

**GENERAL NOTES - STRUCTURAL**

**1. General Information**

- A. The contractor shall verify dimensions and conditions before construction and notify the engineer of any discrepancies, inconsistencies, or difficulties affecting the work before proceeding.
- B. The contractor shall coordinate all disciplines, verifying size and location of all openings, whether shown on structural drawings or not, as called for on architectural, mechanical, or electrical drawings. In the case of work in an existing building the contractor shall scan existing structure to locate all rebar in the area of the new core/opening using ground penetrating radar and notify the engineer of record for review prior to commencing. Conflicts, inconsistencies, or other difficulties affecting structural work shall be called to the architect or engineer's attention for direction before proceeding.
- C. All design and construction work for this project shall conform to the requirements of the following governing design codes:
  - International Building Code (IBC 2018) as amended by the city of Lee's Summit, Missouri
  - Minimum Design Loads for Buildings and Other Structures (ASCE7-16)
  - Specification for Structural Steel Buildings (AISC 360-16)
  - Member Design Basis is Allowable Stress Design (ASD)
  - Construction Basis is Allowable Stress Design (ASD)
  - Structural Welding Code (AWS D1.1-17)
  - Building Code Requirements for Structural Concrete (ACI 318-14)
  - Building Code Requirements for Masonry Structures (ACI 530-16)
  - North American Specification for the Design of Cold-Formed Steel Structural Members (AISI S100-16)
  - National Institute of Standards and Technology (NIST) for Wood Construction with 2018 Supplements (ANSI/AWC NDS-2018)
  - Special Design Provisions for Wind and Seismic (AWC SDWP-2015)
 These drawings are for this specific project and no other use is authorized.

**2. Structural Load Design Criteria**

- A. Dead Load:
  - Floor, Apartment = 35 psf
  - Floor, Balcony = 15 psf
  - Garage Collateral (Above Podium) = 25 psf
  - Roof = 25 psf
  - Roof, Metal Pan = 60 psf
  - Stair, Wood = 25 psf
- B. Live Load:
  - Floor, Apartment = 40 psf
  - Floor, Balcony = 60 psf
  - Floor, Corridor (Serving Apartment) = 40 psf
  - Floor, Corridor (Serving Public) = 100 psf
  - Floor, Public (Clubhouse) = 100 psf
  - Floor, Storage = 125 psf
  - Garage = 40 psf
  - Roof = 20 psf
  - Roof, MEP Equipment Zone = 45 psf
  - Stair = 100 psf
- C. Snow:
  - $P_s = 20 \text{ psf}$ ,  $C_e = 1.0$
  - $P_f = 14 \text{ psf}$  (Ap) & 16.8 psf (Garage),  $P_m = 20 \text{ psf}$
  - $P_g = 1.0$ ,  $C_s = 1.0$ ,  $C_t = 1.0$  (Ap) & 1.2 (Garage)
  - Dirk & unbalanced snow loads per ASCE7-16
- D. Lateral Loads:
  - 1.) Wind ( $V_{90} = 109 \text{ mph}$ , exposure C,  $I_w = 1.0$ ,  $G_{CP} = 1.0$ , 18
  - design wind pressures to be used for the design of exterior component and cladding materials on the designated zones of wall and roof surfaces shall be per section 30.7 and Table 30.7-2 of ASCE7-16. Tabulated pressures shall be multiplied by effective area reduction factors, exposure adjustment factors, and topographic factors where applicable
  - 2.) Seismic:  $S_s = 0.099$ ,  $S_1 = 0.068$ ,  $I_e = 1.0$
  - Site Classification: D
  - Seismic Design Category: B
  - Basic Seismic Force-resisting System:
    - A.2 - Ordinary Reinforced Concrete Shear Walls
    - $R = 4$ ,  $\Omega_{max} = 2.12$ ,  $C_d = 2.12$ ,  $V = 0.053W$
    - At Apartments Above Podium:
      - A.17 - Light-Framed Walls with Shear Panels of All Other Materials
      - $R = 2$ ,  $\Omega_{max} = 2.12$ ,  $C_d = 2.12$ ,  $V = 0.053W$
      - At Precast Garage:
        - A.6 - Ordinary Precast Shear Walls (NS Direction)
        - $R = 3$ ,  $\Omega_{max} = 2.12$ ,  $C_d = 3$ ,  $V = 0.032W$
        - B.9 - Ordinary Precast Shear Walls (EW Direction)
        - $R = 4$ ,  $\Omega_{max} = 2.12$ ,  $C_d = 4$ ,  $V = 0.026W$

E. This project is designed to resist the most adverse effects resulting from the load combinations of section 1605.3 of the International Building Code.

**3. Concrete**

- A. All concrete for foundations (walls, grade beams, footings and piers) shall develop minimum ultimate compressive design strength of 3500 psi in 28 days, but not less than 500 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5 gallons of water per 100 pounds of cement and not over 4 inches of slump.
- B. All concrete for interior slabwork (without floor covering) shall develop minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 525 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5.75 gallons of water per 100 pounds of cement and not over 4 inches of slump. Concrete mix shop drawings shall contain testing data proving concrete design mix shrinkage is less than 0.034% at 28 days when tested according to ASTM C157 (air drying method only).
- C. All concrete for exterior slabwork (with floor covering) shall develop minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 540 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5.40 gallons of water per 100 pounds of cement and not over 4 inches of slump. Concrete mix shop drawing shall contain testing data proving concrete design mix shrinkage is less than 0.034% at 28 days when tested according to ASTM C157 (air drying method only).
- D. All concrete for exterior slabwork shall have a minimum design compressive strength of 4500 psi in 28 days, with not less than 560 pounds of cement per cubic yard of concrete, not over 5 gallons of water per 100 pounds of cement, with 0% +/- 1% air entrainment, and a maximum of 4 inches of slump.
- E. All concrete for columns shall develop a minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 560 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5 gallons of water per 100 pounds of cement and not over 4 inches of slump.
- F. The preceding minimum mix requirements may have water-reducing admixtures conforming to ASTM C494 added to the mix at manufacturer's dosage rates for improved workability.
- G. The preceding minimum mix requirements may have up to 15% maximum of the cement content replaced with an approved ASTM C618 Class C fly ash, provided the total minimum cementitious content is not reduced.
- H. Combined aggregate (coarse plus fine) for all concrete shall be well graded from coarse to finest with no more than 18 percent and not less than 8 percent retained on an individual sieve, except that less than 8 percent may be retained on coarsest sieve and on No. 50 and finer sieves. Submit this gradation with the concrete mix design shop drawings.
- I. All interior concrete slabs on grade shall be placed over 15 mil, Class A Vapor Barrier per ASTM E1745 with less than 0.01 perms, tested after mandatory conditioning. All joints shall be lapped and sealed per manufacturer's recommendations. All penetrations, as well as damaged vapor barrier material shall also be sealed per manufacturer's recommendations and concrete placement. Install barrier per manufacturer recommended details at all discontinuous edges (at interior columns, exterior edge of slab, etc.) to ensure terms of warranty are followed. The vapor barrier shall be lapped over drainage granular material as prescribed by the project soils report.
- J. Basement foundation walls shall be braced at the base and top of wall by the contractor until the slab on grade at the base and the floor framing slab at the top of wall is complete and the concrete has achieved 75% of the design strength. The contractor is responsible for engineering and design of the wall bracing, if required.
- K. All concrete is reinforced concrete unless specifically called out as unreinforced. Reinforce all concrete not otherwise shown with same steel as in similar sections or areas. Any details not shown shall be detailed per ACI 318 and meet requirements of ACI 318, current editions.
- L. Control joints in dirt formed slab to be as shown on plans. Where not shown, limit controlled areas to not more than 144 square feet, or 12 feet any one side. Slab panel size ratio shall not exceed 1:12 to 1.
- M. Contractor shall verify that all concrete inserts, reinforcing and embedded items are correctly located and rigidly secured prior to concrete placement.
- N. Construction joints in beams, slabs, and grade beams shall occur at midspan (middle third) unless noted otherwise. Provide 2 x 4 horizontal keys at construction joints for shear transfer.
- O. No aluminum items shall be embedded in any concrete.

**4. Reinforcing Steel**

- A. All reinforcing steel shall conform to the requirements of ASTM A615 or A706 grade 60 steel. Welded joint wire fabric shall be supplied in sheets and conform to the requirements of ASTM A185.
- B. Clear minimum coverage of concrete over reinforcing steel shall be as follows:
  - Concrete placed against earth: 3"
  - Formed concrete against earth: 2"
  - Slabs: 1-1/2"
  - Beams or Columns: 1-1/2"
  - Other: 2"
- C. All coverage shall be nominal bar diameter minimum.
- D. All dowels shall be the same size and spacing as adjoining main bars (splice tab 48 bar diameters or 24" minimum unless noted otherwise).
- E. At corners of all walls, beams, and grade beams supply corner bars (minimum 2-0" in each direction or 48 bar diameters) in outside face of wall, matching size and spacing of horizontal bars. Where there are no vertical bars in outside face of wall, supply 3-#4 vertical support bars for corner bars.
- F. Bars marked continuous and all vertical steel shall be lapped 48 bar diameters (2-0" minimum) at splices and embedments, unless shown otherwise. Splice top bars near midspan and splice bottom bars over supports, unless noted otherwise.
- G. At all holes in concrete walls and slabs, add 2-#5 bars (opening dimension plus 96 diameters long) at each of four sides and add 2-#5 x 5-0" diagonally at each of four corners of hole. Openings in 8" thick walls are reinforced similar, but with 1-#5 instead of 2-#5, respectively.
- H. Unless otherwise covered on architectural plans or specifications, vertical control joints in concrete wall shall be spaced at a maximum of 20'-0" on center and coordinated with the architect. Every other horizontal wall reinforcing bar shall be discontinued at control joints except heavy top and bottom bars unless noted otherwise. Provide base wall waterstop style number: 772 (by Greenstreak Inc. or approved equal) on drift side of wall at all walls below grade.

**H. Accessories shall be as specified in latest edition of the ACI Detailing Handbook and the concrete Reinforcing Steel Institute Design Handbook. Maximum accessory spacing shall be 4'-0" on center, and all accessories on exposed surfaces are to have plastic coated feet.**

- I. All slabs and stairs not shown otherwise shall be 6" thick with #4 bars at 12" on center each way. All exterior porches and stoops not otherwise detailed may be constructed in any standard manner, solid or hollow, but must be reinforced with #4 bars at 12" on center each way minimum. Rebar shall be dowelled to adjacent walls or grade beams with #4 bars at 12" on center, hooked or embedded 48 diameters into both members. Slope pitches 1/8" per foot for drainage unless noted otherwise.
- J. Allow 2 tons of reinforcing bars #4 or larger to be used as directed in the field for special conditions by the engineer of record (labor for placing same to be included).

**5. Structural Steel**

- A. All structural steel beams and columns shall be ASTM A992, grade 50 steel and all miscellaneous steel shall be ASTM A36 grade steel (except at moment connections where plates shall be ASTM A572, grade 50). Hollow Structural Sections (HSS) shall be ASTM A501, grade C. Fabrication and erection shall be in accordance with AISC 303-05 "Code of Standard Practice for Steel Buildings and Bridges" in the 13th Edition of the AISC Steel Construction Manual.
- B. All welding shall conform to the recommendations of the AWS.
- C. All exterior steel and connections, and brick relief angles shall be hot-dip galvanized.
- D. All bolts not otherwise specified shall be 3/4" diameter high strength (ASTM A325-N). All bolts shall be fully pretensioned. All beam connections shall be designed per the AISC Manual of Steel Construction "Framed Beam Connections" for the indicated reactions or at least 0.4 x beam total shear capacity,  $V_u/\Omega_{max}$ , shown in the maximum total uniform load tables, whichever is greater; and shall account for eccentricity when the bolt line is more than 2" from the center of the support. All connections must be two bolt minimum. Additional connection elements may not be specifically shown in the conceptual details in this set but may be required by the final connection design, such as stiffener plates, doubler plates, slipment/reinforcing plates or other connection material. Connection design and shop drawing preparation shall be completed under the direct supervision of the engineer of record in accordance with the state the project is located and shop drawings and connection calculations shall bear his/her seal.
- E. All anchor bolts shall be 3/4" diameter, ASTM F1554, Grade 36 unless noted otherwise. Washers of minimum size and thickness for the given anchor diameter in Table 14.2 of the AISC Steel Construction Manual shall be provided at every column anchor bolt. Washers shall have a standard size hole, whichever is greater; and, shall account for eccentricity when the bolt line is more than 2" from the center of the support. All connections must be two bolt minimum. Additional connection elements may not be specifically shown in the conceptual details in this set but may be required by the final connection design, such as stiffener plates, doubler plates, slipment/reinforcing plates or other connection material. Connection design and shop drawing preparation shall be completed under the direct supervision of the engineer of record in accordance with the state the project is located and shop drawings and connection calculations shall bear his/her seal.
- F. Allow 2.0 tons structural steel to be used as directed in the field for special conditions by the engineer of record. Cost for shop drawings, fabrication, delivery, detailing, and erection to be included. 50% of structural steel allowance shall be bid as miscellaneous galvanized angle and plate.

**6. Post Installed Anchors**

- A. Post-installed anchors shall be used only where specified on the drawings unless approved in writing by the engineer of record. See drawings for anchor diameter, spacing and embedment. Performance values of the anchors shall be obtained for specified products using appropriate design procedures and anchor standards as required by the governing building code. Anchors installed in concrete shall have an ICC-ES Evaluation Service Report. Special inspection is required for all post installed anchors. The contractor shall coordinate an on-site meeting with the post installed anchor manufacturer field representative to educate the construction team on the anchor installation guidelines and requirements.
- B. Mechanical anchors used in cracked and uncracked concrete shall have been tested and qualified for use in accordance with ACI 308.2 and ICC-ES AC108. All anchors shall be installed per the anchor manufacturer's written instructions.
- C. Adhesive anchors used in cracked and uncracked concrete shall have been tested and qualified for use in accordance with ICC-ES AC308. All anchors shall be installed per the anchor manufacturer's written instructions.
- D. Mechanical anchors used in solid grouted masonry shall have been tested and qualified for use in accordance with ICC-ES AC101. All anchors shall be installed per the anchor manufacturer's written instructions.
- E. Adhesive anchors used in solid grouted masonry shall have been tested and qualified for use in accordance with ICC-ES AC08. All anchors shall be installed per the anchor manufacturer's written instructions.
- F. Anchors used in hollow concrete masonry shall have been tested and qualified in accordance with ICC-ES AC106 or ICC-ES AC55 as appropriate. All anchors shall be installed per the anchor manufacturer's written instructions with appropriate screen tubes used for adhesives.

**7. Foundations**

- A. The soil investigation was prepared by Terracon, the report number is 02215169 and the telephone number is 913-492-7777.
- B. Structural foundations consist of a network of straight shaft auger pressure grouted piles established on moderately weathered shale capable of safely supporting 40 kips per shaft. Each pile shall penetrate 5'-0" minimum into the moderately weathered shale. Spreading footing and shallow foundations for ancillary structures are designed to bear on engineered fill or undisturbed soil capable of safely supporting 1,500 psf.
- C. Retaining walls are designed for an active lateral load of 60 pcf equivalent fluid pressure.
- D. Basement walls are designed for an active lateral load of 70 pcf equivalent fluid pressure. See General Notes 3.1 for wall bracing requirement.
- E. Contractor shall provide for dewatering at excavations from either surface water or seepage.
- F. All foundation excavations shall be inspected by a qualified soil engineer, approved by the architect and/or structural engineer, prior to placement of steel or concrete. This inspection shall be at the owner's expense.
- G. All concrete in the structural portion retaining the backfill shall have attained its design strength prior to being backfilled.
- H. Moisture content in soils beneath building locations should not be allowed to change after grading excavations and after grading for slabs on grade are completed. If subsurface materials become desiccated or softened by water or other conditions, recompact materials to the density and water content specified for construction. Do not place concrete on frozen ground.

**8. Drilled Auger Pressure-Grouted Piers**

- A. Piers not otherwise indicated shall be 30" diameter.
- B. All piers shall have (4) #7@4'-0" hooked dowels unless otherwise indicated.
- C. Piers shall extend 40 diameters above top of pier. Drilling down into concrete after initial set is not allowed.
- D. Refer to the specifications (sections for excavation and concrete) for other detailed requirements.
- E. Pier concrete to have 6" slump.

**9. Concrete Masonry Units**

- A. Concrete block used in exterior walls or load bearing walls shall meet the requirements of ASTM C90 and have a minimum net compressive strength of 2650 psi and laid up using Type N mortar such that  $f_m$  equals 2000 psi. Mortar shall be volume proportion based cement lime mortar. Proportioning shall be completed by mix measure. Any block in contact with earth shall be normal weight units, laid using type "S" mortar and grouted solid.
- B. The contractor shall provide adequate temporary bracing for all masonry walls during construction.
- C. All concrete block shall have 9 gage (or larger) horizontal joint reinforcing (ladder or truss) per architectural drawings and specifications (16" maximum vertical spacing).
- D. Cavity wall construction shall be reinforced as designed for specific concrete block used. The horizontal joint reinforcing shall be of the same size and spacing as the specification and continuous between brick and block, as prescribed by the architectural drawings.
- E. Concrete block shall be reinforced as follows in 6", 8", 10", and 12" walls:
  - Vertical reinforcing shall be a minimum of 1 - #4 bar in 6" and 8" walls and 2 - #4 bars in 10" and 12" walls at 4'-0" on center, at each corner, at each door and window jamb, each side of control joints and in the end void of each length of wall. Lap splices for masonry vertical reinforcing shall be 48 bar diameters or 24" minimum.
  - Horizontal reinforcing:
    - Horizontal joint reinforcing as noted above.
    - Continuous horizontal bars shall be included per section or detail in bond beam or optional turning bond beam where noted. Where bond beams are continuous at corners of walls, supply corner bars matching size of horizontal bars (minimum 2-0" or 48 bar diameters in each direction).
- F. GROUT, where noted above, shall have a minimum design ultimate compressive strength of 2500 psi at 28 day test and 30" maximum aggregate size.
- G. Non-load bearing concrete block walls shall be isolated from adjacent structural elements with vertical 3/8" control joints and at the top of the wall with air space or compressible material and support per architectural detail.
- H. Unless otherwise covered on architectural plans or specifications, vertical control joints in masonry construction shall be 3/8" wide, full height of wall, and shall be spaced at a maximum of 24'-0" on center and coordinated with the architect. All horizontal joint reinforcing shall be discontinued at control joints in masonry. All bond beam horizontal reinforcing shall be continuous through control joints.
- I. Lintels over all openings up to 8'-0" wide in new and existing masonry walls not otherwise covered shall be one #3 1/2x5/16 angle for each 4" width of masonry. All exterior lintels to be galvanized.
- J. Walls shall be anchored top and bottom by dowels matching wall vertical reinforcing (unless noted otherwise) from floor slab bottom and bracing angles at the top, per details on the drawings.

**10. Light Gauge Metal Structural Framing**

- A. All load bearing, light gauge structural studs, track, and bridging shall be of the type, size, gage, and spacing as shown on the plans, minimum.
- B. All materials shall be 33,000 psi minimum yield, except studs of 16 gage or heavier shall have a minimum yield of 50,000 psi.
- C. All pipes, fabrication, and erection shall be in accordance with latest editions of the AISI "Specifications for the Design of Cold-Formed Steel Structural Members."
- D. All framing components shall be galvanized to provide corrosion resistance against atmospheric members. Splicing of axially loaded members is not permitted. Members shall be held firmly in place until properly fastened. Attachments of wall panel components shall be made using screw attachment, or bolting. Wire type of components is not permitted.
- E. Tracks shall be securely anchored to floor and overhead members. Vertical anchorage requirements for wind bracing shall be as shown on the plans.
- F. Prior to fabrication and/or erection, the contractor shall submit shop drawings complete with detail of erection, fabrication, attachments, anchorages, lintels, etc., for review by the architect/engineer.

**11. Timber and Wood Framing**

- A. Quality and construction of wood framing members and their fasteners for load supporting purposes not otherwise indicated on the drawings shall be in accordance with the 2018 International Building Code.
- B. All studs and top and bottom plates shall be Douglas Fir No. 2 grade visually graded lumber, with an allowable flexural stress in bending of 900 psi minimum and an elastic modulus of 1,600,000psi unless noted otherwise. All joist, truss members, and headers to be No. 2 grade (min) unless otherwise noted. Lumber for exterior decks and balconies shall be treated Southern Yellow Pine No. 2 grade.
- C. Bridging of stud bearing walls and shear walls shall be solid, matching sheathing joists. Joist blocking and bridging shall be of wood or steel bridging of either wood or metal straps. Spacing, in any case, shall not exceed 8'-0".
- D. Wood members and sheathing shall be fastened with number and size of fasteners not less than that set forth in Table 2308.9.1 of the 2018 International Building Code. Floor sheathing shall be APA rated tongue and groove Stud-I-Floor, exposure 1, glued and nailed with 10d nails or 10 screws at 12" on center. Sheathing of shear walls or roof diaphragms shall be edge nailed with 8d common nails at 6" on center and nailed to intermediate framing and/or blocking members with 8d common nails at 12" on center unless otherwise noted on the drawings.
- E. Shearwall sheathing shall be bolted to concrete slabs with 1/2" diameter bolts at 32" on center (L/NO, re: shearwall schedule.) Provide plate washers at all plate anchors for shearwalls per shearwall schedule. Plates in direct contact with concrete or masonry shall be preservative-treated.
- G. All hangers, ties and connections shown are based on Simpson Strong Tie as the basis of design, provide Simpson Strong Tie or an approved equal. Joist hangers shall be equal to LUS3 for wood application and "L8" for steel weld-on application. Roof truss ties shall be equal to "H2.5A" and tie the roof truss to the top plate (provide 2" H2.5A" diagonally across from each other when uplift load shown in truss shop submittal exceeds 600lbs). Roof girder ties shall be equal to a "L12", "L13S" or "L13T" (as dependent on number of plies) and tie the truss girder to the top plate. Provide "H2.5A" at the top of each stud to top track when the top track has roof truss attached.
- H. Service moisture - dry with moisture content at or below 19% in service.
- I. Laminated strand lumber (LSL) shall have an allowable flexural stress (Fb) of 1,700 psi (reduced by size factor) and an elastic modulus (E) of 1,300,000 psi.
- J. Laminated veneer lumber (LVL) shall have an allowable flexural stress (Fb) of 2,600 psi (reduced by size factor) and an elastic modulus (E) of 2,000,000 psi.
- K. Parallel Strand Lumber (PSL) shall have an allowable flexural stress (Fb) of 2,900 psi (reduced by size factor) and an elastic modulus (E) of 2,000,000 psi. (E) = 2,200,000 psi for Strands > 18").
- L. Gulgams shall be 2x4-V8 or better with an allowable flexural stress (Fb) of 2,400 psi and an elastic modulus (E) of 1,800,000 psi.
- M. Pre-engineered wood trusses shall be designed in accordance with the Truss Plate Institute's national design standard for metal-plate connected wood truss construction (ANSI/TPI-1 latest edition). Trusses shall be designed by an authorized member of the Wood Truss Council of America (WTCA). Truss design shall conform to specified codes, allowable stress increases, deflection limitations and other applicable criteria of the governing code.
- N. Truss shop drawings showing complete erection and fabrication details and calculations (including connections) shall be submitted to the project architect/engineer for review prior to fabrication and/or erection. Calculations and layout plans shall bear the seal of a professional engineer, registered in the state of the project location. Layout plan shall include truss locations, spacing and all hanger designations used to support trusses to beams or other trusses. Calculations shall indicate max reactions in all directions, number of plies for the truss and dead, live and total load deflections along with a list or key of all standard and non-standard utilized load combination. Shop drawings shall also be submitted to the local government controlling agency when requested by that agency.
- O. All trusses shall be securely braced both during erection and permanently, as indicated on the approved truss design drawings and in accordance with TPI's commentary and recommendations for bracing of trusses using metal-plate connected wood trusses (HIB-91, booklet) and the latest edition of ANSI/TPI-1.
- P. The truss manufacturer shall supply all hardware and fasteners for joining trusses together and fastening truss members to the supporting metal connector plates shall be manufactured by a member of the Wood Truss Council of America (WTCA) and shall be 20 gage minimum. Connector plates shall meet or exceed ASTM A653, grade 33, and meet ASTM A430 Corrosion Control Designation. Trusses shall be printed for distribution to the owner, architect, and general contractor for coordination, bidding, and construction. Subcontractors may not reproduce these drawings for any purpose in any manner.
- I. Christopher A. Bevelin, P.E., registered engineer and a representative of any Bob D. Campbell and Company, Inc., do hereby accept professional responsibility as required by the professional registration laws of the state of Missouri for the structural design drawings consisting of S-series drawings. I hereby disclaim responsibility for all other drawings in the construction document package, they being the responsibility of other design professionals whose seals and signed statements may appear elsewhere in the construction document package.

