reduce that amount by: (i) the aggregate of all previous payments made by Contractor; (ii) the amount, if any, for Work that remains uncorrected and for which Contractor has previously withheld payment for a cause that is the fault of Subcontractor; (iii) all charges for materials and services furnished by Contractor to Subcontractor; (iv) any other charges or deductions as provided for in Section 13.10 below or elsewhere in the Subcontract, including for Work not performed or defects discovered since Subcontractor's last Payment Application for a cause that is the fault of Subcontractor; and (v) retainage withheld pursuant to this Agreement.

**13.6** If allowed by the Contract Documents, Subcontractor's Payment Application may include materials and equipment not yet incorporated in the Work but delivered to, adequately protected, insured, and suitably stored at the Project site or at an offsite storage facility. Approval for payment of such stored items, on or offsite, shall be conditioned upon submission by Subcontractor of bills of sale, evidence of insurance, and such other documents and procedures satisfactory to Owner and Contractor to establish Owner's unencumbered title to such materials and equipment and to otherwise protect Owner's and Contractor's interest, including transportation from an offsite facility to the Project site. Materials stored on the Project site, and for which payment is requested, shall remain in the care and custody of the Subcontractor and shall not be removed from the Project site without the written consent of the Contractor.

**13.7** For each progress payment made prior to Substantial Completion of the Work, Contractor shall withhold retainage at the rate equal to the percentage retained from Contractor's payment by Owner for Subcontractor's Work, at the rate defined in the Prime Contract. If the Subcontractor's Work is satisfactory and the Prime Contract provides for a reduction of retainage, Subcontractor's retainage shall also be reduced when Contractor's retainage for Subcontractor's Work has been so reduced by Owner. Early release of retainage, if any, shall be at Contractor's discretion and in compliance with the early release of retainage provisions of the Prime Contract.

**13.8** The timing and frequency of Contractor's progress and final payments to Subcontractor shall be the same as the timing and frequency of Owner's payments to Contractor pursuant to the terms of the Prime Contract. Provided the Subcontractor is not in default, Contractor shall pay Subcontractor each progress payment no later than seven (7) days after Contractor receives payment from the Owner, or per applicable State law. If Owner does not make payment to Contractor within the time prescribed in the Prime Contract, through no fault of Subcontractor, Contractor will make payment to Subcontractor within sixty (60) days of the Subcontractor's Payment Application for the Work satisfactorily performed, computed pursuant to Section 13.5 herein.

**13.9** Subcontractor shall promptly, and no later than seven (7) days after receipt of payment from Contractor, or per applicable State law, pay its lower tier subcontractors, suppliers, and any other bills or obligations for labor, materials, equipment, suppliers and other items for the Project. Upon Contractor's receipt of notice of any unpaid bills or obligations of Subcontractor on this Project, Contractor, in its sole discretion and in addition to any other remedies it may have hereunder, may pay Subcontractor's lower tier subcontractors or suppliers (either directly or by joint check) and recover these payments from the Subcontractor. Notwithstanding anything to the contrary herein, Subcontractor acknowledges and agrees that regardless of whether Contractor paid Subcontractor, Subcontractor has an obligation to pay its lower tier subcontractor and suppliers the amounts owed by Subcontractor to them for labor and materials furnished to Subcontractor in connection with its Work on the Project. Upon Contractor's request, Subcontractor shall furnish evidence of the payment of all bills and expenses incurred by Subcontractor for labor, services, equipment and materials used by Subcontractor, or any other liability incurred by Subcontractor, in performance of its Work on the Project.

**13.10** Contractor may reject a Subcontractor's Payment Application in whole or in part or withhold amounts from a previously approved Payment Application for any reason set forth in the Prime Contract or as may be reasonably necessary to protect Contractor from loss, including but not limited to, the following:

- (1) Subcontractor's failure to perform the Subcontract Work as required by this Subcontract;
- (2) Loss or damage arising out of or relating to this Subcontract and caused by Subcontractor or those for whom Subcontractor is responsible;
- (3) Rejected, nonconforming, or defective Work which has not been corrected in a timely fashion;
- (4) Reasonable evidence of delay in the Subcontractor's performance of the Work;
- (5) Reasonable evidence demonstrating that the unpaid balance of the Subcontract Amount is insufficient to cover the cost to complete the Subcontractor's Work; and
- (6) Third-party claims involving Subcontractor or reasonable evidence demonstrating that third-party claims are likely to be filed.

**13.11** To the extent permitted by Applicable Law, acceptance of periodic progress payments by Subcontractor shall constitute a waiver of any and all claims, by the Subcontractor against the Contractor, the Owner, the Project, or Contractor's payment bond through the date of the pay period for which payment is made, unless such claims are expressly reserved on the Payment Application.

**13.12** When the Work is Substantially Complete, Subcontractor shall promptly submit its Payment Application for such Work. Within thirty (30) days of acceptance of the Payment Application covering such substantially completed Work, Contractor shall make payment to Subcontractor, less final retainage, and deducting any amounts as may be necessary to cover the cost of items to be completed or corrected by the Subcontractor. Acceptance of Subcontractor's substantially completed Work shall not result in commencement of the warranty period or the statutes of limitations or repose for the Subcontractor's Work which shall instead commence upon achievement of Substantial Completion of the Project under the terms of the Prime Contract.

**13.13** Final payment, constituting the entire unpaid balance of the Subcontract Amount, shall be made by Contractor to Subcontractor when the Subcontract Work is fully performed in accordance with the requirements of the Contract Documents.

**13.13.1** Subcontractor shall submit its final Payment Application in such time to allow Contractor to incorporate Subcontractor's Payment Application into Contractor's application for final payment to Owner without delay. **ANY INVOICE NOT SUBMITTED WITHIN SIXTY (60) DAYS OF THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY WILL NOT BE PAID**, except as related to Work completed after Substantial Completion.

**13.13.2** Issuance of the final payment to Subcontractor is contingent upon: (a) final completion of Subcontractor's Work in accordance with the Contract Documents; (b) acceptance of Subcontractor's Work by Contractor and Owner; (c) furnishing of a Final Release and Waiver of Liens and Claims, in such form as required by Contractor, from Subcontractor and all persons or entities claiming under or through Subcontractor, (d) furnishing an Affidavit that all payrolls, bills for materials and equipment, and all known indebtedness connected with Subcontractor's Work, including any taxes and governmental charges, have been satisfied or will be paid with the proceeds of final payment so not to encumber the Owner, Project, Contractor or Contractor's surety; (e) consent of surety to final payment, if required; (f) furnishing a report of any outstanding known and unreported accidents or injuries experienced by Subcontractor, or anyone for whom Subcontractor is responsible, at the Project site; (g) receipt by Contractor of all close-out documents required by the Subcontract; and (h) compliance with any other conditions precedent to Subcontractor's receipt of final payment as set forth in the Prime Contract or elsewhere in the Subcontract.

**13.13.3** If the above conditions have been satisfied, final payment shall be made to Subcontractor within seven (7) days after receipt by Contractor of final payment from Owner for the Subcontractor's Work, or per applicable State law. If Owner does not make final payment to Contractor within the time prescribed in the Prime Contract, through no fault of Subcontractor, Contractor will make payment to Subcontractor within sixty (60) days of Subcontractor's compliance with the conditions precedent to final payment as set forth herein.

**13.14** No payment, including final payment, shall be construed as an acceptance of defective, rejected, nonconforming or incomplete Work, and Subcontractor shall remain responsible for its performance conforming to the requirements of the Contract Documents.

**13.15** Acceptance of final payment by Subcontractor shall constitute a waiver of all claims by Subcontractor against Contractor, the Owner, the Project, or any surety or bond, arising out of or relating to Subcontractor's Work.

#### **ARTICLE 14. SUSPENSION, DEFAULT AND TERMINATION**

**14.1** Should Owner suspend the Contractor's Work, or any part which includes the Subcontractor's Work, for the convenience of Owner and such suspension is not due to any act or omission of Subcontractor, Contractor shall notify Subcontractor in writing and, upon receipt of notification, Subcontractor shall immediately suspend its Work. To the extent provided for under the Prime Contract, and to the extent Contractor recovers such on Subcontractor's behalf, the Subcontract Amount and the Subcontract Time shall be adjusted by Change Order for the cost and delay resulting for any Owner directed suspension. Contractor agrees to cooperate with Subcontractor, at Subcontractor's expense, in the prosecution of any claim by Subcontractor arising out of an Owner's suspension.

**14.2** Contractor may order Subcontractor in writing to suspend all or any part of the Work for such time as may be determined by Contractor. Phased Work or interruptions of the Subcontractor's Work for short periods of time which do not directly affect the critical path of the Work shall not be considered a suspension. Subcontractor shall promptly notify Contractor if Subcontractor believes such suspension will cause an increase in the time for performance of its Work. The Subcontract Time shall be adjusted for delays caused by the suspension; however, no adjustment shall be made to the extent that Subcontractor's performance is, was or would have been so suspended, delayed or interrupted by another cause for which Subcontractor is responsible.

**14.3** If the Subcontractor:

- (1) repeatedly performs Work in an untimely, defective, or nonconforming fashion;
- (2) provides any false information or documents to the Contractor, Owner or Architect;
- (3) damages work of others or any other property in connection with performance of Subcontractor's Work and fails to repair promptly said damage;
- (4) fails to make payment to its employees, subcontractors or suppliers for labor, materials or equipment, relating to Subcontractor's Work on the Project;
- (5) fails to deliver current insurance certificates, licenses, required bonds, as-built drawings, warranties or the approvals required of Subcontractor's Work;



- (6) fails to promptly provide adequate assurances of its ability to perform under this Subcontract when reasonably requested to do so by Contractor;
- (7) fails to comply with all Applicable Law; or
- (8) has otherwise committed a material breach of this Subcontract,

Contractor may terminate the Subcontract upon seventy-two (72) hours' written notice to Subcontractor unless Subcontractor, within those 72 hours, commences and continues satisfactory correction of the default with diligence and promptness. In the event of emergency affecting the safety of persons or property, Contractor may proceed as above without prior notice to Subcontractor.

**14.4** When Contractor terminates Subcontractor for any of the reasons stated above, Contractor may take possession of the Work, and materials and equipment to be incorporated into the Work of Subcontractor at the Project site, accept assignment of agreements or subcontracts executed by the Subcontractor related to its Work hereunder, and through itself or others prosecute the Subcontractor's Work in the manner Contractor reasonably determines is most expeditious for completion of the Work. Subcontractor shall not be entitled to any further payments until Subcontractor's Work has been completed and fully accepted by Owner. If the unpaid balance of the Subcontract Amount exceeds Contractor's costs of completion, the difference shall be paid to Subcontractor. If such expenses exceed the unpaid balance due, Subcontractor shall pay the difference to Contractor within ten (10) days of written demand for payment of the same.

**14.5** Subcontractor shall be liable to Contractor for all costs incurred as a result of Subcontractor's failure to perform under this Subcontract, including all charges, expenses, losses, costs, damages and reasonable attorney's fees incurred in enforcing any provision hereunder and/or in correcting or completing the Work, and including all costs and expenses associated with Contractor's prosecution or defense of any bankruptcy or insolvency proceeding relating to Subcontractor, and any subsequent proceeding or appeal from any order or judgment entered therein.

**14.6** Contractor shall have the right to terminate this Subcontract, or any part thereof, without Subcontractor being at fault, for any cause or for Contractor's or the Owner's convenience, upon seventy-two (72) hours' written notice to Subcontractor. Upon Subcontractor's receipt of such written notice, this Subcontract shall be terminated, and Subcontractor shall: (a) cease operations as directed by Contractor's notice; (b) take actions necessary, or as directed by Contractor, for the protection and preservation of the Work; and (c) except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts or purchase orders. In the event Contractor terminates this Subcontract for its own convenience, Contractor shall pay Subcontractor for all Work properly performed through the date of termination, including reasonable overhead and profit on such Work, and reasonable costs incurred by Subcontractor related to termination. Contractor shall not be liable to Subcontractor for any other costs, including overhead and profit on the Work not executed. A termination for Subcontractor's default shall, if determined to have been wrongfully made, be treated as a termination for convenience under this subparagraph.

**14.7** The rights and remedies provided Contractor in this Article are not exclusive but are in addition to any rights and remedies afforded by this Subcontract or by law.

**14.8** Any amounts due Contractor as a result of Subcontractor's failure to perform hereunder may be recovered from the surety issuing any bonds required under this Subcontract, and both Subcontractor and its surety agree to pay Contractor such losses, damages, expenses and Contractor's reasonable attorney's fees.

## **ARTICLE 15. SUBCONTRACTOR CLAIMS AND DISPUTES**

**15.1** Any claim by Subcontractor seeking an adjustment in the Subcontract Amount and/or Subcontract Time, an adjustment or interpretation of the Subcontract terms, or other relief arising out of or relating to this Subcontract ("Claim"), must be made by written notice to the Contractor: (a) at least seventy-two (72) hours prior to the beginning of Subcontractor's affected or additional Work, (b) within seventy-two (72) hours of Subcontractor's first knowledge of the event giving rise to the Claim, or (c) at least two (2) business days prior to the date by which Contractor is obligated to give notice to the Owner with respect to such Claim, whichever shall first occur; otherwise, such Claims shall be deemed waived.

**15.2** Should any timely submitted Claim or other dispute between Contractor and Subcontractor remain unresolved, the Parties agree that:

- (1) The Parties shall endeavor to reach resolution of such Claim or other dispute between them through good faith direct discussions between the Parties' Designated Representatives.
- (2) If such Claim or other dispute cannot be resolved between the Parties' Designated Representatives, then Contractor shall issue a written directive to Subcontractor which shall be followed by Subcontractor without waiver of Subcontractor's Claims ("Contractor's Directive").
- (3) Contractor's Directive shall be final and conclusive unless, within seventy-two (72) hours of receipt of such directive, Subcontractor provides a written notice to Contractor contesting Contractor's Directive. If Subcontractor does not timely contest Contractor's Directive, Subcontractor shall be deemed to have waived any right to contest that directive.
- (4) If Subcontractor timely contests Contractor's Directive, the Parties shall proceed as set forth in Section 15.5, below.

- (5) Unless otherwise agreed to by the Parties in writing, Subcontractor shall continue its Work and maintain the Schedule during any dispute resolution procedure. If Subcontractor continues to perform, Contractor shall continue to make any undisputed payments owed to Subcontractor in accordance with this Subcontract.

**15.3** If Subcontractor asserts a Claim for which Owner is or may be responsible ("Pass-Through Claim"), Subcontractor's sole remedy shall be to pursue it at its expense against Owner in its own name. Contractor, in its sole discretion, may choose to, but is not required to, prosecute the Pass-Through Claim for Subcontractor and where applicable charge Subcontractor for a pro-rata share, based on the percentage which Subcontractor's claim bears to the total claim asserted by Contractor, of the total expenses, including reasonable attorney's fees, incurred in pursuing the claim. Subcontractor shall comply with all claim notice requirements and dispute resolution procedures in the Prime Contract, or which otherwise apply to any Pass-Through Claim. Contractor shall have no responsibility or liability in relation to a Pass-Through Claim or its outcome, except to pay Subcontractor any sums received by Contractor from Owner or any other party, less expenses incurred by Contractor in connection with the Pass-Through Claim, as noted herein.

**15.4** If Subcontractor chooses to appeal an adverse final decision rendered with respect to a Pass-Through Claim, Subcontractor may do so provided the Contractor's interests are not materially affected, and the Subcontractor agrees to bear the full cost thereof and be solely responsible for prosecuting such appeal.

**15.5** Contractor and Subcontractor shall endeavor to resolve any Claim or other dispute between them by mediation which, unless the Parties' agree otherwise, shall be conducted in accordance with the then current American Arbitration Association Construction Industry Mediation Procedures. A request for mediation shall be made in writing delivered to the other party to this Subcontract. This request may be made concurrently with the filing of a demand for arbitration as set forth in Section 15.6, which shall be stayed for a period of 30 days following completion of said mediation. The Parties shall share the mediator's fee equally unless otherwise agreed. The mediation shall be held in the County where the Project is located unless otherwise agreed. Agreements reached in mediation shall be enforceable in any court having jurisdiction thereof.

**15.6** Any Claim or other dispute between Contractor and Subcontractor that has not been waived per Section 15.2 and was not resolved through mediation shall be subject to arbitration which, unless the Parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the Subcontract Date. The arbitration shall be conducted in the County where the Project is located, unless another location is mutually agreed upon by the Parties. A demand for arbitration shall be made in writing, delivered to the other party of the Subcontract and filed with the person or entity administering the arbitration. Unless otherwise mutually agreed to by the Parties, the party filing a notice of demand for arbitration must assert in the demand all Claims and other disputes between the Parties arising from the Project then known to that party. In no event shall a demand for arbitration be made after the date when the institution of legal or equitable proceedings based upon the Claim or other dispute would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the initiation of legal or equitable proceedings based on the Claim or other dispute. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with Applicable Law in any court having jurisdiction thereof. Subcontractor agrees to require its sureties to participate in said arbitration proceedings and to be bound by any award rendered against Subcontractor. The foregoing agreement to arbitrate, and any other agreements to arbitrate with an additional person or entity duly consented to by the Parties, shall be specifically enforceable under Applicable Law in any court having jurisdiction thereof. The Parties agree to share equally all arbitration fees and costs. Each party agrees to bear its own attorney's fees associated with any arbitration.

**15.7** Contractor may, in its discretion and as may be required by the Prime Contract, join Subcontractor in any dispute resolution proceeding to which Contractor is or becomes a party and which, in Contractor's reasonable judgment, relates to or affects Subcontractor's performance of the Work, including: (a) any dispute resolution procedure provided in the Prime Contract for disputes arising between Contractor, Owner and/or others, including arbitration and submission to Architect or Engineer; (b) litigation, (c) administrative proceedings, and (d) any other dispute resolution proceeding applicable under the Applicable Law. If so joined or consolidated, Subcontractor shall participate at its own expenses in said proceeding, shall be bound by its outcome, and shall dismiss any mediation, arbitration or litigation proceedings instituted against Contractor related to the same claims and disputes.

**15.8** The validity, interpretation and performance of this Subcontract shall be governed by the laws of the State in which the Project is located. If Contractor is required to employ an attorney to enforce any of the provisions of this Subcontract, or to protect its interest in any matter arising hereunder, or to collect damages for the breach of this Subcontract or to prosecute or defend any suit resulting therefrom, or to recover on any bond given by Subcontractor hereunder, Subcontractor and its surety, jointly and severally, agree to pay Contractor for all reasonable costs, charges, expenses, expert fees and attorney's fees expended or incurred in connection therewith.

#### **ARTICLE 16. PROTECTION AND CORRECTION OF WORK**

**16.1** Subcontractor shall take necessary precautions to properly protect its Work and the work of others from theft or damage caused by Subcontractor's performance of its Work, including the cleaning of surfaces. Should Subcontractor cause damage to its Work or the work or property of Contractor, Owner, or others, Subcontractor shall promptly remedy



such damage to the satisfaction of the Contractor, or Contractor may, in addition to all other rights hereunder, upon seventy-two (72) hours' written notice and opportunity to cure, remedy such damage and recover the cost from Subcontractor.

**16.2** In addition to its obligations under ARTICLE 7, Subcontractor agrees to promptly correct, after receipt of written notice from Contractor, all Work which is found to not be in accordance with the requirements of the Contract Documents within a period of one year from the date of Substantial Completion of the Project, or for a longer period of time as may be required by Prime Contract. Should Subcontractor, within seventy-two (72) hours' of receipt of notice, fail or refuse to commence and continue satisfactory correction of the nonconforming Work, Contractor may have the nonconforming Work corrected at the sole expense of Subcontractor, and may recover from Subcontractor an amount sufficient to cover such repair costs. Nothing contained in this Section shall be construed to establish a period of limitation with respect to the obligations Subcontractor has under the Subcontract. Establishment of the one-year period for correction of Work described in this Section relates only to the specific obligations of Subcontractor to correct its Work, and has no relationship to the time within which the obligation to comply with the Subcontract may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Subcontractor's liability with respect to the Subcontractor's obligations other than to specifically correct its Work. Contractor's remedies described in this Section shall not be exclusive but shall be in addition to all others provided by this Subcontract and Applicable Law.

#### **ARTICLE 17. DEFENSE AND INDEMNITY**

**17.1** To the fullest extent permitted by law, Subcontractor shall indemnify and hold harmless the Owner and Contractor, and all agents and employees of either of them, from and against all claims, damages, losses and expenses, including but not limited to reasonable attorney's fees, arising out of or resulting from performance of Subcontractor's Work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of real or personal property, but only to the extent caused by the negligent acts or omissions of Subcontractor, its sub-subcontractors, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable. Such obligation shall not be construed to negate, abridge or otherwise reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this ARTICLE 17. In claims against any person or entity indemnified under this ARTICLE 17 by an employee of the Subcontractor, its sub-subcontractors, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under this ARTICLE 17 shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for Subcontractor, or its sub-subcontractors, under workers' compensation acts, disability benefits acts or other employee benefits acts. The defense and indemnity obligations hereunder apply without regard to when the claims occur or who makes them and applies to claims made while this Subcontract is in force as well as to claim made after it is terminated or the Work is complete. In addition, Subcontractor shall indemnify, defend and hold harmless Contractor to the same extent that Contractor is required to indemnify, defend and hold harmless Owner and others under the Prime Contract, to the extent of Subcontractor's Work.

**17.2** Subcontractor shall turn the Work over to Contractor in good condition and free and clear of all claims, security interest, encumbrances or liens arising out of the performance of the Work. Subcontractor shall defend, hold harmless and indemnify Contractor and Owner from all loss, liability, damage, or expense, including reasonable attorney's fees and expenses, arising out of any lien claim or other claim for payment by any of Subcontractor's subcontractors or suppliers of any tier. If at any time there is evidence of a lien or claim for which, if established, Contractor or Owner might become liable, and which is chargeable to Subcontractor, including any liens by lower tier subcontractors or suppliers, and Subcontractor has not promptly satisfied, or if Subcontractor shall incur any liability to Contractor, or Contractor shall have a claim or demand against Subcontractor of any kind or for any reason, whether or not reduced to judgment or award, Contractor shall have the right to retain out of any payment due or to become due under this Subcontract, an amount sufficient to indemnify Contractor and Owner against such lien or claim, or to fully satisfy such liability, claim or demand, including reasonable attorney's fees and costs. Upon receipt of notice of such lien claim or other claim for payment, Contractor shall notify Subcontractor, who shall immediately satisfy such lien or claim by filing a bond or in such other manner as may be authorized by Applicable Law or Contractor. Should any claim or lien develop after all payments have been made to Subcontractor under this Subcontract, Subcontractor shall pay to Contractor, within ten (10) days of demand, all monies that Contractor was compelled to pay in discharging such claims or liens, including reasonable attorney's fees and costs incurred in collecting said monies from Subcontractor.

#### **ARTICLE 18. INSURANCE AND BONDS**

**18.1** Subcontractor agrees to provide and maintain the coverage and limits of insurance outlined on **Addendum 1** hereto which are minimum requirements for all projects unless the Contract Documents applicable to a specific project (a) require higher limits, at which point Contractor shall so notify Subcontractor, and Subcontractor shall be required to provide the higher limit or (b) a Controlled Insurance Program (CIP) provided by Owner or Contractor requires Subcontractor to provide different coverage for offsite inspections, warranty period, or other risks not covered by the CIP, at which point Subcontractor is required to strictly comply with the applicable CIP program manual. If a project is covered by a CIP, it will be so indicated on **Addendum 1**. Subcontractor shall require its subcontractor(s) and suppliers to furnish the same coverage, limits of insurance and additional insured status as required of Subcontractor under **Addendum 1** of this Agreement. Subcontractor shall provide certificates of insurance evidencing insurance coverage as required herein prior to commencement of Subcontractor's Work.

**18.2** Should Subcontractor be required to provide Payment and Performance Bonds, the requirement for, and the amounts and terms for, such bonds are set forth on **Addendum 1**.

## **ARTICLE 19. LABOR**

**19.1** Only workers with a legal right to work in the United States shall be employed or used by Subcontractor or any of its lower tier subcontractors or suppliers. Subcontractor certifies that it has completed all work authorizations required by law, including without limitation, the requirements for the use of E-Verify for employment eligibility verification for all new hires where such usage is required by Law or required by the Prime Contract, and retention of Forms I-9 Employment Eligibility Verification, for itself and its lower tier subcontractors and suppliers. Subcontractor agrees that Contractor is entitled, but not required, to monitor compliance with this policy, and that any false certifications or failure to comply may result in termination and/or other penalties.

**19.2** Subcontractor shall give notices and comply with all employment requirements of the Prime Contract and Applicable Law, including: equal opportunity employment requirements, the Fair Labor Standards Act; building codes; federal, state and local tax laws; Workers' Compensation Acts, and such other labor, non-discrimination, employment, Social Security and tax laws to the extent applicable to performance of the Work under this Subcontract. Subcontractor shall also review and comply with the Employment policies and requirements of Contractor outlined in **Addendum 2** to this Agreement.

**19.3** To the fullest extent permitted by law, Subcontractor shall indemnify and hold harmless the Indemnitees from and against all claims, damages, losses, costs and expenses, including without limitation reasonable attorney's fees, public relations costs, fines and/or penalties incurred by the Indemnitees, and work stoppages arising out of or resulting from the failure of Subcontractor, or its employees, agents, lower tier subcontractors or suppliers, to properly verify employment eligibility of any workers or otherwise to fully comply with all applicable immigration and employment laws, and all other applicable wage and benefits Laws.

## **ARTICLE 20. MISCELLANEOUS**

**20.1** Severability. If any provision, or portion thereof, of this Subcontract is found to be void, unenforceable or invalid, the remaining provisions, or portions thereof, shall survive and remain effective and binding.

**20.2** Titles. Title given to articles and sections of this Agreement are for ease of reference only and shall not be relied upon or cited for any other purpose.

**20.3** Electronic Exchange. The Parties may execute and exchange records in electronic form, including the signing of this Agreement, and including written notices in accordance with the terms of Section 20.14 herein. The Contractor may use DocuSign for the transmission and electronic execution of certain Contract Documents, including Change Orders, or may transmit and exchange Contract Documents by email as set forth in Section 20.14 herein. By execution of this Agreement, the parties agree that any electronic record or electronic signature, including a scanned and emailed copy of an original signature, shall be attributable to the person whose signature appears on the electronic record/electronic signature, shall have full legal effect and enforceability to bind the party causing the electronic signature to be made, and shall satisfy any provision of this Agreement or of any Law that requires a record be in writing.

**20.4** Sustainability Objective. Subcontractor shall take all steps necessary to ensure that its Work, including the work of its lower tier subcontractors and suppliers, complies with any sustainability objective, including LEED or other industry-related certification program, required under the Prime Contract.

**20.5** Assignment. Subcontractor shall not assign, transfer or otherwise dispose of this Subcontract, or any part thereof, nor assign any monies due or to become due hereunder, except with the prior written consent of Contractor. Any assignment consented to by Contractor shall not operate to relieve Subcontractor of its primary responsibility to Contractor for the full performance of this Subcontract, nor shall it create any contractual relationship between Contractor and such assignee, and Subcontractor shall continue to be liable to Contractor for all acts and omissions of its subcontractors and assignees. In the event Owner terminates the Prime Contract for cause, this Subcontract is assigned to the Owner pursuant to the Prime Contract provided the Owner accepts the assignment by notifying the Contractor and Subcontractor.

**20.6** Non-Solicitation. Until final completion of the Project, Subcontractor agrees not to perform any work directly for the Owner or any tenants thereof or deal directly with the Owner's representatives in connection with the Project unless otherwise directed and/or consented to in writing by Contractor. All Work for the Project performed by Subcontractor shall be processed and handled exclusively by Contractor.

**20.7** Independent Contractor. All of Subcontractor's services provided under this Subcontract are performed as an independent contractor. Nothing in this Subcontract shall change or modify the independent contractor status or be construed as a partnership arrangement, employer-employee relationship, limited liability relationship or otherwise. Subcontractor shall be solely responsible to its own employees and agents for any compensation due them and for compliance with all Laws including without limitation worker's compensation, employer taxes including FICA and self-employment taxes, and unemployment compensation payments. Subcontractor shall have no authority or right under any circumstance to employ any person for or on behalf of Contractor, or to incur any indebtedness in the name of Contractor, or otherwise to bind or purport to bind Contractor in any manner. Subcontractor agrees, represents and acknowledges that it is an independent contractor and is not an employee of Contractor, the Owner, or any other party on the Project.



**20.8 Confidentiality.** To the extent the Contract Documents provide for the confidentiality of any of the Owner's proprietary or otherwise confidential information disclosed in connection with the performance of this Subcontract, Subcontractor is equally bound by the Owner's confidentiality requirements. As used herein, "Confidential Information" means all information, documentation or records of one party that are disclosed to the other party that are marked or stated to be "Confidential" at the time of disclosure or that a reasonably prudent businessperson would consider to be confidential or proprietary in nature. Subcontractor will hold in confidence any Confidential Information (whether of Owner or Contractor) disclosed to it by Contractor to be used only the purpose for which such Confidential Information was disclosed. The obligations of Subcontractor pursuant to this Section 20.8 are in addition to any confidentiality obligations under the Prime Contract that are incorporated into this Subcontract. All obligations of the Subcontractor and Contractor pursuant to this Article shall survive termination of this Subcontract for any reason.

**20.9 Subordination of Lien.** Subcontractor agrees to subordinate its lien rights to Owner's lender if reasonably requested to do so and execute all necessary documents provided by Owner to affect the subordination of lien.

**20.10 Photographs and Social Media.** Subcontractor may not post, on personal or corporate accounts, any photographs or videos of the Project on any social media forum, including online communities, blogs, social networks, or chat rooms, without the prior written consent of Contractor. Subcontractor shall not disclose any Confidential Information related to the Project on personal or corporate accounts.

**20.11 Setoff.** Subcontractor acknowledges that Contractor shall have the right to set off against funds owed to Subcontractor any amounts due to Contractor by Subcontractor under this Subcontract or any other agreement between the Parties.

**20.12 Temporary Facilities.** Subcontractor shall provide, maintain and remove from the Project site upon completion of its Work, at its sole expense, all temporary office structures for the use of its employees, sheds and storage facilities, complete with all related utilities. Storage areas for the use of Subcontractor shall be designated by Contractor and no materials or equipment shall be stored by Subcontractor except in areas approved by Contractor. Such storage areas shall be maintained in an orderly condition by Subcontractor. Subcontractor shall move material and/or temporary trailers as directed by Contractor with all costs of same borne by Subcontractor.

**20.13 Cutting and Patching.** Subcontractor shall perform all cutting, fitting, patching, sleeving, grouting and sealing of its Work that may be required to fit it to receive, or be received by, the work of others as shown or reasonably implied by the Contract Documents; or as required or reasonably implied by the rules and regulations, codes and requirements of any regulatory or governmental agency having jurisdiction over the project; or as required or reasonably implied to achieve consistency and compatibility with attendant design elements. Poor fit or oversized openings will not be acceptable. Cutting, drilling or other alterations of prefabricated members such as floor trusses, roof trusses, beams, etc. will NOT be allowed without prior approval from the Architect/Engineer of record. The integrity of all structural members must be maintained.

**20.14 Notices.** Where the Contract Documents require one party to notify the other party, such notice shall be provided in a written communication to the Designated Representative of said party and shall be deemed to have been duly made if delivered in person, by mail, by overnight courier, by facsimile, or by email.

**20.15 No Waiver of Performance.** The failure of Contractor to enforce one or more provisions of this Subcontract shall not be construed to be and shall not be a waiver of any such provision(s), and Contractor shall thereafter be entitled to enforce each and every such provision(s) without any requirement that Contractor provide notification to Subcontractor of its intention to thereafter enforce such provision(s).

**20.16 Third-Party Beneficiary.** The Subcontractor agrees that the Owner is a third-party beneficiary of this Agreement.

**REMAINDER OF PAGE BLANK**

## **ADDENDUM 1**

### **INSURANCE AND BONDS**

Subcontractor:

Project Name: Sandbox Test Project - Charlotte Region

Samet Job #:

Subcontract #: 20039003

#### **ARTICLE A1.1 GENERAL**

**A1.1.1** Subcontractor shall purchase and maintain insurance, and if required, provide bonds as set forth in this Addendum 1. Unless otherwise specifically defined in this Addendum 1, any capitalized terms herein shall have the same meaning as set forth in the Subcontract Agreement.

**A1.1.2** The coverage limits set forth in this Addendum 1 are minimum limits. If the Prime Contract or other Contract Documents require higher limits, then the Subcontractor shall provide such higher limits. Subcontractor acknowledges receipt of a copy of the insurance requirement in the Prime Contract.

**A1.1.3** The Contractor makes no representation as to the adequacy or sufficiency of the coverages set forth herein. The following requirements shall in no way be construed to limit or eliminate liability of the Subcontractor, which arises from performance of the Work under the Subcontract Agreement. Subcontractor is responsible for any losses, claims, and costs of any kind which exceed the Subcontractor's limits of liability, or which may be outside the coverage scope of the policies, and which are caused by the negligence of Subcontractor or its representatives, employees, consultants, agents and lower tier subcontractors.

**A1.1.4** In no event shall the failure to provide proof of insurance as set forth herein, prior to the commencement of the Work, be deemed a waiver by the Contractor of Subcontractor's, or its lower tier subcontractor's, insurance obligation set forth herein.

#### **ARTICLE A1.2 PAYMENT AND PERFORMANCE BONDS (P&P Bonds)**

**A1.2.1** As related to the Project of this Agreement, Subcontractor ☐ is or ☒ is not required to provide P&P Bonds at the time of execution of this Agreement.

**A1.2.2** If P&P Bonds are required per Article A.2.1, Subcontractor shall obtain P&P Bonds, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be included in the Subcontract Amount.

**A1.2.2.1** If required per Article A.2.1, Subcontractor shall provide P&P Bonds prior to commencement of Subcontractor's Work under this Agreement. The commencement of Work by Subcontractor without having provided said P&P Bonds shall not be considered a waiver or release by Contractor of the requirement for P&P Bonds, and Subcontractor shall have proceeded with the Work at its own risk and shall not be entitled to payment under the Agreement until such P&P Bonds are delivered to Contractor.

**A1.2.3** Subsequent to the execution of this Agreement, if a bond is later required for the Project, upon Contractor's written request, Subcontractor shall obtain P&P Bonds, each with a penal amount equal to 100% of the then current Subcontract Amount, including all adjustments thereto, on forms acceptable to Contractor. The cost of any subsequently required P&P Bonds shall be charged to the Project outside of the scope of Subcontractor's Work. Subcontractor shall submit for reimbursement a separate invoice for the cost of the P&P Bonds without profit and/or overhead.

#### **ARTICLE A1.3 CONTROLLED INSURANCE PROGRAM**

**A1.3.1** This Project ☐ shall or ☒ shall not be enrolled in a Controlled Insurance Program (CIP).

#### **ARTICLE A1.4 SUBCONTRACTOR INSURANCE**

**A1.4.1** Subcontractor shall secure, pay for, and maintain insurance as enumerated below, and such insurance shall be from an insurer lawfully authorized to transact business in the State of North Carolina and in the state wherein the Project is located, and have a minimum A.M. Best Rating of "A". The insurance must be issued by an insurer(s) acceptable to the Contractor, and in such amounts as required by the Contract Documents. Subcontractor shall furnish such other insurance coverages as may be applicable to its Work and as required under this Agreement, all prior to commencing its Work. All insurance policies shall contain a provision that the coverages afforded thereunder shall not be cancelled, allowed to expire, or not renewed, nor restricted modifications added unless at least thirty (30) days prior written notice has been given to Contractor. Coverages shall be maintained without interruption from the date of commencement of Subcontractor's Work and thereafter remain in full force and effect for the longer of (a) the expiration of the applicable Statutes of Limitations and Repose in the State where the Project is located for any claims arising out of or in any way related to the Subcontractor's Work or (b) such longer period as may be required by the Contract Documents or any applicable laws and regulations, but in no event less than 6 years. Certificates of Insurance acceptable to the Contractor shall be filed with the Contractor prior to the commencement of Subcontractor's Work. Additionally, and prior to commencement of the Work, the Subcontractor shall provide the Contractor with a Certificate of Insurance showing coverage for any sub-subcontractors of the Subcontractor for CGL liability insurance, Worker's Compensation and



Employer's Liability Insurance, and Automobile Liability Insurance, as described herein. **If Subcontractor begins Work prior to providing Contractor with acceptable Certificates of Insurance, Contractor may withhold all payments to Subcontractor until Contractor receives acceptable Certificates of Insurance.** In the event Subcontractor fails to obtain or maintain any insurance coverage required by this Agreement, or the Contract Documents, Contractor may at its option: (i) terminate the Subcontractor or (ii) purchase such coverage and charge the expense thereof to the Subcontractor. The coverage and limits of said insurance are as outlined below.

**A1.4.2 Worker's Compensation and Employer's Liability** meeting statutory limits mandated by state and federal laws or no less than:

- \$1,000,000 Each Accident
- \$1,000,000 Policy Limit
- \$1,000,000 Each Employee

**A1.4.3 Commercial General Liability ("CGL")** including coverage for Premises-Operations, Products-Completed Operations, Contractual Liability, Personal Injury, Bodily injury and Property Damage (including coverage for Explosion, Collapse, Soil subsistence and Underground hazards):

- \$1,000,000 Each Occurrence other than Completed Operations claims
- \$2,000,000 General Aggregate
- \$1,000,000 Personal and Advertising Injury
- \$2,000,000 Products –Completed Operations Aggregate

The General Aggregate Limits and the Completed Operations limits shall be separate limits and shall be administered as separate limits. Only Completed Operations claims shall be applied to the Completed Operations limits. All other claims shall be applied to the General Aggregate. The Subcontractors policy shall be endorsed to provide these separate limits.

**A1.4.3.1** CGL coverage shall be written on ISO coverage form CG 00 01 04 13, or a current version providing equivalent coverage. The CGL provided by subcontractor for this project shall provide ongoing operations, independent contractors, products-completed operations, bodily injury and property damage, and personal and advertising injury and liability assumed under an insured contract (including the tort liability of another assumed in an insured contract). There shall not be any reduction or limitation in the coverage required herein and offered by the policy forms insuring Subcontractor, including but not limited to, the exception to the "your work" exclusion for subcontracted work for completed operations claims.

**A1.4.3.2** Subcontractor shall provide coverage for pollution, explosion, collapse and soil subsistence and underground property damage by endorsement or additional policy if such risks are not covered by Subcontractor's policy.

**A1.4.3.3 EIFS Coverage.** As related to the Project of this Agreement, Subcontractor's Work ☒ involves or ☐ does not involve the installation and/or application, or any part thereof, of exterior insulation and finish systems, synthetic stucco or similar exterior coatings or surfaces (collectively, "EIFS"). If the Subcontractor's Work involves EIFS as set forth in this Article, Subcontractor's CGL policy under Article A1.4.3 shall not contain an exclusion or restriction of coverage for claims related to any EIFS. Subcontractor's Certificate of Insurance shall indicate EIFS coverage. Upon request of Contractor or Owner, Subcontractor shall provide a copy of the policy providing EIFS coverage.

**A1.4.4 Automobile Liability** providing (i) At least \$1,000,000 Combined Single Limit for bodily injury and property damage, including all owned, leased, non-owned and hired motor vehicles and (ii) Endorsement naming Contractor as an Additional Insured.

**A1.4.5 Additional Insureds.** Contractor, Owner and all other parties required of Contractor by the Prime Contract shall be included as Additional Insureds on the Subcontractor's CGL, and including ongoing and completed operations coverage for the Additional Insured on Subcontractor's policy, using both ISO Additional Insured Endorsements CG 20 38 04 13 and CG 20 37 04 13 or an equivalent coverage for an Additional Insured. If equivalent forms are used the coverage afforded shall include ongoing and completed operations and shall afford coverage equal to or greater than the ISO forms cited.

**A1.4.5.1** Attached to all Certificates of Insurance provided by Subcontractor shall be a copy of the Additional Insured Endorsement that is part of the Subcontractor's CGL policy that, to the fullest extent permitted by law, names Contractor, Owner and all others as may be required by the Prime Contract, as Additional Insureds ("Additional Insureds"). Insurance for the Additional Insureds shall be at least as broad as the coverage provided for the Named Insured Subcontractor. It shall apply as primary insurance on a non-contributing basis before any other insurance or self-insurance, including any deductible, maintained by or provided by Owner, Contractor or any other Additional Insureds. During the period insurance is required to be provided as described herein there shall be no modification, reduction or cancellation in insurance provided to Contractor, or any other Additional Insureds, by endorsement or otherwise including but not limited to the ISO standard CGL policy exclusion relating to the "your work" exception for subcontracted work during completed operations. Subcontractor shall maintain CGL coverage for itself and all Additional Insureds for the duration of the project and maintain completed operations coverage for itself and each Additional Insured, including Contractor, for the longer of (a) the expiration of the applicable Statutes of Limitations and Repose in the State where the Project is located, for any claims arising out of or in any way related to the Subcontractor's Work or (b) such longer period as may be required by the Contract Documents or any applicable laws and regulations but in no event less than 6 years.

Subcontractor is solely responsible to ensure that all Subcontractor's subcontractors, sub-subcontractors (of any tier), vendors and suppliers ("Lower Tier Party") provide the necessary insurance coverage required by the Contract Documents and in no case less than the limits provided in this Agreement. Subcontractor is responsible for obtaining prior to the start of any Lower Tier Party's work, and maintaining on file, Certificates of Insurance for each Lower Tier Party and shall provide a copy of all Certificates to Contractor upon request.

**A1.4.5.2** Additional Insured endorsement(s) shall not limit Additional Insured coverage to less than those insurance limits required by the Contract Documents.

**A1.4.5.3** Subcontractor's CGL under which Contractor, Owner and all other Additional Insureds are made Additional Insureds shall provide coverage at least as broad as described herein.

**A1.4.6 Excess Liability/Umbrella** providing (i) At least \$1,000,000 for any one occurrence and (ii) at least \$1,000,000 aggregate per Project. Umbrella policy must provide coverage excess of policies noted above. The Umbrella policy coverage shall be at least as broad as the coverages required above and shall include as Additional Insureds all entities required to be named as Additional Insureds on the Subcontractor's CGL policy above. The excess/umbrella shall be written on a follow form basis. Such Umbrella coverage shall be primary and non-contributory, including any deductible, to any other insurance or self-insurance maintained by or provided to the Additional Insureds, and shall apply to both On-Going and Completed Operations. There shall be no endorsement or modification to the Umbrella coverage excluding any claims arising from pollution, explosion, collapse, underground property damage or work performed by Subcontractor or any Lower Tier Party.

**A1.4.7 Pollution Liability Insurance.** As related to the Project of this Agreement, Subcontractor ☒ is or ☐ is not required to provide Contractor's Pollution Liability Insurance ("CPL").

**A1.4.7.1** If not provided under the Subcontractor's CGL policy, Subcontractor shall provide CPL, with a minimum limit of \$1,000,000 per claim and \$2,000,000 in the aggregate, providing coverage for, but not limited to, claims for bodily injury (including death) or property damage (including loss of use of the damaged property), arising from the discharge, dispersal, release or escape of any irritant or contaminant into or upon land, any structure, the atmosphere, watercourse or body of water (including ground water), including claims arising from above ground and below ground storage tanks used by and/or damaged by Subcontractor in performance of its Work, mold, and other pollution conditions caused by Subcontractor while working at the Project site, including sudden and gradual pollution (collectively a "Pollution Condition"). Such coverage shall include on-site and off-site cleanup and emergency response costs, including costs and expenses incurred in the investigation and settlement of claims, transit, disposal, operation of a motor vehicle and completed operations. To the fullest extent permitted by law, Contractor and Owner, and all other parties required of Contractor by the Contract Documents, shall be included as Additional Insureds on the CPL by attachment of endorsement ISO CG 2038 (or equivalent), "Automatic Status for Other Parties When Required in Written Construction Agreement", and the policy shall contain a cross liability clause. The retroactive insurance date of such CPL insurance shall be no later than the commencement date of this Agreement. The CPL insurance shall be provided for the duration of the Project and shall continue for the longer of (a) the expiration of the applicable Statutes of Limitations and Repose in the State where the Project is located for any claims arising out of or in any way related to Subcontractor's Work or (b) such longer period as may be required by the Contract Documents or applicable laws and regulations. To the extent not covered by any insurance hereunder, Subcontractor shall indemnify, defend and hold harmless Contractor, Owner, and all other Additional Insureds, from and against all claims for any Pollution Condition arising out of Subcontractor's performance of its Work, including without limitation cleanup, control, removal, restoration, remediation, and emergency response costs, investigation and settlement of claims, and reasonable attorney's fees.

**A1.4.8 Professional Liability Insurance (Errors and Omissions Coverage).** As related to the Project of this Agreement, Subcontractor ☒ is or ☐ is not required to provide Professional Liability Insurance (Errors and Omissions Coverage) ("E&O Insurance").

**A1.4.8.1** If the scope of the Subcontractor's work requires it to provide design services for any component of the Work required by the Contract Documents, Subcontractor shall provide and maintain throughout the period of the Project, and for a period of six (6) years thereafter as measured from the date of Substantial Completion of the Project, or as required by law, whichever is more stringent, standard E&O Insurance in accordance with the following requirements and limits of coverage: (i) per claim limit of at least \$1,000,000; and (ii) Aggregate of at least \$2,000,000 per policy year. If the Subcontractor does not currently have E&O Insurance and professional design services are being provided through a third-party design professional, then Subcontractor shall obtain from the said third party design professional of record and shall provide Contractor with a Certificate of Insurance noting the coverage limits for E&O Insurance. The retroactive insurance date of such E&O insurance shall be no later than the commencement date of this Agreement.

**A1.4.8.2** Subcontractor shall indemnify and hold harmless Contractor, Owner, and all other Additional Insureds from and against (i) all claims, demands, and causes of action arising out of Subcontractor's negligence, errors, omissions, or other fault of the Subcontractor or any persons for whom it is responsible; (ii) bodily injury or death to the Subcontractor or any persons for whom it is responsible; and (iii) infringement of intellectual property rights resulting from an item or process furnished, designed or specified by the Subcontractor or any persons for whom it is responsible. Failure of the Subcontractor's insurance to respond to a professional liability claim shall in no way negate the Subcontractor's contractual obligations to respond.



**A1.4.9 Waiver of Subrogation.** To the fullest extent permitted by law, Subcontractor waives all rights against (i) the Contractor and any of its other subcontractors, sub-subcontractors, agents and employees; and (ii) the Owner, the Architect, the Architect's consultants, separate contractors, and any of their subcontractors, sub-subcontractors, agents and employees for damages to the extent covered by property insurance applicable to Subcontractor's Work, except such rights as Subcontractor may have to proceeds of such insurance. Subcontractor shall require of its sub-subcontractors, agents and employees their own CGL and/or Worker's Compensation insurance or by appropriate agreements, written where legally required for validity, similar waivers in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged. Subcontractor further waives all claims and all rights of subrogation against Contractor and Owner for loss of, or damage to, Subcontractor's Work, tools, machinery, equipment, materials or supplies.

**A1.4.10 Deductibles/Self-Retention.** To the extent any of the insurance coverages to be provided by Subcontractor in this Addendum 1 are subject to any deductibles or self-insurance retentions, Subcontractor shall be solely responsible for the payment of such deductibles or retentions and any costs not covered by such deductibles or retentions. To the extent any claims are made against any insurance, including any Builder's Risk insurance, provided by the Contractor or Owner on the Project, due to Subcontractor's negligent acts or omissions, Subcontractor shall be responsible for the payment of any deductibles or self-insurance retentions and any costs not covered by such deductibles or retentions under said insurance policies of Contractor or Owner.

**A1.4.11 Sample Certificate.** A sample Certificate of Insurance is attached to this Agreement as **Addendum 1-1**. Subcontractor is required to use this form or another form providing equivalent information.

**A1.4.11.1** Subcontractor shall provide Contractor with an acceptable Certificate of Insurance prior to commencing Work.

**ARTICLE A1.5 BUILDER'S RISK INSURANCE.** Contractor is not obligated to carry Builder's Risk insurance for the benefit of Subcontractor. Subcontractor agrees that it will assume responsibility to determine whether Builder's Risk Insurance is in force. Upon request of Subcontractor, Contractor shall provide Subcontractor with satisfactory evidence of Builder's Risk insurance, if any, or any other property or equipment insurance in force for the Project and procured by Contractor or Owner. Subcontractor shall be responsible for any desired coverage against damage or loss to its own materials, facilities, equipment or other property or similar items not covered by Owner's or Contractor's insurance on the Project.

**ARTICLE A1.6 ACKNOWLEDGEMENT OF REVIEW.** The Subcontractor represents that it has reviewed this Addendum 1, that all appropriate boxes are checked at the time of execution of this Addendum 1, that it has or will provide a copy of these insurance requirements to its insurance agent and/or broker, and that the Subcontractor will provide insurance in full compliance with the terms and conditions herein. The Subcontractor hereby acknowledges that this Addendum 1 is a material component of the Subcontract Agreement.

(Subcontractor)

By: Sample - Do Not Sign

Printed Name: \_\_\_\_\_

Printed Title: \_\_\_\_\_

Date: \_\_\_\_\_

This is a Sample Certificate that is required by Samet (and all of its subsidiaries).

**NOTE:** It is only a sample. The Minimum Coverages shown below are just that. You must verify against and meet any Project Specific requirements. All other below Check boxes are required unless otherwise noted.



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
Current Date

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Subcontractor's Insurance Agency Name and Address		<b>CONTACT NAME:</b> PHONE (A/C. No. Ext): E-MAIL ADDRESS:		FAX (A/C. No):
		<b>INSURER(S) AFFORDING COVERAGE</b> INSURER A: Insurance Company's Name(s)		NAIC #
<b>INSURED</b> Subcontractor's Name Address City, State, Zip NOTE: Must match the name on Subcontract/PO		INSURER B: " "		
		INSURER C: " "		
		INSURER D: " "		
		INSURER E: " "		
		INSURER F: " "		

## COVERAGES

## CERTIFICATE NUMBER:

## REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR VVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	COMMERCIAL GENERAL LIABILITY			Policy Numbers Required for each type of Insurance Coverage "Occur" box Must be Checked "Project" box Must be Checked If Project includes EIFS, subcontractor performing EIFS application must have EIFS Coverage as part of CGL Must include Hired and Non-Owned OR Any Auto	Current Policy Date	Current Policy Date	EACH OCCURRENCE	\$ 1,000,000
	CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 300,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						MED EXP (Any one person)	\$ 10,000
	POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC <input checked="" type="checkbox"/>						PERSONAL & ADV INJURY	\$ 1,000,000
	OTHER: EIFS						GENERAL AGGREGATE	\$ 2,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	ANY AUTO ALL OWNED AUTOS						BODILY INJURY (Per person)	\$
	SCHEDULED AUTOS NON-OWNED AUTOS						BODILY INJURY (Per accident)	\$
	HIRE AUTOS <input checked="" type="checkbox"/>						PROPERTY DAMAGE (Per accident)	\$
								\$
A	UMBRELLA LIAB						EACH OCCURRENCE	\$ 1,000,000
	EXCESS LIAB						AGGREGATE	\$ 1,000,000
	DED						RETENTION \$	\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			You MUST enter a "Y" or "N" in this box based on your policy. As noted, ONLY Proprietor/Partner/Officer/Members are permitted exclusions.			PER STATUTE	OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y/N					E.L. EACH ACCIDENT	\$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
A	Professional Liability			If you are a Design Professional or a subcontractor providing design-build or design assist services, this Coverage is Required.			Per Claim: \$1,000,000	Aggregate: \$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The Certificate Holder, Owner and all other parties as required by Contract are Additional Insured on a Primary & non-Contributory basis which includes "your work". A Waiver of Subrogation in favor of Holder is provided on all policies scheduled above. A 30-day cancellation notice must be provided by endorsement.

**NOTE:** Additional Insured endorsement must include On-Going & Completed Operations coverage. Copies of all endorsements are required.

## CERTIFICATE HOLDER

Samet Corporation and all of its Affiliates and Joint Venture partners  
 309 Gallimore Dairy Road, Suite 102  
 Greensboro, NC 27409

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Agent Signature Required

© 1988-2014 ACORD CORPORATION. All rights reserved.

ACORD 25 (2014/01)

The ACORD name and logo are registered marks of ACORD

Doc. Date: 01-01-14, REV. 3: 10-01-17

ADDENDUM 1-1

Page 1 of 7



THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Subcontractor's Insurance Agency Name and Address	<b>CONTACT NAME:</b> <b>PHONE (A/C. No. Ext):</b> <span style="float: right;"><b>FAX (A/C. No):</b></span> <b>E-MAIL ADDRESS:</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 80%;">INSURER(S) AFFORDING COVERAGE</th> <th style="width: 20%;">NAIC #</th> </tr> <tr> <td>INSURER A: Insurance Company's Name(s)</td> <td></td> </tr> <tr> <td>INSURER B:</td> <td></td> </tr> <tr> <td>INSURER C:</td> <td></td> </tr> <tr> <td>INSURER D:</td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Insurance Company's Name(s)		INSURER B:		INSURER C:		INSURER D:		INSURER E:		INSURER F:	
INSURER(S) AFFORDING COVERAGE	NAIC #														
INSURER A: Insurance Company's Name(s)															
INSURER B:															
INSURER C:															
INSURER D:															
INSURER E:															
INSURER F:															
<b>INSURED</b> Subcontractor's Name Address City, State, Zip NOTE: Must match the name on Subcontract/PO															

**COVERAGES** **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE		ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<div>COMMERCIAL GENERAL LIABILITY</div> <div><div><div><div></div></div>CLAIMS-MADE</div><div><div></div>OCCUR</div></div> <div></div> <div></div> <div></div>							<div>EACH OCCURRENCE</div> <div>DAMAGE TO RENTED PREMISES (Ea occurrence)</div> <div>MED EXP (Any one person)</div> <div>PERSONAL &amp; ADV INJURY</div> <div>GENERAL AGGREGATE</div> <div>PRODUCTS - COMP/OP AGG</div> <div></div>
	<div>GEN'L AGGREGATE LIMIT APPLIES PER:</div> <div><div><div></div>POLICY</div><div><div></div>PRO-JECT</div><div><div></div>LOC</div></div> <div>OTHER:</div>							<div>COMBINED SINGLE LIMIT (Ea accident)</div> <div>BODILY INJURY (Per person)</div> <div>BODILY INJURY (Per accident)</div> <div>PROPERTY DAMAGE (Per accident)</div> <div></div>
	<div>AUTOMOBILE LIABILITY</div> <div><div><div><div></div>ANY AUTO</div><div><div></div>ALL OWNED AUTOS</div><div><div></div>HIRED AUTOS</div></div><div><div><div></div>SCHEDULED AUTOS</div><div><div></div>NON-OWNED AUTOS</div></div></div>							<div></div>
	<div>UMBRELLA LIAB</div> <div><div><div></div>EXCESS LIAB</div><div><div></div>OCCUR</div><div><div></div>CLAIMS-MADE</div></div> <div><div><div></div>DED</div><div><div></div>RETENTION \$</div></div>							<div>EACH OCCURRENCE</div> <div>AGGREGATE</div> <div></div>
	<div>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</div> <div>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)</div> <div>If yes, describe under DESCRIPTION OF OPERATIONS below</div> <div><div></div>Y / N</div>					Current Policy Date	Current Policy Date	<div><div><div></div>PER STATUTE</div><div><div></div>OTH-ER</div></div> <div>E.L. EACH ACCIDENT</div> <div>E.L. DISEASE - EA EMPLOYEE</div> <div>E.L. DISEASE - POLICY LIMIT</div>
A	Pollution Liability				If you are a demolition, grading, remediation, abatement or similar subcontractor who has potential pollution exposure, OR if there is a project specific pollution requirement, this Coverage is Required.			Per Claim: \$1,000,000 Aggregate: \$2,000,000

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES** (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
 A 30-day cancellation notice must be provided by endorsement.

<b>CERTIFICATE HOLDER</b> Samet Corporation and all of its Affiliates and Joint Venture partners.	<b>CANCELLATION</b> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE Agent Signature Required
------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR  
CONTRACTORS – AUTOMATIC STATUS FOR OTHER  
PARTIES WHEN REQUIRED IN WRITTEN  
CONSTRUCTION AGREEMENT**

This endorsement modifies insurance provided under the following:

**COMMERCIAL GENERAL LIABILITY COVERAGE PART**

**A. Section II – Who Is An Insured** is amended to include as an additional insured:

1. Any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy; and
2. Any other person or organization you are required to add as an additional insured under the contract or agreement described in Paragraph 1. above.

Such person(s) or organization(s) is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

- a. Your acts or omissions; or
- b. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured.

However, the insurance afforded to such additional insured described above:

- a. Only applies to the extent permitted by law; and
- b. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for the person or organization described in Paragraph 1. above are completed.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:
  - a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
  - b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of, or the failure to render, any professional architectural, engineering or surveying services.

2. "Bodily injury" or "property damage" occurring after:
  - a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or



**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

### **SCHEDULE**

<b>Name Of Additional Insured Person(s) Or Organization(s)</b>	<b>Location And Description Of Completed Operations</b>
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

**B.** With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
  2. Available under the applicable Limits of Insurance shown in the Declarations;
- whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

EXAMPLE

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Insured	Effective Policy No.	Endorsement No. Premium
Insurance Company	Countersigned by_____	



POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY  
CG 24 04 05 09

## WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

### SCHEDULE

Name Of Person Or Organization:

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph 8. **Transfer Of Rights Of Recovery Against Others To Us** of Section IV – Conditions:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

POLICY NUMBER:

COMMERCIAL AUTO  
CA 04 44 10 13

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)**

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM  
BUSINESS AUTO COVERAGE FORM  
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

**Named Insured:**

**Endorsement Effective Date:**

### **SCHEDULE**

**Name(s) Of Person(s) Or Organization(s):**

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The **Transfer Of Rights Of Recovery Against Others To Us** condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.



## **ADDENDUM 2**

### **WORK RULES, SAFETY & QUALITY POLICY**

Subcontractor:

Project Name: Sandbox Test Project - Charlotte Region

Samet Job #:

Subcontract #: 20039003

#### **ARTICLE A2.1 GENERAL**

Unless otherwise specifically defined in this Addendum 2, any capitalized terms herein shall have the same meaning as set forth in the Subcontract Agreement. This Addendum 2 is a material component of the Subcontract Agreement. The provisions of this Addendum 2 are in addition to, and not in lieu of, any provisions in the Subcontract Agreement.

#### **ARTICLE A2.2 SAFETY**

**A2.2.1** Subcontractor shall execute its Work with a visible, proactive commitment to safety at all levels. Subcontractor, its employees, and all its tiered subcontractors engaged on the Project site are required to adhere to Contractor's safety rules, regulations and policies. Subcontractor shall review and comply with Contractor's Site-Specific Safety Plan, if applicable, which shall be provided to the Subcontractor at the kick-off meeting. In addition, Subcontractor shall also review and comply with the Contractor's Site Safety & Incident Prevention Program, available here: <https://www.sametcorp.com/subcontractors/safety/>, which requirements are incorporated into the Subcontract Agreement by reference.

**A2.2.2** Subcontractor shall designate a fulltime employee at the Project site who shall act as Subcontractor's "Competent Person", as defined by OSHA regulations. Subcontractor's Competent Person shall oversee the safety of Subcontractor's employees and will be expected to have above average knowledge of OSHA construction standards, pre-task safety planning, job hazard analysis and risk/severity assessment. Unless otherwise identified by Subcontractor in writing to Contractor, the Competent Person shall be the Subcontractor's Supervisor who shall have the necessary training and authority required by OSHA regulations to act as Subcontractor's "Competent Person". Such Competent Person shall attend all Project safety meeting as requested by Contractor and must be able to speak English fluently and speak the language(s) of the Subcontractor's employees and lower tier subcontractors it engages on the Project site. The Subcontractor's Competent Person may be asked to translate safety meetings and onsite orientations for Subcontractor's employees and its lower tier subcontractors. Contractor has the authority to remove or request a replacement of Subcontractor's Competent Person if such Competent Person is found not to be engaged in his/her duties or safe work practices.

**A2.2.3** Subcontractor, its sub-subcontractors, suppliers, and any other person or entity for whom Subcontractor is responsible, shall not generate, introduce or transport any hazardous substance, material or equipment at, near or on the Project site without the prior approval of Contractor. Subcontractor shall exercise extreme care in performing any Work which involves explosives or other dangerous methods of construction or hazardous procedures, materials or equipment. Subcontractor shall use properly qualified individuals or entities to carry out its Work in a safe and reasonable manner to reduce the risk of bodily injury and property damage.

**A2.2.4** Subcontractor shall provide Contractor with an inventory of all materials Subcontractor has or will have on site that are regulated under OSHA Standard 1910.1200. Subcontractor shall also provide Contractor with a Safety Data Sheet (SDS) on all the materials listed on its inventory prior to transporting such materials to the Project site. Subcontractor shall not subcontract any of its Work without securing the above from its sub-subcontractors and providing the same to Contractor.

**A2.2.5** In an emergency affecting the safety of persons or property, Subcontractor shall act immediately to prevent threatened damage, injury or loss. In addition to, and not in lieu of, the safety requirements of the Contract Documents, Subcontractor shall immediately notify Contractor of any illness, injury or property damage with an accident investigation to be completed within twenty-four (24) hours of the incident notification. Any amputations or fatalities must be reported to the local OSHA office within twenty-four (24) hours of the incident. A receipt of required communication to the OSHA office shall be provided to Contractor within twenty-four (24) hours.

**A2.2.6** Contractor is committed to providing a safe, drug-free workplace for all persons engaged on the Project site. Subcontractor shall promote a drug-free workplace with their employees. Subcontractor shall ensure compliance by itself, its employees, and sub-subcontractors with any applicable laws or regulations with respect to "drugs and the workplace" and shall be solely responsible for the consequence of any drug-related losses or expenses due to noncompliance. If required by the Prime Contract, or upon reasonable request of Contractor, Subcontractor shall provide a negative drug screening report for any of its employees or sub-subcontractors who will be working on the Project site.

**A2.2.7** Subcontractor shall comply with the reasonable recommendations of insurance companies having an interest in the Project and shall stop any part of the Work which Contractor deems unsafe until corrective measures satisfactory to Contractor have been taken. Contractor's failure to stop Subcontractor's unsafe practices shall not relieve Subcontractor of its responsibility therefor.

**A2.2.8** Contractor will conduct regular jobsite safety inspections to evaluate safety hazards and general compliance with OSHA Standards. Contractor shall notify Subcontractor of any discovered safety violation or conditions deemed hazardous by Contractor. Corrective action shall be required within a reasonable time as established by the notice. Failure to comply within the time established by the notice shall be considered grounds for Default as provided for in the Subcontract Agreement, and Contractor may, at its option, provide corrective action as required and deduct the cost thereof from any money due or thereafter to become due to Subcontractor. Contractor notifications are not intended to cover the requirements of any federal, state or local statute, ordinance or regulation, nor do they relieve Subcontractor of its legal obligation to maintain safe premises and operations for its employees.

**A2.2.9** If required for the performance of its Work, Subcontractor shall erect and maintain suitable fences, barriers, and barricades. Subcontractor shall replace any fences, barriers and/or barricades which Subcontractor removes or damages in the performance of its Work and shall be responsible for maintaining a safe working environment while such fences, barriers and/or barricades are damaged or removed.

**A2.2.10** Subcontractor has an affirmative duty not to overload the structures or conditions at the Project site and shall take reasonable steps to prevent any loading of any part of the structure or Project site that could give rise to an unsafe condition or create an unreasonable risk of bodily injury or property damage.

**A2.2.11** In the event of any local, state or national epidemic or pandemic, including without limitation the COVID-19 pandemic or any similar or other pandemics or communicable diseases (hereafter "Diseases"), Subcontractor shall comply with all federal, state and local orders, recommendations and requirements of authorities having jurisdiction, including public safety authorities such as the Centers for Disease Control (CDC), as related to such Diseases and Subcontractor's Work on the Project. Such orders may include social distancing recommendations, and require additional personal protective equipment to be utilized on the Project site, monitoring of employee temperatures, increased sanitation measures related to Subcontractor's Work, increased personal hygiene measures, and other proactive measures to prevent the spread of the Diseases, all of which shall be complied with by Subcontractor while on the Project site at Subcontractor's expense. Additionally, Subcontractor shall notify Contractor immediately upon learning that any of Subcontractor's employees or lower tier subcontractors who were on the Project site have tested positive for any Diseases or are awaiting test results and are presumed positive. Such notice by Subcontractor need only indicate that an employee has tested positive or is presumed positive and indicate the day(s) the employee was on the Project site so that Contractor may take appropriate measures to sanitize the Project site, notify others who may have been exposed, and notify the Owner as may be required by the Prime Contract. Subcontractor need not provide any information in violation of HIPAA or other Laws.

#### **ARTICLE A2.3 COMPLIANCE WITH LAWS AND ENVIRONMENTAL REGULATIONS**

**A2.3.1** Compliance requirements of the Prime Contract are incorporated herein by reference, and Subcontractor shall comply with such requirements. Specific reference is made to, but not limited to, the following: (a) equal opportunity employment requirements, (b) special trade permits and connection permits or fees, (c) employee wage rate determinations required by governing authorities, if applicable, (d) insurance provisions, and (e) environmental policy.

