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CIVIL ENGINEERING | SURVEYING | LANDSCAPE ARCHITECTURE

MEMO — **10/22/2026** **SUBJECT —** Borough of Greencastle Plaza Phase 4-Addendum #3

TO — Qualified Bidders

CC —

FROM — FSA, Inc.

REMARKS:

Addendum #3 includes the following information:

- Clarification to bidder's RFI regarding canopy steel items, clip angles, etc.
[See attached drawings](#)

STRUCTURAL NOTES

GENERAL

- 1) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
- 2) NOTES AND DIMENSIONS ON DRAWINGS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS.
- 3) ALL WORK SHALL BE IN ACCORDANCE WITH THE MORE STRINGENT REQUIREMENTS OF THE MINIMUM STANDARDS LISTED IN THE GOVERNING CODE OR AS INDICATED HEREON. THE GOVERNING CODE SHALL BE THE INTERNATIONAL BUILDING CODE 2021.
- 5) THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION, INCLUDING ALL BRACING AND SHORING REQUIRED TO RESIST THE ACTUAL CONSTRUCTION LOADS.
- 6) ASTM SPECIFICATIONS LISTED SHALL BE THE LATEST EDITION.
- 7) DESIGN LIVE LOADS:
- | | |
|-------------------------------------|------------------------|
| EXTERIOR SLAB | 100 PSF |
| ROOF LIVE LOAD | 30 PSF (NON-REDUCIBLE) |
| SNOW LOAD BASED ON GROUND SNOW LOAD | Pg=40 PSF |
| ROOF SNOW LOAD | Pf=28 PSF |
- Cs=1.0 Ct=1.0
- | | |
|-------------------------------------|----------------------|
| RISK CATEGORY FOR WIND | II |
| WIND LOAD BASED ON BASIC WIND SPEED | V=115 MPH |
| WIND LOAD FOR MWFRS | 20 PSF |
| WIND LOAD FOR COMPONENTS & CLADDING | 25 PSF |
| RISK CATEGORY FOR SEISMIC | II |
| SITE CLASS | C |
| SEISMIC DESIGN CATEGORY | B |
| MAPPED SPECTRAL RESPONSE | Ss=16.5%g S1=5.1%g |
| SPECTRAL RESPONSE COEFFICIENT | Sds=13.2%g Sd1=5.8%g |

FOUNDATION

- 1) NO FOUNDATION SUBSURFACE INVESTIGATION HAS BEEN PERFORMED FOR THIS PROJECT.
- 2) FOOTINGS ARE DESIGNED BASED ON AN ALLOWABLE SOIL PRESSURE EQUAL TO 2000 PSF.
- 3) THE CONTRACTOR SHALL PROVIDE FOR ALL DE-WATERING, SHORING, BRACING, ETC. REQUIRED TO PLACE THE FOUNDATIONS AS INDICATED.
- 4) IF FOUNDATION MATERIAL IS UNCOVERED AND DETERMINED NOT TO BE CAPABLE OF SUPPORTING THE PRESSURE INDICATED, THE UNDERLYING MATERIAL SHALL BE OVER-EXCAVATED UNTIL COMPETENT MATERIAL IS FOUND AND BACKFILLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER.