**12. Precast Concrete Members**

- A. The contractor/supplier is responsible for the design of all the precast members and connection between them and other structural members. Submit design calculations, sealed by an engineer licensed in the state of the project location, for review by the architect/engineer of record. The contractor/supplier shall be responsible for the design of the overall structural system designed by Bob D. Campbell and Company, Inc.
- B. All precast members are to be designed in accordance with ACI 318-11, 2012 IBC and other applicable codes, standards (see specs) and design criteria shown on engineering documents.
- C. Precast concrete members shall conform to the 2012 IBC for the required fire ratings (refer to architect's documents).
- D. All wall panels supporting building wind loads, seismic loads, gravity loads, and transmit these loads to the foundation through properly designed connections.
- E. Provide blockouts and openings for mechanical/electrical equipment. Refer to mechanical/electrical documents.
- F. Shop drawings shall be complete and shall include a layout plan, fabrication marks, estimated camber, connection and anchorage details and member identification details. Identification marks shall appear on manufactured units to facilitate correct field placement.

**13. Deferred Submittal and Shop Drawing**

- A. Bob D. Campbell and Company, Inc. will review the General Contractor's (GC) shop drawings and related submittals (as indicated below) with respect to the ability of the contractor to construct the work, when complete, to be a properly functioning integral element of the overall structural system designed by Bob D. Campbell and Company, Inc.
- B. Deferred submittals shall be submitted to the architect of record for review who shall forward to the building official for review. Design calculations for deferred submittals shall be submitted at the same time as the shop drawings for review. Design calculations shall be prepared and sealed by a Professional Engineer licensed in the state of the project. The deferred submittal items shall not be installed until the deferred submittal documents have been approved by the building official.
- C. Prior to submittal of a shop drawing or any related material to Bob D. Campbell and Company, Inc., the GC shall:
  - Review each submittal for conformance with the means, methods, techniques, sequences and operations of construction and safety procedures and programs incidental thereto, all of which are the sole responsibility of the GC.
  - Review and approve each submittal.
  - Stamp each submittal as approved.
- D. Bob D. Campbell and Company, Inc. shall assume that no submission comprises a variation unless the GC advises Bob D. Campbell and Company, Inc. with written documentation.
- E. Bob D. Campbell and Company, Inc. shall review shop drawings and related materials with comments provided that each submission has met the above requirements. Bob D. Campbell and Company, Inc. shall return without comment unrevised material submittals without GC approval stamp.
- F. Shop drawings and related material (if any) required are indicated below. Should Bob D. Campbell and Company, Inc. require more than ten (10) working days to perform the review, Bob D. Campbell and Company, Inc. shall so notify the GC.
  - Concrete mix designs and material certificates including admixtures and compounds applied to the concrete after placement.
  - Reinforcing steel shop drawings including erection drawings and bending details Bar list will not be reviewed for correct quantities.
  - Elevations of all reinforced concrete masonry walls at a scale no smaller than 3/8" = 1'-0" showing all required reinforcing.
  - 4" CONC. SLAB (4000psi) REINFORCE WITH #6-W/2-WX2.9 W/WF ATOP 4" OF 3/4" CLEAN GRANULAR LEVELING COURSE, ATOP SUITABLE SUBGRADE MATERIAL, PER GEOTECH SPECIFICATIONS. T/S/LAB EL. = PER PLAN, SLOPE TO DRAIN
  - 8" CONC. SLAB (4500psi, AIR-ENTRAINED) REINFORCE WITH #6-W/2-WX2.9 W/WF ATOP 4" OF 3/4" CLEAN GRANULAR LEVELING COURSE, ATOP SUITABLE SUBGRADE MATERIAL, PER GEOTECH SPECIFICATIONS. T/S/LAB EL. = PER PLAN, SLOPE TO DRAIN
  - 6" CONC. SLAB (4500psi, AIR-ENTRAINED) REINFORCE WITH #6-W/2-WX2.9 W/WF ATOP 4" OF 3/4" CLEAN GRANULAR LEVELING COURSE, ATOP SUITABLE SUBGRADE MATERIAL, PER GEOTECH SPECIFICATIONS. T/S/LAB EL. = PER PLAN, SLOPE TO DRAIN
  - 19/32" APA RATED, EXP 1 SHEATHING ATTACHED WITH #10 SCREWS AT 6" O.C. AT EDGES & 12" O.C. AT FIELD. (PROVIDE FRT TREATED PLYWOOD AT FIREWALLS - REFER TO ARCH DRAWINGS FOR LOCATION AND EXTENT)
  - 23/32" APA RATED, EXP 1 SHEATHING ATTACHED WITH #10 SCREWS AT 6" O.C. AT EDGES & 12" O.C. AT FIELD WITH ALL EDGES BLOCKED
- D. Deferred Submittal: Augered pile foundation plans and details.
- D. Deferred Submittal: Precast concrete shop drawings including erection drawings and connection details.
- D. Deferred Submittal: Cold concrete connection design calculations.
- D. Deferred Submittal: Cold-Formed metal framing for exterior walls.

**14. Statement of Structural Special Inspections**

- A. The structural design for this project is based on completion of special inspections during construction in accordance with section 1704 of the International Building Code. The owner shall employ one or more qualified special inspectors to provide the required special inspections.
- B. The special inspector shall furnish inspection reports to the building official, owner, architect and structural engineer, and any other designated person.
- C. All discrepancies noted on the inspection reports shall be brought to the building official for correction, then, if uncorrected, to the proper design authority, including official and structural engineer.
- D. The special inspector shall submit a final signed report stating that the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of the governing building code.
- E. The following inspections and tests are required with the frequency (continuous or periodic) as defined within the referenced section or standard listed below. The General Contractor shall be responsible to the inspector when items requiring inspection are ready to be inspected and provide access for those inspections.
  - Shop Fabrication - structural steel per Section 1704.2.5 unless AISC certified
  - Shop Fabrication - pre-engineered wood trusses per Section 1704.2.5 unless TPI certified shop
  - Shop Fabrication - precast concrete per Section 1704.2.5 unless PC certified shop
  - Steel Construction per Section 1705.2 and the quality assurance requirements of AISC 341 Chapter J (as referenced by AISC 360)
  - Concrete Construction per Section 1705.3 and Table 1705.3
    - Reinforcing Steel Placement
    - Reinforcing Steel Verification
    - Cast in Place Anchors
    - Post Installed Anchors
    - Service Mix Verification
    - Concrete Sampling and Testing
    - Concrete Placement
    - Concrete Curing
    - Prestressed Concrete Stressing and Grouting
    - Erection of Precast
    - Verification of In-situ Concrete Strength Prior to Stressing Post-Tensioned Concrete
  - Formwork Shape, Location and Dimensions
  - Masonry Construction per Section 1705.4 and the quality assurance requirements of TMS 402/ACI308/ASCE5 and TMS602/AS310/ASCE5 Level B
  - Verification of Soils per Table 1705.6
  - Inspection and Tests of Cast-in-Place Deep Foundation per Table 1705.6
  - Wood Lateral System (periodic)
    - Wood sheathings (include sheathing, rib board and bottom plate attachments)
    - Portal frames
    - Shear wall and portal frame holdowns
    - Shear wall tension rod system
  - Wood Gravity Framing and Placement (adjust frequency of random sampling where indicated as required)
    - Heavy timber/SC/Lgulum beams and supports (periodic)
    - Headers and jamps (random sampling)
    - Bearing walls (random sampling)
    - Connection hardware installation (random sampling)
    - Floor and roof trusses (random sampling)

**15. Copyright and Disclaimer**

- A. All drawings in the structural set (S-series drawings) are the copyrighted work of Bob D. Campbell and Company, Inc. These drawings may not be photocopied, traced, or copied in any manner without the written permission of Bob D. Campbell and Company, Inc. Original design and construction drawings shall be printed for distribution to the owner, architect, and general contractor for coordination, bidding, and construction. Subcontractors may not reproduce these drawings for any purpose in any manner.
- I. Christopher A. Bevelin, P.E., registered engineer and a representative of any Bob D. Campbell and Company, Inc., do hereby accept professional responsibility as required by the professional registration laws of the state of Missouri for the structural design drawings consisting of S-series drawings. I hereby disclaim responsibility for all other drawings in the construction document package, they being the responsibility of other design professionals whose seals and signed statements may appear elsewhere in the construction document package.

**STRUCTURAL ABBREVIATIONS**

@	AT	FLR	FLOOR	PERP	PERPENDICULAR
&	AND	FS	FAR SIDE	PLATE	
Ø	ROUND, DIAMETER	FTG	FOOTING	PLF	POUNDS PER LINEAR FOOT
ADTL	ADDITIONAL	FV	FIELD VERIFY	PJP	PARTIAL JOINT PENETRATION
ADVF	ADJUSTED FINISHED FLOOR	FTG	FIELD VERIFY	POUNDS PER SQUARE FOOT	
ALT	ALTERNATE	GALV	GALVANIZED(Ø)	PSI	POUNDS PER SQUARE INCH
ARCH	ARCHITECTURAL	GEN	GENERAL	QTY	QUANTITY
BLOG	BUILDING	GRM	GRANULAR	RAD	RADIUS
BTM	BOTTOM OF	GRM	GRADE BEAM	RD-#	ROOF DECK TYPE
BSM	BOTTOM	HORIZ	HORIZONTAL	REF	REFERENCE
BO/TT	BOTTOM	HOR	HORIZONTAL	REIN	REINFORCEMENT
BRG	BEARING	IF	INSIDE FACE	REOD	REQUIRED
BRG	BEARING	INT	INTERIOR	REV	REVISION
CD-#	CONCRETE DECK TYPE	INT	INTERIOR	RTU	ROOF TOP UNIT
CJ	CONSTRUCTION/CONTROL JOINT	JST	JOIST	SC	SCHEDULE(Ø)
CJP	CENTER/Joint PENETRATION	JOINT	JOINT	SECT	SECTION
CL	CENTERLINE	K	KIPS (1000 LBS)	SH	SHIELD
CMU	CONCRETE MASONRY UNIT	KSF	KIPS PER SQUARE FOOT	SM	SIMILAR
CONC	CONCRETE	LBS.	POUNDS	SO	SNOW
CONN	CONNECTION	Ld	DEVELOPMENT LENGTH	SJ	SAW JOINT
COORD	COORDINATE	LL	LONG LEG	SOG	SLAB-

### STUD BEARING WALL SCHEDULE - APARTMENTS ON SLAB-ON-GRADE

WALL TYPE	1st FLOOR WALLS (2nd FLOOR FRAMING)	2nd FLOOR WALLS (3rd FLOOR FRAMING)	3rd FLOOR WALLS (4th FLOOR FRAMING)	4th FLOOR WALLS (ROOF FRAMING)	NOTES
EXTERIOR WALL-TYPICAL	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	
EXTERIOR WALL-FLOOR BEARING	(2) 2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	
CORRIDOR WALL-TYPICAL	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc	
CORRIDOR WALL-APARTMENT FLOOR BEARING	(2) 2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	(3) 2x4 @ 16"oc	(2) 2x4 @ 16"oc	2x4 @ 16"oc	
UNIT PARTITION WALL-TYPICAL	(2) 2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	
UNIT PARTITION WALL-UNITS D3, D4, D5	(2) 2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	
UNIT DEMISING WALL-TYPICAL	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc	
UNIT DEMISING WALL-UNITS D3 & E3	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	(2) 2x4 @ 16"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc	
STAIR WALL-TYPICAL	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	2x6 @ 16"oc	
EXTERIOR STAIR WALL	(2) 2x6 @ 16"oc	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	

### STUD BEARING WALL SCHEDULE - APARTMENTS ON PODIUM

WALL TYPE	2nd FLOOR WALLS (3rd FLOOR FRAMING)	3rd FLOOR WALLS (4th FLOOR FRAMING)	4th FLOOR WALLS (5th FLOOR FRAMING)	5th FLOOR WALLS (ROOF FRAMING)	NOTES
EXTERIOR WALL-TYPICAL	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	
EXTERIOR WALL-FLOOR BEARING	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	
CORRIDOR WALL-TYPICAL	(2) 2x4 @ 16"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc	
CORRIDOR WALL-APARTMENT FLOOR BEARING	(2) 2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	(3) 2x4 @ 16"oc	(2) 2x4 @ 16"oc	2x4 @ 16"oc	
UNIT PARTITION WALL-TYPICAL	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	
UNIT PARTITION WALL-UNITS D3, D4, D5	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	2x6 @ 16"oc	2x6 @ 16"oc	
UNIT DEMISING WALL-TYPICAL	(2) 2x4 @ 16"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc	
UNIT DEMISING WALL-UNITS D3 & E3	(2) 2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	(2) 2x4 @ 16"oc	2x4 @ 16"oc w/ ADTTL 2x4 @ 32"oc	2x4 @ 16"oc	
STAIR WALL-TYPICAL	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	2x6 @ 16"oc	
EXTERIOR STAIR WALL	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc w/ ADTTL 2x6 @ 32"oc	2x6 @ 16"oc	

- NOTES:  
1. REFER TO GENERAL NOTE "11B" FOR STUD SPECIES.  
2. REFER TO 3/50.02 FOR NAILING OF MULTIPLE STUDS IN A WALL STUD PACK.  
3. PROVIDE 2x BLOCKING AT MID-HEIGHT (5'-0" MAX) BETWEEN STUDS AT LOAD-BEARING WALLS FRAMED WITH SINGLE SIDE ONLY.  
4. PROVIDE 2x BLOCKING AT MID-HEIGHT (5'-0" MAX) BETWEEN STUDS AT LOAD-BEARING WALLS FRAMED WITH 2x STUDS OR LARGER.  
5. UNIT PARTITION WALLS ARE THE LOAD-BEARING WALLS OCCURRING WITHIN A UNIT (BETWEEN DEMISING WALLS).  
6. UNIT DEMISING WALLS ARE THE LOAD-BEARING WALLS SEPARATING ONE UNIT FROM ANOTHER.  
7. REFER TO FRAMING PLANS AND ARCHITECTURAL DRAWINGS FOR LEVEL(S) AT WHICH STUDS OCCUR.  
8. REFER TO ARCHITECTURAL AND MEP DRAWINGS FOR LOCATIONS OF FURRED OUT WALLS TO ACCOMMODATE PLUMBING OR OTHER MEP ITEMS.  
9. WHERE SCHEDULE LISTS DIFFERENT WALL SIZES WITH AN "OR", REFER TO ARCHITECTURAL DRAWING LOCATIONS ALONG WALL TYPE WHERE EACH SIZE IS TO BE USED.

### FLOOR AND ROOF FRAMING HEADERS AND BEAMS SCHEDULE

MARK	FLOOR	*4"	*3"	*2"	*1"	NOTES
A1-#	(2) 2x8	1 JACK / 3 KING	1 JACK / 2 KING	1 JACK / 2 KING	1 JACK / 2 KING	
B1-#	(2) 2x10	1 JACK / 5 KING	1 JACK / 2 KING	1 JACK / 2 KING	1 JACK / 2 KING	
B2-#	(2) 2x10	ABOVE PODIUM: 5 KING ABOVE SOG: 4 KING	4 KING	3 KING		UPSET BEAM TIGHT TO B/SUBFLOOR (RE: 7 & 7A ON S3.30)
D1-#	(3) 2x8	1 JACK / 2 KING	1 JACK / 1 KING	1 JACK / 1 KING	1 JACK / 1 KING	
D2-#	(3) 2x8	1 JACK / 3 KING	1 JACK / 2 KING	1 JACK / 2 KING	1 JACK / 1 KING	
D3-#	(3) 2x8	@ END JAMB: 3 KING @ INT JAMB: 4 KING	@ END JAMB: 2 KING @ INT JAMB: 3 KING	@ END JAMB: 2 KING @ INT JAMB: 3 KING	1 JACK / 1 KING	
D4-#	(3) 2x8	@ END JAMB: 4 KING @ INT JAMB: 5 1/4"x7" PSL COL	@ END JAMB: 2 KING @ INT JAMB: 3 KING	@ END JAMB: 2 KING @ INT JAMB: 3 KING	1 JACK / 1 KING	
D5-#	(3) 2x8	5 KING	4 KING	3 KING		
E1-#	(3) 2x10	1 JACK / 2 KING	1 JACK / 1 KING	1 JACK / 1 KING	1 JACK / 1 KING	* PROVIDE (2) KING STUDS @ RAISED TOP PL
E2-#	(3) 2x10	1 JACK / 3 KING	1 JACK / 2 KING	1 JACK / 2 KING	1 JACK / 1 KING	
E3-#	(3) 2x10	5 KING	2 KING	2 KING		
F1-#	(3) 2x12	1 JACK / 3 KING	1 JACK / 2 KING	1 JACK / 2 KING	1 JACK / 1 KING	* PROVIDE (2) KING STUDS @ RAISED TOP PL
F2-#	(3) 2x12	1 JACK / 5 KING	1 JACK / 2 KING	1 JACK / 2 KING		
F3-#	(3) 2x12	2 JACK / 5 KING	2 JACK / 4 KING	2 JACK / 3 KING		
G1-#	@ FLOOR: 1 1/4"x18" CONT LSL RIMBOARD w/ 18"Dp PRE-ENG TRUSS @ ROOF: GIRDER TRUSS	ABOVE PODIUM: 8B/S3.30 ABOVE SOG: 8A/S3.30	8C/S3.30	8D/S3.30	8D/S3.30 w/ LSTA12 @ EA END OF GIRDER TRUSS	DESIGN TRUSS TO SPAN OPENING FOR DL=200psf, LL=250psf (UNFACTORED), REFER TO DTL X/S3.30
G2-#	@ FLOOR: 1 1/4"x18" CONT LSL RIMBOARD w/ 18"Dp PRE-ENG TRUSS @ ROOF: GIRDER TRUSS	4 KING	4 KING	4 KING	3 KING w/ LSTA12 @ EA END OF GIRDER TRUSS	DESIGN TRUSS TO SPAN OPENING FOR DL=200psf, LL=250psf (UNFACTORED), REFER TO DTL X/S3.30
I1-#	(3) 1 3/4"x7 1/4" LVL	5 1/4"x7" PSL COL	5 KING	3 KING	1 JACK / 1 KING	
I2-#	(3) 1 3/4"x7 1/4" LVL	2 JACK / 3 KING	2 JACK / 2 KING	2 JACK / 1 KING		
I3-#	(3) 1 3/4"x7 1/4" LVL	1 JACK / 3 KING	1 JACK / 2 KING	1 JACK / 1 KING		
L1-#	(3) 1 3/4"x9 1/4" LVL	2 JACK / 2 KING	2 JACK / 1 KING	2 JACK / 1 KING	2 JACK / 2 KING	
L2-#	(3) 1 3/4"x9 1/4" LVL	2 JACK / 5 KING	2 JACK / 2 KING	2 JACK / 2 KING	1 JACK / 2 KING	
N1-#	(3) 1 3/4"x11 1/4" LVL	2 JACK / 5 1/4"x5 1/4" PSL COL	2 JACK / 2 KING	2 JACK / 1 KING	3 KING	
N2-#	(3) 1 3/4"x11 1/4" LVL	5 1/4"x9 1/4" PSL COL	5 KING	3 KING		
N3-#	(3) 1 3/4"x11 1/4" LVL	1 JACK / 3 KING	1 JACK / 2 KING	1 JACK / 2 KING		
T1-#	(2) 1 3/4"x18" LVL		5 KING	4 KING		PROVIDE HB3.56/18 HANGER @ STEEL BEAM CONNECTION
U1-#	(3) 1 3/4"x18" LVL	4 KING	3 KING	2 KING		
U2-#	(3) 1 3/4"x18" LVL	5 1/4"x9 1/4" PSL COL	5 KING	3 KING		

- NOTES:  
1. REFER TO GENERAL NOTE "11B" FOR STUD SPECIES.  
2. JAMB STUDS SHALL MATCH SIZE & GRADE OF WALL STUDS U.N.O.  
3. WHERE BEAM IS NOTED "UPSET", ALL JAMB STUDS NOTED WILL EXTEND TO DOUBLE TOP PLATE.  
4. PROVIDE SQUASH BLOCKS AT TRUSSES & BLOCKING FRAMING WHERE JAMBS OR STUD PACKS ARE DISCONT. QUANTITY TO MATCH JAMB OR STUD PACK ABOVE.  
5. PROVIDE 1" PLYWOOD SPACER PLATES AT INTERIOR HEADERS CONSTRUCTED WITH 2x LUMBER.  
6. AT CONTRACTOR'S OPTION, PROVIDE GLULAM IN LIEU OF PSL OF EQUAL OR GREATER STRENGTH.  
7. REFER TO DETAILS 5A & 5B ON S0.02 FOR MULTIPLE MEMBER CONNECTION REQUIREMENTS.  
8. REFER TO 4/S0.02 FOR JACK STUD ATTACHMENT TO KING STUDS.