**A2.3.2** Subcontractor shall give notices and comply with all Federal, state and local laws, ordinances, rules, regulations, codes and orders of any public authority bearing on the performance of the Work of this Agreement, including but not limited to: the Occupational Safety and Health Act of 1970; Fair Labor Standards Act; building codes; federal, state and local tax laws; Workers' Compensation Acts; the General Safety Rules and Regulations of the Construction Industry as currently required by the governing authorities having jurisdiction; and such other labor, non-discrimination, employment, Social Security and tax laws to the extent applicable to performance of the Work under this Agreement.

**A2.3.3** Subcontractor shall observe and comply with all environmental requirements of Owner, Architect, Engineer, Contractor and the Prime Contract. Owner, Architect, Engineer and/or Contractor may retain independent persons experienced in environmental matters to ensure that acceptable environmental standards are being maintained during the performance of the Work. Failure by Subcontractor to comply with such environmental requirements shall constitute an immediate event of default, and upon the occurrence thereof, Contractor may exercise any or all of the rights and remedies available to it under this Agreement or Applicable Law. Subcontractor shall immediately give notice to Contractor of any environmental disturbance, including without limitation: contamination of the environment such as any spills or leaks of fuels, lubricants, motor oils, pipe dope or coating, paints, solvents, ballasts, bilge garbage, sewerage, pollutants or other materials caused by the acts or omissions of Subcontractor or anyone for whom it is responsible; erosion; or archaeological finds. Subcontractor shall, if directed by Contractor, immediately stop its Work causing or affecting the environmental disturbance and take such other actions as may be required by Owner, Architect, Engineer, or Contractor. Subcontractor shall be responsible for all costs, including control and removal of, and shall indemnify and hold harmless Owner and Contractor against and from all loss, costs, or damages arising from pollution or contamination which originates from any environmental disturbance caused by Subcontractor or anyone for whom it is responsible.

**A2.3.4** If hazardous materials or substances are being used on the site by Subcontractor, or anyone for whom they are responsible, and they are a type of hazardous material or substance of which an employer is required by law to notify its employees, Subcontractor shall, prior to delivery to the Project site or exposure of the Contractor, other subcontractors and other employers on the site to such material or substance, give notice of the chemical composition thereof to Contractor in sufficient detail and time to permit compliance with laws by Contractor, other subcontractors and other employers at the site.



**A2.3.5** Subcontractor shall reimburse Contractor for the cost and expense Contractor incurs (1) for remediation of a hazardous material or substance brought to the site and negligently handled by Subcontractor or (2) where Subcontractor fails to perform its obligations under Article A2.3.4, except to the extent that the cost and expense are due to Contractor's fault or negligence.

**A2.3.6** Subcontractor shall defend, indemnify and hold harmless Contractor and Owner from any and all liability, damages, fines, citations and costs arising out of Subcontractor's failure to comply with Applicable Law. In the event of Subcontractor's violation of any of the requirements of this Article A2.3, Subcontractor shall bear all costs resulting from any such violation and shall defend, indemnify and hold harmless Contractor and Owner from any damages, including reasonable attorney's fees, claims, losses, expenses and causes of actions arising from such violations.

## **ARTICLE A2.4 LABOR RELATIONS AND CONDUCT**

**A2.4.1** Subcontractor acknowledges and understands that contracts on the Project are awarded and labor employed without discrimination as to whether the employees of any contractor or subcontractor are members or non-members of any labor organization.

**A2.4.2** Subcontractor agrees that all workers employed or used by Subcontractor or its sub-subcontractors, shall be paid by their respective employers all wages and benefits to which they are entitled in accordance with Applicable Law, including but not limited to, the federal Davis Bacon Act if applicable to the Project, and to make payments at the time prescribed in the Subcontract Documents or by law. Subcontractor, upon request of Contractor, shall certify that it and all its subcontractors are in compliance with all laws pertaining to the payment of wages and benefits. If the Project of this Agreement is subject to the federal Davis Bacon Act, Subcontractor shall be notified by Contractor prior to execution of this Agreement and the terms of any wage and certification requirements shall be set forth on an exhibit to be attached to this Agreement. Subcontractor and its lower tier subcontractors agree that Contractor is entitled, but not required, to monitor compliance with this policy, and that any false certifications or failure to comply with Applicable Laws pertaining to payment of wages and benefits may result in termination and/or other penalties.

**A2.4.3** In addition to, and not in lieu of, any other provisions herein requiring compliance with Laws, Subcontractor warrants to Contractor that it: (a) has fully complied and shall continue to fully comply, at its sole cost, with all applicable federal, state and local Laws concerning employment and immigration, including without limitation, the Immigration Reform and Control Act of 1986 ("IRCA") and the employment eligibility verification provisions therein, and the child labor restrictions set forth in the Fair Labor Standards Act ("FLSA") and any other applicable statute; (2) has properly trained and shall continue to properly train its staff regarding the execution and retention of Forms I-9 Employment Eligibility Verification and any other applicable employment verification method used by Subcontractor to comply with any requirements of IRCA and any other applicable Laws; is not now in violation of IRCA or any child labor restrictions including without limitation those set forth in FLSA; (4) has provided written notification to Contractor of all prior citations by any government agency for violation of IRCA or any child labor restrictions including without limitation those set forth in FLSA; (5) has implemented and shall continue to implement a company-wide employment verification policy that fully complies with all applicable federal, state and local Laws, including without limitation the use of the **E-Verify** for employment eligibility verification for all new hires where such usage is required by law or required by the Prime Contract. Subcontractor further warrants that if Subcontractor becomes aware of any government audit of its employees, employer verification procedures or any child labor restrictions, it shall immediately notify Contractor in writing of such audit and provide Contractor a copy of the finding when they are made available.

**A2.4.4** Subcontract shall maintain harmony among its personnel, lower tier subcontractors and other workers. Subcontractor shall not employ any persons or engage in any activities which cause, or are likely to cause, a work stoppage or other similar concerted labor action. Subcontractor shall maintain and exercise control over all employees engaged in the performance of the Work and shall remove or cause to be removed from the Project site any such person(s) reasonably determined by Owner or Contractor to be detrimental to Owner's best interests.

**A2.4.5** If Subcontractor's workers, or workers of Subcontractor's lower tier subcontractors, engage in a work stoppage or strike, whether against Subcontractor or to support employees of a third party, Contractor may suspend Subcontractor for a reasonable time and either perform the services or retain a third party of its choosing to perform the services Subcontractor would have otherwise had to perform under this Agreement. Subcontractor shall defend, indemnify and hold harmless Contractor from all costs, losses or expenses, including reasonable attorney's fees incurred by Contractor related to such work stoppage and/or suspension of Subcontractor. If Contractor suspends Subcontractor under this provision, Subcontractor shall not receive any further payments under this Agreement except for payments for Work satisfactorily performed through the date of suspension less all costs, losses or expenses, including reasonable attorney's fees, incurred by Contractor, and Contractor may retain out of any payment due or to become due Subcontractor under this Agreement, or under any other agreement between Contractor and Subcontractor, an amount sufficient to cover such costs. Subcontractor shall refund Contractor, upon written demand, any amounts paid in advance for Work not performed by Subcontractor.

**A2.4.6** To the extent required by the Prime Contract and/or upon written request of Contractor, Subcontractor shall obtain criminal history record information regarding its and its subcontractor's "Covered Employees". For the purposes of this Article, "Covered Employees" means employees, agents, lower tier subcontractors or suppliers of Subcontractor who

have or will have continuing duties related to the Work to be performed at the Project. Subcontractor agrees that it will not assign any Covered Employees who Owner and/or Contractor reasonably determined have a disqualifying criminal history to work on the Project. On request of Contractor, Subcontractor shall provide all necessary identifying information to allow Contractor to obtain criminal history record information covered by employees of Subcontractor and all its lower tier subcontractors and suppliers. Subcontractor shall update this list at the request of Contractor. If Subcontractor becomes aware that a Covered Employee has a record disqualifying criminal history, then Subcontractor shall immediately remove the Covered Employee from the Project and notify Contractor in writing within three (3) business days. If Contractor objects to the assignment of any Covered Employee based on the Covered Employee's criminal history record information, Subcontractor agrees to discontinue using that Covered Employee on the Project.

**A2.4.7** Subcontractor shall conform to Contractor's hours of work, and any Work performed outside those hours must be approved in advance by Contractor. No premium or overtime will be allowed or paid without prior written approval by Contractor.

**A2.4.8** Subcontractor and all its lower tier subcontractors agree:

**A2.4.8.1** All personnel assigned to the Project site shall conduct themselves in a professional manner and be respectful of others on the Project including employees of Contractor, Owner, other subcontractors and adjacent property owners.

**A2.4.8.2** Obscene, vulgar or harsh conduct will not be tolerated in any manner. Obscene displays or inappropriate comments to the public or any Project personnel will result in the immediate dismissal of the offender from the Project site regardless of his or her position.

**A2.4.8.3** Alcohol, tobacco and controlled substances are prohibited on the Project site.

**A2.4.8.4** Subcontractor shall not communicate directly with Owner during the period of this Agreement unless agreed to by and in the presence of Contractor. All submittals or other Project communication or documentation, unless otherwise directed, will be directed to Contractor.

#### **ARTICLE A2.5 QUALITY**

**A2.5.1** In addition to the requirements of Article 8 of the Subcontract Agreement, Contractor may establish a Site-Specific Quality Control Plan to ensure that all Work performed by employees and subcontractors meets all contractual requirements. If applicable, Contractor's current Site-Specific Quality Control Plan will be provided to Subcontractor at the kick-off meeting. Upon receipt of the Site-Specific Quality Control Plan, Subcontractor will be expected to review and comply with the Site-Specific Quality Control Plan.

EXAMPLE



## ADDENDUM 3

### APPLICATION FOR PAYMENT



## INSTRUCTIONS TO RECEIVE PAYMENT

**The below items are required for payment.**

1. Application for payment must be received by the **20th day** of each month.

***Request for payment received after the 20th of each month will fall into the following month's payment cycle.***

2. Reconciliation of contract amount (including any change orders) with previous payments is a pre requisite of application acceptance.

***Applications submitted without proper mathematical reconciliation will be rejected.***

3. Contract/Change Orders must be fully executed (signatures of both parties).

**YOU ARE RESPONSIBLE FOR PROPER DOCUMENTATION**

4. Current certificates of insurance, all of which meet 's requirements, must be on file. A sample certificate outlining 's requirements is available by visiting:  
<http://www.sametcorp.com/subcontractors/apply/>
5. Payments will be processed from original, faxed or emailed invoices (if faxed or emailed do not send a paper copy in the mail). Email Pay Applications to [accts@sametcorp.com](mailto:accts@sametcorp.com) or to fax to (336) 544 2562.
6. Application for payment must be **approved by the PROJECT MANAGER** and include an itemized schedule of values displaying a breakdown of labor, materials and equipment.
7. Any other documents that are specifically required for the project.

**YOUR APPLICATION FOR PAYMENT consists of the following documents:**

- A. Application and Certification for Payment Form
- B. Continuation Sheet Approved Schedule of Values
- C. Subcontractors List of 2nd Tier Suppliers and Subcontractors
  - a. 2nd Tier Partial Lien Waivers may be requested with your partial payment request at 's discretion.
- D. Sales Tax Affidavit

**\*\*The Application for Payment documents listed above are available in a Microsoft Excel version by visiting:**

**<http://www.sametcorp.com/subcontractors/forms/>**

# SUBCONTRACTOR/SUPPLIER STANDARD APPLICATION & CERTIFICATION FOR PAYMENT

TO CONTRACTOR:

Samet Corporation

Project: \_\_\_\_\_

Project #: \_\_\_\_\_

FROM: SUBCONTRACTOR/SUPPLIER

Owner: \_\_\_\_\_

Designer: \_\_\_\_\_

Subcontractor for: \_\_\_\_\_

Application # \_\_\_\_\_

Subcontract / P.O. # \_\_\_\_\_

Period From: \_\_\_\_\_ to \_\_\_\_\_

**SUBCONTRACTOR/SUPPLIER'S APPLICATION FOR PAYMENT:** Applications made for payment, as shown below, in connection with the Contract. Continuation Sheet is attached.

## CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet is attached.

1. ORIGINAL SUBCONTRACT/PURCHASE ORDER SUM \_\_\_\_\_
2. Net change by Change Orders \_\_\_\_\_
3. SUBCONTRACT/PURCHASE ORDER SUM TO DATE (Line 1 + 2) \_\_\_\_\_
4. TOTAL COMPLETED AND STORED TO DATE  
(Column G on Continuation Sheet) \_\_\_\_\_
5. RETAINAGE: \_\_\_\_\_
  - a. % of Completed & Stored to Date Work (Column I on Contin. Sheet) \_\_\_\_\_
  - Total Retainage (Line 5a or Total in Column I of Continuation Sheet) \_\_\_\_\_
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total). \_\_\_\_\_
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate) \_\_\_\_\_
8. CURRENT PAYMENT DUE: \_\_\_\_\_
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6). \_\_\_\_\_

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Change Orders previously approved by GC		
Total approved this Month:		
Totals:		
Net change by Change Orders:		

**Partial Waiver of Lien** In consideration for, and effective upon receipt of, payment in the amount of Current payment Due noted above, to be paid after approval of this request, the Undersigned Subcontractor/Supplier does hereby waive, release and discharge all claims, liens, bond claims, Claims of Lien on Real Property, and Notices of Claim of Lien upon Funds on or against Owner, Contractor, Contractor's Surety or on the Project described above or any funds owed to anyone on the Project for and on account of labor, services, materials, fixtures, apparatus or machinery furnished by the Undersigned to or for the above-described Project, through the end date of the Pay period above, excepting only those claims for retainage withheld.

Further, Undersigned certifies that to the best of its knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents and that Current Payment Due noted above is now due. Undersigned further represents and warrants that all labor, materials, equipment, services and other items, including without limitation all payroll, sales and privilege taxes furnished by it and/or its subcontractors and suppliers for Work on the Project for which Undersigned Subcontractor/Supplier has previously been paid by Contractor, have been paid by the Undersigned, and Undersigned agrees to indemnify Owner, Contractor and Contractor's Surety from any claims for the same.

## SUBCONTRACTOR OR SUPPLIER:

By: \_\_\_\_\_ Date: \_\_\_\_\_

State of: \_\_\_\_\_ County of: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

Notary Public:

My commission expires:

Contractor's Approval  
In accordance with the Contract Documents, based on on site observations and the data comprising the application, this Application for Payment has been approved.

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Samet Corporation



**Outstanding Change Requests:**

If there are any outstanding change requests as of the date of this Application for Payment, the Subcontractor/Supplier shall provide a detailed list of these items below. Failure to list these items, if applicable, may result in the denial of the Subcontractor/ Supplier's change request due to untimely notice to the General Contractor.

**Outstanding Item(s) Description:**

**COR No.**

**Amount**

- 1.
- 2.
- 3.
- 4.

Total Outstanding Change Requests:

\$

EXAMPLE

# CONTINUATION SHEET

APPLICATION NO:  
 APPLICATION DATE:  
 PERIOD TO:  
 PROJECT NO:

Contractor's signed certification is attached.  
 In tabulations below, amounts are stated to the nearest dollar.  
 Use Column I on Contracts where variable retainage for line items may apply.

A	B	C	D	E	F	G	H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED FROM PREVIOUS APPLICATION (D + E)	WORK COMPLETED THIS PERIOD	MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
GRAND TOTALS								

ADDENDUM 3 – APPLICATION FOR PAYMENT



## Subcontractor's Name &amp; Address

Contact Name:	
Phone & Email:	

[illegible]

I ACKNOWLEDGE THE INFORMATION SUBMITTED IS TRUE AND ACCURATE.

(Must be signed by a Principal of the company)



## SALES TAX AFFIDAVIT

The purpose of this Sales Tax Affidavit is to provide Samet Corporation documentation that you have paid sales tax on materials purchased for the Samet Corporation job referenced below. Please select one of the three options shown below and provide this affidavit with each pay application to Samet Corporation. This document must be signed and returned to this office before any final retainages are released.

**Job Name:** \_\_\_\_\_

**Job Location:** \_\_\_\_\_

**Period To Date:**

☐ The undersigned certifies that all state and local taxes (including sales, use and excise taxes) applicable to the work and services performed and materials and equipment incorporated into the work, in each case pursuant to the contract referred to above, have been paid in full.

☐ If state and local taxes (including sales, use and excise taxes) have been paid to a jurisdiction other than the location of the project listed above, please indicate the amount of material purchases as well as amounts paid to each jurisdiction.

Net Amount Paid for Materials: \$ \_\_\_\_\_

County Tax	\$ _____	% _____
City Tax	\$ _____	% _____
State Tax	\$ _____	% _____

☐ In the event state and local sales tax have not been, please list the amount of purchases made for materials and provide a brief description as to why sales tax has not been paid.

Net Amount Paid for Materials: \$ \_\_\_\_\_

Reason for no sales tax: \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Company Name:** \_\_\_\_\_

**Printed Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Sworn to and Subscribed before me:

This \_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_  
(Seal)

Notary Public  
My Commission Expires:





# E 589CI

## Affidavit of Capital Improvement

Form E 589CI, Affidavit of Capital Improvement, is generally required to substantiate that a contract, or a portion of work to be performed to fulfill a contract, is to be taxed for sales and use tax purposes as a real property contract with respect to a capital improvement to real property.

- This affidavit may not be used to purchase building materials, other tangible personal property, or digital property to fulfill a real property contract exempt from sales and use tax.
- A person who willfully attempts, or a person who aids or abets a person to attempt in any manner, to evade or defeat a tax imposed by the Sales and Use Tax Laws, or the payment thereof, shall be guilty of a Class H felony. If there is a deficiency or delinquency in payment of any tax due to fraud with intent to evade the tax, there shall be assessed a penalty equal to 50% of the total deficiency.

### Section I. Single Use (Complete this section to issue the affidavit for a single capital improvement.)

**Owner, Tenant, or Real Property Contractor**

**Real Property Contractor** (General Contractor or Subcontractor)

*Hired to perform capital improvement*

**Describe capital improvement to be performed:**

**Project Name:**

**Project Address (where the work is to be performed)**

I certify that, to the best of my knowledge, this affidavit is accurate and complete and that the transaction described to be performed by the Real Property Contractor (General Contractor or Subcontractor identified in box "B") shall be treated as a real property contract with respect to a capital improvement to real property for sales and use tax purposes.

Signature of

Authorized Person: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

### Section II. Blanket Use (Complete this section execute a blanket affidavit.)

**C** **Real Property Contractor**

Address

City

State Zip Code

**D** **Real Property Contractor or Subcontractor**

*Hired to perform capital improvement*

Address

City

State Zip Code

**To be completed by the Real Property Contractor identified in Box C.**

I certify that I am a Real Property Contractor who performs capital improvements to real property and all transactions with the real property contractor (subcontractor) identified in box "D" shall be treated as real property contracts with respect to capital improvements for real property for sales and use tax purposes.

Signature of Authorized Person: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

## Affidavit of Capital Improvement Instructions

Form E-589CI, Affidavit of Capital Improvement, is generally required to be issued (see exceptions below) to substantiate that a contract, or a portion of work performed to fulfill a contract, is to be taxed for sales and use tax purposes as a real property contract with respect to a capital improvement to real property.

- Form E-589CI is not an affidavit of tax paid on building materials, other tangible personal property, or digital property purchased or used to fulfill a real property contract.
- Form E-589CI is not to be used to purchase building materials, other tangible personal property, or digital property purchased or used to fulfill a real property contract exempt from sales and use tax.
- A person that issues Form E-589CI in error is liable for use tax on the sales price of or the gross receipts derived from the transaction if it is determined that the contract is not a capital improvement to real property.

A person who willfully attempts, or a person who aids or abets a person to attempt in any manner, to evade or defeat a tax imposed by the Sales and Use Tax Laws, or the payment thereof, shall be guilty of a Class H felony. If there is a deficiency or delinquency in payment of any tax due to fraud with intent to evade the tax, there shall be assessed a penalty equal to 50% of the total deficiency.

### Exceptions to the Requirement to Issue Form E-589CI

The following are exceptions for transactions where Form E-589CI is not required to be issued to substantiate that the transaction is taxed, as applicable, for sales and use tax purposes as a real property contract with respect to a capital improvement to real property.

- Painting or wallpapering real property, or parts thereof.
- Landscaping service.

Form E-589CI is not required to be issued by the specific person for a transaction noted below. The exceptions do not apply to transactions between a general contractor hired to oversee the entire contract and one of its subcontractors (See "Blanket Use" of Form E-589CI (Section II) for possible exceptions.). The following exceptions do not apply to remodeling.

- A real property owner or other person hires a general contractor to oversee the entire contract and the contract is for "new construction" as defined in N.C. Gen. Stat. § 105-164.4H(e)(2).
- A real property owner or other person hires a general contractor to oversee the entire contract and the contract is to rebuild or construct again a prior existing permanent building, structure, or fixture on land (reconstruction as defined in N.C. Gen. Stat. § 105-164.4H(e)(3)).
- A general contractor that purchases all tangible personal property and digital property to fulfill the real property contract and provides the employee labor to fulfill the real property contract.

### Section I. Single Use Instructions

A person must complete "Section I - Single Use" of the form for a one time use to substantiate that a transaction that otherwise meets the definition of repair, maintenance, or installation services to real property is taxed for sales and use tax purposes as a real property contract with respect to a single capital improvement for real property. When a real property contractor hires a subcontractor to perform a portion of the overall contract and there is not a recurring business relationship between the two parties, "Section I - Single Use" of Form E-589CI shall be completed and the form issued to each subcontractor as notice that the transaction is subject to tax as a real property contract with respect to a capital improvement for sales and use tax purposes.

A property owner oversees the entire activity that is a real property contract with respect to a capital improvement for real property and hires various subcontractors to complete the real property contract:

- Box A - Owner, Tenant or Real Property Contractor: Enter property owner's name and address.
- Box B - Real Property Contractor (*General Contractor or Subcontractor*): Enter general contractor's or subcontractor's name and address.
- Property owner listed in Box A must describe real property contract with respect to capital improvement to be performed.
- Authorized Person (typically property owner) signs, enters title (owner), and enters the date.

A general contractor hires a subcontractor to perform a real property contract with respect to a capital improvement, or portion thereof:

- Box A - Owner, Tenant or Real Property Contractor: Enter general contractor's name and address.
- Box B - Real Property Contractor (*General Contractor or Subcontractor*): Enter subcontractor's name and address.
- General contractor listed in Box A describes real property contract with respect to capital improvement to be performed.
- Authorized Person (typically general contractor) signs, enters title (general contractor), and enters the date.

A lessee or tenant hires a general contractor (or subcontractor) to perform a real property contract with respect to a capital improvement for real property; provided the capital improvement is intended to become a permanent installation and title to it vests in the owner or lessor of the real property immediately upon installation:

- Box A - Owner, Tenant or Real Property Contractor: Enter lessee or tenant's name and address.
- Box B - Real Property Contractor (*General Contractor or Subcontractor*): Enter general contractor's or subcontractor's name and address.
- General contractor must describe capital improvement for real property to be performed.
- Authorized Person (typically lessee or tenant) signs, enters title, and enters the date.

### Section II. Blanket Use Instructions

A real property contractor may complete "Section II - Blanket Use" and issue the form to a real property contractor (subcontractor) who is used exclusively to perform part, or all, of real property contracts with respect to capital improvements to real property, where the person and the real property contractor have a recurring business relationship. A blanket use affidavit continues in force so long as the real property contractor named in "Box C" and the real property contractor (subcontractor) named in "Box D" maintain a recurring business relationship (when a period of no more than twelve months elapse between transactions between two parties) or until withdrawn or otherwise notified by the issuer of the form. The blanket use will generally apply for the following: (1) a builder who hires the same contractor(s) only for new construction; (2) a real property contractor who hires the same subcontractor(s) only for reconstruction; (3) a real property contractor who hires the same subcontractor(s) for remodeling and the activities performed by the subcontractor(s) are never repair, maintenance, and installation services for real property; and (4) a real property contractor who exclusively hires the same subcontractor(s) to perform part, or all, of its real property contracts with respect to capital improvements for real properties.

A general contractor or subcontractor hires a subcontractor to perform a capital improvement, or portion thereof:

- Box C - Real Property Contractor: Enter the hiring real property contractor's name and address.
- Box D - Real Property Contractor (*General Contractor or Subcontractor*): Enter subcontractor's name and address. Authorized person listed in Box C signs, enters title, and dates.

## **TRADE PACKAGE SCOPE OF WORK**

### **03A CONCRETE FOUNDATIONS, WALLS, SLABS, & SITE SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Concrete Foundations, Walls, Slabs, & Site** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Concrete Foundations, Walls, Slabs, & Site Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>
010200	General Sitework Requirements
011000	Summary
012100	Allowances
012200	Unit Prices
012300	Alternates
012500	Substitution Procedures
012501	Substitution Request Form
012900	Payment Procedures
013100	Project Management and Coordination
013300	Submittals Procedures
014000	Quality Requirements
014110	Statement of Special Inspections
014200	References
015000	Temporary Facilities and Controls
016000	Product Requirements
017300	Execution



017419	Construction Waste Management and Disposal
017700	Closeout Procedures
017823	Operation and Maintenance Data

**Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)	
033000	Cast-in-Place Concrete
107500	Flagpoles
313116	Termite Control

**Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES	
033100	Polished Concrete Flooring
055000	Metal Fabrications
055100	Metal Stairs
072100	Thermal Insulation
079200	Joint Sealants
079500	Expansion Control
105113	Metal Lockers
312000	Earthwork
321313	Site Concrete
334100	Storm Drainage

The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed above, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Concrete Foundations, Walls, Slabs, & Site Subcontractor is responsible for all Work described herein and

below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

### **3.0 CONCRETE SCOPE OF WORK DESCRIPTION**

- 3.0.1 The Concrete Foundations, Walls, Slabs, & Site Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work.
- 3.0.2 The Concrete Foundations, Walls, Slabs, & Site Subcontractor is responsible for all layout work, field engineering including vertical control, providing and maintaining lines and batter boards, protection of survey pins provided by others and coordination between its Subcontractors and other onsite subcontractors for all aspects covered under this Scope of Work. Building corners and control points will be established and maintained by the Concrete Foundations, Walls, Slabs, & Site Subcontractor using a Certified Registered Surveyor. The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall have Surveyor provide control lines on building slabs and benchmark elevations as located by the General Contractor (4 per floor and roof) for all trades use.
- 3.0.3 Concrete Formwork – This Work shall include providing of a complete concrete formwork system, where required, including but not limited to, formwork design / engineering, safety measures, preformed steel forms, plyform material, strongbacks, walers, kickers, wall braces and shores, temporary elevated slab on deck shores, if required, formed construction joints, edge forms, form ties, form release agents, chamfer strips, installation of dovetail anchors slots furnished by others, flashing reglets, nails, spikes, lag bolts, through bolts, miscellaneous anchors, waterstop, adjustable wedge inserts, threaded inserts, sealers, miscellaneous incidentals, form stripping, pointing, patching and rubbing of all exposed concrete surfaces following the form stripping operation, concrete embed supports, etc. This Subcontractor shall provide all concrete form work, including but not limited to, concrete footing forms, where required, step footing forms, rebar templates, anchor bolt templates, slab on grade column blockout forms, concrete pier forms, concrete wall and pilaster forms, if required, wall blockout forms, where required, slab on grade edge forms, slab on grade construction joints, depressed slab forms, slab on grade turndown forms, etc.
- 3.0.4 Miscellaneous Blockout Formwork – Miscellaneous slab on grade, wall or elevated slab blockout forms / sleeves required to accommodate work of other trades will be provided by the Subcontractor requiring a specific slab on grade, wall or elevated slab blockout form / sleeve, unless noted otherwise. Coordination of these items will be required by this Subcontractor.
- 3.0.5 Concrete Reinforcement and Accessories – This Work shall include furnishing and installing a complete concrete reinforcement and accessories system, including not be limited to, all reinforcing steel, welded steel wire fabric at slab on grade, tie wire, bar supports, bar chairs, slab on grade expansion joint filler and felts, column / wall support anchor bolts, adhesive

anchors, etc. This Subcontractor shall furnish and install all concrete reinforcement and accessories work, including but not limited to, concrete foundation reinforcement, including footing wall dowels to receive masonry (block walls by others), concrete wall reinforcement, concrete steps on grade reinforcement, concrete column reinforcement, concrete pier reinforcements, concrete slab on grade turn down reinforcement, equipment pad reinforcement, concrete slabs on grade reinforcement, including thickened slab reinforcement, elevated supported slab reinforcement, etc. All concrete steel bar reinforcement such as concrete footing dowels, thickened slab on grade dowels, etc. cast into a concrete assembly is part of this Scope of Work.

3.0.6 Cast-In-Place Concrete and Accessories – This Work shall include furnishing and installing all cast-in-place concrete with admixtures and PSI requirements as specified and accessories, including but not limited to, all concrete materials for foundations, slabs on grade, elevated slab on deck, column block out concrete, stair pan fill, concrete steps on grade, exterior/interior concrete equipment pads, elevator machine slabs, etc. in accordance with the concrete finishes specified. Provide all concrete floor sealers, curing compounds, expansion joints, slab on grade vapor barriers, non-shrink grout, saw cut joints, waterstop, diamond dowels, smooth bar dowels, etc. to complete this concrete scope of work.

3.0.7 Grouting Base Plates – This Work shall include furnishing and installing non-shrink grout at all base plates provided by the Structural Steel Subcontractor that are utilized or set atop concrete foundations, piers or other concrete related work.

3.0.8 Concrete Finishes – This Work shall include placement and finishing of all concrete furnished and installed as part of this scope of work in accordance with the finish tolerance requirements specified. Work shall also include providing slab on grade saw cut and/or tooled joints, where specified. Unless noted otherwise, all exposed concrete shall be pointed, rubbed and patched to provide a uniform and smooth face finish as part of this Scope of Work. EXTREME CARE SHALL BE TAKEN TO PLACE AND FINISH THE SLAB ON GRADE TO ACHIEVE A FF35 / FL25 TOLERANCE. SLAB ON GRADE TOLERANCE UNDER GYMNASIUM, CORRIDORS AND CAFETERIA FLOORING SHALL BE EVEN MORE STRINGENT AT A FF50/FL35 TOLERANCE. THIS MEANS THAT CERTAIN PLACE AND FINISH TECHNIQUES (SEPARATE POURS, SETTING PIPE SCREEDS, ETC.) MUST BE UTILIZED TO ENSURE THESE TOLERANCE REQUIREMENTS ARE MET. ALL OTHER TOLERANCES SHALL BE AS SPECIFIED IN SECTION 03300 – CAST-IN-PLACE CONCRETE OR THE APPLICABLE FLOORING SYSTEM (WHICHEVER IS GREATER OR MORE STRINGENT) AS SPECIFIED IN DIVISION 9 FINISHES.

3.0.9 Polished Concrete Floor Finish – Placement of concrete shall be provided by the Concrete Foundations, Walls, Slab & Site Subcontractor in a separate pour/s in accordance with the plans and specifications at locations indicated; the Polished Concrete Flooring Subcontractor shall coordinate with the Concrete Foundations, Walls, Slab & Site Subcontractor prior to concrete placement to ensure the design mix and placement methods of the concrete pour/s meets the project specifications. A pre-installation meeting with each Subcontractor present will be held prior to concrete placement. Additionally, the Polished Concrete Subcontractor shall be present during these concrete placement activities to ensure the plans and specifications are being followed And the Polished Concrete Flooring



Subcontractor WILL saw cut all control joints. The Polished Concrete Flooring Subcontractor shall provide all polishing materials, hardening and sealing agents. The Polished Concrete Contractor shall provide all special concrete floor finishes as defined within the contract documents to include but not limited to finishing system, hardening/sealing agent, protective treatments, water and oil repellent, stain and cleaning products.

- 3.0.10 The Concrete Foundation, Walls, Slabs & Site Subcontractor shall specifically reference sheet A3.0.13 for proposed locations of polished concrete flooring. Subcontractor should also reference section 01230 – Alternates.
- 3.0.11 Concrete Curing – This Work shall include furnishing and installing specified curing and sealing compounds at all concrete slabs scheduled as part of this Scope of Work. The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall confirm that the proposed cure and seal compound will have compatibility with all future scheduled floor finishes so as to not impede any future floor finishes work being performed by other trades. This subcontractor is responsible for curing concrete per the project documents including but not limited to wet curing. If the proposed floor finishes specified requires that the concrete surface be wet cured in lieu of the specified cure and seal compound, then the Concrete Foundations, Walls and Slabs Subcontractor shall wet cure the concrete surface(s) at no additional cost. This Subcontractor shall coordinate with the Polished Concrete Flooring Subcontractor to ensure recommended curing practices are adhered to in all areas to receive polished concrete finishes per designated alternate, this includes any wet curing methods, other admixtures, wet curing blankets, etc. as required.
- 3.0.12 Stepped Footings / Forms – Where required to accommodate underground site utility piping, plumbing piping, electrical conduit or mechanical piping which is run across scheduled concrete foundations / footings, the Concrete Foundations, Walls, Slabs, & Site Subcontractor shall step footings as required to accommodate this work being provided by other trades at no additional cost. The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall reference the site utility, mechanical, electrical and plumbing drawings to determine underground pipe or conduit locations in order to ascertain these requirements.
- 3.0.13 Exterior & Interior Equipment Pads – This Work shall include furnishing and installing all concrete related work required for Plumbing, Mechanical / Electrical equipment including concrete equipment pads, transformer pads, water heater pads, boiler pads, Chiller pads, pump pads, housekeeping pads, etc. on slabs poured under this scope of work. The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall coordinate the specific size requirements of these exterior and interior equipment concrete pads with the respective HVAC, Plumbing and Electrical Subcontractor.
- 3.0.14 Dumpster and Masonry Wall Screen Enclosures - The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall specifically include all foundations, reinforcing, backfilling, slabs, concrete accessories, etc. for the Dumpster and Masonry Wall Screen Enclosures as indicated within the Contract Documents.

- 3.0.15 Concrete Admixtures & Corrosion Inhibitor – This subcontractor shall furnish all required or specified admixtures including but not limited to corrosion inhibitors, super plasticizer, accelerators, decelerators, air, fly ash, alkali-silica reaction inhibiting admixture, etc. to complete this trades scope of work and as specified in contract documents. All admixtures and quantities shall be listed on delivery tickets and provided to the CM prior each concrete pour. All admixtures and quantities shall be listed on all delivery tickets and copies given to the GC during each pour. Failure to supply admixture documentation could result in removal of that particular portion of the work at Concrete Foundations, Walls, Slabs, & Site Subcontractor expense.
- 3.0.16 Dry Shake Floor Hardener – If specified, the Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish and install dry shake floor hardener per specified quantities at areas indicated on the contract documents. Application rate shall be in accordance with specifications.
- 3.0.17 Liquid Floor Treatment – If specified, the Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish and install Liquid Floor Treatment per specified quantities at areas indicated on the contract documents. Application rate shall be in accordance with specifications.
- 3.0.18 Mud Mats – In order to avoid problematic excavations being left open before concrete can be poured following inspections, this work shall include providing and installing a minimum of (2) inches of lean concrete mud mats at the bottoms of all footing and foundation excavations. This may be avoided if the Concrete Foundations, Walls, Slabs, & Site Subcontractor can properly coordinate its work, however its best to error on the side of caution. No excuses for delay or cost shall be permitted should mud mats not be used during concrete work execution.
- 3.0.19 If required, this Subcontractor shall provide temporary shoring of elevated slabs on top of metal decks or free formed slabs in accordance with contract documents to accommodate the designed floor construction system. Evaluate structural design, structural notes and industry standard requirements to determine if this work will in fact be a required.
- 3.0.20 This Subcontract shall include the block out and forming necessary for the laundry extractor trench drain system as depicted on sheet P5.1. Coordinate size and locations with the 22A Plumbing Subcontractor. The 22A Plumbing Subcontractor shall provide all imbedded items to this Subcontractor for installation.

## **5.0 METALS SCOPE OF WORK DESCRIPTION**

- 5.0.1 The Concrete Foundations, Walls, Slabs, & Site Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work.
- 5.0.2 Installation of Steel Embeds – This Work shall include installing all steel embedded items furnished by others which are cast directly into a concrete system, including but not limited

to, all required field engineering, vertical control and layout, column anchor bolts, steel weld plates, interior and exterior bollards, if applicable, miscellaneous embedded angles, stair nosings, etc.

5.0.3 All structural steel embed items will be furnished by the Structural Steel Subcontractor to this Subcontractor for installation. The Concrete Foundations, Walls, Slabs, & Site Subcontractor will be responsible for unloading, sorting, storing and protecting aforementioned miscellaneous steel materials furnished by the Structural Steel Subcontractor.

5.0.4 Installation of Floor Expansion Joint Assemblies – The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall install all floor expansion joint assemblies. The expansion joint assemblies shall be furnished by the Drywall, Framing and Insulation Subcontractor.

## **7.0 THERMAL AND MOISTURE PROTECTION SCOPE OF WORK DESCRIPTION**

7.0.1 The Concrete Foundations, Walls, Slabs, & Site Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work.

7.0.2 Under-Slab Vapor Barriers – This Work shall include furnishing and installing a complete under slab vapor barrier system, including but not limited to, under slab vapor barrier membrane, pipe boots, seam tape, miscellaneous accessories, etc. at all locations designated within the Contract Documents. Any specific tears, rips, etc. made in the under slab vapor barrier shall be patched in accordance with manufacturer recommendations at no additional cost. Under-Slab Vapor Barrier shall be as specified but at a minimum 15 mil Stego Wrap material or approved equal.

## **10.0 SPECIALTIES SCOPE OF WORK DESCRIPTION**

10.0.1 Flagpoles - The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish and install flagpoles in strict accordance with contract documents including, but not limited to ground mounted flagpole, concrete foundations, sleeves, flashing collar, etc. for a complete installation and system. Flags shall be furnished by Owner.

10.0.2 Brick Sign Foundations – This Work shall include providing a complete reinforced concrete foundation to serve the School sign(s) detailed on Drawings. Confirm locations of these signs with the General Contractor prior to commencing with this work.

10.0.3 Locker Bases – This Work shall include providing a complete concrete locker bases to serve the applicable lockers detailed on Drawings.



**31.0 EARTHWORK SCOPE OF WORK DESCRIPTION**

- 31.0.1 The Concrete Foundations, Walls, Slabs, & Site Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work.
- 31.0.2 Excavation, Trenching, Backfilling, Fine Grading & Compaction - This Work shall include, but not be limited to, all excavation, trenching, backfilling, fine grading and compaction work associated with the proper installation of all work required of this Subcontract, including, but not limited to, concrete foundations, slab on grade turndowns, concrete steps on grade, interior concrete equipment pads, foundations, concrete piers, etc., backfilling and compacting stone or suitable backfill atop concrete foundations and within the elevated stage / ramp area, compacting soil and or stone adjacent to below grade masonry walls (interior and exterior against masonry foundations) etc. All excavation, backfilling, trenching and compaction work shall be based on the use of safe excavation practices, governed by the Occupational Safety and Health Administration (OSHA). Typical slab on grade elevations shall be left at approximately 8" below Finished Floor Elevations plus or minus one tenth as indicated on the Structural Drawings and all remaining excavation and backfill for foundations, slab elevation changes, etc. are the responsibility of this Subcontractor.
- 31.0.3 Graded Aggregate Stone Base - This Work shall include furnishing and installing all graded aggregate stone base underneath all concrete slabs on grades including but not limited to, crusher run (ABC stone) gravel base material in the four (4") inch thickness or as specified, fine grading, compaction, etc. at all slab locations being provided as part of this Scope of Work.
- 31.0.4 Termite Treatment - The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish and install all required termite control including, but not limited to all slab on grade areas, beneath or adjacent to foundations, piping, interior of open masonry cells, and associated warranty etc. and in accordance with contract documents. This Subcontractor shall coordinate installation of termite control with other trades and their work.
- 31.0.5 Excess Foundation Spoil – The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall remove and dispose of all excess foundation spoils to an on-site location. The typical spread footing, perimeter footings, pits around auditorium area shall be quoted assuming excess spoils to be loaded into a truck immediately after excavation.
- 31.0.6 Dewatering - The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall leave its work in a condition that will naturally drain at the end of each day. If standing water accumulates, this Subcontractor is responsible for dewatering, pumping of water, demucking, and subgrade and soil restoration at no additional cost.
- 31.0.7 Site Concrete Subgrades - The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall assume the responsibility for determining if the sidewalk and concrete paving subgrade elevations as delivered by the Earthwork, Storm Drainage and Erosion Control Subcontractor are within a tolerance no more than plus or minus two tenths ( $\pm 0.20'$ ) of one foot and are in conformance with the information reflected on the drawings. The General Contractor shall

be notified of the acceptance or rejection of these subgrades prior to commencement of this scope of work.

- 31.0.8 Building Pad Subgrades - The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall assume the responsibility for determining if the building pad subgrade elevations as delivered by the Earthwork, Storm Drainage and Erosion Control Subcontractor are within a tolerance no more than plus or minus one tenth ( $\pm 0.10'$ ) of one foot and are in conformance with the information reflected on the drawings. The General Contractor shall be notified of the acceptance or rejection of these subgrades prior to commencement of this scope of work.

### **32.0 EXTERIOR IMPROVEMENTS SCOPE OF WORK DESCRIPTION**

- 32.0.1 Graded Aggregate Stone Base - This Work shall include furnishing and installing a graded aggregate stone base underneath the following exterior concrete areas:

1. All exterior concrete slab, paving, sidewalk, etc. designated to receive a stone base on the drawings.

- 32.0.2 Site Concrete, Concrete Sidewalks and Pavement – This Work shall include furnishing and installing all concrete sidewalks, crosswalks and associated ramps, concrete pavement, transformer(s) pads, exterior equipment pads, exterior patio slabs, door stoops, concrete walls, grandstand bleacher concrete paving under outdoor seating, softball / baseball concrete pads, etc. designated on the drawings complete with concrete, expansion joint materials, reinforcing, forms, curing compounds, detectable warning surfaces, etc. in order to provide a complete concrete sidewalk and pavement system. All material costs for concrete and accessories shall be included in this scope of work.

- 32.0.3 Concrete Materials and Admixtures: This scope shall include the costs for all concrete material costs with the correct PSI mix designs and admixtures as specified within the contract documents including but not limited to Silica Fume, air, etc.

- 32.0.4 Wheel Chair Ramps and Truncated Domes– This work shall include furnishing and installing all wheel chair ramps and detectable warning domes in accordance with details on drawings.

- 32.0.5 Adjustment of Tops / Grates / Covers - The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall adjust to appropriate finish grade elevations all tops, grates and covers associated with the sanitary sewer manholes, catch basins, drop inlets, grate inlets, etc. located within or directly in contact with an concrete sidewalk or concrete paved system. Elevation adjustment, if required, to these miscellaneous tops, grates and covers will be undertaken during the final phase of the Site Development Work.

### **33.0 UTILITIES SCOPE OF WORK DESCRIPTION**

- 33.0.1 Auditorium Seating Area Subgrade Drainage - Provide a temporary drain pipe(s) at a depth adequate to not interfere with work of other trades including sump, pipe, fittings, coring,

grouting, patching, stone, fabric, etc. to serve as a temporary drainage device serving the low area and around all foundation walls at the Auditorium. Temporary drain piping shall be routed to the nearest stormwater manhole at the exterior of the building.

- 33.0.2 Subdrainage (Foundation) System - This Work shall include providing a complete permanent subdrainage (foundation) system serving the Auditorium depressed area and walls and from the elevator pit to the nearest storm drain structure outside the building, including but not limited to, drainage / porous fill material around the pipe and adjacent to the wall up to subgrade, fabric drainage panels, high density polyethylene pipe (6"), fittings, accessories, etc., filter fabric, roofing felts, matting, foundation pipe drain leaders from the perforated foundation drainage piping to storm drain inlets provided by others, coring and grout patch work of each storm drain inlet to receive each end of the foundation pipe drain leaders, pipe fittings, accessories, etc., couplings, coupled joints, etc. and any other incidentals which might be required to provide a completely functional subdrainage (foundation) system. It shall be the Concrete Subcontractor's responsibility to install the subdrainage (foundation) system in accordance with the specified minimum one percent (1%) slope and invert elevations to ensure the subdrainage (foundation) system performs properly. Should any invert or profile discrepancies occur, the Concrete Subcontractor shall immediately advise the General Contractor in writing, prior to proceeding.

### **39.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 39.0.1 All necessary hoisting equipment required to furnish and install all concrete shall be provided as part of this Scope of Work.
- 39.0.2 All necessary conveyance equipment required to place and finish all concrete shall be provided as part of this Scope of Work.
- 39.0.3 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall provide photo documentation of existing conditions for all items/areas including any items that are to be specifically reused or relocated. Any questionable items are to be brought to the attention of the General Contractor before beginning work.
- 39.0.4 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall include all necessary shoring and engineering as required by contract documents or as deemed necessary to provide minimum flatness and levelness specifications on all elevated slabs.
- 39.0.5 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall assume pouring the elevated concrete slabs using a leveling method and not a sticking method and include the additive costs in its bid amount. Confirm with the Structural Engineer and General Contractor during a pre-installation meeting if this is acceptable before work begins. Should this not be acceptable, a credit shall be issued to the General Contractor.
- 39.0.6 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall include the costs for light stands if required for night concrete pours. There will be no added costs for these stands.



- 39.0.7 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall include costs for temporary power with generators throughout the entire duration of the concrete scope of work.
- 39.0.8 This subcontractor's trash/debris shall be removed from the buildings and work area constantly as work progresses, or immediately upon request by the General Contractor's superintendent. All stored material will be kept in neat locations at all times as directed by the General Contractor.
- 39.0.9 Perimeter Board Insulation – The Masonry Subcontractor will include furnishing and installing a perimeter below grade insulation system, at vertical installations including but not limited to, board insulation, seam tape, miscellaneous accessories, etc. at all locations designated within the Contract Documents.
- 39.0.10 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall establish and maintain wash out areas for concrete trucks and routinely dispose of debris generated by this process including removal, recycling and re-grading of the areas at the completion of the work.
- 39.0.11 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish manpower and necessary equipment including street washing truck to assist in cleaning concrete truck tires and any other material delivery truck under this subcontract at the wheel wash station and ensure that roadways are left in a clean condition after each pour sequence or unloading operation.
- 39.0.12 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish ample flag men to flag, pump and route concrete trucks in and out of pour areas once trucks enter the site.
- 39.0.13 This Concrete Foundations, Walls, Slabs, & Site Subcontractor shall be responsible for the proper spacing and locating of the reinforcement dowels to accept the CMU as sized and located on the drawings. This Subcontractor shall coordinate with the General Contractor and the Masonry Subcontractor responsible for the masonry work prior to commencement and installation of reinforcement dowels to minimize conflicts and errors. Any and/or all reinforcement dowel(s) which are incorrectly located and interfere with the installation of the CMU shall be promptly and properly corrected, by this Subcontractor at its own expense by methods approved by the Designer.
- 39.0.14 The Structural Steel Subcontractor shall furnish, install and maintain a complete Fall Protection Guardrail System for all elevated slabs, decks, mezzanines, etc. which are required by OSHA to receive a Guardrail System as stipulated by the OSHA Handbook for the Construction Industry (29 CFR PART 1926), Subpart L – Scaffolding and Subpart M – Fall Protection. Installation of the Fall Protection Guardrail System shall be based upon the elevated slabs, decks, mezzanines, etc. finish floor elevations so as to comply with the requirements for fall protection during the installation of the metal decking and subsequent to the placement of the elevated concrete slabs. Additional clarification and coordination is described as follows:

1. Upon installation of the elevated concrete slabs on deck, the Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish, install and maintain any additional appurtenances to provide a complete Fall Protection Guardrail System as stipulated by the OSHA Handbook for the Construction Industry (29 CFR PART 1926), Subpart L – Scaffolding and Subpart M – Fall Protection (i.e. toe boards, etc.). The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall maintain the Fall Protection Guardrail System until the Structural Steel Subcontractor who is responsible for the steel railings at the mezzanine removes and palletizes the components of the Fall Protection Guardrail System to allow for immediate installation of metal railing work.
2. The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish, install and maintain any additional appurtenances to provide a complete Fall Protection Guardrail System as stipulated by the OSHA Handbook for the Construction Industry (29 CFR PART 1926), Subpart L – Scaffolding and Subpart M – Fall Protection (i.e. toe boards, etc.) for foundation walls, elevator pits and openings, retaining walls, pits, stairs, etc. until permanent walls or protection are installed by other trades.

39.0.15 Masonry Reinforcement and Accessories – Furnishing and installing steel bar reinforcement for masonry block walls is not part of this Scope of Work and will be provided by the Masonry Subcontractor. Dowels for masonry shall be provided by this subcontractor. The Concrete Foundations, Walls, Slabs, & Site Subcontractor and the Masonry Subcontractor shall closely coordinate the concrete and masonry reinforcing shop drawings to ensure a complete reinforcement system is accomplished between both trades Scope of Work.

39.0.16 The Concrete Foundations, Walls, Slabs, & Site Subcontractor is responsible for all Concrete Work with the exception of:

1. Miscellaneous concrete work associated with the storm drainage, sewer, water or other related work.
2. Concrete Foundations for Home side Exterior Grandstands are by the Outdoor Grandstand and Bleachers Subcontractor.
3. Electrical concrete pole bases and ductbanks by Electrical Subcontractor.
4. Concrete curb and gutter provided by the Asphalt Paving and Curb & Gutter Subcontractor.
5. Concrete trench drain at perimeter of asphalt running track, track and field runways, takeoff boards, shot put and discus pads by the Athletic Surfaces Subcontractor.
6. Concrete footings for fencing by the Fencing Subcontractor.
7. Concrete footings for outdoor athletic equipment, discus pad, and shot-put pad by the Outdoor Athletic Equipment Subcontractor.

39.0.17 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall provide one (1) sets of scaffold stairs furnished, installed, maintained and removal for an eight (8) month period. Stairs should extend from the lowest floor elevation to roof level. Stairs to be installed at the direction and location of the General Contractor. Installation and erection shall be provided by a trained/certified installation company and crew.

- 39.0.18 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall furnish, maintain and remove at the direction of the General Contractor stone and grading for temporary access drives or pads for pump and concrete truck egress to pour locations.
- 39.0.19 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall include 200 Manhours of miscellaneous labor to be used as directed by the GC Field Supervision at an agreed upon labor rate in the base bid amount.
- 39.0.20 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall include 200 tons placed and compacted of ABC stone for use as directed by the GC Field Supervision at an agreed upon tonnage rate in the base bid amount.
- 39.0.21 Special inspections - As Special inspections will be required on this project it will be the responsibility of this Concrete Foundations, Walls, Slabs & Site Subcontractor to provide supervision to accompany inspectors as required. Any deficiencies noted shall be corrected at the time of inspection. If this Subcontractor is unable to make the correction during the inspection and a deficiency is placed on a non-compliant list, this Subcontractor will have no more than 48 hrs to make the correction and schedule the reinspection to have the item removed from the non-compliant list. All non-complaint items shall be reported to the General Contractor as soon as possible and before the close of business on the day of inspection. Failure to make corrections as stated above could result in a stop work order until corrections are made.
- 39.0.22 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 39.0.23 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall provide a lockable ASTM / Testing Company approved concrete cylinder box for storing and curing of concrete test cylinders for the project.
- 39.0.24 Prior to infilling concrete block-outs, the Concrete Foundations, Walls, Slabs, & Site Subcontractor shall provide the bituminous asphaltic coating to the below grade steel on all applicable columns as required on Sheet S0.0.1., Structural Steel Note 8.
- 39.0.25 The Concrete Foundations, Walls, Slabs, & Site Subcontractor shall provide the aluminum canopy foundations and installation of the foam block-outs to receive the canopy columns provided by the Awnings & Canopies Subcontractor. The Awnings & Canopies Subcontractor will provide the foam block-outs to the Concrete Foundations, Walls, Slabs, & Site Subcontractor for its installation.



**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Concrete Foundations, Walls, Slabs, & Site Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION

**—ALLOWANCES—**

Allowances shall cover the cost of all materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses associated with stated allowance amounts shall be included in the Subcontract Amount but not in the allowances. Whenever costs are more than or less than an allowance amount, the Subcontract Amount shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances.

ALLOWANCES		
ALLOWANCE NO.	ALLOWANCE DESCRIPTION	AMOUNT
1	Unsuitable Soil	\$100,000.00
2	Surveying	\$35,000.00

**—UNIT PRICES—**

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

UNIT PRICES			
UNIT NO.	UNIT PRICE DESCRIPTION	UNIT PRICE	UNIT MEASURE
1	Unsuitable Soil Excavation Off-Site	\$25.00	CY

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

<b>ALTERNATES</b>			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
1	Tennis Courts (Turnkey with HID Athletic Field Lighting)	N/A	Declined
2	Tennis Courts (Turnkey with LED Athletic Field Lighting)	N/A	Accepted
3	Gravel Parking Lot (Asphalt Paving, Curb & Gutter on Gravel Lot)	\$11,625.00	Accepted
4	Soccer Field Irrigation	N/A	Accepted
5	Polished Concrete (First Floor Main Corridor & Commons)	\$30,960.00	Accepted
6	Polished Concrete (First Floor Secondary Corridors)	\$32,617.00	Accepted
7	Exterior Steel Doors & Frames	N/A	Declined
8	TPO Roofing System	N/A	Declined

Subcontract Cost Breakdown Summary			
03A: Concrete Foundations, Walls, Slabs, and Site			
<b>Base Contract Amount Total (Excluding Allowances &amp; Alternates):</b>			<b>\$3,850,000.00</b>
Scope Breakdown			
1	Concrete Foundations, Walls, Slabs, and Site	\$3,000,000.00	
2		\$0.00	
3		\$0.00	
Subtotal:		<b>\$3,850,000.00</b>	
<b>Accepted Alternates Total:</b>			<b>\$75,202.00</b>
No.	Description		
2	Tennis Courts (Turnkey with LED Athletic Field Lighting)	N/A	
3	Gravel Parking Lot (Asphalt Paving, Curb & Gutter on Gravel Lot)	\$11,625.00	
4	Soccer Field Irrigation	N/A	
5	Polished Concrete (First Floor Main Corridor & Commons)	\$30,960.00	
6	Polished Concrete (First Floor Secondary Corridors)	\$32,617.00	
Subtotal:		<b>\$75,202.00</b>	
<b>Allowances Total:</b>			<b>\$135,500.00</b>
No.	Description		
1	Unsuitable Soil	\$100,000.00	
2	Surveying	\$35,500.00	
Subtotal:		<b>\$135,500.00</b>	
		Sales Tax	Included
		P & P Bond	Included
<b>Final Subcontract Amount:</b>			<b>\$4,060,702.00</b>



**—PAYMENT AND PERFORMANCE BONDS—**

If requested, the cost of the Performance and Payment Bonds will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. No mark-up, overhead, etc. shall be included as Samet will only reimburse the cost of the bond.

**END OF SECTION**

**TRADE PACKAGE SCOPE OF WORK:**

**03A CONCRETE FOUNDATIONS, WALLS, SLABS, & SITE SUBCONTRACT**

EXAMPLE

Name of Project  
City of Project  
Samet Project # XX-XXX



Description	Revision	Page Number
<b>GENERAL REQUIREMENTS MANUAL</b>		
PROJECT MANUAL COVER	0	1
INDEX TO CM GENERAL REQUIREMENTS MANUAL	0	1
NOTICE TO BIDDERS/ADVERTISEMENTS FOR BIDS	0	6
INSTRUCTIONS TO BIDDERS (AIA FORM A701-2018)	0	7
TRADE PACKAGE PRE-QUALIFICATION FORMS/REQUIREMENTS	0	22
STANDARD FORMS OF AGREEMENT BETWEEN OWNER AND CONSTRUCTION MANAGER	0	65
<b>01300 FORM(S) OF AGREEMENT (SUBCONTRACT AGREEMENT)</b>		
ADDENDUM 1- INSURANCE AND BONDS	0	11
ADDENDUM 2 -WORK RULES AND SAEFTY POLICY	0	4
ADDENDUM 3- APPLICATION FOR PAYMENT	0	4
ADDENDUM 4- ADDIDAVIT OF CAPITAL IMPROVEMENT	0	2
EXHIBIT A DETAILED SCOPE OF WORK (SAMPLE)	0	11
EXHIBIT B -LIST OF CONTRACT DOCUMENTS (SAMPLE)	0	1
EXHIBIT C -PROJECT SCHEDULE (SAMPLE)	0	1
<b>EXHIBIT D- NORTH CAROLINA STATE M/WBE FORMS</b>		
IDENTIFICATION OF HUB CERTIFIED/ MINOIRITY BUSINESS PARTICIPATION	0	1
AFFIDAVIT A - LISTING OF GOOD FAITH EFFORTS	0	1
AFFIDAVIT B- INTENT TO PERFORM CONTRACT WITH OWN WORKFORCE	0	1
AFFIDAVIT C- PROTION OF WORK TO BE PERFORMED BY HUB CERTIFIED/MINORITY BUSINESSES	0	1
AFFIDAVIT D- GOOD FAITH EFFORTS	0	1
EXHIBIT E- PRE-AWARD MEETING MINUTES	0	7
01340 SCHEDULE REQUIREMENTS	0	1
<b>TRADE PACKAGE SCOPE MANUAL</b>		
CONSTRUCTION MANAGER PACKAGE MANUAL COVER	0	1
TABLE OF CONTENTS	0	3
FORM OF PROPOSAL (BID FORM)	0	12
01210 ALLOWANCES	0	9
01230 ALTERNATES	0	4
LOGISTICS PLAN	0	1
LIST OF CONTRACT DOCUMENTS	0	18
REPORT OF SUBSURFACE EXPLORATION	0	124
BUILDING INFORMATION MODELING REQUIREMENTS	0	21
COMMISSIONING REQUIREMENTS	0	3
ASBESTOS INSPECTION INFORMATION	0	28
<b>TRADE PACKAGE SCOPE OF WORK</b>		
01A Final Clean	0	7
01B General Trades	0	12
03A Concrete Foundations, Walls, Slabs & Site	0	14
04A Masonry	0	8
05A Structural Steel, Miscellaneous Metals	0	8
07A Waterproofing, Dampproofing, & Joint Sealants	0	5
07B Membrane & Shingle Roofing	0	7
07C Metal Roofing	0	6
07D Membrane, Shingle & Metal Roofing Combination	0	3
08A Doors, Frames, & Hardware	0	8
08B Aluminum Storefront, Glass, & Glazing	0	8

Samet Project # XX-XXX

[illegible]



Name of Project  
City of Project  
Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Architectural	A0.1	GENERAL ARCHITECTURAL NFORMATION	0	12/18/2020	Bid Set
Architectural	A0.2	WALL/PARTITION TYPES, WALL JOINTS AND TERMINATIONS	1	1/20/2021	Addendum 001
Architectural	A1.1.0	ENLARGED SERVICE COURTYARD	0	12/18/2020	Bid Set
Architectural	A1.1.1	SITE BUILDINGS & ENTRANCE CANOPY	0	12/18/2020	Bid Set
Architectural	A1.1.2	SITE DETAILS	0	12/18/2020	Bid Set
Architectural	A1.1.3	SITE DETAILS	0	12/18/2020	Bid Set
Architectural	A2.0.1	OVERALL FIRST FLOOR PLAN	0	12/18/2020	Bid Set
Architectural	A2.0.2	OVERALL SECOND FLOOR PLAN	0	12/18/2020	Bid Set
Architectural	A2.1.1	FIRST FLOOR PLAN PART A	1	1/20/2021	Addendum 001
Architectural	A2.1.2	FIRST FLOOR PLAN PART B	1	1/20/2021	Addendum 001
Architectural	A2.1.3	FIRST FLOOR PLAN PART C	1	1/20/2021	Addendum 001
Architectural	A2.1.4	FIRST FLOOR PLAN PART D	1	1/20/2021	Addendum 001
Architectural	A2.1.5	FIRST FLOOR PLAN PART E	1	1/20/2021	Addendum 001
Architectural	A2.1.6	FIRST FLOOR PLAN PART F	1	1/20/2021	Addendum 001
Architectural	A2.1.7	FIRST FLOOR PLAN PART G	1	1/20/2021	Addendum 001
Architectural	A2.1.8	SECOND FLOOR PLAN PART A	1	1/20/2021	Addendum 001
Architectural	A2.1.9	SECOND FLOOR PLAN PART B	1	1/20/2021	Addendum 001
Architectural	A2.1.10	SECOND FLOOR PLAN PART C	1	1/20/2021	Addendum 001
Architectural	A2.1.11	SECOND FLOOR PLAN PART D	1	1/20/2021	Addendum 001
Architectural	A2.1.12	EQUIPMENT PLATFORM (PARTS C,F,G)	1	1/20/2021	Addendum 001
Architectural	A2.1.13	EQUIPMENT PLATFORM (PART A)	1	1/20/2021	Addendum 001
Architectural	A2.1.14	EQUIPMENT PLATFORM (PART D)	1	1/20/2021	Addendum 001
Architectural	A2.2.1	PLAN DETAILS	0	12/18/2020	Bid Set
Architectural	A2.2.2	PLAN DETAILS	0	12/18/2020	Bid Set
Architectural	A2.2.3	PLAN DETAILS	0	12/18/2020	Bid Set
Architectural	A2.2.4	PLAN DETAILS	0	12/18/2020	Bid Set
Architectural	A2.2.5	PLAN DETAILS	0	12/18/2020	Bid Set
Architectural	A3.0.0	FINISH SCHEDULE	1	1/20/2021	Addendum 001
Architectural	A3.0.1	FINISH SCHEDULE	0	12/18/2020	Bid Set
Architectural	A3.0.2	FINISH PATTERNS - FIRST FLOOR PART A	0	12/18/2020	Bid Set
Architectural	A3.0.3	FINISH PATTERNS - FIRST FLOOR PART B	0	12/18/2020	Bid Set
Architectural	A3.0.4	FINISH PATTERNS - FIRST FLOOR PART C	0	12/18/2020	Bid Set
Architectural	A3.0.5	FINISH PATTERNS - FIRST FLOOR PART D	0	12/18/2020	Bid Set
Architectural	A3.0.6	FINISH PATTERNS - FIRST FLOOR PART E	0	12/18/2020	Bid Set
Architectural	A3.0.7	FINISH PATTERNS - FIRST FLOOR PART F	0	12/18/2020	Bid Set
Architectural	A3.0.8	FINISH PATTERNS - FIRST FLOOR PART G	0	12/18/2020	Bid Set
Architectural	A3.0.9	FINISH PATTERNS - SECOND FLOOR PART A	0	12/18/2020	Bid Set
Architectural	A3.0.10	FINISH PATTERNS - SECOND FLOOR PART B	0	12/18/2020	Bid Set
Architectural	A3.0.11	FINISH PATTERNS - SECOND FLOOR PART C	0	12/18/2020	Bid Set
Architectural	A3.0.12	FINISH PATTERNS - SECOND FLOOR PART D	0	12/18/2020	Bid Set
Architectural	A3.0.13	OVERALL FINISH PLAN ALTERNATES NO. 08 AND NO. 09	0	12/18/2020	Bid Set
Architectural	A3.1.0	591568 ALAMANCE BURLINGTON SCHOOL SYSTEM S. NC HWY 119, HAW RIVER, NORTH CAROLINA 27258	1	1/20/2021	Addendum 001
Architectural	A3.1.1	DOOR AND FRAME SCHEDULE	1	1/20/2021	Addendum 001
Architectural	A3.1.2	DOOR, FRAME AND GLAZING TYPES	0	12/18/2020	Bid Set
Architectural	A3.1.3	FRAME TYPES	0	12/18/2020	Bid Set
Architectural	A3.2.1	DOOR AND FRAME DETAILS	0	12/18/2020	Bid Set
Architectural	A3.2.2	DOOR AND FRAME DETAILS	0	12/18/2020	Bid Set

Name of Project

City of Project

Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Architectural	A3.2.3	DOOR AND FRAME DETAILS	0	12/18/2020	Bid Set
Architectural	A4.0.1	OVERALL BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.0.2	OVERALL BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.1.1	BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.1.2	BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.1.3	BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.1.4	BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.1.5	BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.1.6	BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.1.7	BUILDING ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A4.2.1	INTERIOR ELEVATIONS GYMNASIUM	0	12/18/2020	Bid Set
Architectural	A4.2.2	INTERIOR ELVATIONS AUX. GYMNASIUM	0	12/18/2020	Bid Set
Architectural	A4.2.3	INTERIOR ELEVATIONS BAND, CHORUS, DANCE	0	12/18/2020	Bid Set
Architectural	A4.2.4	INTERIOR ELEVATIONS - COMMONS, LOBBY	0	12/18/2020	Bid Set
Architectural	A5.1.1	BUILDING SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.2	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.3	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.4	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.5	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.6	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.7	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.8	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.9	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.10	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.11	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.12	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.13	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.14	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.1.15	WALL SECTIONS	0	12/18/2020	Bid Set
Architectural	A5.2.1	SECTION DETAILS	0	12/18/2020	Bid Set
Architectural	A6.1.1	ENLARGED STAIR & RAMP DETAILS	0	12/18/2020	Bid Set
Architectural	A6.1.2	ENLARGED STAIR & RAMP DETAILS	0	12/18/2020	Bid Set
Architectural	A6.1.3	ENLARGED STAIR & RAMP DETAILS	0	12/18/2020	Bid Set
Architectural	A6.1.4	ENLARGED STAIR & RAMP DETAILS	0	12/18/2020	Bid Set
Architectural	A7.1.1	TOILET ASSEMBLIES,	0	12/18/2020	Bid Set
Architectural	A7.1.2	TOILET ASSEMBLIES	0	12/18/2020	Bid Set
Architectural	A7.1.3	TOILET ASSEMBLIES	0	12/18/2020	Bid Set
Architectural	A7.2.1	ENLARGED GYM PLAN	1	1/20/2021	Addendum 001
Architectural	A7.2.2	AUX GYM PLAN AND LOCKER ROOMS	1	1/20/2021	Addendum 001
Architectural	A7.2.3	ENLARGED FLOOR PLANS - FACS	1	1/20/2021	Addendum 001
Architectural	A7.2.4	ENLARGED PLANS - SCIENCE	1	1/20/2021	Addendum 001
Architectural	A7.2.5	ENLARGED PLANS - SCIENCE	1	1/20/2021	Addendum 001
Architectural	A7.3.1	ENLARGED AUDITORIUM PLAN	1	1/20/2021	Addendum 001
Architectural	A7.3.2	591568 ALAMANCE BURLINGTON SCHOOL SYSTEM S. NC HWY 119, HAW RIVER, NORTH CAROLINA 27258	1	1/20/2021	Addendum 001
Architectural	A7.3.3	AUDITORIUM ELEVATIONS	1	1/20/2021	Addendum 001
Architectural	A8.1.1	CASEWORK ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A8.1.2	CASEWORK ELEVATIONS	0	12/18/2020	Bid Set