STRUCTURAL STEEL

- 1) STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE A.N.S.I./A.I.S.C. SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ANSI/AISC 360, LATEST EDITION).
- 2) ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING ASTM DESIGNATIONS:
- | | | |
|-----------------------|-------------------|-----------|
| TUBE SHAPES (HSS) | ASTM A500 GRADE B | Fy=46 KSI |
| CHANNELS (C) | ASTM A36 | Fy=36 KSI |
| ANGLES (L) | ASTM A36 | Fy=36 KSI |
| PLATES & OTHER SHAPES | ASTM A36 | Fy=36 KSI |
- STAINLESS STEEL SHALL CONFORM TO THE REQUIREMENTS OF ANSI 316 AND SHALL HAVE A MINIMUM YIELD STRENGTH Fy=42 KSI.
- 3) BEAM CONNECTIONS SHALL BE LONGEST PERMITTED BY BEAM WEB DEPTH OR AS REQUIRED BY DESIGN.
- 4) ALL BOLTS SHALL CONFORM TO ASTM DESIGNATION A325 UNLESS NOTED OTHERWISE. ALL NUTS SHALL CONFORM TO ASTM DESIGNATION A563 UNLESS NOTED OTHERWISE. ALL WASHERS SHALL CONFORM TO ASTM DESIGNATION F436.
- 5) BOLT HOLES SHALL BE 1/16 INCH LARGER DIAMETER THAN NOMINAL SIZE OF BOLTS USED, UNLESS NOTED OTHERWISE. ALL BOLTED CONNECTIONS ARE DESIGNED FOR THE BEARING-TYPE CONDITION WITH THREADS INCLUDED IN THE SHEAR PLANE. BOLTS SHALL BE TIGHTENED TO THE SNUG-TIGHT CONDITION.
- 6) ALL WELDS SHALL BE MADE WITH 70 KSI ELECTRODES. STRUCTURAL STEEL SHALL BE WELDED IN CONFORMANCE WITH THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY (AWS D1.1/D1.1M, LATEST EDITION). REINFORCING STEEL SHALL BE WELDED IN CONFORMANCE WITH THE STRUCTURAL WELDING CODE - REINFORCING STEEL OF THE AMERICAN WELDING SOCIETY (AWS D1.4/D1.4M, LATEST EDITION)
- 7) ALL SHOP WELDS SHALL BE SHOP PAINTED. FIELD WELDS SHALL BE PAINTED TO MATCH. ALL STRUCTURAL STEEL SURFACES THAT ARE ENCASED IN CONCRETE OR ARE ENCASED BY BUILDING FINISH MAY BE LEFT UNPAINTED UNLESS NOTED OTHERWISE. PRIMER SHALL BE USED ELSEWHERE. SEE SPECIFICATIONS.
- 8) THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY BRACING FOR NEW STRUCTURAL STEEL.
- 9) THE FABRICATOR SHALL FURNISH SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

REINFORCING STEEL

- 1) REINFORCING STEEL SHALL BE DEFORMED 'S' BARS CONFORMING TO ASTM DESIGNATION A-615 GRADE 60. TIES AND STIRRUPS MAY BE GRADE 40. REINFORCING STEEL TO BE WELDED SHALL BE DEFORMED 'W' BARS CONFORMING TO ASTM DESIGNATION A-706, AND SHALL BE WELDED IN CONFORMANCE WITH AWS D1.4.
- 2) ALL REINFORCING SHALL BE FABRICATED AND PLACED IN CONFORMANCE WITH THE A.C.I. 'BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE' (ACI 318, LATEST EDITION) AND THE 'MANUAL OF STANDARD PRACTICE FOR CONCRETE REINFORCEMENT' BY C.R.S.I.
- 3) ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
- 4) WELDED WIRE FABRIC SHALL CONFORM WITH ASTM A-185. FABRIC SHALL BE SUPPLIED IN FLAT SHEETS ONLY.
- 5) MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH AND ONE HALF WHICHEVER IS GREATER.
- 6) REINFORCING SHALL BE SUPPORTED BY CHAIRS AS REQUIRED FOR PROPER PLACEMENT AND TO PREVENT DEFLECTION.
- 7) DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME SIZE, GRADE, AND SPACING OR NUMBER AS THE VERTICAL REINFORCING, RESPECTIVELY, UNLESS OTHERWISE NOTED.
- 8) THE RATIO OF REINFORCEMENT TO CONCRETE IN SLABS SHALL BE NO LESS THAN 0.0018. THE RATIO OF REINFORCEMENT TO CONCRETE IN CRACK-CRITICAL SLABS SHALL BE NO LESS THAN 0.005.