### HANGER SCHEDULE

MEMBER TYPE/SIZE	CONNECTION TYPE	HANGER SIZE	NOTES
2x10 JOIST	FACE MOUNT TO WOOD LEDGER/RIMBOARD/BEAM	LUS28	TYPICAL @ CORRIDOR
2x10 JOIST	SKewed FACE MOUNT TO WOOD LEDGER/RIMBOARD/BEAM	SUR/L210	TYPICAL @ CORRIDOR
2x10 JOIST	TOP MOUNT TO 2x NAILER ATOP STEEL BEAM	JB210A	
(2) 2x10 JOIST	FACE MOUNT TO WOOD LEDGER/RIMBOARD/BEAM	LUS28-2	
(2) 2x10 JOIST	SKewed FACE MOUNT TO WOOD LEDGER/RIMBOARD/BEAM	SUR/L210-2	
2x12 JOIST	FACE MOUNT TO WOOD LEDGER/RIMBOARD/BEAM	LUS210	TYPICAL @ BALCONY
2x12 JOIST	SKewed FACE MOUNT TO WOOD LEDGER/RIMBOARD/BEAM	SUR/L210-2	TYPICAL @ BALCONY
18"Dp PRE-ENG FLOOR TRUSS	FACE MOUNT TO WOOD LEDGER	LUS410	
18"Dp PRE-ENG FLOOR TRUSS	TOP MOUNT TO 2x NAILER ATOP STEEL BEAM	THA426	

- NOTES:  
1. HANGERS APPLY TO ALL LOCATIONS WHERE NOT OTHERWISE SPECIFIED IN DETAIL OR PLAN NOTE

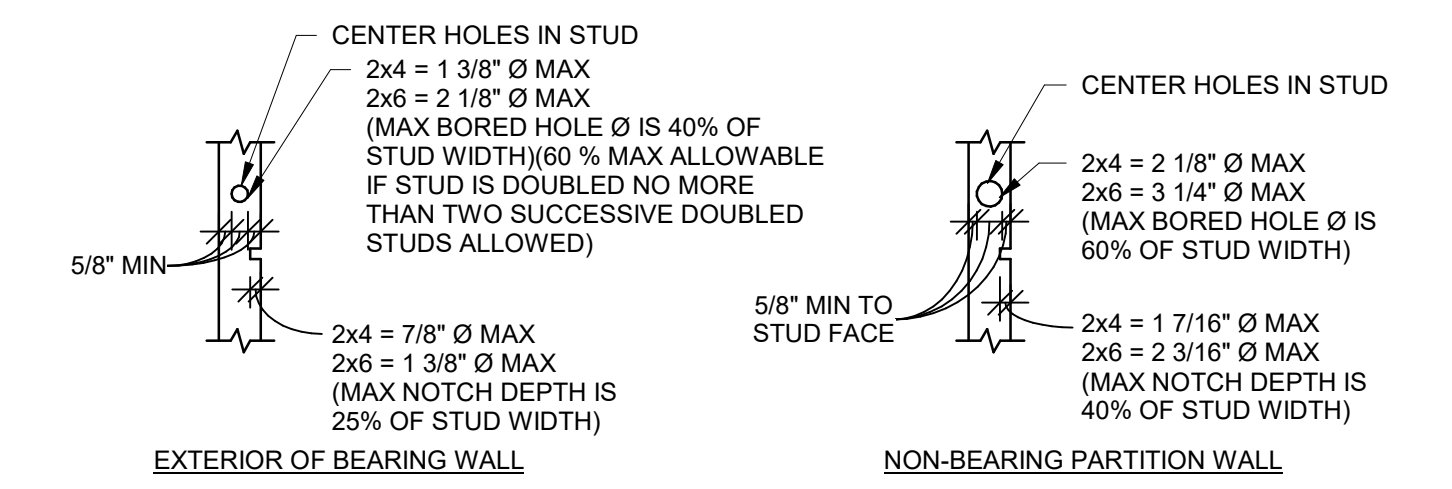
### PLAN NOTES

A	18"Dp PRE-ENGINEERED FLOOR TRUSSES @ 24"oc	
A1	18"Dp PRE-ENGINEERED FLOOR TRUSSES @ 16"oc	
B	PRE-ENGINEERED ROOF TRUSSES @ 24"oc	
C	(2) 2x10 HEADER W/HUC210-2 HANGER EACH END TO (2) 2x4 KING STUDS (RE: 9/S3.40)	
D1	7"x7" PSL COLUMN w/ ABU7-7Z POST BASE (GROUT SOLID w/ 6,000psi MIN NON-SHRINK GROUT) & CC07-1-17-1SDS2.5 POST CAP	
D2	5 1/4"x7" PSL COLUMN CC07-1-6SDS2.5 POST CAP TOP & BOTTL TO BEAMS ABOVE & BEYOND	
E	UPSET (4) 1 3/4"x18" LVL BEAM CONTINUOUS w/ (4) 2x6 KING STUDS EA END	
F	UPSET (1) 3 1/4"x14" LVL BEAM w/ (2) KING STUDS EA END U.N.O. PROVIDE H2.5A HOLDDOWN @ EA END OF BEAM TO JAMB	
G	UPSET 6 3/4"x12"x21-6" 2x4x8 GLULAM OUTRIGGER. COPE AT EXTERIOR TRANSITION TO MATCH B/DCK SLOPE	
H	SIMPSON HHGU50-SDS (H=18") HANGER	
H1	SIMPSON HHUS50/10 HANGER	
H2	SIMPSON HGUS50-SDS (H=18") HANGER	
H3	STEEL BUCKET PER 8/S3.20	
J	UPSET (3) 1 3/4"x18" LVL BEAM	
K	(2) 2x12 HEADER w/ (2) JACK & (1) KING STUD EA END	
L	(2) 2x4 @ 16"oc WALL STUDS FOR EXTENTS OF DOOR RECESS	

### NAILING SCHEDULE (REFER TO NOTES #1 and #2)

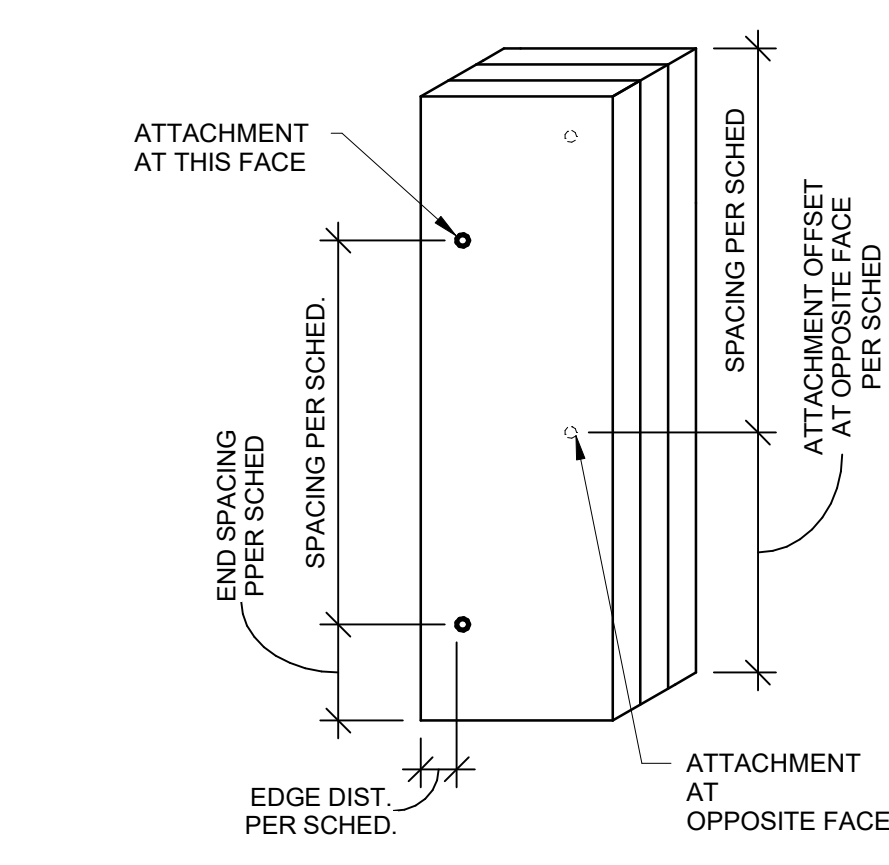
CONNECTION	ATTACHMENTS (REF NOTE #3 and #4)	ATTACHMENTS (REF NOTE #3 and #4)
JOIST TO SILL OR GIRDER	3-3" x 0.131" NAILS-TOENAIL	3-8d NAILS-TOENAIL
BRIDGING TO JOIST	2-3" x 0.131" NAILS-TOENAIL EACH END	2-8d NAILS-TOENAIL EACH END
SOLE PLATE TO JOIST OR BLOCKING	3" x 0.131" NAILS AT 8"o.c. TYPICAL FACE NAIL 4-3" x 0.131" NAILS AT 16"o.c. BRACED WALL PANELS	16d BOX NAILS AT 16"o.c. MAX. FACE NAILING 3-16d BOX NAILS AT 16"o.c. BRACED WALL PANELS
TOP PLATE TO STUD	3-3" x 0.131" NAILS-END NAIL	2-16d NAILS-END NAIL
STUD TO SOLE PLATE	4-3" x 0.131" NAILS-TOENAIL OR 3-3" x 0.131" NAILS-END NAIL	4-8d NAILS-TOENAIL OR 2-16d NAILS-END NAIL
DOUBLE STUDS	3" x 0.131" NAILS AT 8"o.c.-FACE NAIL	16d BOX NAILS AT 24"o.c. MAX. FACE NAIL
DOUBLED TOP PLATES	3" x 0.131" NAILS AT 12"o.c.-FACE NAIL	16d BOX NAILS AT 16"o.c. MAX. FACE NAIL
DOUBLE TOP PLATE LAPS AND INTERSECTIONS	12-3" x 0.131" NAILS	8-16d NAILS
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3-3" x 0.131" NAILS -TOENAIL	3-8d NAILS-TOENAIL
RIM JOIST TO TOP PLATE	3" x 0.131" NAILS AT 6"o.c.-TOENAIL	8d NAILS AT 6"o.c. MAX.-TOENAIL
TOP PLATE LAPS AND INTERSECTIONS	3-3" x 0.131" NAILS-FACE NAIL	2-16d NAILS-FACE NAIL
CONTINUOUS HEADER, TWO PIECES	3" x 0.131" NAILS AT 10"o.c. ALONG EACH EDGE	16d NAILS AT 16"o.c. MAX. ALONG EACH EDGE-TOENAIL
CEILING JOISTS TO PLATE	5-3" x 0.131" NAILS-TOENAIL	3-8d NAILS-TOENAIL
CONTINUOUS HEADER TO STUD	4-3" x 0.131" NAILS-TOENAIL	4-8d NAILS-TOENAIL
CEILING JOISTS, LAPS OVER PARTITIONS	4-3" x 0.131" NAILS-FACE NAIL	3-16d NAILS-FACE NAIL
CEILING JOISTS TO PARALLEL RAFTERS	4-3" x 0.131" NAILS-FACE NAIL	3-16d NAILS-FACE NAIL
RAFTER TO PLATE	3-3" x 0.131" NAILS-TOENAIL	3-8d NAILS-TOENAIL
1" BRACE TO EACH STUD AND PLATE	2-3" x 0.131" NAILS-FACE NAIL	2-8d NAILS-FACE NAIL
BUILT-UP CORNER AND MULTIPLE STUDS	3" x 0.131" NAILS AT 16"o.c.	16d NAILS AT 24"o.c. MAX.
BUILT-UP GIRDER AND BEAMS	3" x 0.131" NAILS AT 24"o.c. FACE NAILED TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES 3-3" x 0.131" NAILS AT ENDS AND EACH SPLICE	20d NAILS AT 32"o.c. MAX. TOP AND BOTTOM, STAGGERED ON OPPOSITE SIDES. 2-20d NAILS AT ENDS AND EACH SPLICE
BUILT-UP LAMINATED VENEER LUMBER BEAMS	3" x 0.131" NAILS AT 8"o.c. TOP AND BOTTOM ALONG EDGE	16d NAILS AT 12"o.c. TOP AND BOTTOM ALONG EDGE
2" PLANKING	4-3" x 0.131" NAILS AT EACH SUPPORT	16d NAILS AT EACH SUPPORT

- NOTES:  
1. ALL NAILS SHALL BE AS NOTED UNLESS OTHERWISE SPECIFIED ON STRUCTURAL DRAWINGS OR ALTERNATE PROVIDED BY ENGINEER IN WRITING.  
2. CONDITIONS NOT SPECIFIED SHALL BE IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE.  
3. NAILING DESIGNATION:  
4 - 3" x 0.131" NAILS  
DIAMETER IN INCHES  
NAIL LENGTH  
QUANTITY  
4. ALL NAILS NOTED AS 8d, 10d, 16d, ETC. SHALL BE COMMON NAILS UNLESS NOTED BOX.



- TYPICAL NOTES FOR BEARING WALLS  
1. HOLES SHALL NOT BE LOCATED IN THE SAME STUD AS A CUT OR NOTCH  
2. CONTACT ARCHITECT PRIOR TO CUTTING OR NOTCHING TO VERIFY SIZE AND LOCATION IF HOLE IS GREATER THAN 20% STUD WIDTH OR NOTCHES GREATER THAN 10% STUD WIDTH ARE REQUIRED IN TWO OR MORE CONSECUTIVE STUDS  
3. NOTCHES OR HOLES NOT PERMITTED IN JAMBS, STUD PACKS AND AT ENDS OF SHEARWALLS  
4. STUD SHOES ARE NOTE AN ACCEPTABLE REMEDIATION OF OVER-NOTCHED OR OVER-CUT STUDS WITHOUT PRIOR APPROVAL BY EOR
- ALLOWABLE HOLES/NOTCHES IN WALL STUDS

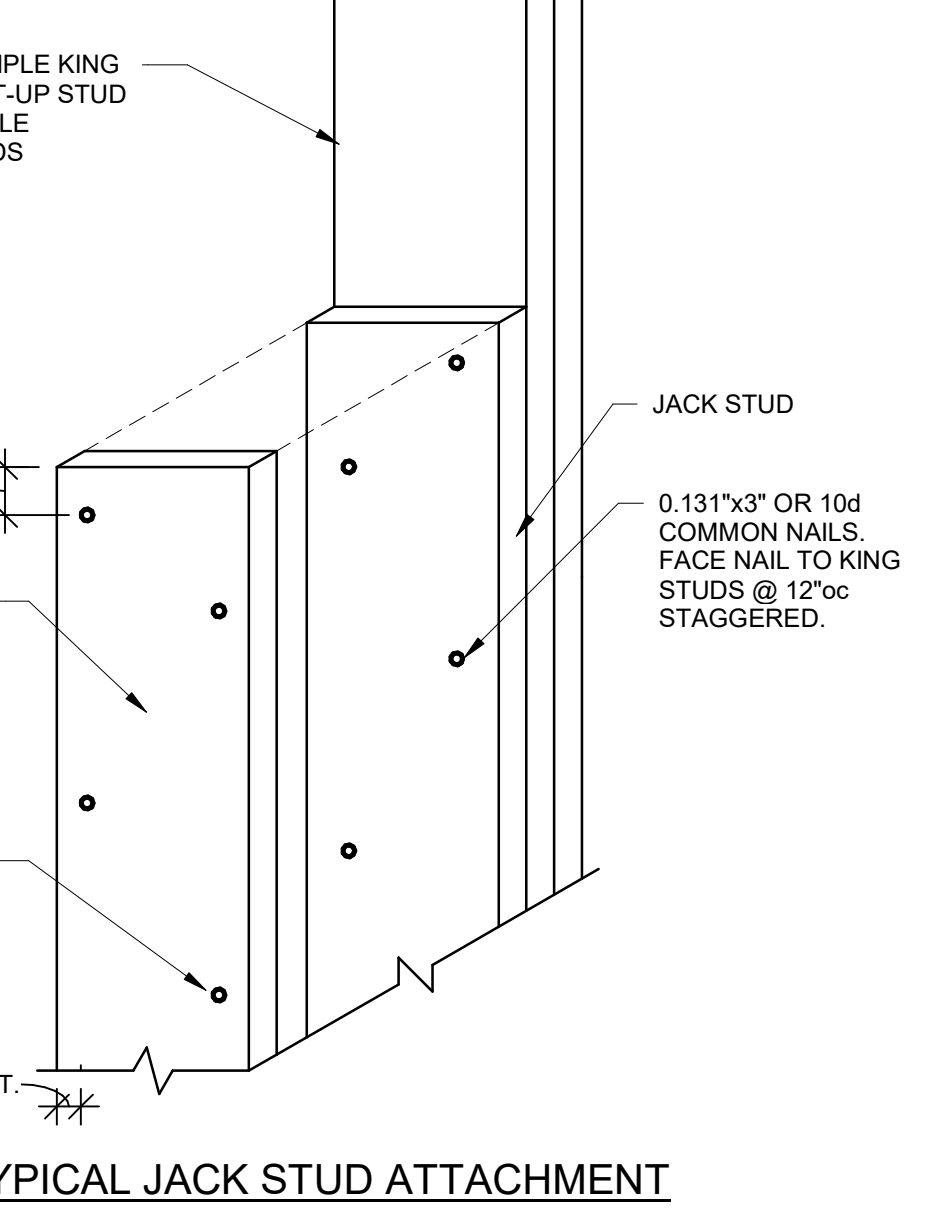
**1 DETAIL**  
3/4" = 1'-0"



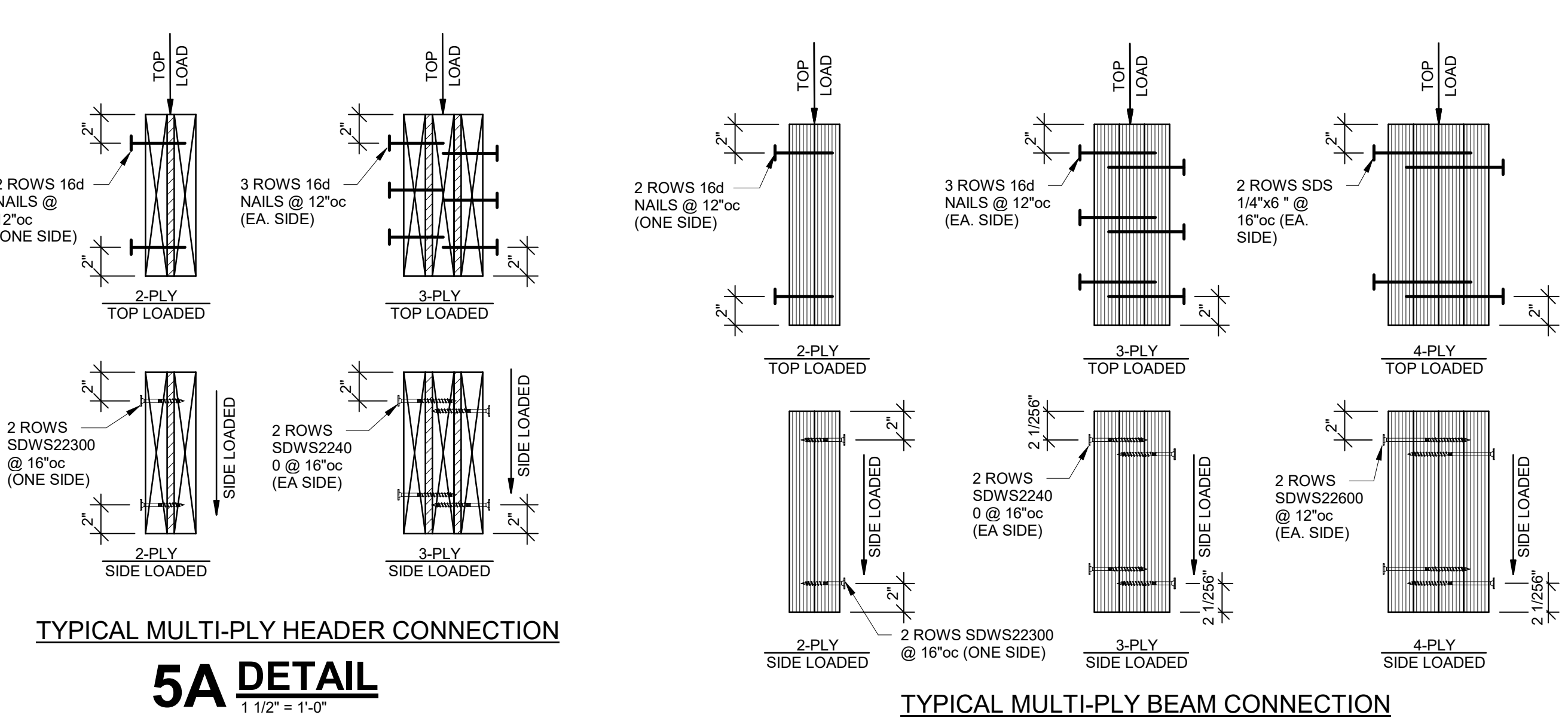
### BUILT-UP STUD PACK COLUMN ATTACHMENT SCHEDULE

NUMBER OF PLYS	ATTACHMENT AT JAMB STUD PACKS*	ATTACHMENT AT WALL STUD PACKS*
2-PLY MEMBERS	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END
3-PLY MEMBERS	20d NAILS AT 16"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 8", @ 16"oc w/ FIRST NAIL 4" FROM EA. END	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END
4-PLY MEMBERS	SDWS22500 SCREWS AT 16"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 8", @ 16"oc w/ FIRST SCREW 4" FROM EA. END	3 PLYS ATTACHED PER 3-PLY ATTACHMENT w/ 4th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROW 6"
5-PLY MEMBERS	SDWS22600 SCREWS AT 12"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST SCREW 4" FROM EA. END	3 PLYS ATTACHED PER 3-PLY ATTACHMENT w/ 4th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROW 6"
6-PLY MEMBERS	SDWS22600 SCREWS AT 12"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST SCREW 4" FROM EA. END	3 PLYS ATTACHED PER 3-PLY ATTACHMENT w/ 4th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROW 6" AND 5th AND 6th PLYS ATTACHED w/ SDWS22500 SCREWS @ 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROWS 6"oc w/ FIRST SCREW 4" FROM EA. END

- NOTES:  
1. ALL BUILT-UP STUD PACKS MUST ALIGN FLOOR-TO-FLOOR WITH SOLID BLOCKING (SQUASH BLOCKS) AT FLOOR CAVITIES.  
2. EXTEND ALL STUD PACKS TO LOWEST LEVEL UNLESS NOTED OTHERWISE.  
3. ALL NAILS ARE COMMON NAILS UNLESS NOTED OTHERWISE.  
4. JAMB STUD PACKS ARE STUDS SUPPORTING STRUCTURAL MEMBERS SUCH AS BEAMS, HEADERS, GIRDER TRUSSES, ETC.  
5. WALL STUD PACKS ARE REPETITIVE STUDS BETWEEN WALL PLATES AS SCHEDULED IN THE "STUD BEARING WALL SCHEDULE".



**4 DETAIL**  
1 1/2" = 1'-0"



**5A DETAIL**  
1 1/2" = 1'-0"

**5B DETAIL**  
1 1/2" = 1'-0"



REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

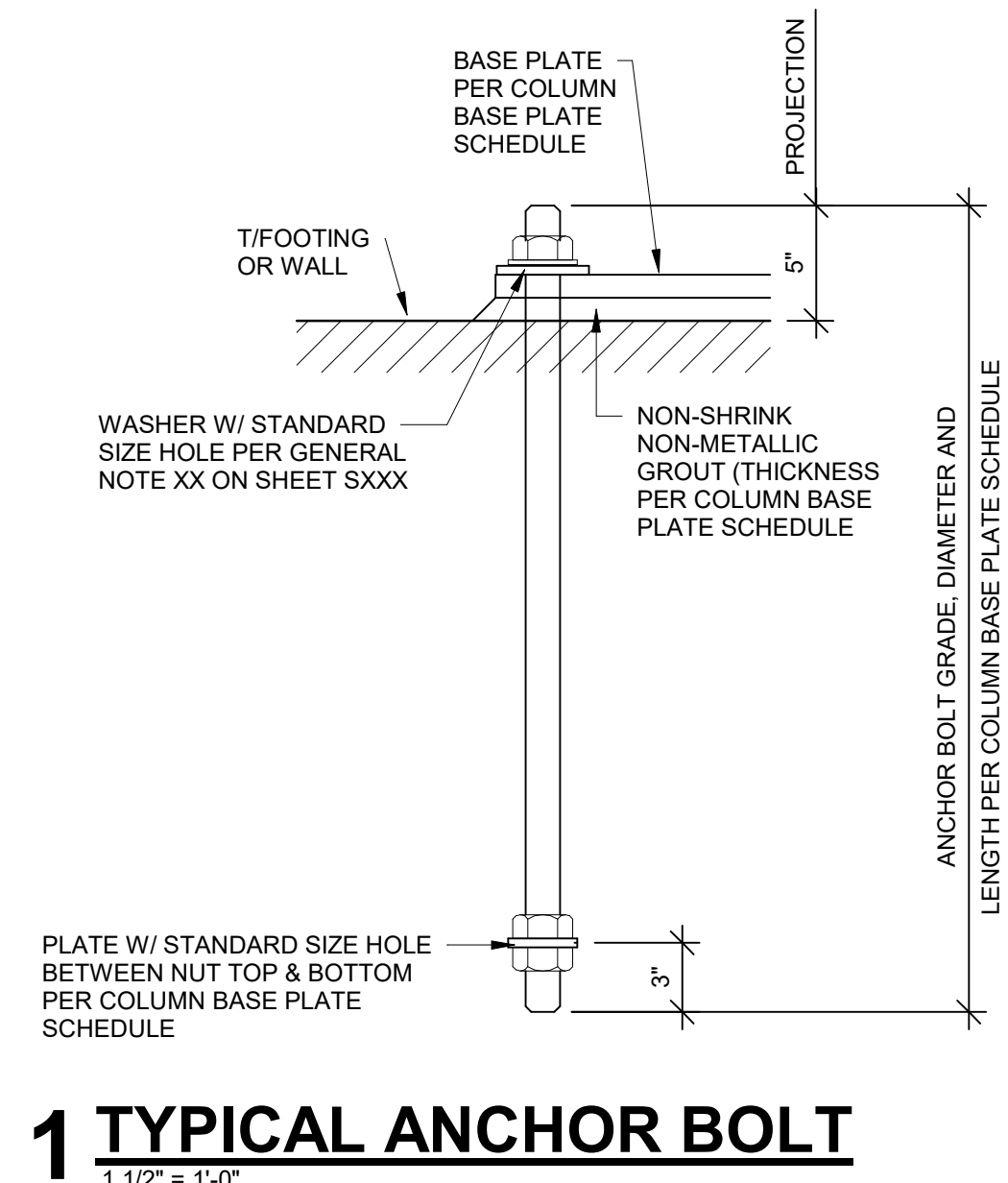
**BOB D. CAMPBELL & CO.**  
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SHEET TITLE