Name of Project  
City of Project  
Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Architectural	A8.2.1	SCIENCE CASEWORK ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A8.2.2	SCIENCE CASEWORK ELEVATIONS	0	12/18/2020	Bid Set
Architectural	A9.1.0	REFLECTED CEILING PLAN - SITE BUILDINGS	0	12/18/2020	Bid Set
Architectural	A9.1.1	REFLECTED CEILING PLAN - FIRST FLOOR - PART A	1	1/20/2021	Addendum 001
Architectural	A9.1.2	REFLECTED CEILING PLAN - FIRST FLOOR - PART B	0	12/18/2020	Bid Set
Architectural	A9.1.3	REFLECTED CEILING PLAN - FIRST FLOOR - PART C	1	1/20/2021	Addendum 001
Architectural	A9.1.4	REFLECTED CEILING PLAN - FIRST FLOOR - PART D	1	1/20/2021	Addendum 001
Architectural	A9.1.5	REFLECTED CEILING PLAN - FIRST FLOOR - PART E	1	1/20/2021	Addendum 001
Architectural	A9.1.6	REFLECTED CEILING PLAN - FIRST FLOOR - PART F	1	1/20/2021	Addendum 001
Architectural	A9.1.7	REFLECTED CEILING PLAN - FIRST FLOOR - PART G	1	1/20/2021	Addendum 001
Architectural	A9.1.8	REFLECTED CEILING PLAN - SECOND FLOOR - PART A	1	1/20/2021	Addendum 001
Architectural	A9.1.9	REFLECTED CEILING PLAN - SECOND FLOOR - PART B	0	12/18/2020	Bid Set
Architectural	A9.1.10	REFLECTED CEILING PLAN - SECOND FLOOR - PART C	0	12/18/2020	Bid Set
Architectural	A9.1.11	REFLECTED CEILING PLAN - SECOND FLOOR - PART D	1	1/20/2021	Addendum 001
Architectural	A10.1.1	ROOF PLAN	0	12/18/2020	Bid Set
Architectural	A10.1.2	PLAN	0	12/18/2020	Bid Set
Architectural	A10.1.3	AREA A	0	12/18/2020	Bid Set
Architectural	A10.1.4	ROOF PLAN	0	12/18/2020	Bid Set
Architectural	A10.1.6	ROOF PLAN -	0	12/18/2020	Bid Set
Architectural	A10.1.8	ROOF PLAN - AREA G	0	12/18/2020	Bid Set
Architectural	A10.1.9	ROOF PLAN	0	12/18/2020	Bid Set
Architectural	A10.2.1	DETAILS	0	12/18/2020	Bid Set
Architectural	AI 0.2.2	DETAILS	0	12/18/2020	Bid Set
Architectural	AI 0.2.3	DETAILS	0	12/18/2020	Bid Set
Architectural	AI 0.2.4	DETAILS	0	12/18/2020	Bid Set
C		0 COVER	0	12/18/2020	Bid Set
C		0 COVER	0	12/18/2020	Bid Set
Civil	C0.0	COVER SHEET	0	12/18/2020	Bid Set
Civil	C0.1	OVERALL PLAN	0	12/18/2020	Bid Set
Civil	C1.0	EXISTING CONDITIONS & DEMOLITION PLAN	0	12/18/2020	Bid Set
Civil	C1.1	EXISTING CONDITIONS & DEMOLITION PLAN	0	12/18/2020	Bid Set
Civil	C1.2	EXISTING CONDITIONS & DEMOLITION PLAN	0	12/18/2020	Bid Set
Civil	C2.0	PHASE I EROSION & SEDIMENT CONTROL	0	12/18/2020	Bid Set
Civil	C2.1	PHASE I EROSION & SEDIMENT CONTROL	1	1/20/2021	Addendum 001
Civil	C2.2	PHASE I EROSION & SEDIMENT CONTROL	0	12/18/2020	Bid Set
Civil	C2.3	PHASE II EROSION & SEDIMENT CONTROL	1	1/20/2021	Addendum 001
Civil	C2.4	PHASE II EROSION & SEDIMENT CONTROL	1	1/20/2021	Addendum 001
Civil	C2.5	PHASE II EROSION & SEDIMENT CONTROL	0	12/18/2020	Bid Set
Civil	C2.6	PHASE III EROSION & SEDIMENT	1	1/20/2021	Addendum 001
Civil	C2.7	PHASE III EROSION & SEDIMENT	1	1/20/2021	Addendum 001
Civil	C2.8	PHASE III EROSION & SEDIMENT	0	12/18/2020	Bid Set
Civil	C2.9	EROSION CONTROL NOTES & DETAILS	1	1/20/2021	Addendum 001
Civil	C2.10	EROSION CONTROL NOTES & DETAILS	1	1/20/2021	Addendum 001
Civil	C2.11	EROSION CONTROL NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C3.0	SITE LAYOUT	0	12/18/2020	Bid Set
Civil	C3.1	SITE LAYOUT	1	1/20/2021	Addendum 001
Civil	C3.2	UTILITY PLAN	0	12/18/2020	Bid Set



Name of Project

City of Project

Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Civil	C3.3	UTILITY PLAN	0	12/18/2020	Bid Set
Civil	C3.4	UTILITY PLAN	0	12/18/2020	Bid Set
Civil	C3.5	STRIPING & SIGNAGE PLAN	0	12/18/2020	Bid Set
Civil	C3.6	STRIPING & SIGNAGE PLAN	0	12/18/2020	Bid Set
Civil	C3.7	ROAD WIDENING PLAN	0	12/18/2020	Bid Set
Civil	C3.8	SANITARY SEWER PROFILES	0	12/18/2020	Bid Set
Civil	C3.9	WATER LINE PROFILES	0	12/18/2020	Bid Set
Civil	C3.10	WATER LINE PROFILES	0	12/18/2020	Bid Set
Civil	C4.0	GRADING & DRAINAGE PLAN	0	12/18/2020	Bid Set
Civil	C4.1	GRADING & DRAINAGE PLAN	0	12/18/2020	Bid Set
Civil	C4.2	STORMWATER CONTROL PLAN	0	12/18/2020	Bid Set
Civil	C4.3	BMP DETAIL SHEET POND A1	0	12/18/2020	Bid Set
Civil	C4.4	BMP DETAIL SHEET POND B1	0	12/18/2020	Bid Set
Civil	C4.5	BMP DETAIL SHEET POND C1	0	12/18/2020	Bid Set
Civil	C4.6	BMP DETAIL SHEET POND D1	0	12/18/2020	Bid Set
Civil	C4.7	BMP DETAIL SHEET POND D2	0	12/18/2020	Bid Set
Civil	C4.8	BMP NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C4.9	STORM SEWER PROFILES	0	12/18/2020	Bid Set
Civil	C4.10	STORM SEWER PROFILES	0	12/18/2020	Bid Set
Civil	C4.11	STORM SEWER PROFILES	0	12/18/2020	Bid Set
Civil	C4.12	STORM TABLES	0	12/18/2020	Bid Set
Civil	C5.0	ALTERNATE NO. 1	0	12/18/2020	Bid Set
Civil	C5.1	ALTERNATE NO. 6	0	12/18/2020	Bid Set
Civil	C6.0	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.1	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.2	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.3	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.4	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.5	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.6	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.7	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.8	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.9	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.10	NOTES & DETAILS	0	12/18/2020	Bid Set
Civil	C6.11	NOTES & DETAILS	0	12/18/2020	Bid Set
Electrical	E0.1	LEGENDS, ABBREVIATIONS AND GENERAL NOTES	0	12/18/2020	Bid Set
Electrical	E1.1	OVERALL SITE PLAN - ELECTRICAL	1	1/20/2021	Addendum 001
Electrical	E1.2	UTILITY YARD POWER PLAN	1	1/20/2021	Addendum 001
Electrical	E1.3	FOOTBALL STADIUM LIGHTING PLAN	0	12/18/2020	Bid Set
Electrical	E1.4	BASEBALL/SOFTBALL FIELD LIGHTING PLAN	0	12/18/2020	Bid Set
Electrical	E1.5	ALTERNATE 01 & 04 - SOCCER/TENNIS LIGHTING PLAN	1	1/20/2021	Addendum 001
Electrical	E1.6	HID - SPORTS FIELDS PHOTOMETRY STUDIES	0	12/18/2020	Bid Set
Electrical	E1.7	LED - SPORTS FIELDS PHOTOMETRY STUDIES	0	12/18/2020	Bid Set
Electrical	E2.1A.1	FIRST FLOOR PLAN - PART A - LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.1A.2	FIRST FLOOR PLAN - PART A - POWER	0	12/18/2020	Bid Set
Electrical	E2.1A.3	FIRST FLOOR PLAN - PART A - COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.1B.1	FIRST FLOOR PLAN - PART B - LIGHTING	0	12/18/2020	Bid Set

Name of Project  
City of Project  
Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Electrical	E2.1B.2	FIRST FLOOR PLAN - PART B - POWER	0	12/18/2020	Bid Set
Electrical	E2.1B.3	FIRST FLOOR PLAN - PART B - COMMUNICATIONS	0	12/18/2020	Bid Set
Electrical	E2.1C.1	FIRST FLOOR PLAN - PART C - LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.1C.2	FIRST FLOOR PLAN - PART C - POWER	1	1/20/2021	Addendum 001
Electrical	E2.1C.3	FIRST FLOOR PLAN-PART C- COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.1D.1	FIRST FLOOR PLAN - PART D - LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.1D.2	FIRST FLOOR PLAN - PART D - POWER	0	12/18/2020	Bid Set
Electrical	E2.1D.3	FIRST FLOOR PLAN-PART D- COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.1E.1	FIRST FLOOR PLAN - PART E - LIGHTING	1	1/20/2021	Addendum 001
Electrical	E2.1E.2	FIRST FLOOR PLAN-PARTE POWER	1	1/20/2021	Addendum 001
Electrical	E2.1E.3	FIRST FLOOR PLAN-PARTE COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.1F.1	FIRST FLOOR PLAN - PART F - LIGHTING	1	1/20/2021	Addendum 001
Electrical	E2.1F.2	FIRST FLOOR PLAN - PART F - POWER	1	1/20/2021	Addendum 001
Electrical	E2.1F.3	FIRST FLOOR PLAN-PARTF- COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.1G.1	FIRST FLOOR PLAN-PARTG LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.1G.2	FIRST FLOOR PLAN-PARTG-POWER	1	1/20/2021	Addendum 001
Electrical	E2.1G.3	FIRST FLOOR PLAN-PARTG-COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.2A.1	SECOND FLOOR PLAN - PART A - LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.2A.2	SECOND FLOOR PLAN - PART A - POWER	0	12/18/2020	Bid Set
Electrical	E2.2A.3	SECOND FLOOR PLAN-PART A- COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.2B.1	SECOND FLOOR PLAN - PART B - LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.2B.2	SECOND FLOOR PLAN PART B - POWER	0	12/18/2020	Bid Set
Electrical	E2.2B.3	SECOND FLOOR PLAN-PART B- COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.2C.1	SECOND FLOOR PLAN - PART C - LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.2C.2	SECOND FLOOR PLAN - PART C - POWER	0	12/18/2020	Bid Set
Electrical	E2.2C.3	SECOND FLOOR PLAN-PART C- COMMUNICATIONS	0	12/18/2020	Bid Set
Electrical	E2.2C.5	EQUIPMENT PLATFORM PLAN -PARTC- LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.2C.6	EQUIPMENT PLATFORM PLAN PART C-POWER & COMMS	1	1/20/2021	Addendum 001
Electrical	E2.2D.1	SECOND FLOOR PLAN PART D - LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.2D.2	SECOND FLOOR PLAN-PART D- POWER	0	12/18/2020	Bid Set
Electrical	E2.2D.3	SECOND FLOOR PLAN-PART D- COMMUNICATIONS	1	1/20/2021	Addendum 001
Electrical	E2.2F.1	EQUIPMENT PLATFORM PLAN -PARTF- LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.2F.2	EQUIPMENT PLATFORM PLAN PART F-POWER & COMMS	1	1/20/2021	Addendum 001
Electrical	E2.2G.1	EQUIPMENT PLATFORM PLAN -PARTG- LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.2G.2	EQUIPMENT PLATFORM PLAN PARTG-POWER & COMMS	1	1/20/2021	Addendum 001
Electrical	E2.3A.1	EQUIPMENT PLATFORM PLAN PART A- LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.3A.2	EQUIPMENT PLATFORM PLAN PART A-POWER & COMMS	1	1/20/2021	Addendum 001
Electrical	E2.3D.1	EQUIPMENT PLATFORM PLAN -PARTD- LIGHTING	0	12/18/2020	Bid Set
Electrical	E2.3D.2	EQUIPMENT PLATFORM PLAN PART D-POWER & COMMS	1	1/20/2021	Addendum 001
Electrical	E2.4	ELECTRICAL ROOF PLAN	0	12/18/2020	Bid Set
Electrical	E3.1	OVERALL FIRST FLOOR PLAN - COMMUNICATIONS ZONES	0	12/18/2020	Bid Set
Electrical	E3.2	OVERALL SECOND FLOOR PLAN- COMMUNICATIONS ZONES	0	12/18/2020	Bid Set
Electrical	E4.1.1	DETAILS	0	12/18/2020	Bid Set
Electrical	E4.1.2	DETAILS	0	12/18/2020	Bid Set
Electrical	E4.2	OUTBUILDINGS - POWER, COMMUNICATIONS AND LIGHTING	1	1/20/2021	Addendum 001
Electrical	E4.3	CTE BUILDING - POWER, COMMUNICATIONS & LIGHTING	1	1/20/2021	Addendum 001
Electrical	E4.4	ENLARGE KITCHEN PLAN	0	12/18/2020	Bid Set

Name of Project

City of Project

Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Electrical	E5.1	POWER ONE-LINE DIAGRAM	1	1/20/2021	Addendum 001
Electrical	E5.2	FIRE ALARM RISER DIAGRAMS	0	12/18/2020	Bid Set
Electrical	E5.3	NETWORK RISER DIAGRAM	0	12/18/2020	Bid Set
Electrical	E6.1	PANELBOARD SCHEDULES	1	1/20/2021	Addendum 001
Electrical	E6.2	PANELBOARD SCHEDULES	1	1/20/2021	Addendum 001
Electrical	E6.3	PANELBOARD SCHEDULES	1	1/20/2021	Addendum 001
Electrical	E6.4	PANELBOARD SCHEDULES	1	1/20/2021	Addendum 001
Electrical	E6.5	PANELBOARD SCHEDULES	1	1/20/2021	Addendum 001
Electrical	E6.6	PANELBOARD SCHEDULES	0	12/18/2020	Bid Set
Electrical	E6.7	PANELBOARD SCHEDULES	0	12/18/2020	Bid Set
Electrical	EPS1.1	AUDITORIUM AV FIRST FLOOR PLAN PARTG	0	12/18/2020	Bid Set
Electrical	EPS2.1	AUDITORIUM AV FIRST FLOOR RCP PARTG	0	12/18/2020	Bid Set
Electrical	EPS3.1	AUDITORIUM AV SECTION PART G	0	12/18/2020	Bid Set
Electrical	EPS4.1	AUDITORIUM AV DETAILS	0	12/18/2020	Bid Set
Electrical	EPS4.2	AUDITORIUM AV DETAILS	0	12/18/2020	Bid Set
Electrical	EPS4.3	AUDITORIUM AV DETAILS	0	12/18/2020	Bid Set
Electrical	EPS4.4	AUDITORIUM AV DETAILS	0	12/18/2020	Bid Set
Electrical	EPS5.1	LOCATION	0	12/18/2020	Bid Set
Electrical	EPS5.2	SPORTS LOUDSPEAKER LOCATIONS	0	12/18/2020	Bid Set
Electrical	EPS5.3	SPORTS DETAILS	0	12/18/2020	Bid Set
Electrical	EPS5.4	SPORTS LOUDSPEAKER DETAILS	0	12/18/2020	Bid Set
Electrical	EPSL	AV LEGEND	0	12/18/2020	Bid Set
Fire Protection	FP0.1	LEGENDS, ABBREVIATIONS AND GENERAL NOTES	0	12/18/2020	Bid Set
Fire Protection	FP2.1.1	FIRST FLOOR PLAN - PART A - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.1.2	FIRST FLOOR PLAN - PART B - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.1.3	FIRST FLOOR PLAN - PART C - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.1.4	FIRST FLOOR PLAN - PART D - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.1.5	FIRST FLOOR PLAN - PART E - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.1.6	FIRST FLOOR PLAN - PART F - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.1.7	FIRST FLOOR PLAN - PART G - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.1.8	CTE FLOOR PLAN - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.2.1	SECOND FLOOR PLAN - PART A - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.2.2	SECOND FLOOR PLAN - PART B - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.2.3	SECOND FLOOR PLAN - PART C - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.2.4	SECOND FLOOR PLAN - PART D - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FP2.2.5	SECOND FLOOR PLAN - PART E - FIRE PROTECTION	0	12/18/2020	Bid Set
Fire Protection	FS.01	FOODSERVICE EQUIPMENT PLAN	1	1/20/2021	Addendum 001
Fire Protection	FS.02	FOOD SERVICE EQUIPMENT SCHEDULE	1	1/20/2021	Addendum 001
Fire Protection	FS.03	FOOD SERVICE PLUMBING PLAN	0	12/18/2020	Bid Set
Fire Protection	FS.04	FOOD SERVICE ELECTRICAL PLAN	0	12/18/2020	Bid Set
Fire Protection	FS.05	FOOD SERVICE EQUIPMENT	0	12/18/2020	Bid Set
Fire Protection	FS.06	COLD STORAGE DETAILS	0	12/18/2020	Bid Set
General	G0.0.1	INTEGRATED MOCKUP PANEL	0	12/18/2020	Bid Set
General	G0.0.2	GENERAL INFORMATION - AIR BARRIER	0	12/18/2020	Bid Set
General	G2.1	GENERAL INFORMATION - AIR BARRIER	0	12/18/2020	Bid Set
IR	IR-1	IRRIGATION PLAN	0	12/18/2020	Bid Set
IR	IR-2	IRRIGATION PLAN	0	12/18/2020	Bid Set



Name of Project

City of Project

Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
IR	IR-3	IRRIGATION PLAN	0	12/18/2020	Bid Set
Landscape	L1.0	SOD & SEED PLAN	0	12/18/2020	Bid Set
Landscape	L1.1	SEED & SOD PLAN	0	12/18/2020	Bid Set
Life Safety	LS1.1	CODE SUMMARY BLDG 1-4	0	12/18/2020	Bid Set
Life Safety	LS1.2	CODE SUMMARY BLDG 5	0	12/18/2020	Bid Set
Life Safety	LS1.3	CODE SUMMARY BLDG 6	0	12/18/2020	Bid Set
Life Safety	LS1.4	CODE SUMMARY BLDG 7	0	12/18/2020	Bid Set
Life Safety	LS1.5	CODE SUMMARY BLDG 8	0	12/18/2020	Bid Set
Life Safety	LS2.1	LIFE SAFETY INFORMATION	0	12/18/2020	Bid Set
Life Safety	LS2.2	LIFE SAFETY INFORMATION	0	12/18/2020	Bid Set
Life Safety	LS2.3	LIFE SAFETY INFORMATION	0	12/18/2020	Bid Set
Life Safety	LS2.4	LIFE SAFETY INFORMATION	0	12/18/2020	Bid Set
Life Safety	LS2.5	LIFE SAFETY INFORMATION	0	12/18/2020	Bid Set
Life Safety	LS3.1	UL ASSEMBLIES	0	12/18/2020	Bid Set
Mechanical	M0.1	LEGENDS, ABBREVIATIONS AND GENERAL NOTES	0	12/18/2020	Bid Set
Mechanical	M0.2	SCHEDULES	0	12/18/2020	Bid Set
Mechanical	M0.3	SCHEDULES	0	12/18/2020	Bid Set
Mechanical	M0A.1	- X9ckIMERS __ nrRer iU , __ 1B-1rtCKWU __ TOP of: D&CK tvr. - c0RRUrmeeS0rWNNSS	0	12/18/2020	Bid Set
Mechanical	M0A5	NEW HIGH SCHOOL 591568   SALAMANCA BURLINGTON SCHOOL SYSTEM   S. NC HWY 119, NORTH CAROLINA 2	0	12/18/2020	Bid Set
Mechanical	M1.1	OVERALL FLOOR PLAN	0	12/18/2020	Bid Set
Mechanical	M1.2	CTE BUILDING 'A' - FLOOR PLAN	1	1/20/2021	Addendum 001
Mechanical	M1.3	SITE BUILDINGS - FLOOR PLANS	0	12/18/2020	Bid Set
Mechanical	M2.1.1	FIRST FLOOR PLAN - PART A - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.1.2	FIRST FLOOR PLAN - PART A - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.2.1	FIRST FLOOR PLAN - PART B - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.2.2	FIRST FLOOR PLAN - PART B - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.3.1	FIRST FLOOR PLAN - PART C - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.3.2	FIRST FLOOR PLAN - PART C - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.4.1	FIRST FLOOR PLAN - PART D - DUCTWORK	1	1/20/2021	Addendum 001
Mechanical	M2.4.2	FIRST FLOOR PLAN - PART D - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.5.1	FIRST FLOOR PLAN - PART E - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.5.2	FIRST FLOOR PLAN - PART E - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.6.1	FIRST FLOOR PLAN - PART F - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.6.2	FIRST FLOOR PLAN - PART F - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.7.1	FIRST FLOOR PLAN - PART G - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.7.2	FIRST FLOOR PLAN - PART G - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.8.1	SECOND FLOOR PLAN - PART A - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.8.2	SECOND FLOOR PLAN - PART A - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.9.1	SECOND FLOOR PLAN - PART B - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.9.2	SECOND FLOOR PLAN - PART B - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.10.1	SECOND FLOOR PLAN - PART C - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.10.2	SECOND FLOOR PLAN - PART C - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.11.1	SECOND FLOOR PLAN - PART D - DUCTWORK	0	12/18/2020	Bid Set
Mechanical	M2.11.2	SECOND FLOOR PLAN - PART D - PIPING	0	12/18/2020	Bid Set
Mechanical	M2.12	ROOF PLAN	0	12/18/2020	Bid Set
Mechanical	M3.1	MECHANICAL ROOM AND EQUIPMENT AREA	0	12/18/2020	Bid Set
Mechanical	M3.2	EQUIPMENT PLATFORM - PART A	0	12/18/2020	Bid Set

Name of Project  
City of Project  
Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Mechanical	M3.3	EQUIPMENT PLATFORM - PART D	0	12/18/2020	Bid Set
Mechanical	M3.4	EQUIPMENT PLATFORM - KITCHEN	0	12/18/2020	Bid Set
Mechanical	M3.5	EQUIPMENT PLATFORM - GYM	0	12/18/2020	Bid Set
Mechanical	M3.6	EQUIPMENT PLATFORM - MUSIC	0	12/18/2020	Bid Set
Mechanical	M4.1	SECTIONS	0	12/18/2020	Bid Set
Mechanical	M4.2	SECTIONS	0	12/18/2020	Bid Set
Mechanical	M4.3	SECTIONS	0	12/18/2020	Bid Set
Mechanical	M4.4	SECTIONS	0	12/18/2020	Bid Set
Mechanical	M5.1	DETAILS	0	12/18/2020	Bid Set
Mechanical	M5.2	DETAILS	0	12/18/2020	Bid Set
Mechanical	M5.3	DETAILS	0	12/18/2020	Bid Set
Mechanical	M5.4	UNIT LAYOUT DETAILS	0	12/18/2020	Bid Set
Mechanical	M5.5	UNIT LAYOUT DETAILS	0	12/18/2020	Bid Set
Mechanical	M6.1	SYSTEM SCHEMATICS	0	12/18/2020	Bid Set
Mechanical	M7.1	CONTROL DIAGRAMS	0	12/18/2020	Bid Set
Mechanical	M7.2	CONTROL DIAGRAMS	0	12/18/2020	Bid Set
Plumbing	P0.1	LEGENDS, ABBREVIATIONS AND GENERAL NOTES	0	12/18/2020	Bid Set
Plumbing	P2.0.1	FOUNDATION PLAN - PART A - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.0.2	FOUNDATION PLAN - PART B - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.0.3	FOUNDATION PLAN - PART C - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.0.4	FOUNDATION PLAN - PART D - PLUMBING	1	1/20/2021	Addendum 001
Plumbing	P2.0.5	FOUNDATION PLAN - PART E - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.0.6	FOUNDATION PLAN - PART F - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.0.7	FOUNDATION PLAN - PART G - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.1.1	FIRST FLOOR PLAN - PART A - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.1.2	FIRST FLOOR PLAN - PART B - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.1.3	FIRST FLOOR PLAN - PART C - SANITARY	1	1/20/2021	Addendum 001
Plumbing	P2.1.4	FIRST FLOOR PLAN - PART D - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.1.5	FIRST FLOOR PLAN - PART E - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.1.6	FIRST FLOOR PLAN - PART F - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.1.7	FIRST FLOOR PLAN - PART G - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.1.8	FIRST FLOOR PLAN - PART A - DOMESTIC	0	12/18/2020	Bid Set
Plumbing	P2.1.9	FIRST FLOOR PLAN - PART B - DOMESTIC	0	12/18/2020	Bid Set
Plumbing	P2.1.10	FIRST FLOOR PLAN - PART C - DOMESTIC	0	12/18/2020	Bid Set
Plumbing	P2.1.11	FIRST FLOOR PLAN - PART D - DOMESTIC	1	1/20/2021	Addendum 001
Plumbing	P2.1.12	FIRST FLOOR PLAN - PART E - DOMESTIC	1	1/20/2021	Addendum 001
Plumbing	P2.1.13	FIRST FLOOR PLAN - PART F - DOMESTIC	0	12/18/2020	Bid Set
Plumbing	P2.1.14	FIRST FLOOR PLAN - PART G - DOMESTIC	0	12/18/2020	Bid Set
Plumbing	P2.2.1	SECOND FLOOR PLAN - PART A - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.2.2	SECOND FLOOR PLAN - PART B - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.2.3	SECOND FLOOR PLAN - PART C - SANITARY	1	1/20/2021	Addendum 001
Plumbing	P2.2.4	SECOND FLOOR PLAN - PART D - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.2.5	SECOND FLOOR PLAN - PART E - SANITARY	0	12/18/2020	Bid Set
Plumbing	P2.2.6	SECOND FLOOR PLAN - PART A - DOMESTIC	0	12/18/2020	Bid Set
Plumbing	P2.2.7	SECOND FLOOR PLAN - PART B - DOMESTIC	0	12/18/2020	Bid Set
Plumbing	P2.2.8	SECOND FLOOR PLAN - PART C - DOMESTIC	1	1/20/2021	Addendum 001
Plumbing	P2.2.9	SECOND FLOOR PLAN - PART D - DOMESTIC	0	12/18/2020	Bid Set

Name of Project

City of Project

Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Plumbing	P2.2.10	SECOND FLOOR PLAN - PART E - DOMESTIC	0	12/18/2020	Bid Set
Plumbing	P2.3	PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.4	CONCESSION STAND C FLOOR PLANS - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.5	CONCESSION STAND D FLOOR PLANS - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.6	CTE BUILDING FLOOR PLANS - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P2.11	MECHANICAL PLATFORM PLANS - SANITARY	0	12/18/2020	Bid Set
Plumbing	P3.1.1	ROOF PLAN - PART A - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P3.1.2	ROOF PLAN - PART B - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P3.1.3	ROOF PLAN - PART C - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P3.1.4	ROOF PLAN - PART D - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P3.1.5	ROOF PLAN - PART E - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P3.1.6	ROOF PLAN - PART F - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P3.1.7	ROOF PLAN - PART G - PLUMBING	0	12/18/2020	Bid Set
Plumbing	P4.1	ENLARGED MECHANICAL ROOM PLAN	1	1/20/2021	Addendum 001
Plumbing	P4.2	ENLARGED PLANS	0	12/18/2020	Bid Set
Plumbing	P4.3	ENLARGED PLANS	0	12/18/2020	Bid Set
Plumbing	P4.4	ENLARGED PLANS	0	12/18/2020	Bid Set
Plumbing	P4.5	ENLARGED PLANS	0	12/18/2020	Bid Set
Plumbing	P4.6	ENLARGED KITCHEN PLAN	1	1/20/2021	Addendum 001
Plumbing	P4.7	ENLARGED KITCHEN PLAN	1	1/20/2021	Addendum 001
Plumbing	P4.8	ENLARGED KITCHEN PLAN	0	12/18/2020	Bid Set
Plumbing	P4.9	RISER DIAGRAMS	0	12/18/2020	Bid Set
Plumbing	P5.1	DETAILS	0	12/18/2020	Bid Set
Plumbing	P5.2	DETAILS	0	12/18/2020	Bid Set
Plumbing	P6.1	SCHEDULES	0	12/18/2020	Bid Set
Plumbing	P7.1	STORM RISER DIAGRAM	0	12/18/2020	Bid Set
Plumbing	P51.1	AUDIO	0	12/18/2020	Bid Set
Plumbing	P51.2	AUDITORIUM AUDIO FLOW 2	0	12/18/2020	Bid Set
Plumbing	P51.3	FLOW 3	0	12/18/2020	Bid Set
Plumbing	P51.4	AUDITORIUM VIDEO FLOW	0	12/18/2020	Bid Set
Plumbing	P51.5	AUDITORIUM CONTROL FLOW	0	12/18/2020	Bid Set
Plumbing	P51.6	CLASSROOM AUDIO FLOW	0	12/18/2020	Bid Set
Plumbing	P51.7	SPORTS AUDIO FLOW	0	12/18/2020	Bid Set
Structural	S0.0.1	GENERAL NOTES AND LEGENDS	1	1/20/2021	Addendum 001
Structural	S0.0.2	SCHEDULE OF SPECIAL INSPECTIONS	0	12/18/2020	Bid Set
Structural	S0.0.3	SNOW LOADING	0	12/18/2020	Bid Set
Structural	S0.0.4	WIND PRESSURE DIAGRAM	0	12/18/2020	Bid Set
Structural	S1.1.1	FOUNDATION PLAN - PART A	1	1/20/2021	Addendum 001
Structural	S1.1.2	FOUNDATION PLAN - PART B	0	12/18/2020	Bid Set
Structural	S1.1.3	FOUNDATION PLAN - PART C	0	12/18/2020	Bid Set
Structural	S1.1.4	FOUNDATION PLAN - PART D	0	12/18/2020	Bid Set
Structural	S1.1.5	FOUNDATION PLAN - PART E	0	12/18/2020	Bid Set
Structural	S1.1.6	FOUNDATION PLAN - PART F	0	12/18/2020	Bid Set
Structural	S1.1.7	FOUNDATION PLAN - PART G	1	1/20/2021	Addendum 001
Structural	S1.1.8	PARTIAL FOUNDATION PLAN - PART E	0	12/18/2020	Bid Set
Structural	S1.1.9	FOUNDATION PLANS - SITE BUILDINGS	1	1/20/2021	Addendum 001
Structural	S1.1.10	SLAB CONTROL JOINT PLAN	0	12/18/2020	Bid Set



Name of Project

City of Project

Samet Project # XX-XXX



Discipline	Drawing No.	Drawing Title	Revision	Drawing Date	Set Name
Structural	S1.1.11	SLAB CONTROL JOINT PLANS - SITE	0	12/18/2020	Bid Set
Structural	S2.1.1	2ND FLOOR FRAMING PLAN - PART A	0	12/18/2020	Bid Set
Structural	S2.1.2	2ND FLOOR FRAMING PLAN - PART B	0	12/18/2020	Bid Set
Structural	S2.1.3	2ND FLOOR FRAMING PLAN - PART C	0	12/18/2020	Bid Set
Structural	S2.1.4	2ND FLOOR FRAMING PLAN - PART D	0	12/18/2020	Bid Set
Structural	S2.1.5	2ND FLOOR AND LOW ROOF FRAMING PLAN - PART E	0	12/18/2020	Bid Set
Structural	S2.1.6	LOW ROOF AND MECHANICAL MEZZ FRAMING - PART F	0	12/18/2020	Bid Set
Structural	S2.1.7	MECHANICAL MEZZ FRAMING PLAN - PART G	0	12/18/2020	Bid Set
Structural	S2.2.1	MECHANICAL MEZZANINE FRAMING PLAN - PART A	0	12/18/2020	Bid Set
Structural	S2.2.2	MECHANICAL MEZZANINE FRAMING PLAN - PART D	0	12/18/2020	Bid Set
Structural	S2.3.1	ROOF FRAMING PLAN - PART A	0	12/18/2020	Bid Set
Structural	S2.3.2	ROOF FRAMING PLAN - PART B	0	12/18/2020	Bid Set
Structural	S2.3.3	ROOF FRAMING PLAN - PART C	0	12/18/2020	Bid Set
Structural	S2.3.4	ROOF FRAMING PLAN - PART D	0	12/18/2020	Bid Set
Structural	S2.3.5	ROOF FRAMING PLAN - PART E	0	12/18/2020	Bid Set
Structural	S2.3.6	ROOF FRAMING PLAN - PART F	0	12/18/2020	Bid Set
Structural	S2.3.7	ROOF FRAMING PLAN - PART G	0	12/18/2020	Bid Set
Structural	S2.3.8	ROOF FRAMING PLAN - SITE BUILDINGS	1	1/20/2021	Addendum 001
Structural	S3.0.1	TYPICAL FOUNDATION DETAILS	0	12/18/2020	Bid Set
Structural	S3.0.2	TYPICAL SLAB DETAILS	0	12/18/2020	Bid Set
Structural	S3.1.1	FOUNDATION SECTIONS	0	12/18/2020	Bid Set
Structural	S3.1.2	FOUNDATION SECTIONS	0	12/18/2020	Bid Set
Structural	S4.0.1	TYPICAL MASONRY WALL AND LINTEL DETAILS	0	12/18/2020	Bid Set
Structural	S4.0.2	TYPICAL FRAMING DETAILS	0	12/18/2020	Bid Set
Structural	S4.0.3	TYPICAL FRAMING DETAILS AND DECK SCHEDULE	0	12/18/2020	Bid Set
Structural	S4.1.1	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.2	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.3	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.4	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.5	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.6	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.7	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.8	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.9	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.10	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S4.1.11	FRAMING SECTIONS	0	12/18/2020	Bid Set
Structural	S5.1.1	PORTAL DETAILS	0	12/18/2020	Bid Set
Structural	S5.1.2	PORTAL DETAILS	0	12/18/2020	Bid Set
Structural	S5.1.3	PORTAL DETAILS	0	12/18/2020	Bid Set
Structural	S5.1.4	PORTAL DETAILS	0	12/18/2020	Bid Set
Structural	S5.1.5	PORTAL DETAILS	0	12/18/2020	Bid Set
Structural	S5.1.6	PORTAL DETAILS	0	12/18/2020	Bid Set
Structural	S6.1.1	JOIST LOADING DIAGRAMS	0	12/18/2020	Bid Set

Name of Project  
City of Project  
Samet Project # XX-XXX



Division	Number	Description	Revision	Issued Date	Set
01 - General Requirements	10200	General Sitework Requirements	1	1/20/2021	Addendum 001
01 - General Requirements	11000	Summary need Cx	0	12/18/2020	Bid Set
01 - General Requirements	12100	Allowances	0	12/18/2020	Bid Set
01 - General Requirements	12200	Unit Prices	0	12/18/2020	Bid Set
01 - General Requirements	12300	Alternates	1	1/20/2021	Addendum 001
01 - General Requirements	12500	Substitution Procedures	0	12/18/2020	Bid Set
01 - General Requirements	12900	Payment Procedures	0	12/18/2020	Bid Set
01 - General Requirements	13100	Project Management and Coordination	0	12/18/2020	Bid Set
01 - General Requirements	13300	Submittals Procedures	0	12/18/2020	Bid Set
01 - General Requirements	14000	Quality Requirements	0	12/18/2020	Bid Set
01 - General Requirements	14200	References	0	12/18/2020	Bid Set
01 - General Requirements	14520	Testing, Adjusting and Balancing for HVAC	0	12/18/2020	Bid Set
01 - General Requirements	15000	Temporary Facilities and Controls	0	12/18/2020	Bid Set
01 - General Requirements	16000	Product Requirements	0	12/18/2020	Bid Set
01 - General Requirements	17300	Execution	0	12/18/2020	Bid Set
01 - General Requirements	17419	Construction Waste Management and Disposal	0	12/18/2020	Bid Set
01 - General Requirements	17700	Closeout Procedures	0	12/18/2020	Bid Set
01 - General Requirements	17823	Operation and Maintenance Data	0	12/18/2020	Bid Set
01 - General Requirements	18119	Indoor Air Quality Requirements	0	12/18/2020	Bid Set
01 - General Requirements	18317	Exterior Building Enclosure Air Barrier Requirements	0	12/18/2020	Bid Set
02 - Existing Conditions	24113	Selective Site Demolition	0	12/18/2020	Bid Set
02 - Existing Conditions	24116	Structural Demolition	0	12/18/2020	Bid Set
03 - Concrete	33000	Cast-In-Place Concrete	1	1/20/2021	Addendum 001
03 - Concrete	33100	Polished Concrete Floor Finish	1	1/20/2021	Addendum 001
03 - Concrete	33519	Colored Concrete Finishing	0	12/18/2020	Bid Set
04 - Masonry	42000	Unit Masonry	0	12/18/2020	Bid Set
05 - Metals	51200	Structural Steel Framing	0	12/18/2020	Bid Set
05 - Metals	52100	Steel Joist Framing	0	12/18/2020	Bid Set
05 - Metals	53100	Steel Decking	0	12/18/2020	Bid Set
05 - Metals	54000	Cold-Formed Steel Framing	0	12/18/2020	Bid Set
05 - Metals	54400	Cold-Formed Metal Trusses	0	12/18/2020	Bid Set
05 - Metals	55000	Metal Fabrications	0	12/18/2020	Bid Set
05 - Metals	55100	Metal Stairs	0	12/18/2020	Bid Set
05 - Metals	55213	Pipe and Tube Railing	0	12/18/2020	Bid Set
06 - Wood, Plastics, and Composites	60501	Rough Carpentry for Roofing	0	12/18/2020	Bid Set
06 - Wood, Plastics, and Composites	61000	Rough Carpentry	0	12/18/2020	Bid Set
06 - Wood, Plastics, and Composites	61600	Sheathing	0	12/18/2020	Bid Set
06 - Wood, Plastics, and Composites	64023	Interior Architectural Woodwork	1	1/20/2021	Addendum 001
07 - Thermal and Moisture Protection	71326	Self-Adhering Sheet Waterproofing	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	72100	Thermal Insulation	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	72120	Board Roof Insulation	0	12/18/2020	Bid Set

Name of Project  
City of Project  
Samet Project # XX-XXX



Division	Number	Description	Revision	Issued Date	Set
07 - Thermal and Moisture Protection	72727	Spray Polyurethane Foam Air Barrier	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	73110	Asphalt Shingle Roof System	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	74100	Sheet Metal Roofing System	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	75400	Thermoplastic Single-Ply Roof System	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	76200	Sheet Metal Roof Flashings	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	77200	Roof Accessories	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	78413	Penetration Firestopping	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	78426	Thermal Barriers for Plastic	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	79200	Joint Sealants	0	12/18/2020	Bid Set
07 - Thermal and Moisture Protection	79500	Expansion Control	0	12/18/2020	Bid Set
08 - Openings	08 7100	Door Hardware	0	12/18/2020	Bid Set
08 - Openings	81113	Steel Doors and Frames	0	12/18/2020	Bid Set
08 - Openings	81416	Flush Wood Doors	0	12/18/2020	Bid Set
08 - Openings	81613	Fiberglass Reinforces Polyester (FRP) Flush Doors	0	12/18/2020	Bid Set
08 - Openings	83113	Access Doors and Frames	0	12/18/2020	Bid Set
08 - Openings	83313	Coiling Counter Doors	0	12/18/2020	Bid Set
08 - Openings	83323	Overhead Coiling Doors	0	12/18/2020	Bid Set
08 - Openings	83326	Overhead Coiling Grilles	0	12/18/2020	Bid Set
08 - Openings	84000	Aluminum Framed Entrances and Storefront	0	12/18/2020	Bid Set
08 - Openings	88000	Glazing	0	12/18/2020	Bid Set
08 - Openings	88300	Mirrors	0	12/18/2020	Bid Set
08 - Openings	89000	Louvers and Vents	0	12/18/2020	Bid Set
09 - Finishes	92116	Gypsum Board Assemblies	0	12/18/2020	Bid Set
09 - Finishes	92216	Cold-Formed Steel Framing - Non-Structural (CFSF-NS)	0	12/18/2020	Bid Set
09 - Finishes	92900	Gypsum Board	0	12/18/2020	Bid Set
09 - Finishes	93000	Tiling	0	12/18/2020	Bid Set
09 - Finishes	95113	Acoustical Panel Ceilings	1	1/20/2021	Addendum 001
09 - Finishes	96453	Stage Flooring Assembly	0	12/18/2020	Bid Set
09 - Finishes	96466	Wood Athletic Flooring	1	1/20/2021	Addendum 001
09 - Finishes	96467	Wood Dance Flooring Assemblies	1	1/20/2021	Addendum 001
09 - Finishes	96513	Resilient Base & Accessories	1	1/20/2021	Addendum 001
09 - Finishes	96519	Resilient Tile Flooring	1	1/20/2021	Addendum 001
09 - Finishes	96566	Rubber Athletic Flooring	1	1/20/2021	Addendum 001
09 - Finishes	96723	Resinous Flooring and Wall Systems	1	1/20/2021	Addendum 001
09 - Finishes	96816	Sheet Carpeting	1	1/20/2021	Addendum 001
09 - Finishes	97713	Stretched-Fabric Wall Systems	0	12/18/2020	Bid Set
09 - Finishes	98433	Sound Absorbing and Diffusing Wall Units	0	12/18/2020	Bid Set
09 - Finishes	98436	Sound Absorbing Ceiling Units	0	12/18/2020	Bid Set
09 - Finishes	99100	Painting	0	12/18/2020	Bid Set
10 - Specialties	101100	Visual Display Surfaces	0	12/18/2020	Bid Set
10 - Specialties	101200	Display Cases	0	12/18/2020	Bid Set



Name of Project  
City of Project  
Samet Project # XX-XXX



Division	Number	Description	Revision	Issued Date	Set
10 - Specialties	101400	Signage	0	12/18/2020	Bid Set
10 - Specialties	102113	Solid-Polymer Toilet Compartments	0	12/18/2020	Bid Set
10 - Specialties	102123	Cubicle Curtain and Track	0	12/18/2020	Bid Set
10 - Specialties	102600	Wall Protection	0	12/18/2020	Bid Set
10 - Specialties	102800	Toilet, Bath, and Laundry Accessories	0	12/18/2020	Bid Set
10 - Specialties	104400	Fire Protection Specialties	0	12/18/2020	Bid Set
10 - Specialties	105113	Metal Lockers	0	12/18/2020	Bid Set
10 - Specialties	107300	Protective Covers	1	1/20/2021	Addendum 001
10 - Specialties	107500	Flagpoles	0	12/18/2020	Bid Set
11 - Equipment	111300	Loading Dock Equipment	0	12/18/2020	Bid Set
11 - Equipment	112300	Commercial Laundry Equipment	0	12/18/2020	Bid Set
11 - Equipment	113100	Residential Appliances	0	12/18/2020	Bid Set
11 - Equipment	114000	Foodservice Equipment	1	1/20/2021	Addendum 001
11 - Equipment	116143	Stage Curtains	0	12/18/2020	Bid Set
11 - Equipment	116613	Ballet Barres	0	12/18/2020	Bid Set
11 - Equipment	116623	Gymnasium Equipment	0	12/18/2020	Bid Set
11 - Equipment	119513	Kilns	0	12/18/2020	Bid Set
12 - Furnishings	122113	Horizontal Louver Blinds	0	12/18/2020	Bid Set
12 - Furnishings	123216	Manufactured Plastic-Laminate-Faced Casework	1	1/20/2021	Addendum 001
12 - Furnishings	123553	Laboratory Casework	1	1/20/2021	Addendum 001
12 - Furnishings	123616	Metal Countertops	0	12/18/2020	Bid Set
12 - Furnishings	126100	Fixed Audience Seating	0	12/18/2020	Bid Set
12 - Furnishings	126600	Telescoping Stands	0	12/18/2020	Bid Set
13 - Special Construction	133416	Grandstands and Press Box	1	1/20/2021	Addendum 001
13 - Special Construction	133423	Greenhouse Structure	0	12/18/2020	Bid Set
14 - Conveying Equipment	142100	Electric Traction Machine-Roomless Elevators	0	12/18/2020	Bid Set
21 - Fire Suppression	210500	Common Work Results for Fire-Suppression	0	12/18/2020	Bid Set
21 - Fire Suppression	211000	Water-Based Fire-Suppression Systems	0	12/18/2020	Bid Set
22 - Plumbing	220500	Common Work Results for Plumbing Piping	0	12/18/2020	Bid Set
22 - Plumbing	220513	Motors for Plumbing Equipment	0	12/18/2020	Bid Set
22 - Plumbing	220516	Expansion Fittings and Loops for Plumbing Piping	0	12/18/2020	Bid Set
22 - Plumbing	220517	Sleeves and Sleeve Seals for Plumbing Piping	0	12/18/2020	Bid Set
22 - Plumbing	220519	Meters and Gages for Plumbing Piping	0	12/18/2020	Bid Set
22 - Plumbing	220523	General Duty Valves for Plumbing Piping	0	12/18/2020	Bid Set
22 - Plumbing	220529	Hangers and Supports for Plumbing Piping	0	12/18/2020	Bid Set
22 - Plumbing	220553	Identification for Plumbing Piping and Equipment	0	12/18/2020	Bid Set
22 - Plumbing	220700	Plumbing Insulation	0	12/18/2020	Bid Set
22 - Plumbing	221113	Facility Natural Gas Piping	0	12/18/2020	Bid Set
22 - Plumbing	221116	Domestic Water Piping	0	12/18/2020	Bid Set
22 - Plumbing	221119	Domestic Water Piping Specialties	0	12/18/2020	Bid Set
22 - Plumbing	221125	Circulating Pumps	0	12/18/2020	Bid Set

Name of Project  
City of Project  
Samet Project # XX-XXX



Division	Number	Description	Revision	Issued Date	Set
22 - Plumbing	221316	Sanitary Waste and Vent Piping	0	12/18/2020	Bid Set
22 - Plumbing	221319	Sanitary Waste Piping Specialties	0	12/18/2020	Bid Set
22 - Plumbing	221413	Facility Storm Drainage Piping	0	12/18/2020	Bid Set
22 - Plumbing	221423	Storm Drainage Piping Specialties	0	12/18/2020	Bid Set
22 - Plumbing	221429	Sump Pumps	0	12/18/2020	Bid Set
22 - Plumbing	223300	Electric Water Heaters	0	12/18/2020	Bid Set
22 - Plumbing	223400	Fuel-Fired, Domestic-Water Heaters	0	12/18/2020	Bid Set
22 - Plumbing	224000	Plumbing Fixtures	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230500	Common Work Results for HVAC	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230513	Motors for HVAC Equipment	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230514	Variable Speed Drives	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230516	Expansion Fittings and Loops for HVAC Piping	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230517	Sleeves and Sleeve Seals for HVAC Piping	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230519	Meters and Gauges for HVAC Piping	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230523	General Duty Valves for HVAC Piping	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230529	Hangers and Supports for HVAC Piping and Equipment	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230533	Heat Tracing for HVAC Piping	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230553	Identification for HVAC Piping and Equipment	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230700	HVAC Insulation	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230900	Building Automation System	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	230993	Sequence of Control For HVAC	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	232113	Hydronic Piping	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	232123	Hydronic Pumps	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	232500	HVAC Water Treatment	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	233113	Metal Ducts	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	233300	Air Duct Accessories	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	233424	Specialty Exhaust Systems	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	233600	Air Terminal Units	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	233713	Diffusers Registers and Grilles	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	233716	Fabric Ducts	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	233723	HVAC Gravity Ventilators	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	234100	Particulate Air Filtration	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	235100	Breechings Chimneys and Stacks	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	235216	Condensing Boilers	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	236426	Air-Cooled, Rotary-Screw Water Chillers	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	237313	Modular Indoor Central Station Air Handling Units	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	237433	Energy Recovery Units	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	238123	Computer Room Air Conditioners	1	1/20/2021	Addendum 001
23 - Heating, Ventilating, and Air Conditioning (HVAC)	238126	Ductless Split-System Air Conditioning Units	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	238127	Split-System Air Conditioners	0	12/18/2020	Bid Set
23 - Heating, Ventilating, and Air Conditioning (HVAC)	238240	Electric Unit Heaters	0	12/18/2020	Bid Set

Name of Project  
City of Project  
Samet Project # XX-XXX



Division	Number	Description	Revision	Issued Date	Set
26 - Electrical	260519	Low-Voltage Electrical Power Conductors and Cables	1	1/20/2021	Addendum 001
26 - Electrical	260526	Grounding and Bonding for Electrical Systems	0	12/18/2020	Bid Set
26 - Electrical	260529	Hangers and Supports for Electrical Systems	0	12/18/2020	Bid Set
26 - Electrical	260533	Raceways and Boxes for Electrical Systems	0	12/18/2020	Bid Set
26 - Electrical	260536	Cable Trays for Electrical Systems	0	12/18/2020	Bid Set
26 - Electrical	260544	Sleeves and Sleeve Seals for Electrical Raceways and Cabling	0	12/18/2020	Bid Set
26 - Electrical	260553	Identification for Electrical Systems	0	12/18/2020	Bid Set
26 - Electrical	260572	Overcurrent Protective Device Short-Circuit Study	0	12/18/2020	Bid Set
26 - Electrical	260573	Overcurrent Protective Device Coordination Study	0	12/18/2020	Bid Set
26 - Electrical	260574	Overcurrent Protective Device Arc-Flash Study	0	12/18/2020	Bid Set
26 - Electrical	260923	Lighting Control Devices	0	12/18/2020	Bid Set
26 - Electrical	262200	Low-Voltage Transformers	0	12/18/2020	Bid Set
26 - Electrical	262413	Switchboards	0	12/18/2020	Bid Set
26 - Electrical	262416	Panelboards	0	12/18/2020	Bid Set
26 - Electrical	262726	Wiring Devices	0	12/18/2020	Bid Set
26 - Electrical	262816	Enclosed Switches and Circuit Breakers	0	12/18/2020	Bid Set
26 - Electrical	263214	Engine Generators Diesel	0	12/18/2020	Bid Set
26 - Electrical	263600	Automatic Transfer Switches	0	12/18/2020	Bid Set
26 - Electrical	264313	Surge Protection Devices	0	12/18/2020	Bid Set
26 - Electrical	265119	LED Interior Lighting	0	12/18/2020	Bid Set
26 - Electrical	265619	LED Exterior Lighting	0	12/18/2020	Bid Set
27 - Communications	274116	Integrated Av Communications	0	12/18/2020	Bid Set
27 - Communications	270500	Common Work Results for Communications Systems	0	12/18/2020	Bid Set
27 - Communications	271100	Communications Equipment Room Fittings	0	12/18/2020	Bid Set
27 - Communications	271300	Communications Backbone Cabling	0	12/18/2020	Bid Set
27 - Communications	271500	Communications Horizontal Cabling	0	12/18/2020	Bid Set
27 - Communications	275116	Public Address System	0	12/18/2020	Bid Set
27 - Communications	275515	Bi-Directional Amplification System	0	12/18/2020	Bid Set
28 - Electronic Safety and Security	283111	Emergency Voice Communication Fire Alarm System	0	12/18/2020	Bid Set
31 - Earthwork	312000	Earthwork	1	1/20/2021	Addendum 001
31 - Earthwork	311000	Site Clearing	1	1/20/2021	Addendum 001
31 - Earthwork	312500	Erosion Control	0	12/18/2020	Bid Set
31 - Earthwork	313116	Termite Control	0	12/18/2020	Bid Set
32 - Exterior Improvements	321900	Exterior Athletic Equipment	0	12/18/2020	Bid Set
32 - Exterior Improvements	323113	Chain Link Fences and Gates (Galvanized)	0	12/18/2020	Bid Set
32 - Exterior Improvements	321216	Asphalt Pavement	0	12/18/2020	Bid Set
32 - Exterior Improvements	321313	Site Concrete	0	12/18/2020	Bid Set
32 - Exterior Improvements	321700	Pavement Markings, Signs and Specialties	0	12/18/2020	Bid Set
32 - Exterior Improvements	321823	Athletic Surfacing	0	12/18/2020	Bid Set
32 - Exterior Improvements	328400	Irrigation System	0	12/18/2020	Bid Set
32 - Exterior Improvements	329200	Lawns and Grasses	0	12/18/2020	Bid Set

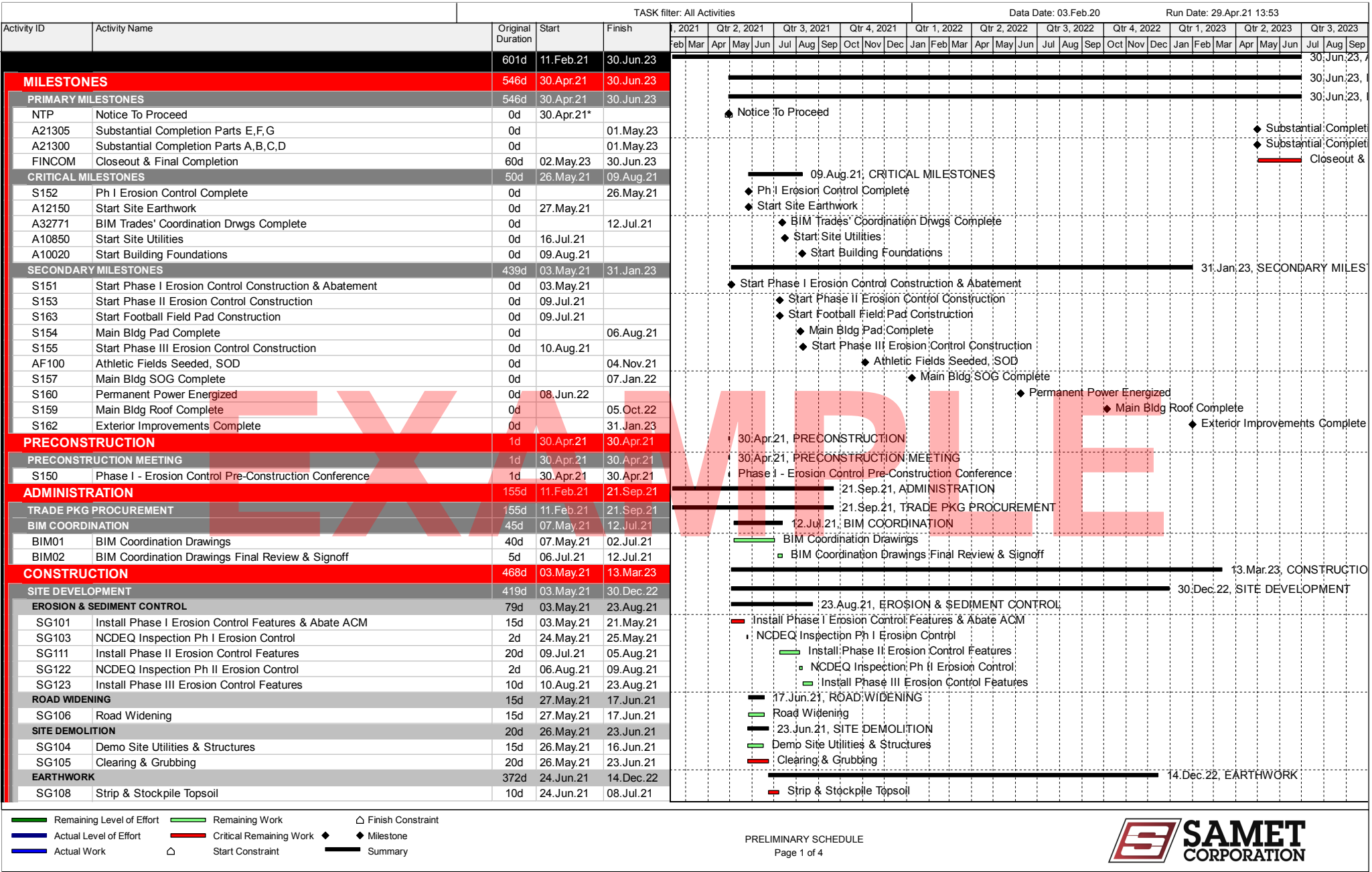


Name of Project  
City of Project  
Samet Project # XX-XXX



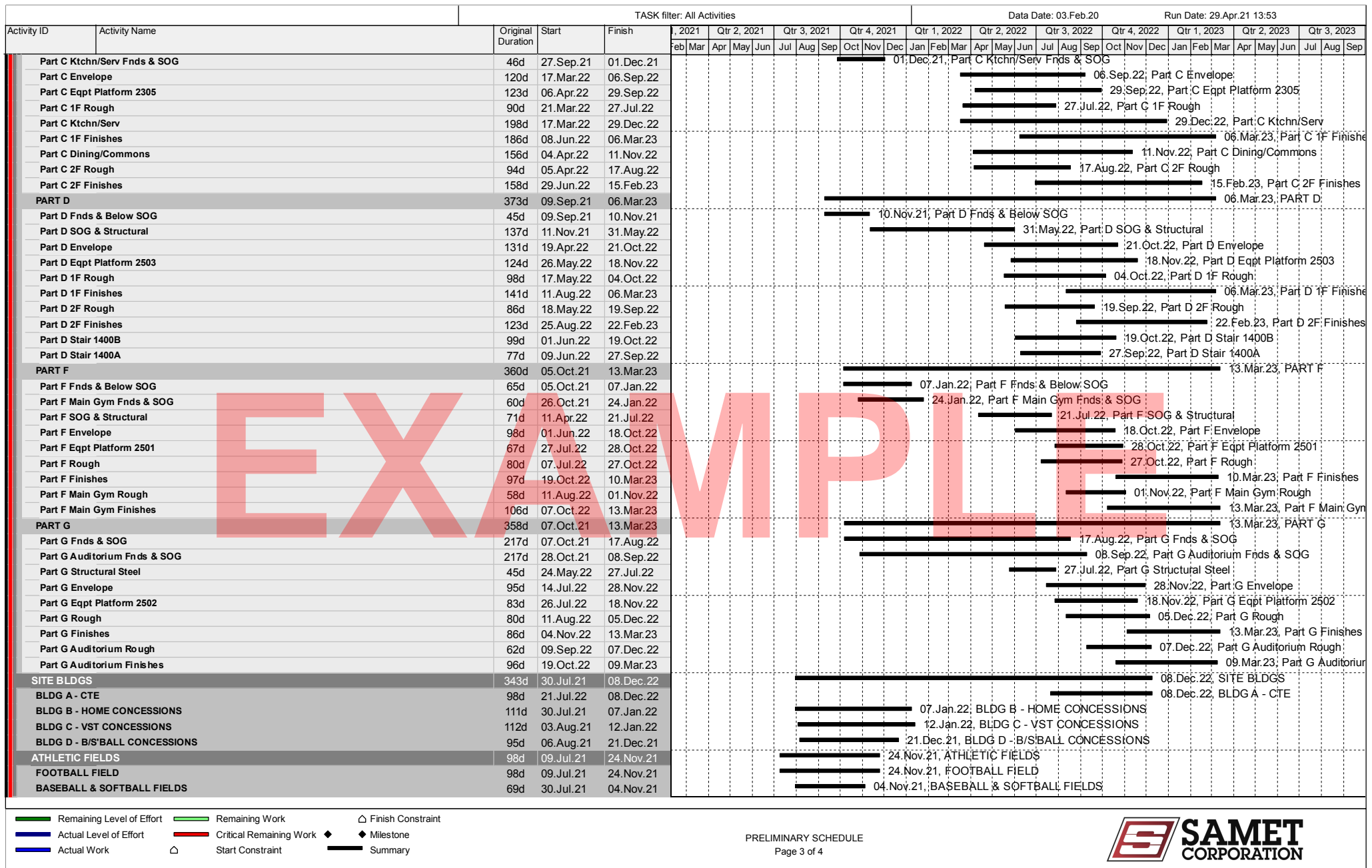
Division	Number	Description	Revision	Issued Date	Set
32 - Exterior Improvements	329300	Exterior plants	0	12/18/2020	Bid Set
33 - Utilities	331000	Exterior Water System	0	12/18/2020	Bid Set
33 - Utilities	333000	Sanitary Sewerage	0	12/18/2020	Bid Set
33 - Utilities	334100	Storm Drainage	0	12/18/2020	Bid Set
59 - Unknown	591568	Architects Project No	1	12/18/2020	Bid Set

EXAMPLE



[illegible]





				TASK filter: All Activities												Data Date: 03.Feb.20								Run Date: 29.Apr.21 13:53																								
Activity ID		Activity Name		Original Duration	Start	Finish	Q1 2021		Q2 2021				Q3 2021				Q4 2021				Q1 2022				Q2 2022				Q3 2022				Q4 2022				Q1 2023				Q2 2023				Q3 2023			
							Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep									
FINAL INSPECTIONS																											01.May.23, FINAL IN																					
PARTS A,B,C,D																											01.May.23, PARTS A																					
A32590	Health Departments Final Inspections	10d	09.Dec.22	22.Dec.22																					Health Departments Final Inspections																							
A19730	Testing Fire Alarm System	10d	06.Jan.23	20.Jan.23																					Testing Fire Alarm System																							
A19930	Final Inspections Fire Sprinkler System	10d	06.Jan.23	20.Jan.23																					Final Inspections Fire Sprinkler Sys																							
A20010	Prelim Inspect Elevator C	10d	23.Jan.23	03.Feb.23																					Prelim Inspect Elevator C																							
A20070	Elevator Inspections	2d	06.Feb.23	07.Feb.23																					Elevator Inspections																							
A20120	Final MEP Inspections Parts A, B, C, D	10d	09.Feb.23	22.Feb.23																					Final MEP Inspections Parts A																							
A20170	Fire Marshall Inspections Parts A, B, C, D	5d	23.Feb.23	01.Mar.23																					Fire Marshall Inspections Par																							
A20200	City/County Inspections Parts A, B, C, D	10d	02.Mar.23	15.Mar.23																					City/County Inspections Pa																							
SAMET	Samet Quality Inspections	32d	16.Mar.23	01.May.23																					Samet Quality Inspe																							
PARTS E,F,G																											15.Mar.23, PARTS E,F,G																					
A25860	Final MEP Inspections Parts E,F,G	10d	13.Feb.23	24.Feb.23																					Final MEP Inspections Parts I																							
A25870	Fire Marshall Inspections Parts E,F,G	5d	23.Feb.23	01.Mar.23																					Fire Marshall Inspections Par																							
A25880	City/County Inspections Parts E,F,G	10d	02.Mar.23	15.Mar.23																					City/County Inspections Pa																							

EXAMPLE

Finish ConstraintMilestoneSummary

**ATTACHMENT E**  
**MBE DOCUMENTATION FOR CONTRACT PAYMENTS**

Prime Contractor/Architect: \_\_\_\_\_

Address & Phone: \_\_\_\_\_

Project Name: \_\_\_\_\_

Pay Application #: \_\_\_\_\_ Period: \_\_\_\_\_

The following is a list of payments to be made to minority business contractors on this project for the above-mentioned period.