CONCRETE

- 1) ALL CONCRETE SHALL CONFORM WITH THE REQUIREMENTS OF THE A.C.I. 'BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE' (ACI 318, LATEST EDITION). STRUCTURAL CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTH (fc') UNLESS NOTED OTHERWISE:
- | | |
|----------------------------------|----------|
| CONCRETE FOR FOOTINGS | 3000 PSI |
| CONCRETE FOR SLABS, WALLS, PIERS | 4000 PSI |
| EXTERIOR CONCRETE SLABS | 4500 PSI |
- 2) CLEAR COVERAGE OVER OUTER REINFORCING BAR SHALL BE AS FOLLOWS:
- | | |
|--|----------|
| CONCRETE POURED DIRECTLY AGAINST EARTH | 3 INCHES |
| FORMED CONCRETE WITH EARTH BACKFILL | 2 INCHES |
| COLUMNS-CLEAR TO MAIN REINFORCING | 2 INCHES |
- 3) CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND APPROVED BY THE STRUCTURAL ENGINEER.
- 4) PORTLAND CEMENT SHALL CONFORM TO ASTM C-150 TYPE 1A OR TYPE 1 WITH AIR-ENTRAINING ADMIXTURE IF CONCRETE IS IN CONTACT WITH SOIL OR SUBJECT TO FREEZING AND THAWING. TYPE 1 SHALL BE USED ELSEWHERE.
- 5) AGGREGATE FOR CONCRETE SHALL CONFORM TO ALL THE REQUIREMENTS AND TESTS OF ASTM C-33 AND PROJECT SPECIFICATIONS. EXCEPTIONS MAY BE USED ONLY WITH THE PERMISSION OF THE STRUCTURAL ENGINEER.
- 6) EACH TRUCKLOAD OF CONCRETE SHALL BE TESTED FOR THE FOLLOWING:
- SLUMP OF 4"±1" IN ACCORDANCE WITH ASTM C143
 - AIR CONTENT OF 5% TO 7% IN ACCORDANCE WITH ASTM C231
 - CYLINDER BREAK TESTING IN ACCORDANCE ASTM C39
- 7) GROUT SHALL BE PLACED USING LOW LIFT CONSTRUCTION: 4' MAX. FILL HEIGHT OR PRESSURE PUMPED FROM BOTTOM OF UNIT TO BE FILLED, 8" MINIMUM SLUMP.
- 8) CONSTRUCTION JOINTS OR CONTROL JOINTS IN SLABS SHALL BE LOCATED SUCH THAT SPACING BETWEEN JOINTS DOES NOT EXCEED 15 FEET ON CENTER. WHERE FEASIBLE, JOINTS SHALL BE LOCATED UNDER PARTITION WALLS OR OTHERWISE HIDDEN BY OTHER ARCHITECTURAL FEATURES.

EPOXY ANCHORS & DOWELS

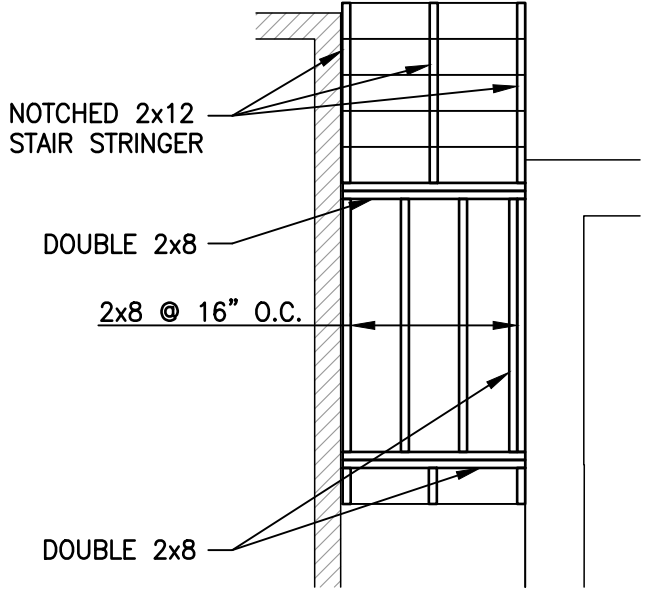
- 1) UNLESS NOTED OTHERWISE, ALL ANCHORS SHALL BE A36 THREAD RODS. UNLESS NOTED OTHERWISE, ALL DOWELS SHALL BE REINFORCING STEEL BARS PER THE CORRESPONDING NOTES ON THESE DRAWINGS.
- 2) EPOXY SHALL BE AS INDICATED ON THESE DRAWINGS OR AS DESCRIBED BELOW:
- MASONRY - HILTI HIT-HY 200 ADHESIVE
 - CONCRETE - HILTI HIT-HY 200 ADHESIVE
- EQUIVALENT OR SUPERIOR PRODUCTS MAY BE SUBSTITUTED PROVIDED THAT THEY ARE APPROVED BY THE ENGINEER.
- 3) ANCHORS AND DOWELS SHALL BE PLACED IN COMPETENT CONCRETE OR MASONRY MATERIALS.
- 4) EPOXY ADHESVES SHALL BE INSTALLED IN ACCORDANCE WITH ALL MANUFACTURER SPECIFICATIONS.