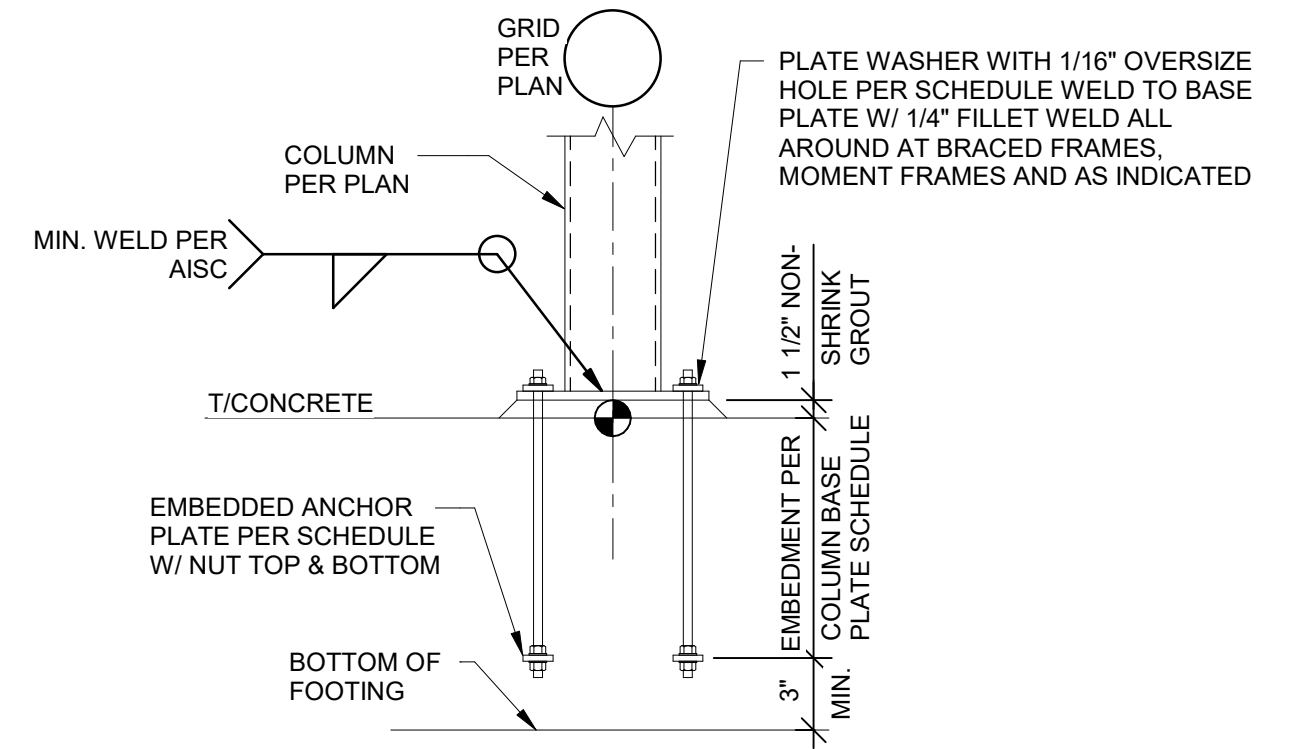
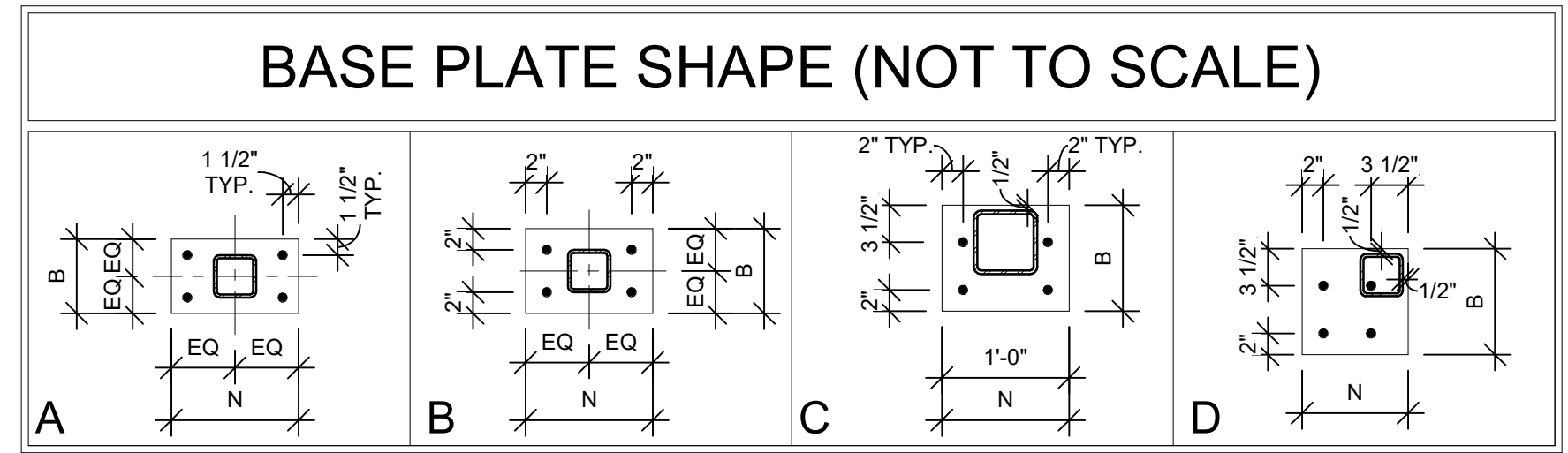
STEEL  
SCHEDULES

SHEET NUMBER

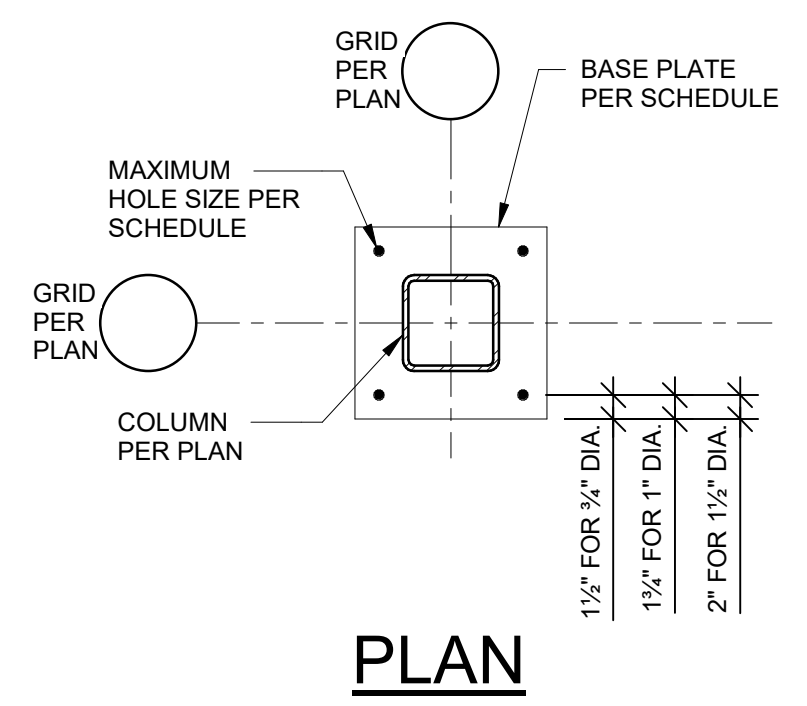
S0.04



**1 TYPICAL ANCHOR BOLT**  
1 1/2" = 1'-0"



**ELEVATION**



**PLAN**

**COLUMN BASE PLATE SCHEDULE**

TYPE	COLUMN	BASE PLATE (xhxn)	SHAPE	ANCHOR RODS	EMBEDMENT
1	PER PLAN	3/4"x7"x12"	A	(4) 3/4" DIA.	12"
2	PER PLAN	3/4"x8"x12" EMBED	B	(4) 3/4" DIA. HEADED STUDS	12"
3	PER PLAN	3/4"x10"x12" EMBED	C	(4) 3/4" DIA. HEADED STUDS	12"
4	PER PLAN	3/4"x10"x10" EMBED	D	(4) 3/4" DIA. HEADED STUDS	12"

**NOTES:**  
1. SEE PLAN FOR ORIENTATION OF COLUMNS.  
2. PROVIDE PLATE WASHER & EMBEDDED PLATE PER SCHEDULE @ ALL ANCHOR BOLTS.  
3. U.N.O. ALL THREADED ROD A,B'S SHALL BE F1554 (36ksi) MATERIAL.

**COLUMN BASE PLATE AND ANCHOR-ROD CRITERIA**

ANCHOR-ROD DIAMETER	MAX. BASE PLATE HOLE DIAMETER	MIN. PLATE WASHER SIZE	MIN. PLATE WASHER THICKNESS	EMBEDDED ANCHOR PLATE SIZE
3/4"	1 5/16"	2"	1/4"	1/2"x2 1/2"x2 1/2"
7/8"	1 9/16"	2 1/2"	5/16"	1/2"x2 1/2"x2 1/2"
1"	1 7/8"	3"	3/8"	5/8"x3"x3"
1 1/4"	2 1/8"	3 1/2"	1/2"	5/8"x3 1/2"x3 1/2"
1 1/2"	2 3/8"	4"	1/2"	5/8"x3 1/2"x3 1/2"
1 3/4"	2 7/8"	4 1/2"	5/8"	3/4"x3 1/2"x3 1/2"
2"	3 1/4"	5"	3/4"	3/4"x3 1/2"x3 1/2"
2 1/2"	3 3/4"	5 1/2"	7/8"	3/4"x3 1/2"x3 1/2"

**NOTES:**  
1. HOLE SIZES PROVIDED ARE BASED ON ANCHOR ROD SIZE AND CORRELATE WITH ACI 117 (ACI, 2010)  
2. CIRCULAR OR SQUARE WASHERS MEETING THE WASHER SIZE ARE ACCEPTABLE.  
3. HOLE IN PLATE WASHER SHALL BE 1/16" LARGER THAN ANCHOR DIAMETER.





# BEAM SCHEDULES

MARK	SIZE b d	SHAPE OR SECTION	LONGITUDINAL STEEL				STIRRUPS					
			QUANTITY	SIZE	TOTAL LENGTH	MK	TOP	PLACED	BOT	REMARKS	NO.	SHAPE
B1	36" 36"		4 #8	#8	32'-0"					#4		18 @ 4"oc RIGHT END RMDR @ 12"oc
B2	36" 36"		4 #8	#8	34'-0"					#4		10 @ 4"oc, 12" @ 8"oc RIGHT END RMDR @ 12"oc
B3	48" 36"		6 #8	#8	32'-0"					(2) #4		PROJECT 4'-0" PAST GRID F.2 6" CLR FROM BOTT
B4	48" 36"		6 #8	#8	36'-0"					(2) #4		PROJECT 4'-0" PAST 12" WALL
B5	36" 36"		4 #8	#8	32'-0"					#4		PROJECT 4'-0" PAST GRID F.2 6" CLR FROM BOTT
B6	36" 36"		4 #8	#8	36'-0"					#4		PROJECT 4'-0" PAST 12" WALL
B7	36" 32"		4 #8	#8	40'-0"					#4		
B8	36" 32"		4 #8	#8	42'-0"					#4		
B9	36" 32"		4 #8	#8	44'-0"					#4		
B10	36" 32"		4 #8	#8	46'-0"					#4		12 @ 8"oc AT CANTILEVER RMDR @ 12"oc
B11	36" 32"		4 #8	#8	48'-0"					#4		
B12	36" 32"		4 #8	#8	50'-0"					#4		
B13	36" 32"		4 #8	#8	52'-0"					#4		@ 3"oc BTWN GRID 16.2 & GA RMDR @ 8"oc
B14	48" 32"		12 #8	#8	32'-0"					(2) #4		ALT HOOK DIRECTION 6" CLR FROM BOTT
B15	42" 32"		8 #8	#8	26'-0"					#4		ALT HOOK DIRECTION 6" CLR FROM BOTT
B16	36" 40"		4 #8	#8	16'-0"					#4		@ 4"oc AT CANTILEVER RMDR @ 12"oc
B17	36" 40"		4 #8	#8	24'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B18	36" 40"		4 #8	#8	32'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B19	36" 40"		4 #8	#8	40'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B20	24" 40"		4 #8	#8	48'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT ALT HOOK DIRECTION
B21	36" 40"		4 #8	#8	56'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B22	36" 40"		4 #8	#8	64'-0"					#4		1/2 AT EA COLUMN 1/2 EA FACE @ 10"oc FROM BOTT
B23	36" 40"		4 #8	#8	72'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B24	36" 40"		4 #8	#8	80'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B25	36" 40"		4 #8	#8	88'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B26	36" 40"		4 #8	#8	96'-0"					#4		1/2 AT EA COLUMN 1/2 EA FACE @ 10"oc FROM BOTT
B27	36" 40"		4 #8	#8	104'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B28	36" 40"		4 #8	#8	112'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B29	36" 40"		4 #8	#8	120'-0"					#4		1/2 EA FACE @ 10"oc FROM BOTT
B30	48" 40"		4 #8	#8	128'-0"					(2) #4		12"oc AT CANTILEVER (10) @ 6"oc EA END BTWN COLS RMDR @ 12"oc
B31	48" 40"		4 #8	#8	136'-0"					(2) #4		1/2 EA FACE @ 10"oc FROM BOTT 6" CLR FROM BOTT ALT HOOK DIRECTION

# BEAM SCHEDULES

MARK	SIZE b d	SHAPE OR SECTION	LONGITUDINAL STEEL				STIRRUPS					
			QUANTITY	SIZE	TOTAL LENGTH	MK	TOP	PLACED	BOT	REMARKS	NO.	SHAPE
B32	24" 36"		4 #7	#7	26'-0"					#4		ALT HOOK DIRECTION
B33	24" 36"		4 #7	#7	28'-0"					#4		ALT HOOK DIRECTION
B34	24" 36"		4 #7	#7	30'-0"					#4		ALT HOOK DIRECTION

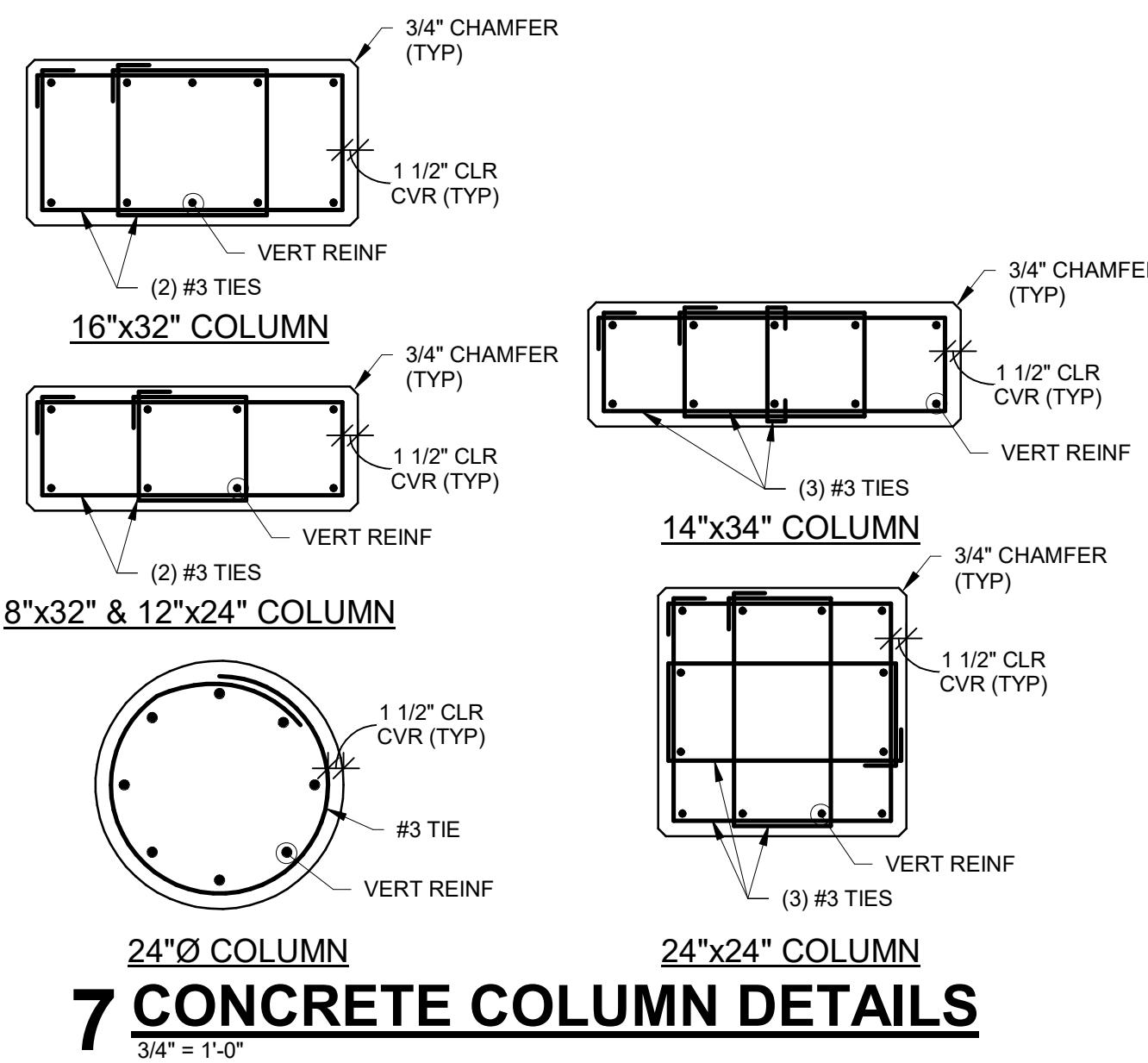
## CONCRETE SHEARWALL SCHEDULE

TYPE	THICKNESS	VERTICAL REINFORCEMENT	HORIZONTAL REINFORCEMENT	COLUMN @ END OF WALL	LATERAL LOAD ALONG WALL FOR PILE DESIGN (kips)	UPLIFT AT EACH END OF WALL FOR PILE DESIGN (kips)
CSW1	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW2	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW3	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW4	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW5	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW6	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW7	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW8	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW9	8"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW10	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW11	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW12	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW13	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW14	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW15	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW16	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW17	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW18	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW19	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW20	8"	#5 @ 12"oc CTR IN WALL	#5 @ 12"oc CTR IN WALL	8"x32"		
CSW21	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW22	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		
CSW23	12"	#5 @ 12"oc EA FACE	#6 @ 12"oc EA FACE	12"x24"		

- NOTES:  
 1) PROVIDE (2)W/ CONT TOP AND BOTTOM OF EACH WALL WITHIN 4" OF THE TOP AND BOTTOM. SPLICE BOTTOM BARS 5'-0" AND TOP BARS 6'-0" WITH 90 DEG HOOKS AT DISTANT ENDS  
 2) VERTICAL FOUNDATION DOWELS TO MATCH VERTICAL WALL REINFORCEMENT SIZE AND SPACING WITH 48 BAR Ø LAP INTO WALL AND 90 DEG HOOK INTO BOTTOM OF FOOTING BELOW.  
 3) TERMINATE TOP OF VERTICAL BARS WITH 90 DEG HOOK INTO TOP OF SLAB WITH 3" OF CLEAR COVER.

## CONCRETE COLUMN SCHEDULE

COLUMN SIZE	REINFORCEMENT	COLUMN SIZE	REINFORCEMENT
8X32	(8) #7 VERTICAL (2) #3 TIES @ 8"oc	16X32	(10) #8 VERTICAL (2) #3 TIES @ 8"oc
12X24	(8) #7 VERTICAL (2) #3 TIES @ 12"oc	24X24	(12) #8 VERTICAL (3) #3 TIES @ 16"oc
14X34	(10) #8 VERTICAL (3) #3 TIES @ 14"oc	24Ø	(10) #8 VERTICAL (3) TIES @ 12"oc



## 7 CONCRETE COLUMN DETAILS

## SLAB NOTES

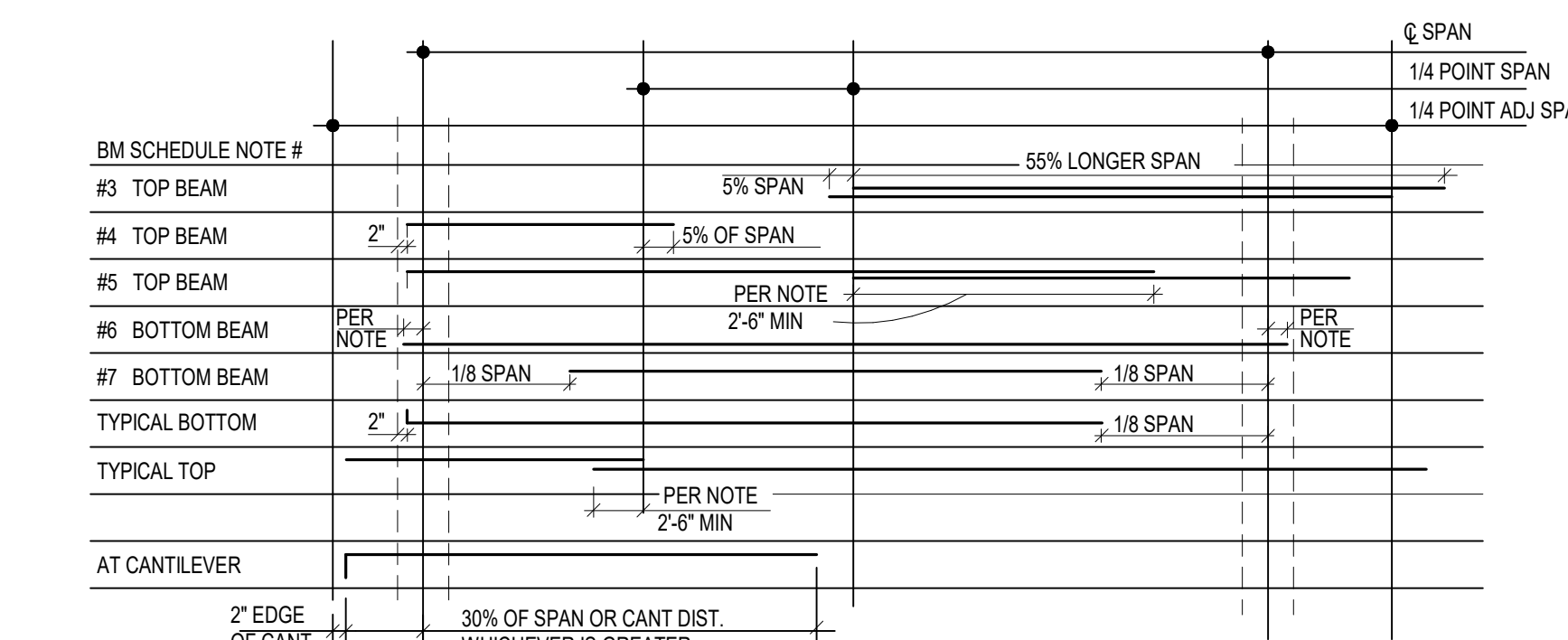
- SEE GENERAL NOTES (STRUCTURAL) ON SHEET S001.
- PODIUM SLAB IS 15" THICK REINFORCED WITH A CONTINUOUS (60" LAP AT COLUMN CENTERLINE OF COLUMN STRIPS AND 24" LAP AT COLUMN CENTERLINE OF MID-STRIPS) BOTTOM MAT OF #6 @ 12" EACH WAY. SEE PLAN FOR BOTTOM MAT EXTENDING EAST/WEST THAT SHALL BE SUPPORTED ON 1" SLAB BOLSTERS AT 4"oc.
- TOP REINFORCING BARS PLACING SEQUENCE:  
 14A 5' 19'-9"  
 TOTAL LENGTH OF BAR IN FEET AND INCHES  
 SIZE OF BAR AND LOCATION IN SLAB AS NOTED BELOW  
 TOTAL NUMBER OF EXTRA BARS IN STRIP DEFINED ON PLAN  
 \*A\* #6 EXTRA BOTTOM BARS WITH 1" CLEAR COVER BOTTOM. (PLACE WITH 1" CLEAR COVER BOTTOM MAT BARS.)  
 \*B\* #6 EXTRA BOTTOM BARS WITH 1 3/4" CLEAR COVER BOTTOM. (PLACE WITH 1 3/4" CLEAR COVER BOTTOM MAT BARS.)  
 \*C\* #7 TOP BARS WITH 1" CLEAR COVER WHERE TWO LAYERS OF BARS OCCUR AND 1" CLEAR COVER WHERE ONE LAYER OF BARS OCCUR ON IHC @ 4'-0" o.c. AND #5 SUPPORT BARS @ 4'-0" o.c.  
 \*D\* #7 TOP BARS WITH 1" CLEAR COVER TOP. PLACE ON TOP OF "C" BARS WHERE THEY OCCUR OR OTHERWISE PLACE ON IHC AT 4'-0" o.c. AND #5 SUPPORT BARS AT 4'-0" o.c.  
 \*E\* #6 TOP BARS WITH 1" CLEAR COVER WHERE ONE LAYER OF BARS OCCUR ON IHC AT 4'-0" o.c. AND #5 SUPPORT BARS AT 4'-0" o.c.  
 \*F\* #5 TOP BARS WITH 1 7/8" CLEAR COVER WHERE TWO LAYERS OF BARS OCCUR AND 1" CLEAR COVER WHERE ONE LAYER OF BARS OCCUR ON IHC AT 4'-0" o.c. AND #5 SUPPORT BARS AT 4'-0" o.c.  
 \*G\* #5 TOP BARS WITH 1" CLEAR COVER TOP. PLACE ON TOP OF "F" BARS WHERE THEY OCCUR, OTHERWISE PLACE ON IHC AT 4'-0" o.c. AND #5 SUPPORT BARS AT 4'-0" o.c.  
 4. REINFORCING SHALL BE SPREAD AROUND OPENINGS LESS THAN 18" WIDE. REINFORCING SHALL BE CUT AT OPENINGS GREATER THAN 18" WIDE WITH EQUAL CONTINUOUS BARS ADDED ONE-HALF EACH SIDE OF OPENING. PROVIDE REINFORCING PER GENERAL NOTE 7F AT ALL OPENINGS LARGER THAN 9".  
 5. STRIP LINES ARE LOCATED AT 1/4 POINTS BETWEEN COLUMN CENTERLINES UNLESS NOTED ON PLAN OTHERWISE.  
 6. SEE DETAIL 2/31 FOR PLACING PATTERN FOR TOP REINFORCING BARS OVER INTERIOR COLUMN AS NOTED.  
 7. TOP BARS SHOWN STAGGERED ON PLAN SHALL BE STAGGERED WHEN PLACED. THE END OF EVERY OTHER BAR TO BE PLACED AT RELATIVE STRIP LINE, UNLESS NOTED ON PLAN.  
 8. BOTTOM BARS ARE SHOWN THIS SHALL HAVE A STANDARD ACI 90 DEG. HOOK.  
 9. UNLESS SHOWN ON "S" SERIES DRAWINGS, NO HOLES LARGER THAN TEN INCH DIAMETER SHALL BE PLACED THROUGH SLAB. NOT MORE THAN ONE, SIX TO EIGHT INCH DIAMETER HOLES, OR TWO FOUR INCH DIAMETER HOLES, OR THREE TWO INCH DIAMETER HOLES SHALL BE PLACED WITHIN 20" OF THE FACE OF THE COLUMNS.  
 10. CAMBER ALL SPANS BETWEEN 16'-0" AND 24'-0" CENTERLINE TO CENTERLINE OF SUPPORTS FOR A MINIMUM AT MIDSPAN (WITH L = SPAN IN INCHES) (I.E. 3/8 AT MIDSPAN FOR 16'-0" SPAN, CAMBER ALL SPANS LONGER THAN 24'-0" FOR LABS (I.E. 3/4 AT MIDSPAN FOR 30'-0" SPAN).  
 11. AT TERMINATION OF COLUMN STRIP AT COLUMN, WALL, BEAM, PROVIDE 90° STANDARD ACI HOOK EACH END AT (4) BOTTOM BARS NEAREST TO COLUMN CENTERLINE PER 6/3.10

## BEAM SCHEDULE PLACING NOTES

- See General Notes (Structural) on sheet S0.01.
- Orientation of beams in schedule are as seen from the bottom or right of the plan sheet.
- Center group of top bars indicated thus in "placed" schedule on centerline of support. Stagger bars 5% of longer span. Bar length = 55% of longer span.
- Top bars scheduled thus extend 2" from face of exterior soffit to 5% of span past 1/4 point of span.
- All lapped top bars shall have a minimum of lap of 2'-0" or 48 bar diameters. Perimeter beams shall have two bars lapped a minimum of 66 bar diameters.
- Bottom bars indicated thus in "placed" schedule to have scheduled bars extend 12" past centerline of support each end and a minimum 2 bars with a 66 bar diameter lap.
- Bottom bars scheduled thus extend to within 1/8 point of span.
- Start stirrups 2" from face of support each end unless noted.
- All bars shown thus to have standard ACI hook. Extend to within 2" of exterior face.
- No holes, sleeves, or conduit larger than 1" diameter round shall be put through beams without written authorization from the engineer. All conduit shall be PVC (non metallic).
- Splice length at bars of different sizes shall be based on the larger of the two bar diameters.