Firm Name	*Minority Category	Payment Amount	Owner Use Only
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

\*Minority categories: Black, African American (B), Hispanic (H), Asian American (A), American Indian (I), Female (F), Socially and Economically Disadvantaged (D)

Date: \_\_\_\_\_

Approved/Certified By: \_\_\_\_\_

Name

Title

Signature

**\*\*THIS DOCUMENT MUST BE SUBMITTED WITH EACH PAY REQUEST & FINAL PAYMENT\*\***



Name of Project  
City of Project  
Samet Project # XX-XXX



## TRADE PARTNER PRE-AWARD MEETING

<XXX> <Trade Package Name> <small>(Insert Division(s)) / (Insert Package Name)</small>	
Project Name:	<Project Name>
Project Number:	XX-XXX Meeting Date/ Time: XX/XX/XXXX XX:XX am/pm

**Attendees:** List all meeting participants or attach sign-in sheet

Name	Company

Name	Company

### 1. Bid Proposal

Bid Amount \$ \_\_\_\_\_

#### Standard Alternates

Alternate No. 1:	\$	
Alternate No. 2:	\$	
Alternate No. 3:	\$	
Alternate No. 4:	\$	
Alternate No. 5:	\$	
Alternate No. 6:	\$	
	\$	
	\$	
	\$	
	\$	
	\$	

#### Other Alternates

	\$	
	\$	
	\$	
	\$	
	\$	
	\$	
	\$	
	\$	
	\$	
	\$	

Name of Project  
City of Project  
Samet Project # XX-XXX



Voluntary Alternates

☐ Yes ☐ No

**Unit prices**

<u>Item</u>	<u>Price</u>	<u>Unit Measure</u>
	\$0	HR

**Labor Rates**

<u>Position Description</u>	<u>Price</u>	<u>Unit Measure</u>
	\$	
	\$	
	\$	
	\$	
	\$	

**Allowances** – Included in base proposal amount? ☐ Yes ☐ No

<u>#</u>	<u>Description</u>	<u>Cost</u>
1		
2		
3		

Permits are included in the base proposal amount? ☐ Yes ☐ No

**See Remarks for any comments regarding Section 1?** ☐ Yes ☐ No

**2. General Conditions**

Indicate document has been read/reviewed, understood and included as part of the bid.

	<u>Document Date</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>
a. Bidder is pre-qualified with Samet	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Form of agreement between Contractor and Subcontractor	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Purchase Order agreement (if applicable)	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. General Conditions of the Contract for Construction	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Bid # / Specifications	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Bid Drawings	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Bid Clarifications	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Addenda	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Number (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Number (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Number (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Name of Project  
City of Project  
Samet Project # XX-XXX



- |                                                         |       |                          |                          |                          |
|---------------------------------------------------------|-------|--------------------------|--------------------------|--------------------------|
| Number (4)                                              | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Number (5)                                              | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Other                                                | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Bidder accepts Samet Terms & Conditions of Agreement | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Exceptions or Exclusion to above items               | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**See Remarks for any comments regarding Section 2?** ☐ Yes ☐ No

### 3. Scope of Work Document Review

Note any issues:

Item #	Comment

### 4. Payment of Invoices

- a. Invoices are to be submitted to:  
Accts@sametcorp.com
- b. Invoices are due on the **20th** day of the month
- c. Required documentation with all invoices are noted below and samples provided to Trade Partner:

	Yes	No	To Be Issued
Application & Certification for Payment with Lien waiver	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
List of Second Tier Subcontracts and Suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Understand the requirements for the payment application process, preparation of the schedule of values and timely completion of closeout document preparation?

☐ Yes ☐ No

**See Remarks for any comments regarding Section 4?**

### 5. Change Order Procedures

- |                                    |                  |                     |
|------------------------------------|------------------|---------------------|
| a. % of mark up: Self Performed    | <u>xx% Labor</u> | <u>xx% Material</u> |
| b. % of mark up: Sub-subcontractor | <u>xx% Labor</u> | <u>xx% Material</u> |



Name of Project  
City of Project  
Samet Project # XX-XXX



c. Authorization process reviewed ☐ Yes ☐ No

d. Who at Samet can authorize your request: \_\_\_\_\_

e. Who at your company may submit and approve a request: \_\_\_\_\_

**See Remarks for any comments regarding Section 5?** ☐ Yes ☐ No

## 6. Proposed Subcontractors/Suppliers

Proposed Major Subs/Suppliers

---

---

---

Proposed Workforce Diversity, Small Business Subs/Suppliers

---

---

---

**See Remarks for any comments regarding Section 6?** ☐ Yes ☐ No

## 7. Bonding & Insurance

- |                                                                                                                        | Yes                      | No                       | N/A                      |
|------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Insurance requirements reviewed and example of completed COI provided to Trade Partner                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Professional Liability insurance requirements reviewed and within required limits                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Sealed design documents, submitted by a registered design professional, etc. are to be provided for design services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Subcontract Payment/Performance Bond required (attach)                                                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Bid Bond Included                                                                                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Bonding Company Name: _____                                                                                         |                          |                          |                          |

**See Remarks for any comments regarding Section 7?** ☐ Yes ☐ No

## 8. Safety Procedures / Requirements

- |                                                     | Yes                      | No                       | N/A                      |
|-----------------------------------------------------|--------------------------|--------------------------|--------------------------|
| f. Completed Contractor Safety Certificate on file? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Bidder's current EMR rating: _____               |                          |                          |                          |
| h. Daily clean up included per Samet requirements?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Bidder's Safety Representative: _____            |                          |                          |                          |

\_\_\_\_\_  
(name) (phone) (e-mail)

**See Remarks for any comments regarding Section 8?** ☐ Yes ☐ No

## 9. Schedule Requirements

- |                                                          | Yes                      | No                       | N/A                      |
|----------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Project Construction Schedule understood and accepted | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Name of Project  
City of Project  
Samet Project # XX-XXX



- b. Project Substantial Completion Date – Base Bid: \_\_\_\_\_ (date)
- c. Bidder's proposed schedule durations: (record on lines below)
- |                             |       |
|-----------------------------|-------|
| Shop Drawings/Submittals    | _____ |
| Material/Equipment Delivery | _____ |
| Installation/Erection       | _____ |
| Long Lead Items             | _____ |
- d. All costs included to meet schedule (i.e. overtime/shift time) ☐ ☐ ☐
- e. Overtime for shut-downs and work in existing facilities included ☐ ☐ ☐
- f. Bidder has the manpower to perform the work ☐ ☐ ☐
- See Remarks for any comments regarding Section 9?** ☐ Yes ☐ No

#### 10. Submittals / Document Control

- a. Proposed time frames for submittals if different than schedule:
- |                          |       |
|--------------------------|-------|
| Shop drawings            | _____ |
| Coordination Drawings    | _____ |
| Product Data             | _____ |
| Fabrication and Delivery | _____ |
- b. Number of copies to be submitted: \_\_\_\_\_
- c. Transmittal procedures reviewed ☐ Yes ☐ No ☐ N/A
- d. How will bidder monitor document control \_\_\_\_\_

**See Remarks for any comments regarding Section 10?**

☐ Yes ☐ No

#### 11. Building Information Modeling

- a. BIM project requirements understood and accepted? ☐ Yes ☐ No ☐ N/A
- See Remarks for any comments regarding Section 11?** ☐ Yes ☐ No

#### 12. Product Substitutions – N/A

Product substitutions are not accepted post bid.

**See Remarks for any comments regarding Section 12?** ☐ Yes ☐ No

#### 13. Liquidated Damages

- |                                                 | Yes                      | No                       | N/A                      |
|-------------------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Bidder understands role in preventing        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Bidder understands consequences of incurring | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**See Remarks for any comments regarding Section 13?** ☐ Yes ☐ No

#### 14. Recycling

- a. This site recycles all materials noted below. Material is to be properly separated and placed in the dumpster(s) provided by Samet. Bidder is responsible for ensuring daily compliance:

- |                                 |                                    |                                         |
|---------------------------------|------------------------------------|-----------------------------------------|
| <input type="checkbox"/> Brick  | <input type="checkbox"/> Cardboard | <input type="checkbox"/> Concrete Block |
| <input type="checkbox"/> Gypsum | <input type="checkbox"/> Metals    | <input type="checkbox"/> Wood Pallets   |
| <input type="checkbox"/> Other  | _____                              |                                         |

Name of Project  
City of Project  
Samet Project # XX-XXX



See Remarks for any comments regarding Section 14?

☐ Yes ☐ No

### 15. Site Logistics

a. Bidder's site requirements (check those that apply):

- ☐ Site Trailer ☐ Parking  
☐ Staging ☐ Hoisting  
☐ Other: \_\_\_\_\_

b. Temporary facilities, utilities, power, storage, access, security, etc. reviewed ☐ Yes ☐ No

c. Temporary protection plan \_\_\_\_\_

d. Temporary heating/cooling/electric procedures \_\_\_\_\_

e. Have you made a site visit? ☐ Yes ☐ No

See Remarks for any comments regarding Section 15?

☐ Yes ☐ No

### 16. Project Meetings

a. Meeting(s) Schedule (day/time): (Time TBD) \_\_\_\_\_

b. Location: \_\_\_\_\_

c. Who will attend \_\_\_\_\_

(must be a person with decision making authority)

### 17. Contacts for Project

All communication shall go through the Samet Corporation; any communication given or received from a third party to the Subcontractor/Supplier will not be recognized by Samet Corporation. This is to ensure the Samet Corporation is involved in all Project processes and decisions.

Trade Partner Info:	Name	Cell	E-mail
Samet Team Info:	Name	Cell	E-mail





**SAMET**  
CORPORATION

[illegible]

For: \_\_\_\_\_

Signature: \_\_\_\_\_

Print  
Name: \_\_\_\_\_

Date: \_\_\_\_\_

Trade Partner Pre-Award Meeting Minutes - Page 7 of 7

Project Name  
City of Project  
Samet Project # XX-XXX



## **PROJECT STATEMENT**

### **NOTICE OF PROJECT STATEMENT**

A. Name of Project:  
<Name of Project>

B. Physical Address of the Project:  
<Street Address>  
<City>, <State> <Zip>

C. Contracting Body:  
<Owner Name>  
<Owner Address>  
<Owner City>, <Owner State> <Owner Zip>

D. Name of Construction Manager:  
Samet Corporation, 309 Gallimore Dairy Road, Suite 102, Greensboro, NC 27409

E. The name, phone number, and mailing address of an agent authorized by the Construction Manager to accept service of the requests for payment bond, the notice of public subcontract, and the notice of claim on payment bond referenced in subsection (b) of this section:

Douglas A Beane, CFO  
Samet Corporation  
P.O. Box 8050  
Greensboro, NC 27419  
(336) 544-2600

F. The name and address of the principal place of business of the surety issuing the payment bond required by G.S. 44A—26(a) for the construction contract:

Liberty Mutual Insurance  
Attn: Surety Claims Department  
1001 4<sup>th</sup> Avenue  
Suite 1700  
Seattle, WA 98154

Dated: <Date>

This is a Sample Certificate that is required by Samet (and all of its subsidiaries).

**NOTE:** It is only a sample. The Minimum Coverages shown below are just that. You must verify against and meet any Project Specific requirements. All other below Check boxes are required unless otherwise noted.



## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
Current Date

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Subcontractor's Insurance Agency Name and Address	<b>CONTACT NAME:</b>	
	<b>PHONE (A/C. No. Ext):</b>	<b>FAX (A/C. No.):</b>
<b>INSURED</b> Subcontractor's Name Address City, State, Zip <b>NOTE: Must match the name on Subcontract/PO</b>	<b>E-MAIL ADDRESS:</b>	
	<b>INSURER(S) AFFORDING COVERAGE</b>	
	<b>INSURER A:</b> Insurance Company's Name(s)	<b>NAIC #</b>
	<b>INSURER B:</b> "	
	<b>INSURER C:</b> "	
	<b>INSURER D:</b> "	
	<b>INSURER E:</b> "	
	<b>INSURER F:</b> "	

### COVERAGES

### CERTIFICATE NUMBER:

### REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR VVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	COMMERCIAL GENERAL LIABILITY			Policy Numbers Required for each type of Insurance Coverage "Occur" box Must be Checked "Project" box Must be Checked If Project includes EIFS, subcontractor performing EIFS application must have EIFS Coverage as part of CGL Must include Hired and Non-Owned OR Any Auto	Current Policy Date	Current Policy Date	EACH OCCURRENCE	\$ 1,000,000
	CLAIMS-MADE	<input checked="" type="checkbox"/>	OCUR				DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 300,000
							MED EXP (Any one person)	\$ 10,000
							PERSONAL & ADV INJURY	\$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 2,000,000
	POLICY	<input checked="" type="checkbox"/>	PRO-JECT				PRODUCTS - COMP/OP AGG	\$ 2,000,000
	OTHER: EIFS							\$
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	ANY AUTO						BODILY INJURY (Per person)	\$
	ALL OWNED AUTOS						BODILY INJURY (Per accident)	\$
	HIRED AUTOS	<input checked="" type="checkbox"/>	SCHEDULED AUTOS NON-OWNED AUTOS	<input checked="" type="checkbox"/>			PROPERTY DAMAGE (Per accident)	\$
A	UMBRELLA LIAB	<input checked="" type="checkbox"/>	OCUR				EACH OCCURRENCE	\$ 1,000,000
	EXCESS LIAB		CLAIMS-MADE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		AGGREGATE	\$ 1,000,000
	DED		RETENTION \$					\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input checked="" type="checkbox"/>	Y/N				OTH-ER	
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. EACH ACCIDENT	\$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
A	Professional Liability						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
							Per Claim: \$1,000,000 Aggregate: \$2,000,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The Certificate Holder, Owner and all other parties as required by Contract are Additional Insured on a Primary & non-Contributory basis which includes "your work". A Waiver of Subrogation in favor of Holder is provided on all policies scheduled above. A 30-day cancellation notice must be provided by endorsement.

**NOTE: Additional Insured endorsement must include On-Going & Completed Operations coverage. Copies of all endorsements are required.**

### CERTIFICATE HOLDER

### CANCELLATION

Samet Corporation and all of its Affiliates and Joint Venture partners  
309 Gallimore Dairy Road, Suite 102  
Greensboro, NC 27409

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Agent Signature Required

© 1988-2014 ACORD CORPORATION. All rights reserved.

ACORD 25 (2014/01)

The ACORD name and logo are registered marks of ACORD

Doc. Date: 01-01-14, REV. 3: 10-01-17

**ADDENDUM 1-1**  
**Page 1 of 7**



**NOTE:** This is a Sample Certificate that is required by Samet (and all of its subsidiaries). It is only a sample. The Minimum Coverages shown below are just that. You must verify against and meet any Project Specific requirements. All other below Check boxes are required unless otherwise noted.



# CERTIFICATE OF LIABILITY INSURANCE -Cont'd

DATE (MM/DD/YYYY)  
Current Date

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> <b>Subcontractor's Insurance Agency</b> <b>Name and Address</b>		<b>CONTACT NAME:</b> <b>PHONE (A/C. No. Ext):</b> <b>FAX (A/C. No):</b> <b>E-MAIL ADDRESS:</b>	
		<b>INSURER(S) AFFORDING COVERAGE</b> <b>INSURER A:</b> <b>Insurance Company's Name(s)</b>	
<b>INSURED</b> <b>Subcontractor's Name</b> <b>Address</b> <b>City, State, Zip</b> <b>NOTE: Must match the name on Subcontract/PO</b>		<b>INSURER B:</b> <b>INSURER C:</b> <b>INSURER D:</b> <b>INSURER E:</b> <b>INSURER F:</b>	

## COVERAGES

## CERTIFICATE NUMBER:

## REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below				Current Policy Date	Current Policy Date	PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	<b>Pollution Liability</b>						If you are a demolition, grading, remediation, abatement or similar subcontractor who has potential pollution exposure, OR if there is a project specific pollution requirement, this Coverage is Required. <b>Per Claim: \$1,000,000</b> <b>Aggregate: \$2,000,000</b>

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

A 30-day cancellation notice must be provided by endorsement.

## CERTIFICATE HOLDER

Samet Corporation and all of its Affiliates and Joint Venture partners.

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Agent Signature Required

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – AUTOMATIC STATUS FOR OTHER PARTIES WHEN REQUIRED IN WRITTEN CONSTRUCTION AGREEMENT**

This endorsement modifies insurance provided under the following:

### **COMMERCIAL GENERAL LIABILITY COVERAGE PART**

**A. Section II – Who Is An Insured** is amended to include as an additional insured:

1. Any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy; and
2. Any other person or organization you are required to add as an additional insured under the contract or agreement described in Paragraph 1. above.

Such person(s) or organization(s) is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

- a. Your acts or omissions; or
- b. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured.

However, the insurance afforded to such additional insured described above:

- a. Only applies to the extent permitted by law; and
- b. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for the person or organization described in Paragraph 1. above are completed.

**B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:**

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:
  - a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
  - b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of, or the failure to render, any professional architectural, engineering or surveying services.

2. "Bodily injury" or "property damage" occurring after:
  - a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

### **SCHEDULE**

<b>Name Of Additional Insured Person(s) Or Organization(s)</b>	<b>Location And Description Of Completed Operations</b>

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

**B.** With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
  2. Available under the applicable Limits of Insurance shown in the Declarations;
- whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.



**WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT**

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

**SAMPLE**

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

**(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)**

Endorsement  
Insured

Effective Policy No.

Endorsement No.  
Premium

Insurance Company

Countersigned by \_\_\_\_\_

**WC 00 03 13**  
(Ed. 4-84)

POLICY NUMBER:

**SAMPLE**

COMMERCIAL GENERAL LIABILITY  
CG 24 04 05 09

## **WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

### **SCHEDULE**

**Name Of Person Or Organization:**

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions**:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

# SAMPLE

POLICY NUMBER:

COMMERCIAL AUTO  
CA 04 44 10 13

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)**

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM  
BUSINESS AUTO COVERAGE FORM  
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

**Named Insured:**

**Endorsement Effective Date:**

### **SCHEDULE**

**Name(s) Of Person(s) Or Organization(s):**

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The **Transfer Of Rights Of Recovery Against Others To Us** condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.





309 Gallimore Dairy Rd., Suite 102  
Greensboro, North Carolina 27409  
(336) 544-2600 Phone

## SUBCONTRACT WORK ORDER

(Valid for Subcontracts Less Than \$50,000)

THIS SUBCONTRACT AGREEMENT (hereinafter "Agreement") made and entered as of this date , by and between Samet Corporation (hereinafter "Contractor") and Subcontractor named below (hereinafter "Subcontractor"), pertains to the following:

<b>Subcontract #</b>	<b>NC GC License:</b> 3538
	<b>SC GC License:</b> G16448
<b>Subcontract For:</b>	<b>VA GC License:</b> 2705065547
	<b>GA GC License:</b> GCCO003331
<b>With:</b>	<b>Rep Name:</b>
<b>Address:</b>	<b>Email:</b>
<b>Phone:</b>	<b>Fax:</b>
<b>Project #:</b>	<b>Project Name:</b>
<b>Project Manager:</b>	<b>Superintendent:</b>
<b>Contract Amount:</b> \$0.00	

For consideration named, the receipt and sufficiency of which is hereby acknowledged, the Contractor and Subcontractor hereby covenant and agree that Subcontractor shall perform the Work as described below in "Scope of Services," all in accordance with this Agreement, the Contract Documents, Specifications and all Exhibits and Addenda hereto.

**PAYMENT:** Invoices for payment received on or before the 20th of each month will be processed for payment on the 25th of the following month. Payments will be processed from electronically submitted invoices. Email invoices to [accts@sametcorp.com](mailto:accts@sametcorp.com) .

**The Subcontractor agrees to provide the following scope of services:**

### Subcontract Addenda:

Addendum 1	N/A
Addendum 2	N/A
Addendum 3	N/A
Addendum 4	Affidavit of Capital Improvement

### Subcontract Exhibits:

Exhibit A	Detailed Scope of Work
Exhibit B	List of Contract Documents
Exhibit C	Project Schedule
Exhibit D	D Exhibit
Exhibit E	E Exhibit
Exhibit F	F Exhibit
Exhibit G	G Exhibit
Exhibit H	H Exhibit
Exhibit I	I Exhibit
Exhibit J	J Exhibit

---



309 Gallimore Dairy Rd., Suite 102  
Greensboro, North Carolina 27409  
(336) 544-2600 Phone

Samet Corporation

By: SAMPLE - not for signature

By: SAMPLE - not for signature

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**SUBCONTRACT WORK ORDER TERMS & CONDITIONS**  
**The above items are incorporated by reference below**

---

Contractor, and Subcontractor, agree for themselves, their successors and assigns as follows:

- 1. Work.** Subcontractor shall perform and furnish all labor, supervision, materials, equipment and all other things necessary to prosecute and complete the Work as outlined in the scope of services above. Work shall be performed by Subcontractor in a good and workmanlike manner strictly in accordance with the Contract Documents. With respect to the Work, to be bound to Contractor by the terms and conditions of the Contract Documents and this Subcontract Work Order and hereby assumes toward Contractor all of the duties, obligations and responsibilities that Contractor has by the Contract Documents assumed toward the Owner.
- 2. Price.** Contractor shall pay to Subcontractor for the satisfactory performance and completion of the Work and all the duties, obligations and responsibilities of Subcontractor under this Subcontract Work Order, the sum set forth above as the Price which shall be deemed to include all costs of Subcontractor's performance of the Work.
- 3. Final Payment.** A final payment, consisting of the unpaid balance of the Price, shall be made within 30 days after the last of the following to occur; (a) completion of the Work by Subcontractor, (b) furnishing of evidence satisfactory to Contractor that there are no claims, obligations, liens outstanding or unsatisfied for labor, services, materials, equipment, taxes or other items performed, furnished or incurred in connection with the Work, (c) delivery of all guaranties, warranties, bonds, instruction manuals, performance charts, diagrams, as-built drawings and similar items required of Subcontractor or its suppliers or subcontractors and (d) delivery of a general release, in a form satisfactory to Contractor, executed by Subcontractor running to and in favor of Contractor and Owner.
- 4. Time.** Time is of the essence. Therefore, Subcontractor shall begin the Work upon Contractor's order to do so, and perform the Work diligently and promptly and in such order and sequence as Contractor may direct to achieve the milestone dates and project coordination as directed in the project schedule.
- 5. Change Orders.** Contractor may from time to time, by written order ("Change Order") to Subcontractor, make changes in the Work to the same extent and in the same manner as may be required of Contractor by Owner under the Contract Documents; and Subcontractor shall thereupon perform the changed Work in accordance with the terms of the Subcontract Work Order. The price shall be adjusted by the net amount of any direct savings and direct costs, plus not to exceed 10% markup for Overhead and Profit, (unless otherwise indicated in the Contract Documents) attributable to the Change Order.
- 6. Insurance.** Subcontractor shall secure, pay for, and maintain insurance as enumerated below, and such insurance shall be from an insurer lawfully authorized to transact business in the state wherein the Project is located and A.M. Best "A" rated. The insurance must be issued by an insurer acceptable to the Contractor, and in such amounts as required by the Contract Documents. Subcontractor shall furnish such other insurance coverages as may be applicable to its Work and as required under this Agreement, all prior to commencing its Work. All insurance policies shall contain a provision that the coverages afforded thereunder shall not be cancelled, allowed to expire, or not renewed nor restricted modifications added unless at least thirty (30) days prior written notice has been given to Contractor. Coverages shall be maintained without interruption from the date of commencement of Subcontractor's Work for a period no less than the Statue of Repose in the state the project is located. Certificates of insurance or copies of policies acceptable to the Contractor shall be filed with the Contractor prior to the commencement of Subcontractor's Work. Attached to all certificates of insurance provided by Subcontractor shall be a copy of the Additional Insured Endorsement that is part of the Subcontractor's Commercial General Liability policy. Additional insured coverage shall apply as primary insurance with respect to any other insurance afforded to Owner or Contractor. In the event Subcontractor fails to obtain or maintain any insurance coverage required by this Agreement, or the Contract Documents, Contractor may at its option: (i) terminate the Subcontractor; or (ii) purchase such coverage and charge the expense thereof to the Subcontractor. A sample certificate, outlining Contractor's requirements is available by clicking **HERE**:

<http://sametcorp.com/prequalification-initial>

The coverage and limits of said insurance are as follows:

- (a) Workers' Compensation** (i) Statutory limits (ii) Employers Liability Limits of at least \$1,000,000 each accident for bodily injury by accident and \$1,000,000 each employee for injury by disease. Subcontractor shall provide workers' compensation insurance even if the Subcontractor does not have sufficient number of employees to require such insurance coverage under applicable state statutes.
- (b) Commercial General Liability ("CGL")** (i) Limit \$1,000,000 combined single limit for bodily injury and property damages; (ii) Aggregate Limit \$2,000,000 per project and location; (iii) CGL coverage shall be written on ISO Occurrence form CG00 01 10/04 or a substitute form providing equivalent coverage and shall cover liability arising from premise and operations, independent contractors, products-completed operations and personal and advertising injury and liability assumed under an insured contract (including the tort liability of another assumed in a business contract); (iv) Contractor,



Owner and all other parties required of Contractor by contract shall be included as additional insureds on the CGL, using ISO Additional Insured Endorsement CG 20 10 11/85 or both CG 20 10 10/01 and CG 20 37 10/01 or an equivalent coverage to the additional insured. This insurance for the additional insured shall be as broad as the coverage provided for the named insured subcontractor. It shall apply as primary insurance on a non-contributing basis before any other insurance or self-insurance, including any deductible, maintained by or provided to the additional insured; (v) There shall be no endorsement or modification of the Subcontractor's CGL policy arising from pollution, explosion, collapse, underground property damage or work performed by subcontractors; and (vi) Subcontractor shall maintain CGL coverage for itself and all additional insureds for the duration of the project and maintain completed operations coverage for itself and each additional insured for a period no less than the Statue of Repose in the state the project is located.

**(c) Commercial Automobile Liability** (i) Limit \$1,000,000 combined single limit for bodily injury and property damage, including owned, leased, non-owned and hired motor vehicles; and (ii) Endorsement naming Contractor as an additional insured.

**(d)** Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof is included in the Subcontract Amount. All bonds issued pursuant to this Article shall be issued by a Surety acceptable to Contractor and lawfully authorized to transact business in the State of North Carolina and in the state wherein the Project is located.

**(e)** Subcontractor shall furnish to the Contractor all bonds required under this Agreement prior to the commencement of the Subcontractor's Work. Commencement of Work by the Subcontractor without having provided said Performance and Payment Bonds shall not be considered a waiver or release by the Contractor of the above requirement for bonds, and Subcontractor shall have proceeded with the Work at its own risk and shall not be entitled to payment hereunder until such bonds are delivered to the Contractor.

**10. Indemnity.** Subcontractor shall indemnify and hold harmless the Contractor and the Owner and all agents and employees of either of them from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the Subcontractor's Work under this Agreement, provided that any such claim, damage, loss or expense (i) is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom and (ii) is caused in whole or in part by any negligent act or omission of the Subcontractor or anyone directly or indirectly employed by him or anyone for whose acts he may be liable, regardless of whether such claim, damage, loss or expense is caused in part by a party indemnified hereunder.

In any and all claims against the Contractor or any of his agents or employees by any employee of the Subcontractor, anyone directly or indirectly, employed by him or anyone for whose acts he may be liable, the indemnification obligations under these paragraphs shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts.

**11. Assignment.** Subcontractor shall not assign or subcontract any part of the Work, without the prior written consent of Contractor. Subcontractor shall not be relieved of its duties and obligations hereunder by any such assignment or subcontract.

**12. Compliance.** Subcontractor shall, at its own expense, obtain all necessary licenses and permits pertaining to the Work and comply with all statutes, ordinances, rules, regulations, Environmental Policy and orders of any governmental or quasi-governmental authority having jurisdiction over the Work or the performance thereof, and respond to, and shall defend, indemnify and save harmless Contractor and Owner from and against any loss, liability or expense arising from, any such violations and any citations, assessments, fines or penalties resulting therefrom.

**13. Safety.** Subcontractor shall establish and implement safety measures, policies and standards conforming to those required or recommended by governmental and quasi-governmental authorities having jurisdiction and by Contractor and Owner. Subcontractor shall review and comply with Contractor's Site Safety & Incident Prevention Program, which is available by clicking **HERE**:

<http://sametcorp.com/safety-requirements>

In addition, Subcontractor shall review and comply with Contractor's Site Specific Safety Plan, as applicable.

**14. Cleaning Up.** The scope of Subcontractor's Work includes an obligation to completely clean all Work and remove all contributing debris from the Project site as often as necessary and as often as directed by Contractor. This Subcontractor shall be required to broom clean each work area prior to discontinuing work in that area. Further, Subcontractor shall be required to participate in the clean-up of any common areas in the building or site jointly used by

Subcontractor, the Contractor and other subcontractors. If Subcontractor fails, within twenty-four (24) hours of receipt of written notice to the Subcontractor's field supervisor, to correct a failure to properly clean-up and dispose of all trash and waste materials created by the Subcontractor, the Contractor shall have the right to terminate the Subcontract or at its option to perform such clean-up for Subcontractor; and the Subcontractor hereby agrees to indemnify and to pay Contractor all costs incurred by the Contractor in performing the clean-up work. Clean-up of the Work and the daily removal of debris from the areas of the work is mandatory. Each day, all trash and debris shall be removed from the Project. Fire exits, corridors, ladderways, doorways and exit paths in general shall be clear of debris and open to pedestrian and wheelchair traffic at all times, specifically including nights and weekends.

**15. Guarantees.** Subcontractor warrants and guarantees the Work to the full extent provided for in the Contract Documents, but in no event shall the period of such guarantee be less than one year from the time of acceptance of the Project by Owner.

**16. Damage.** Contractor shall not be liable or responsible for loss or damage to the equipment, tools, facilities, or other personal property owned, rented, or used by Subcontractor, or anyone employed by Subcontractor, in the performance of the Work. Except to the extent of any proceeds received by Contractor for the benefit of Subcontractor under a policy of builders' risk or fire insurance, Contractor shall not be liable or responsible for any loss or damage to the Work, and Subcontractor shall be responsible for the correction or restoration of any such loss or damage to the Work, or to the work of Contractor or any other subcontractor, resulting from the operations of Subcontractor, or its subcontractors, agents, servants, or employees hereunder.

**17. Default.** Should Subcontractor at any time: (a) fail to supply the labor, materials, equipment, supervision or other things required of it in sufficient quantities and of sufficient quality to perform the Work with the skill, conformity, promptness, and diligence required hereunder, (b) cause stoppage or delay of or interference with the Project work, (c) become insolvent, or (d) fail in the performance or observance of any of the covenants, conditions, or other terms of this Subcontract Work Order, then in any such event, each of which shall constitute a default hereunder by Subcontractor, Contractor shall, after giving Subcontractor notice of default and 48 hours within which to cure, have the right to remedy the default by whatever means Contractor may deem necessary or appropriate, including, but not limited to, correcting, furnishing, performing, or otherwise completing the Work, or any part thereof, by itself or through others (utilizing where appropriate any materials and equipment previously purchased for that purpose by Subcontractor) and deducting the cost thereof from any monies due or to become due to Subcontractor hereunder, and recover from Subcontractor all losses, damages, penalties and fines, whether actual or liquidated, direct or consequential, and all reasonable attorneys' fees suffered or incurred by Contractor by reason of or as a result of Subcontractor's default.

**18. Miscellaneous Requirements and Special Provisions:**

**a. Quality Assurance Plan.** This Subcontractor shall comply with the requirements of the Quality Assurance Plan by Contractor. Compliance includes coordination with other trades, mandatory attendance at a Pre-Installation Conference, and performance of work in a manner that will meet or exceed contract document requirements and client expectations.

**b. Assignment by Contractor.** Contractor shall have the right to assign its rights and obligations under this agreement to any direct or indirect parent or subsidiary without the consent of the other party or parties to this agreement.

**c. Use of Contractor's Equipment:** Subcontractor, its agent, employees, subcontractors or suppliers shall not use Contractor's labor or equipment without the express permission of Contractor. By using any labor, equipment, tools, scaffolding, hoists, lifts or similar items (collectively "equipment") owned, leased, or under the control of Contractor, Subcontractor shall be deemed to have assumed all risks in connection therewith including the risk of defects in said equipment, and Article 9 hereof shall apply to any loss or damage which arises from such use. Subcontract shall reimburse the Contractor the reasonable value of any of the Contractor's equipment used by Subcontractor in performing its work.

**d. Illegal Drugs and Alcohol:** Any worker on a Contractor construction site who is suspected of using illegal drugs and/or alcohol will be removed from the construction site. His/her employer will be given the opportunity to administer a drug and/or alcohol test at their expense. If the test proves negative, that person will be allowed back on our site. The results will be submitted to Contractor's Safety Director. If the worker tests positive for illegal drugs and/or alcohol, he will be barred from Contractor construction sites. To continue working for Contractor, the employer must certify in writing that all his employees are drug and/or alcohol free. Failure to abide by this requirement will result in termination of subcontractor's subcontract and being removed from Contractor's bid list.



# E 589CI

## Affidavit of Capital Improvement

Form E 589CI, Affidavit of Capital Improvement, is generally required to substantiate that a contract, or a portion of work to be performed to fulfill a contract, is to be taxed for sales and use tax purposes as a real property contract with respect to a capital improvement to real property.

- This affidavit may not be used to purchase building materials, other tangible personal property, or digital property to fulfill a real property contract exempt from sales and use tax.
- A person who willfully attempts, or a person who aids or abets a person to attempt in any manner, to evade or defeat a tax imposed by the Sales and Use Tax Laws, or the payment thereof, shall be guilty of a Class H felony. If there is a deficiency or delinquency in payment of any tax due to fraud with intent to evade the tax, there shall be assessed a penalty equal to 50% of the total deficiency.

### Section I. Single Use (Complete this section to issue the affidavit for a single capital improvement.)

#### Owner, Tenant, or Real Property Contractor

Samet Corporation  
309 Gallimore Dairy Rd., Suite 102  
Greensboro, North Carolina 27409

#### Real Property Contractor (General Contractor or Subcontractor)

*Hired to perform capital improvement*

#### Describe capital improvement to be performed:

#### Project Name:

#### Project Address (where the work is to be performed)

I certify that, to the best of my knowledge, this affidavit is accurate and complete and that the transaction described to be performed by the Real Property Contractor (General Contractor or Subcontractor identified in box "B") shall be treated as a real property contract with respect to a capital improvement to real property for sales and use tax purposes.

Signature of Authorized Person: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

### Section II. Blanket Use (Complete this section execute a blanket affidavit.)

#### C Real Property Contractor

Address

City

State Zip Code

#### D Real Property Contractor or Subcontractor

*Hired to perform capital improvement*

Address

City

State Zip Code

#### To be completed by the Real Property Contractor identified in Box C.

I certify that I am a Real Property Contractor who performs capital improvements to real property and all transactions with the real property contractor (subcontractor) identified in box "D" shall be treated as real property contracts with respect to capital improvements for real property for sales and use tax purposes.

Signature of Authorized Person: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_



## Affidavit of Capital Improvement Instructions

Form E-589CI, Affidavit of Capital Improvement, is generally required to be issued (see exceptions below) to substantiate that a contract, or a portion of work performed to fulfill a contract, is to be taxed for sales and use tax purposes as a real property contract with respect to a capital improvement to real property.

- Form E-589CI is not an affidavit of tax paid on building materials, other tangible personal property, or digital property purchased or used to fulfill a real property contract.
- Form E-589CI is not to be used to purchase building materials, other tangible personal property, or digital property purchased or used to fulfill a real property contract exempt from sales and use tax.
- A person that issues Form E-589CI in error is liable for use tax on the sales price of or the gross receipts derived from the transaction if it is determined that the contract is not a capital improvement to real property.

A person who willfully attempts, or a person who aids or abets a person to attempt in any manner, to evade or defeat a tax imposed by the Sales and Use Tax Laws, or the payment thereof, shall be guilty of a Class H felony. If there is a deficiency or delinquency in payment of any tax due to fraud with intent to evade the tax, there shall be assessed a penalty equal to 50% of the total deficiency.

### Exceptions to the Requirement to Issue Form E-589CI

The following are exceptions for transactions where Form E-589CI is not required to be issued to substantiate that the transaction is taxed, as applicable, for sales and use tax purposes as a real property contract with respect to a capital improvement to real property.

- Painting or wallpapering real property, or parts thereof.
- Landscaping service.

Form E-589CI is not required to be issued by the specific person for a transaction noted below. The exceptions do not apply to transactions between a general contractor hired to oversee the entire contract and one of its subcontractors (See "Blanket Use" of Form E-589CI (Section II) for possible exceptions.). The following exceptions do not apply to remodeling.

- A real property owner or other person hires a general contractor to oversee the entire contract and the contract is for "new construction" as defined in N.C. Gen. Stat. § 105-164.4H(e)(2).
- A real property owner or other person hires a general contractor to oversee the entire contract and the contract is to rebuild or construct again a prior existing permanent building, structure, or fixture on land (reconstruction as defined in N.C. Gen. Stat. § 105-164.4H(e)(3)).
- A general contractor that purchases all tangible personal property and digital property to fulfill the real property contract and provides the employee labor to fulfill the real property contract.

### Section I. Single Use Instructions

A person must complete "Section I - Single Use" of the form for a one time use to substantiate that a transaction that otherwise meets the definition of repair, maintenance, or installation services to real property is taxed for sales and use tax purposes as a real property contract with respect to a single capital improvement for real property. When a real property contractor hires a subcontractor to perform a portion of the overall contract and there is not a recurring business relationship between the two parties, "Section I - Single Use" of Form E-589CI shall be completed and the form issued to each subcontractor as notice that the transaction is subject to tax as a real property contract with respect to a capital improvement for sales and use tax purposes.

A property owner oversees the entire activity that is a real property contract with respect to a capital improvement for real property and hires various subcontractors to complete the real property contract:

- **Box A - Owner, Tenant or Real Property Contractor:** Enter property owner's name and address.
- **Box B - Real Property Contractor (General Contractor or Subcontractor):** Enter general contractor's or subcontractor's name and address.
- Property owner listed in Box A must describe real property contract with respect to capital improvement to be performed.
- Authorized Person (typically property owner) signs, enters title (owner), and enters the date.

A general contractor hires a subcontractor to perform a real property contract with respect to a capital improvement, or portion thereof:

- **Box A - Owner, Tenant or Real Property Contractor:** Enter general contractor's name and address.
- **Box B - Real Property Contractor (General Contractor or Subcontractor):** Enter subcontractor's name and address.
- General contractor listed in Box A describes real property contract with respect to capital improvement to be performed.
- Authorized Person (typically general contractor) signs, enters title (general contractor), and enters the date.

A lessee or tenant hires a general contractor (or subcontractor) to perform a real property contract with respect to a capital improvement for real property; provided the capital improvement is intended to become a permanent installation and title to it vests in the owner or lessor of the real property immediately upon installation:

- **Box A - Owner, Tenant or Real Property Contractor:** Enter lessee or tenant's name and address.
- **Box B - Real Property Contractor (General Contractor or Subcontractor):** Enter general contractor's or subcontractor's name and address.
- General contractor must describe capital improvement for real property to be performed.
- Authorized Person (typically lessee or tenant) signs, enters title, and enters the date.

### Section II. Blanket Use Instructions

A real property contractor may complete "Section II - Blanket Use" and issue the form to a real property contractor (subcontractor) who is used exclusively to perform part, or all, of real property contracts with respect to capital improvements to real property, where the person and the real property contractor have a recurring business relationship. A blanket use affidavit continues in force so long as the real property contractor named in "Box C" and the real property contractor (subcontractor) named in "Box D" maintain a recurring business relationship (when a period of no more than twelve months elapse between transactions between two parties) or until withdrawn or otherwise notified by the issuer of the form. The blanket use will generally apply for the following: (1) a builder who hires the same contractor(s) only for new construction; (2) a real property contractor who hires the same subcontractor(s) only for reconstruction; (3) a real property contractor who hires the same subcontractor(s) for remodeling and the activities performed by the subcontractor(s) are never repair, maintenance, and installation services for real property; and (4) a real property contractor who exclusively hires the same subcontractor(s) to perform part, or all, of its real property contracts with respect to capital improvements for real properties.

A general contractor or subcontractor hires a subcontractor to perform a capital improvement, or portion thereof:

- **Box C - Real Property Contractor:** Enter the hiring real property contractor's name and address.
- **Box D - Real Property Contractor (General Contractor or Subcontractor):** Enter subcontractor's name and address. Authorized person listed in Box C signs, enters title, and dates.

## **TRADE PACKAGE GENERAL SCOPE REQUIREMENTS**

### **I. INTRODUCTION**

The PROJECT MANUAL was prepared to assist with the overall administrative functions of the Project. It provides information and examples of several aspects of Project correspondence that should be followed throughout the job; however, the following requirements are not intended to supersede any more strenuous requirements elsewhere in the Contract Documents.

Revisions to this Manual and additional information may be issued periodically and should be inserted in the applicable section(s).

The General Contractor (Construction Manager (CM)) suggests that you copy portions of the Manual and distribute the necessary pages within your organization (especially field personnel) to ensure that these procedures are followed. This should eliminate inconsistencies, allowing an efficient completion of the Project.

Unless noted otherwise herein, requirements applicable to ALL trade package scopes of work are defined within this Section. Further, these requirements herein shall become part of each trade package scope of work as if fully written out in each respective trade package scope of work.

Each Subcontractor/Vendor is required to furnish General Contractor, in writing, the name of all their Supervisory Personnel clearly identifying and listing their roles and responsibilities related to the project. An organization chart shall be included as part of this submittal.

Note: All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. DO NOT contact the Owner or Architect directly without the consent of General Contractor.

“General Contractor” or “Contractor” specified in Contract Document trade specific Technical Specification sections refers to this Subcontractor for all work pertaining to the scope described herein unless otherwise noted.

### **II. DEFINITIONS**

Outlined below are specific terms, which are used throughout the Contract Documents. These terms are described below to clarify the particular “term” as it is used in context throughout the Contract Documents.

<b><u>#</u></b>	<b><u>Term:</u></b>	<b><u>Definition:</u></b>
1.	“Owner”	Wake Technical Community College 4723 Advantage way Raleigh, NC 27603
2.	“Designer, Architect of Record, Architect/Engineer”	HH Architecture 1100 Dresser Court Raleigh, NC 27609

3.	"General Contractor or Construction Manager"	Samet Corporation (SAMET) 5430 Wade Park Blvd, Suite 110 Raleigh, NC 27607
4.	"Contractor"	All areas within the Contract Documents (except where implied differently when referring to an entity under contract with the General Contractor (e.g., references in a technical specification)) where this term is used shall mean "General Contractor" and not Contractor.
5.	"Subcontractor"	An entity who contracts directly with the General Contractor through execution of the <i>Standard form of Agreement between Contractor and Subcontractor</i> included within the Contract Documents to furnish and install specific goods and services as defined within a specific Trade Package Scope of Work.
6.	"Sub-Subcontractor"	An entity who contracts directly with the Subcontractor to furnish and install specific goods and services as defined within a specific Trade Package Scope of Work.
7.	"Supplier"	An entity who contracts directly with the General Contractor through execution of the standard <i>Purchase Order Agreement</i> included within the Contract Documents to furnish specific goods and services as defined within a specific Trade Package Scope of Work.
8.	"Provide"	This term shall mean to furnish and install a particular item(s) as necessary to accomplish a complete, finished and properly operating installation.
9.	"Furnish"	This term shall mean to furnish including taxes and delivery of a particular item(s) as necessary to facilitate a complete and finished installation by others or as defined within the Trade Package Scope of Work.
10.	"Install"	This term shall mean to install a particular item(s) as necessary to facilitate a complete and finished installation through materials, equipment or the like furnished by others or as defined within the Trade package Scope of Work.
11.	"PROJECT MANUAL"	The PROJECT MANUAL shall consist of all technical specifications, sample forms, sample agreements, trade package scopes of work, general requirements, proposal forms and procedures, etc. as prepared by the Designer, General Contractor and/or Owner for use in bidding and constructing



	the project.
--	--------------

### **III. CONTRACT DOCUMENTS**

- 3.0. As applicable and defined within the respective Trade Package Scope of Work, furnish all labor, materials, tools, taxes, insurances, equipment, hoisting, supervision and all other incidentals necessary to accomplish all Work in accordance with ALL Contract Documents, which consist of the following:
1. All Addenda or Bid Clarifications issued prior to Bid Date.
  2. Drawings and/or supplemental sketches prepared by Designer.
  3. Technical Specifications located within the PROJECT MANUAL and/or as amended by Addendum as prepared by the Designer and General Contractor.
  4. Form of Agreement (Subcontractor Agreement or Purchase Order Agreement) between Samet Corporation and Subcontractor or Supplier contained within the PROJECT MANUAL, – Contract Documents.
  5. All Division 1 – General Requirement Specifications located within the PROJECT MANUAL and/or as amended by Addendum as prepared by the Designer and General Contractor.
  6. Form of Agreement between the Owner and General Contractor containing the General Conditions for the Contract of Construction as contained within the PROJECT MANUAL, – Contract Documents.
  7. Project Construction Schedule as prepared by the General Contractor contained within the SCOPE AND INFORMATION MANUALS – Contract Documents.
  8. Safety Procedures and Requirements contained within the PROJECT MANUAL, – Contract Documents.
- 3.1. All Contract Documents shall be at each Subcontractor's expense.
- 3.2. Modifications are prohibited to the Standard Form of Agreement between the Contractor and Subcontractor. Successful Bidders will be required to execute the agreement without exception.

### **IV. APPLICATIONS FOR PAYMENT**

- 4.0. Application for Payment Format – Applications for Payment must be submitted by the Subcontractor/Supplier Standard Application & Certification for Payment Forms furnished by the General Contractor. No exceptions will be allowed. Reference the Subcontractor/Supplier Standard Application & Certification for Payment Forms which are included within the PROJECT MANUAL for further information.

- 4.1. The Schedule of Values shall be approved by the General Contractor prior to the Subcontractor or Supplier submitting its first application for payment. The schedules of values must be submitted to the General Contractor for approval at least thirty (30) days before the Subcontractor or Vendor apply for payment.
- 4.2. The Subcontractor shall modify its Schedule of Values as directed by the General Contractor in order to provide sufficient breakdown of cost, reflect changes within the Subcontract Sum due to Change Orders and/or other modifications of the Subcontract Agreement.
- 4.3. All MWBE sub-Subcontractors and Suppliers shall be listed separately on the Trade Subcontractor or Supplier's Schedule of Values in order to easily track payments to these companies. Additionally, each Trade Subcontractor shall submit a completed "Appendix E – MBE Documentation for Contract Payments" Form with each of its Applications for Payment.
- 4.4. Materials stored on site may be submitted for payment provided the following conditions are adhered to by the Subcontractor:
  1. Material is on site and properly stored and protected.
  2. Submittals for materials have been forwarded to the General Contractor and Designer for review and the Designer has provided an acceptable review.
  3. Field receiving reports (material delivery tickets) are provided with the Applications for Payment. The description and quantities of the subject material being invoiced shall be depicted on the subject field receiving report in order to comply with this requirement.
  4. The material on site is the same material submitted and reviewed by the General Contractor and Designer.
  5. Stored materials must be specific to the project. Items such as conduit, wire, pipe, etc. will not be paid for as stored material without prior approval of the Owner, General Contractor and the Designers.
- 4.5. Material stored off site may be submitted for payment provided the following conditions are adhered to by the Subcontractor:
  1. The General Contractor must receive approval from the Designer and Owner on behalf of a Subcontractor prior to approving payment.
  2. Material is in a bonded warehouse and properly stored and protected.
  3. Submittals for materials have been forwarded to the General Contractor and Designer for review and the Designer has provided an acceptable review.

4. Field receiving reports (material delivery tickets) are provided with the Applications for Payment. The description and quantities of the subject material being invoiced shall be depicted on the subject field receiving report in order to comply with this requirement.
  5. The stored material is the same material submitted and reviewed by the General Contractor and Designer.
  6. Material shall be fully insured by the Subcontractor to include full replacement thereof due to theft, fire, natural disaster, or any other cause under or outside the control of the Subcontractor. Subcontractor's insurance company via a certificate of insurance or letter as deemed acceptable to the Owner and/or General Contractor shall confirm that this separate coverage is intact prior to considering processing payment to Subcontractor. Offsite materials shall be stored in a bonded warehouse acceptable to the General Contractor and Owner in order to be considered for payment.
  7. Bill of Sale for all stored materials are provided with the Applications for Payment.
  8. Stored materials must be specific to the project. Items such as conduit, wire, pipe, etc. will not be paid for as stored material without prior approval of the Owner, General Contractor and the Designers.
  9. The stored materials must be clearly marked for this project only at the stored location and stored separately from other materials, such that this material can be clearly delineated in provided photos satisfactory to the Owner, Designer and General Contractor. The Owner, Designer or General Contractor also require inspection of said materials, so this subcontractor or vendor shall fully cooperate to accomplish this inspection.
- 4.6. Retainage - The General Contractor shall pay ninety-five percent (95%) of the amount due to the Subcontractor which is an equivalent to five percent (5%) retainage. Upon fifty percent (50%) completion of the overall project and the Subcontractor's Scope of Work and if the project is proceeding satisfactorily as determined by the General Contractor, Designer and Owner and if approved by the Owner, no further retainage will be withheld from the Subcontractor. The retainage withheld (totaling two and one-half percent (2.5%) retainage at final completion) after the Subcontractor achieving the fifty percent (50%) completion stage of its Work shall be held until final completion is achieved. If the project is not proceeding satisfactorily on or after the Subcontractor achieves the fifty percent (50%) completion stage as determined by the General Contractor and Designer and Owner, retainage shall remain or be readjusted to five percent (5%). Additionally, retainage will not be withheld on materials purchased by the General Contractor through a Purchase Order Agreement.
- 4.7. Quick Payment Program – In order to promote a good faith effort to recruit Historically Underutilized Businesses, Minority Business Enterprises and/or Non-Minority Business



Enterprises, the General Contractor will consider implementing a quick payment program for this project. This quick payment program / process must be approved and facilitated by the Owner through early payments to the General Contractor. In all cases, each Subcontractor who wants to be considered for inclusion in this program shall provide a written request to the General Contractor on or before thirty (30) days prior to submission of its first Application for Payment. The General Contractor will also consider reviewing a Subcontractor's request if submitted to the General Contractor with its Subcontractor / Supplier Pre-qualification Application. Following receipt and review of the aforementioned written request, the General Contractor will advise the Subcontractor of its decision of what it can and cannot do in order to assist the Subcontractor with expediting its payments.

- 4.8. At a minimum, the Subcontractor's written request for enrollment into the General Contractor's Quick Payment Program shall include the following for review and consideration by both the General Contractor and Owner. Please note that only Subcontractors who may benefit from this program will be considered for inclusion. The General Contractor's decision on this matter will be final.
1. Provide a specific reason(s) as to why your company needs to receive payment on an alternative payment schedule (e.g., every two weeks, etc.) in lieu of the payment terms defined herein.
  2. The aforementioned reason(s) shall be accompanied with an explanation and documentation in order to substantiate as to why this is necessary in order for the applying firm to meet its financial obligations.
  3. Documentation which must be provided to the General Contractor shall include, but not be limited to the following:
    - i. A comprehensive project list must be provided to include all projects currently under contract between an Owner(s) or other Contractor(s) and the applying Subcontractor.
    - ii. Comprehensive project list shall include each project's completion status, contract amount between applying firm and Owner or other Contractor and amount of each contract currently paid to date.
    - iii. Copies of recent bank statements (last six (6) months) illustrating the applying Subcontractor's cash on hand and its recent payment history.
  4. Provide a proposed payment schedule and frequency thereof for review and consideration.
  5. Define any other reasons for consideration for enrollment into the General Contractor's Quick Payment Program.

- 4.9. "Quick Payment Agreement" form to be used as part of this Quick Payment Program is included in Section 01600 - Forms of this Project Manual.
- 4.10. Joint Check Agreement – If deemed in the best interest of the Project, as determined by the General Contractor, the General Contractor may require the Trade Subcontractor to pay its Sub-subcontractor or Supplier via Joint Check. If required, the following procedure must be undertaken to complete the joint check process.
  1. This Subcontractor shall provide the General Contractor with a comprehensive list of all material / equipment Suppliers and/or Sub-Subcontractors with whom the Trade Subcontractor intends on or will be purchasing materials / equipment and/or sub-subcontracting certain aspects of the Work for this project.
  2. On behalf of the Trade Subcontractor, each of the proposed material / equipment suppliers or sub-subcontractors who are contracted by the Trade Subcontractor shall be paid by the General Contractor via a joint check naming both the Trade Subcontractor and material/equipment supplier or sub-subcontractor as a payee on the applicable check.
  3. A joint check agreement shall be executed between the Trade Subcontractor and General Contractor in accordance with the General Contractor's standard Joint Check Procedure defined herein. There needs to be a Joint Check Agreement for each of the Trade Subcontractor's suppliers or Sub-subcontractors. Both signatures need to be notarized on each of the agreements.
  4. The Trade Subcontractor shall also have its Material/Equipment Supplier or Sub-subcontractor shall submit and notarize a "Partial Waiver of Liens" form with each application of payment in order for the General Contractor's accounting department to determine the exact amount of each applicable joint check to be issued for the Trade Subcontract.

**The following steps need to be completed every month before payment can be released by the General Contractor:**

5. The Trade Subcontractor needs to supply the General Contractor with all invoices due to their sub-Subcontractors or Suppliers for that month.
6. A partial lien waiver needs to be completed for the correct amount scheduled to be paid to each sub-Subcontractor or Supplier that month.
7. Each Supplier and Subcontractor need to sign the partial lien waiver and both signatures are to be notarized.
8. Checks will be issued jointly to the Sub-subcontractor or Supplier and Trade Subcontractor. The Trade Subcontractor will need to execute and endorse the back of the check. In turn, the check will then be given to the Sub-subcontractor or Supplier by the General Contractor.

9. Reference the General Contractor's Joint Check Agreement Form included in Section 01600 of this Project Manual for further information.
- 4.11. Early Release of Final Payment – Contingent upon receipt of approval from the Owner, a particular Subcontract may be closed out financially upon the completion of the applicable Subcontractor's Scope of Work. In any event, prior to a Subcontract being closed out financially, the General Contractor and/or Designer must complete a Final Inspection of the Subcontractor's work, all punch list items, if applicable, must be completed in their entirety by the applicable Subcontractor and all required close out documentation shall be received and approved by the General Contractor, Designer and/or Owner. Additionally, if the Subcontractor's work is closed out financially prior to the achieving the substantial completion date of the project, all warranties and guarantees shall be post dated to the Substantial Completion date of the project. Upon completion of the aforementioned, and only contingent upon the Owner's concurrence, the applicable Subcontract will be considered complete and will be closed out accordingly.
- 4.12. Reference other Specification Sections contained within the PROJECT MANUAL as prepared by the General Contractor or Designer for other requirements pertaining to this section.

## **V. CHANGE ORDER PROCEDURE**

- 5.0. Change Order Work
  - a. Definition: Any work that changes the scope of the Subcontractor's/Supplier's agreement whether directed by the Owner, Architect, or General Contractor.
  - b. Instructions for change order Work of any type must be in writing and include a General Contractor Proposed Change Order Number (PCO Number).
  - c. Extra Work performed without prior written instruction AND including a General Contractor's PCO Number will be at the Subcontractor's/Supplier's expense.
  - d. It is the Subcontractor's responsibility to ensure that the field supervisors are familiar with the extent and scope of Subcontractor's Work so that the Work is not delayed due to disagreements regarding contractual responsibilities.
  - e. **All Field Work Tickets are to be signed daily by the General Contractor's authorized representative.** Signing of this Field Work Ticket only constitutes Subcontractor has performed the work in question, **not** approval that Subcontractor will receive compensation. Each Field Work Ticket must have a **detailed** description of the work performed, itemized materials list, equipment utilized, and man-hours hours spent. Subcontractor shall forward to the General Contractor within one (1) week of such occurrence a Request for Change Order in the format defined herein. Failure to provide **all** information may result in rejection of claim.
- 5.1. Changes in Scope of Work



- a. General Contractor will review all changes initiated by the Owner or Architect, assign a General Contractor PCO Number, and forward the information to applicable Subcontractors/ Supplier's with instructions.
  - b. It is imperative that the Subcontractor/Supplier's reply with a response in writing for the proposed change Work within five (5) business days of receipt of the General Contractor's **Proposed Change Order (PCO)** Letter. All proposals must include itemized breakdowns including the following:
    - i. Material
    - ii. Equipment rental
    - iii. Labor
    - iv. Taxes
    - v. Overhead and profit
    - vi. Bond/insurance, if applicable
  - c. If at the time Subcontractor submits his quotation (Change Proposal) he does not specify that a time extension is required, he will be required to complete the work required by the change as indicated by the most current Project Schedule.  
**Each change proposal shall reference only one General Contractor PCO Number. Change proposals that do not have the proper General Contractor PCO Number listed and/or a complete breakdown will be returned to the Subcontractor and may result in rejection of claim.**
  - d. The pre-assigned Proposed Change Order Number shall be referenced on all correspondence relating to CHANGES and PROPOSED CHANGES once a number has been assigned.  
**When a Subcontractor/ Supplier submits a change proposal for a change under a particular referenced Proposed Change Order Number, it will be assumed to cover all Work required by that change unless indicated otherwise. It is the Subcontractor's/Supplier's responsibility to investigate the total scope of the change and notify General Contractor at the time the change proposal is submitted, of any exclusions and/or qualifications that would affect Subcontractor's/Supplier's quote.**
  - e. If a change order(s) significantly increases the Subcontract value (in excess of 15% of the original subcontract amount), Subcontractor must provide a rider from its surety company increasing the Performance and Payment Bond amounts.
  - f. When Owner, Designer and General Contractor have approved Subcontractor change in scope, a Subcontractor Change Order will be issued.
- 5.2. Time and Material Change in Scope of Work (T&M) - If Subcontractor is instructed to perform Work on a "time and material" basis, the cost of the Work is to be documented as follows:
- a. Prior to proceeding with any time and material Work, Subcontractor must obtain a **Field Work Ticket (Copy included in Section 01600 of this Project Manual)** form, along with a General Contractor PCO Number from the General Contractor's Project Manager responsible for that Project.
  - b. The **Field Work Ticket (included in Project Manual)** form must be completed in its entirety and **signed daily by the General Contractor's Superintendent or Project Manager.**

- c. Time and material tickets are to be signed on a daily basis by General Contractor's authorized representative and attached as documentation to the **Field Work Ticket** form. One (1) copy of the signed ticket is to be given to General Contractor's authorized representative prior to leaving the site at the end of each day. Information on the daily tickets is to include:
    - i. Date
    - ii. Subcontractor
    - iii. Complete description of the Work, including type, location, extent, quantities, etc.
    - iv. Manpower involved, broken down by trade and number of hours worked by each
    - v. Material used
    - vi. Equipment used
    - vii. Include General Contractor reference number
    - viii. Estimated cost to complete the Work
  - d. **Extra Work Authorization** directives issued by the General Contractor are **valid for a Thirty (30) Calendar Day period**. If work extends beyond (30) calendar days, the subcontractor performing the work is responsible for obtaining a new **Extra Work Authorization** from the General Contractor. Failure to obtain a new **Extra Work Order** will result in rejection of payment for the work.
  - e. Failure to fully comply with the above requirements will result in rejection of claim.
- 5.3. Billing of Changes - All Subcontractor Pay Applications for base contract Work and change order Work (including change in Scope of Work, time and material Work, etc.) will be paid as progress billings ONLY. There will be no payments for change order work of any type without a signed General Contractor Change Order.
- a. Change in Scope of Work - Upon receipt of a contract/change order from the Designer or Owner; General Contractor will issue a Subcontract Change Order.
  - b. Change in Scope of Work **not** involving the Owner or Designer - Upon General Contractor's review and approval of Subcontractor's quotation, General Contractor will issue a Subcontract Change Order.
- 5.4. Overhead and Profit Mark-up –
- a. Subcontractor agrees to be bound to the provisions of the Contract Documents between the Owner and the General Contractor, with regards to percentage markups for changes and in no case shall the applicable percentage for overhead and profit for all tiers of Subcontractors exceed the amount shown on the Subcontract.
  - b. Supervision costs included in the original Subcontractor's Agreement cannot be included in any change order pricing unless additional supervision is required to execute change.
  - c. Overhead and fee will not be allowed on premium time.

- 5.5. In order to facilitate checking of quotations for extras or credits, all change requests from Subcontractors or Suppliers, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials, equipment and sub-Subcontractors. Labor and materials shall be itemized in the manner prescribed below. When major cost items as provided through sub-subcontracts are applicable to the particular change request, the same itemization shall be required of the sub-Subcontractor. In no case will a change involving over \$500.00 be approved without such itemization.
- 5.6. All change requests shall be submitted directly to the General Contractor for review and approval and when applicable, subsequent submission to the Designer and Owner for their review and approval.
- 5.7. Submit one (1) original cost proposal along with all appropriate supporting documentation, including at least invoice(s) for any materials, cost proposal for any sub-subcontract work, invoice(s) for equipment rental, etc.
- 5.8. The Subcontractor's Change Order Request shall include an allowance for overhead and profit in accordance with the schedule as follows:
- 15% on net additional cost for work performed by Subcontractor's own forces or for work performed by others under sub-subcontract to the Subcontractor.
  - No markups will be allowed below a sub-subcontractor level.
  - For all change orders (additive or deductive) to the subcontract sum, the change order shall include the net cost plus ten (15%) overhead and profit.
  - Reference General Conditions, Article 7 for specific percentage adjustments applicable to Changes associated with a Subcontractor or Suppliers work.
- 5.9. Change requests that result in an added cost of more than \$500.00 shall be accompanied with an itemized cost breakdown of all material, labor, equipment, sub-subcontract work and bonds (if applicable) similar to the following format.

**Change Request Cost Breakdown**

**Materials**

xxx units @ \$xxx/unit	\$xxx.xx
sales tax	<u>\$xx.xx</u>
Total Material:	\$xxx.xx

**Labor**

tradesman xxhrs @ \$xx.xx/hr	\$xxx.xx
payroll tax & insurance @ xx%	<u>\$xxx.xx</u>
Total Labor:	\$xxx.xx



Rental Equipment

Equipment xxday @ \$xx.xx/day \$xxx.xx

Total Rental Equipment: \$xxx.xx

Sub-subcontract (see attached separate material and labor breakdown)

Total Sub-subcontract: \$xxx.xx

**Change Request Cost Summary**

Self-Performed Work

Total material \$xxx.xx

Total labor \$xxx.xx

Total rental equipment \$xxx.xx

Subtotal \$xxx.xx

Overhead / profit @ 15% \$xxx.xx

Subtotal Self Performed Work: \$xxx.xx

Sub-subcontract Work

Total sub-subcontract \$xxx.xx

Overhead / profit @ 8% \$xxx.xx

Subtotal Sub-subcontract Work: \$xxx.xx

Total Self Performed and  
Sub-subcontract Work: \$xxx.xx

Bond Premium (if applicable) \$xxx.xx

Total Change Request Amount: \$xxx.xx

- 5.10. Labor rates and labor burden must be substantiated through a detailed cost breakdown acceptable to the General Contractor.
- 5.11. Upon request from the General Contractor for a specific change order proposal, the Subcontractor shall submit a change request proposal in accordance with the previously described format by no later than five (5) calendar days upon receipt of the request.
- 5.12. Should the Subcontractor discover a discrepancy among the Contract Documents or a concealed condition or other cause for initiating a change in the Subcontract Sum or Time of Completion, the Subcontractor shall notify the General Contractor immediately, but no later than seven (7) calendar days or sooner if required by other pertinent provisions of the Contract Documents. Failure to notify the General Contractor within the

aforementioned established timeframe may result in a “No Cost” Change Order to the Subcontractor.

- 5.13. Should the Owner and/or Designer approve a change in the Work or a change in the Contract Time of Completion, the General Contractor shall issue a Change Order or a Notice to Proceed in the Change of the Work to the Subcontractor or Supplier for an agreed upon dollar value.
- 5.14. Cost Increase Policy – Subcontractor has assumed the risk of cost increases and the effects of shortages or lack of availability of materials, energy, goods, and labor, and neither the price nor schedule for performance and completion of the Work shall be subject to adjustments should any of these risks arise.
- 5.15. Upon request, Subcontractor shall assist the General Contractor in preparing Time and Material / Unit Price Estimates before the Extra Work commences.

## **VI. SUBMITTALS**

- 6.0. Timing of Submittals - Upon receipt of a Notice to Proceed, Subcontract Agreement or Purchase Order Agreement from the General Contractor, all submittals supporting critical path activities shall be transmitted to the General Contractor for review and subsequent forwarding to the Designer for review within thirty (30) calendar days, unless reflected otherwise within the Project Construction Schedule.

All submittals must be submitted to the General Contractor within thirty (30) calendar days from receipt of a Notice to Proceed, Subcontract Agreement or Purchase Order Agreement from the General Contractor. Only with prior approval from the General Contractor, at the latest any submittal shall be submitted to the General Contractor is sixty (60) calendar days from receipt of a Notice to Proceed, Subcontract Agreement or Purchase Order Agreement from the General Contractor. Subcontractor Monthly Pay Applications shall include a separate line item for submittals acceptable to the Owner, Designers and General Contractor. Subcontractor Pay Applications will not be processed for payment until all submittals have been submitted to the General Contractor for review and approval.

- 6.1. Prior to the Subcontractor preparing the submittals, the General Contractor shall advise the Subcontractor or Supplier of the required number of submittals including shop drawings, product data or color samples to be transmitted to the General Contractor for review. At a minimum, the Subcontractor shall assume a minimum of seven (7) copies. All submittals shall also be provided in a PDF electronic format organized by specified sections, paragraphs and subparagraphs numerical system.
- 6.2. It shall be the Subcontractor or Supplier’s responsibility to forward all submittals far enough in advance to provide sufficient time required for reviews, for securing necessary approvals, including possible revisions and re-submittals, and for placing orders and securing delivery to enable installation of material or equipment to meet the Project Construction Schedule.