MASONRY

- 1) CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF A.C.I. 'BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES' (ACI 530, LATEST EDITION) AND THE N.C.M.A. SPECIFICATION.
- 2) CONCRETE BLOCK SHALL BE HOLLOW LOAD-BEARING CONCRETE MASONRY UNITS CONFORMING TO ASTM C90. USE OPEN END UNITS FOR BOND BEAM UNITS AT HORIZONTAL REINFORCING.
- 3) CEMENT SHALL BE AS SPECIFIED FOR CONCRETE.
- 4) MORTAR SHALL BE TYPE 'S' AND SHALL ATTAIN A COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.
- 5) GROUT SHALL ATTAIN A COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. USE SUFFICIENT WATER FOR GROUT TO FLOW INTO ALL MASONRY CELLS WITHOUT SEGREGATION. GROUT SHALL BE PLACED USING LOW LIFT CONSTRUCTION: 4' MAX. FILL HEIGHT OR PRESSURE PUMPED FROM BOTTOM OF UNIT TO BE FILLED, 8" MINIMUM SLUMP.
- 6) PROVIDE A MINIMUM OF 1/2 INCH GROUT BETWEEN MAIN REINFORCING BARS AND WALLS OF MASONRY UNITS. LOW LIFT CONSTRUCTION SHALL BE FOLLOWED WITH A MAXIMUM POUR HEIGHT OF 4 FEET.
- 7) CELLS IN CONCRETE BLOCKS SHALL BE IN VERTICAL ALIGNMENT WITH THE FOOTING DOWELS PLACED TO MATCH THIS VERTICAL ALIGNMENT. FILL ALL CELLS SOLID BELOW LOWEST FINISH FLOOR OR FINISH GRADE, WHICHEVER IS AT A HIGHER ELEVATION.
- 8) HORIZONTAL JOINT REINFORCING SHALL CONSIST OF 9 GAGE TRUSS REINFORCING VERTICALLY SPACED 16 INCHES ON CENTER.
- 9) CONTROL JOINTS SHALL BE PLACED NOT TO EXCEED A MAXIMUM SPACING OF 24 FEET OR AS SHOWN.