## BEAM PLACEMENT SCHEDULE

NOTE: ALL SIMILAR CONDITIONS TO BE PLACED PER THE PLACING SCHEDULE.



## CONCRETE COLUMN NOTES:

- PROVIDE (4) SETS OF TIES AT 3"oc TOP & BOTTOM OF EACH COLUMN
- ALL COLUMNS TO CENTER ON GRIDLINE AND PIER/FOUNDATION U.N.O.
- PROVIDE VERTICAL FOUNDATION DOWEL MATCH SIZE AND QUANTITY OF VERTICAL REINFORCEMENT WITH 48 BAR Ø LAP INTO COLUMN AND 90 DEG HOOK INTO BOTTOM OF FOOTING.
- PROVIDE VERTICAL SLAB DOWELS AT TOP OF COLUMN WITH 48 BAR Ø LAP INTO COLUMN AND 90 DEG HOOK INTO TOP OF SLAB ABOVE.

## REBAR DEVELOPMENT LENGTH AND LAP SPLICE SCHEDULE

CASE	CONCRETE STRENGTH = 5000 psi				CONCRETE STRENGTH = 4000 psi				CONCRETE STRENGTH = 3500 psi				
	DEVELOPMENT LENGTH OR CLASS A LAP		CLASS B LAP		DEVELOPMENT LENGTH OR CLASS A LAP		CLASS B LAP		DEVELOPMENT LENGTH OR CLASS A LAP		CLASS B LAP		
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
#3	24	24	24	24	#3	24	24	24	24	#3	24	24	24
#4	24	24	29	24	#4	25	24	33	25	#4	27	24	35
#5	28	24	36	28	#5	31	24	41	31	#5	33	26	43
#6	34	28	43	34	#6	37	29	49	37	#6	40	31	52
#7	49	38	63	49	#7	54	42	71	54	#7	58	45	75
#8	56	43	72	56	#8	62	48	81	62	#8	66	51	86
#9	63	48	81	63	#9	70	54	91	70	#9	75	58	97
#10	71	54	92	70	#10	79	61	102	79	#10	84	65	109
#11	78	60	102	78	#11	87	67	113	87	#11	93	72	121

- NOTES:  
 1. UNLESS SPECIFICALLY INDICATED OTHERWISE, USE THE MINIMUM LENGTH FOR A CLASS B LAP SPLICE OR THE MINIMUM DEVELOPMENT LENGTH INDICATED IN THE TABLES ABOVE MULTIPLIED BY THE APPLICABLE FACTOR(S) LISTED BELOW.  
 2. WHERE THE CLEAR SPACING BETWEEN BARS LAP SPLICED OR EMBEDDED AT ANY SECTION IS LESS THAN 2 BAR DIAMETERS, OR WHERE THE BAR COVER IS LESS THAN OR EQUAL TO THE BAR DIAMETER, INCREASE THE INDICATED BAR SPLICE OR DEVELOPMENT LENGTH BY 50%.  
 3. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.  
 4. MECHANICAL COUPLERS MAY BE SUBSTITUTED FOR TENSION LAP SPLICED BARS PROVIDED THAT THEY MEET THE REQUIREMENTS OF ACI 318-11, 12.14.  
 5. AT LOCATIONS WHERE REINFORCING WITHIN A STRUCTURAL ELEMENT WILL BE SPLICED, ALTERNATING SPLICES SHALL BE STAGGERED A MINIMUM OF THE CLASS B SPLICE LENGTH UNLESS INDICATED OTHERWISE.



## PARAGON STAR NORTH VILLAGE

3200 NW PARAGON PKWY - LEE'S SUMMIT, MO 64081

Project No.: 18017.19050.07.19050.08  
 Date: 06.28.2022  
 Issued For: FOR CONSTRUCTION

## REVISIONS

No.	Date	Description
2	7.11.22	ADDENDUM 1

## REGISTRATION



## PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

**BOB D. CAMPBELL & CO.**  
 Structural Engineers  
 Since 1957  
 4338 Belleview Ave.  
 Kansas City, MO 64111  
 www.bdc-engrs.com

## SHEET TITLE

## CONCRETE SCHEDULE

## SHEET NUMBER

# S0.10

























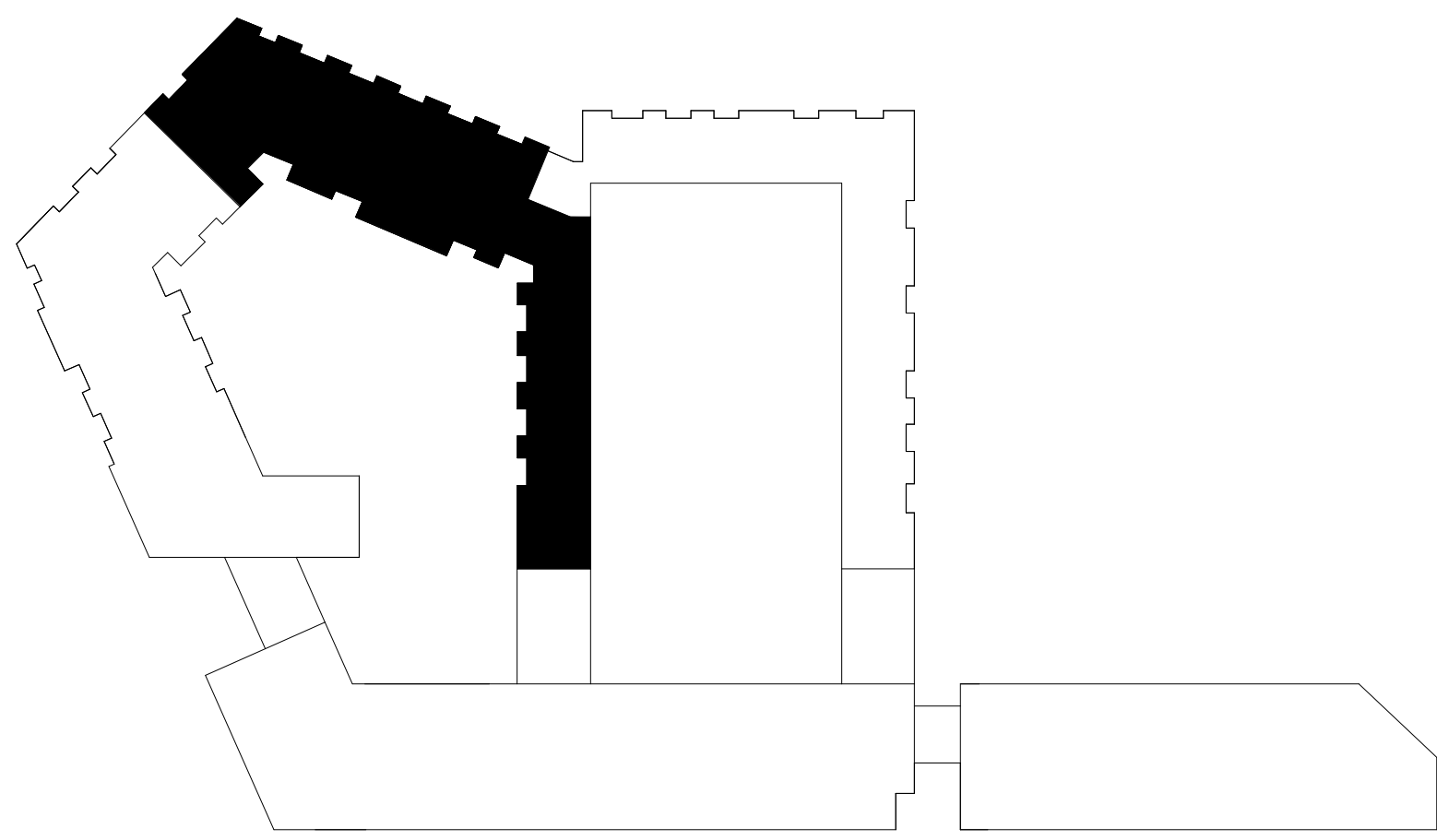












**PARAGON STAR  
NORTH VILLAGE**

3200 NW PARAGON PKWY,  
LEES SUMMIT, MO 64081

Project No.: 18017.19050.07.19050.08  
Date: 06.28.2022  
Issued For: FOR CONSTRUCTION

REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

**BOB D. CAMPBELL & CO.**  
Structural Engineers Since 1957  
4338 Belleview Ave. 816.531.4144  
Kansas City, MO 64111 www.bdc-engrs.com

SHEET TITLE

**BUILDING B  
FOUNDATION  
PLAN**

SHEET NUMBER

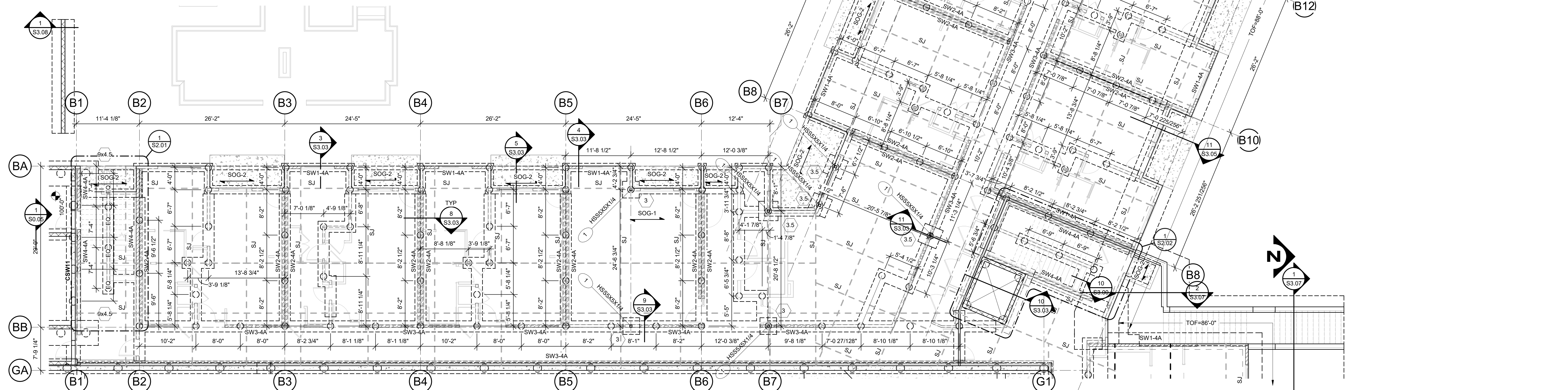
**S1.21B**

**1 BUILDING B FOUNDATION PLAN**

1/8" = 1'-0"

**FOUNDATION NOTES:**

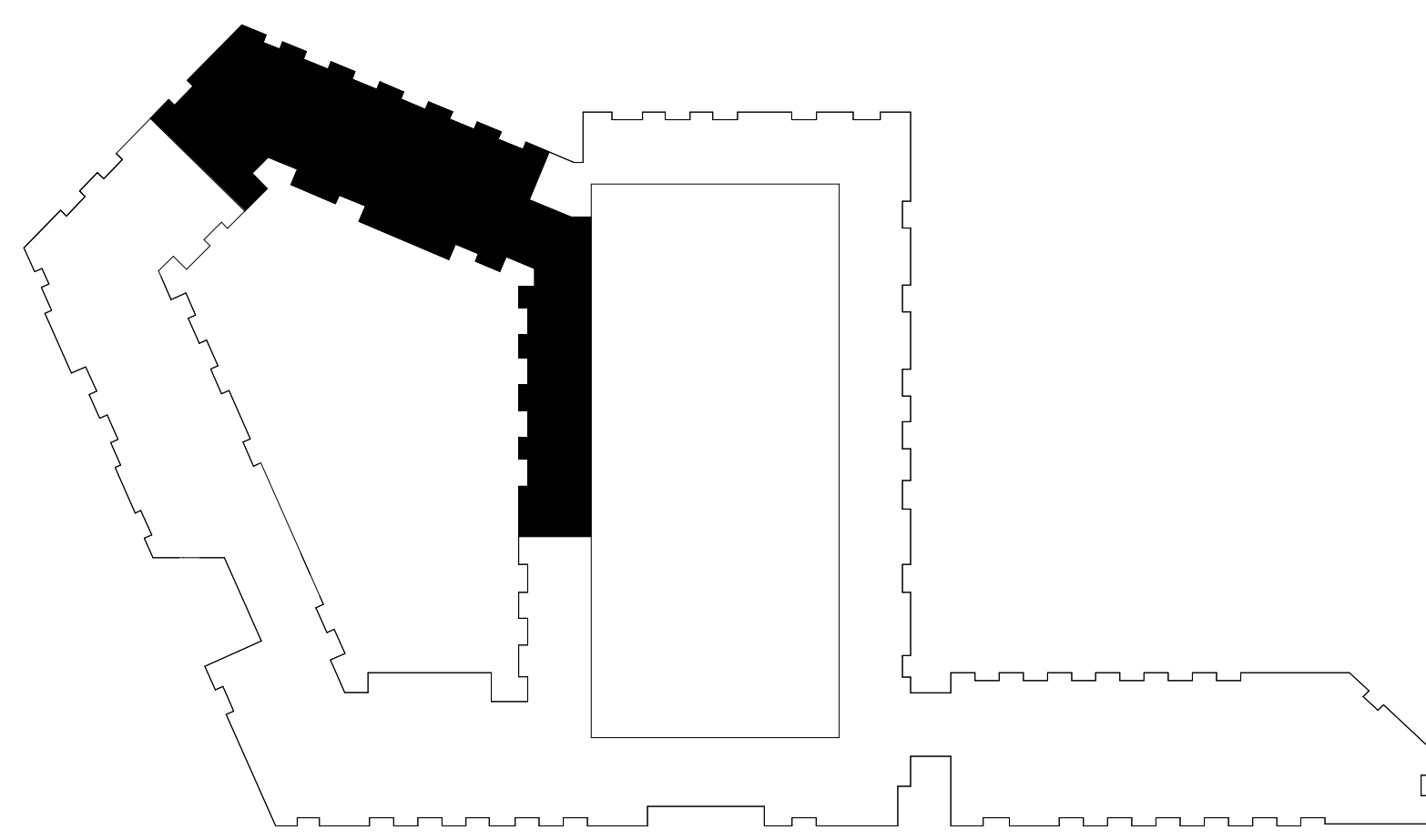
1. REFER TO GENERAL NOTES ON SHEET S0.01.
2. REFER TO PILE CAP SCHEDULE ON S3.02.
3. REFER TO STRUCTURAL BECK & SLAB SCHEDULE ON SHEET S0.01.
4. REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
5. ELEVATION 100'-0" EQUALS CIVIL DATUM ELEVATION 820.67.
6. TOP OF EXTERIOR FOOTINGS = 99'-0" UNO
7. TOP OF INTERIOR PILE CAPS = 98'-6" UNO
8. REFER TO FOOTING SCHEDULE ON S0.01.
9. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
10. REFER TO S3.00-SERIES DRAWINGS FOR TYPICAL FOUNDATION DETAILS.











**PARAGON STAR  
NORTH VILLAGE**

3200 NW PARAGON PKWY,  
LEES SUMMIT, MO 64081

Project No.: 18017.19050.07.19050.08  
Date: 06.28.2022  
Issued For: FOR CONSTRUCTION

REVISIONS

No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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Kansas City, MO 64111 www.bdc-engrs.com

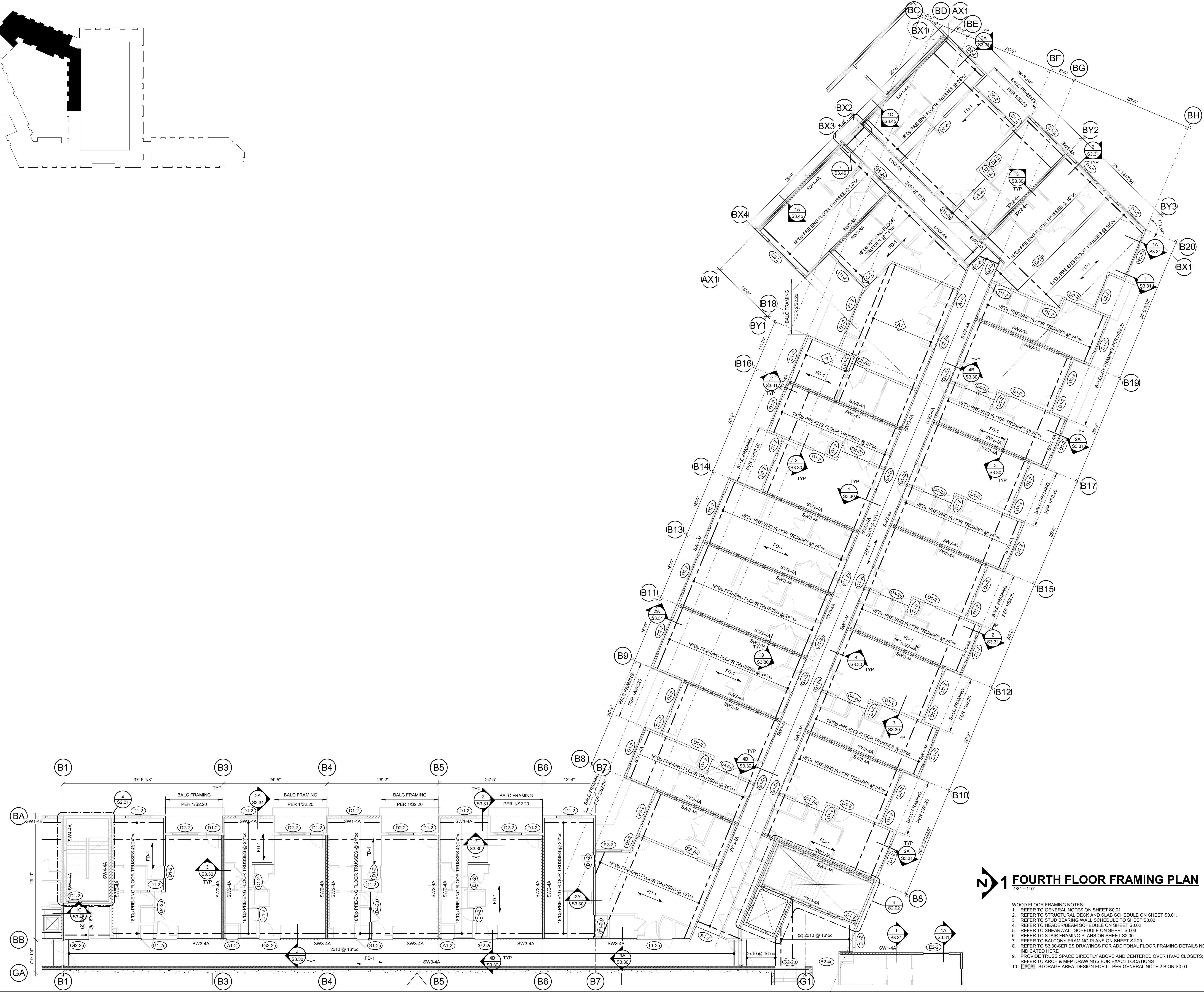
SHEET TITLE

**BUILDING B  
FOURTH FLOOR  
FRAMING PLAN**

SHEET NUMBER

**S1.24B**

C:\Users\CAB\Documents\FW12101-S1-Paragon Star\_cab\enr\FV02B.rvt



**1 FOURTH FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- WOOD FLOOR FRAMING NOTES:
- REFER TO GENERAL NOTES ON SHEET S0.01
  - REFER TO STRUCTURAL DECK AND SLAB SCHEDULE ON SHEET S0.01
  - REFER TO STUD BEARING WALL SCHEDULE ON SHEET S0.02
  - REFER TO HEADER/BEAM SCHEDULE ON SHEET S0.02
  - REFER TO SHEARWALL SCHEDULE ON SHEET S0.03
  - REFER TO STAIR FRAMING PLANS ON SHEET S2.00
  - REFER TO BALCONY FRAMING PLANS ON SHEET S2.20
  - REFER TO S3.30-SERIES DRAWINGS FOR EXACT LOCATIONS
  - PROVIDE TRUSS SPACE DIRECTLY ABOVE AND CENTERED OVER HVAC CLOSETS; REFER TO ARCH & MEP DRAWINGS FOR EXACT LOCATIONS
  - STORAGE AREA: DESIGN FOR LL PER GENERAL NOTE 2.B ON S0.01





REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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Kansas City, MO 64111 www.bdc-engr.com