- 6.3. No extension of Subcontract Time will be authorized because of the Subcontractor or Supplier's failure to transmit submittals to the General Contractor sufficiently in advance of the Work to permit processing.
- 6.4. Each Subcontractor shall allow at least fourteen (14) calendar days for review of submittals by the General Contractor and an additional twenty (20) calendar days for review by the Designer following receipt of the submittal. Each Subcontractor is responsible for timely submission of submittals. Submittals shall be transmitted enough in advance of the work to permit processing including resubmittals. All costs for schedule delays or expediting costs associated with deliveries and work for late submission is the responsibility of the submitting Subcontractor.
- 6.5. Coordinate transmittal of different types of submittals for related elements of the Work such that processing will not be delayed by the need to review submittals concurrently for coordination. The General Contractor and/or Designer reserve the right to withhold action on any particular submittal requiring coordination with other submittals until all related submittals are received.
- 6.6. If required by the General Contractor, the Subcontractor or Supplier shall provide to the General Contractor six (6) sets of "Field Use Drawings" (i.e., rebar, structural steel, bar joist, trusses, food service equipment layout, etc.) for distribution to other Subcontractors for coordination purposes. "Field Use Drawings" shall incorporate all Designer approved and/or directed revisions and include the words "Field Use Drawings" stamped on each sheet.
- 6.7. Prior to each submittal, the Subcontractor or Supplier shall carefully review and coordinate all aspects of each item being submitted.
- 6.8. The Subcontractor or Supplier shall verify that each item and the submittal for it, conforms in all aspects with the specified requirements.
- 6.9. All shop drawings submitted shall be marked with the name of the project and associated building, numbered consecutively and bear **the signed and dated stamp of the approval of that Subcontractor or Supplier** as evidence that the drawings have been checked by the Subcontractor or Supplier. Any drawings submitted without this stamp of approval shall not be reviewed and shall be returned to the Subcontractor or Supplier for resubmission. In lieu of a review stamp, the Subcontractor or Supplier may provide **a letter with each submittal certifying the contents of the submittal have been reviewed by the Subcontractor or Supplier and that the same has been reviewed for compliance with the Contract Documents.** If the shop drawings indicate variations from the requirements of the Contract Documents because of standard shop practices or other reasons, the Subcontractor or Supplier shall make specific notation of such variations in its letter of transmittal and on the drawings in order that, if acceptable, suitable action may be taken for proper adjustment; otherwise, that Subcontractor or Supplier shall not be relieved of the responsibility for executing the Work in accordance with the Contract Documents even though such shop drawings have been reviewed.



- 6.10. Reference other Specification Sections including but not limited to submittals, as-built and record documents contained within the PROJECT MANUAL as prepared by the General Contractor or Designer for other requirements pertaining to this section.

## **VII. SUBMITTAL OF SUBSTITUTIONS**

- 7.0. The Trade Subcontractor or Supplier's Base Bid shall be in strict accordance with the Contract Documents.
- 7.1. The Trade Subcontractor has the option of requesting substitutions during the bid period by submitting a completed Substitution Request Form to the General Contractor.
- 7.2. The Substitution Request Form shall be submitted a minimum of ten (10) calendar days prior to the Bid Date. Requests received by the General Contractor within ten (10) calendar days prior to Bid Date shall be included within an addendum, if acceptable to the General Contractor, Designer and/or Owner.
- 7.3. Reference the "Substitution Request Form" which is included in Section 01600 - Forms in this Project Manual or in not there, reference the Designer's Technical Specifications of their Project Manual.
- 7.4. Subcontractors submitting substitution request shall be responsible for coordination and all costs of other work required and/or necessitated by the substitution.

## **VIII. COORDINATION WITH OTHER TRADE SUBCONTRACTORS**

- 8.0. Each Trade Subcontractor or Supplier shall coordinate its work with the work of the other Trade Subcontractors or Suppliers in such a manner as the General Contractor may direct.
- 8.1. Subcontractor understands and agrees that the Work performed under this agreement is intended to be a complete Scope of Work and shall perform such Work as may be reasonably inferred from the Contract Documents or required to complete the Work.
- 8.2. All RFI – Request for Information (questions, confirmation and clarifications of the contract documents) are required to be made using the General Contractor's Procore Project Management System. Subcontractor shall obtain permission rights and password from the General Contractor.
- 8.3. If a Trade Subcontractor notifies the General Contractor in writing that a second Trade Subcontractor on the project is failing to coordinate its work with the work under the first Trade Subcontractor's Subcontract, the General Contractor will promptly investigate the matter and, if the allegation is determined to be justified, shall issue such directions to the second Subcontractor as are appropriate or as deemed necessary to resolve the issue. However, the General Contractor shall not be liable for any costs incurred by the Subcontractor by reason of the second Subcontractor's failure to coordinate or his failure to comply with directives of the General Contractor. Additionally, it shall be understood

and agreed to by all Trade Subcontractors that the General Contractor does not guarantee that other Trade Subcontractors will not breach their obligations to coordinate their work with that of the Trade Subcontractor.

- 8.4. Various Trade Subcontractors and their respective Sub-subcontractors are required to work the days required when coordination between the Trade Subcontractors is required, even if the additional days worked are not considered a scheduled or normal workday. Trade Subcontractors can achieve this coordination by alternating workdays and/or shifts in a manner so as not to incur overtime or additional cost to the Trade Subcontractor. Instances which may require coordination, include but are not limited to, the following items:
- A. Blockout sizing, locating and installing within:
    - 1. Footings
    - 2. Slabs on grade
    - 3. Elevated Slabs
    - 4. Masonry
    - 5. Roof Decks
  - B. Installation of material within concrete, masonry, metal stud framing, drywall, acoustical ceiling grid, etc.:
    - 1. Anchor Bolts
    - 2. Embeds
    - 3. Anchorage's and/or backing
    - 4. Structural Steel Framing
    - 5. Building Insulation
    - 6. Electrical
    - 7. Plumbing
    - 8. HVAC
    - 9. Fire Protection
    - 10. Fire Safing
    - 11. Spray-on Fireproofing
- 8.5. Failure on the Trade Subcontractor's part not to coordinate and provide sufficient manpower to maintain the Project Construction Schedule shall be at no fault of the other Trade Subcontractors and their Sub-subcontractors. Any demolition and rework required to install work which should have been located and/or installed during the construction and/or erection of other work shall be back charged to the negligent Trade Subcontractor(s) and deducted from its Subcontract Amount.
- 8.6. Fireproofing - All items that are attached to the structural steel and/or metal deck must be in place before the fireproofing is installed. Should this Subcontractor damage or disturb the fireproofing this Subcontractor will be charged for patching and repair costs.
- 8.7. Backing and Blocking -
- a. The Drywall, Framing and Insulation Subcontractor shall provide all backing, blocking, and/or concealed framing required within their work and shall install

same in a timely manner so as not to delay the Work of other trades. Fire-treated wood shall be used as required.

- b. The Drywall, Framing and Insulation Subcontractor shall provide all in-wall blocking (and include double studs) as necessary to be attached to framing for support. The Drywall, Framing and Insulation, Subcontractor shall include all wood blocking attached to studs for systems installed by Others. Each Subcontractor requiring the blocking shall coordinate location and confirm/verify layout/installation of all blocking requirements with the installing subcontractor. All wood blocking and plywood to be fire rated as required. This includes plywood backing at all electrical panels, control panels, etc.
  - c. In-wall blocking support for all "Owner Furnished Contractor Installed", "Owner Furnished Owner Installed," and "Vendor Furnished Contractor Installed" equipment shall be furnished and installed by the Drywall, Framing and Insulation Subcontractor. Work provided by the Drywall, Framing and Insulation Subcontractor shall include, but not be limited to, wood, metal backing, framed openings, etc. sufficient to support the equipment while in static or operating position.
  - d. All Roof blocking including but not limited to nailers, cants, plywood at parapets, blocking at parapets, blocking at eaves, rakes and freeze boards, expansion joints, roof openings, etc. shall be by the Roofing Subcontractor(s).
  - e. Provide all materials as required (misc. iron, brackets, pipe, hangers, rods, inserts, etc.) to support, hang, secure, mount, and brace all equipment and materials encompassed by the terms of the Subcontract.
  - f. Provide all welding, bolting, fasteners, anchors, anchorage devices, and devices of similar distinction as required for the performance of the Work in the Subcontract.
- 8.8. Dewatering - Dewatering operations as needed to facilitate and continue work are included within each applicable Subcontract. Provide sump pits or other suitable means as required for dewatering.
- 8.9. Equipment Coordination - All Work associated with Owner or Vendor Furnished Equipment shall be coordinated with the manufacturer's requirements, product data/cut sheets, Owner requirements, and other trades Work.

#### **IX. PRECEDING WORK / EXISTING CONDITIONS**

- 9.0. All Trade Subcontractors and Suppliers shall be responsible for inspecting all job conditions affecting the installation of an item being furnished and/or installed as part of their respective Work. Additionally, all Trade Subcontractors and Suppliers shall take field measurements required prior to fabrication of an item to ensure that the item concerned will integrate properly with all adjacent materials and fit all other conditions as they exist or will exist in the finished construction.
- 9.1. All Work in connection with installation of an item(s) being furnished and/or installed as part of a Trade Package Scope of Work shall be coordinated with all other affected work and trades.



- 9.2. Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the General Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the General Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.

**X. LIQUIDATED DAMAGES / SCHEDULE RECOVERY PLAN**

- 10.0. Reference the CM – Owner Agreement for a detailed outline of the liquidated damages applicable to this project. Each Trade Subcontractor is responsible for liquidated damages if enacted by the Owner based on the portion thereof contributed by the Trade Subcontractor due to non-performance of its agreement between the General Contractor and Subcontractor.
- 10.1. Further requirements of this section are defined below.
- 10.2. The Dates for Substantial Completion and Final Acceptance / Completion are designated on the Project Construction Schedule.
- 10.3. As time is of the essence, all efforts shall be taken by all Trade Subcontractor's or Supplier's to ensure that the durations and dates within the Project Construction Schedule are maintained and are met by all project participants.
- 10.4. If enacted by the Owner due to the project failing to meet its scheduled dates plus time extensions granted by the Owner, liquidated damages will be assessed to the Trade Subcontractor(s) who is determined to be the cause of the delay. This determination will be made by the General Contractor by completing a detailed analysis of the "Critical Path" contained within the Project Construction Schedule. Once the schedule activity(s) is determined and the responsibility thereof assigned, the Trade Subcontractor initially causing the delay will be obligated to pay / reimburse the liquidated damages to the General Contractor to be paid to the Owner. If it is determined that the responsibility of the delay is a result of more than one Trade Subcontractor's inability to maintain the durations and dates on Project Construction Schedule, then the General Contractor will appropriate a pro-rata share of the liquidated damages to each Trade Subcontractor responsible for the delay.
- 10.5. If required, the Trade Subcontractor's application for payment may be placed on hold by the General Contractor in an amount(s) deemed sufficient to cover projected liquidated damages if it is likely that liquidated damages will be assessed by the Owner.
- 10.6. During the course of the project and if it is found that a particular Trade Subcontractor is behind schedule as measured by the current Project Construction Schedule, the General Contractor will serve the delinquent Trade Subcontractor a written notice of the delay and will instruct the Trade Subcontractor to provide a schedule recovery plan to the General Contractor for review and approval. The Trade Subcontractor will be allowed seventy-two (72) hours to submit this plan for review and approval. Upon receipt, the

General Contractor will respond promptly as to the acceptance or rejection of this plan. If the Trade Subcontractor fails to submit an acceptable schedule recovery plan to the General Contractor within the seventy-two (72) hour time frame, the General Contractor will provide a mandatory schedule recovery plan to the Trade Subcontractor for its execution.

- 10.7. The Trade Subcontractor shall maintain the schedule recovery plan by working overtime, weekends, multiple shifts, multiple crews, etc. at no additional cost and as required to maintain and achieve the durations and activity completion dates defined within the Project Construction Schedule. The Trade Subcontractor may become responsible for the additional supervisory time required by the General Contractor as a result of the Trade Subcontractor not maintaining the Project Construction Schedule.
- 10.8. All Trade Subcontractor's or Supplier's recognize that the Project Construction Schedule represents the latest an activity shall start. Should the Project Construction Schedule be improved during construction, the Trade Subcontractor or Supplier Subcontractor shall be required to begin the Work as soon as the preceding work allows or as expeditiously as the progress of the project permits in the opinion of the General Contractor.
- 10.9. If a Trade Subcontractor falls behind schedule for causes not entitling it to an extension of time under any provisions within the Contract Documents, and the delay in progress causes delay to another Trade Subcontractor's performance, the Trade Subcontractor shall indemnify and hold harmless the General Contractor from all reasonable costs incurred as a result of the delay.
- 10.10. Additionally, time is of the essence as it relates to crew sizing and scheduling of critical path activities, particularly those associated with work covered by each Trade Subcontractor's Scope of Work. The scheduling of each Trade Subcontractor's Scope of Work shall be based on the fact that different portions of the project will be undertaken separately and completed simultaneously in a timely manner in order to accomplish all work within the time frames designated within the Project Construction Schedule. Unless alternate scheduling proves the project can otherwise be completed on schedule, activities among different portions of the building shall not be interdependent.

#### **XI. PERMITS, FEES, INSPECTIONS AND TESTING & LICENSING**

- 11.0. The NCDEQ grading permit will be obtained by the Owner at no cost to the Trade Subcontractor(s).
- 11.1. All sanitary sewer and water tap and/or impact / connection fees, acreage fees, frontage fees, etc. will be paid directly by the Owner at no cost to the Trade Subcontractor(s).
- 11.2. Water meters and associated meter fees, if applicable shall be paid by the Owner at no cost to the Trade Subcontractor(s).
- 11.3. The Building Permit will be paid by the Owner at no cost to the Trade Subcontractor(s).

- 11.4. Any other applicable permits, licenses, and fees not included as part of the Building Permit including permits for HVAC, Plumbing, Electrical and/or Fire Protection Work shall be obtained and paid for by the respective Trade Subcontractor requiring the permit in order to be authorized to commence its work on site. Wake County is the permitting authority for this project.
- 11.5. Where tests, certificates or approvals by authorities other than the Designer are required for an item of work or material, the Trade Subcontractor shall have such tests performed and/or shall procure such certifications or approvals and forward four (4) copies of the test results of the certificates or approvals to the General Contractor prior to proceeding with the work involved. Such laboratories and/or authorities as are employed for this purpose shall be competent, with a generally recognized reputation in the field concerned and shall be subject to approval of the Designer.
- 11.6. Inspections by the Local Fire Marshal, City or County Building Inspectors or Utility Companies shall be obtained by and coordinated by the Trade Subcontractor through the General Contractor. The cost of inspections shall be borne by the responsible Trade Subcontractor for applicable inspections.
- 11.7. Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.
- 11.8. Independent Construction Materials Testing, Field Inspections and Special Inspections specifically provided by the Owner, will be at no cost to the General Contractor or Trade Subcontractor unless noted otherwise. The Subcontractor will offer complete cooperation to all testing and inspection-related personnel. Subcontractor shall provide the necessary equipment, devices, etc. to facilitate safe access to the points of inspection.
- 11.9. Excluding only tests and testing performed by a Testing Engineer employed by the Owner, the Subcontractor shall be responsible for the execution of all tests and testing required by the Specifications and by all governmental authorities having jurisdiction and shall pay the costs of all such tests and testing. The Subcontractor shall submit certified results of the test to the General Contractor for the Architect's approval. If directed in writing by General Contractor, the Subcontractor shall provide additional tests and testing performed by approved personnel working under the direction and supervision of General Contractor.
- 11.10. If retesting a certain aspect of the work results in confirmation of an initial failed test result, then the Trade Subcontractor responsible for the failed test result shall be responsible for reimbursing the cost thereof to the Owner for the additional testing work.
- 11.11. Each Trade Subcontractor shall be responsible for notifying the General Contractor in accordance with the Contract Documents, but no less than one (1) week of a specific work activity requiring an Owner furnished test and/or inspection in order for the General Contractor to timely schedule Owner furnished Construction Testing/Inspection Services.



Failure of the Trade Subcontractor to advise the General Contractor no less than one (1) week of the requested testing and/or inspection shall not constitute an extension of time should the Construction Testing/Inspection Services not be available at the requested time.

- 11.12. Each Trade Subcontractor shall be responsible for having a Specialty Contractor's license to perform its Scope of Work as required by all state and/or local governing codes and/or requirements. For example, the HVAC, Plumbing, Electrical, Fire Protection, Site Utilities Trades require a Specialty Contractor's License in the State of North Carolina.

## **XII. PROJECT MEETINGS / REPORTING**

- 12.0. Pre-construction Meeting – A Pre-Construction Meeting will be scheduled and conducted by the General Contractor and Designer. All Subcontractors and Suppliers issued a Subcontract Agreement and/or Purchase Order Agreement shall attend this meeting. At a minimum, the Project Manager and Field Superintendent for the Subcontractor or Supplier shall attend this meeting as many processes and procedures will be discussed in detail during the course of this important meeting. The Owner, Designer and other interested parties will also attend this meeting. The General Contractor will establish the time and place of this meeting.
- 12.1. Weekly Project Meetings - Project Site Meetings will be held weekly at the project site. The purpose of these meetings will be discussing the Project Construction Schedule, Safety, Coordination Issues, Status of Submittals, RFI's, Change Requests, etc. At least two (2) weeks prior to the start of a Subcontractor's on-site work and through the completion thereof, each Subcontractor shall be represented at every weekly meeting by its on-site Superintendent or Project Supervisor. Additionally, each Subcontractor or Supplier's Project Manager(s) is required to attend the weekly project site meeting at least twice a month or as required by the General Contractor. Failure to attend the required weekly meetings will result in a \$500 fine per occurrence. The General Contractor will establish time and place of these meetings.
- 12.2. Preparatory Meetings - The Subcontractor and/or Supplier and its sub-Subcontractor(s) shall not commence with any new work at the project site until such time as a preparatory meeting is scheduled. The intent of the General Contractor's preparatory meeting is outlined below.
  1. The purpose of the preparatory meeting is to indoctrinate the Subcontractor's employees and/or sub-Subcontractors of the specific requirements, changes, clarifications, interfaces with other work, safety related issues, etc. which may affect the forthcoming new work.
  2. The Subcontractor shall provide the General Contractor with a proposed list of the work items for which a preparatory meeting must be held prior to commencing on site work. The list shall be provided to the General Contractor within Ten (10) Calendar Days of receiving a Notice to Proceed for approval.

3. Prior to the preparatory meeting being scheduled, all submittal requirements, pending changes and/or clarifications affecting the new work shall have been completed and/or resolved.
  4. At a minimum, the Subcontractor's onsite supervisor and/or key foreman who are going to directly supervise the installation of the Subcontractors work shall be in attendance at this meeting. This superintendent must be able to discuss and make decisions relative to schedule, costs, scope of work, etc.
  5. The General Contractor reserves the right not to proceed with new work until the preparatory meeting(s) is held with the Subcontractor.
- 12.3. All Subcontractors will be required to submit a Daily Construction Report by 10:00 AM of the following workday to the General Contractor. The report shall include the number of men by trade or craft, type and location of work. It shall include the Subcontractor's work and other information as required by the General Contractor. Each Subcontractor shall use the General Contractor's "Daily Construction Report Form" which is included in Section 01600 - Forms of this Project Manual or received during the preparatory meeting.

### **XIII. QUALITY EXPECTATIONS**

- 13.0. All items shall be installed in a workmanlike manner in accordance with the best-recognized practice in the field concerned.
- 13.1. Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 13.2. Unless otherwise indicated, items exposed to weather or subject to flooding or wetting shall be installed so as to shed and not retain water. Items shall in all cases be installed plumb and true and/or in proper relation to surrounding materials.
- 13.3. All materials entering into the construction of the building covered by this Contract, including but not be limited to, those mentioned below, shall be securely anchored and/or tied together in accordance with the best recognized practice in the field concerned whether shown, specified or not.
- 13.4. Ties and anchors shall be best quality and material for the purpose and/or location for installation. Wythes of masonry and corners of masonry walls and partitions shall be bonded together if possible unless otherwise specifically shown and where not bonded shall be secured with appropriate metal ties or anchors. Masonry walls shall be anchored to adjacent columns unless otherwise specifically shown.
- 13.5. All wood, steel, concrete or other framing shall be securely anchored and tied together and to supporting or abutting masonry. All veneer finishes and applied items shall be securely anchored and tied to the backing material.

- 13.6. Except for expansion joints or otherwise where materials are purposely separated, each and every piece of material integrated into the building shall be bonded, anchored, tied or otherwise secured in place in a permanent manner that will permit expansion, contraction and other minor movements and normal use of the structure without structural features of the building becoming impaired and without any of its components becoming loose.
- 13.7. If in the opinion of the General Contractor, a Subcontractor's work requires caulking to provide the "finished product" appearance of any item installed, that Subcontractor shall furnish and install that caulking whether specified or not within the Contract Documents at no additional cost.
- 13.8. Unless otherwise specifically mentioned, all anchors, bolts, screws, fittings, fillers, hardware, accessories, trim and other parts required for or in connection with an item of material to make a complete, serviceable, finished and first quality installation shall be furnished and installed as part of the item whether specified or not within the Contract Documents at no additional cost.
- 13.9. Unless otherwise specifically specified, all items and parts thereof that are made of steel, iron or other ferrous metal that are not galvanized, plated or otherwise specified to be factory finished, shall be cleaned and painted with one shop coat of the best quality rust inhibitive metallic primer by the Painting Subcontractor unless specifically specified in the Contract Documents or other trade scopes. After installation, all exposed metal connections and abrasions shall be touched up with the same materials as the shop coat and left in good condition for final finishing.
- 13.10. Each respective Trade Subcontractor shall provide its own related supporting devices, including but not limited to, hangers and supports, seismic hangers and supports, hanger saddles, vibration isolation hangers, and miscellaneous structural steel supports and/or angle frame supports which are not detailed or illustrated on the drawings as being provided as part of Division 5 – Metals Work which are needed to support equipment as defined within the respective Trade Subcontractor's Scope of Work. When applicable, the respective Subcontractor shall be responsible for obtaining written approval for all attachments (i.e., beam clamps, all thread hangers, uni-strut, clamps, braces, etc.) attached to other Subcontractor's work prior to commencing with the installation of said attachments. Failure to obtain written approval from the respective Trade Subcontractor and/or Designer may result in the General Contractor's rejection of the installation(s).
- 13.11. The Subcontractor requiring access shall furnish access panels as required for access to items in their scope of work, panels to be installed by the Drywall/Acoustical or Masonry Subcontractor in their respective Scope of Work. This Subcontractor providing the access panels is responsible for provision of specified panels, included rated panels as required. Provide layout and coordination prior to all wall and ceiling construction for all access panels. All access panels to be keyed identical throughout the Project and shall be coordinated with other Subcontractors by this Subcontractor.



- 13.12. Provide dewatering operations as needed to facilitate and continue work included within this Contract.
- 13.13. Mold Prevention and Management Plan – The Subcontractor will comply with all mold prevention and management requirements as detailed in the Construction Mold Prevention and Management Plan that is part of the Project Manual enclosures. This includes all responsibilities, procedural controls, and moisture controls pertaining to Subcontractor's Scope of Work. Water leaks are to be responded to immediately upon discovery. Subcontractors are responsible for all rework and damage due to mold per Subcontractor's work.
- 13.14. This Subcontractor shall be fully responsible for Federal ADA standards compliance in the construction of this work. Where the Contract Documents conflict with these requirements, it is the supplier's responsibility to bring these inconsistencies to the attention of General Contractor in writing for clarification by the designer prior to the installation of the work. If any work is produced contrary to the Federal ADA, then this Subcontractor will be responsible for the cost of all work to bring it to compliance.
- 13.15. All materials furnished by Subcontractor are furnished and installed unless clearly specified otherwise.

**XIV. SEPARATE TRADE PACKAGE SCOPES OF WORK**

- 14.0. Each section of the Designer's Division 2 through 33 project specifications has been assigned to a minimum of one of the Trade Package Scopes of Work. Where a section of the specifications is referenced or in a Trade Package Scope of Work, then any and all items necessary for the proper and normal installation of the item referenced in the specification sections shall be included whether indicated within the documents or not.
- 14.1. This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

**XV. ON SITE SUPERVISION / WORK HOURS / MULTIPLE MOBILIZATIONS**

- 15.0. Subcontractors/Suppliers performing work on multiple buildings or areas of the project site (i.e., buildings, road widening, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each building or area unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.
- 15.1. Each Subcontractor shall have supervision on site any time work within their scope or the Subcontractor's tiered Subcontractors are being performed unless approved otherwise by the General Contractor.

- 15.2. The General Contractor will establish the project work hours that shall be adhered to by all Trade Subcontractor's, Sub-subcontractors and the like assigned to the project. Refer to Section 01340 of the Project Manual and the Trade Package Scope of Work Clarifications.
- 15.3. Should a Subcontractor fail to provide a competent supervisor, the Subcontractor's employees, Sub-Subcontractors, etc. shall be directed by the General Contractor to leave the project site.
- 15.4. Subcontractor's Field Supervision - Supervisor must be knowledgeable in all codes applicable to the Work including scope performed by sub-subcontractors. Qualified full-time supervision (onsite) is required for daily procedures with sole authority to make decisions on behalf of the company.
- 15.5. The Subcontractor and/or Supplier or its Sub-Subcontractor(s) shall have a full-time employee on site that is capable of translating/communicating with the other site employees who cannot speak the English language fluently. This requirement is to ensure that all on site field personnel are able to receive immediate verbal direction from their supervisors. Any employees on-site who are incapable of speaking the English language fluently, and who are not supervised by individuals capable of communicating with these employees, shall be removed for the project site immediately. This requirement is only applicable if the Subcontractor has employees not capable of speaking the English language fluently.
- 15.6. Multiple mobilizations may be required to complete the respective Trade Package Scope of Work. No additional charges or cost will be accepted by the General Contractor from the Trade Subcontractor or Supplier for multiple mobilizations.
- 15.7. The Work includes any out-of-sequence work required to meet job progress. Work necessitated by the special construction phasing requirements of the Project, or work interrupted by the Owner's operations shall include "comeback" costs required to complete this work at no additional cost to the Owner or the General Contractor.

**XVI. TEMPORARY FACILITIES**

- 16.0. Temporary facilities that affect all Trade Subcontractors and/or are specifically assigned to a particular Trade Package Scope of Work is designated below.
- 16.1. All temporary facilities installed by this trade shall be removed by the installing trade as directed by General Contractor unless specifically noted otherwise. The location of any temporary facilities shall be returned to the condition which existed prior to starting Work by the removing Subcontractor.
- 16.2. Each Subcontractor shall provide or arrange for the use of a telephone and/or radio for its own use while on the project. If required, each Subcontractor's Superintendent/Forman shall have in their possession at all times radio(s) compatible

with the General Contractor's radios/communication system. The General Contractor shall be able to contact each Subcontractor's Superintendent / Foreman (Responsible person having authority to make decisions on behalf of the company) at all times by use of the radio(s) or cell phone.

- 16.3. Each Subcontractor shall provide its own water coolers, ice, drinking water and cups for its own work force in accordance with the applicable FDA, OSHA and Union Labor requirements.
- 16.4. Portable power (i.e., generator, etc.), if necessary, shall be the responsibility of the Subcontractor requiring power along with its associated cost if a fixed power source is not available during construction unless specified otherwise.
- 16.5. Each trade Subcontractor shall provide generators as required for the Work of this Subcontract until temporary power is available to the building pads (exact location to be determined by General Contractor).
- 16.6. If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 16.7. Unless approved by the General Contractor, Subcontractors are not permitted to install any project signage on site and/or on any office and storage trailers.
- 16.8. Each Subcontractor shall be responsible for utilizing wheel wash equipment to wash off all of its respective vehicles leaving the project site which have accumulated mud, debris, etc. Any mud, debris, etc. tracked onto the adjacent roadway(s), due to the Subcontractor's failure to wash off affected vehicles, shall be scraped, cleaned and pressure washed immediately by and at the expense of the Subcontractor.
- 16.9. All other required temporary facilities or services not specifically assigned responsibility shall be provided by the Subcontractor requiring the service(s).

#### **XVII. MATERIAL DELIVERY, STORAGE AND HANDLING**

- 17.0. Each Subcontractor and/or Supplier is responsible for securing and protecting all materials furnished under its respective Scope of Work. Should a specific Trade Subcontractor and/or other entity furnish material to another Trade Subcontractor for installation, then at that time the Trade Subcontractor receiving the material from the other Trade Subcontractor and/or other entity becomes responsible for securing and protecting that material.
- 17.1. Each Subcontractor is responsible for coordinating on site material deliveries 24 hours in advance with the General Contractor's on-site project representative. Failure to do so, the General Contractor may request the material delivery to be rescheduled. This requirement will be strictly enforced by General Contractor.



- 17.2. Materials furnished and installed as part of the Trade Subcontractor's Scope of Work shall be received by a representative of the Trade Subcontractor and unloaded / transported by this Subcontractor to each respective work area for installation as part of this Scope of Work.
- 17.3. Unless noted otherwise, materials or equipment furnished by others for installation as part of the designated Trade Subcontractor's Scope of Work shall be received by a representative of the receiving Subcontractor in conjunction with a representative of General Contractor and unloaded / transported by the receiving Subcontractor to each respective work area on site for installation as part of the designated Trade Subcontractor's Scope of Work.
- 17.4. Any Trade Subcontractor or Supplier supplying and delivering equipment or materials that are to be installed by another Subcontractor must notify the receiving Subcontractor at least twenty-four (24) hours prior to delivery. If requested by the General Contractor and prior to authorizing the Subcontractor's or Supplier's payment, the receiving Subcontractor shall be responsible for unloading and must provide either a shipping invoice or a delivered materials list that has been signed and certified by the receiving Subcontractor.
- 17.5. Each Subcontractor shall be responsible for receiving, storing, distributing to the installed location and protecting all materials incorporated within their respective Scope of Work.
- 17.6. Any Subcontractor furnishing and delivering equipment or materials that are to be installed under its Scope of Work must provide personnel and equipment to unload these materials at the time they arrive on site or make provisions for receiving and unloading the shipment. Any deliveries arriving on site without proper personnel present to receive and unload the shipment shall be instructed by the General Contractor to return to the shipping terminal.
- 17.7. All materials shall be shipped and stored and handled in a manner that will afford protection and ensure their being in first-class condition at the time they are incorporated into the work. Improperly stored materials that accumulate mud, debris, rust or other foreign matter shall be restored to its original condition prior to concealment or final acceptance of the work.
- 17.8. After installation, the materials shall be properly protected against damage to ensure their being in first-class condition when the construction is substantially completed and accepted by the General Contractor, Designer and Owner.
- 17.9. Each Subcontractor is solely responsible for the security of its own material and equipment. The General Contractor, Designer nor Owner shall be responsible for the cost to replace stolen or missing material and equipment.
- 17.10. There is very limited storage and lay down area available on site, subsequently materials delivered to the site should be installed as soon as possible after delivery. Each Subcontractor may need off site storage in order to accommodate limited laydown and

storage areas. The areas that are available shall be coordinated with and approved by the General Contractor. Storage and lay down areas may have to be relocated by the Trade Subcontractor multiple times during the duration of the project to accommodate construction progress. If requested by the General Contractor, the Trade Subcontractor shall relocate all material(s) at no additional cost.

- 17.11. Reference the Logistics Plan prepared by the General Contractor for further information.
- 17.12. All hoisting of materials into the building and to the installed location is the responsibility of each Subcontractor.
- 17.13. Each Subcontractor shall retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage and providing required protection of materials.
- 17.14. Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.

#### **XVIII. PROGRESS CLEAN-UP**

- 18.0. Each Subcontractor shall provide daily clean up relative to its own Scope of Work. Should the Subcontractor fail to provide daily clean-up of its own work, the General Contractor will provide the subject Subcontractor with a written notice. Upon receipt of the written notice, the Subcontractor will have Twenty-Four (24) hours to complete its daily clean up requirements. Failure to comply with this notification may result in the General Contractor completing the daily clean-up work on behalf of the Subcontractor through the General Trades/Final Cleaning Subcontractor or other means determined by the General Contractor, thus resulting in back charges to the Subcontractor. This requirement will be strictly enforced by General Contractor.
- 18.1. Scrap, debris, waste material and other items shall not be accumulated at or around the construction site.
- 18.2. At least once a week and more often, if necessary, completely remove all scrap, debris and waste material from the job site. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.
- 18.3. At least once a week and more often, if necessary, inspect all arrangements of materials stored on the site. Re-stack or rearrange stored materials on site to ensure the site is maintained in a neat and orderly fashion.
- 18.4. During the course Project if debris and waste material get to be excessive, (determined by the General Contractor) the jobsite will be shut down and an all-hands clean-up will

occur until the area is orderly. Costs of this effort will be at each Subcontractors expense. If a trade does not participate the General Contractor will supplement their part of the work and this cost will be paid by this subcontractor.

- 18.5. Each individual Subcontractor will be required to supply his own drum containers for the depositing of miscellaneous trash generated within the Subcontractor's office areas. No food or drinks other than water will be allowed in the buildings at any time. Coffee breaks/Meals/Snack areas will be identified by the General Contractor for the Subcontractors use outside the Buildings construction areas. Subcontractors are responsible for maintaining these areas in a clean and orderly manner at all times. Subcontractor will be responsible for keeping these areas clean and sanitary. No Subcontractor will allow waste materials to accumulate in any area without consolidating them for pickup for more than the duration of one (1) workday, or as may be directed by General Contractor to facilitate job cleanliness.
- 18.6. Trash and debris shall be removed and placed in designated dumpster daily.
- 18.7. All offsite disposal costs associated with remedial work, if encountered during the course of the project shall be borne by the Subcontractor responsible for the remedial work.
- 18.8. Reference the Logistics Plan prepared by the General Contractor for further information. Subcontractors should anticipate and expect the site logistics plan to change with updates during the course of construction.

#### **XIX. FIELD ENGINEERING AND LAYOUT**

- 19.0. The Earthwork, Storm Drainage and Erosion Control Subcontractor and Cast-in-Place Concrete Subcontractor will provide initial field engineering services as defined within their respective Scopes of Work for the vertical building trades use and coordination by establishing select building corners and column lines and vertical control via establishing a benchmark(s) reference at select area(s) of the site. These initial field engineering services will be established subsequent to completion of the building pad by a licensed surveyor for use by all Trade Subcontractors. Any additional or remaining field engineering, layout work, etc. as required to complete a respective Trade Package Scope of Work shall be provided by the Subcontractor requiring the additional or remaining field engineering services at its own cost.
- 19.1. Layout work and field engineering services required of each Subcontractor shall include, but not be limited to the following:
  1. Unless specifically noted otherwise within a specific Trade Package Scope of Work or herein, each Subcontractor is responsible for its own layout work, field engineering and protection of the same necessary to complete its own respective Scope of Work.
  2. Upon commencement of the Subcontractor's work, the pre-established reference points, benchmarks, etc. as provided by others shall be field verified



and protected and become the responsibility of each Subcontractor using the subject reference points and/or benchmarks. This responsibility shall cease upon the preceding Subcontractor starting its Work with the responsibility thereof being transferred therewith.

3. Establishing additional lines and levels and/or maintaining lines and levels including horizontal and vertical control as required to properly install the Work shall be provided by the Subcontractor.
4. Locate and protect all control points before starting work on the project site.
5. Preserve permanent reference points during the progress of the work.
6. Do not change or relocate reference points or items of the work without written approval from the General Contractor.
7. Promptly advise the General Contractor when a reference point is lost or destroyed or requiring relocation because of other changes in the work. Upon direction of the General Contractor, the Subcontractor's field engineer or licensed surveyor as engaged by the Subcontractor shall immediately replace the lost or destroyed reference stakes or markers as not to slow or stop other trades work activities, which were its responsibility to protect. Subcontractor shall locate such replacements according to the original survey control points at no additional cost. Failure to do so the General Contractor will supplement this work and this cost will be paid by this subcontractor.

## **XX. PROTECTION OF WORK**

- 20.0. Each Subcontractor is responsible for the protection and security of its finished work until final acceptance of the work. If finished work is damaged by another Trade Subcontractor, then the responsible Trade Subcontractor shall be held accountable. However, if the entity responsible for the damage cannot be determined, it is the responsibility of each Subcontractor to repair, replace or restore its own work to an acceptable condition.
- 20.1. Any part of the finish product damaged during installation or prior to final acceptance of the work shall be repaired so as to be unnoticeable and to be equal of quality, appearance, serviceability and all other aspects to an undamaged item. Where this cannot be fully accomplished the damaged item or part shall be replaced. Upon completion of the repair(s) or replacement installation, all exposed surfaces and parts of the item(s) shall be cleaned in a manner that shall not damage the finish or any of the parts of the item(s) and the finish product left in first-class condition, free of all visible defects.
- 20.2. Each Subcontractor shall take all necessary precautions so as not to damage existing construction. However, if damage occurs the responsible Subcontractor shall be responsible for restoring the existing construction to a condition, which is equal to that found prior to the damage occurring at its own cost.

- 20.3. General Contractor will not accept any claim for repair or replacement of Subcontractor's material or installed Work required because of vandalism, malicious mischief, normal construction traffic, theft, etc.
- 20.4. Damage by another Subcontractor - If Subcontractor's Work is damaged by another, the Subcontractor who caused the damage will be responsible for any repair and/or replacement costs. The work is not to be delayed by disputes regarding cost responsibility. The burden of proof will be on the Subcontractor whose Work was damaged.
- 20.5. Repair or Replacement of Installed Work –
  - a. Subcontractor's responsibilities as noted above will be in effect until both the following conditions are met:
    - i. Certificate of Beneficial Occupancy/Substantial Completion or Final Acceptance for the Project has been issued by the Designer.
    - ii. The Owner accepts the Work and takes over the building for their beneficial use.
- 20.6. No work shall be performed on concrete floors that would detrimentally affect the finish or appearance of uncovered floors or the application of finish flooring where called for. Operations such as cutting or threading pipe, burring, welding, paint mixing, or cleanup of painting will not be permitted in these areas.
- 20.7. The Subcontractor must obtain approval in advance from the General Contractor's Superintendent for any usage of lifts, trucks, trailers, cranes, or other heavy equipment that will sit on or move over completed structures. Any damage to these structures caused by the Subcontractor's actions will be the responsibility of the Subcontractor.
- 20.8. Watchmen services will not be provided. Neither General Contractor nor the Owner will be responsible for loss due to theft or otherwise of the property of any Subcontractor or their employees, including construction materials and equipment not yet accepted by the Owner.
- 20.9. The Subcontractor shall provide security as deemed necessary to protect its own work, tools, materials, etc.
- 20.10. Each Subcontractor shall provide protection and /or cleaning of permanent roof following completion of the Subcontractor's work. This shall include but not be limited to foot traffic / mud removal, temporary protection and roof protection, etc.
- 20.11. Each Subcontractor is responsible for all roof protection to complete the Subcontractors scope of work. Provide a protective material (i.e., visqueen, rigid insulation with plywood) when performing work on or adjacent to the roof. A ½" layer of insulation board shall also be installed under the protective material. Maintenance and removal are by this Subcontractor.

---

**XXI. CUTTING AND PATCHING**

- 21.0. Unless specifically noted otherwise within a specific Trade Package Scope of Work, each Subcontractor is responsible for its own cutting and patching work as required facilitating the proper installation of its own Work.
- 21.1. Repair and/or replacement of the surrounding surfaces to their original condition shall be the responsibility of the Subcontractor requiring the activity to continue its own Work.
- 21.2. All cutting and patching shall be completed in a manner to ensure that the patched surfaces are compatible with the adjacent surfaces in which the repairs or cutting and patching work was performed.

**XXII. SLEEVES AND FIRESTOPPING**

- 22.0. All subcontractors having penetrations through wall, ceilings and or floors will participate in the construction of a mockup panel to be approved by the Designers, Inspectors and other governing authorities having jurisdiction.
- 22.1. All penetrations through walls, ceilings and/or floors shall be sealed in such a manner in order to meet or exceed the requirements of the Contract Documents and all building codes, fire codes, etc., applicable to this project. Additionally, all penetrations shall be sealed with the required firesafing or firestopping materials to meet or exceed the fire rating requirements of the applicable wall, ceiling and/or floor assembly as acceptable to the General Contractor, Designer and governing authorities.
- 22.2. Unless specifically noted otherwise within a Trade Package Scope of Work, all penetrations made by any Subcontractor through walls, ceilings and/or floors shall be sealed by the Subcontractor requiring the penetration in such a manner in order to meet or exceed the requirements of the Contract Documents and all building codes, fire codes, etc., applicable to this project. Additionally, all penetrations shall be sealed with the required firesafing or firestopping materials to meet or exceed the fire rating requirements of the applicable wall, ceiling and/or floor assembly as acceptable to the General Contractor, Designer and governing authorities.
- 22.3. Unless specifically noted otherwise within a Trade Package Scope of Work, all sleeves or embeds set or cast into concrete, masonry or other work shall be furnished and installed by the Subcontractor requiring these items in order to complete the installation of its respective work. Additionally, these items shall be provided in a timely manner so as not to delay the concrete, masonry or other work. In the event the Subcontractor requiring the sleeve(s) or embed(s) fails to provide them in a timely manner, the Subcontractor requiring the sleeve(s) or embed(s) will be required to bear the cost associated with cutting and patching the work in order to properly to install the sleeve(s) or embed(s).
- 22.4. The Drywall Subcontractor shall provide all sprayed firestopping at tops of ALL walls. Each Trade Subcontractor shall be responsible for firestopping all penetrations made by their respective trade.



- 22.5. All through-penetration firestop systems installed around fire protection piping shall comply fully with NFPA 13 requirements for minimum annular space and sealant flexibility, as well as, requirements imposed by the design assembly itself.
- 22.6. The installing Subcontractor must provide UL approved details for each firestopping condition. If among the specified firestop manufacturers, no approved firestop assembly exists for non-standard openings in need of firestopping, mock-ups may be required for any proposed engineering judgment designs for approval by the General Contractor, the Architect, the Owner and/or the authority having jurisdiction prior to final firestop installation. Accepted in-place mock-ups will be accepted as final work. All engineering judgements must be sealed by licensed North Carolina engineer provided by the installing Subcontractor.
- 22.7. Firestopping installers must provide proof of Factory Mutual Firm 4991 certification and approval. Work must be performed by a specialty firestop installer who must provide evidence that they have been trained and achieved a passing score in a competency-based testing by the manufacturer whose products will be installed. All firestopping materials will be supplied by only one of the specified manufacturers.

**XXIII. PME SYSTEM START UP, PUNCH LIST, WARRANTIES, RECORD DRAWINGS, CLOSEOUT DOCUMENTS**

- 23.0. Prior to Final Inspection and Turnover to the General Contractor, each Trade Subcontractor and/or Supplier shall provide sufficient manpower and materials to adequately "punch" out the Project, such that all Work required of each Trade Subcontract is undertaken and completed within twenty-one (21) calendar days of commencement and/or issuance of punch list or deficiency notice.
- 23.1. All Work shall be guaranteed by each Trade Subcontractor against defects in material or workmanship for a period defined within the Contract Documents and/or by the Laws of North Carolina as measured from the Date of Final Acceptance as established in writing by the Designer and/or Owner.
- 23.2. The HVAC, Plumbing, and Electrical Subcontractors shall place the permanent HVAC and Electrical systems in operation during the construction of this project to insure proper environmental conditions to allow for installation of finishes to cure and subsequent to final inspections by Designer and Owner. All warranties and guarantees shall start on the Date of Final Acceptance, established in writing by the Designer and/or Owner. If the manufacturer's warranties start at the date of installation, each Trade Subcontractor shall extend the warranties to start at the Date of Final Acceptance at no additional cost.
- 23.3. Unless advised otherwise by the General Contractor, each Trade Subcontractor shall furnish the General Contractor / Owner with four (4) original copies of the defined warranty / guarantee, delivered within the close-out documents, provided on the Trade Subcontractor's stationery with original signatures on each copy, signed and sealed, stating the language as reflected within the sample letter following this section.

- 23.4. Unless advised otherwise by the General Contractor, each Trade Subcontractor shall furnish the General Contractor with four (4) original copies of a Subcontractor / Supplier Final Waiver of Lien, delivered within the close-out documents, provided on the Trade Subcontractor's stationery with original signatures on each copy, signed and sealed, stating the language as reflected within the sample Final Lien Waiver following this section.
- 23.5. Unless required otherwise by the General Contractor or contract documents, each Trade Subcontractor shall provide a minimum of four (4) copies of its own Project Record Documents including Record Drawings and Operation and Maintenance Manuals to the General Contractor for subsequent review and approval by the General Contractor, Designer and Owner. These documents shall be provided to the General Contractor prior to the Substantial Completion Date/ Beneficial Occupation of the Project. Additionally, submitting these and all other required Closeout Documents required of the Project Specifications shall be received and approved by the General Contractor, Designer and Owner before the Trade Subcontractor receives its Final Payment.
- 23.6. All Closeout Documents including Record Drawings and Operation and Maintenance Manuals shall be submitted electronically in a PDF format and shall be bookmarked and cataloged for easy reference.

**XXIV. FIREARM POLICY, BADGE PROGRAM & BACKGROUND CHECKS**

- 24.0. ABSOLUTELY NO FIREARMS, WEAPONS OR THE LIKE SHALL BE PERMITTED ON SITE. Any violators will be removed from the project site immediately by the local authorities.
- 24.1. Employees of each Trade Subcontractor or Supplier including Sub-subcontractors, visitors, etc. may be required to carry an identification badge furnished by the General Contractor at no cost to the Trade Subcontractor or Supplier. Replacement badges if lost by the Trade Subcontractor or Supplier's employees shall be replaced at the Trade Subcontractor's or Supplier's expense. Anyone who is making a delivery to the site or just visiting the site must check in at the General Contractor's site office to obtain a visitor's badge. Badges will only be required if work is performed when the building is occupied by the owner.
- 24.2. Trade Subcontractors may be required to complete the Sexual Offender Registry Check Certification Form if included within the CM – Owner Agreement and to complete a Background Check of each of its employees to certify this form's contents BEFORE the Subcontractor commences any on-site Work. Forms shall be turned into the General Contractor for further distribution to the Owner.

**XXV. FIRE PREVENTION PROGRAM**

- 25.0. Each Subcontractor is required to maintain portable firefighting equipment for their work and their work areas (i.e., hot work areas, storage units, fuel storage, mobile equipment,

trailers, etc.). All firefighting equipment is required to meet OSHA regulations and/or the local authority having jurisdiction requirements.

- 25.1. Each Subcontractor shall be required to furnish and maintain full, tested fire extinguishers for all of their equipment and work areas, as required by the latest federal, state, and local regulations. All Subcontractors involved in burning, welding, soldering, or cutting operations shall furnish their own fire extinguishers, welding blankets, fire watch, etc. in adequate quantities or provide fireproof protective enclosures.
- 25.2. All applicable safety rules and practices must be followed at all times. It is the responsibility of the Subcontractor to provide required training, PPE, and appropriate and safe materials, tools, and equipment, and to ensure that they are used in an appropriate manner. Proof of appropriate safety training programs may be required at any time.

#### **XXVI. PARKING AND PROJECT ACCESS**

- 26.1 There is limited area for parking for construction workers for all trades. Due limited site area for parking, material storage, equipment, etc., each Subcontractor may be limited in the number of vehicles onsite. Each Subcontractor may be required to make arrangements for off site parking for employee individual vehicles and transport said employees to the site with multiple workers in single vehicle or bus type transportation. See the Logistics Plan for further information.





## Housekeeping Commitment Agreement – Exhibit E

Contractor Company Name: \_\_\_\_\_

Contractor Supervisor Name: \_\_\_\_\_

A clean jobsite leads to a safe jobsite. With that basic principle in mind, I (and all of my tiered subcontractors) agree to follow these rules:

- Allocate adequate resources to ensure this housekeeping standard is maintained throughout their time on the project.
- Be responsible and accountable for each of your workers and any tiered contractor(s) under your control assigned to work on this project for complying with this Housekeeping Standard.
- Agree to allocate the necessary personnel, equipment, and supplies required to comply with this standard.
- Dumpsters for general trash, construction debris (wood, metal, concrete, etc.) and or specific recycling dumpsters pursuant to contract requirements will be provided.
- Samet will provide trash containers on site for general trash and debris. There will be no bottles, food wrappers, cups, etc. thrown on the ground.
- When containers are  $\frac{3}{4}$  full they will be either removed from the site or dumped in a large metal dumpster provided by Samet.
- All materials, equipment, etc. brought on site shall be organized and stored in areas designated by project team. Subcontractors are responsible for organizing material, equipment, and tools so they do not create a tripping hazard or impede/block exits out of the area or rooms they are working in.
- Subcontractors are responsible for daily clean-up of excess material and debris. Excess material and debris shall be deposited in appropriate containers throughout the day.
- In areas and rooms where multiple subcontractors are working each subcontractor shall clean up their own excess material and debris.
- When work is completed in a room or area all excess material and debris shall be removed and the area or room broom cleaned.
- Any stored materials must be easily transportable to make way for clean-up.

**The complete copy of Samet Corporation Housekeeping Standard is contained in the Site Safety and Incident Prevention Program. There may be Terms and Conditions in your subcontract agreement that may override or supersede the above.**

I fully understand that if my company or my tiered contractor(s) fail(s) to comply with any part of this Housekeeping Standard, that I will incur all costs associated with Samet Corporation cleaning up your areas of responsibility to meet this standard. Additionally, any and/or all the work being performed by my company may be suspended until such time this standard has been accepted by Samet Corporation.

<b>Contractor Performing Work:</b>	_____	<b>Sign:</b>	_____	<b>Date:</b>	_____
<b>Contractor/Project Safety:</b>	_____	<b>Sign:</b>	_____	<b>Date:</b>	_____



# **SITE SPECIFIC SAFETY PLAN**

**WTCC Fire and Rescue Training Center  
23-878**



## Table of Contents

SITE SPECIFIC SAFETY PLAN.....	3
SITE SPECIFIC SAFETY COMMITTEE .....	3
CONTRACTOR SAFETY PERFORMANCE .....	4
DESIGNATED CONTRACTOR COMPETENT PERSON .....	4
WORK-REALATED INJURIES, ILLNESSES AND INCIDENT INVESTIGATION - MONTHLY INCIDENT SUMMARY REPORTS .....	5
CONTRACTOR SAFETY SUBMITTALS.....	5
VIOLATION OF SAFETY AND HEALTH REQUIREMENTS .....	6
SUBSTANCE ABUSE POLICY .....	7
SAFETY PLANNING .....	7
SAFETY INSPECTIONS .....	7
SAFETY TRAINING.....	8
GENERAL SAFETY GUIDING PRINCIPLES.....	8
EMERGENCY ACTION PROCEDURES.....	9
PROJECT SITE SECURITY .....	9
FIRST AID POLICY.....	9
HEAT STRESS .....	9
HAZARDOUS COMMUNICATION/SDS .....	10
FALL PROTECTION .....	10
SCAFFOLDS AND AERIAL LIFTS .....	11
PERSONAL PROTECTIVE EQUIPMENT .....	11
HOUSEKEEPING AND ORDERLINESS.....	13
LADDER SAFETY.....	13
ELECTRICAL SAFETY.....	13
TRENCHING & EXCAVATION SAFETY.....	14
UNDERGROUND UTILITY LOCATIONS .....	14
CONFINED SPACE .....	14
FIRE PROTECTION AND PREVENTION .....	14
HOTWORK PERMIT REQUIREMENTS .....	15
EQUIPMENT AND VEHICLES.....	15
MOBILE CRANE SAFETY AND RIGGING .....	16
DEMOLITION .....	18
CONCRETE AND MASONRY .....	18
STEEL ERECTION .....	18
MOLD CONTROL.....	18
SILICA.....	18
INSTALLING AND SANDING SHETROCK.....	19
LOCK OUT POLICY.....	19
CODE OF CONDUCT /WORKPLACE VIOLENCE.....	20
PROTECTING ASSOCIATES IN THE WORKPLACE.....	20



### **SITE SPECIFIC SAFETY PLAN**

This SSSP was prepared to assist all workers in understanding the health and safety expectations and requirements of Samet Corporation on this project. Compliance with this Plan is expected and a condition of work. Contractors' project managers and superintendents have overall responsibility for the implementation and the execution of this Plan.

On this project site, Samet Corporation enforces its Safety Program through its Superintendent, Safety Manager and other designees and weekly meetings with our own labor force and contractor employees (including tiers) stressing the importance of maintaining a safe and productive work site.

Health and safety will always remain the top priority for all levels of management, supervision, and workers engaged in construction activities. Health and safety will never be sacrificed in lieu of schedule, cost, production, or any other component of the work process.

To comply with this philosophy, the project's contractors will:

- ❖ Thoroughly plan all work activities and operations so they are performed safely, as well as efficiently.
- ❖ Effectively communicate the health and safety requirements of Samet Corporation this Site-Specific Safety Plan to all contractors and their workers through open communications, comprehensive training, assessments, and workplace inspections.
- ❖ Develop an understanding, among those in leadership on this project, of their responsibilities and accountability for providing a safe and healthful workplace.
- ❖ Plan and coordinate work operations and activities to minimize or eliminate situations which may jeopardize worker's health and safety due to conflicting or simultaneous work operations or activities.
- ❖ Communicate to all workers that safety is their responsibility, and they will be held responsible, accountable, and assigned the appropriate authority for their individual safety and the safety of their co-workers.

All contractors will incorporate, as a minimum, OSHA 29 CFR 1926 Construction Safety Standards, OSHA 29 CFR 1910 General Industry Standards (as applicable), specific state safety regulations, specific owner requirements, project safety rules, and this SSSP when determining the safe work practices and protection of all workers. If any of these standards, requirements, or procedures conflict, the more stringent requirement shall prevail.

#### ***Refer to Samet's TSW "Above OSHA Requirements"***

The term "contractor" within this document refers to any contractor or subcontractor of any and all tiers. Samet Corporation, as the general contractor, is referred to by name.

### **SITE SPECIFIC SAFETY COMMITTEE**

A site-specific safety committee will be utilized to assist project team in implementing this SSSP and to work as a team to identify and correct safety or health hazards, identify unsafe work practices and offer solutions to safety issues. Participation is mandatory and each contractor must designate at least one (1) foreman level (or higher) to actively participate.

#### ***Refer to Samet's TSW for Project Safety Committee***

## **CONTRACTOR SAFETY PERFORMANCE**

Samet Corporation expects all contractors to execute their work on this project with a proactive commitment to safety at all levels. Each contractor should plan their work focusing on protecting their workers from incidents and injuries. The following are actions that each of us can take to improve safety performance on this project:

- Attend and actively participate in toolbox meetings.
- Discuss safety in all meeting.
- Include safety and high-risk activities in daily huddles.
- Revisit high-risk activity plans at least 1 week prior to work so allow for safe and proper planning.
- When you talk about safety, talk about people, not numbers or statistics.
- Ask where the next injury is likely to happen and what can be done to prevent it – Run The 2 Minute Drill
- Fill a Pre-Task Plan for all high-risk activities on a daily basis and have it communicated/acknowledged by all crew members involved.
- Recognize individuals and groups daily for working safely – Implement MVA program
- Take positive actions when you see someone doing something you believe is unsafe. Talk to them about your concern for their safety, not about violating rules or procedures -Safeguarding Families
- Take responsibility for people's safety that work with you, for you and around you.
- Find ways to express care and concern for people and work to improve the dignity and respect people experience on the project.
- Make and keep promises around safety issues.

Samet Corporation or their representative will continually monitor and assess each contractor for compliance with this SSSP and appropriate regulatory requirements.

Immediate corrective action will be taken to eliminate any safety discrepancy, hazard, at-risk behavior, or violation observed.

## **DESIGNATED CONTRACTOR COMPETENT PERSON**

Each contractor will designate a competent person as defined by OSHA 29 CFR 1926.32(f) as “one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them” as their project safety representative. This person(s) name will be submitted to Samet Corporation and this person must have the authority and responsibility to ensure the proper implementation and enforcement of this SSSP.

The General Trades Competent Person/Foreman designated will be expected to have an adequate knowledge of OSHA construction standards,

The Scaffold Competent Person designated to oversee erection and dismantling of scaffolds will be expected to have an above average knowledge of OSHA 29 CFR 1926.450 Subpart L –Scaffolds, and proof of qualification training.

The Trenching and Excavation Competent Person designated to oversee digging trenches and excavations will be expected to have an above average knowledge of OSHA 29 CFR 1926.650 Subpart P – Excavations, and proof of qualification training.

The Fall Protection Competent Person designated to oversee his company's fall protection plan will be expected to have an above average knowledge of OSHA 29 CFR 1926.500 Subpart M – Fall Protection, and proof of qualification training.

The Electrical Competent Person designated to oversee his company's electrical protection plan will be expected to have an above average knowledge of OSHA 29 CFR 1926.400 Subpart K and NFPA 70E – and proof of qualification training,

The Rigging qualified person designated to oversee the rigging of structural steel, concrete panels, materials or other equipment hoisted above the ground will be expected to have an above average knowledge of OSHA 29 CFR 1926.251. Competent Person

designated for rigging structural steel shall have an above average knowledge of OSHA 29 CFR 1926.753 Hoisting and rigging, and formal training.

The Safety Competent Person designated to oversee the safety of their employees and subcontractors will be expected to have an above average knowledge of OSHA construction standards.

As a minimum, each of these competent persons must:

- be proficient in the development and execution of pre-task safety plans, competency plans and risk/severity assessments. Audit, document and submit as required.
- obtain an OSHA 10-hour certificate from a certified OSHA trainer and a minimum of 3 years' experience as a foreman/competent person. OSHA 30-hour certificate and at least 5 years construction safety training is highly recommended. Experience must be in the non-residential construction industry.
- obtain certified competency training conducted by an authorized OSHA certified trainer.
- conduct regular safety meetings with workers to instruct them on safe work practices and requirements.
- timely submission of all safety related documents.
- conduct documented pre-task safety plans and communicate daily to workers to ensure compliance with safe work practices, this Site Safety and Prevention Program and OSHA safety regulations.

For the purposes of this Program, the use of the words "competent person", in any format, is defined pursuant to the OSHA definition as stated above.

#### **WORK-RELATED INJURIES, ILLNESSES, AND INCIDENT INVESTIGATION - MONTHLY INCIDENT SUMMARY REPORTS**

An incident is defined as any unplanned or undesired event that results in or has the potential to result in a work-related injury/illness, property damage, or disruption of business where the cause was from human errors or omission.

Every incident will be investigated to determine the probable root causes (s) and steps required preventing a similar occurrence from happening in the future. All contractors must fully cooperate with Samet's investigation under the law.

All work-related injuries/illnesses and incidents must be reported to Samet Corporation immediately and submit a preliminary report within 24 hours of the incident. A final report must be submitted within 48 hours for review and implementation of lessons learned to prevent further incidents from occurring.

Each contractor must submit a report monthly indicating the below information. This form must be submitted even if the subcontractor has no incidents to report.

- Total man hours worked, first aid cases, OSHA medical treatment cases & lost workday cases, restricted work cases.

#### **CONTRACTOR SAFETY SUBMITTALS**

Prior to beginning work, each contractor shall submit the following minimum (but not limited to) documentation:

- Contractor's written site-specific safety programs including, but not limited to substance abuse and silica exposure control.
- Contractor's written housekeeping plan and Samet Housekeeping Commitment Agreement
- Energized Work Permit.
- Detailed job hazard analysis/pre-task safety plan
- Personal protective equipment hazard assessment and certification (if applicable)
- Annual crane inspections
- Verification of OSHA and or project required training as necessary. Employee training shall be verified by contractor's management and documentation of training submitted to Samet team. Examples of training may include:
  - OSHA 10- and 30-hour construction safety training
  - Fall protection
  - Pre-task safety training and risk assessment
  - Ladders
  - Scaffolds



- Trenching
- Crane signalperson
- Confined spaces
- Respiratory protection
- Lockout/Tagout
- Rigging (plan)
- Mechanized equipment (all types) operators
- Traffic control (public right-of-way)
- First aid
- Competent persons by scope of work

Throughout the course of the project each contractor will be required to submit various on-going safety documents as required by the scope of work. These submittals may include but are not limited to:

- Weekly Jobsite Inspection Checklist.
- Daily documented scaffold, trench, crane, aerial lift, rigging/hoisting equipment, PFAS, welding machines, generators, ladders, power tools, heavy equipment (i.e., backhoe, dump truck, front end loader) and forklift inspections.
- Weekly safety toolbox meeting training records.
- Daily pre-task safety plan
- Air sampling data (if respirator in use)

#### **VIOLATION OF SAFETY AND HEALTH REQUIREMENTS**

Violations of statutory health and safety regulations, project safety rules and policies contained in this plan or at-risk behavior will not be tolerated. All identified hazards are to be abated immediately. When a hazard cannot be immediately corrected, a written explanation is to be submitted to Samet Corporation team. Failure to correct hazards may result in disciplinary actions or suspension of part or all work.

#### **DISCIPLINARY PROGRAM**

Each worker has an individual responsibility to work safely and minimize unsafe actions. Samet Corporation reserves the right to discipline any contractor based on safety violations committed by their employees of any tier, or the contractor itself.

Samet Corporation has established a progressive disciplinary program as outlined below:

Committing an unsafe act, practice of disregard for policies (see below) that is not considered Immediately Dangerous to Life or Health (IDLH) can result in the following consequences:

- First occurrence: Verbal warning with a note to file
- Second occurrence: Written warning, re-training, or action to include, but not limited to suspension from project, holding monthly invoice checks, etc.
- Third occurrence: Written notification of actions up to termination from project site.

Other-than-serious unsafe safety acts may consist of, but not limited to:

- Failure to wear hard hat properly.
- Failure to wear safety glasses/eye protection when required.
- Failure to use hearing protection when required.
- Failure to wear proper work boots/shoes and clothing.
- Failure to wear seatbelts on mechanized equipment.
- Failure to have first aid kit.
- Using frayed/cut drop cords.
- Using drop cords less than #14 AWG.
- Using unrated ladders.
- Failure to submit daily safety reports.
- Failure to submit weekly toolbox safety talks.

Committing unsafe acts and or practices that are considered Immediately Dangerous to Life and Health (IDLH) may result in worker and supervisor's immediate removal from the project. Samet Corporation also reserves the right to immediately discipline/sanction

a contractor. Sanctions include but are not limited to immediate abatement of the IDLH condition/hazard or a mandatory meeting with contractor's ownership to discuss actions to improve safety performance. Samet Corporation reserves the right to terminate a contractor for repeated IDLH safety violations.

IDLH safety violations may include, but are not limited to:

- Failure to follow fall protections requirements.
- Removing guard rails and not putting them back in place.
- Working in an unprotected trench greater than 5 feet deep.
- Failure to follow the Substance Abuse Policy.
- Possession of firearms, explosives or dangerous weapons.
- Violation of project security rules and procedures.
- Fighting, horseplay, practical joking or gambling.
- Entering a confined space without following procedures.
- Failure to follow lock-out/tag-out procedures.
- Working on energized circuits without an energized hot work permit.
- Physical altercations, or any sort of harassment (investigated).
- Smoking within any structure or outside the designated smoking area.

It is impossible to publish every safety rule to cover every circumstance. However, if workers fail to follow safe work practices not covered by this policy, disciplinary actions will be assessed based on Samet Corporation's assessment of the violation.

### **SUBSTANCE ABUSE POLICY**

This project is committed to providing a safe, drug free workplace for all employees. This policy applies to all Samet Corporation contractors, vendors and other third-party employees.

The use, sale, offer to sell, purchase, and transfer, distribution, or possession of drug paraphernalia, any detectable amounts of alcohol or illegal drug, firearm, or other dangerous weapons by any employee on this project is prohibited. Each contractor will promote a Drug Free Workplace with their employees and communicate during the safety orientation what constitutes prohibited activities. Every worker involved in an incident shall have a post incident drug/alcohol test performed within three (3) hours after the incident. Any worker on the project site who is reasonably suspected of being under the influence of alcohol or a controlled substance shall be tested. Contractors are responsible for having their workers tested at an approved facility and reporting the results to Samet. Any worker that refuses to test, stall to be tested, are uncooperative with collectors, or attempt to alter a urine specimen will be considered positive and immediately removed from the project.

### **SAFETY PLANNING**

#### **Job Hazard Analysis** (Completed by Contractor Superintendent and Project Manager)

Prior to starting work on this project, each contractor will submit a written Job Hazard Analysis (JHA) for their scope of work. The JHA can be included in the Site-Specific Safety Plan. The JHA must identify and outline each work component or activity, list the potential safety hazards, risk/severity assessment and health hazards associated with each activity. It must also describe what safety controls, PPE, tools and equipment will be implemented and required to mitigate the recognized hazards and safely complete each activity.

#### **Pre-Task Safety Planning** (Completed by Contractor Foreman or First Line Supervisor)

Each Foreman, designated supervisor and/or workers will analyze each task to be performed by scope of work and identify the work sequences, hazards, and controls necessary to protect workers from the identified hazards. Our hierarchy of controls must be observed. The Pre-Task Safety Plan (PTP) will be communicated daily to each crew performing work on this project. Each employee will sign the PTP acknowledging the safety procedures while engaged in the task. In cases of a changed construction activity, the employee or contractor's competent person must assess the change(s), retrain his employees and document that re-training in his daily pre-task safety plan and field report.

**2 Minute Drill** -throughout the day, each worker should run the 2 Minute Drill to help prevent any potential accidents.

### **SAFETY INSPECTIONS**

Each Contractor performing work will be responsible for conducting weekly safety inspections of their work area, tools and equipment

(daily). The following inspections will be required as applicable to ongoing work activities. Safety forms or permits can be obtained from project team.

#### General Daily Worksite Safety Inspections (weekly documentation Required)

Each contractor will perform a visual general safety inspection of their work area where their employees and subcontractors are working daily. Subcontractor's competent person will use their daily pre-task safety plan when assessing the potential hazards utilizing a hierarchy of risk control. Safe work practices and physical hazards must be verified while conducting inspection of their work areas. Samet weekly Worksite Safety Inspection form or equivalent form must be used to document these inspections and the completed corrective actions

#### Daily Inspections

Contractors using the below equipment or performing the specific type of work will designate a competent person to inspect and document each day prior to use.