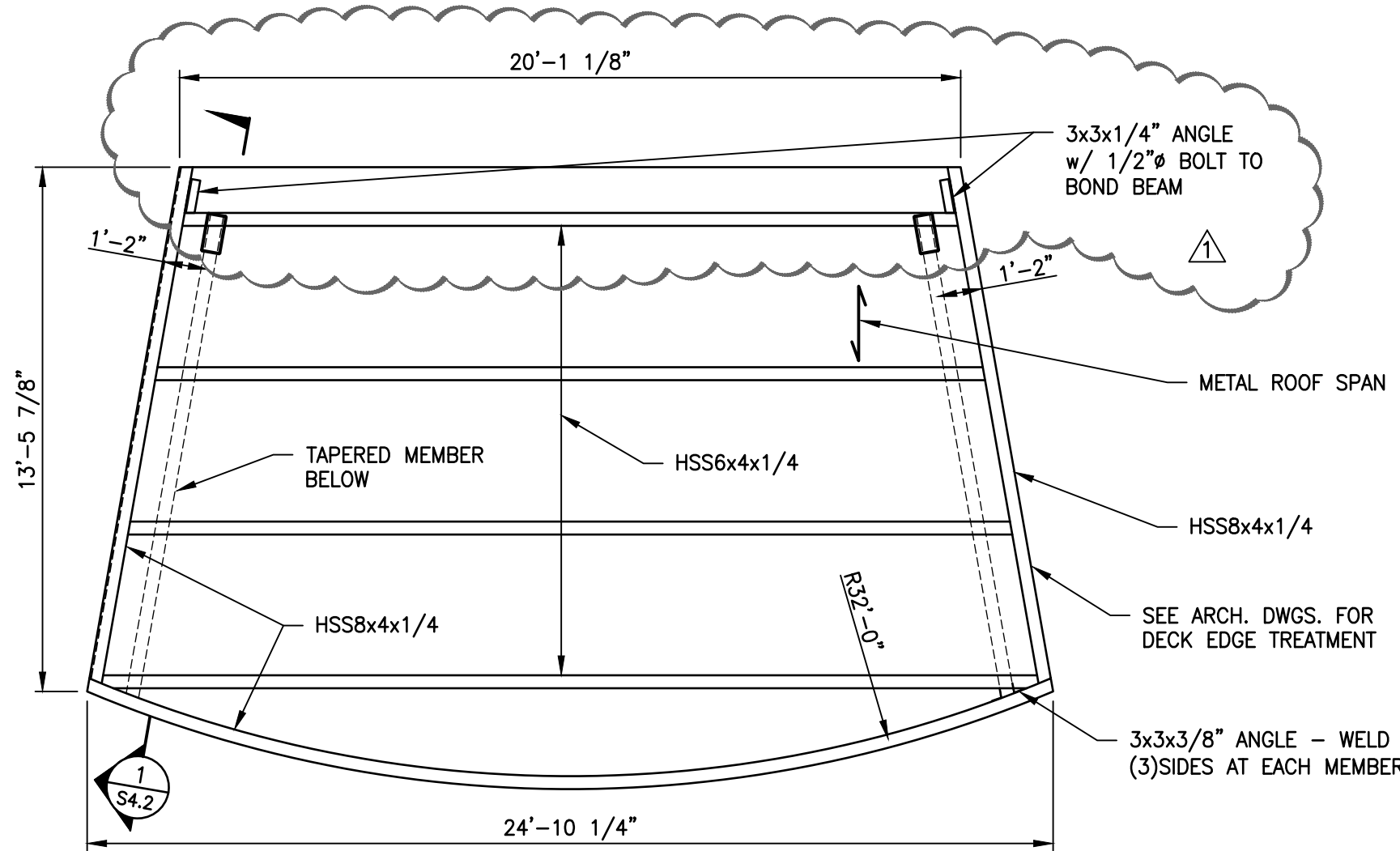
TIMBER

- 1) TIMBER CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE 'MANUAL OF HOUSE FRAMING' (LATEST EDITION) AS PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION AND THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
- 2) ALL TIMBER FRAMING SHALL BE TEMPORARILY BRACED AS REQUIRED UNTIL ALL CONNECTING MEMBERS AND BRACING HAVE BEEN ERECTED AND FASTENED IN PLACE.
- 3) SAWN LUMBER FRAMING MEMBERS SHALL BE SPRUCE-PINE-FIR #2 OR BETTER WITH THE FOLLOWING MINIMUM MATERIAL DESIGN PROPERTIES:
- | | |
|--------------------------------|--------------|
| ALLOWABLE BENDING STRESS: Fb = | 875psi |
| ALLOWABLE SHEAR STRESS: Fv = | 135psi |
| MODULUS OF ELASTICITY: E = | 1,400,000psi |
- 4) SHEATHING PANELS SHALL BE STRUCTURAL I GRADE OR OTHER GRADES COVERED IN THE U.S. DEPARTMENT OF COMMERCE PRODUCT STANDARD 1 (PS 1) OR 2 (PS 2); AND SHALL BE APPROPRIATELY MARKED WITH THE GRADE OF THE PANEL AND STAMPED BY THE INSPECTION AGENCY. UNLESS NOTED OTHERWISE, THE FOLLOWING MATERIALS SHALL BE USED:
- | | |
|-----------------|--------------------------------------|
| ROOF SHEATHING: | ¾" EXTERIOR GRADE OSB OR CDX PLYWOOD |
|-----------------|--------------------------------------|
- 5) WOOD ROOF DECK SHALL BE 2" (½" ACTUAL MINIMUM THICKNESS) TONGUE AND GROOVE WOOD DECKING PLACED IN A TWO-SPAN CONTINUOUS LAYUP AND HAVE THE FOLLOWING MINIMUM MATERIAL DESIGN PROPERTIES:
- | | |
|-----|------------|
| Fb= | 875psi |
| E= | 700,000psi |