SHEET TITLE

**BUILDING C  
FOUNDATION  
PLAN**

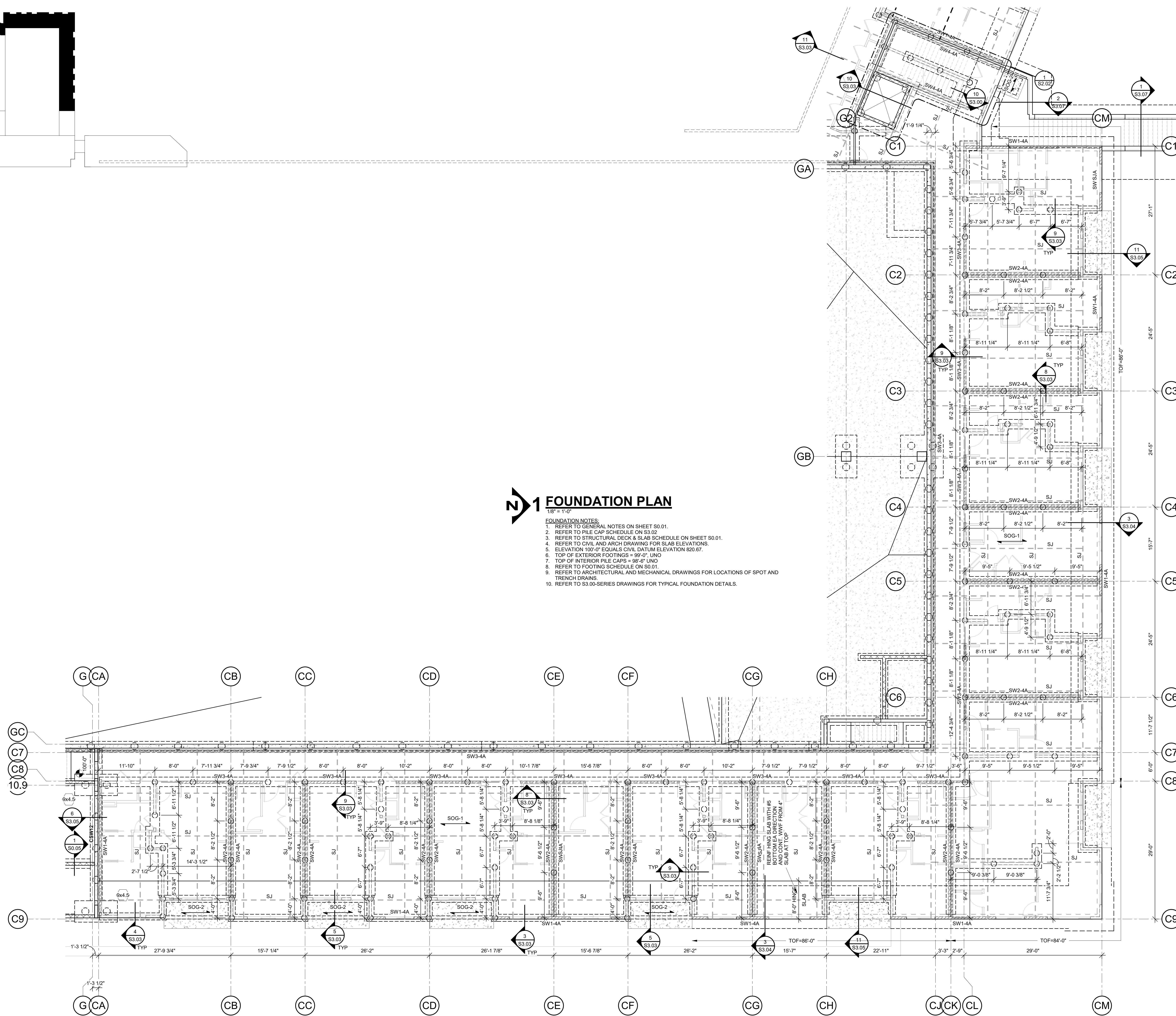
SHEET NUMBER

**S1.31C**

## FOUNDATION PLAN

1/8" = 1'-0"

- FOUNDATION NOTES:**
1. REFER TO GENERAL NOTES ON SHEET S0.01.
  2. REFER TO PILE CAP SCHEDULE ON S3.02.
  3. REFER TO STRUCTURAL DECK & SLAB SCHEDULE ON SHEET S0.01.
  4. REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
  5. ELEVATION 100'-0" EQUALS CIVIL DATUM ELEVATION 820.67.
  6. TOP OF EXTERIOR FOOTINGS = 99'-0" UNO
  7. TOP OF INTERIOR PILE CAPS = 96'-6" UNO
  8. REFER TO FOOTINGS SCHEDULE ON S0.01.
  9. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS
  10. REFER TO S3.00-SERIES DRAWINGS FOR TYPICAL FOUNDATION DETAILS.















REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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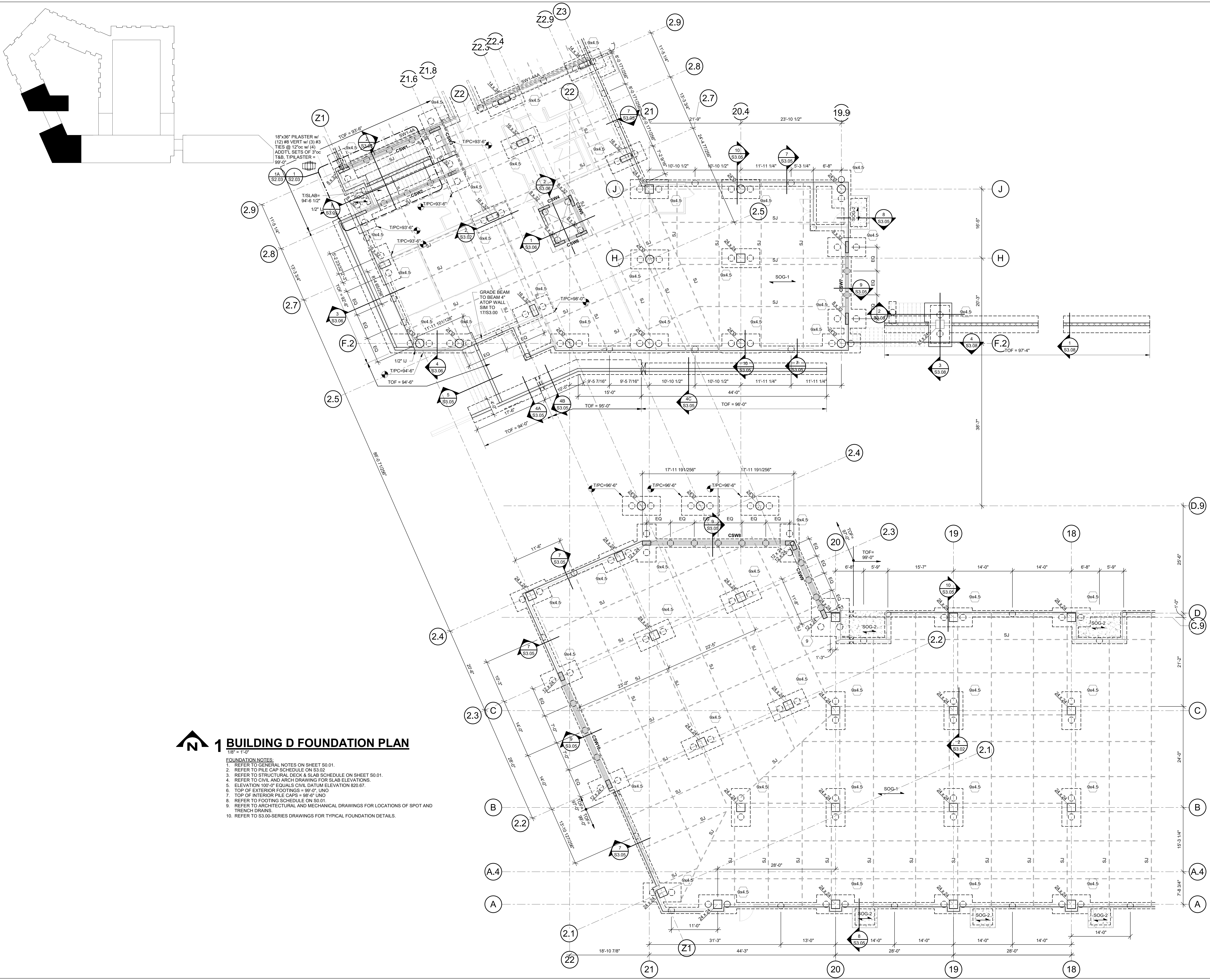
SHEET TITLE

**BUILDING D  
FOUNDATION  
PLAN**

SHEET NUMBER

**S1.41D**

C:\Users\CAB\Documents\FM2101 - S21 - Paragon Star\_cbevelin\FV2B.rvt



**1 BUILDING D FOUNDATION PLAN**  
1/8" = 1'-0"

- FOUNDATION NOTES:**
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO PILE CAP SCHEDULE ON S3.02.
  - REFER TO STRUCTURAL DECK & SLAB SCHEDULE ON SHEET S0.01.
  - REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
  - ELEVATION 100'-0" EQUALS CIVIL DATUM ELEVATION 820.67.
  - TOP OF EXTERIOR FOOTINGS = 99'-0" UNO
  - TOP OF INTERIOR PILE CAPS = 98'-6" UNO
  - REFER TO FOOTING SCHEDULE ON S0.01.
  - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
  - REFER TO S3.00-SERIES DRAWINGS FOR TYPICAL FOUNDATION DETAILS.

REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

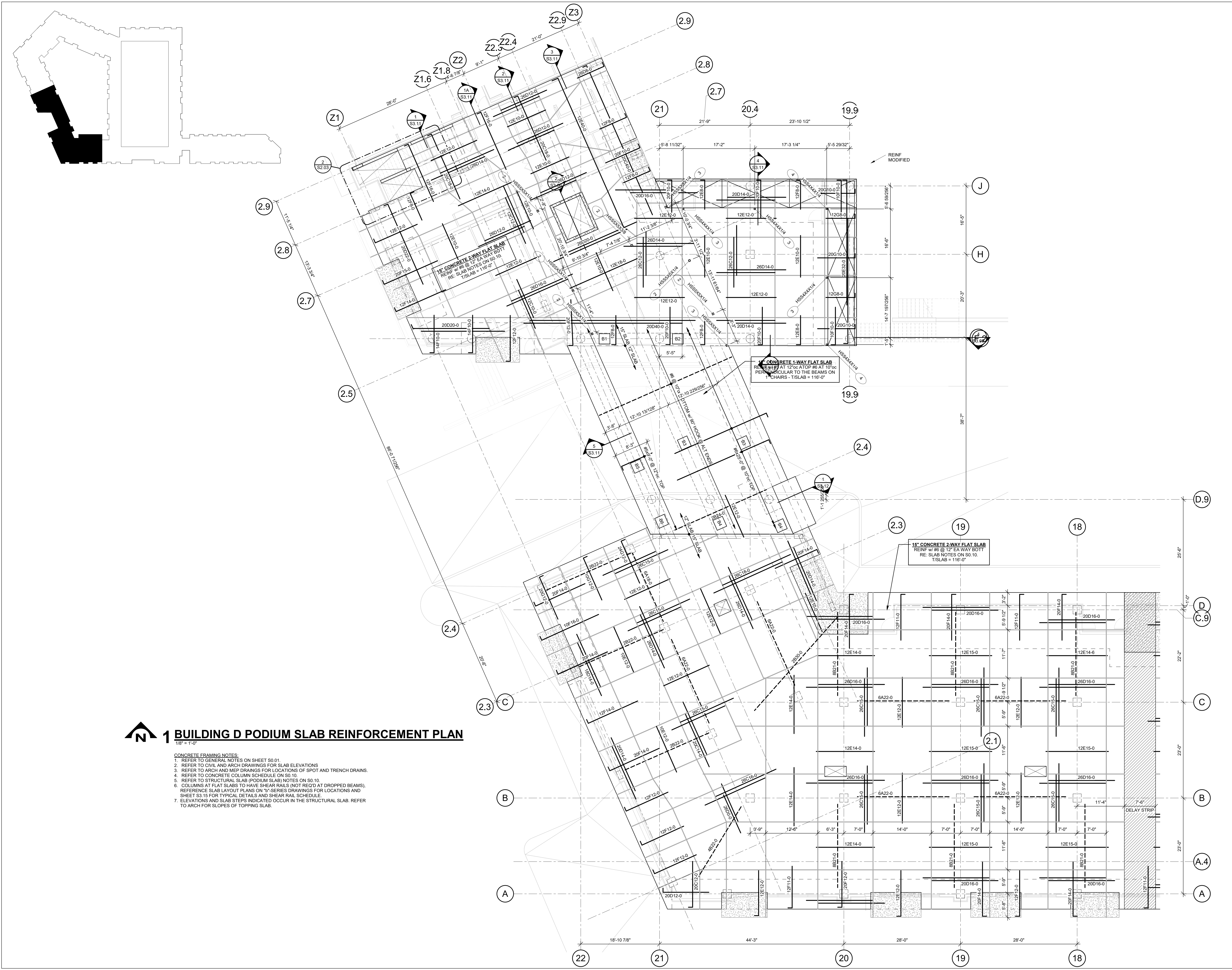
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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SHEET TITLE  
**BUILDING D  
PODIUM SLAB  
REINFORCEMENT  
PLAN**

SHEET NUMBER

**S1.42Da**



**1 BUILDING D PODIUM SLAB REINFORCEMENT PLAN**  
1/8" = 1'-0"

- CONCRETE FRAMING NOTES:**
1. REFER TO GENERAL NOTES ON SHEET S0.01.
  2. REFER TO CIVIL AND ARCH DRAWINGS FOR SLAB ELEVATIONS.
  3. REFER TO ARCH AND MEP DRAININGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
  4. REFER TO CONCRETE COLUMN SCHEDULE ON S0.10.
  5. REFER TO STRUCTURAL SLAB (PODIUM SLAB) NOTES ON S0.10.
  6. COLUMNS AT FLAT SLABS TO HAVE SHEAR RAILS (NOT REQ'D AT DROPPED BEAMS). REFERENCE SLAB LAYOUT PLANS ON 7"-SERIES DRAWINGS FOR LOCATIONS AND SHEET S3.15 FOR TYPICAL DETAILS AND SHEAR RAIL SCHEDULE.
  7. ELEVATIONS AND SLAB STEPS INDICATED OCCUR IN THE STRUCTURAL SLAB. REFER TO ARCH FOR SLOPES OF TOPPING SLAB.

REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

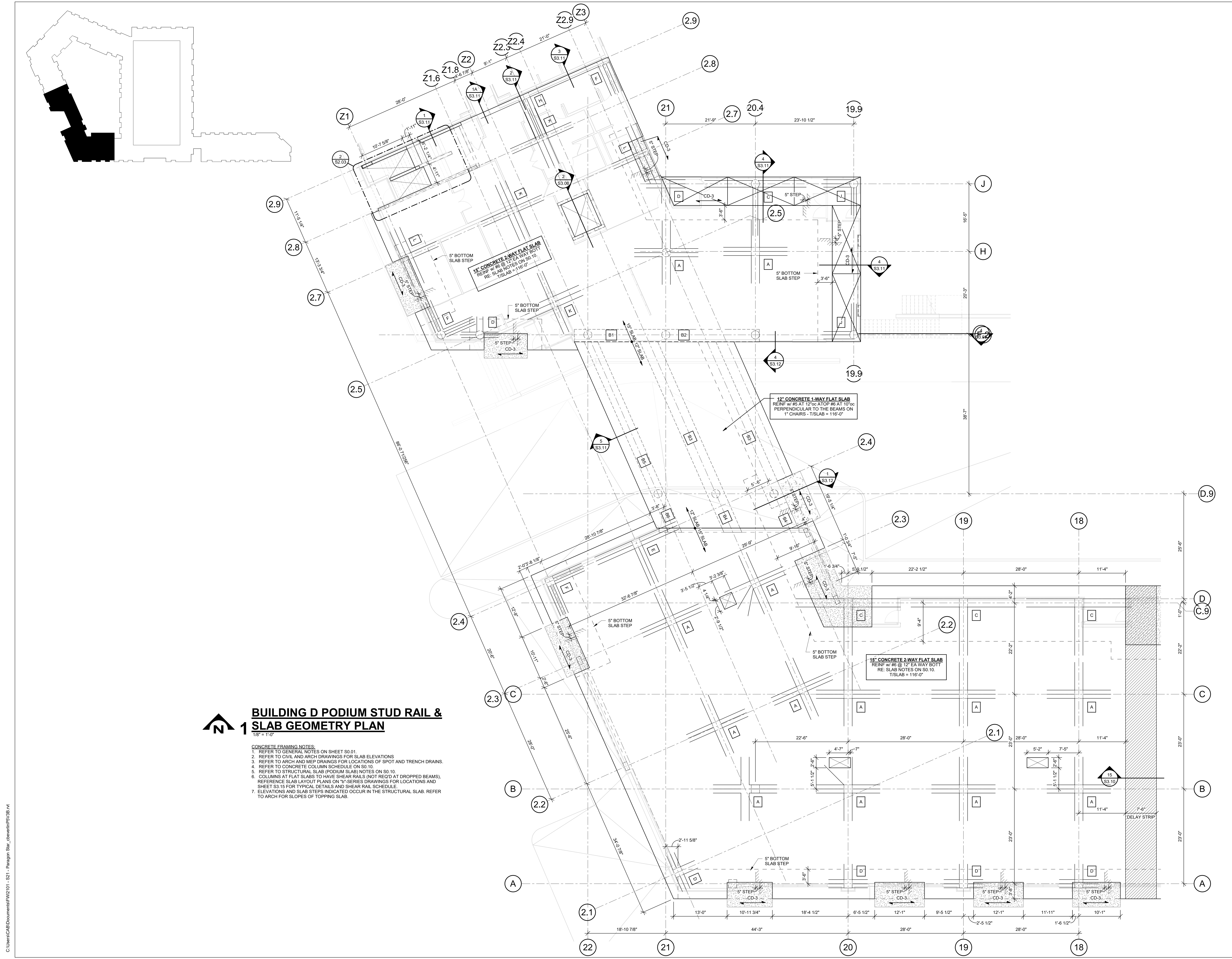
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Kansas City, MO 64111  
www.bdc-engrs.com

SHEET TITLE

**BUILDING D  
PODIUM STUD  
RAIL & SLAB  
GEOMETRY PLAN**

SHEET NUMBER

**S1.42Db**



**BUILDING D PODIUM STUD RAIL & SLAB GEOMETRY PLAN**  
1/8" = 1'-0"

- CONCRETE FRAMING NOTES:**
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO CIVIL AND ARCH DRAWINGS FOR SLAB ELEVATIONS.
  - REFER TO ARCH AND MEP DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
  - REFER TO CONCRETE COLUMN SCHEDULE ON S0.10.
  - REFER TO STRUCTURAL SLAB (PODIUM SLAB) NOTES ON S0.10.
  - COLUMNS AT FLAT SLABS TO HAVE SHEAR RAILS (NOT REQ'D AT DROPPED BEAMS). REFERENCE SLAB LAYOUT PLANS ON 16"-SERIES DRAWINGS FOR LOCATIONS AND SHEET S3.15 FOR TYPICAL DETAILS AND SHEAR RAIL SCHEDULE.
  - ELEVATIONS AND SLAB STEPS INDICATED OCCUR IN THE STRUCTURAL SLAB. REFER TO ARCH FOR SLOPES OF TOPPING SLAB.

REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

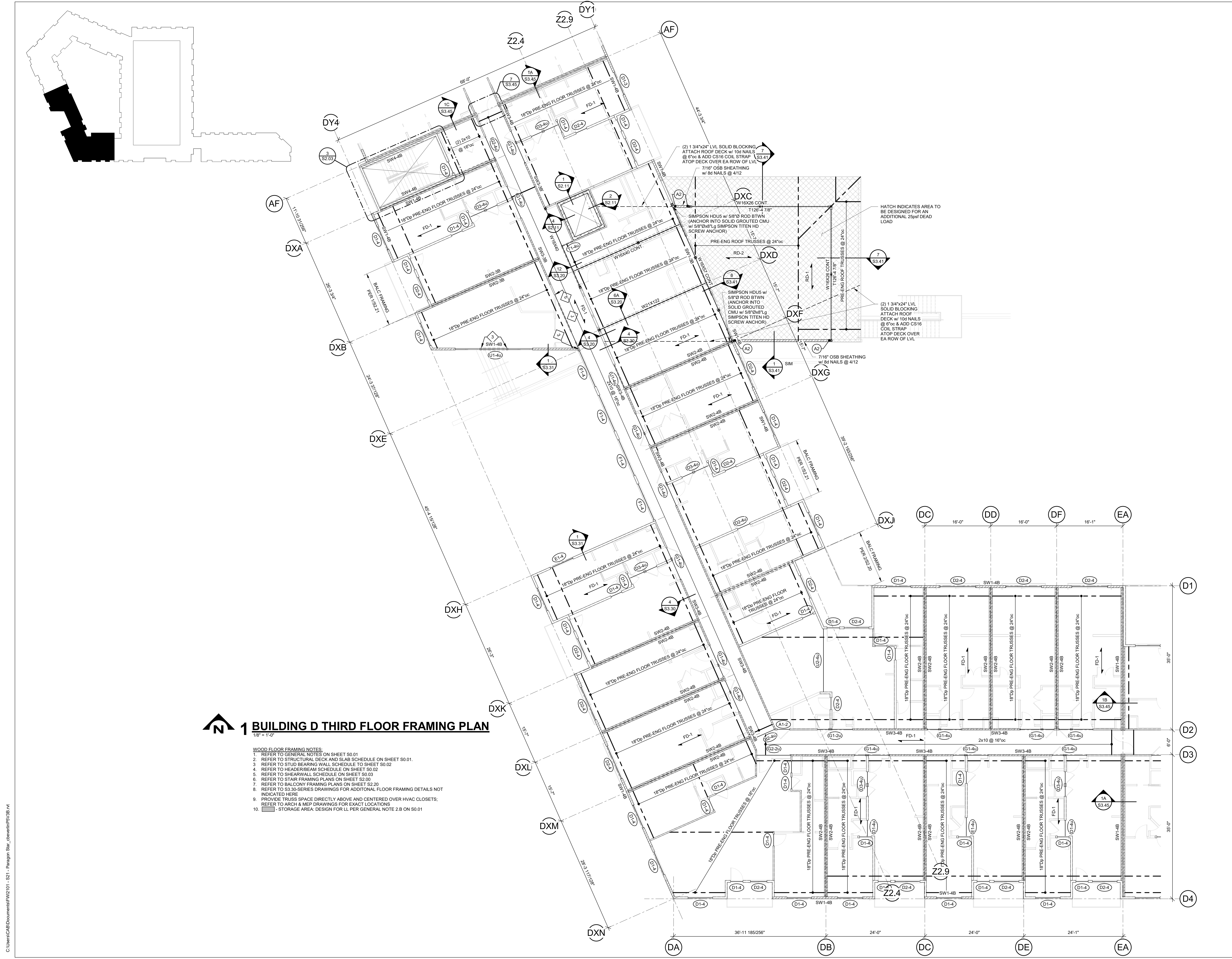
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Structural Engineers  
Since 1957  
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Kansas City, MO 64111  
www.bdc-engineers.com

SHEET TITLE

**BUILDING D THIRD FLOOR FRAMING PLAN**

SHEET NUMBER

**S1.43D**



**1 BUILDING D THIRD FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- WOOD FLOOR FRAMING NOTES:
1. REFER TO GENERAL NOTES ON SHEET S0.01
  2. REFER TO STRUCTURAL DECK AND SLAB SCHEDULE ON SHEET S0.01.
  3. REFER TO STUD BEARING WALL SCHEDULE TO SHEET S0.02
  4. REFER TO HEADER/BEAM SCHEDULE ON SHEET S0.02
  5. REFER TO SHEARWALL SCHEDULE ON SHEET S0.03
  6. REFER TO STAIR FRAMING PLANS ON SHEET S2.00
  7. REFER TO BALCONY FRAMING PLANS ON SHEET S2.20
  8. REFER TO S3.30-SERIES DRAWINGS FOR ADDITIONAL FLOOR FRAMING DETAILS NOT INDICATED HERE
  9. PROVIDE TRUSS SPACE DIRECTLY ABOVE AND CENTERED OVER HVAC CLOSETS; REFER TO ARCH & MEP DRAWINGS FOR EXACT LOCATIONS
  10. [Symbol] STORAGE AREA: DESIGN FOR LL PER GENERAL NOTE 2.B ON S0.01

REVISIONS		
No.	Date	Description
1	7.11.22	ADDENDUM 1
2	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