Scaffolds, trenches, cranes, forklifts, aerial lifts, material handling and hoisting equipment, rigging, ladders and hand and power tools.

**Notes:** All rigging equipment shall be inspected and certified by contractor prior to use and as a minimum monthly. A visible inspection tag must be used for scaffolds and mechanized equipment. Each contractor who requires their employees to wear personal fall arrest systems (PFAS) shall inspect harnesses and lanyards as required. Workers engaged in steel working activities shall inspect harnesses and lanyards daily. All others shall inspect harnesses and lanyards monthly (or as required by manufacturer), color code or tag them to indicate current inspection.

#### **SAFETY TRAINING**

Safety and health training are a requirement and mandatory for all and contractor workers assigned to this project to promote and ensure that an incident and injury free environment exists.

#### Safety Orientation:

All project management, supervisors, and workers shall attend site-specific safety orientation training and will be allowed to start work until they have attended.

Upon conclusion thereof, all personnel will be given a hard hat sticker verifying that they have been through the orientation and will, be asked to sign the orientation summary and the Samet "I am Committed to Safety For" sign.

#### **GENERAL SAFETY GUIDING PRINCIPLES**

Clean and safe working conditions are essential for achieving an Incident and Injury Free Environment. Everyone must maintain a strong personal desire to think and act safely.

The following Safety Guiding Principles will be used to guide all work activities on this site and to help foster a culture of ensuring that all workers go home safely to their families each day.

- Everyone is responsible for safety and health -
- We look out for each other –
- Safety is planned into our work –
- All injuries are preventable –
- All deficiencies will be resolved immediately –
- Management is accountable for preventing injuries –
- Everyone must be trained to work safely & healthfully –
- Working safely and healthfully is a condition of employment –
- We measure safety performance –
- React to incidents, not just injuries –
- Off the job safety is as important as on the job safety
- Every worker has 100% Stop Work Authority (SWA)\_



### **EMERGENCY ACTION PROCEDURES**

A site-specific emergency action plan (EAP) will be written, and all subcontractor competent persons will be provided a copy will be discussed during the project safety orientation meeting.

A site-specific emergency action plan (EAP) will be written and maintained in the Samet field office. The EAP determines the proper access/egress of emergency equipment and/or personnel into or out of the site in case of emergency.

- Project superintendent will activate EAP using 3 long air horn blasts and/or phone communication to subcontractor competent persons.
- Supervisors will be directed to key locations on the site to assist in an emergency.
- Each employee is expected to follow direction of supervisors and cooperate in any emergency action effort.
- Personnel should evacuate the site in an orderly fashion if instructed to do so by supervisors.
- If you become aware of an emergency or an injury, notify a supervisor immediately.
- Two means of access/egress must be available, identified and unobstructed at all times.

Personnel are strictly forbidden to discuss project conditions, incidents, or emergencies with the media, press or any person not associated with the project.

### **PROJECT SITE SECURITY**

“No Trespassing” signs shall be posted at the project site to prevent casual entry by the public (See Project Signage TSW). All construction traffic and parking will follow Site Logistics plan.

All workers may be subject to Samet Corporation disciplinary procedures for violation of project security measures and will be held under applicable Local, State and Federal laws for any offenses that violate said laws including but not limited to:

- Possession of firearms and other weapons
- Fighting or horseplay.
- Being on project while under the influence or possession, distribution, or offering for sale of alcohol or controlled substances.
- Theft.
- Smoking in unauthorized areas.
- Negligent damage of owner’s property or the property of contractors or employees.

### **FIRST AID POLICY**

In the event an employee is injured on the job, first aid kits are available for the employee to treat their own injuries. First aid kits will be in the vicinity of the work area and contents of the kit inspected when brought on site. Subcontractor Foreman will notify project superintendent or his representative if employees use first aid items. In the event of a serious injury, 911 will be called.

No employee is required to treat another’s wounds. However, in the event “Good Samaritan” assistance is rendered, the exposed employee and victim will be evaluated by a medical clinic or doctor for Blood Borne Pathogens exposure control within 24 hours. The exposed employee will receive general blood borne pathogen training pursuant to OSHA 1910.1030 requirements.

### **HEAT STRESS**

Work involving high air temperature, radiant heat sources, high humidity, direct physical contact with hot objects or strenuous physical activities have a high potential for inducing heat stress in workers engaged in construction activities.

Workers should consume adequate liquids and take necessary rest breaks to help prevent heat disorders. Water is recommended over carbonated beverages or sport drinks like Gatorade.

#### Heat Disorders and Health Effects

Heat stroke: Occurs when the body temperature rises to critical levels, Heat stroke is a medical emergency. Do not send worker home or leave unattended.

Heat Exhaustion: Symptoms often are non-specific and may be sudden in onset. These symptoms often resemble a viral illness. It is caused from dehydration where a large loss of body fluid causes a slowing of the circulatory system.

Heat Cramps: Usually caused by performing hard physical labor in a hot environment. They are caused from an electrolyte imbalance or by too little or too much salt.

#### **HAZARDOUS COMMUNICATION/SDS**

All contractors will submit their hazardous communication program and SDS to the Samet team prior to the start of work. Each contractor must supervise employees under his direct supervision for proper training and proper precautions prior to the hazardous chemical's introduction to the jobsite. The following information will assist in understanding OSHA Hazardous Communication requirements:

##### List of Hazardous Chemicals

The team will maintain a master list of all hazardous chemicals on the project. This list will be in the trailer and available for all employees upon request.

##### Safety Data Sheets (SDS's)

Each contractor must have ready access to the SDS for all chemicals they bring to the project site.

Labels and Other Forms of Warning

Each contractor will ensure all containers on the site have proper, up-to-date labels.

##### Training

Each contractor is responsible for the proper training of their employees.

##### Contractor Employees

Project team will advise contractors of location of hazardous chemical inventory list during the safety orientation.

Each contractor bringing chemicals onsite must provide a copy of their written Hazardous Communication Program including all SDS's to Samet team prior to mobilization on the jobsite.

##### Community Right to Know

Each project location will cooperate with city and county officials to comply with requirements of the OSHA standards regarding hazardous materials onsite.

#### **FALL PROTECTION**

All individuals will take all practical measures to eliminate, prevent, and control fall hazards. All work will be planned with the intent to eliminate identified and potential fall hazards. Samet Corporation's fall protection policy and OSHA 29 CFR 1926.500 Subpart M govern the requirements to protect workers exposed to falls. Additionally, Samet Corporation's fall protection policy is 100% fall protection when exposed six (6) feet or greater above a lower level. The use of conventional fall protection systems (passive preferred) shall be utilized to protect workers from falls to lower levels. Workers wearing personal fall arrest systems shall not free fall more than six (6) feet or contact a lower level.

A written fall protection and prevention plan, including a rescue plan as applicable, may be required as deemed necessary by Samet Corporation. Contractors engaged in the following shall submit their fall protection plan for approval prior to beginning work on site: Steel erection, concrete (cast in place), wood framing, dry laid masonry wall (segmented), pre-cast concrete walls, tilt-up concrete walls, and roofing work. The plan must be agreed to prior to beginning work and the designated competent person must enforce said plan.

Acceptable fall protection systems include the following conventional systems: guardrails, safety netting, floor and wall hole

covers, positioning device systems, fall restraint systems, protection from falling objects and personal fall arrest systems.

**\*\*\*Safety monitoring systems as part of a warning line fall protection system is prohibited.\*\*\***

Workers exposed to fall hazards shall be uniformly equipped, trained, and given periodic refresher training in fall protection at specific intervals to minimize the adverse effects of accidental falls. Fall protection training records will be maintained on the project and available for review by Samet Corporation.

Low-Slope & Flat Roof fall protection program: Warning line systems:

There are times when a warning line is necessary. The roofers shall place the warning line as close as six (6) feet from the edge. For the other trades working on a roof the warning line must be 15 feet from the edge.

Anyone outside of the warning line system is required to wear personal fall protection.

Personal fall arrest systems will be required for workers on ladders when the following conditions are present:

- center of worker's body is outside the side rails of the ladder,
- ladder is positioned such that its distance to a leading edge or open-sided floor is less than the working height of the ladder, plus 6 feet.
- 3 points of contact cannot be maintained when climbing,
- Competent Person evaluation of conditions, working greater than 6 feet above a lower level and tying off does not create an additional hazard on the ladder.

General fall protection requirements:

Any task or activity involving work at heights must be carefully planned and communicated with all involved. Effective controls must be implemented to protect people/tools/materials from falling distances equal or greater than 6 feet.

Any contractor that creates a floor hole or penetration larger than 2 inches will be responsible for protecting that opening and properly marking it with the words "HOLE-DO NOT REMOVE" or "COVER-DO NOT REMOVE" in languages that the workers speak most prevalently.

**SCAFFOLDS AND AERIAL LIFTS**

All Contractors shall identify a Competent Person responsible for the erecting and dismantling of all scaffolds according to OSHA regulations (29 CFR 1926 subpart L- Scaffolds) and Codes of Safe Practice (Scaffold Industry Association). Records will be maintained for scaffold training and be available for review by Samet Corporation team. The Competent person shall submit to Samet Corporation Superintendent or his representative a fall protection plan for erecting and dismantling scaffolds.

Employees working on scaffolds 6 feet above a lower level shall be protected from falling by either a standard guardrail system or personal fall arrest system. Any use of a personal fall arrest system used on a scaffold shall be approved by Samet Corporation team and Samet Corporation EHS Director. The subsequent specific scaffold requirements shall be followed:

- All scaffolds shall be erected under the supervision of a competent person and inspected daily. Scaffold tags or equivalent shall be used to document the inspection. Green Tags - Approved ready for use. Yellow Tags - Caution if restrictions are required. Red Tags – Scaffold unsafe do not use. Narrow span scaffolds (Baker scaffolds) are required to be inspected and tagged.

Aerial Lifts

- All contractors are required to ensure that their workers are properly trained in the use and operation of aerial lifts, including any manufacturer specific requirements and OSHA requirements of 29 CFR 1926 subpart L.
- Workers must wear their personal fall arrest system while working on any mobile elevated working platforms.

**PERSONAL PROTECTIVE EQUIPMENT**

All personal protective equipment (PPE) shall meet applicable standards of the American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM) and properly used in accordance with the manufactures' recommendations. Each employer shall furnish their employees approved PPE that fits to size and provide training in the selection, use and care of such, retraining to be performed as necessary. Employees must maintain their PPE in good sanitary conditions, if defective or showing signs of excessive wear PPE must be replaced. All persons entering the jobsite will, as a



minimum, wear the following personal protective equipment at all time in the designated work area while on this project (except in office and lunch areas). At no times during the project will PPE requirements be relaxed.

#### Head Protection

An approved hard hat must always be worn.

#### Eye and Face Protection

- Safety glasses (Z87.1) with side shields must always be worn.
- Workers that wear prescription safety glasses may do one of the following:
  - Obtain prescription safety glasses (Z87.1) with rigid side shields.
  - Wear over- the- glass safety glasses.

In addition, the following eye/face equipment must be worn when performing the following work activities:

- |                              |                                     |
|------------------------------|-------------------------------------|
| • Arc welding                | Welding hood with proper shading*.  |
| • Burning                    | Burning goggles with proper shading |
| • Grinding or cutting metals | Face shield*                        |
| • Drilling (rock)            | Face shield*                        |
| • Chemical handling          | Face shield*                        |
| • Molten materials           | Face shield*                        |
| • Corrosive liquids          | Face Shield*                        |
| • Concrete pouring           | Face Shield*                        |

Note: \* Safety glasses will be worn in conjunction with face shields and welding hoods.

#### Foot Protection

Above the ankle hard soled work boots or shoes that are in good condition must always be worn. Safety toed work boots if worn must conform to ASTM F2412-05 & ASTM F-2413-05.

#### Work attire

- Shirt sleeves will have a minimum length of 4 inches. No shorts, tank tops, or cut-off shirts are permitted.
- All personnel shall wear a reflective vests or high visibility clothing while in the designated work zone. During the hours of dusk to dawn ANSI class II reflective vests or clothing shall be worn.
- Long pants that fit properly around the waist and of a proper length so as not to create a trip hazard
- Long hair must be contained so as not to create a hazard of getting caught.

#### Respiratory Protection

All contractors are required to determine if hazards exist that require respiratory protection. If so, the Competent Person must submit a plan to the Samet team prior to the start of work. Respiratory protection would be required if OSHA permissible exposure limits are exceeded, and no means of engineering controls could be used. Subcontractor would be responsible for determining the exposure level by sampling for airborne contaminants.

When respiratory protection is required, the employer must establish a comprehensive respiratory protection program, as outlined in OSHA's Small Entity Compliance Guide for Respiratory Protection and as required in the OSHA respiratory protection standard [29 CFR 1910.134 and 1926.103].

#### Use of Respirators

As the primary means of preventing or minimizing exposures to airborne contaminants, use effective source controls such as substitution, automation, enclosed systems, local exhaust ventilation or wet methods.

#### Hearing Protection

Approved hearing protection will be worn as specified in posted areas and while working with or around high-noise level producing machines, tools, or equipment. A good rule to follow is: When you must raise your voice to be heard, you need hearing protection. Exposure to impulsive or impact noise must not exceed 140dB noise level.

#### Hand Protection

Workers will wear appropriate level of hand protection as necessary and as determined by the Competent Person to prevent hand and finger injuries.

#### Additional Protections

Specific activities may require that additional personal protective equipment be worn such as working on energized circuits. Contractors and their Competent Persons shall evaluate the need for additional protection based on their pre-task safety plan.

#### Hand and Power Tools

All hand and power tools will be operated, kept in good condition and regularly maintained per manufacturer's recommendations. Workers working 6 feet or greater above a lower level while using handheld tools and or power tools that may be subject to dropping shall be tethered or area barricaded to prevent tool from hitting unsuspected workers below.

#### **HOUSEKEEPING AND ORDERLINESS**

All persons shall always maintain their work locations in an orderly and clean manner. Daily cleanup of work areas is mandatory for all trades on site. Subcontractor competent person shall submit a housekeeping plan to project team prior to starting work.

#### Samet Corporation Cleanliness Standard

Dumpsters for general trash, construction debris (wood, metal, concrete and etc) and recycling dumpsters will be provided pursuant to contract requirements. Contractors shall provide trash containers on site for general trash and debris. All miscellaneous trash generated by workers shall be deposited in a container or in the back of pickup trucks daily. Do not throw bottles, food wrappers, cups or any other types of trash on the floor or ground. When containers are  $\frac{3}{4}$  full, they will be either removed from the site or dumped in a large metal dumpster. Contractors, as required by contract, will provide their own dumpsters for their specific excess materials and allocate adequate resources to ensure this housekeeping standard is maintained throughout their time on the project. Project team shall address this housekeeping standard with all subcontractors prior to beginning work.

#### General Housekeeping Requirements:

Housekeeping is an important part of our daily work. All materials, equipment, etc. brought on site shall be organized and stored in areas designated by Samet project team. Trade partners are responsible for organizing material, equipment, and tools so they do not create tripping hazards or impede/block exits. Trade partners are responsible for daily clean up of excess material and debris which shall be deposited in appropriate containers throughout the day. When work is completed in a room or area all excess material and debris shall be removed and broom cleaned.

***Refer to Samet's "Housekeeping Commitment Agreement" as provided by the project team***

#### **LADDER SAFETY**

Samet Corporation requires all portable ladders to be rated heavy duty Type 1, 1A, or 1AA. Type II or Type III Ladders (<225 Lbs.) and all types of aluminum ladders are prohibited. Job made ladders shall comply with ANSI A14.4 1979 and 2009 as well as OSHA 29 CFR 1926 Subpart X. Contractor Competent Person shall evaluate the use of personal fall protection systems while on ladders greater than 6 feet above the finished floor the ladder sits on.

Refer to manufacturer's specifications for the proper use of all ladders.

#### **ELECTRICAL SAFETY**

The following regulations apply to both temporary and permanent electrical installations used on this Project site. Electricians working on exposed live (50 to 280 volts) parts shall wear the appropriate level of personal protective equipment required under NFPA 70e and as designated by the Competent Person.

- Extension cords used with portable electrical tools and appliances shall be #14 AWG or greater and be three-wire type designed for hard or extra-hard usage. Grounds are never to be removed from the extension cords.
- All flexible cords plugged into a generator with an output of 5KW or greater and all flexible cords plugged into the permanent wiring of the building shall be protected by a ground fault circuit interrupter (GFCI).
- Any replacement plug ends installed on flexible cords shall be UL/FM approved for its intended use. Note: Open construction sites are considered wet locations. UL/FM approved water-resistant replacement plug ends would be acceptable.
- Temporary lights shall be equipped with guards to prevent accidental contact with the bulb. "Red" bulbs will be used to designate exit ways. Temporary lighting circuits shall be permitted within cable assemblies, or within multi-conductor cord or cable of a type identified for hard usage or extra-hard usage.
- Electrical and extension cords or cable are not to be laid on floors, in walkways, etc., unless it is impractical to do otherwise. They should be suspended or protected in such a way as not to block or hang in walkways, doorways, or work areas.

- It is Samet Corporation policy that electrical panels shall be de-energized and locked out prior to being worked on. However, if any work on energized circuits is required with panels removed an “Energized Work Permit” and safety plan shall be submitted and reviewed by Samet project team and EHS Director. Compliance with NFPA 70E is mandatory. PPE requirements shall comply with NFPA 70E Hazard Risk Classification Table 130.7 (c)(9) and 130.7 (c)(10).
- A weekly cord roll-up program is required on this project. This includes cords of every type, not just extension cords.

### **TRENCHING & EXCAVATION SAFETY**

The following regulations apply to all trenching and excavation activities on this site: OSHA CFR 1926, Subpart P.

- Any contractor engaged in trenching operations deeper than 5 feet shall designate a Competent Person and inform Samet Corporation team.
- Underground utilities must be located.
- Trenches or excavations greater than 5 feet in depth will be sloped, benched, or otherwise protected from cave-ins as determined by the Competent Person. Sloping, benching or other protective systems are recommended for any trenches and excavations over three (3) feet in depth.
- Protective systems designed to be placed in trenches such as trench boxes must have tabulated data available for review as necessary.
- Spoil piles and other materials will be placed a minimum of 2 feet from the edges of all trenches and excavations.
- In trenches deeper than four (4) feet, locate means of egress, such as ladders or steps or ramps (45-degree slope), so they are no more than 25 feet of travel from anyone in trench.
- The Competent Person must inspect all trenches daily before work begins and after every rainstorm or other hazardous conditions.
- A registered professional engineer must design all excavations and protective systems over 20 feet in depth.
- Completion and acceptance of Samet’s “Underground Utility Excavation Permit/Checklist” is required for each trench.

### **UNDERGROUND UTILITY LOCATIONS**

Any contractor who digs a trench or excavation shall call the State appropriate 811 service. Before digging, be sure that all utilities have responded to your locate request. The 811 representatives will advise you of the member utility owners notified. It is the responsibility of the caller (the contractor responsible for excavation) to contact a utility locating company to have any private lines located.

A copy of the 811-notification form shall be submitted to Samet Corporation team as part of the completion and acceptance of Samet’s “Underground Utility Excavation Permit/Checklist”.

Private or third-party independent locate is required if 811 Service isn’t available in the location where the excavation will be occurring.

### **CONFINED SPACE**

The following regulations apply to all confined space activities on this site: OSHA CFR 1926.1201.

Samet Corporation team along with contractor’s Competent Person will identify all confined spaces on the project. Confined Space in Construction shall abide by all the requirements of the standard. Specific requirements for work in a confined space shall be attached as an amendment to this SSSP. As a minimum before work starts at a project site, each contractor must ensure that a Competent Person identifies all confined spaces in which one or more of their employees it directs may work, and identifies each space that is a permit space, through considerations and evaluation of the elements of that space, including testing as necessary. Samet Corporation policy is that all confined spaces by definition as indicated in 29 CFR 1926.1201 will be reclassified as a non-permit confined space based on 1926.1203(e)(1)(i-vi). Contractor’s Competent Person shall submit to Samet Corporation team a confined space entry permit indicating its reclassification as a non-permit confined space. In the event a confined space can’t be reclassified as a non-permit space, all requirements under 1926.1203(a-d) shall be followed. Samet Corporation team is required to coordinate confined space rescue with local fire department in absence of on-site rescue procedures.

### **FIRE PROTECTION AND PREVENTION**

#### **Fire Protection**

Temporary fire protection measures, such as fire extinguishers, temporary hose lines, and temporary standpipes are required near



hazardous locations and as required by OSHA regulations 29 CFR 1926 Subpart F.

- Fire extinguishers will be the primary means for fire protection and must be located within 75' feet of travel distance from any point within any structure under construction, although other means may be added.
- Any discharge of a fire extinguisher must be reported to Samet Corporation team.
- All enclosed buildings under construction shall have appropriate number of fire extinguishers rated not less than 4A-40B:C (10 lbs. ABC) and not less than 2A-20B:C (5 lbs. ABC) for motorized equipment.
- All temporary buildings (shops, field offices, locker rooms, etc.) will have a class ABC fire extinguisher rated not less than a 2A-10B:C
- All spark producing, welding, cutting or flammable storage operations shall require the fire extinguisher rated not less than 4A-40B:C (minimum 10 lbs. ABC Fire extinguisher) be approximately 25' from operations.

### **Fire Prevention**

Combustible refuse from construction operations will not be burned or dumped anywhere on the construction site. Such refuse will be removed at frequent intervals, as required. Storage of large quantities of construction debris will be placed in metal dumpsters.

Compressed gasses will be:

- Stored with valve caps securely fastened when not attached to a regulator.
- Always secured upright, including when transported in vehicles.
- Fuel and oxygen cylinders will be separated by 20 feet for greater when not in use or separated by a not less than a 5' fire rated (one-half hour) wall.
- Empty cylinders shall be stored separate from full cylinders.
- Oily rags and waste are to be stored separately in metal containers fitted with self-closing lids.
- **Smoking shall not be permitted inside any structure**, only permitted in designated smoking areas.
- **Smoking areas shall be delineated with physical barriers, with proper signage, have a 4A-40B:C (10 lbs. Fire Extinguishers) and safe receptacles for smoking materials disposal.**

### **Flammable Liquid Storage and Dispensing**

Flammable liquids will be:

- Stored outside and no closer than 20 feet of any structure or inside a properly constructed storage container.
- Stored in approved metal safety cans and marked to indicate its contents.
- Not more than 25 gallons stored inside any trailer or building.
- Posted with "No Smoking" signs.
- Outside storage areas kept free of other combustible materials.
- Gasoline or diesel storage tanks will be double walled and protected from contact by mechanized equipment.
- At fuel dispensing points, the following is required:
  - Fire extinguisher rated not less than 40 B-C located within 75 feet of fueling point.
  - "No Smoking" signs posted.
  - Self-locking fuel nozzle prohibited.
  - Spill kit stored nearby.

### **HOTWORK PERMIT REQUIREMENTS**

A Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks. This includes, but not limited to brazing, flame cutting, grinding, soldering, torch applied roofing and welding. Hot work permits will be issued by Samet Corporation team and will filled out by contractor engaged in hot work operations in an enclosed building/structure.

- All provisions of the Hot Work Permit will be followed including fire watch personnel. Hot Work Permits can be issued for the duration of the hot work but not to exceed the work shift.
- Hot work operations will be minimized or eliminated by selection of safer means methods whenever possible (example; utilizing hydraulic cutters/shears vs flame torches)
- ***Refer to Samet's PtW – Hot Work Permit***

### **EQUIPMENT AND VEHICLES**

- Heavy equipment (cranes, forklifts, dump trucks, excavators/backhoes, man-lifts, etc.) used on this project will be inspected

- prior to use and comply with applicable OSHA and ANSI standards as well as manufacturers documentation.
- Seat belts shall be worn on all equipment with roll-overprotective structures.
- Windshields will be free from cracks or other visible damage.
- Vehicles and equipment with an obstructed view to the rear must have an audible backup alarm or a flagman must be used.
- No equipment or vehicle will be used to transport personnel unless it is specifically designed to do so.
- Equipment operators are responsible to check their equipment daily to verify it is working properly.
- Equipment operators will possess the required training, certification, and licenses as required by law for the equipment that they are required to operate. All forklift operators shall have a valid operator's license, a copy of which must be submitted to Samet Corporation team.
- If operating a forklift, backhoe, or similar piece of equipment in a public ROW, a valid State driver's license is required and must be on file with Samet Corporation team.

## **CRANE SAFETY, RIGGING AND HOISTING OPERATIONS**

Any contractor who uses a crane on this Project Site shall adhere to the requirements of 29 CFR 1926.1400 Cranes and Derricks in Construction and ASME B30. **All crane operators shall fill out Samet Pre-Erection/Assembly Crane Analysis and provide required documentation such as annual inspection certification, operator's license, and signalman training.**

**Each qualified crane operator will be responsible to conduct a detailed daily inspection of its crane and ensure findings are properly logged in a written daily report and reported to crane supplier and Samet.**

### **Mobile Cranes**

- No crane will be brought onto the project without a current annual inspection and applicable load charts.
- Crane operators will perform daily crane safety inspections. Crane operators are to turn in the Daily Crane Safety Checklist to Samet Superintendent. A Daily Safety Crane Checklist is provided in the Appendix to this manual. Note: An equivalent form may be used.
- All cranes will be equipped with an anti-two block device. Hooks will be equipped with safety latches.
- Contractor's supervisor shall designate a qualified person to monitor all rigging. All rigging will be inspected daily and before each shift. A Daily Rigging Safety Inspection Checklist is provided in the Appendix to this manual.
- The crane manufacturer's operating manual, instructions and load charts for a specific crane will be used to determine the safe operation of all cranes.
- All crane operators must be certified by the National Commission on Certification of Crane Operators (NCCCO) or equivalent. This rule applies to Contractors as well as Samet employees. Exception: cranes mounted on delivery trucks that unload outside, onto the ground.
- The supervisor shall ensure that crane operators meet legal and Owner requirements. After initial qualification, the supervisor shall closely monitor until the operator's capability is established.
- The ground where the crane will be set up must be solid and able to support the weight of the loaded crane. Determine if underground utilities exist near where the crane will be set up.
- Cranes will be set up level with outriggers fully extended or set per the manufacturer's recommendation for particular lift configuration. All tires should be clear of the ground.
- Cribbing or mats under outrigger pads should be of sufficient size and properly placed to ensure adequate soil bearing.
- Tag lines shall be used when needed to control the load. (Exception: When loading and unloading trucks)
- The entire swing radius of the rear rotating superstructure of all cranes must be barricaded to prevent crushing injuries.
- The load path shall be barricaded to protect worker from overhead hazards.
- Loads shall be routed to minimize exposure to workers.
- Before a lift, determine the load weight and load capacity. A designated qualified person will determine the load weight. Refer to the shipping weight or have the equipment or machinery assembly weighed. Calculate all structural loads and determine the center of gravity.
- Position the crane so there is a minimum swing and load path clearance of two feet. Cranes and their loads shall not be operated within 20 feet of electrical lines. Increased clearance is required for higher voltage lines. When working near electrical sources (overhead lines or lightning), the crane should be grounded.
- Crane operators are to know the weight of the load they are lifting.
- A written critical lift and rigging plan are required for any lift where:
  - The load is greater than 75% of the crane capacity as configured for the lift.

- Two cranes are used.
- The Project Manager/Superintendent or Safety Director determines the lift to be non-routine.
- Lift plans are required for all project hoisting operations not taken plan of regular basis.

### Rigging

- Special attention needs to be taken when wind speeds exceed 20mph. Such lifts will only be made at the discretion of the crane operator, project superintendent and safety director and must follow Crane manufacture's recommendations. Lower crane booms/raise hook when appropriate due to high winds.
- All loads to be slung, lifted, or transported must have no uncontrolled movement or loss of the load. This can involve redundant slinging or secondary containment for small objects.
- All lifting gear and tackle (e.g., chains, wire ropes, kibbles, slings and rubbish removal skips) must be inspected before use and must be structurally sound, fit for purpose and designed for lifting (with certified lifting points and the rated capacity/safe working load clearly displayed).
- Tag lines shall be used when needed to control the load.
- Objects transported through site must be adequately restrained to prevent uncontrolled movement forwards, rearwards, upwards or sideways.
- Slinging methods must manage any expected dynamic load forces (e.g. wind, sudden crane halt).
- Deliveries where the load has the potential to fall/roll when unshackled must be inspected by a Competent Person, i.e. Rigger/Signal Person or equivalent and restrained before removal, e.g. chocked or slung with hoisting/lifting gear.
- The requirement for exclusion zones for lifting/hoisting operations must be identified and included in the crane lifting plan or PTP.
- All riggers must possess a valid qualification card and identifiable at all times (e.g. different color vest with Rigger identification) or hardhats)
- Proprietary Loading platforms are preferred (Prestonbox Type) when utilized by multiple trade partners. All platforms must be engineered, load capacity posted, enclosed on all sides and equipped with means of controlling access to the platform.

### Signalman Training and Qualifications

Employers of signalmen shall ensure that each signal person meets the qualification requirements contained in 29 CFR 1926.1419 Signals – General Requirements.

- Know and understand the type of signals used. If hand signals are used, the signal person shall be designated in writing and know and understand the standard method for hand signals.
- Be competent in the application of the type of signals used.  
Have a basic understanding of equipment operations and limitations, including the crane dynamics involved in swinging and stopping loads and boom deflection from hoisting loads.
- The crane operator, signal person shall be able to effectively communicate the language used.
- The signals used (hand, voice, audible, or new) and means of transmitting the signals to the operator (such as line of sight, video, radio, etc.) shall be appropriate for the site conditions.
- If radios are used to signal crane operator radio must have a dedicated channel.
- Hand signal charts shall be either posted on the equipment or readily available at the site.
- A crane operator should always move loads according to the established code of signals and use a signaler. Hand signals are preferred and commonly used.
- Only a qualified person should give signals to the crane operator.
- There should be only one designated person at a time giving crane signals.
- A crane operator should move loads only on crane signals from one person.
- A crane operator must obey STOP signals no matter who gives it.
- The person giving crane signals must be in clear view of the crane operator.
- The person giving crane signals must have a clear view of the load and the equipment,
- The person giving crane signals must keep persons outside the crane's operating area. Any request or questions should be addressed to the signaler.
- The person giving crane signals should never direct a load over a person.



## **DEMOLITION**

- Demolition plans shall follow OSHA 29 CFR 1926 Subpart T.
- Prior to start of any demolition work, an engineering survey of the building or area to be demolished is required to determine the condition of the area. Debris and material shall not be dropped through walls, floor holes, windows, or other elevated work areas without the area below being barricaded and proper signs posted.
- Debris chutes shall have a substantial gate at all elevated openings.
- Samet Corporation may require the demolition contractor to submit a site-specific fall protection plan if the work requires the removal of exterior walls and or flooring.

## **CONCRETE AND MASONRY**

- Free standing masonry walls over eight (8) feet in height will be adequately braced to prevent collapse. Limited access zones will be established as required by OSHA 1926, Subpart Q, to protect workers from the hazards associated with collapsing masonry walls.
- All rebar dowels, electrical conduits or similar items which are considered a “potential impalement hazard” shall always be capped (protected). This includes vertical and horizontal impalement hazards.
- Refer to Section on [SILICA](#) for specific requirements.

## **Pre-Cast Concrete**

- The inspection and supervision of all rigging and hardware must be performed by a Competent Person.
- Never move pre-cast members over another worker.
- 100% fall protection is required of all workers involved in the setting or connection of pre-cast members
- No workers will use their hands to reach under a pre-cast member to adjust a shim or bearing pad.

## **STEEL ERECTION**

The steel erection contractor shall submit a written steel erection plan to the Samet Corporation team prior to any work being performed. The plan must be comprehensive and include all aspects of the erection process, including but not limited to storage/staging of materials, equipment for hoisting materials, routes for lifting operations, critical lifts, rigging procedures, connection procedures, erection bridging procedures, stability requirements, fall protection requirements, decking procedures and proper training of workers. Steel erection procedures shall follow OSHA 29 CFR 1926. 750 Subpart R – Steel Erection standard or any supplemental requirements required by Samet Corporation. The following requirement shall be incorporated into the plan:

- 100% continuous fall protection for heights six (6) feet or greater above a lower level. Workers engaged in steel erection activities to include connecting, bolt-up and decking are **not exempt** from the project’s 100% fall protection requirements.
- During skeletal steel erection, a tightly planked temporary floor shall be maintained within two (2) stories or thirty (30) feet, whichever is less, below and directly under that portion of each tier of beams on which any work is being performed.
- During structural steel assembly, a safety railing of wire rope (at least 3/8” dia.) or equivalent shall be installed. Top railing should be forty-five (45) inches and a mid-railing at twenty-two (22) inches above the deck along all open sides including stairway landings and elevator shafts. The railing must support two hundred (200) lbs. of downward force and not deflect below thirty-nine (39) inches and shall not deflect outward beyond the edge of the floor. Flagging must be placed no more than every six (6) feet apart using a hi-visibility material.
- When placing structural steel members, the load shall not be released from the hoisting line until the member is secured by at least two bolts or the equivalent at each connection, drawn up wrench tight.

## **MOLD CONTROL**

If mold is observed, work must not continue in the area until Samet Corporation supervision has made an evaluation of the exposure and develop an abatement plan.

## **SILICA**

Contractors shall submit an exposure control plan to Samet team prior to beginning any work. The contractor shall adhere to the requirements of 29 CFR 1926.1153 Respirable crystalline silica. If respiratory protection is required by this section, the contractor shall institute a respiratory protection program according to 29 CFR 1910.134. In addition, contractor shall ensure medical surveillance is available at no cost to employees as required under 29 CFR 1926.1153(h).

- Workers that perform any of the following work tasks will be protected from exposure to crystalline silica dust:
  - Abrasive blasting using silica sand as a blasting medium.
  - Abrasive blasting of concrete regardless of the type of medium.
  - Sawing, hammering, drilling, grinding, sanding or chipping of concrete, rock or masonry products.
  - Heavy equipment and utility vehicles used to fracture or abrade silica containing materials, i.e. rock ripping, grading, demolition, fracturing
  - Dry sweeping or compressed air blowing of concrete, masonry, rock, or sand dust.
- Workers exposed to silica dust will receive training on silica hazards and protection methods.
- Examples of acceptable engineering controls are:
  - Substitute blasting medium for less hazardous material with 0% silica.
  - Dust collection systems shall be equipped with a commercially available shroud and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.
  - Wet saw systems equipped with integrated water delivery system that continuously feeds water to the blade or cutting surface.
  - Wet sweeping, HEPA-filtered vacuuming shall be used to clean up materials and debris where crystalline silica may be present.
- Do not use respirators as the primary means of preventing or minimizing exposures to airborne contaminants. Instead, use effective source controls such as substitution, automation, enclosed systems, local exhaust ventilation, wet methods, and good work practices as indicated in 29 CFR 1926.1153 Respirable crystalline silica.
- Do not eat, drink, or use tobacco products in areas where crystalline silica dust is present. Always wash hands and face before eating, drinking, or using tobacco products.

#### **INSTALLING AND SANDING SHEETROCK**

This procedure outlines the safety requirements for installing and sanding sheet rock in all buildings under construction.

- While wearing stilts, workers are prohibited from walking up and down stairs or working near leading edges without proper physical protection.
- Workers wearing stilts who are within ten (10) feet of standard guardrails must extend the top rail an additional two (2) feet to ensure proper protection.
- Workers hand sanding sheetrock joints can, on a voluntary basis, wear a disposable respirator (dust mask) rated N95. Workers must be trained and sign Appendix D to section 29 CFR 1910.134 "Voluntary Use of a Disposable Respirator".
- Workers engaged in mechanically sanding (powered orbital sander) sheetrock joint compound shall not be exposed to airborne concentrations of respirable dust above the OSHA permissible exposure level (PEL). Contractor is responsible for determining the exposure level of respirable dust in and around their employees breathing zone. The use of a vacuum attached to powered orbital sanders is the preferred means to reduce respirable dust below the OSHA PEL.
- Workers who would be exposed to respirable dust that is greater than 5mg/m3 in and around workers breathing zone must submit a comprehensive respiratory protection program that complies with 29 CFR 1910.134 if they require their employees to wear respiratory protection when sanding sheetrock joint compound.

#### **LOCK OUT POLICY**

This procedure establishes the minimum requirements for the lockout of energy isolation devices whenever maintenance or servicing is done on machines or electrical equipment. It shall be used to ensure that the machine or electrical equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before anyone performs any servicing or maintenance where the unexpected energization or start-up of the machine or electrical equipment or release of stored energy could cause injury.

- Lockout is the preferred method of isolating machines or electrical equipment from energy sources. To assist employers in developing a procedure which meets the requirements of the standard, the following simple procedure is provided for use in lockout programs. This procedure may be used when there are limited numbers or types of machines or electrical equipment or there is a single power source. For more complex systems, a more comprehensive procedure will need to be developed, documented, and utilized.
- All employees and contractor employees are required to comply with the restrictions and limitations imposed on them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees and contractor employees, upon observing a machine or piece of electrical equipment which is locked out to perform servicing or maintenance, shall not attempt to start, energize, or use that machine or electrical equipment.
- ***Refer to Samet's TSW for LOTO, Verify Permit***

### Responsibility

- Appropriate employees (contractor) shall be instructed in the safety significance of the lockout procedure.
- A competent person will conduct a survey to locate and identify all isolating devices to be certain which switch(s), valve(s) or other energy isolating devices apply to the equipment to be locked out. More than one energy source (electrical, mechanical, or others) may be involved.

### Lockout system procedure

- Notify all affected employees that a lockout system is going to be utilized and the reason. The authorized employee (contractor) shall know the type and magnitude of energy that the machine or electrical equipment utilizes and shall understand the hazards.
- If the machine or electrical equipment is operating, shut it down by the normal stopping procedure.
- Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.
- Lockout the energy isolating devices with assigned individual lock(s) and tag(s).
- Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate. Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment. The machine is now locked out.

### Restoring Equipment to Service

When the servicing or maintenance is complete and the machine or electrical equipment is ready to return to normal operating condition, the following steps shall be taken.

- Check the machine or electrical equipment and the immediate area around the machine or equipment to ensure that nonessential items have been removed and that the machine or electrical equipment components are operationally intact.
- Check the work area to ensure that all employees have been safely positioned or removed from the area.
- Verify that the controls are in neutral.
- Remove the lockout devices and reenergize the machine or electrical equipment.
- Notify affected employees that the servicing or maintenance is complete, and the machine or electrical equipment is ready for use.

### **CODE OF CONDUCT /WORKPLACE VIOLENCE**

Nothing is more important to Samet Corporation than the safety and security of its associates and partners. Threats, threatening behavior or acts of violence against anyone on Company property or projects sites will not be tolerated. Violations of this policy will lead to disciplinary action (up to and including termination) and/or removal from premises.

In carrying out Samet Corporation policies, it is essential that all personnel understand that no existing Samet Corporation policy, practice, or procedure should be interpreted to prohibit decisions designed to prevent a threat from being carried out, a violent act from occurring, or a life-threatening situation from developing.

All workers are responsible for notifying their supervisor and Samet Corporation team of any and all threats or unusual behavior, which they may witnessed, receive or have been told that another person has witnessed or received.

This policy also requires all individuals who apply for or obtain a protective restraining order, which lists company locations as being protected areas to provide such to Samet's Safety Director. Samet Corporation understands the sensitivity of the information requested and will respect the confidentiality thereof.

### **PROTECTING ASSOCIATES IN THE WORKPLACE**

Protecting all Associates' safety and well-being is of utmost importance to maintaining a positive, productive work environment and culture. This commitment includes protecting Samet field and office Associates from harassment, threats, and violent behavior, and extends to our sub-contractors, customers, and anyone present at one of our job sites or offices. Being a good steward of your own personal safety and the safety of others involves knowing the risk factors, reducing any known risks, and taking pro-active approaches to help yourself and others stay safe and free from harassment, threatening or volatile behavior in any form.



Risk factors for working on construction sites:

- Working late at night or early morning hours
- Working during non-daylight hours
- Working alone or with a limited number of co-workers
- Uncontrolled access to a construction site
- Areas of known security concerns
- General construction parking areas
- Areas that cannot be readily seen by others (i.e., apartment units, closets, enclosed spaces)

Reducing the risks:

- Remove yourself from any contentious situation immediately and do not confront the workers or engage in conversation
- Note who the workers are and or what job they were doing
- If harassed in any form, contact your supervisor or a co-worker immediately and then report the incident to Associate Services. If you wish to by-pass your immediate supervisor, you may reach out to Associate Services or any member of the management team.
- Report all safety concerns to a member of Samet's safety team or VP of Administration
- You can raise concerns or make reports without fear of reprisal

Practical tips for helping yourself and others stay safe at work:

- Always be aware of your surroundings
- Inform your co-workers when working alone
- Inform your co-workers when you intend to enter and return from the project site
- Park your vehicle near the construction office and not in the general parking area
- Keep your cell phone handy and ensure it is charged
- Keep phone numbers of project or department team members in your cell phone's favorites file
- Be aware of groups congregated in and around isolated areas
- Do not stay in isolated areas too long
- Keep doors to isolated spaces open
- When possible, position yourself between the door and the person(s) you are with

If you believe you are being harassed either through verbal communication, body language, or gestures, report the incident immediately to your supervisor and Associate Services. Samet will investigate and take prompt action against any worker(s) or individual(s) who harass Associates in the workplace or the general public near a project site. Threats, hostile behavior, or acts of violence against Associates, contractors, visitors, guests, or other individuals by anyone on company property or projects sites will not be tolerated. Violators will be subject to disciplinary action up to and including termination of employment. You may view Samet's full policy on harassment and sexual harassment on SametNet. If you have concerns about the safety and security of a Samet job site or office, please contact a member of our safety team or VP of Administration.

Revision History

June 1, 2016 – Added Silica Requirements (Section XX) and Modified Aerial Lift Requirement (Section XX)

April 18, 2018 – Revised SSSP

March 2020 – General re-write

May 2021 – Revised / Reformatted

June 2022 – High Rise Construction requirements under Fall Protection, Hot Work Requirements updated, Tower Cranes and hoists third party inspections added.

May 2023 – Fire Prevention was updated - No Smoking allowed within any structure, language for designated smoking areas added. Also updated the Fire Extinguisher size to 10 lbs for general purposes and Fire Watch purposes

## **Samet Requirements Above OSHA – Exhibit D**

Safety is one of Samet Corporation's core values. It is incumbent on each of us to do all we can to ensure that all associates, trade partners and visitors go home safely to their families every day. While our actions are an important and integral part of this process, we also have a duty to properly document our work daily. This is a key factor in ensuring that we keep our commitment to ensuring associates, trade partners and visitors do not compromise safety performance by undertaking work they are not qualified or trained for, and that they have the proper equipment to perform the task. To that end, Samet follows OSHA's minimum requirements and guidelines as part of our safety program except for the below standards that we exceed. Please review these requirements as you will be held accountable for following.

### **A. Subpart C - General Safety and Health Provisions**

#### Accident prevention OSHA 20(b)(1)

Samet has a written site safety and incident prevention program for each project. Subcontractors submit written site-specific safety and health programs for each project.

#### Job site inspections OSHA 20(b)(2)

Samet requires weekly written job site/areas inspections by our associates and subcontractor's competent persons (2 independent inspections). Daily Pre-task Plans and Permits to Work are required for high-risk activities and must be filled by subcontractor's competent persons and reviewed with working crew. Additional Inspections would include Material and Equipment Inspections.

#### Machinery and equipment operator training OSHA 20(b)(4)

Samet requires all subcontractors to identify, in writing, that all their equipment operators (lifts, earth moving, etc.) have been trained and qualified to operate the equipment/machinery.

#### Housekeeping OSHA 25(a-c)

Samet requires subcontractors to keep their work areas in and around buildings cleaned & organized, deposit their scrap/debris into provided dumpsters daily and remove or bend nails protruding from lumber. When unable to deposit debris daily into dumpsters, their trash/excess materials need to be organized and not obstruct means of egress out of the building. A Housekeeping agreement must be signed by all trades.

### **B. Subpart D - Occupational Health and Environmental Controls**

#### Medical services and first aid OSHA 50(a-g)

Samet requires that in the event an employee is injured on the job, First Aid kits are available for the employee to treat their own injuries. Subcontractor's first aid kits will be near the work area and contents of the kit inspected when brought on site. Subcontractor foreman will notify project superintendent or his representative if employees use first aid items. In the event of a severe injury, 911 will be called. Employees with minor injuries can self-treat their injuries or be taken to a nearby clinic for a medical evaluation and or treatment. As Samet projects sites are all within 15 minutes of a nearby medical facility or an EMS station (which meets the requirement as reasonably accessible), we do not require our associates and subcontractors' employees to be trained in first aid. No employee is required to treat another's wounds. However, in the event "Good Samaritan" assistance is rendered the exposed employee and victim will be evaluated by a medical clinic or doctor for Blood Borne Pathogens exposure control within 24 hours. The exposed employee will receive general blood borne pathogen training pursuant to OSHA 1910.1030 requirements.

### **C. Subpart E - Personal Protective Equipment and Life Saving Equipment**

#### Personal protective equipment OSHA 95(a-d)

Samet requires its associates and subcontractor employees on all project sites to wear hard hats,



safety glasses, high visibility clothing or vests, work boots, long pants, shirts with 4"sleeves, have hearing protection on their person and wear gloves (based on the hazard) regardless if associates and subcontractor employees are exposed to respective hazards or conditions.

**D. Subpart K – Electrical**

Samet requires all flexible cords to be three-wire 14 AWG or greater and rated for hard or extra hard use. Cords must be kept of the ground on walkways and means of access/egress to avoid tripping hazards.

**E. Subpart L – Scaffolds**

Samet requires fall protection (guardrails) on scaffolds at 6 feet and greater in height.

**F. Subpart M - Fall Protection**

Samet requires workers on low-sloped roofs (4 pitch or less) to be protected from leading edge falls of 6 feet or greater using guardrails or personal fall protection systems. Safety monitoring systems as part of awarning line fall protection system is prohibited. Samet required PFAS to be worn on all Mobile Elevated Working Platforms including scissor's lift.

**G. Subpart R - Steel Erection**

Samet requires 100% continuous fall protection for heights six (6) feet or greater above a lower level. Workers engaged in steel erection activities to include connecting, bolt-up and decking are **not exempt** from the project's 100% fall protection requirements.

**H. Subpart X - Stairways and Ladders**

Samet requires all portable ladders to be rated heavy duty Type 1, 1A, or 1AA. **Type II or Type III Ladders (<225 Lbs.) are Prohibited.** The use of aluminum ladders is also prohibited.

**Personal fall arrest systems will be required for workers on ladders when the following conditions are present:**

- a. Work requires the employee to reach such that the center of the body travels outside the area between the side rails of the ladders.
- b. The ladder is positioned such that its distance to a leading edge or open-sided floor is less than the working height of the ladder.
- c. Employees not maintaining 3 points of contact when climbing the ladder.
- d. Employees working on ladders when it's feasible and would not create an additional hazard to tie off to an approved anchor point when working greater than 6 feet above a lower level on the ladder.

Note: Competent Person shall evaluate conditions that would support tying off on ladders.

**Samet adheres to all the below Subparts as written:**

Subpart F Fire Protection and Prevention, Subpart G - Signs, Signals, and Barricades, Subpart H - Materials Handling, Storage, Use, and Disposal, Subpart I - Tools - Hand and Power, Subpart J - Welding and Cutting, Subpart N - Helicopters, Hoists, Elevators, and Conveyors, Subpart O - Motor Vehicles, Mechanized Equipment, and Marine Operations, Subpart P – Excavations, Subpart Q - Concrete and Masonry Construction, Subpart S - Underground Construction, Caissons, Cofferdams, and Compressed Air, Subpart T – Demolition, Subpart U - Blasting and the Use of Explosives, Subpart V - Electric Power Transmission and Distribution, Subpart W - Rollover Protective Structures; Overhead Protection, Subpart Y - Commercial Diving Operations, Subpart Z - Toxic and Hazardous Substances, Subpart AA - Confined Spaces in Construction, Subpart CC - Cranes & Derricks in Construction, 29 CFR 1926.1153 –Respirable Crystalline Silica

Additionally, Samet adheres to the OSHA regulations (Z- 1153) and to 29 CFR 1910 General Industry Standards as referenced in 29 CFR 1926 Construction standards as written.





WTCC – Fire and Rescue Training Center

Quality Control Plan



## Subcontractor's Site-Specific Quality Control Plan

<b>Trade Partner</b>	<b>Samet Job No.:</b>	23-878
<b>Attn:</b>	<b>Project Nam</b>	WTCC: F&R Training
	<b>Fax:</b>	
<b>Email:</b>	<b>Scope of Services:</b>	
<b>Phone:</b>		

<b>Email:</b>	<b>Project Start:</b> /        /
<b>Phone:</b>	<b>Project Finish:</b> /        /

### Contractor Quality Team

<b>Quality Control Director:</b>	Coleman Fenton	<b>Ph:</b>	910-777-9995	<b>Email:</b>	cfenton@sametcorp.com
----------------------------------	----------------	------------	--------------	---------------	-----------------------

(Responsible for the overall QA/QC Program for the CONTRACTOR)

<b>Project Superintendent:</b>	TBD	<b>Ph:</b>		<b>Email:</b>	
--------------------------------	-----	------------	--	---------------	--

(Responsible for this project's specific quality program for the CONTRACTOR)

<b>Site Quality Coordinator:</b>	Superintendent-TBD	<b>Ph:</b>		<b>Email:</b>	
----------------------------------	--------------------	------------	--	---------------	--

(Responsible for all inspections and field documentation for this project for the CONTRACTOR)

### Trade Partner Quality Team

<b>Operations Manager:</b>		<b>Ph:</b>		<b>Email:</b>	
----------------------------	--	------------	--	---------------	--

(Responsible for the overall QA/QC Program for Trade Partner)

<b>Project Manager:</b>		<b>Ph:</b>		<b>Email:</b>	
-------------------------	--	------------	--	---------------	--

(Responsible for this SSQCP for Trade Partner)

<b>Site Quality Representative:</b>		<b>Ph:</b>		<b>Email:</b>	
-------------------------------------	--	------------	--	---------------	--

(Responsible for all inspections and field documentation for this SSQCP for Trade Partner)

### Trade Partner's Quality Program Objective:

The principal objective of this Site-Specific Quality Control Plan (SSQCP) is to provide the CONTRACTOR and the Owner with the specified materials and high-quality workmanship that meets or exceeds their expectations. To accomplish this, both Samet Corporation's management and its employees are committed to continuous improvement in the quality of the products and services we provide.

This SSQCP has been established to ensure that all work performed by employees and Trade Partners of Samet Corp meet or exceed all contractual and regulatory requirements. Our Quality Team (defined above) takes total responsibility for the implementation of this program and its success for our scope of work on this project.

**Quality Control Requirements**

Topic	Required Actions & Documentation	Initials
Documentation Control: RFI's COR's	<p>Keep an organized file of all required project documents up to date at all times.</p> <p>Submit timely RFI's.</p> <p><u><i>Include suggestions for best outcome with the RFI.</i></u></p> <p>Submit timely Changes. Include cost, detail and time impacts of all ASI's, RFI's or other Project changes. NO LATE CO's.</p> <p>Communicate with CONTRACTOR when the inspection or test reports will be completed and the frequency of submissions.</p>	
Submittals and 100% Material Verification	<p>Conform to contractual requirements regarding submittals.</p> <p>If the project specifications do not call out what is to be submitted, then Samet Corp will create a list of products to be used. At the time of First Work-in-Place inspection or earlier, field verify that materials conform to the approved material submittal for the materials in question.</p>	
Manufacturer's Application	<p>Confirm the Approved Submitted Material is compatible for with other products that interface with this duct.</p> <p>What does it go on, go in, or what's on it?</p> <p>Confirm interface details.</p>	
Storage & Handling of Materials/Equipment First Delivery	<p>Identify any special requirements and documentation specific to Samet Corp's contract.</p> <p>Execute First Delivery Checklist.</p>	
Pre-installation Meetings	<p>Attend Samet's Pre-Installation Meetings as a primary Trade Partner or coordinating Trade Partner with the Trade Partner's qualified Field Supervisor(s)* performing the work and the Trade Partner's Project Manager and any other key personnel at all Pre-installation Meetings requested.</p> <p>*Includes supervisors for tiered Trade Partners.</p>	
First Work-in-Place Inspections	<p>Manage First Work-in-Place inspections and reviews with CONTRACTOR, Designer, etc. Document Standard of Performance.</p>	
Quality Control Checklists & Special Documentation	<p>Trade specific Inspection Checklists will be utilized on this project. All checklists are to be signed off by Samet Corp's Site Quality Representative (SQR.) All inspection results and documentation will be completed and turned over to the CONTRACTOR at job completion.</p>	
Testing & Inspections	<p>A Testing and Inspection Plan will be prepared by Samet Corp's SQR that lists all specified tests and inspections from the Project Specification for Samet Corp's scope of work.</p> <p>Tests &amp; Inspections will be witnessed by Samet Corp's SQR.</p> <p>Samet Corp's SQR will track all contractual and non-contractual inspections on a Testing &amp; Inspection Log.</p>	
Non-Conformances	<p>Samet Corp will document and notify Trade Partner to rectify all non-conformances. All issues will be corrected per the approved corrective action plan and completed in an acceptable timeframe tracked on a Deficiency Log.</p>	





Subcontractor's Site-Specific Quality Control Plan

Progress Photos	Trade Partner and Samet Corp will take daily progress photos, documented to confirm work complies with Project Requirements.	
As-built Drawings	The master as-built drawing set kept by Samet Corp in the field office will be updated by your field supervisor on a weekly basis, as applicable.	
Close-out and Warranty Procedures	Submit all Close-out Data, complete and timely to Project Requirements. Warranty, Guarantee, Attic Stock, Manufacturer Maintenance Data, and Training – each as may be required. Provide responsive action to Warranty Issues. Manage Warranty issues with a goal of overall Customer Satisfaction.	

---

Trade Partner's Site Quality Representative (SQR)

---

Samet Corp Representative



## Quality Inspection

### Forms



## Subcontractor's Site-Specific Quality Control Plan

### Inspection and Testing Requirements

Item #	Item Description	Inspection Checklist or Inspection Form

Notes: Inspection Checklists and Inspection Report Forms shall be attached.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
*Trade Partner's Site Quality Representative (SQR)*

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
*Samet Corp Representative*



[illegible]

# QUALITY INSPECTION



QUALITY

**Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Project:** \_\_\_\_\_ **Job No:** \_\_\_\_\_

**Location:** \_\_\_\_\_ **Meet at:** \_\_\_\_\_

**Bid Packages:** \_\_\_\_\_ **Trade Partner(s):** \_\_\_\_\_  
\_\_\_\_\_

**Specification Section(s):** \_\_\_\_\_ **Drawing No(s):** \_\_\_\_\_

Quality Inspection Sign-Off		
Trade Partner Names:	Trade Partner Signatures	Date:
Attached photos documenting the inspection.		
Photos to be taken by the Trade Partner and Samet Corporation representative.		

# QUALITY INSPECTION



QUALITY

Does the area/item Inspected conform to the Contract Documents? **Yes** ☐ **No** ☐

If not, is re-inspection by Samet acceptable for approval? ☐ **Yes** ☐ **No**

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Acceptance Signatures:**

**Samet** \_\_\_\_\_ **TC** \_\_\_\_\_

**Owner** \_\_\_\_\_ **A/E** \_\_\_\_\_



# QUALITY COORDINATION



## QUALITY

The Contractor shall coordinate all Electrical requirements for equipment provided under this Trade Partner's Scope of Work.

Provide a written statement confirming coordination of voltage requirements for all equipment requiring an electrical connection. Statement shall bear the names and signatures of the Trade Partner supplying the equipment and the Electrical contractors. Coordinate location, position, orientation, or other requirements for connecting equipment with Electrical and other trades as may be needed.

### VOLTAGE COORDINATION STATEMENT

This statement is to confirm that the voltages of all equipment provided under this Trade Partner's Scope of Work have been coordinated with the Electrical Drawings and Specifications, as well as with the Electrical Contractor.

Trade Partner: \_\_\_\_\_ Project Manager Name: \_\_\_\_\_

Project Manager Signature: \_\_\_\_\_

Date:  /  /

Electrical Trade Partner: \_\_\_\_\_ Project Manager Name: \_\_\_\_\_

Project Manager Signature: \_\_\_\_\_

Date:  /  /

Connections:

Who Supplies Disconnects?

Who Wires Disconnects to Power Supply?

Who Wires Disconnects to Equipment?

Who Supplies Fire Alarm Devices? (e.g. - Smoke / Heat Detectors for Duct)

Who Wires Fire Alarm, Security Devices? (e.g. - Tamper Switches, Door Hardware)

Notice:

At the time of discovery of a discrepancy within the Project Documents as regards power requirements, the Trade Partner shall issue a Request for Information identifying the following: Specifications, Drawings, Submittals, or other Project Documents related to the discrepancy. Include specific information as to the nature of the discrepancy and a suggestion for resolving the issue.

(No Changes will be issued for cost or time impacts related to a failure to coordinate the appropriate power requirements for this Trade Partner's Scope of Work.)

## QUALITY

### COORDINATION OF TRADES

The Contractor shall give full cooperation to other trades and shall furnish all information necessary to permit the work of all trades to be installed satisfactorily and with the least possible interference or delay.

Coordinate with all preceding trades and follow-on trades related to this Trade Partner's Scope of Work. Confirm compliance of preceding and follow on work to the Work of this Trade Partner with regards to the following:

- Specifications (e.g. – Tolerances match or exceed follow-on trade tolerances.)
- Drawings
- Submittals
- Manufacturer's Applications
- Specified Trade Association / Institute Requirements (e.g. – ACI, AISC, etc.)

Preceding Trade Partner(s): \_\_\_\_\_ Project Manager Name: \_\_\_\_\_  
Project Manager Signature: \_\_\_\_\_  
Date:  /  /

**Trade Partner:** \_\_\_\_\_ Project Manager Name: \_\_\_\_\_  
Project Manager Signature: \_\_\_\_\_  
Date:  /  /

Follow-on Trade Partner(s): \_\_\_\_\_ Project Manager Name: \_\_\_\_\_  
Project Manager Signature: \_\_\_\_\_  
Date:  /  /

### NOTICE:

Notify Samet Corporation in writing at the time of discovery of a discrepancy affecting this Trade Partner's Scope of Work prior to the application of the Work of this Subcontract. Re-assess after corrections are made and execute this document.

(No Changes will be issued for cost or time impacts related to a failure to coordinate with and inspect the preceding or follow on work with this Trade Partner's Scope of Work.)

---

## **SCHEDULE REQUIREMENTS**

### **I. Project Construction Schedule**

Samet Corporation's Master Project Construction Schedule which has been issued and is part of the Contract Documents illustrates the project schedule plan for this project. Each work activity required for the project is depicted on this schedule and will be updated on a monthly basis or as required by Samet until project completion. Additional work activities, when required, will be added to the project construction schedule as deemed warranted by Samet. Each subcontractor and/or supplier bidding and/or contracted to complete an aspect of this project shall comply with the durations and time frames established by this schedule. Additionally, all subcontractors and suppliers shall comply with project schedule updates and/or additional schedule requirements implemented by Samet during the course of the project to ensure the project is completed on schedule. *The Project Construction Schedule will be strictly enforced by Samet.*

Additionally, it is imperative that each Subcontractor or Supplier intending to bid this project thoroughly review the Project Construction Schedule in conjunction with the Contract Documents and prepare its bid proposal to meet the Project Construction Schedule. The successful Subcontractor(s) or Supplier shall be required to maintain the scheduled activity dates whether by the required forty (40) hour work week, or additional overtime labor and/or additional shifts. If in the opinion of Samet, the Subcontractor or Supplier falls behind schedule, the Subcontractor or Supplier shall be required to increase crew size, work overtime, shift work and/or weekends and provide supplemental equipment as necessary at no additional cost in order to recover the slippage of the schedule. Work hours shall be set by Samet and shall be adhered to by the Subcontractor or Supplier.

If inclement weather is encountered during the regular scheduled work week, weekends (Saturday or Sunday) shall be worked (full day) in order to make up lost time at no additional cost as directed by the Construction Manager.

At a minimum, the work week shall be Monday through Friday, working eight (8) hours per day (7:00 AM to 4:00 PM) with Saturdays or Sundays being a make-up day(s).

### **II. Short Interval Schedules**

"Short Interval Schedules" may also be utilized by Samet's Site Superintendent or Project Manager during the course of the project to compliment the Master Project Construction Schedule. "Short Interval Schedules" will be discussed, reviewed and agreed to during weekly subcontractor / supplier coordination meetings held on site.

Each Subcontractor shall submit a two (2) week Look Ahead Schedule in a format acceptable to the Construction Manager on or before each Monday Morning by 9:00 am for the total duration of the Subcontractors Work. The Construction Manager will review, approve or provide modifications to the proposed two (2) week Look Ahead Schedule as necessary to maintain the project construction schedule.



**PERFORMANCE BOND  
(Subcontract)**

**KNOW ALL MEN BY THESE PRESENTS**, That

(hereinafter called the "Principal"), as Principal and

a corporation organized and existing under the laws of the State of \_\_\_\_\_  
and firmly bound unto

(hereinafter called the "Surety"), as Surety, are held

(hereinafter called the "Obligee"), in the sum of

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

for the payment of which sum well and truly to be made, the said Principal and Surety bind themselves, and their respective heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Obligee has been awarded a contract (hereinafter called the "Prime Contract"), by

for

and; **WHEREAS**, the Principal has entered into a written Subcontract with the Obligee, dated \_\_\_\_\_ to perform, as Subcontractor, certain portions of the work in connection with said Prime Contract, consisting of

which Subcontract is hereby referred to and made a part hereof.

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH** that, if the above bounden Principal shall well and truly perform all the undertakings, covenants, terms, conditions, and agreements of said Subcontract within the time provided therein and any extensions thereof that may be granted by the Obligee, and during the life of any guaranty required under said Subcontract, and shall also well and truly perform all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said Subcontract that may hereafter be made, and shall indemnify and save harmless said Obligee of and from any and all loss, damage, and expense, including costs and attorney's fees, which the said Obligee may sustain by reason of failure so to do, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The said Surety agrees that no change, extension of time, alteration, addition, omission, or other modification of the terms *of* either the said Subcontract or the said Prime Contract, or both, or in the said work to be performed, or in the specifications, or in the plans, shall in anywise affect its obligation on this Bond, and it does hereby waive notice of any such changes, extensions of time, alterations, additions, omissions, and other modifications.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Witness:

\_\_\_\_\_  
Or Secretary's Attest

Witness:

\_\_\_\_\_  
(Principal) (Seal)

\_\_\_\_\_  
(Business Address)

By: \_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Surety)

\_\_\_\_\_  
(Business Address)

By: \_\_\_\_\_

**PAYMENT BOND  
(Subcontract)**

**KNOW ALL MEN BY THESE PRESENTS,** That

(hereinafter called the "Principal"), as Principal and

a corporation organized and existing under the laws of the State of \_\_\_\_\_ (hereinafter called the "Surety"), as Surety, are held and firmly bound unto

(hereinafter called the "Obligee"), in the sum of

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

for the payment of which sum well and truly to be made, the said Principal and Surety bind themselves, and their respective heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

**WHEREAS,** the Obligee has been awarded a contract (hereinafter called the "Prime Contract"), by

for

and;

**WHEREAS,** the Principal has entered into a written Subcontract with the Obligee, dated \_\_\_\_\_ to perform, as Subcontractor, certain portions of the work in connection with said Prime Contract, consisting of

which Subcontract is hereby referred to and made a part hereof.

**NOW, THEREFORE, THE CONDITION OF THE OBLIGATION IS SUCH** that, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said Subcontract and any and all modifications of said Subcontract that may hereafter be made, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The said Surety agrees that no change, extension of time, alteration, addition, omission, or other modification of the terms of either the said Subcontract or the said Prime Contract, or both, or in the said work to be performed, or in the specification, or in the plans, shall in anywise affect its obligation on this Bond, and it does hereby waive notice of any such changes, extension of time, alterations, additions, omissions, and other modifications.

The said Principal and the said Surety agree that this Bond shall inure to the benefit of all persons supplying labor and material in the prosecution of the work provided for in said Subcontract, as well as to the Obligee, and that such persons may maintain independent actions upon this Bond in their own names.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Witness:

\_\_\_\_\_  
(Principal) (Seal)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
Or Secretary's Attest

By:

\_\_\_\_\_  
(Signature and Title)

Witness:

\_\_\_\_\_  
(Surety)

\_\_\_\_\_  
(Business Address)

By:

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
Or Secretary's Attest

**QUICK PAY AGREEMENT  
(01600.3)**

For

Project Name: WTCC Fire and Rescue Training Facility

Samet Corporation agrees to provide quick pay to Minority or Women or Socially and Economically Disadvantaged Business Enterprise (MWBE) contractors in connection with the above-named project, to enable the MWBE to meet cash-flow demands. For the purpose of this Agreement, the term "Quick Pay" means a commitment to pay the MWBE within fifteen (15) days after confirmation that performance has been properly completed.