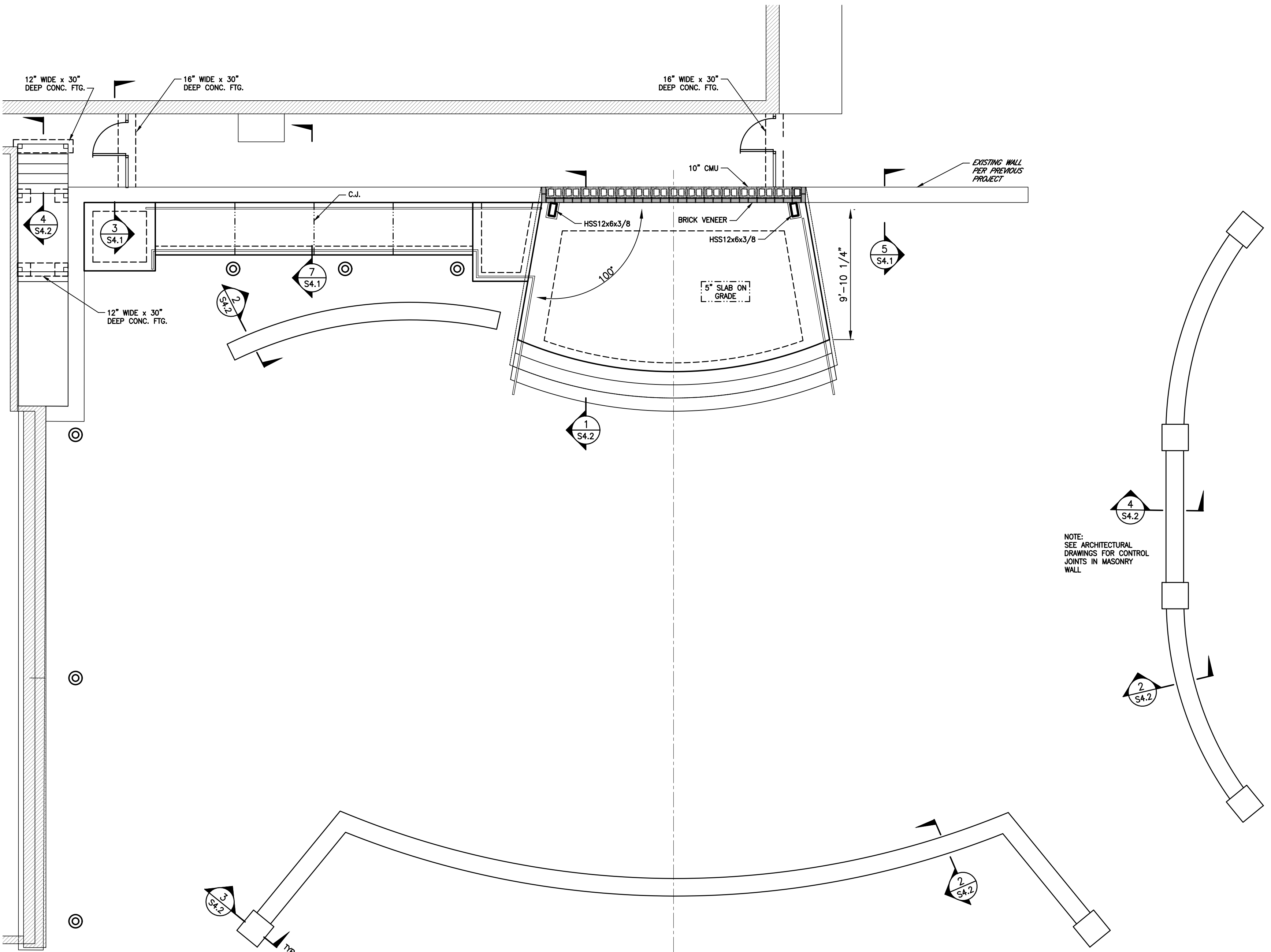
STAIR/LANDING FRAMING PLAN

1/4"=1'-0"



CANOPY FRAMING PLAN

1/4"=1'-0"



FOUNDATION PLAN

3/16"=1'-0"

M&A

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M&A PROJECT # 25-023



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM
A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE
COMMONWEALTH OF PENNSYLVANIA
LICENSE: PE027118E
EXPIRES: 30 SEP 2027

DATES:
PERMIT 19 JUNE 2026
REVISION 20 OCT 2026

Proposed Construction for
Town Hall Plaza
60 N. Washington Street
Greencastle, Pennsylvania 17225

STRUCTURAL
PLANS & NOTES

S1.1