Name of Project  
City of Project  
Samet Project # XX-XXX



**JOINT CHECK AGREEMENT BETWEEN SUBCONTRACTOR AND SUB-SUBCONTRACTOR (01600.4)**

THIS AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and among:

Subcontractor:

Sub-Subcontractor:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

For the establishment of an open account with the Sub-Subcontractor for the purchase of certain materials to be sold by Sub-Subcontractor to Subcontractor and identified for delivery to the following project: \_\_\_\_\_

Subcontractor and Sub-Subcontractor hereby acknowledge, agree and authorize Samet Corporation to make disbursement of joint-payee checks drawn jointly payable to both the Subcontractor and Sub-Subcontractor. Said joint-payee checks shall be delivered by Samet to Subcontractor who further agrees to endorse same then transmit to Sub-Subcontractor for deposit and credit on the open account.

The Sub-Subcontractor agrees not to apply any portion of the checks issued pursuant to this Agreement to or for any account other than the subcontract and the project involved, shall apply all amounts for credit against materials actually furnished or services actually rendered in connection with the subcontract, and will not rebill any such amounts to Samet Corporation, the Subcontractor, or the owner.

All payments made by joint-payee check shall constitute a credit for or payment of sums due from Samet Corporation to Subcontractor on the designated project.

The obligations of Samet Corporation to the Subcontractor and the Sub-subcontractor, or either of them, under this Agreement, are expressly made subject to the terms of the contract between Samet Corporation and the Subcontractor and to all rights at law or in equity which Samet Corporation has with respect thereto including back charges for defective work, setoffs, or otherwise.

Samet Corporation assumes no obligation or liability to the Subcontractor or the Sub-Subcontractor pursuant to this Agreement. The Subcontractor and the Sub-Subcontractor shall release, indemnify, and hold Samet Corporation harmless from any and all liability, including reasonable attorneys' fees, to any party as a result of complying or failing to comply with the provisions hereof.

To the maximum extent allowed by law, execution of this Agreement shall constitute a waiver by Sub-Subcontractor of all claims, demands, or liens of any sort against the Project, the Owner of the Project, Samet Corporation, and \_\_\_\_\_ surety and bonds provided by any of the above for labor materials equipment or services provided by Sub-Subcontractor on the Project.

Receipt and negotiation of any referenced check shall constitute evidence of payment of outstanding invoices from Sub-Subcontractor to Subcontractor and will operate as a full release and discharge of all lien or other rights against Samet Corporation by Sub-Subcontractor and Subcontractor to the extent of such payments.

Nothing in this Agreement shall constitute a security interest, guaranty, additional assurance, or grant of any other or further rights against Samet Corporation to either Subcontractor or Sub-Subcontractor.

This Agreement cannot be altered or revoked without the written consent of Samet Corporation.

Unless this Agreement is sooner terminated by mutual agreement by the Subcontractor and Sub-Subcontractor, the Sub-Subcontractor, upon receipt of all amounts owed by Samet Corporation for materials and services furnished on account for the project, shall promptly give written notice to Samet Corporation of the termination of this Agreement.

Sub-Subcontractor:

Subcontractor:

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Name of Project  
City of Project  
Samet Project # XX-XXX



**JOINT CHECK AGREEMENT BETWEEN SUBCONTRACTOR AND SUPPLIER (01600.5)**

THIS AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and among:

Subcontractor:

Supplier:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

For the establishment of an open account with the Supplier for the purchase of certain materials to be sold by Supplier to Subcontractor and identified for delivery to the following project: \_\_\_\_\_

Subcontractor and Supplier hereby acknowledge, agree and authorize Samet Corporation to make disbursement of joint-payee checks drawn jointly payable to both the Subcontractor and Supplier. Said joint-payee checks shall be delivered by Samet Corporation to Subcontractor who further agrees to endorse same and then transmit to Supplier for deposit and credit on the open account.

The Supplier agrees not to apply any portion of the checks issued pursuant to this Agreement to or for any account other than the subcontract and the project involved, shall apply all amounts for credit against materials actually furnished or services actually rendered in connection with the subcontract, and will not rebill any such amounts to Samet Corporation, the Subcontractor, or the owner.

All payments made by joint-payee check shall constitute a credit for or payment of sums due from Samet Corporation to Subcontractor on the designated project.

The obligations of Samet Corporation to the Subcontractor and the Supplier, or either of them, under this Agreement, are expressly made subject to the terms of the contract between Samet Corporation and the Subcontractor and to all rights at law or in equity which Samet has with respect thereto including back charges for defective work, setoffs, or otherwise.

Samet Corporation assumes no obligation or liability to the Subcontractor or the Supplier pursuant to this Agreement. The Subcontractor and the Supplier shall release, indemnify, and hold Samet Corporation harmless from any and all liability, including reasonable attorneys' fees, to any party as a result of complying or failing to comply with the provisions hereof.

To the maximum extent allowed by law, execution of this Agreement shall constitute a waiver by Supplier of all claims, demands, or liens of any sort against the Project, the Owner of the Project, Samet Corporation, and \_\_\_\_\_ surety and bonds provided by any of the above for labor materials equipment or services provided by Supplier on the Project.

Receipt and negotiation of any referenced check shall constitute evidence of payment of outstanding invoices from Supplier to Subcontractor and will operate as a full release and discharge of all lien or other rights against Samet Corporation by Supplier and Subcontractor to the extent of such payments.

Nothing in this Agreement shall constitute a security interest, guaranty, additional assurance, or grant of any other or further rights against Samet Corporation to either Subcontractor or Supplier.

This Agreement cannot be altered or revoked without the written consent of Samet Corporation.

Unless this Agreement is sooner terminated by mutual agreement by the Subcontractor and Supplier, the Supplier, upon receipt of all amounts owed by Samet Corporation for materials and services furnished on account for the project, shall promptly give written notice to Samet of the termination of this Agreement.

Supplier:

Subcontractor:

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_ Project: \_\_\_\_\_ Date: \_\_\_\_\_

Weather Conditions: AM \_\_\_\_\_ PM \_\_\_\_\_

Temperature: 7:00AM \_\_\_\_\_ Lunch \_\_\_\_\_ 4:00PM \_\_\_\_\_

### Manpower Summary

NOTE: Include all sub-tier personnel as well as direct employees

	Total # Employees	Total Manhours	Description
Superintendent			
Foreman			
Journeyman			
Apprentice			
Laborer			
Operator			

### Description of Work Activities (IN DETAIL):

---



---



---

### Look Ahead Tasks (IN DETAIL):

---



---



---

Safety:	Yes/No	Comments
Have all on-site sub personnel and sub-tiers have attended Samet Safety orientation?		
Were any employees injured today?		
Are there any unsafe conditions to report?		
Is the Daily Pre-Task Plan/Jobsite Checklist attached? (Required)		
<b>Environmental:</b>		
Are there any environmental issues to report?		
<b>Quality Assurance/Control:</b>		
Have all inspections/testing per project specifications been performed, documented, and submitted to Samet Corporation?		

### Materials Delivered (IN DETAIL):

---



---

### Inspections Performed (IN DETAIL):

---



---

The information contained herein this report is true and accurate to the best of my knowledge:

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Name (Signature)

\_\_\_\_\_  
Date







---

## FORM OF PROPOSAL

**Name of Firm:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone/Email:** \_\_\_\_\_

---

**(Contractor's License Number, if applicable)**

---

**(Trade Package Name)**

CONSTRUCTION MANAGER: Samet  
309 Gallimore Dairy Rd, Suite 102  
Greensboro, NC 27409

For

OWNER: Wake Technical Community College  
4723 Advantage Way  
Raleigh, NC 27603

The undersigned, having carefully and completely examined the Proposal Forms and Procedures, Contract Documents, Trade Package Scopes of Work, Other Bidding Requirements, and all subsequent addenda, and being familiar with all conditions and requirements of the Work for the **Wake Tech Fire and Rescue Training Center** agrees to furnish all materials, labor, equipment, taxes, insurance and services for the lump sum, BASE BID AMOUNT of:

\_\_\_\_\_(Words)

\$\_\_\_\_\_(Figures)

**Initial below to confirm:**

\_\_\_\_\_ Base bid amount includes the cost for the Insurance requirements in compliance with Exhibit of Subcontract Agreement

\_\_\_\_\_ Base Bid amount includes the cost for all Allowances identified in the Allowance section of the bid form.



---

**(List all Addenda along with the date of issue. If no additional Addenda are issued, write the word "NONE".)**

Addendum Number

Date

---

---

---

---

---

---

---

---

---

---

## **UNIT PRICES**

Bidders are to provide unit prices for each item of work listed below. Each unit price provided shall include all profit, overhead, supervision, surveying/field engineering services, materials, labor, equipment, taxes, insurance, and any miscellaneous incidentals required to complete the unit price work activity. Unit prices shall be treated as a change to the Scope of Work and are subject to comply with all provisions outlined within the Contract Documents. Refer to 012200 "Unit Prices" within the Specifications for additional information related to each unit price. **Where noted below, the Unit Price(s) shall be the basis for determining a respective Subcontract allowance value(s). Additionally, the Unit Prices outlined herein shall be used as a basis of determining additions and/or deductions to the Subcontract Sum by change order.**

- A. Unit Price A: Unsuitable Soil – On-Site Disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soil for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  2. Unit of Measurement: Cubic Yards
  3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
  4. **Rate: \_\_\_\_\_ \$/CY**
- B. Unit Price B: Unsuitable Soil – On-site Disposal and Backfill with off Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement if unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances".
  4. **Rate: \_\_\_\_\_ \$/CY**
- C. Unit Price C: Unsuitable soil – Off-site disposal and Backfill with On-Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
  4. **Rate: \_\_\_\_\_ \$/CY**
- D. Unit Price D: Unsuitable Soil – Off-site disposal and Backfill with Off-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
  4. **Rate: \_\_\_\_\_ \$/CY**

- E. Unit Price E: Unsuitable Trench Soil – On-site disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soils for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- F. Unit Price F: Unsuitable Trench Soil – Off-Site Disposal and Backfill with On-Site Source
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- G. Unit Price G: Unsuitable Trench Soil – Off-Site Disposal and Backfill with On-Site Source
1. Description: Removal unsuitable soil, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- H. Unit Price H: Unsuitable Trench Soil – Off-Site Disposal and Backfill with Off-Site Source
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- I. Unit Price I: Stream Crossing – Off-Site Disposal and Backfill with Class B Rip-Rap
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with an Approved Rip-Rap material.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**



- 
- J. Unit Price J: Stream Crossing – Off-Site Disposal and Backfill with #57 Stone
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with an Approved #57 Stone material.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- K. Unit Price K: Stream Crossing – Type 4 Geotextile Fabric
1. Description: Furnish and Install Type 4 Geotextile Fabric as required per the Specifications .
  2. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances".
- Rate:** \_\_\_\_\_ **\$/CY**
- L. Unit Price L: Rip Rock Excavation – Dispose of Off-Site
1. Description: Removal and disposal off-site, and replacement with a controlled backfill material per Specifications.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- M. Unit Price M: Rip Rock Excavation – Dispose of On-Site
1. Description: Removal, disposal of rip rock for re-use on-site, and replacement with a controlled backfill material per Specifications.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**
- N. Unit Price N: Trench Rock Excavation (Hammer) – Dispose of Off-Site
1. Description: Removal and disposal off-site, and replacement with a controlled backfill material per Specifications.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."
- Rate:** \_\_\_\_\_ **\$/CY**

- 
- O. Unit Price O: Trench Rock Excavation (Hammer) – Dispose of On-Site
1. Description: Removal, disposal of rip rock for re-use on-site, and replacement with a controlled backfill material per Specifications.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."  
**Rate:** \_\_\_\_\_ **\$/CY**
- P. Unit Price P: #57 Stone Backfill/Spread
1. Description: Provide and install #57 stone per Specifications.
  2. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances".  
**Rate:** \_\_\_\_\_ **\$/CY**
- Q. Labor Rates: Provide position and hourly rates for common cost of work positions such as laborer, carpenter, foreman, ect.

Position	Hourly Rate

### **ALLOWANCES**

Bidders are to provide allowances for each item of work listed below. Each allowance provided shall include all profit, overhead, supervision, surveying/field engineering services, materials, labor, equipment, taxes, insurance, and any miscellaneous incidentals required to complete the quantity allowance work activity. Allowances shall be included in the lump sum bid and are subject to comply with all provisions outlined within the Contract Documents. Refer to 012100 within the Specifications for additional information related to each allowance. (Verification of any allowance usage must be signed off on by the Contractor / Owner to be validated for billing purposes, and all unused portion(s) of these item(s) will be reconciled at the completion of the project via deductive change order)

- A. Allowance No. A: Unsuitable Soil – On-site Disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soil for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled back fill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 1,500 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- B. Allowance No. B: Unsuitable Soil – On-site Disposal and Backfill with off Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement if unsuitable soil and/or debris with a controlled backfill material from an off-site source.

- 
2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 1,500 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- C. Allowance No. C: Unsuitable soil – Off-site disposal and Backfill with On-Site Source Suitable Soils.
1. Description: Removal of unsuitable soil, disposal for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 250 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- D. Allowance No. D: Unsuitable Soil – Off-site disposal and Backfill with Off-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 250 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- E. Allowance No. E: Unsuitable Trench Soil – On-site disposal and Backfill with On-Site Suitable Soils.
1. Description: Removal of unsuitable soil, disposal of unsuitable soils for re-use on-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 250 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- F. Allowance No. F: Unsuitable Trench Soil – Off-Site Disposal and Backfill with On-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 100 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_

- 
- G. Allowance No. G: Unsuitable Trench Soil – Off-Site Disposal and Backfill with On-Site Source Suitable Soils.
1. Description: Removal unsuitable soil, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an on-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 50 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- H. Allowance No. H: Unsuitable Trench Soil – Off-Site Disposal and Backfill with Off-Site Source Suitable Soils.
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with a controlled backfill material from an off-site source.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 50 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- I. Allowance No. I: Stream Crossing – Off-Site Disposal and Backfill with Class B Rip-Rap
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with an Approved Rip-Rap material.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 500 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- J. Allowance No. J: Stream Crossing – Off-Site Disposal and Backfill with #57 Stone
1. Description: Removal, disposal off-site, and replacement of unsuitable soil and/or debris with an Approved #57 Stone material.
  2. Unit Price includes excavation, transportation, re-spread, compaction, and backfill to compaction requirements per specifications.
  3. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  4. Allowance Quantity: 200 cubic yards.
  5. Base Bid Quantity: Lump Sum.  
**Value: \$** \_\_\_\_\_
- K. Allowance No. K: Stream Crossing – Type 4 Geotextile Fabric
1. Description: Furnish and Install Type 4 Geotextile Fabric as required per the Specifications .
  2. This allowance includes material cost receiving, handling, and installation and Contractor overhead and profit.
  3. Allowance Quantity: 1,500 square feet.
  4. Base Bid: Lump Sum.  
**Value: \$** \_\_\_\_\_



---

## **ALTERNATES**

The undersigned further agrees to perform the alternates for the sums herein stated resulting in additions to or deductions from the Base Bid Amount. Additions and deductions shall include any modifications of work or additional work that shall be reasonably included as a part of the alternate. Alternates within the Specifications for additional information and/or requirements related to each alternate. If any of the following alternates are accepted, the above stated lump sum (Base Bid Amount) will be revised by the amount(s) indicated below.

If you choose to bid an alternate but there is no change to the base bid amount, enter the term "NO CHANGE" after the dollar sign (\$). If you know an alternate below is not applicable to your scope of work, enter the term "NOT APPLICABLE" after the dollar sign (\$).

All North Carolina State Sales and Use Taxes or Local Sales and Use Taxes are included in the above Base Bid and Alternates (including taxes on purchase or rental of tools and equipment). Bidder agrees. that this Base Bid will remain good and may not be withdrawn for a period of (60) calendar days after receipt date of Bid Proposals

### **ALTERNATE NO. 1 – Payment and Performance Bond**

The cost of the Performance and Payment Bonds will be reimbursed to the Subcontractor based on the following revised contract review noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. NO mark-up, overhead, etc. shall be included as Samet will only reimburse the cost of the bond.

Add or Deduct \_\_\_\_\_ (Words)

\$ \_\_\_\_\_ (Figures) (in case of discrepancy, the amount shown in words shall govern)

---

## **BID SUBMITTAL CHECKLIST**

In addition to completing this Form of Proposal, the bidder recognizes the following items must be completed to submit a responsible and responsive bid for this project.

- a. All bids must be submitted on the Form of Proposal provided by the Construction Manager and marked accordingly to identify the Trade Package name being bid.
- b. Form of Proposal shall be signed by an officer of the company.
- c. When applicable to a particular trade package scope of work, the respective bidder must fill in all alternates or unit prices on the form of proposal being solicited for the project.
- d. Each bidder as applicable to its respective Trade Package shall include the value of each allowance within its base bid amount as further defined in 012100 – Allowances.
- e. Bids must be submitted in a sealed opaque envelope with the following marked on the front of the envelope:
  - (1) Bidder Name and Address
  - (2) Project Name – **WTCC Fire and Rescue Training Center**
  - (3) Trade Package Name (e.g. “02A Demolition”)
- f. A Bid Security of five percent (5%) of the Bid in Cashier’s Check, Certified Check, or a fully executed Bid Bond is required to accompany each Bid Proposal where designated on the Instructions to Bidder. Bids may not be withdrawn within sixty (60) days after the scheduled bid date and time, except as provided by law. Please reference Instructions to Bidders for specifics. (Required for packages that exceed \$300,000.00)
- g. As required, all bids must be accompanied with the following completed M/WBE Participation Forms.

ALL BIDDERS MUST SUBMIT TWO FORMS WITH THEIR BID:

1. Identification of Minority Business Participation” form

AND EITHER

2. Affidavit A – “Listing of Good Faith Efforts”

OR

2. Affidavit B – “Intent to Perform Contract with Own Workforce

(Required for Bidders who self-perform 100% percent of their contract value including material / equipment purchases (i.e. typically a labor only contract))

The above information must be provided as required. Failure to submit these documents is grounds for rejection of the bid. Bid amounts from rejected bids shall not be read aloud at public bid openings.

The bidder must identify on its bid (by using the “Identification of Minority Business Participation” form provided in the bid document), the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit (Affidavit A) listing good faith efforts **or** affidavit (Affidavit B) of self-performance of work, if the bidder will perform work under contract by its own workforce, as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).

---

An issuance of a Notice to Proceed shall be considered acceptance of this bid proposal sixty (60) calendar days after the date fixed for the opening of bid proposals. Furthermore, the undersigned agrees to execute and deliver the Contractor and Subcontractor Agreement, Performance and Payment Bonds (if applicable), Material Purchase Order Agreement (if applicable) and Certificate of Insurance within fourteen (14) calendar days after the Subcontractor or Supplier has received the said Contractor and Subcontractor Agreement and/or Purchase Order (if applicable), requiring execution. The undersigned agrees, if awarded the Subcontract, within sixty (60) calendar days from the fixed date for opening of the bids, to faithfully and properly complete the whole and several portions of the work within the specified time defined within the Contract Documents.

It is agreed that the undersigned has fulfilled and is in current compliance with all state licensing laws and will comply with all requirements concerning licensing with all other local and national laws and that no legal requirement has been or will be violated in making or accepting this bid proposal by awarding the Subcontract or Purchase Order to the firm and/or in the performance of the work required thereunder.

The undersigned declares that he/she is an officer of the firm listed and is authorized to sign the bid proposal and fully bind the said firm to all the conditions and provisions thereof.

Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_, 2025.

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name and Title)





## Identification of HUB Certified/ Minority Business Participation

I, \_\_\_\_\_,  
(Name of Bidder)

do hereby certify that on this project, we will use the following HUB Certified/ minority business as construction subcontractors, vendors, suppliers or providers of professional services.

Firm Name, Address and Phone #	Work Type	*Minority Category	**HUB Certified (Y/N)

\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.

The total value of minority business contracting will be (\$)\_\_\_\_\_.

# State of North Carolina AFFIDAVIT A – Listing of Good Faith Efforts

County of \_\_\_\_\_

(Name of Bidder)

Affidavit of \_\_\_\_\_

I have made a good faith effort to comply under the following areas checked:

**Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive.** (1 NC Administrative Code 30 I.0101)

- ☐ **1 – (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
- ☐ **2 --(10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
- ☐ **3 – (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- ☐ **4 – (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- ☐ **5 – (10 pts)** Attended prebid meetings scheduled by the public owner.
- ☐ **6 – (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- ☐ **7 – (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- ☐ **8 – (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- ☐ **9 – (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- ☐ **10 - (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

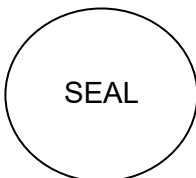
The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d) Failure to abide by this statutory provision will constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

# State of North Carolina --AFFIDAVIT B-- Intent to Perform Contract with Own Workforce.

County of \_\_\_\_\_

Affidavit of \_\_\_\_\_

(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the \_\_\_\_\_

\_\_\_\_\_ contract.

(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

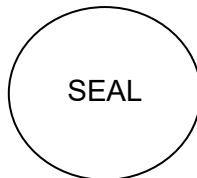
The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

# State of North Carolina - AFFIDAVIT C - Portion of the Work to be Performed by HUB Certified/Minority Businesses

County of \_\_\_\_\_

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the portion of the work to be executed by HUB certified/minority businesses as defined in GS143-128.2(g) and 128.4(a),(b),(e) is equal to or greater than 10% of the bidders total contract price, then the bidder must complete this affidavit.

This affidavit shall be provided by the apparent lowest responsible, responsive bidder within **72 hours** after notification of being low bidder.

Affidavit of \_\_\_\_\_ I do hereby certify that on the \_\_\_\_\_  
(Name of Bidder)

(Project Name)  
Project ID# \_\_\_\_\_ Amount of Bid \$ \_\_\_\_\_

I will expend a minimum of \_\_\_\_\_ % of the total dollar amount of the contract with minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below.

Attach additional sheets if required

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

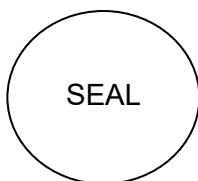
\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.**

Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_



Signature: \_\_\_\_\_

Title: \_\_\_\_\_

State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_



# State of North Carolina AFFIDAVIT D – Good Faith Efforts

County of \_\_\_\_\_

(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)

If the goal of 10% participation by HUB Certified/ minority business **is not** achieved, the Bidder shall provide the following documentation to the Owner of his good faith efforts:

Affidavit of \_\_\_\_\_ I do hereby certify that on the \_\_\_\_\_  
(Name of Bidder)

Project ID# \_\_\_\_\_ (Project Name) Amount of Bid \$ \_\_\_\_\_

I will expend a minimum of \_\_\_\_\_% of the total dollar amount of the contract with HUB certified/ minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. (Attach additional sheets if required)

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.**

**Examples** of documentation that may be required to demonstrate the Bidder's good faith efforts to meet the goals set forth in these provisions include, but are not necessarily limited to, the following:

- Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- Copies of quotes or responses received from each firm responding to the solicitation.
- A telephone log of follow-up calls to each firm sent a solicitation.
- For subcontracts where a minority business firm is not considered the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- Copy of pre-bid roster
- Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- Letter detailing reasons for rejection of minority business due to lack of qualification.
- Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

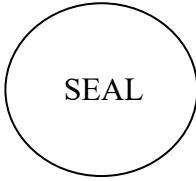
Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

---

**BID BOND FORM**

KNOW ALL MEN BY THESE PRESENTS, That we,

\_\_\_\_\_

(Bidder's Name)

\_\_\_\_\_, of \_\_\_\_\_ (Street Address)  
(City, State, Zip)

Hereinafter called the principal, and

\_\_\_\_\_

(Surety's Name)

A corporation organized and existing under the Laws of the State of \_\_\_\_\_,  
and authorized to transact business in the State of \_\_\_\_\_, as Surety, hereinafter  
called Surety, are held and firmly bound unto the **Samet and Wake Technical Community college.**

Hereinafter called Oblige, in the Penal sum of five percent (5%) of the amount bid, good and lawful  
money of the United States of America, for the payment of which the Principal and Surety bind  
themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly  
by these presents.

The Condition of this Obligation is such, that, WHEREAS the Principal has submitted a proposal to  
the Oblige on a contract for the construction.

NOW THEREFORE, if the Oblige shall accept the bid of the Principal and the Principal shall enter  
into a contract with the Oblige in accordance with the terms of such bid, and give such bond or  
bonds as may be specified in the Bidding or Contract Documents with good and sufficient surety for  
the faithful performance of such construction for the prompt payment of labor and material furnished  
in the prosecution thereof, or in the event of the failure of the Principal to enter such contract and  
give such bond or bonds, if the Principal shall pay to the Oblige the difference not to exceed the  
penalty hereof between the amount specified in said bid and such larger amount for which the Oblige  
may in good faith contract with another party to perform the Work covered by said bid, then this  
obligation shall be null and void; otherwise to remain in full force and effect.

In witness whereof, we have hereunto set our signatures and seal this \_\_\_\_\_  
day of \_\_\_\_\_, 20\_\_\_\_\_, all pursuant to due authorization.

\_\_\_\_\_  
Principal (Seal)

\_\_\_\_\_  
By Surety

\_\_\_\_\_  
By  
Attorney-in-Fact in accordance with the attached Power of Attorney

STATE OF \_\_\_\_\_)

ss:

COUNTY OF \_\_\_\_\_)

I, \_\_\_\_\_, a Notary Public in and for the State and County  
aforesaid, do hereby certify that \_\_\_\_\_, and  
\_\_\_\_\_, whose names are signed to the foregoing bond, this day  
personally appeared before me in my State and County aforesaid and acknowledged the  
same.

Given under my hand seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public (Seal)

My Commission expires:



## **TRADE PACKAGE SCOPE OF WORK**

### **01A FINAL CLEANING SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Final Cleaning** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the **Final Cleaning** Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

DIVISION 1 – GENERAL REQUIREMENTS	
GC Req.	General Requirements Manual
GC Req.	Trade Package Scope Manual
GC Req.	Trade Package General Scope Requirements

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)	
	Specifications are included on the Drawings
Div 00 &01	All

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**



PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)		
DRAWING NO.	DRAWING NAME	SPECIFIC ITEM
All Dwgs	All Dwgs	All Dwgs

The Final Cleaning Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Final Cleaning Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

## **1.0 SCOPE OF WORK DESCRIPTION**

- 1.0.1 This Subcontract Agreement specifically includes, but is not limited to cleaning solutions, cleaning utensils, cleaning equipment, etc. as needed for a complete Final Clean.
- 1.0.2 Subcontractor to provide all final cleaning required to make all towers, restrooms, auxiliary spaces, building interiors, etc. ready for use.
- 1.0.3 Final Cleaning activities to include, but not limited to:
  - .0.3.1 Wiping down all trim, mirrors, plumbing fixtures, light fixtures, shelves, millwork, countertops, appliances, thresholds, doors, including hardware, jambs, heads, weatherstripping, vents, diffusers, etc.
  - .0.3.2 Cleaning all windows, steel shutters, doors, stairs, sills, thresholds, jambs, heads, and window locks. Removal of all stickers and markings, residues, etc. is included in this scope of work.

- .0.3.3 Remove all excess caulking, paint, grease, drywall, joint compound, and film from all surfaces.
- .0.3.4 Clean all misc. metals interior and exterior so that they are free of dirt, grime, grease, and any debris preventing the desired finish. This includes but is not limited to stairs, railings, shutters, tie offs, posts, bollards, gates, gantries, platforms, ect.
- .0.3.5 Clean all flooring in accordance with the manufacturer's recommendations.
- .0.3.6 Clean and remove all protective film from all fixtures/equipment/appliances.
- .0.3.7 Clean all fire extinguisher cabinets, inside and out.
- .0.3.8 All plumbing fixtures to be cleaned and sanitized and all bathroom mirrors cleaned.
- .0.3.9 All areas above and the tops of all items which are elevated and not easily viewed are to be cleaned including, but not limited to, all light fixtures, toilet partition top edges, top of trim and casings, wall cabinets, etc.
- .0.3.10 All millwork to be cleaned on all sides, inside and out, per manufacturer's specifications.
- .0.3.11 All mechanical, electrical, janitorial, and storage rooms to be wiped down and free of debris and dust.
- 1.0.4 Intention is that Final Cleaning will commence when all trades are fully punched and performing no more work in the area as directed by Samet. Once final cleaning has been completed, a walk-through with the Contractor will be required for Approval by Owner.
- 1.0.5 Cleaning work provided by this Subcontractor shall be inspected and signed-off by the Site Superintendent before work is considered complete. Subcontractor to coordinate with the Superintendent for these inspections.
- 1.0.6 Any work that requires a change order will need to be brought to the attention of the Project Manager prior to proceeding. It is understood that only a change in scope will qualify as grounds for a possible change order. Subcontractor has included all items for a complete final cleaning scope of work.
- 1.0.7 All Sealed Concrete Floors shall be swept and scrubbed, all minor stains removed, and be free of dust or debris.
- 1.0.8 Clean/power wash all site hardscapes and flatwork to remove all debris, tire marks, grease, ect.
- 1.0.9 Subcontractor to provide 40 hours of additional cleaning labor as directed by the

Construction Manager. Any unused hours will be credited back to the Construction Manager in the form of a deduct change order.

## 17.0 **SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 17.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 17.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 17.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.
- 17.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.
- 17.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 17.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 17.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 17.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 17.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 17.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No





additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations.

- 17.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 17.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 17.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.
- 17.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 17.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 17.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 17.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 17.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum

with other safety forms submitted as required by daily activities.

- 17.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 17.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 17.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 17.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.
- 17.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 17.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order. If at anytime the manufacturer installation instructions differ from the contract documents, the subcontractor is to bring this to the attention of the Construction Manager prior to installation.
- 17.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 17.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.

- 17.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 17.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 17.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 17.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.
- 17.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Final Cleaning Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
PC1040	Final Approval – C of O	8/24/2025



**—ALLOWANCES—**

Allowances shall cover the cost of all materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses associated with stated allowance amounts shall be included in the Subcontract Amount but not in the allowances. Whenever costs are more than or less than an allowance amount, the Subcontract Amount shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances.

<b>ALLOWANCES</b>		
<b>ALLOWANCE NO.</b>	<b>ALLOWANCE DESCRIPTION</b>	<b>AMOUNT</b>

**—UNIT PRICES—**

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

<b>UNIT PRICES</b>			
<b>UNIT NO.</b>	<b>UNIT PRICE DESCRIPTION</b>	<b>UNIT PRICE</b>	<b>UNIT MEASURE</b>
L1	laborer hourly rate		Hour

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- "Accepted" – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- "Pending" – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.





- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment & Performance Bond		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor’s bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**01A – FINAL CLEANING SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **03A – CAST-IN-PLACE CONCRETE SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Cast-in-place concrete** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the **Cast-in-place concrete** Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)</b>	
	<b>Specifications are included on the Drawings</b>
00 & 01	All division 00 and 01 specifications
031000	Concrete Forming and Accessories
032000	Concrete Reinforcing
033000	Cast-in-Place Concrete
033000.01	Cast-in-Place Concrete – Burn Building, Training Tower, and Drafting Pit
079200	Joint Sealants

### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES</b>	
	<b>Specifications are included on the Drawings</b>
042000	Unit Masonry
042000.01	Unit Masonry Assemblies – Burn Building and Training Tower
051200	Structural Steel Framing
052100	Steel Joist Framing
055000	Metal Fabrications
055000.01	Metal Fabrications – Burn Building, Training Tower, and Drafting Pit
070001	Burn Building/Training Structure Thermal Linings
312000	Earth Moving

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-03A-CONCRETE</b>, per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the Cast-in-Place Concrete scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All concrete notes/specs and items as it relates to cast-in-place concrete and associated joint sealants and items to be coordinated with other trades.

The Cast in Place Concrete Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Cast in Place Concrete Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

### **3.0 CAST-IN-PLACE CONCRETE SCOPE OF WORK DESCRIPTION**

3.0.1 Turnkey Concrete - This Scope of Work includes all concrete work inside and outside building footprints excluding site concrete paving, sidewalks, curb & gutter, and including, but not limited to, stairs, footings, foundation walls, CIP structure, slabs on grade, Drafting Pit, housekeeping/equipment pads, etc. as required within Contract Documents. The following structures are within scope;

- .0.1.1 Training Tower
- .0.1.2 Burn Building
- .0.1.3 Shade Structure
- .0.1.4 Covered Storage
- .0.1.5 Drafting Pit

3.0.2 Review all cast-in-place concrete requirements as it relates to the installation of the Thermal linings scope of work. Please refer to the following; Specification 070001 "Training Structure Thermal Linings", Thermal lining System notes on BB001, and the HTL Contractor Letter attachment. If any discrepancies and or conflicts arise between details and notes the subcontractor is to provide an RFI to the construction manager prior to starting the



scope of work.

- 3.0.3 Drafting Pit – subcontractor to provide all concrete, reinforcement, and accessories for this scope of work. Subcontractor owns installation of items cast in concrete. Waterproofing, misc metals, and earthwork are by other bid packages.
- 3.0.4 The Concrete subcontractor shall reference all Civil and Landscape drawings and details to gain a complete understanding of the work included in this Scope of Work. Because a thorough inspection of all drawings is required, change orders will not be issued for any work missed by this Subcontractor.
- 3.0.5 The Concrete Subcontractor shall assume the responsibility for determining if the site related work subgrade elevations as delivered by others are within a tolerance of plus or minus one tenth (+0.10') of one foot and are in conformance with the information reflected on the drawings. The Construction Manager shall be notified of the acceptance or rejection of these subgrades prior to commencement of this scope of work.
- 3.0.6 Provide a full and complete under slab vapor barrier system and required accessories.
- 3.0.7 Cast-in-Place Concrete Stairs – This work shall include furnishing and installing all concrete stairs. This shall include, but not be limited to, all labor, concrete, reinforcement, compaction of subgrade, installation & compaction of ABC stone, wire mesh, dowels, expansion joints, and stair nosings etc. as required to complete this scope of work. Handrails to be supplied by Miscellaneous Metals Subcontractor.
  - .0.7.1 Stairs in Training Tower and Burn Building may be pre-cast or site cast with approval by the design team. If the subcontractor wishes to proceed with either, please submit a substitution request form before the Pre-bid RFI due date
- 3.0.8 Cast-in-place wall caps – Furnish and install all cast-in-place wall caps and window sills. Reference typical window sill sections and parapet wall details.
  - .0.8.1 If subcontractor wishes to review precast approach, a pre-bid RFI with substitution request form must be submitted and approved by design team prior to bid submission.
- 3.0.9 Concrete Formwork – This Subcontractor shall provide all concrete form work, including but not limited to, concrete forms, rebar templates, construction joints, etc. as required to complete this scope of work.
- 3.0.10 Concrete Finishes – This Work shall include placement and finishing of all concrete furnished and installed as part of this scope of work in accordance with the finish tolerance requirements specified. This includes specified joint details and tolerances for coordination with all scopes.

- 3.0.11 Concrete finishes – This work shall include all slopes, crickets, drip edges, etc. associated with creating the design pitch and drainage for all floor of the Burn Building and Training Tower. Refer to slope and cricket notes on Architectural Floor Plans for Burn Building and Training Tower.
- 3.0.12 Concrete Curing – This Work shall include furnishing and installing specified curing and sealing compounds at all concrete scheduled as part of this Scope of Work.
- 3.0.13 Provide necessary means/plans to account for cold and or hot weather concrete placement.
- 3.0.14 Concrete Reinforcement and Accessories – This Work shall include furnishing and installing a complete concrete reinforcement and accessories system, including but not limited to, all reinforcing steel, Tie wire, bar supports, bar chairs, expansion joint filler and felts, adhesive anchors, etc. as required to complete this scope of work. Provide all dowels in locations where reinforcement is shown in concrete for CMU partitions. BP-04A owns the continuation of the reinforcement in CMU walls.
- 3.0.15 Coordinate Reinforcing placement with all post-installed anchors at guardrails, doors, shutters, scuppers, rope tie-off anchors, and misc metals that fasten into concrete.
- 3.0.16 Cast-in-place concrete subcontractor owns installation of items furnished by other trade packages that are embedded or cast into concrete such as anchor bolts, leveling plates, bearing plates, anchor plates, doorway plates, drainage pipe, etc.
- 3.0.17 This subcontractor owns concrete fill around structural steel after steel has been set and any lean concrete.
- 3.0.18 This subcontractor shall furnish and install concrete caps per the ventilation opening detail
- 3.0.19 Provide proper concrete coverage protection for steel reinforcement as described in table 2 – “Concrete protection for steel reinforcement”
- 3.0.20 All necessary conveyance equipment required to place and finish all concrete shall be provided as part of this Scope of Work.
- 3.0.21 Provide all control joints as required for cast-in-place concrete. Formed and sawcut.
- 3.0.22 Chamfer corners and edges of exposed concrete where indicated.
- 3.0.23 Provide a labor allowance of 100 hours to be used at the discretion of the construction manager. Unused allowance will be credited back to the CM in the form of a deduct change order.
- 3.0.24 The Concrete Subcontractor is responsible for all noise, silica, dust and exhaust control

related to this Scope of Work.

- 3.0.25 Cast-in-place concrete subcontractor shall be responsible for all required fall protection per OSHA and Samet's Safety plan. Subcontractor shall be responsible for installation, maintenance, and removal fall protection railings, toe kicks, and devices at all cast-in-place structures. Slab grabber rail system or similar to be used. Subcontractor shall perform all patching required after removal.
- 3.0.26 This subcontractor shall be responsible for scheduling and coordinating deliveries, etc. with the Construction Manager and the Owner.
- 3.0.27 Subcontractor shall keep and maintain at the jobsite one (1) complete and current set of Contract Drawings, which must be used for the purpose of recording all changes occurring during the construction of this project. Red line as built documents shall be updated weekly as progress occurs. Progress is to be indicated by coloring-in various components of work and associated appurtenances exactly as they are erected. These drawings shall be used to produce the final as-built drawings.
- 3.0.28 Warranty to begin at date of project final completion unless specified otherwise in the contract documents.
- 3.0.29 This Subcontractor as part of the base bid is required to review the contract documents for incomplete design, scope gaps, etc. Each subcontractor shall include in their base bid all items related to their scope of work that can be inferred from the contract documents. Change Orders will not be issued for these items.
- 3.0.30 This Subcontractor shall include all mobilizations as required to complete this scope of work. Subcontractor acknowledges and agrees to comply with the following requirements of the project schedule as part of this scope of work.
- 3.0.31 This Subcontractor is required to attend all weekly Subcontractor meetings. Failure to attend will result in a \$500 fine for each missed meeting.
- 3.0.32 All submittals, close-out documentation, etc. should be submitted via hard copies and electronic copies, as requested by the Construction Manager.
- 3.0.33 If contract documents and scopes of work conflict, the most stringent requirements shall apply and be provided by this Subcontractor.
- 3.0.34 This subcontractor is responsible for Quality Control of their work and or their subcontractor's work and includes providing a punch list toward the end of their scope prior to the Construction Manager punching out the work.
- 3.0.35 This project is based on a mandatory (5) days per week (Monday through Friday), with eight

(8) hour days minimum work week. Additional shifts and weekends being used for make-up days for inclement weather and Holidays. Subcontractors are required and agree to provide adequate manpower and supervision acceptable to the Construction Manager to comply with the Project Schedule.

3.0.36 Coordinate testing requirements according to the statement of special inspections and project documents.

3.0.37 Bids shall reflect the allotted time to complete this scope of work as outlined in the Project Schedule.

3.0.38 This subcontractor shall utilize the onsite concrete washout area for all washout. Sub is responsible for disposal of concrete.

## **7.0 THERMAL AND MOISTURE PROTECTION SCOPE OF WORK DESCRIPTION**

7.0.1 Provide a full and complete expansion/sealant joint system at all locations required for completion of this scope. This work shall include all concrete-to-concrete joints and concrete-to-steel joints.

## **31.0 EARTHWORK SCOPE OF WORK DESCRIPTION**

31.0.1 Graded Aggregate Stone Base - This Work shall include furnishing and installing a graded and compacted aggregate stone base/porous fill underneath concrete as indicated on contract documents.

31.0.2 This Subcontractor shall be responsible all fine grading associated with this scope of work. Inclusive of minor excavation required to form foundations, haunches, ect.

## **39.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

39.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.

39.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.

39.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.

39.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and



has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.

- 39.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 39.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 39.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 39.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 39.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 39.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations.
- 39.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 39.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 39.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the

availability of Samet supervisory coverage may impact this approval process.

- 39.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 39.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 39.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 39.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 39.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 39.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 39.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 39.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 39.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times

during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.

- 39.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 39.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order. If at anytime the manufacturer installation instructions differ from the contract documents, the subcontractor is to bring this to the attention of the Construction Manager prior to installation.
- 39.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 39.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 39.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 39.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 39.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 39.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required.

Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.

39.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

39.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Cast-in-Place Concrete Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
BB1010	Foundations (Burn Building)	10 Days
BB1020	CIP Concrete Structure Complete (slabs, structure ,stairs) -Burn Building	50 Days
A8490	Foundation (Training Tower)	10 Days
A8500	CIP Concrete Structure Complete (slabs, structure ,stairs) – Training Tower	45 Days
A8630	Foundations (Shade Structure)	5 Days
A8620	Foundations and SOG (Covered Storage)	10 Days
A8610	Construct Drafting Pit	30 Days
PC1040	Final Approval – C of O	8/24/2026





—ALLOWANCES—

Allowances shall cover the cost of all materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses associated with stated allowance amounts shall be included in the Subcontract Amount but not in the allowances. Whenever costs are more than or less than an allowance amount, the Subcontract Amount shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances.

ALLOWANCES		
ALLOWANCE NO.	ALLOWANCE DESCRIPTION	AMOUNT

—UNIT PRICES—

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

UNIT PRICES			
UNIT NO.	UNIT PRICE DESCRIPTION	UNIT PRICE	UNIT MEASURE
L1	Laborer Rate		Hour
L2	Carpenter Rate		Hour
L3	Foreman Rate		Hour

—ALTERNATES—

Each alternate designated below has been separated into the following three categories:

- "Accepted" – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- "Pending" – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- "Declined" – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.



ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bond		Pending

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor's bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**03A – CAST-IN-PLACE CONCRETE SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **04A MASONRY SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Masonry** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Masonry Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)</b>	
	<b>Specifications are included on the Drawings</b>
042000	Unit Masonry
042000.01	Unit Masonry Assemblies – Burn Building and Training Tower
079200	Joint Sealants

### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES</b>	
	<b>Specifications are included on the Drawings</b>
00 & 01	All division 00 and 01 specifications
033000	Cast-in-Place Concrete
051200	Structural Steel
055000	Metal Fabrications
055000.01	Metal Fabrications – Burn Building, Training Tower, and Drafting Pit
070001	Thermal Lining System – Burn Building
079200	Joint Sealants
081113	Hollow Metal Doors and Frames

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-04A-MASONRY</b>, per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the Masonry scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All concrete notes/specs and items as it relates to masonry and associated joint sealants and items to be coordinated with other trades.



The Masonry Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Masonry Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

#### **4.0 MASONRY SCOPE OF WORK DESCRIPTION**

- 4.0.1 This Subcontractor's scope of work is for a **"turnkey" Masonry Scope of Work**, generally including but not limited to the following items and as further described herein at all structures.
- A. Concrete Masonry Units (CMU)
  - B. Horizontal and vertical reinforcement
  - C. Grout and mortar fill inside brick and block
  - D. Scaffolding and Hoisting
  - E. Mortar and mixing
  - F. Seismic requirements
  - G. Sample panels and mockups
  - H. Bond Beams/concrete precast lintels
  - I. Integral and applied Water Repellant for Masonry Units and Mortar
  - J. Masonry Sealers
  - K. Masonry Cleaners
- 4.0.2 This Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package

scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal.

- 4.0.3 Unit Masonry - This Work shall include a complete Unit Masonry System, including but not be limited to, shop drawings, scaffolds, material lifts, masonry units, special shapes as required, mortar, colored mortar (if specified), masonry sand, etc., concrete grout fill, horizontal joint reinforcement, adjustable brick wall ties and anchoring devices, control and expansion joints, block sealer, chases, recesses, pockets and openings in masonry to be used for installation by others, through wall flashing material, masonry damp proofing, where specified, associated adhesives, where specified, miscellaneous masonry accessories, tie beams, weeps, special masonry cuts, masonry cleaning at new work, protection of other work and repair, patching, rubbing and pointing of mortar joints and new masonry surfaces at all exposed surfaces to receive paint.
- 4.0.4 This Subcontractor includes shaping, cutting, and sawing of masonry units as required. Provide desired finish/striking of any shaping, cuts, and sawing.
- 4.0.5 Fire Brick – Scope to be provided by trade package 13A
- 4.0.6 Masonry subcontractor to coordinate its work with the Fire Brick Scope (BP-13A) as required by the project documents. This includes any notes and clarifications associated with tolerances, placement, sequencing, and installation of this BP-04A scope.
- 4.0.7 Reinforcement – This Subcontractor shall be responsible for all reinforcement and anchorage associated with, and required by, its Scopes of Work, including but not limited to reinforcing steel, tie spacing, seismic wall brick wall ties, joint reinforcement, wall reinforcement, rebar poisoners, anchors, reinforced hollow unit masonry/bond beams lintels per the Contract Documents.
- 4.0.8 Subcontractor to abide by rebar locations/positions as called out in the project documents.
- 4.0.9 Subcontractor shall coordinate all Items by others that are installed into masonry such as access doors, door frames, anchors, sleeves and inserts to be embedded into masonry, leveling plates, misc metals, metal shutters, steel doors, scuppers. etc..
- 4.0.10 Furnished by others, installed by BP-04A Masonry
  - .0.10.1 Hollow Metal Door Frames – Furnished by BP-08A – Mason owns a complete installation of all hollow metal door frames and grouting of frames where required.
  - .0.10.2 Structural Steel Leveling plates/bearing plates in masonry – Furnished by BP-05A – Mason owns installation of bearing plates and grouting installed in masonry. Welding by BP-05A
- 4.0.11 Precast Masonry – This Work shall include furnishing and installation of all Precast

Masonry, including but not limited to, precast concrete lintels, and refractory concrete lintels.

- 4.0.12 The Masonry Subcontractor shall be responsible for furnishing and installing all reinforcing steel dowels in existing footings and slabs. These dowels shall be of the size indicated by wall type and be embedded as required into existing footings and epoxy grouted in place or installed per plans and specifications. Follow manufacturer instructions for proper installation of epoxy. Reference plans for locations and installation of dowels.
- 4.0.13 The Masonry Subcontractor shall include patching around all piping, ductwork, conduits, and penetrations through masonry as required.
- 4.0.14 Weather Protection - The Masonry Subcontractor shall provide hot and cold-weather protection following Masonry Industry Standards. Further, this Subcontractor shall protect on-site materials from adverse weather conditions whether the materials are installed or otherwise. Material installed each day must be protected at the end of each day. Any material supplied and installed under this Scope of Work damaged by weather from a failure by this Subcontractor to protect their Work shall be replaced at no cost to the Construction Manager or Owner. This Subcontractor is responsible for the services of a professional engineer where required by specification or for means and methods related to this Subcontractor's scope of work.
- 4.0.15 This Subcontractor shall be responsible for all layout associated with this scope of work from a single N/S and E/W Control line for each building area.
- 4.0.16 This Subcontractor shall protect all floors, walls, adjacent surfaces during its work. It is understood this subcontractor shall be responsible for cleanup including removing all motor drips and splashes timely to not allow them to cure onto other unintended surfaces.
- 4.0.17 This Subcontractor includes the required tooling or finishing of joints.
- 4.0.18 Subcontractor shall furnish and install all compressible joint fillers, preformed control-joint gaskets, and bond breakers where required as per the contract documents.
- 4.0.19 Masonry Cleaning – This Work shall include providing Masonry Cleaning by washing and cleaning all items installed under this Scope of Work and adjacent dissimilar materials (i.e., aluminum glazed framing components, including windows, etc., hollow metal door/window frames, metal stairs, etc. before the finish trades, etc. starting their work), including but not be limited to, removal of dirt, stains, mortar splatter, droppings, etc. Cleaning materials used shall be compatible with the masonry materials and finishes so that the appearance, color, etc. of masonry work and the adjoining surfaces are not compromised. Areas shall be ready to receive finish paint, wall covering, sealer, etc. as

specified.

- 4.0.20 Masonry Subcontractor is responsible for providing all access required to complete this scope of work such as but not limited to scaffolding, staging, lifts, ect.
- 4.0.21 This Subcontractor includes maintaining a competent person appropriately trained for any scaffold system being used to be on-site during hours the scaffolding is in use and is responsible to maintain appropriate tagging of scaffold systems.
- 4.0.22 This Subcontractor shall provide temporary bracing and shoring of all walls as necessary and shall comply with all applicable Building Codes, OSHA regulations and ANSI standards.
- 4.0.23 Masonry subcontractor shall be responsible for all required fall protection as required per OSHA and Samet's Safety plan. Subcontractor shall be responsible for installation, maintenance, and removal of fall protection. Subcontractor to install all fall protection at exterior openings created by subcontractor such as shutters and doors. Toe kick, mid-rail, and top-rail. Subcontractor to perform any required patching of CMU and concrete required after removal.
- 4.0.24 This subcontractor shall be responsible for scheduling and coordinating deliveries, etc. with the Construction Manager and the Owner.
- 4.0.25 Warranty to begin at date of project final completion unless specified otherwise in the contract documents.
- 4.0.26 This Subcontractor as part of the base bid is required to review the contract documents for incomplete design, scope gaps, etc. Each subcontractor shall include in their base bid all items related to their scope of work that can be inferred from the contract documents. Change Orders will not be issued for these items.
- 4.0.27 This Subcontractor shall include all mobilizations as required to complete this scope of work. Subcontractor acknowledges and agrees to comply with the following requirements of the project schedule as part of this scope of work.
- 4.0.28 This Subcontractor is required to attend all weekly Subcontractor meetings. Failure to attend will result in a \$500 fine for each missed meeting.
- 4.0.29 All submittals, close-out documentation, etc. should be submitted via hard copies and electronic copies, as requested by the Construction Manager.
- 4.0.30 If contract documents and scopes of work conflict, the most stringent requirements shall apply and be provided by this Subcontractor.



- 4.0.31 This subcontractor is responsible for Quality Control of their work and or their subcontractor's work and includes providing a punch list toward the end of their scope prior to the Construction Manager punching out the work.
- 4.0.32 This project is based on a mandatory (5) days per week (Monday through Friday), with eight (8) hour days minimum work week. Additional shifts and weekends being used for make-up days for inclement weather and Holidays. Subcontractors are required and agree to provide adequate manpower and supervision acceptable to the Construction Manager to comply with the Project Schedule.
- 4.0.33 Coordinate testing requirements according to the statement of special inspections and project documents.

## **7.0 THERMAL AND MOISTURE PROTECTION SCOPE OF WORK DESCRIPTION**

- 7.0.1 Provide a full and complete expansion/sealant joint system at all locations required for completion of this scope. This work shall include all masonry-to-masonry joints, masonry-to-concrete joints and masonry-to-steel joints.

## **39.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 39.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 39.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 39.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.
- 39.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.
- 39.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.

- 39.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 39.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 39.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 39.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 39.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 39.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 39.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 39.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.
- 39.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 39.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for

daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.

- 39.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 39.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 39.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 39.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 39.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 39.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 39.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.
- 39.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack

of coordination in performing their respective scopes of work.

- 39.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 39.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 39.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 39.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 39.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 39.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 39.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.
- 39.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.
- 39.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.



**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Masonry Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

<b>SCHEDULE MILESTONE TABLE</b>		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
BB1040	CMU Exterior Walls (Burn Building)	35 days
BB1080	CMU Interior Walls (Burn Building)	40 days
A8510	Exterior and Interior CMU Walls (training Tower)	45 days
PC1040	Final Approval – C of O	8/24/2026

**—ALLOWANCES—**

Allowances shall cover the cost of all materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses associated with stated allowance amounts shall be included in the Subcontract Amount but not in the allowances. Whenever costs are more than or less than an allowance amount, the Subcontract Amount shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances.

<b>ALLOWANCES</b>		
ALLOWANCE NO.	ALLOWANCE DESCRIPTION	AMOUNT

**—UNIT PRICES—**

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

<b>UNIT PRICES</b>			
UNIT NO.	UNIT PRICE DESCRIPTION	UNIT PRICE	UNIT MEASURE
L1	Laborer Rate		Hour
L2	Mason Rate		
L3	Foreman Rate		



—ALTERNATES—

Each alternate designated below has been separated into the following three categories:

- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bond		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor’s bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**04A MASONRY SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **05A STRUCTURAL & METAL FABRICATIONS SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Structural Steel & Metal Fabrications** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Structural Steel & Metal Fabrications Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)</b>	
	<b>Specifications are included on the Drawings</b>
051200	Structural Steel
052100	Steel Joist Framing
053100	Steel Decking
055000	Steel Fabrications
055000.01	Metal Fabrication – Burn Building, Training Tower, and Drafting Pit

### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES</b>	
	<b>Specifications are included on the Drawings</b>
033000	Cast-in-Place Concrete
042000	Unit Masonry
042000.01	Unit Masonry Assemblies – Burn Building and Training Tower
054000	Cold-Formed Metal Framing
061600	Sheathing
072100	Thermal Insulation
074113	Standing-Seam Metal Roof Panels
074293	Metal Soffit Panels
076200	Sheet Metal Flashing and Trim
070001	Thermal Lining System – Burn Building

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-05A-Structural Steel &amp; Metal Fabrications</b> per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the Structural Steel & Metal Fabrications scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All notes/specs and items as it relates to Structural Steel & Metal Fabrications and items to be coordinated with other trades.



### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
N/A	All Drawings	For coordination with this Scope of Work. If discrepancies exist between the sets, the most stringent details shall apply.

The Structural & Miscellaneous Steel Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Structural Steel & Metal Fabrications Subcontractor is responsible for all work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

## **5.0 METALS SCOPE OF WORK DESCRIPTION**

- 5.0.1 This Subcontractor shall furnish all labor, supervision, scaffolding, transportation, welding, and tools necessary to complete the installation of **BP-05A-STRUCTURAL STEEL & METAL FABRICATIONS** at all structures and locations.
- a) Burn Building
  - b) Training Tower
  - c) Shade Structure
  - d) Covered Storage
  - e) Drafting Pit

- 5.0.2 This Subcontractor shall coordinate, detail, fabricate, furnish, schedule, deliver, unload, inventory, stage, rig, hoist, fasten, frame, galvanize, level, mock-up, weld, finish, cut, install, all structural steel consisting of, but not limited to all structural steel framing, steel columns, posts, beams, joists, bracing, canopy steel, girt framing, embeds, anchor bolts, base plates, edge angles, shelf angles, louver angles, closure plates, framed openings, structural steel, , metal deck and edge angles, CMU wall bracing, overhead door framing, overhead door embeds, CMU support angles and lintels, brick lintels, roof tie-back embeds, roof anchor embeds, in-wall steel support framing, embeds as required, and all structural and miscellaneous items outlined in the Contract Documents.
- 5.0.3 Should Subcontractor elect to Subcontract the Erection of Structural Steel Framing, the Erector is subject to review and approval by Contractor. Rejection of any Erection Subcontractor by Contractor will not result in any additional compensation.
- 5.0.4 The Subcontractor is required to submit a detailed schedule for the entire scope of the contract, including shop drawings, mill order delivery, fabrication, delivery and erection within Ten (10) days of written notice to proceed. This schedule is to be updated and submitted to the Contractor every two weeks throughout the performance duration.
- 5.0.5 The Subcontractor shall submit a written erection plan to the Contractor for review and approval no later than (6) weeks after LOI or approval of shop drawings, whichever comes first. This plan must include the erection sequence and serve as the basis for organization of the detailing, fabrication, and erection of the project. The plan must also include the number of cranes, size and reach of each crane and the crane locations for erection of each part of the sequence. The erection plan shall indicate the necessary pad levelness, and exact crane path through erection.
- 5.0.6 The Subcontractor shall submit calculations stamped and sealed by a registered professional engineer licensed in the State of North Carolina.
- 5.0.7 Subcontractor shall furnish and install all leveling nuts, leveling plates, and shims as required.
- 5.0.8 The Subcontractor shall survey all anchor bolts, embeds, and leveling plates and must notify the Contractor of any discrepancies at least within 7 days of concrete pour and no less than 7 days prior to the start of steel erection.
- 5.0.9 The Subcontract includes all cutting, drilling, punching, and reaming required for the completion of this work. Reinforcing of holes must be in accordance with the structural steel drawings.
- 5.0.10 The Subcontractor shall include reinforced and un-reinforced beam penetrations as shown on the structural steel drawings. All penetrations shall be shop fabricated.

- 5.0.11 The Subcontractor shall furnish and install all guying, bracing, and shoring required to complete the work and maintain the structure true and plum throughout erection.
- 5.0.12 Subcontractor has included all falsework, scaffolding, engineering, temporary shoring and bracing, support members, erection angles, cables, loose hardware, embeds, welding, drilling, and anchors necessary to support framing members during erection. Any and all patchwork required, as a result of temporary systems utilized, which is associated with the erection of this Scope of Work shall be the responsibility of this Subcontractor.
- 5.0.13 The Subcontractor shall supply an as-built set of erection drawings, which note any and all changes made in the field.
- 5.0.14 On site testing shall be by others. Shop testing shall be by others; however, this Subcontractor shall coordinate and accommodate agents testing shop welds. Any re-testing required as a result of this Subcontractor's work not being in conformance with the project contract documents, shall be done at the expense of this Subcontractor. This Subcontractor shall coordinate with the testing agencies as specified and shall provide and assist in access for the testing agents to complete their work as it pertains to the inspection of work in this Subcontract.
- 5.0.15 Subcontractor shall be responsible for providing safe access for the testing agency and Engineer of Record to the Work being fabricated, stored, or erected so that required inspection and testing may be accomplished. It is understood and agreed that any Work under this Scope found to be in non-compliance shall be corrected and re-tested at no cost to the Contractor and/or Owner.
- 5.0.16 Provide openings in steel and metal deck to accommodate mechanical, electrical, plumbing and fire protection penetrations. Provide reinforcement of steel where necessary. Compare PME drawings vs. Architectural & Structural Drawings that reflect openings, include the greater quantity of openings if there is a discrepancy. Provide edge angle at metal deck openings where necessary.
- 5.0.17 This Subcontractor shall furnish and turn over to the Concrete and Masonry Subcontractor all embedded plates, anchor bolts, anchor bolt washers, and nuts as required per the contract drawings. The embed plates supplied by the subcontractor shall be fitted with holes to facilitate fastening. The Subcontractor shall turn over all of these items when required to meet the schedule. All post applied items shall be installed by BP-05A. This subcontractor shall survey all items furnished by BP-05A and installed by others such as the items listed above and within this scope of work. This subcontractor shall perform all required welding.
- 5.0.18 This subcontractor shall furnish and install-(unless installation is noted by others) the metal fabrications scope included but not limited to;

- a) Stair towers and all metal fabrications associated with them for a full and complete installation
- b) Metal Stairs and landings in their entirety
- c) All handrails/railings
- d) All guardrails and associated gates
- e) Guardrail Gates
- f) Steel Grating
- g) Steel framing and supports for counter tops
- h) Steel framing and supports for MEPS
- i) Metal Ladders at all locations
- j) Lintels (installed by BP-04A)
- k) All Misc steel trim and joint closure plates at steel, concrete, and masonry
- l) All CMU top of wall and brace clips, supports, and angles
- m) Scuppers at all areas
- n) SS drain piping/weep piping in cast in place concrete slabs (install by BP-03A)
- o) Sleeves cast in concrete and masonry
- p) Burn Racks
- q) Debris Chute in its entirety (Cast embeds furnished to BP-03A and BP-04A. Post installed embeds installed by BP-05A)
- r) Window Shutters and Swing Windows and associated parts for a full system (interior and exterior)
- s) Steel Doors and associated parts for a full system (interior and exterior)
- t) Cast Doorway Weld Plates and door thresholds
- u) Attic Access Hatch
- v) Access Ladders
- w) Ladder Tie offs
- x) Sheet Rock Pulldown Prop
- y) Rope Frames
- z) Rope Tie-Offs
- aa) Rope Anchors
- bb) Rope protection Bent Plate
- cc) Ventilation Opening
- dd) Parapet Wall Supports
- ee) Bent Rod at Parapets
- ff) Elevator Door Support Sill
- gg) Elevator Fall protection gate with all connections/hardware
- hh) Halligan Spike Pipe
- ii) Rope Gantry Frame and Gantry Rope Anchor
- jj) Manhole and assembly
- kk) Breach Wall in its entirety
- ll) Metal Fabrications in Drafting Pit

5.0.19 The following is furnished and installed by other bid packages

1. Exterior Bollards



2. Entrance Gates to site

**17.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 17.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 17.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 17.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.
- 17.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.
- 17.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 17.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 17.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 17.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.

- 17.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 17.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 17.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 17.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 17.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.
- 17.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 17.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 17.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 17.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet

staff upon arrival to the site.

- 17.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 17.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 17.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 17.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 17.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.
- 17.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 17.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 17.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 17.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work

shall provide its own temporary lighting at its own expense.

- 17.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 17.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 17.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 17.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.
- 17.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.
- 17.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.



**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Structural & Miscellaneous Steel Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

<b>SCHEDULE MILESTONE TABLE</b>		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
BB1060	Install Star Tower (Burn Building)	15 Days
BB1070	Install Steel Plate Windows and Doors (Burn Building)	15 Days
BB1100	Install Interior Doors and Misc Metals (Burn Building)	20 Days
BB1110	Install Debris Chute (Burn Building)	5 Days
A8530	Install Star Tower and Roof Guard Rail (Training Tower)	20 Days
A8800	2 <sup>nd</sup> Floor Steel Grating Walkway (Training Tower)	5 days
A8810	Install Steel Plate Windows and Doors (Training Tower)	8 Days
A8840	Install Interior Doors and Misc Metals (Training Tower)	20 days
A8830	Install Roof Level Misc Metals	5 Days
A8650	Structural Steel (Shade Structure)	3 Days
A8770	Covered Storage Steel and Decking	10 Days
PC1040	Final Approval – C of O	8/24/2026

**—ALLOWANCES—**

Allowances shall cover the cost of all materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses associated with stated allowance amounts shall be included in the Subcontract Amount but not in the allowances. Whenever costs are more than or less than an allowance amount, the Subcontract Amount shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances.

<b>ALLOWANCES</b>		
ALLOWANCE NO.	ALLOWANCE DESCRIPTION	AMOUNT



**—UNIT PRICES—**

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

UNIT PRICES			
UNIT NO.	UNIT PRICE DESCRIPTION	UNIT PRICE	UNIT MEASURE
L1	Iron Worker Rate		hour
L2	Foreman Rate		hour

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- "Accepted" – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- "Pending" – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- "Declined" – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bond		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor's bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**05A STRUCTURAL & MISCELLANEOUS STEEL SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **07A WATERPROOFING SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Waterproofing** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Waterproofing & Expansion Joints Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)</b>	
	<b>Specifications are included on the Drawings</b>
<b>0 &amp; 1</b>	<b>All division 00 and 01 specifications</b>



### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES</b>	
	<b>Specifications are included on the Drawings</b>
079200	Joint Sealants
033000	Cast-In-Place Concrete
033000.01	Cast-in-place Concrete – Burn Building, Training Tower, and Drafting Pit
042000	Unit Masonry
042000.01	Unit Masonry Assemblies – Burn Building, Training Tower, and Drafting Pit

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
DP001	Drafting Pit – General Notes	Polymer-Modified Cement Waterproofing
DP100	Drafting Pit – Plans & Sections	
All Drawings	All Drawings	

The Waterproofing & Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Waterproofing Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope

is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

## **7.0     THERMAL AND MOISTURE PROTECTION SCOPE OF WORK DESCRIPTION**

- 7.0.1    Furnish & install all Polymer-modified cement waterproofing as designated in the contract documents.
- 7.0.2    Dampproofing and/or waterproofing shall be installed at all locations below/at/above grade as designated in the contract documents.
- 7.0.3    Includes proper preparation of surfaces to receive dampproofing and/or waterproofing, including but not limited to: cleaning, chipping, grinding, etc.
- 7.0.4    Includes proper installation and preparation ahead of materials installed atop membranes, including but not limited to drainage mats, topping slabs, etc.
- 7.0.5    Includes all necessary membrane flashings and or accessories as required for a total system.
- 7.0.6    Includes all protection board, rigid insulation, accessories, etc. as required for a complete dampproofing and/or waterproofing system.
- 7.0.7    Includes all membranes as specified in the project documents and/or for a complete waterproofing system.
- 7.0.8    Coordination and testing as required by project documents, local authority having jurisdiction, and/or 3rd-party testing agency. Note it is the responsibility of the trade partner to satisfy the requirements set forth by the project documents as well as those prescribed by the LAHJ or representatives of 3rd-party testing agency including but not limited to: application methods, product storage requirements, mils testing, etc.
- 7.0.9    Documentation of work: it is the responsibility of the trade partner to properly document storage, handling, installation/application, and completion of this scope, to include digital documentation of installed materials prior to backfilling.
- 7.0.10   It is the responsibility of the trade partner to provide letters of confirmation on company letterhead indicating proper installation of products should these be requested by the Samet project team, project owners, LAHJ, 3rd-party testing agencies, or any other interested party as approved by the Samet project team.

- 7.0.11 Materials that must be removed/replaced as a result of deficient/missing dampproofing and/or waterproofing will be rectified at the expense of the trade partner.
- 7.0.12 Furnish and install related accessories including, but not limited to, fasteners, sealants, adhesives, backboard, backer rod, flashings, drainage boards, termination bars, cant strips, protection boards, etc. for all systems under this agreement per manufacturers recommendations and as specified in the project documents.
- 7.0.13 Furnish and Install dampproofing/water-proofing as specified in the project documents.
- 7.0.14 Provide inspection and moisture testing of substrate to receive waterproofing.
- 7.0.15 Clean and prep all surfaces to ensure proper adhesion. Provide pull test and report for verification.
- 7.0.16 Apply or install bond breakers where adhesion is not desirable.
- 7.0.17 Provide full-size samples in mock-up panels of all materials until all required colors are accepted. Color will be approved by owner on mock-up.
- 7.0.18 Protect all installed material until properly cured.
- 7.0.19 Install materials according to manufacturer's recommendations.
- 7.0.20 Provide all necessary manufacturer inspections/certifications.

## 17.0 **SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 17.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 17.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 17.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.

- 17.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.
- 17.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 17.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 17.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 17.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 17.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 17.0.10 Provide written confirmation from the caulking and sealant manufacturer, that all materials that come into contact with adjacent caulking materials, including materials provided by other Subcontractors, are compatible. Failure to provide this in a timely manner may affect the payments made to this Subcontractor.
- 17.0.11 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 17.0.12 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 17.0.13 It is understood there may be utilities (new or existing), equipment, or other trades



potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.

- 17.0.14 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of General Contractor supervisory coverage may impact this approval process.
- 17.0.15 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 17.0.16 While completing this Subcontractor's Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 17.0.17 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.18 This Subcontractor shall submit SDS forms before beginning work.
- 17.0.19 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.20 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 17.0.21 This Subcontractor shall complete all required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 17.0.22 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 17.0.23 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to

meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.

- 17.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.
- 17.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 17.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 17.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 17.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 17.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 17.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 17.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 17.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or

County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.

17.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

17.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Waterproofing Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
PC1040	Final Approval – C of O	8/24/2026

**—UNIT PRICES—**

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

UNIT PRICES			
UNIT NO.	UNIT PRICE DESCRIPTION	UNIT PRICE	UNIT MEASURE
L1	Laborer Rate		Hour
L2	Foreman Rate		Hour

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:



- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
  - “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bonds		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor’s bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**07A WATERPROOFING SUBCONTRACT**



## **TRADE PACKAGE SCOPE OF WORK**

### **07C METAL PANELS AND METAL ROOFING SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Metal Panels and Metal Roofing** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Metal Panels and Metal Roofing Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)</b>	
	<b>Specifications are included on the Drawings</b>
072100	Thermal Insulation
074113	Standing-Seam Metal Roof Panels
074293	Soffit Panels
076200	Sheet Metal Flashing and Trim
079200	Joint Sealants

### Primary Responsibility

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)		
DRAWING NO.	DRAWING NAME	SPECIFIC ITEM
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-07C Metal Panels and Metal Roofing</b>, per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the Metal panels & Metal Roofing scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All concrete notes/specs and items as it relates to metal panels and metal roofing and items to be coordinated with other trades.

The Metal Panels and Metal Roofing Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Cast in Place Concrete Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an

item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

## **7.0 THERMAL AND MOISTURE PROTECTION SCOPE OF WORK DESCRIPTION**

- 7.0.1 This Subcontractor shall furnish all labor, supervision, scaffolding, transportation, and tools/equipment necessary to complete the installation of **BP-07C Metal Panels and Metal Roofing**.
- 7.0.2 This Trade Contractor is responsible to provide all roofing materials required from the top of metal deck to finished roofing. Included but not limited to metal panels/roof, insulation, vapor barrier, trim, flashing, caps, subframing, waterproofing, accessories, gutters, downspouts, joint sealants, etc.
- 7.0.3 Subcontractor to provide architectural corrugated metal wall panels, painted to match roof panels.
- 7.0.4 Roof blocking to be performed by BP-09A. All other required backing plates, fastening needs, attachments, etc. to be performed by BP-07C
- 7.0.5 This Subcontractor shall furnish the necessary access panels for items of Work installed under this Subcontract. This Subcontractor is responsible for the proper location of access panels installed for this scope of work.
- 7.0.6 Provide all shimming or furring as required for this scope of work using concealed shims.
- 7.0.7 Provide flashing and sealant required for a complete system and coordinated with all other trades
- 7.0.8 This Subcontractor shall be responsible for performing all necessary field measurements to ensure proper installation of this scope of work. Samet Corporation will not provide any measurements or verification of field dimensions.
- 7.0.9 This Subcontractor is responsible for all layout associated with this scope of work. Contractor to provide control points (centerlines of corridors and finished floor elevations). Subcontractor shall verify the established control points and benchmarks and notify the Contractor of all discrepancies prior to the commencement of this scope of work. Maintain carefully the integrity of all benchmark, monuments, and other reference points. If disturbed or destroyed, replace as directed. If found at variance with drawings, notify Samet Corporation site Superintendent before proceeding to lay-out work.

- 7.0.10 Subcontractor shall make all suitable preparations for the installation of his Work including all piping, sleeves, miscellaneous items, conduit, hangers, inserts, anchors, grounds and supports that are to be embedded in concrete, masonry walls, floors, partitions or structural members or that are to pass through or be attached thereto.
- 7.0.11 This Subcontractor shall be responsible for providing all fasteners (exposed and/or concealed as directed) as required to complete this scope of work, including bolts, nails, screws and toggle bolts. Provide all applicable sealants, caulking and fire stopping integral with this Subcontractor's work; it is the responsibility of this Subcontractor to maintain all fire ratings. Provide all core drilling, cutting, and patching as required for completion of this Subcontractor's work. Include restoration of surfaces to original condition if required; any work damaged by this Subcontractor's actions will be the responsibility of this Subcontractor for repair. Cutting to be performed as to minimize patching. Provide adequate temporary protection of adjacent work and removal of same following the completion of this scope of work in the area affected. This Subcontractor shall submit to Samet Corporation a coring plan/penetration for review and approval prior to any cutting. All hollow core cells must be sealed upon completion of the coring and cutting by this Subcontractor. If cutting is required in a post-tensioned assembly this Subcontractor is responsible for any cost associated with X-Ray and/or cutting of cables.
- 7.0.12 All flashings and facias used in connection with such metal roof and wall panel or cladding systems to perform waterproof inspections of horizontal and vertical surfaces.
- 7.0.13 All sealing and caulking of seams and joints on these metal roof and wall panel systems to ensure weather tightness.
- 7.0.14 All protective coatings applied to metal roofing and wall panel systems.
- 7.0.15 All insulations applied with roof and wall systems, as described, whether laid dry, mechanically fastened or attached with adhesives.
- 7.0.16 All forms of composite insulations having available surfaces (e.g. plywood, pressboard, chipboard, drywall, or other laminates) bonded to the insulations wherever such composite insulations are used as an integral thermal insulation component of the roofing system.
- 7.0.17 All vapor barriers applied with metal roof and wall panel systems.
- 7.0.18 This Trade Contractor is responsible for all other items, materials, equipment, and hardware either inferred, connected, or interrelated which is required to complete such work function for its intended use and purpose regardless of whether or not such items, materials, equipment, hardware, or requirements are specifically expressed or detailed above/within.



7.0.19 All cleaning, preparing, priming and sealing of surfaces to be installed.

## 17.0 **SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 17.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 17.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 17.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.
- 17.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.
- 17.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 17.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 17.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 17.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 17.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.

- 17.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 17.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 17.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 17.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.
- 17.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 17.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 17.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 17.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 17.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am.

Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.

- 17.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 17.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 17.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 17.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.
- 17.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 17.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 17.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 17.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 17.0.29 All stored materials must be protected from moisture, temperature, weather elements,

theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.

17.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.

17.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.

17.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.

17.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

17.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Metal Panels and Metal Roofing Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
A8780	Roofing and Metal Panels (covered Storage)	10 Days
A8670	Metal Roofing (Shade Structure)	5 days
PC1040	Final Approval – C of O	8/24/2026





**—UNIT PRICES—**

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

UNIT PRICES			
UNIT NO.	UNIT PRICE DESCRIPTION	UNIT PRICE	UNIT MEASURE
L1	Labor Rate		Hour
L2	Roofer Rate		Hour
L3	Foreman Rate		Hour

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- "Accepted" – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- "Pending" – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- "Declined" – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bond		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor's bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**

**TRADE PACKAGE SCOPE OF WORK:**

**07C METAL PANELS AND METAL ROOFING SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **08A DOORS, FRAMES, & HARDWARE SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Doors, Frames, & Hardware** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.

Project Specifications for the Doors, Frames, & Hardware Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 00 & 01 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

DIVISION 1 – GENERAL REQUIREMENTS	
GC Req.	General Requirements Manual
GC Req.	Trade Package Scope Manual
GC Req.	Trade Package General Scope Requirements

### **Primary Responsibility**

This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.

PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)	
	Specifications are included on the Drawings
081113	Hollow Metal Doors and Frames
087100	Door Hardware



### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES</b>	
	<b>Specifications are included on the Drawings</b>
033000	Cast-in-Place Concrete
042000	Unit Masonry
054000	Cold-Formed Metal Framing
061600	Sheathing
092216	Non-Structural Metal Framing
092900	Gypsum Board
096726	Resinous Flooring
099113	Exterior Painting
099123	Interior Painting
102600	Wall and Door Protection

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-08A Doors, Frames, and Hardware</b> per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the Doors, Frames, and Hardware scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All notes/specs and items as it relates to Doors, Frames, and Hardware and items to be coordinated with other trades.
A001	Wall, Door, Louver Types & Signage	
BB604	Burn Building – Typical Steel Plate Door Details	



BB605	Burn Building – Double Steel Plate Door Details	
TT603	Training Tower – Door Details and Schedules	

The Doors, Frames, & Hardware Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Doors, Frames, and Hardware Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise.

## **8.0 OPENINGS SCOPE OF WORK DESCRIPTION**

- 8.0.1 Provide a "turnkey" Doors, Frames & Hardware Scope of Work.
- 8.0.2 This Subcontractor's scope of work is for complete and fully operable Door, Frames & Hardware System(s), generally including but not limited to the following items and as further described herein.
  - a) Hollow Metal Doors & Frames at all structures
  - b) Access Doors & Frames
  - c) Door Hardware
- 8.0.3 Heavy duty plate steel doors in training tower and burn building to be furnish and installed by BP-05A.
- 8.0.4 This Subcontractor shall furnish and install all doors, and hardware in this Scope of Work.. Install complete door system for a fully functioning opening that meets all applicable UL ratings, and codes including ADA. All doors shall have required rating labels. Proper operation will be the responsibility of this subcontractor. Installation of hollow metal frames



in CMU will be by BP-04A and frames installed in metal framing will be by 09A.

- 8.0.5 Door frames furnished by this Subcontractor shall be set and plumbed by others. This Subcontractor will inspect all frames in each work area no less than One (1) week prior to hanging doors and provide a written list of required corrective issues, if any. If this Subcontractor installs the door and it is later determined that corrections to the frame are required for proper functioning or code compliance, removal and reinstallation of the door/hardware is this Subcontractors responsibility.
- 8.0.6 This Subcontractor shall furnish and install all required hardware per the Contract Documents and Authorities Having Jurisdiction, whether or not specifically detailed. This includes, but shall not be limited to hinges, spring hinges, door closers (where required), handle sets, lever sets, panic bars, keyed locks (where required), deadbolts, coordinators, silencers, door stops, hold opens, kick plates, etc. Proper operation of door hardware shall be the responsibility of this trade.
- 8.0.7 Subcontractor shall clearly mark frames with opening number as shown on contract documents.
- 8.0.8 This Subcontractor shall prepare doors and frames for access control and electrical devices as required and as directed by Samet Corporation.
- 8.0.9 This subcontractor shall make multiple delivery trips, at a minimum by area and floors.

## **17.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 17.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 17.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 17.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.
- 17.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.
- 17.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality

control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.

- 17.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 17.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 17.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 17.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 17.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 17.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 17.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 17.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.
- 17.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base

proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.

- 17.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 17.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 17.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 17.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 17.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 17.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 17.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 17.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.

- 17.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 17.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 17.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 17.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 17.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 17.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 17.0.31 This Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 17.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to ensure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.
- 17.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractors' work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.



17.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Doors, Frames, and Hardware Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

<b>SCHEDULE MILESTONE TABLE</b>		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
A8840	Install interior Doors and Interior Misc Metals	10 days
PC1040	Final Approval – C of O	8/24/2026

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

<b>ALTERNATES</b>			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bond		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor’s bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.



**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**08A DOORS, FRAMES, & HARDWARE SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **08D – OVERHEAD DOORS SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Overhead Doors** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Overhead Doors Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

DIVISION 1 – GENERAL REQUIREMENTS	
GC Req.	General Requirements Manual
GC Req.	Trade Package Scope Manual
GC Req.	Trade Package General Scope Requirements

### **Primary Responsibility**

This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.

PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)	
	Specifications are included on the Drawings

### **Secondary Responsibility**

This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.

SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES	
	Specifications are included on the Drawings

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-08D Overhead Doors</b>, per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the Overhead Door scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All notes/specs and items as it relates to overhead doors and items to be coordinated with other trades.
TT201	TRAINING TOWER – FIRST & SECOND FLOOR PLANS	<p>Detail 1, note G</p> <p>Detail 1, note 7</p>
TT603	TRAINING TOWER – DOOR DETAILS AND SCHEDULE	<p>Detail 1</p> <p>Door Schedule, Note 8</p> <p>Door Schedule, Note 9</p>

### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>

The Overhead Doors Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.



This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Overhead Doors Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise.

## **8.0 OPENINGS SCOPE OF WORK DESCRIPTION**

- 8.0.1 This Subcontractor shall furnish and install all Overhead Coiling Doors in accordance with all Contract Documents. This Work shall include all overhead coiling doors, guides, hoods, operators, motors, controls, locking devices, weather stripping, safety sensors, bottom bars, brackets, etc. as required.
- 8.0.2 This Subcontractor shall furnish and install all required supports for Work under this Scope, including but not limited to anchor bolts, hangers, isolators, channels, angles, embeds, miscellaneous tubes, plates, or any other engineered support required to provide for a complete and operating system.
- 8.0.3 This Subcontractor shall verify rough opening sizes before installation and validate with the General Contractor.

## **17.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 17.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 17.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 17.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.
- 17.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.



- 17.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 17.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 17.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 17.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 17.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 17.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 17.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 17.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 17.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.



- 17.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 17.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 17.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 17.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 17.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 17.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 17.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 17.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 17.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the

Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.

- 17.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 17.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 17.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 17.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 17.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 17.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 17.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 17.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.
- 17.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing



conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

17.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Overhead Doors Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
PC1040	Final Approval – C of O	8/24/2026

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bonds		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:



Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor's bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**08D OVERHEAD DOORS SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **09A DRYWALL, METAL FRAMING, & INSULATION SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Drywall, Metal Framing, & Insulation** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Drywall, Metal Framing, & Insulation Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 00 & 01 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)</b>	
	<b>Specifications are included on the Drawings</b>
054000	Cold-Formed Metal Framing
061053	Miscellaneous Rough Carpentry
061600	Sheathing
072100	Thermal Insulation
079200	Joint Sealants



092216	Non-structural Metal Framing
092900	Gypsum Board
099659	Fiberglass Mat Reinforced Wall Coating System

#### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES</b>	
	<b>Specifications are included on the Drawings</b>
042000	Unit Masonry
042000.01	Unit Masonry Assemblies – Burn Building and Training Tower
076200	Sheet metal Flashing and Trim

#### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-09A Drywall, Metal Framing, and Insulation</b>, per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the drywall, framing, and insulation scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All notes/specs and items as it relates to drywall, framing, and insulation and items to be coordinated with other trades.

The Drywall, Metal Framing, & Insulation Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their



entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Drywall, Metal Framing, & Insulation Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

## **5.0 COLD-FORMED METAL FRAMING**

- 5.0.1 Cold Formed Metal Framing – This Work shall include providing and installing a complete Cold Formed Metal Framing system including but not be limited to, all engineered shop drawings, light gauge structural steel studs with design load and structural analysis data signed and sealed by a qualified professional engineer (who is legally qualified to practice in the jurisdiction where the project is located), non-load bearing structural end wall steel stud framing, light and heavy gauge steel studs, steel track, single deflection steel track, metal stud x bracing, bridging, blocking, etc., framing accessories, anchor bolts, expansion anchors, power actuated anchors, mechanical fasteners, clips, galvanizing touch up paint where required, light gauge steel hat and/or furred channels, cold rolled steel channels, miscellaneous light gauge steel components, closure angle at doors and windows, etc. to complete all cold formed metal framing work designated within the Contract Documents.

## **6.0 ROUGH CARPENTRY AND SHEATHING**

- 6.0.1 Interior In-wall Blocking- This subcontractor shall provide/coordinate any required in wall blocking needed unless noted otherwise. This subcontractor shall provide layout for all materials being furnished or provided in this Scope of Work. Layout shall comply with manufacturer's recommendations for mounting and all applicable codes. This subcontractor is responsible to field verify all blocking prior to wall close-in. Any missed blocking and resultant patching of adjacent surfaces is the responsibility of this Subcontractor.
- 6.0.2 Provide blocking for all millwork, casework, shelving, handrails, markerboards, overhead coiling door, toilet accessories, wall and door protection, equipment cabinets, fire extinguishers, OFCI items, TVs, window treatments, and signage.

- 6.0.3 Provide all exterior gyp sheathing for all systems.
- 6.0.4 Provide blocking for all roofing assemblies.
- 6.0.5 This subcontractor shall provide all associated rough carpentry associated with this scope of work.

## **7.0 THERMAL AND MOISTURE PROTECTION SCOPE OF WORK DESCRIPTION**

- 7.0.1 Provide all batt and/or rigid thermal, fire-safing, and/or sound insulation where specified or indicated within or behind gypsum assemblies or withing CFMF. Exterior wall cavity insulation at masonry and metal wall panels will be by others.
- 7.0.2 Trade Contractor shall provide all firesafing and firestopping at all partition types and to adjacent surfaces per the UL and partition type details associated with this Trade Contractors scope of work and this Trade Contractors own penetrations. MEP trades shall firesafe & firestop their own penetrations.
- 7.0.3 Provide all acoustical sealant and insulation within this work and between this work and other trades.
- 7.0.4 Provide all insulation where specified pursuant to the specification insulation schedule and the wall type designation including rock wool in wall insulation, polyiso insulation, soffits, acoustical insulation.

## **9.0 FINISHES SCOPE OF WORK DESCRIPTION**

- 9.0.1 Drywall Construction - This Work shall include providing a complete Gypsum Drywall and the Non-Structural Metal Framing for the building, including but not limited to, submittals, scaffolds, material lifts, all light gauge steel studs, metal stud x bracing, light gauge steel hat and/or furred channels, miscellaneous light gauge steel components, kickers, supports, track, power actuated anchors, mechanical fasteners, clips, gypsum ceiling clips, gypsum board, gypsum board sheathing, moisture resistant sheet rock, cement board, gypsum joint taping and finishing, gypsum board, tile backer board at wall tile locations, water resistant gypsum backing board, mold resistant gypsum board when complete scheduled dry in is after this work commences, acoustical sealants, angles, clips, hangers, trim, miscellaneous accessories, joint compound, gypsum ceiling metal control joints, wire, ties, corner beads, zip beads, spot grout, where required, fasteners, felt, sealant, and all other materials required to complete all fire rated and non-fire rated gypsum ceilings, walls, shaft wall assemblies, soffits, and associated light gauge metal framing work, including drywall/metal stud partitions, drywall/metal stud soffits, special drywall/metal stud

bulkheads and ceiling systems, etc. as designated within the Contract Documents.

- 9.0.2 Coordinate stud locations with layout required for Others installing materials that will attach to stud framing.
- 9.0.3 Drywall & Framing Subcontractor shall provide rough openings, if required, within an applicable new drywall/metal stud wall / soffit condition to receive work of other trade subcontractors
- 9.0.4 Drywall & Framing Subcontractor shall be responsible for providing the fire wall stenciling of all fire rated or smoke rated masonry/drywall walls, etc. as required by the Contract Documents or Building Code.
- 9.0.5 Provide all reveals, troughs, coffers, reliefs, angles, radius and details as shown or reasonably inferable on the Contract Documents.
- 9.0.6 This Subcontractor shall provide the specified level of GWB finishes.
- 9.0.7 Sanitary Wall Finish (FRP) – This Subcontractor shall furnish and install a sanitary wall finish at all locations shown within the Contract Documents.
- 9.0.8 Construct all partitions and ceilings within the tolerances specified in the Contract Documents. Drywall & Framing Subcontractor shall be responsible for all remedial work associated with work out of tolerances including, but not limited to, caulking, shimming, filling, skimming, or replacement of work provided as part of this subcontractor or work provided by others.
- 9.0.9 Provide proper ventilation during and following joint treatment applications.
- 9.0.10 Engineering and layout from control lines shall be by Drywall & Framing Subcontractor.
- 9.0.11 Drywall & Framing Subcontractor shall provide all trapezes, hangers, seismic support if required, and additional framing necessary to support this trade's work.
- 9.0.12 Control and/or expansion joint systems to be provided in walls and ceilings in accordance with USG recommendations or as specifically noted in the Contract Documents.
- 9.0.13 This Subcontractor shall provide all reveals, accessories, trim and miscellaneous components within the components in this scope and those required to make a smooth transition to adjoining dissimilar materials by others.
- 9.0.14 This Subcontractor shall utilize the latest edition of the U.S. Gypsum Company handbook for installation of gypsum board materials, except where it is found to be in conflict with the Contract Documents or any governing inspection agency. In this case, the Subcontractor

will advise Contractor to obtain a ruling from the Architect on the method of construction to be used.

- 9.0.15 This Subcontractor shall check for compliance (plumb, square, proper alignment, etc.) at each stage of completion (framing, hanging, finishing). Any work that is not within specified tolerances 1/8" in 10' shall be removed and replaced. All interior and exterior studs to be secured to floor and ceiling runners, both sides and top and bottom, prior to drywall installation unless specified otherwise. Under no circumstances are studs to be left loose prior to hanging drywall.
- 9.0.16 This Subcontractor shall verify code space requirements prior to framing walls (i.e. 5'-0" turnarounds, 8'-0" corridors, 12"/18" Push/Pull at doors, etc.) Sweep all tracks and shafts clean prior to hanging board. The Contractor shall sign-off on completion of in-wall prior to any wall being two-sided with drywall.
- 9.0.17 This Subcontractor shall provide holes, cutouts, framing, prep work, etc. as required for any penetrations that require framing for installation of others work (i.e., electrical work, mechanical work, miscellaneous specialties, equipment, etc.). Cut drywall neatly to fit around all boxes or penetrations. This Subcontractor shall be responsible for maintaining all U.L. ratings, STC ratings, sound seals, etc. Sealing around penetrations necessary to maintain the integrity of smoke, sound, and fire-rated are by others.
- 9.0.18 This subcontractor shall provide an allowance of 100 carpenter hours to be used at the CM's discretion. Any unused funds will be returned to the CM in the form of a deduct change order.
- 9.0.19 This Subcontractor understands that MEP Subcontractors will attempt to layout required penetrations prior to wall framing. However, if for any reason, all layout cannot be provided prior to framing, this Subcontractor is still responsible for framing penetrations as required.

## **17.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 17.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 17.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 17.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.
- 17.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and



has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.

- 17.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 17.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 17.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 17.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 17.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 17.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 17.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 17.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 17.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site

hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.

- 17.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 17.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 17.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 17.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 17.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 17.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 17.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 17.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 17.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.

- 17.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.
- 17.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 17.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 17.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 17.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 17.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 17.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 17.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 17.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.

17.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

17.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Drywall, Metal Framing, & Insulation Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
A8660	Cold Form Metal Framing	5 Days
A8700	Interior Framing	5 days
A8720	Drywall	5 Days
PC1040	Final Approval - C of O	8/24/2026

**—UNIT PRICES—**

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.

UNIT PRICES			
UNIT NO.	UNIT PRICE DESCRIPTION	UNIT PRICE	UNIT MEASURE
L1	Laborer Rate		Hour
L2	Carpenter Rate		Hour
L3	Foreman Rate		Hour





—ALTERNATES—

Each alternate designated below has been separated into the following three categories:

- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bond		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor’s bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**

**TRADE PACKAGE SCOPE OF WORK:**

**09A DRYWALL, METAL FRAMING, & INSULATION SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **31A SITEWORK SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Sitework** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Sitework Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)</b>	
	<b>Specifications are included on the Drawings</b>
221113	Facility Water Distribution Piping
221116	Domestic Water Distribution Piping
221313	Facility Sanitary Sewers
311000	Site Clearing
312000	Earth Moving
321216	Asphalt Paving
321313	Concrete Paving



321723	Pavement Markings
330500	Common Work Results for Utilities
334100	Storm Utility Drainage Piping

#### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES</b>	
	<b>Specifications are included on the Drawings</b>
033000	Cast-in-Place Concrete
033000.01	Cast-in-place Concrete – Burn Building, Training Tower, and Drafting Pit
221316	Sanitary Waste and Vent Piping

#### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-31A - Sitework</b>, per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>

The Sitework Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit

the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Sitework Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

### **31.0 EARTHWORK SCOPE OF WORK DESCRIPTION**

- 31.0.1 This Subcontractor shall furnish all labor, supervision, equipment, transportation, and material necessary to complete the **BP-05A-Sitework** package.
- 31.0.2 Permits - As Applicable. This Subcontractor includes all equipment transport permits, traffic control, city permits, etc., if necessary, to bring any rigging, materials, equipment etc. The Subcontractor is responsible to obtain permits, licenses, pay fees, charges and obtain all necessary approvals in a timely fashion in order to maintain the schedule and progress of the Work, and in accordance with all legal requirements. The Building Permit will be paid by the Owner at no cost to the Trade Subcontractor(s).
- 31.0.3 This Subcontractor understands and agrees that all work is to be performed in accordance with sequencing, inspections, and approvals required by the local, state, and federal jurisdiction.
- 31.0.4 This Subcontractor shall provide complete turnkey erosion control and maintenance as required per the contract documents. This includes but is not limited to sediment barriers, silt fencing, baffles, gravel, silt ditch, matting, construction entrances, diversion swales, check dams, inlet protection, stone, skimmers, skimmer traps, silt-sacks, sediment traps, temporary slope drains, energy dissipaters, orange construction fencing, rip-rap, piping, flex piping, diversion berms, temporary seeding/mulching of ponds and site, filter fabric, posts, liners, pond kits, anti-float blocks, grading, excavation, mucking, risers, sediment cleanout, plantings etc. for a complete erosion and sediment control package. This Subcontractor shall be responsible for coordinating all requirements for NCDEQ and USACE, including all reporting as specified within the contract documents. Erosion control work is phased and requires approval by NCDEQ prior to beginning next phase. This agreement includes the continued maintenance for the duration of the project and removal of all devices upon acceptance by NCDEQ, Samet, design team and all governing authorities. This Subcontractor shall not be responsible for damages to the erosion control measures damaged by others.
- 31.0.5 This subcontract includes temporary storm drainage systems, as well as temporary drainage piping, drainage swales, etc. not shown on the drawings, but is required to facilitate a naturally draining site condition.
- 31.0.6 This Subcontractor shall complete construction and maintenance of work per sequence



outlined in contract documents. Any stop work-order issued due to improper erosion control measure due to fault of this Subcontractor will be the sole responsibility of this Subcontractor, including any fees for violations and recovery of lost time. Failures due to the design of the erosion control measures are not the responsibility of this Subcontractor. This Subcontractor shall endeavor to identify any concerns and/or potential failures to Samet, upon immediate recognition of concern.

- 31.0.7 This Subcontractor shall confirm the entire site is stabilized with respect to controlling erosion which includes the establishment of a satisfactory vegetative cover (i.e. grassing, etc.) at all disturbed site locations. All required erosion control measures shall be validated with a copy of the erosion control inspection by state authority prior to commencing with on site clearing, stripping, grading operations and maintain all erosion control measures throughout every phase of the project from the day the project is started to the day the project reaches final completion.
- 31.0.8 This subcontractors owns all site protections identified in project documents such as tree protection.
- 31.0.9 This Subcontractor shall be responsible for ensuring the driveways and roadways are kept free of mud and debris during the course of completing work required by this subcontract. Should mud, dirt, or debris be generated and deposited onto the adjacent roadways, this Subcontractor shall be responsible for removing the mud, dirt, or debris from the applicable roadway at its expense and to the satisfaction of the governing authorities and Samet Corporation. A water truck and/or water connection along with a pressure washer will be provided on site by this Subcontractor as needed to prevent mud or debris from making it into the roadway from all trades.
- 31.0.10 This Subcontractor shall provide its own traffic control including flagmen, signage, barricades, cones, barrels, etc. as required by all governing authorities when its work is being performed within a road right-of-way as part of this agreement. All ROW/road work is to be coordinated through the Construction Manager and NCDOT or Wendell for prior approval. This includes temporary signage for pedestrian and traffic control and detours.
- 31.0.11 This subcontractor shall provide (2) locations for temp water connections on site for use by the other trades. (1) on the west end of the site and another on the East end of the site. Locations of these water connections will be within 25' of a water source/main.
- 31.0.12 Furnish and install of (2) 30' telephone pole for mounting of site security cameras.
- 31.0.13 This subcontractor shall provide a temp access road and temp parking lot as shown on the project logistics plan. Installation, maintenance, and removal shall be included in this subcontractors base bid.
- 31.0.14 This subcontractor shall include an allowance in their base bid for the placement and

removal of 1000tn of stone above and beyond the previously listed temp access road and temp parking lot. Stone will be used for other temp roadways, parking, and pathways. To be used at CM's decision. Unused funds will be returned to the CM.

- 31.0.15 This Subcontractor shall verify existing contours are in conformance with the information reflected on the contract documents. Samet Corporation shall be notified in writing of the Subcontractor's acceptance or rejection of the existing topographical information prior to commencement of any mass grading operations. Failure to check the existing contours, etc. once the sitework mass grading operations begin, this Subcontractor shall forfeit the right to make any claim for existing conditions which may differ from those illustrated on the contract drawings. This agreement includes providing certified subgrade elevations prior to building construction and/or site construction.
- 31.0.16 This Subcontractor is responsible for turn-key surveying package including but not limited to all surveying, layout, grade staking, field engineering, etc. for this scope of work is included in this agreement. This Subcontractor shall be responsible for protection of staking and restoring the same if any stakes are damaged, removed, etc. at no additional cost to Contractor. This agreement includes providing certified as-builts for all surveying work completed by this subcontract.
- 31.0.17 This Subcontractor shall be responsible for all clearing and demolition work as required per the contract documents, including but not limited to clearing and grubbing of site. This Subcontractor is responsible for all clean-up and leaving area free of hazards. All debris shall be removed and disposed of properly off-site. No on-site burning will be allowed.
- 31.0.18 Earthwork – All earthwork and site grading work as required will be per the contract documents, including but not limited to all cutting and filling, rough grading, surface roughening, dust control measures, along with all water pumping and dewatering work as required for this scope of work to maintain the project schedule and complete this scope of work. This includes backfilling and grading where subgrade has been disturbed by this Trade. No changes to building or road elevations will be accepted to balance the site.
- 31.0.19 In all areas receiving fill materials, the soil shall be proof-rolled and approved by the Independent Testing Laboratory (ITL) prior to the placement of any fill material. All fill material is to be tested and compaction approved as the work is placed and completed.
- 31.0.20 This subcontract includes excavating, trenching, cutting, filling, compacting, and grading of all parking lots, retaining walls, ramps, sidewalks, aprons, curb & gutter, site concrete, exterior of building slabs, exterior of building structures, etc. as required per the contract documents.
- a) This subcontractor owns all grading/fine grading aside from the items listed below.
  - b) Fine grading of porous fill under concrete slabs by BP-03A.

- c) Fine grading of ABS stone under heavy/light duty concrete paving by BP-32A
- d) Fine grading of ABS stone under Asphalt & Curb/Gutter by BP-32C
- e) Fine grading of topsoil by BP-32E

31.0.21 This subcontractor shall perform all undercut of unsuitable soils, rock removal, and replacement with suitable borrow material as required on the project based on the third-party ITL field inspection(s) and reports. All unsuitable soils are to be disposed of onsite or offsite based on the direction of the Construction Manager/Design Team in conformance with the project documents and allowances. The third-party inspector and/or geotechnical consultant shall be the responsible party in determining whether materials are suitable or unsuitable. Prior to placement or borrow material, the third-party inspector shall verify said material meets contract document requirements.

31.0.22 When placing material courses included in this agreement, this Subcontractor shall be responsible for placement in lifts as specified within the contract documents. All necessary equipment and hand-tamping is included in this agreement.

31.0.23 Strip, screen, and stockpile all topsoil required for project. Place all topsoil as final grading is achieved and as directed by Construction Manager.

31.0.24 This Subcontractor understands and agrees that they are to remove net spoils that are generated by this Subcontractor off site. In the event that topsoil and/or dirt stockpiles are created by on this site, it is the responsibility of this Subcontractor to install and maintain erosion control measures, per NCDEQ standards of erosion control. This does not include stockpiles generated by other subcontractors, and/or erosion control measures necessary to maintain stockpiles generated by other subcontractors. Stockpile locations will be designated by the Samet Superintendent. This Subcontractor may remove and store topsoil off site to be used later, but it shall be coordinated prior to the removal offsite with the Samet Project Team and documented in writing

31.0.25 All removal and disposal of spoils generated by other trade contractors is included in this subcontract.

31.0.26 This Subcontractor shall provide complete and operable site utility services as required per the contract documents. This includes but is not limited to taps into existing structures, sub drains, drop inlets, RCP, PVC, and DIP, for a complete site utility package, including domestic water, FDC, sanitary, and storm utility services as required per the contract documents. This includes all accessory materials and components such as fittings, tees, bends, flanges, valves, sleeves, valve boxes, precast boxes & manholes, structures, plugs, pipe extensions, adapters, meter bases & setters, check-valves, bypasses, hot-boxes, grates, headwalls, manholes, inlets, rip-rap, clean-outs, hydrants, test-clock, thrust blocking, concrete, concrete cradles, masonry, concrete support, hardware, reducers, bypass valves, reduce pressure assemblies, piping, PIVs, bedding, stone, excavation, compaction, fill, backflow assemblies, blowoffs, connection to roof drain assemblies, PVC

boots, tapping sleeves, pits, heaters, tracing tape/wire, and all other necessary components for a complete installation. Any necessary concrete encasements, etc., including reinforcing steel for concrete work required within this Scope of Work and any cast-in-place concrete work associated with this Trades' scope of work is included in this agreement.

- 31.0.27 The domestic/fire water system piping installation shall be installed so that final connection location/inverts are provided to Samet Corporation to ensure that the domestic/fire water systems perform as designed.
- 31.0.28 All chlorination, bacteriological and pressure testing as required by contract documents and governing authorities is included in this agreement. It is the responsibility of this Subcontractor to provide all flushing certificates. Provide a copy of all such testing reports promptly to governing authorities and Samet Corporation.
- 31.0.29 This Subcontractor shall coordinate connection of services with other trades in order to provide complete operable systems. This subcontractor shall bring all owned utilities to within 5' of the buildings in which they serve. BP-021A Fire Protection and BP-022A shall take it from that point and into the buildings.
- 31.0.30 This Subcontractor shall schedule, with applicable local and state health officials and/or agencies, a final inspection of the water and fire water distribution systems no later than two (2) weeks prior to the time the system is to be put into operation. This Subcontractor shall have approved results of water tests, taken under this Subcontract, available for the officials/agencies upon arrival on-site. This Subcontractor shall provide Contractor's Material & Test Certificate to Samet Corporation upon successfully completing a fire water main flow test.
- 31.0.31 This subcontract includes a complete storm drainage system including all trench bedding, piping work, curb inlets and piping, grate inlets, drop inlets, storm drain outlet protection, permanent connections to existing storm drainage structures and piping, stone, where required. This includes concrete work applicable to the storm drainage system, head walls, concrete flared-end sections, rip-rap, diversion ditches, junction boxes, and associated temporary seeding for areas disturbed by this Scope of Work, where required, and any other incidentals which may be required for a completely functional storm drainage system as required per the contract documents.
- 31.0.32 Tops, Frames and Grates – This Work shall include all tops, steel frames and grates and hoods for each respective structure/manhole requiring a specific type of top and grate being provided as part of this Scope of Work. All tops, frames, grates, and hoods are to meet NCDOT requirements for water flow. This Subcontractor is responsible for confirming that the type of structures being provided meet the proper jurisdictional requirements.
- 31.0.33 Turn-Key Storm Drainage Maintenance and Cleaning – This Subcontractor shall perform



interim and final cleaning of storm drainage pipes, grate inlets, drop inlets, curb inlets, etc. and remove all mud and debris prior to final acceptance. This Subcontractor shall be responsible for the maintenance and final cleaning of storm drainage system until final project acceptance. This Subcontractor is responsible to test the lines to ensure that they are obstruction-free. This Subcontractor is to camera stormwater lines at the conclusion of the project and repair any damages as necessary at no additional cost to Contractor.

31.0.34 Stream crossing – This subcontractor shall perform this scope of work and associated crossing utilities in its entirety to complete the crossing per the contract documents, NCDOT, USACE, 404 and 401 permitting requirements and sequencing. This work includes but is not limited to erosion control, earth moving, stone, soil, concrete, culverts, Piping, utilities, structures, boxes, and drainage. Subcontractor shall carry in their base bid the temporary stream crossing identified on drawing D-102. Bridge matting may be an acceptable alternate to the detail if submitted and approved by the design team.

- A. Scope performed by other trades at this area;
  - 1. Electrical and conduit and structures
  - 2. Paving & curb and gutter

31.0.24

### **39.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

39.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.

39.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.

39.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.

39.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.

39.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.

- 39.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 39.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 39.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 39.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 39.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 39.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 39.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 39.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.
- 39.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 39.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for

daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.

- 39.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 39.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 39.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 39.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 39.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 39.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 39.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.
- 39.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack

of coordination in performing their respective scopes of work.

- 39.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 39.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 39.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 39.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 39.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 39.0.31 This Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 39.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to ensure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.
- 39.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractors' work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.
- 39.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.



**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Sitework Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

<b>SCHEDULE MILESTONE TABLE</b>		
<b>ACTIVITY NO.</b>	<b>ACTIVITY DESCRIPTION</b>	<b>COMPLETION DATE OR DURATION</b>
A8380	Construction Entrance/Temp Stream Crossing/Erosion Control	15 days
A8390	Remaining Erosion Control Measures and Temp Diversions for Diversion pond	10 days
A8400	Diversion Pond	15 days
A8410	Remaining Tree Clearing and Site Grading	25 days
A8540	Permanent Stream Crossing with Utilities	10 days
A8550	Site Utilities (Sewer, Storm, Electric, Water at entrance road)	45 days
A8450	Prep Parking lot area	10 days
A8560	Install Site Water lines	20 days
PC1040	Final Approval – C of O	8/24/26



**—ALLOWANCES—**

Allowances shall cover the cost of all materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses associated with stated allowance amounts shall be included in the Subcontract Amount but not in the allowances. Whenever costs are more than or less than an allowance amount, the Subcontract Amount shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances.

<b>ALLOWANCES</b>		
<b>ALLOWANCE NO.</b>	<b>ALLOWANCE DESCRIPTION</b>	<b>AMOUNT</b>
Allowance No. A	Unsuitable Soil – On-Site Disposal and Backfill with On-Site Suitable Soils: 100 CY	
Allowance No. B	Unsuitable Soil – On-site disposal and Backfill with off Site Source Suitable Soils. 100 CY	
Allowance No. C	Unsuitable soil – Off-site disposal and Backfill with On-Site Source Suitable Soils: 50 CY	
Allowance No. D	Unsuitable Soil – Off-site disposal and Backfill with Off-Site Source Suitable Soils: 50 CY	
Allowance No. E	Unsuitable Trench Soil – On-site disposal and Backfill with On-Site Suitable Soils: 50 CY	
Allowance No. F	Unsuitable Trench Soil – On-Site Disposal and Backfill with Off Site Source Suitable Soils: 50 CY	
Allowance No. G	Unsuitable Trench Soil – Off-Site Disposal and Backfill With On-Site Source Suitable Soils: 50 CY	
Allowance No. H	Unsuitable Trench Soil – Off-Site Disposal and Backfill with Off-Site Source Suitable Soils: 50CY	
Allowance No. I	Stream Crossing – Off-Site Disposal and Backfill with Class B or Class A Rip-Rap: 500 CY	
Allowance No. J	Stream Crossing – Off-Site Disposal and Backfill with #4 and/or #57 Stone: 200 CY	
Allowance No K: Stream Crossing	Stream Crossing – Type 4 Geotextile Fabric: 1,500 SF	

**—UNIT PRICES—**

To the extent that some or all of the Subcontractor's Work is to be performed on a unit price basis, the Subcontract Amount shall be computed in accordance with the unit prices set forth below. Unit prices are deemed to include all costs related to Subcontractor's performance of the Work, including, but not limited to, costs of labor, supervision, services, materials, equipment, tools, scaffolds, hoisting, transportation, storage, insurance, and taxes, and all overhead and profit. Quantities shall be measured by means acceptable to Owner, General Contractor and Subcontractor, and if applicable, an independent testing firm hired by Owner.



UNIT PRICES			
UNIT NO.	UNIT PRICE DESCRIPTION	UNIT PRICE	UNIT MEASURE
Allowance No. A	Unsuitable Soil – On-Site Disposal and Backfill with On-Site Suitable Soils:		CY
Allowance No. B	Unsuitable Soil – On-site disposal and Backfill with off Site Source Suitable Soils.		CY
Allowance No. C	Unsuitable soil – Off-site disposal and Backfill with On-Site Source Suitable Soils:		CY
Allowance No. D	Unsuitable Soil – Off-site disposal and Backfill with Off-Site Source Suitable Soils:		CY
Allowance No. E	Unsuitable Trench Soil – On-site disposal and Backfill with On-Site Suitable Soils:		CY
Allowance No. F	Unsuitable Trench Soil – On-Site Disposal and Backfill with Off Site Source Suitable Soils:		CY
Allowance No. G	Unsuitable Trench Soil – Off-Site Disposal and Backfill With On-Site Source Suitable Soils:		CY
Allowance No. H	Unsuitable Trench Soil – Off-Site Disposal and Backfill with Off-Site Source Suitable Soils:		CY
Allowance No. I	Stream Crossing – Off-Site Disposal and Backfill with Class B or Class A Rip-Rap:		CY
Allowance No. J	Stream Crossing – Off-Site Disposal and Backfill with #4 and/or #57 Stone:		CY
Allowance No. K: Stream Crossing	Stream Crossing – Type 4 Geotextile Fabric:		SF
L1	Laborer Rate		Hr
L2	Operator Rate		Hr
L3	Foreman Rate		Hr

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bond		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor's bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**31A - SITEWORK SUBCONTRACT**



## **TRADE PACKAGE SCOPE OF WORK**

### **BP-32A – SITE CONCRETE SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Site Concrete** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Site Concrete Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

DIVISION 1 – GENERAL REQUIREMENTS	
GC Req.	General Requirements Manual
GC Req.	Trade Package Scope Manual
GC Req.	Trade Package General Scope Requirements

### **Primary Responsibility**

This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.

PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)	
	Specifications are included on the Drawings
321313	Concrete Paving

### **Secondary Responsibility**

This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.

SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES
----------------------------------------------------



	<b>Specifications are included on the Drawings</b>
312000	Earthmoving

**Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
<b>DRAWING NO.</b>	<b>DRAWING NAME</b>	<b>SPECIFIC ITEM</b>
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-032A SITE CONCRETE</b>, per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the Site Concrete scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All concrete notes/specs and items as it relates to Site Concrete and associated joint sealants and items to be coordinated with other trades.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Site Concrete Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

### **31.0 EARTHWORK SCOPE OF WORK DESCRIPTION**

- 31.0.1 Graded Aggregate Stone Base - This Work shall include furnishing and installing a graded and compacted aggregate stone base/porous fill underneath concrete as indicated on contract documents.
- 31.0.2 This Subcontractor shall be responsible all fine grading associated with this scope of work. Inclusive of minor excavation required to form shapes, haunches, ect.

### **32.0 EXTERIOR IMPROVEMENTS SCOPE OF WORK DESCRIPTION**

- 32.0.1 Turnkey Site Concrete - This Scope of Work includes all concrete outside building footprints including, but not limited to light duty concrete paving, heavy duty concrete paving, sidewalks, walkways, aprons, approaches, ramps, equipment pads, detectable warning surfaces, expansion joints and sealants, construction joints, etc. as required within Contract Documents. Curb and gutter to be performed by BP-032C
- 32.0.2 The Concrete subcontractor shall reference all Civil and Landscape drawings and details to gain a complete understanding of the work included in this Scope of Work. Because a thorough inspection of all drawings is required, change orders will not be issued for any work missed by this Subcontractor.
- 32.0.3 The Concrete Subcontractor shall assume the responsibility for determining if the site related work subgrade elevations as delivered by others are within a tolerance of plus or minus one tenth (+0.10') of one foot and are in conformance with the information reflected on the drawings. The Construction Manager shall be notified of the acceptance or rejection of these subgrades prior to commencement of this scope of work.
- 32.0.4 Concrete Formwork – This Subcontractor shall provide all concrete form work, including but not limited to, concrete forms, rebar templates, construction joints, etc. as required to complete this scope of work.
- 32.0.5 Concrete Finishes – This Work shall include placement and finishing of all concrete furnished and installed as part of this scope of work in accordance with the finish tolerance requirements specified. This includes specified joint details and tolerances for coordination with all scopes.
- 32.0.6 Subcontractor owns forming concrete ladder grooves in concrete as shown in contract documents.
- 32.0.7 Concrete Curing – This Work shall include furnishing and installing specified curing and sealing compounds at all concrete scheduled as part of this Scope of Work.

- 32.0.8 Concrete Reinforcement and Accessories – This Work shall include furnishing and installing a complete concrete reinforcement and accessories system, including but not limited to, all reinforcing steel, Tie wire, bar supports, bar chairs, expansion joint filler and felts, adhesive anchors, etc. as required to complete this scope of work.
- 32.0.9 Site concrete subcontractor owns installation of items furnished by other trade packages that are embedded or cast into concrete such as site furnishings, bollards, signage, etc.
- 32.0.10 All necessary conveyance equipment required to place and finish all concrete shall be provided as part of this Scope of Work.
- 32.0.11 This Subcontractor as part of the base bid is required to review the contract documents for incomplete design, scope gaps, etc. Each subcontractor shall include in their base bid all items related to their scope of work that can be inferred from the contract documents. Change Orders will not be issued for these items.
- 32.0.12 Provide all control joints as required for cast-in-place concrete. Formed and sawcut.
- 32.0.13 Coordinate testing requirements according to the statement of special inspections and project documents.
- 32.0.14 Provide a full and complete expansion/sealant joint system at all locations required for completion of this scope. This work shall include all exterior concrete-to-concrete joints, concrete to asphalt, and concrete-to-steel joints. This shall also include any expansion joints and sealants from site concrete to the buildings.

### **39.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 39.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 39.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 39.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.
- 39.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.



- 39.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 39.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 39.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 39.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 39.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 39.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations.
- 39.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 39.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 39.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday, unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.



- 39.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 39.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 39.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 39.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 39.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 39.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 39.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 39.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.
- 39.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as

a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.

- 39.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 39.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order. If at anytime the manufacturer installation instructions differ from the contract documents, the subcontractor is to bring this to the attention of the Construction Manager prior to installation.
- 39.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 39.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 39.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 39.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 39.0.31 Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 39.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to insure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.

39.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractor's work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

39.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Site Concrete Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
A8570	Concrete Paving and Flatwork	20 Days
PC1040	Final Approval – C of O	8/24/2026

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.

ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and Performance Bonds		Pending



If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor's bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**32A – SITE CONCRETE SUBCONTRACT**

## **TRADE PACKAGE SCOPE OF WORK**

### **32C ASPHALT PAVING/CURB AND GUTTER SUBCONTRACT**

Furnish all labor, materials, tools, taxes, safety, insurances, equipment, hoisting, cranes, supervision, and all other incidentals necessary to accomplish all **Asphalt Paving/Curb and Gutter** Work in accordance with all Contract Documents and as defined within **Trade Package General Scope Requirements** and this Scope of Work.

**Subcontractors/Suppliers performing work on multiple portions of the project site (i.e., buildings, parking area, site, etc.) shall provide separate equipment, hoisting, cranes, supervision including, but not limited to management, superintendent, foreman, tradesman, laborers, etc. for each portion unless agreed to otherwise in writing by the General Contractor. If the project needs and schedule are not being met to the satisfaction of the General Contractor, written approval will be rescinded, and the original staffing requirements shall be provided by the Subcontractor.**

Project Specifications for the Asphalt Paving/Curb and Gutter Scope of Work are listed below. This Subcontractor or Supplier shall carefully examine all specification sections and drawings within the Contract Documents and be responsible for all work described within this Scope of Work and as required on the project.

### **PROJECT SPECIFICATIONS**

This Subcontractor is responsible for all Division 1 - General Requirements as listed below prepared by the Architect, Design Consultants, and/or General Contractor or as designated elsewhere within the Technical Specifications or Drawings as applicable to this Trade Package Scope of Work.

<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
<b>GC Req.</b>	<b>General Requirements Manual</b>
<b>GC Req.</b>	<b>Trade Package Scope Manual</b>
<b>GC Req.</b>	<b>Trade Package General Scope Requirements</b>

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (PROJECT MANUAL)</b>	
	<b>Specifications are included on the Drawings</b>
321216	Asphalt Paving
321313	Concrete Paving
321723	Pavement Markings

### **Secondary Responsibility**

**This Subcontractor is responsible for all Secondary Specification Responsibilities listed below to the extent applicable, or defined, within this Scope of Work.**

<b>SECONDARY TECHNICAL SPECIFICATION RESPONSIBILITIES</b>	
	<b>Specifications are included on the Drawings</b>
311000	Site Clearing
312000	Earth Moving
330500	Common Work Results for Utilities
334100	Storm Utility Drainage Piping

### **Primary Responsibility**

**This Subcontractor is responsible for all Primary Specification Responsibilities listed below unless this Scope of Work specifically states otherwise.**

<b>PRIMARY TECHNICAL SPECIFICATION RESPONSIBILITIES (DRAWINGS)</b>		
DRAWING NO.	DRAWING NAME	SPECIFIC ITEM
All Dwgs	All Dwgs	All Dwgs
BID DOCUMENTS	ALL DRAWINGS	<p>This Subcontractor shall furnish and install a complete turnkey of Work for <b>BP-32C Asphalt Paving and Curb &amp; Gutter</b>, per the Contract Documents to include, but not limited to: including all accessories and incidentals for a complete job with no exceptions.</p> <p>This Subcontractor shall coordinate with other trades as applicable to complete this Scope of Work including</p>
All	All	Subcontractor owns all drawings and notes as it relates to the Asphalt Paving and Curb & Gutter scope. The items listed below are intended to add clarification. Notes or drawings not included below does not alleviate the subcontractor from ownership.
All	Notes, General Notes, Key Notes, and specifications	All notes/specs and items as it relates to Asphalt Paving and Curb & Gutter and associated joint sealants and items to be coordinated with other trades.

The Asphalt Paving/Curb and Gutter Subcontractor shall be responsible for complying with the requirements of each Scope of Work Description / Clarification Section listed below, **even if** those requirements are not shown within the Specification Sections listed above.

This Subcontractor shall be responsible for all Primary Specification Responsibilities identified above in their entirety. All costs associated with Primary Specification Responsibilities shall be included in this Subcontractor's Scope of Work and reflected in bid amount.

This Subcontractor shall be at least partially responsible for Secondary Specification Responsibilities identified above. The Secondary Specifications identify work scopes for which this Subcontractor is not wholly responsible but shall be applicable as it relates to the execution of Primary Specification Responsibilities. This may include a varying degree of responsibility from simple coordination to performing entire portions of work. The Secondary Specifications are not intended to be all inclusive and shall not limit the Subcontractor in any way with regards to installation of work identified in Primary Specification Responsibilities.

The Cast in Place Concrete Subcontractor is responsible for all Work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work. If for some reason an item of scope is included inadvertently in this scope of work and another trade package scope of work, this Subcontractor shall be responsible for including the subject scope of work within its base bid proposal regardless.

### **31.0 EARTHWORK SCOPE OF WORK DESCRIPTION**

31.0.1 Graded Aggregate Stone Base - This Work shall include furnishing and installing a graded and compacted aggregate stone base/porous fill underneath concrete as indicated on contract documents.

31.0.2 This Subcontractor shall be responsible all fine grading associated with this scope of work.

### **32.0 EXTERIOR IMPROVEMENTS SCOPE OF WORK DESCRIPTION**

32.0.1 Turn-Key Asphalt and Curb-and-Gutter – This subcontract includes a complete turnkey asphalt paving package, including all subgrade verification, fine grading, stone, curb and gutter, binder, asphalt, striping and markings, and milling / overlay of existing asphalt as required per the contract documents. This Work shall include but not be limited to all specified concrete wheel stops, painted directional lane markings, painted handicap markings, line striping, miscellaneous painted markings, traffic, handicap signage, posts, etc., including all necessary layout and signage foundation work as required to complete this Scope of Work. Curb and gutter will be installed to NCDOT standards to include compacted stone base.

32.0.2 This Subcontractor shall provide asphalt and/or concrete pavement removal and patch back work including all necessary traffic control work as required by the local or state governing authority at all utility connection tie-in locations(s) designated on the Contract Drawings. If asphalt or concrete pavement cannot be removed and subsequently patched as determined by the governing utility, DOT or Owner, the Site Utilities Subcontractor shall jack and bore across the applicable obstacle in order to complete this scope of work at no additional cost.

32.0.3 Permits: As Applicable. This Subcontractor includes all equipment transport permits, traffic control, city permits, etc., if necessary, to bring any rigging, materials, equipment etc. The



Subcontractor is responsible to obtain permits, licenses, pay fees, charges and obtain all necessary approvals in a timely fashion in order to maintain the schedule and progress of the Work, and in accordance with all legal requirements. The Building Permit and Demolition Permit will be paid by the Owner at no cost to the Trade Subcontractor(s).

- 32.0.4 This Subcontractor is responsible for all work described herein and below unless specifically noted otherwise to be part of another Subcontractor's Scope of Work.
- 32.0.5 This Subcontractor understands and agrees that all work is to be performed in accordance with sequencing, inspections, and approvals required by the local, state, and federal jurisdiction.
- 32.0.6 This Subcontractor is to provide mechanical broom cleaning, pressure washing, etc. of the asphalt binder or wear course previously installed in order to receive the final asphalt surface wear course, line striping, etc. as part of this Scope of Work.
- 32.0.7 This Subcontractor shall clean all curb and gutter prior to final acceptance by the Owner. All asphalt shall be properly cleaned between courses for proper adhesion, before striping for proper application and prior to final acceptance by the Owner. This work shall be scheduled in advance with the Construction Manager.
- 32.0.8 Subcontractor to provide all striping, symbols, and signage in all areas. Refer to C-101.
- 32.0.9 This Subcontractor shall leave all areas of the project in a condition that will naturally drain at the end of the day. If water accumulates, this Subcontractor shall be responsible for dewatering as required to maintain the construction schedule. Additionally, as a wet weather prevention measure, this Subcontractor shall compact, drum roll and slick off all work areas each day to seal off the graded substrate to help keep water from penetrating into the soil which may impede construction work due to inclement weather. Dewatering due to winter weather, i.e. snow, sleet, and ice, and/or 4" or more of rain within a 24-hour time period, shall be addressed utilizing the unit rate provided in Exhibit E.A

### **39.0 SCOPE OF WORK CLARIFICATIONS AND/OR OTHER REQUIREMENTS**

- 39.0.1 The intent of this section is to clarify the assignment of the Trade Work, and not to alter or change the specifications and design requirements.
- 39.0.2 All correspondence and/or communication must be directed through General Contractor. All construction directives must come through General Contractor. Do NOT contact the Owner, Owner Consultant, or Architect directly without the consent of General Contractor.
- 39.0.3 The scope items listed in this Exhibit are to be used only as a guide and in no way limits the Scope of Work to those items listed.

- 39.0.4 It is recognized and understood that this Subcontractor was selected for their expertise and knowledge of this specialized work, and it is expected that the subcontractor did and has included in their scope of work all items and quality control required to carry out the intent of the Contract Documents to completion.
- 39.0.5 This Subcontractor shall provide, but not limited to the following items which may or may not be clearly defined in the Contract Documents as being within the Scope of Work of this Subcontract Agreement: standards, certifications, testing, cleaning, inspecting, field quality control, close-out procedures, labels, field measurements and verifications, coordination with other trades, shop drawings and submittals, as-built drawings (PDF set), operating and maintenance instruction manuals, etc.
- 39.0.6 Each Subcontractor is responsible for inspecting the work that precedes its work and reporting any deficiencies which will affect its work to the Contractor prior to commencing with the new work. Once the new work has been installed over preceding work, the Contractor shall consider this action as the Subcontractor installing the new work as acceptance of all preceding work.
- 39.0.7 In cases where Division One Specifications contain conflicting information with Documents made a part of this Subcontract, the provisions, terms, conditions, etc. the more stringent shall take precedence.
- 39.0.8 Subcontractor shall be responsible for all freight, delivery, equipment, loading, unloading, rigging, and hoisting, as required to perform this Work. All costs associated with delivery of materials and equipment to perform the Scope of Work is included.
- 39.0.9 Extra Materials – This work shall include providing extra materials (attic stock) as specified.
- 39.0.10 Multiple mobilizations will be required for the completion of this Scope of Work. No additional compensation will be provided for multiple mobilization requirements. Samet will make every effort to limit the number of mobilizations. Roof installation will be based upon the construction schedule.
- 39.0.11 This Subcontractor shall NOT include the cost for their Payment and Performance Bonds in their bid amount, however if requested by the General Contractor, this Subcontractor shall provide a Performance and Payment Bond at Cost if awarded the Subcontract.
- 39.0.12 It is understood there may be utilities (new or existing), equipment, or other trades potentially in the way during operations performed by this Subcontractor. This Subcontractor agrees to coordinate as necessary to work around all obstacles to meet the requirements of the schedule.
- 39.0.13 The project site shall be open for subcontractor work from 7:00am-5:00pm, Monday-Friday,



unless otherwise directed by the Construction Manager. The site will be open on Saturdays and Sundays for make-up days only on a pre-approved basis. No work, deliveries, pickups, or subcontractor presence shall be allowed outside of normal site hours without prior approval from the Construction Management Team. Note that the availability of Samet supervisory coverage may impact this approval process.

- 39.0.14 This Subcontractor will be responsible for all required cleanup of their excess materials and equipment on a daily basis. This Subcontractor is also responsible for protection of its work. All cost associated with this required cleanup and protection is to be included in their base proposal including but not limited to weather protection for all roofing work as needed to maintain the requirements of the Contract Documents.
- 39.0.15 While completing this Subcontractors Scope of Work, this Subcontractor is responsible for daily cleanup of their materials. All trash and debris generated by this Subcontractor should be disposed of in the provided onsite dumpster.
- 39.0.16 This Subcontractor shall submit a site-specific safety plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.17 This Subcontractor shall submit SDS forms before beginning work.
- 39.0.18 This Subcontractor shall submit a QA/QC plan before beginning work. A template will be provided by the Construction Manager at the pre-install meeting.
- 39.0.19 All workers under this Subcontract shall attend a Samet Site Orientation meeting on their first day on this project BEFORE beginning work. New workers should report to Samet staff upon arrival to the site.
- 39.0.20 This Subcontractor shall complete all Samet required safety and job reports DAILY by 9am. Electronic and hard copies of all needed forms will be supplied to this Subcontractor at the Pre-Install meeting. Forms will include a Daily Report and a Pre-Task Plan at a minimum with other safety forms submitted as required by daily activities.
- 39.0.21 This Subcontractor shall reference scope clarification drawings included in the trade scope manual for specific directions on additions and deletions regarding this Scope of Work.
- 39.0.22 Labor and material prices are guaranteed through the duration of the project. Escalation costs are prohibited. The contract price shall not be increased for any coordination work related to conflict resolution, miscellaneous or incidental items required for the work to meet the intent of the Owner, architect's and engineer's design, the Contract Documents, plans, or specifications.
- 39.0.23 Maintenance of controlled access zones and fall protection as required by OSHA, for the safety of the Subcontractor's employees or others during the Work is included. This

Subcontractor to provide any barricades, caution tape, spotters, and/or safety equipment necessary to protect the public, employees, and the property.

- 39.0.24 Subcontractor shall have a qualified foreman and/or superintendent onsite at all times during the performance of the Work and be capable of directing crews. This individual must be fluent in written and spoken English and be reasonably acceptable to the Contractor as a supervisor. The Subcontractor's onsite foreman and/or superintendent shall always be equipped with a cellular telephone during working hours and provide the Contractor with Emergency Contact Information for non-working hours.
- 39.0.25 Subcontractor shall be responsible to coordinate and work with each other to eliminate conflicts during the installation of the Work. No change orders will be accepted by the Contractor for relocation and/or replacement of the Work due to the Subcontractor's lack of coordination in performing their respective scopes of work.
- 39.0.26 Manufactured items shall be installed in strict accordance with the manufacturer's printed directions, specifications and/or recommendations for installation of highest quality. All working parts shall be properly adjusted after installation and left in new working order.
- 39.0.27 Temporary electricity supplied by the Electrical Contractor will include minimal wattage single phase for small electric hand tools and basic construction temporary lighting only in accordance with OSHA guidelines. Any specific power requirements for welding, task lighting or other operations are to be provided by this Subcontractor.
- 39.0.28 If temporary "task" lighting is required to complete the Subcontractor's work, then the Trade Subcontractor requiring the temporary "task" lighting in order to complete its work shall provide its own temporary lighting at its own expense.
- 39.0.29 All stored materials must be protected from moisture, temperature, weather elements, theft, and vandalism, and stored at locations as not to interfere with the performance of other subcontractors. Any damages or theft resulting from the storing of materials are the responsibility of the Subcontractor. Re-handling of onsite materials that interfere with the work of other subcontractors shall be at no cost to the Contractor.
- 39.0.30 Each Subcontractor will remove all excess materials from the site at the time work has been completed. Failure to do so the General Contractor will give the Subcontractor a 24-hour notice at the end of this 24 hours the General Contractor will make arrangements to have the material removed. This work and the supervision of this work will be at the cost of this Subcontractor.
- 39.0.31 This Subcontractor shall be responsible for cold and hot weather protection as required to perform the Work so not to delay the Project Construction Schedule.
- 39.0.32 Each Trade Subcontractor shall be responsible for notifying the City Inspectors and/or



County Inspectors and/or State Inspectors when their services or inspections are required. Expedite notification to ensure proper lead-time. The Trade Subcontractor shall notify the General Contractor in writing twenty-four (24) hours prior to any inspection.

39.0.33 This Subcontractor is responsible for all Contract Documents for this project. No allowance will be made for lack of knowledge of other subcontractors' work or existing conditions required in connection with HVAC, plumbing, electrical and other Subcontractors, including Owner furnished equipment.

39.0.34 Subcontractors entitlement to additional overhead and profit as a result of such changes, if any, shall not exceed a combined total of fifteen percent (15%) of the value of the Work to be self-performed.

**—OTHER SCHEDULE SUMMARY INFORMATION—**

The Substantial Completion date for the Asphalt Paving/Curb and Gutter Subcontractor is as reflected within the Construction Schedule. Special attention should be directed to the Construction Schedule for project sequencing requirements which are a requirement of this Scope of Work. Reference Schedule Milestone Table extracted from the Project Schedule below for other specifics related to this Scope of Work.

SCHEDULE MILESTONE TABLE		
ACTIVITY NO.	ACTIVITY DESCRIPTION	COMPLETION DATE OR DURATION
A8470	Asphalt Binder Parking lot	3 days
A8480	Road Prep and Curb & Gutter (multi-trade)	5 Days
A8580	Asphalt Paving (light duty and heavy duty)	15 days
A8590	Striping, Markings, and Road Signage	5 Days
PC1040	Final Approval – C of O	8/21/2026

**—ALTERNATES—**

Each alternate designated below has been separated into the following three categories:

- “Accepted” – Alternate was accepted by General Contractor and the dollar value for the alternate is included within the Subcontractor Amount.
- “Pending” – Alternate is pending award by General Contractor with the decision being deferred until the date defined within each applicable Alternate. This cost is NOT included in the Subcontractor Amount.
- “Declined” – Alternate was NOT accepted by General Contractor and the dollar value for the alternate is NOT included within the Subcontractor Amount. By declining the alternate, all requirements applicable thereof are deleted from the contract documents.



ALTERNATES			
ALTERNATE NO.	ALTERNATE DESCRIPTION	VALUE	STATUS
P1	Payment and performance Bond		Pending

If requested, the cost of the Performance and Payment Bonds (amount as provided) will be reimbursed to the Subcontractor based on the following revised contract revision noted below:

Subcontractor shall provide Performance and Payment Bonds, if required, each with a penal amount equal to 100% of the Subcontract Amount, on forms acceptable to the General Contractor. The premium for these bonds shall be paid by Subcontractor and the cost thereof shall be invoiced separately to the General Contractor based on the Subcontractor providing an actual paid receipt from its surety agent. The value of the Performance and Payment bond in all cases shall not be more than the Subcontractor's bid alternate amount submitted for these bonds. If the bond(s) value is more than the bid amount submitted for these bonds, the Subcontractor shall pay the difference to its surety agent at its cost.

**END OF SECTION**  
**TRADE PACKAGE SCOPE OF WORK:**  
**32C ASPHALT PAVING/CURB AND GUTTER SUBCONTRACT**