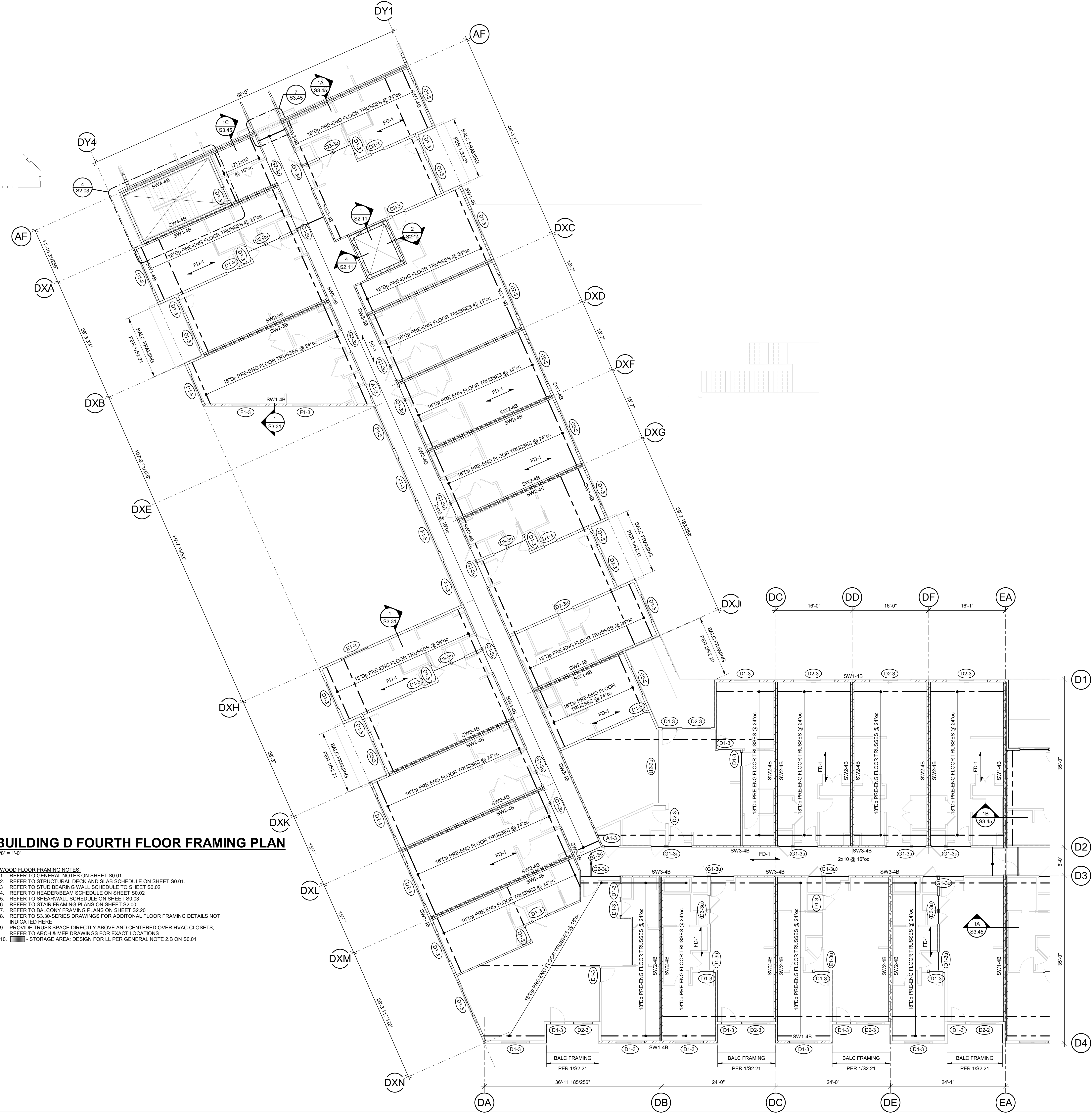
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Structural Engineers  
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4338 Bellevue Ave. 816.531.4144  
Kansas City, MO 64111 www.bdc-engr.com

SHEET TITLE

**BUILDING D  
FOURTH FLOOR  
FRAMING PLAN**

SHEET NUMBER

**S1.44D**



**1 BUILDING D FOURTH FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- WOOD FLOOR FRAMING NOTES:
1. REFER TO GENERAL NOTES ON SHEET S0.01
  2. REFER TO STRUCTURAL DECK AND SLAB SCHEDULE ON SHEET S0.01.
  3. REFER TO STUD BEARING WALL SCHEDULE TO SHEET S0.02
  4. REFER TO HEADER/BEAM SCHEDULE ON SHEET S0.02
  5. REFER TO SHEARWALL SCHEDULE ON SHEET S0.03
  6. REFER TO STAIR FRAMING PLANS ON SHEET S2.00
  7. REFER TO BALCONY FRAMING PLANS ON SHEET S2.20
  8. REFER TO S3.30-SERIES DRAWINGS FOR ADDITIONAL FLOOR FRAMING DETAILS NOT INDICATED HERE
  9. PROVIDE TRUSS SPACE DIRECTLY ABOVE AND CENTERED OVER HVAC CLOSETS; REFER TO ARCH & MEP DRAWINGS FOR EXACT LOCATIONS
  10. STORAGE AREA. DESIGN FOR LL PER GENERAL NOTE 2.B ON S0.01









REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

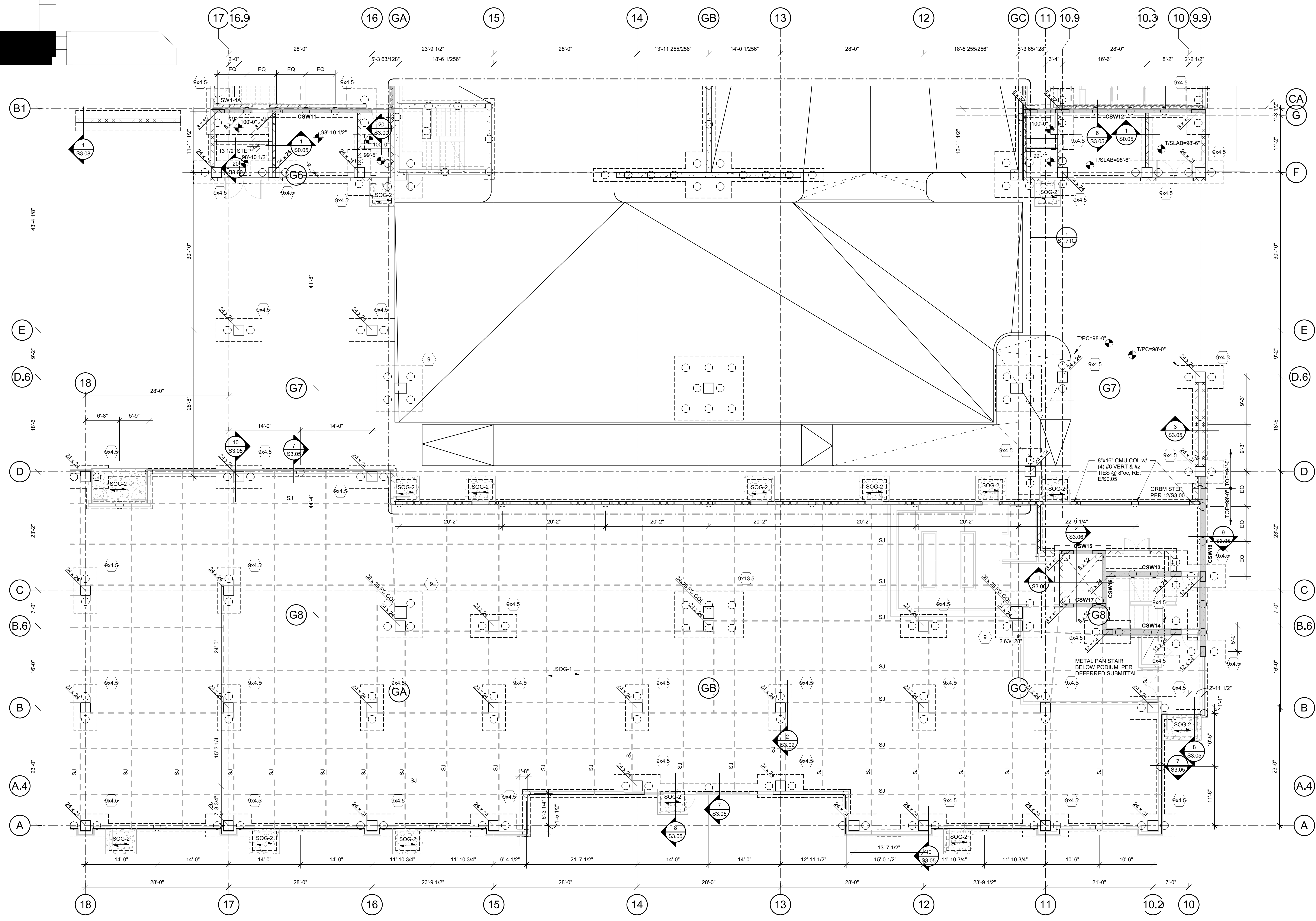
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Structural Engineers Since 1957  
4338 Bellevue Ave. 816.531.4144  
Kansas City, MO 64111 www.bdc-engrs.com

SHEET TITLE

**BUILDING E  
FOUNDATION  
PLAN**

SHEET NUMBER

**S1.51E**



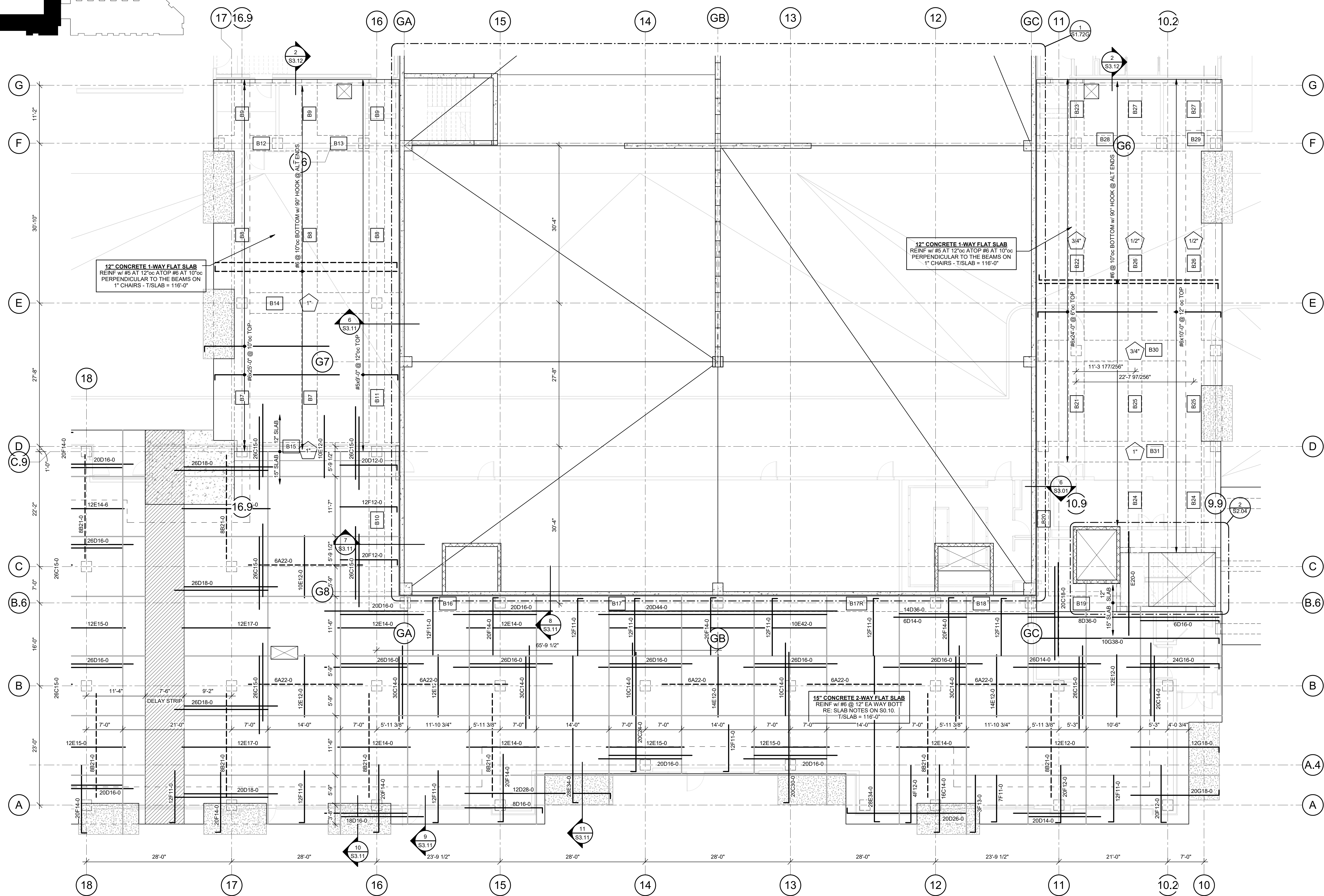
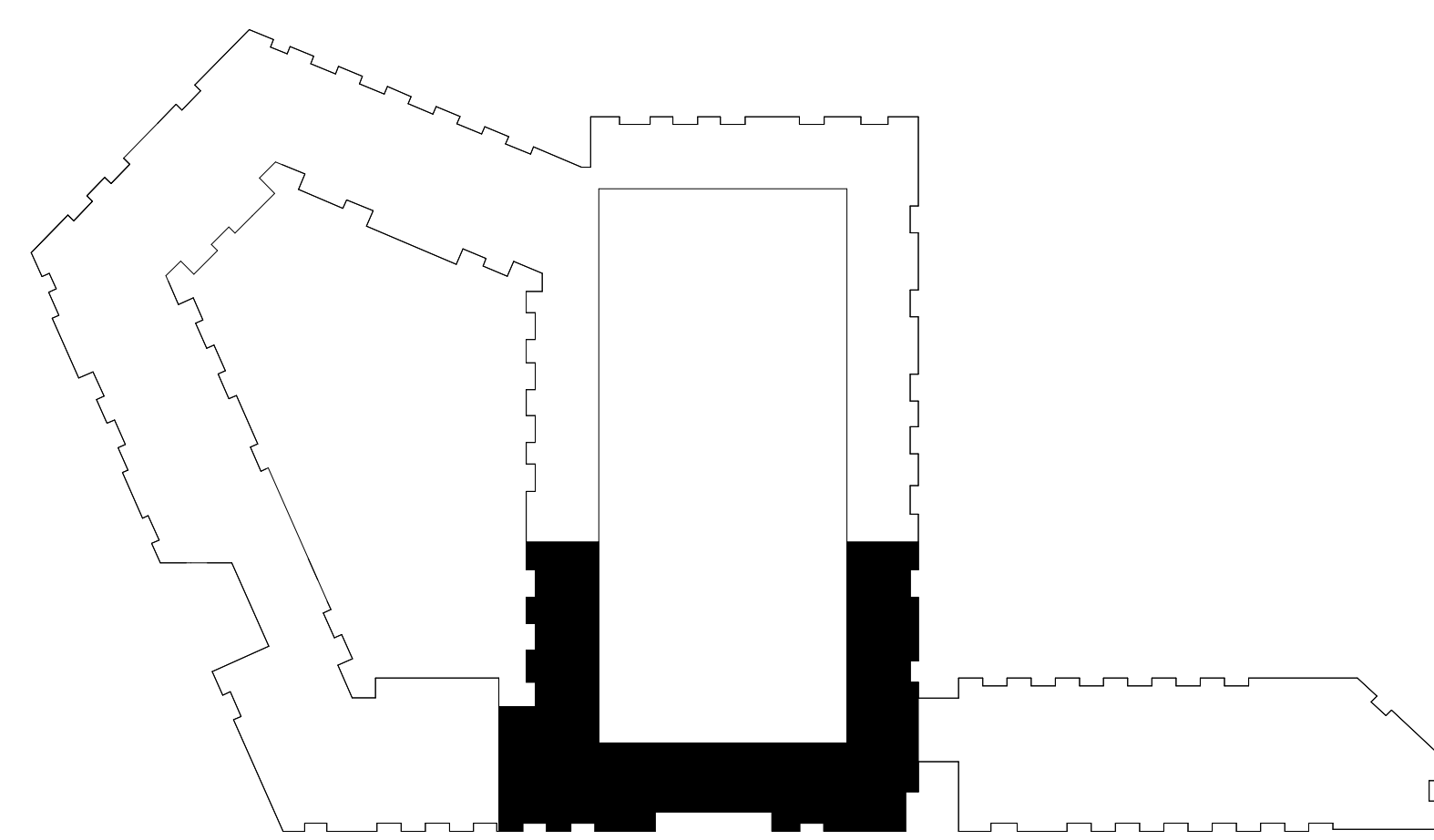
**1 BUILDING E FOUNDATION PLAN**

- 1/8" = 1'-0"
- FOUNDATION NOTES:**
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO PILE CAP SCHEDULE ON S3.02.
  - REFER TO STRUCTURAL DECK & SLAB SCHEDULE ON SHEET S0.01.
  - REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
  - ELEVATION 100'-0" EQUALS CIVIL DATUM ELEVATION 820.67.
  - TOP OF EXTERIOR FOOTINGS = 99'-0" UNO
  - TOP OF INTERIOR PILE CAPS = 98'-6" UNO
  - REFER TO FOOTING SCHEDULE ON S0.01.
  - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
  - REFER TO S3.00-SERIES DRAWINGS FOR TYPICAL FOUNDATION DETAILS.



ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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Kansas City, MO 64111 www.bdc-engrs.com



**1 BUILDING E PODIUM SLAB REINFORCEMENT PLAN**  
1/8" = 1'-0"

- CONCRETE FRAMING NOTES:
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO CIVIL AND ARCH DRAWINGS FOR SLAB ELEVATIONS.
  - REFER TO ARCH AND MEP DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
  - REFER TO CONCRETE COLUMN SCHEDULE ON S0.10.
  - REFER TO STRUCTURAL SLAB (PODIUM SLAB) NOTES ON S0.10.
  - COLUMNS AT FLAT SLABS TO HAVE SHEAR RAILS (NOT REQ'D AT DROPPED BEAMS).
  - REFERENCE SLAB LAYOUT PLANS ON "S" SERIES DRAWINGS FOR LOCATIONS AND SHEET S3.15 FOR TYPICAL DETAILS AND SHEAR RAIL SCHEDULE.
  - ELEVATIONS AND SLAB STEPS INDICATED OCCUR IN THE STRUCTURAL SLAB. REFER TO ARCH FOR SLOPES OF TOPPING SLAB.

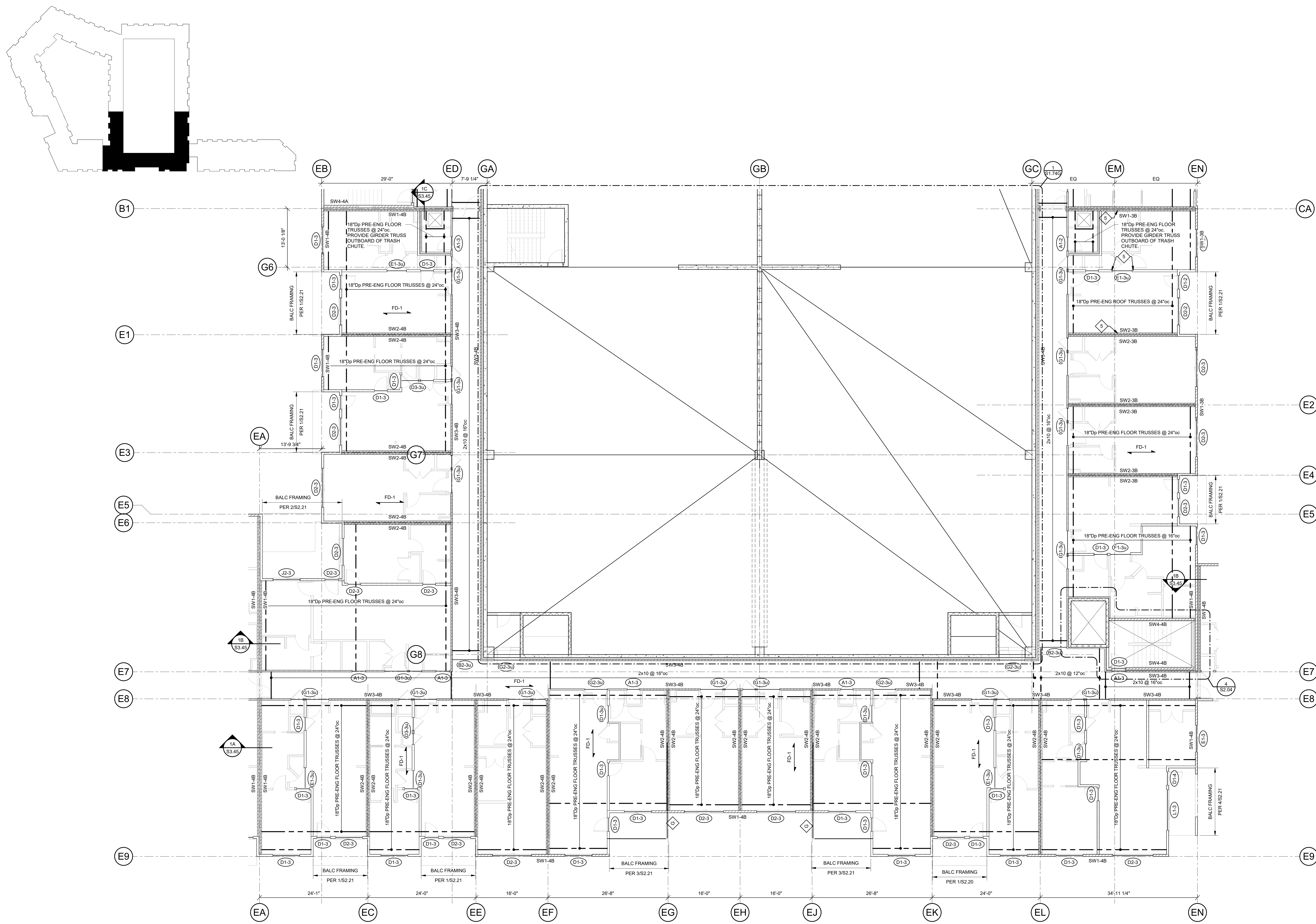






ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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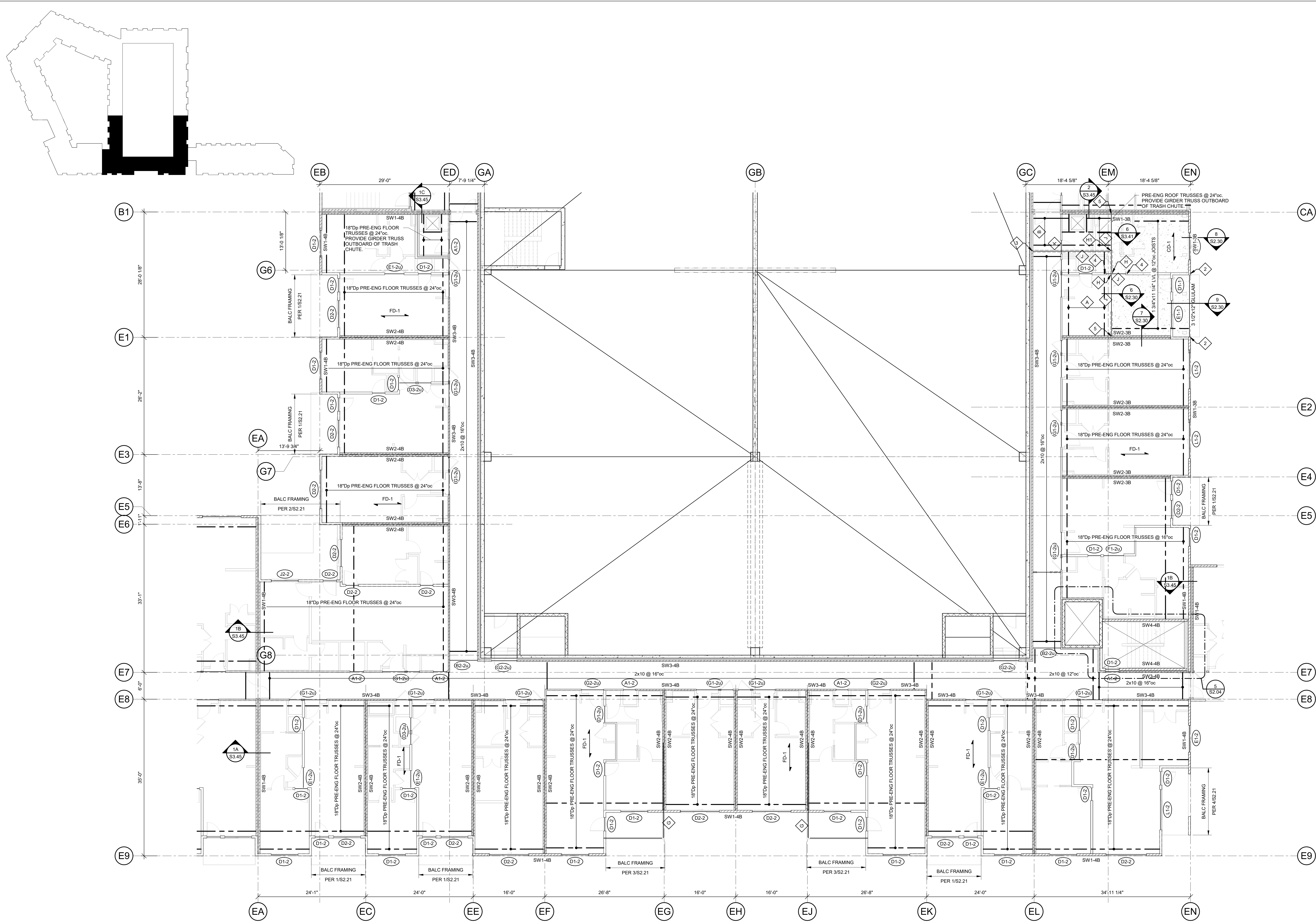
**1 BUILDING E FOURTH FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- WOOD FLOOR FRAMING NOTES:**
1. REFER TO GENERAL NOTES ON SHEET S0.01
  2. REFER TO STRUCTURAL DECK AND SLAB SCHEDULE ON SHEET S0.01
  3. REFER TO STUD BEARING WALL SCHEDULE TO SHEET S0.02
  4. REFER TO HEADER/BEAM SCHEDULE ON SHEET S0.02
  5. REFER TO SHEARWALL SCHEDULE ON SHEET S1.03
  6. REFER TO STAIR FRAMING PLANS ON SHEET S2.00
  7. REFER TO BALCONY FRAMING PLANS ON SHEET S2.20
  8. REFER TO S3.30-SERIES DRAWINGS FOR ADDITIONAL FLOOR FRAMING DETAILS NOT INDICATED HERE
  9. PROVIDE TRUSS SPACE DIRECTLY ABOVE AND CENTERED OVER HVAC CLOSETS; REFER TO ARCH & MEP DRAWINGS FOR EXACT LOCATIONS
  10. STORAGE AREA: DESIGN FOR LL PER GENERAL NOTE 2.B ON S0.01



ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

**BOB D. CAMPBELL & CO.**  
Structural Engineers Since 1957  
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Kansas City, MO 64111 www.bdc-engr.com



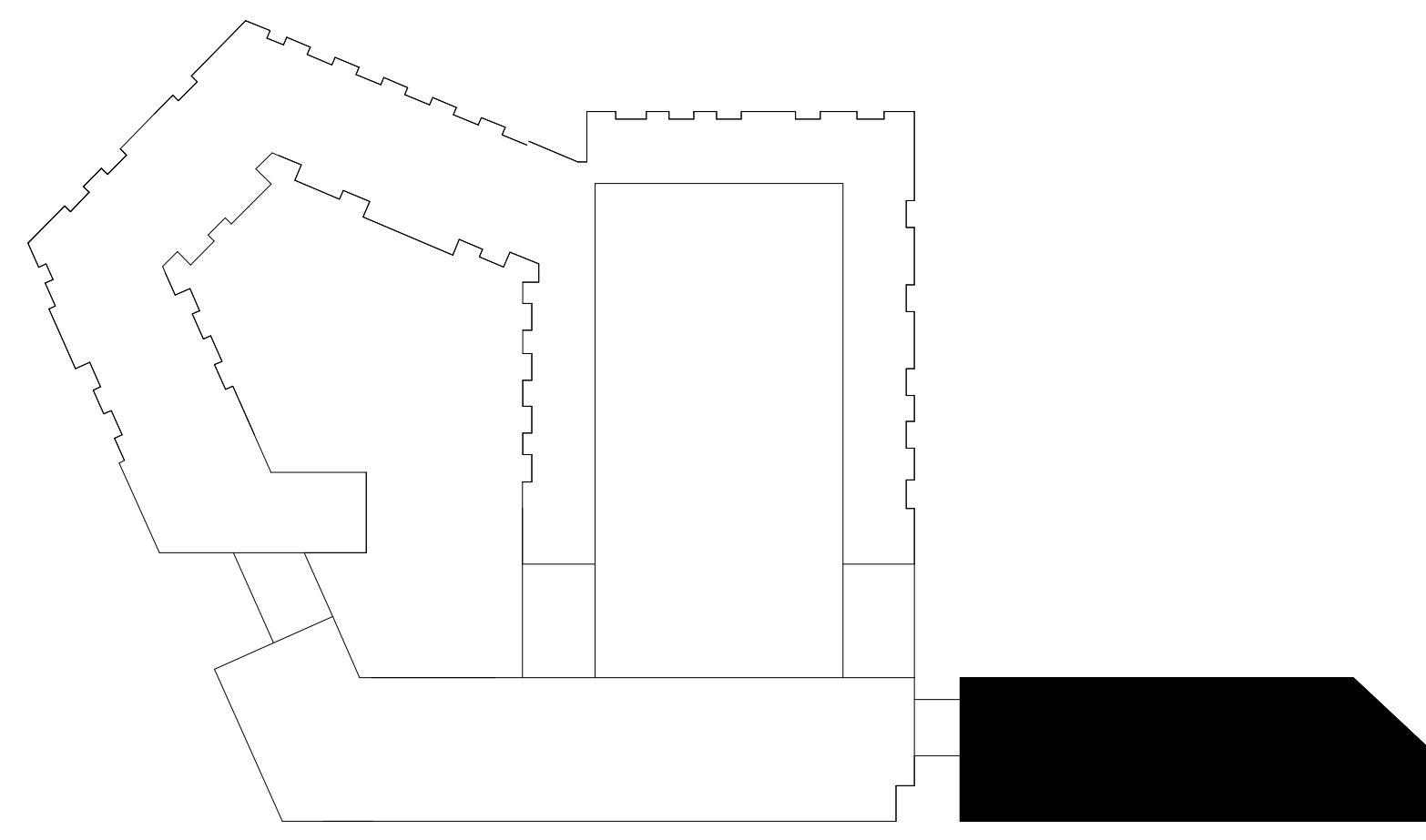
**1 BUILDING E FIFTH FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- WOOD FLOOR FRAMING NOTES:**
1. REFER TO GENERAL NOTES ON SHEET S0.01
  2. REFER TO STRUCTURAL DECK AND SLAB SCHEDULE ON SHEET S0.01
  3. REFER TO STUD BEARING WALL SCHEDULE TO SHEET S0.02
  4. REFER TO HEADER/BEAM SCHEDULE ON SHEET S0.02
  5. REFER TO SHEARWALL SCHEDULE ON SHEET S0.03
  6. REFER TO STAIR FRAMING PLANS ON SHEET S2.00
  7. REFER TO BALCONY FRAMING PLANS ON SHEET S2.20
  8. REFER TO S3.30-SERIES DRAWINGS FOR ADDITIONAL FLOOR FRAMING DETAILS NOT INDICATED HERE
  9. PROVIDE TRUSS SPACE DIRECTLY ABOVE AND CENTERED OVER HVAC CLOSETS; REFER TO ARCH & MEP DRAWINGS FOR EXACT LOCATIONS
  10. STORAGE AREA: DESIGN FOR LL PER GENERAL NOTE 2.B ON S0.01









**PARAGON STAR  
NORTH VILLAGE**

3200 NW PARAGON PKWY,  
LEES SUMMIT, MO 64081

Project No.: 18017.19050.07.19050.08  
Date: 06.28.2022  
Issued For: FOR CONSTRUCTION

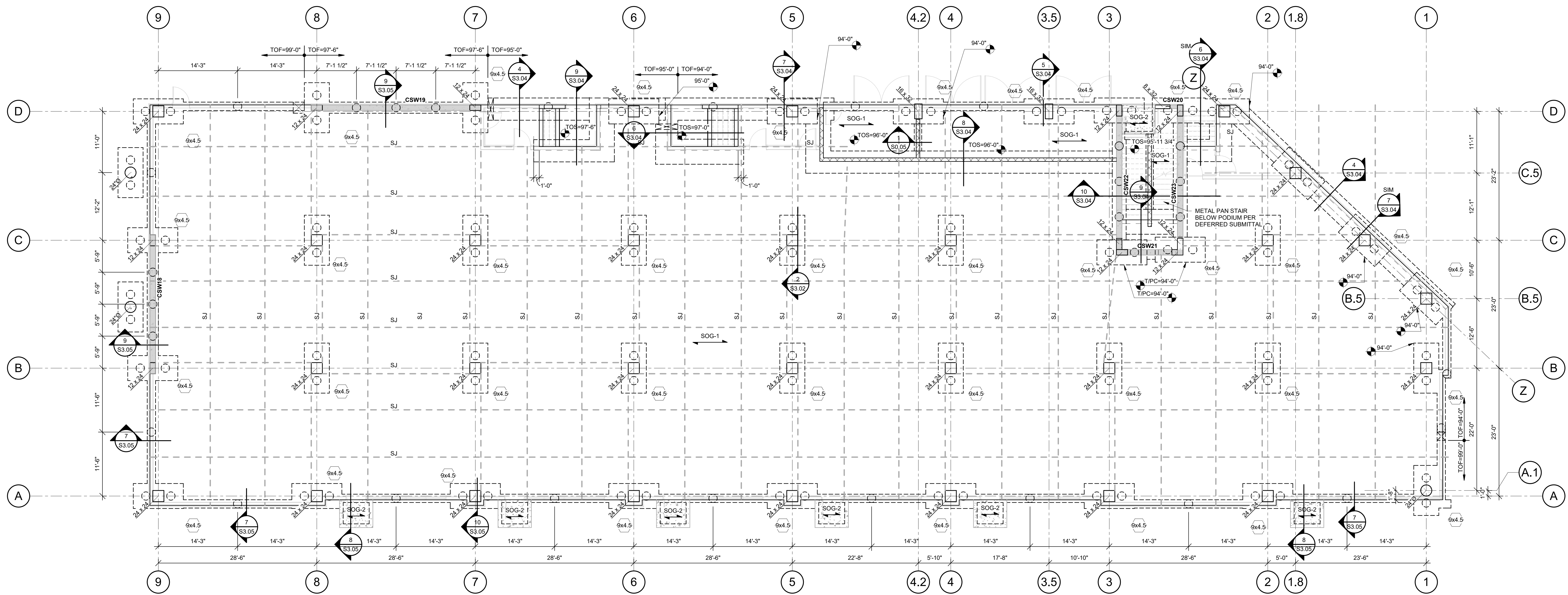
REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS



**1 BUILDING F FOUNDATION PLAN**

1/8" = 1'-0"

**FOUNDATION NOTES:**

1. REFER TO GENERAL NOTES ON SHEET S0.01.
2. REFER TO PILE CAP SCHEDULE ON S3.02.
3. REFER TO STRUCTURAL DECK & SLAB SCHEDULE ON SHEET S0.01.
4. REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
5. ELEVATION 100'-0" EQUALS CIVIL DATUM ELEVATION 820.67.
6. TOP OF EXTERIOR FOOTINGS = 99'-0" UNO
7. TOP OF INTERIOR PILE CAPS = 96'-6" UNO
8. REFER TO FOOTING SCHEDULE ON S0.01.
9. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
10. REFER TO S3.00-SERIES DRAWINGS FOR TYPICAL FOUNDATION DETAILS.

SHEET TITLE

**BUILDING F  
FOUNDATION  
PLAN**

SHEET NUMBER

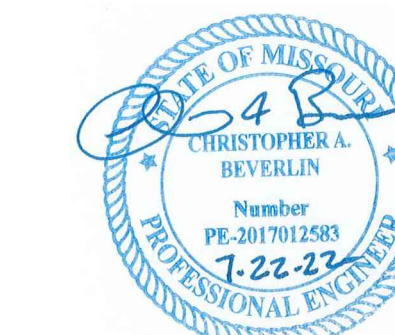
**S1.61F**

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REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



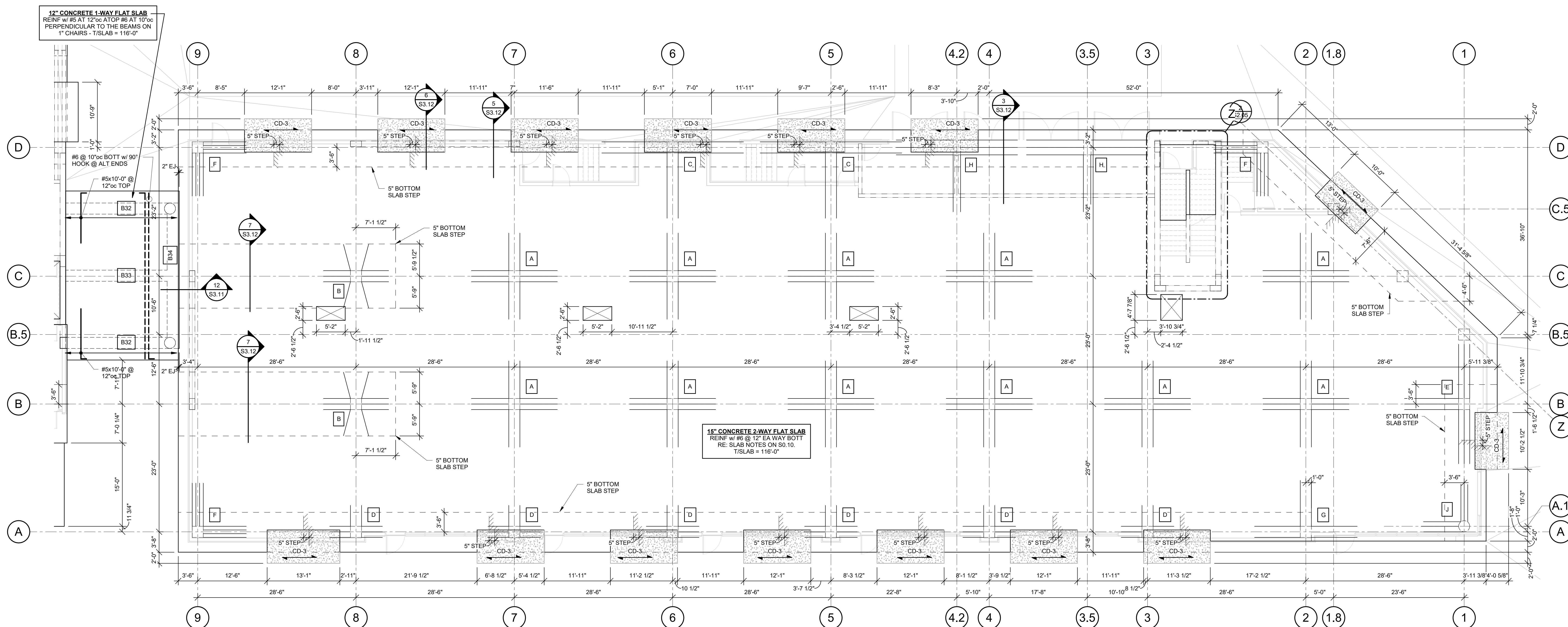
PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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SHEET TITLE  
**BUILDING F  
PODIUM STUD  
RAIL & SLAB  
GEOMETRY PLAN**

SHEET NUMBER  
**S1.62Fb**



**1 BUILDING F PODIUM STUD RAIL & SLAB GEOMETRY PLAN**  
1/8" = 1'-0"

- CONCRETE FRAMING NOTES:**
1. REFER TO GENERAL NOTES ON SHEET S0.01.
  2. REFER TO CIVIL AND ARCH DRAWINGS FOR SLAB ELEVATIONS
  3. REFER TO ARCH AND MEP DRAINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
  4. REFER TO CONCRETE COLUMN SCHEDULE ON S0.10.
  5. REFER TO STRUCTURAL SLAB (PODIUM SLAB) NOTES ON S0.10.
  6. COLUMNS AT FLAT SLABS TO HAVE SHEAR RAILS (NOT REQ'D AT DROPPED BEAMS). REFERENCE SLAB LAYOUT PLANS ON "B"-SERIES DRAWINGS FOR LOCATIONS AND SHEET S3.15 FOR TYPICAL DETAILS AND SHEAR RAIL SCHEDULE.
  7. ELEVATIONS AND SLAB STEPS INDICATED OCCUR IN THE STRUCTURAL SLAB. REFER TO ARCH FOR SLOPES OF TOPPING SLAB.







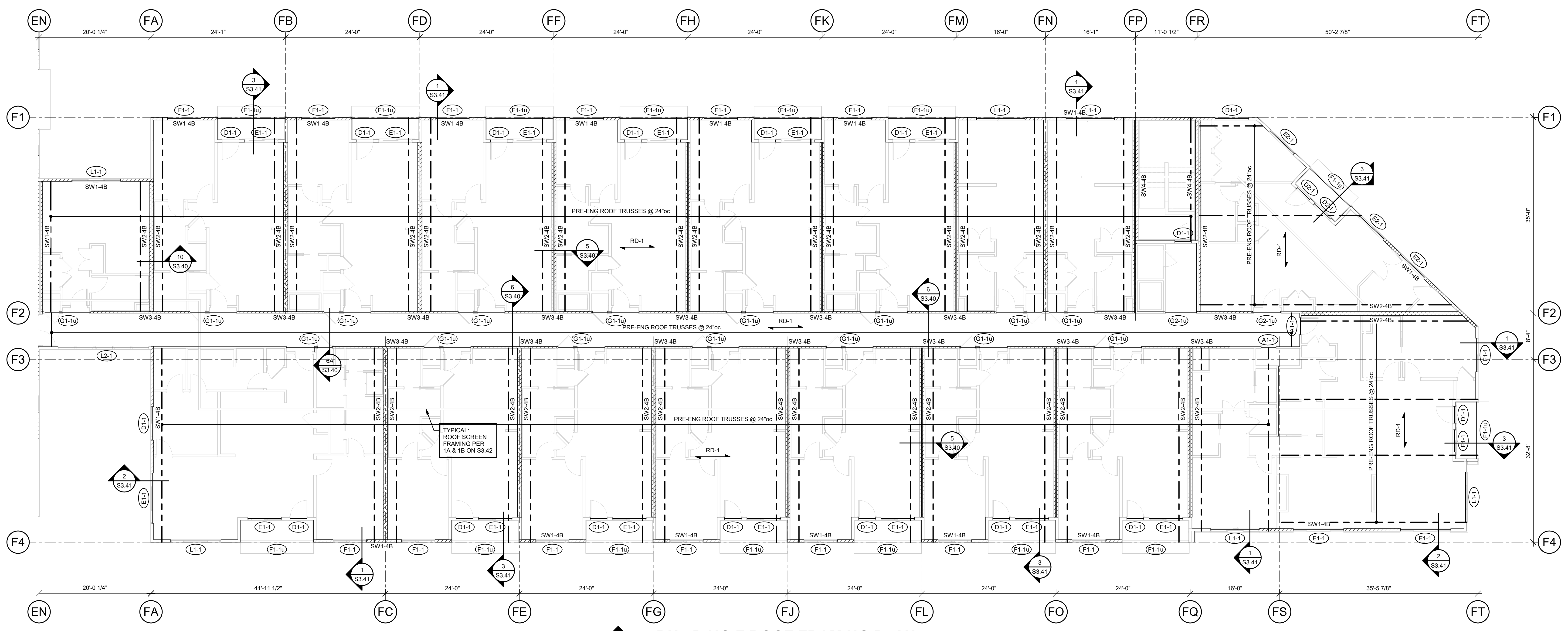
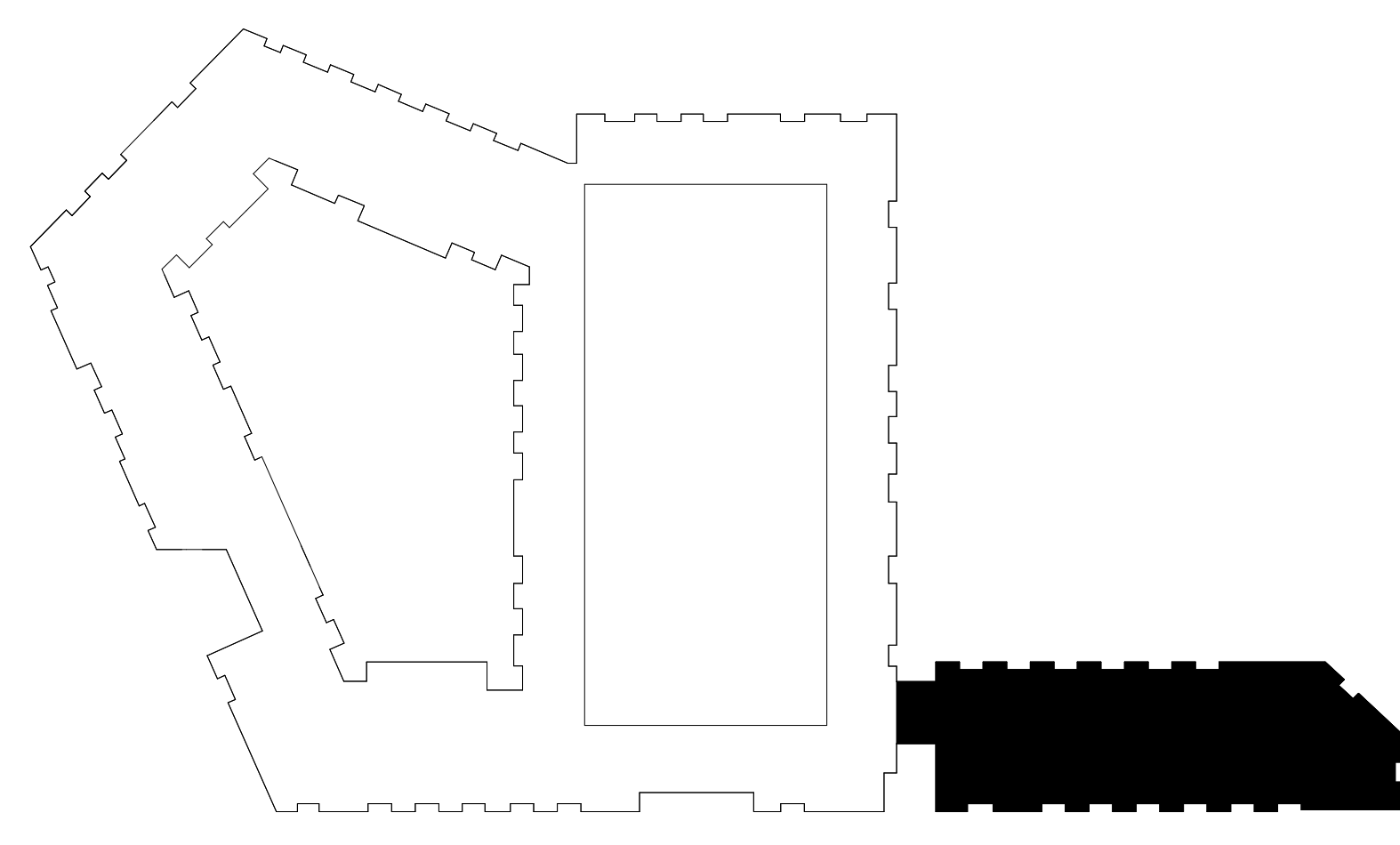


REVISIONS		
No.	Date	Description



PROJECT TEAM	
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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**1 BUILDING F ROOF FRAMING PLAN**  
1/8" = 1'-0"

- WOOD ROOF FRAMING NOTES:**
- REFER TO GENERAL NOTES ON SHEET S0.01
  - REFER TO STRUCTURAL DECK AND SLAB SCHEDULE ON SHEET S0.01
  - REFER TO STUD BEARING WALL SCHEDULE TO SHEET S0.02
  - REFER TO HEADER/BEAM SCHEDULE ON SHEET S0.02
  - REFER TO SHEARWALL SCHEDULE ON SHEET S0.03
  - PROVIDE (3) STUD (MINIMUM) ALIGNED UNDER EACH END OF GIRDER TRUSS (CONTINUOUS FOUNDATION) - FINAL QUANTITY TO MATCH NUMBER OF PLYS OF GIRDER TRUSS. PROVIDE SIMPSON LSTA-STYLE HOLDDOWN AT EACH END OF GIRDER TRUSS.
  - REFER TO S3.40-SERIES DRAWINGS FOR ADDITIONAL ROOF FRAMING DETAILS NOT INDICATED HERE.
  - PROVIDE UNIFORM UPLIFT SCREWS AT UPPER FLOOR PER DETAILS 2, 2A, 3, 3A, 3B, 4 AND 5 ON SHEET S0.20
  - PRE-ENGINEERED TRUSSES TO HAVE A MINIMUM DEPTH OF 24" SLOPE TOP CHORD PER ARCHITECTURAL DRAWINGS.
  - INDICATES AREA ON ROOF THAT IS REQ'D TO BE DESIGNED FOR MEP EQUIPMENT ZONE PER GENERAL NOTE "2.B" ON SHEET S0.01

SHEET TITLE

BUILDING F ROOF  
FRAMING PLAN

SHEET NUMBER

**S1.66F**

No.	Date	Description
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

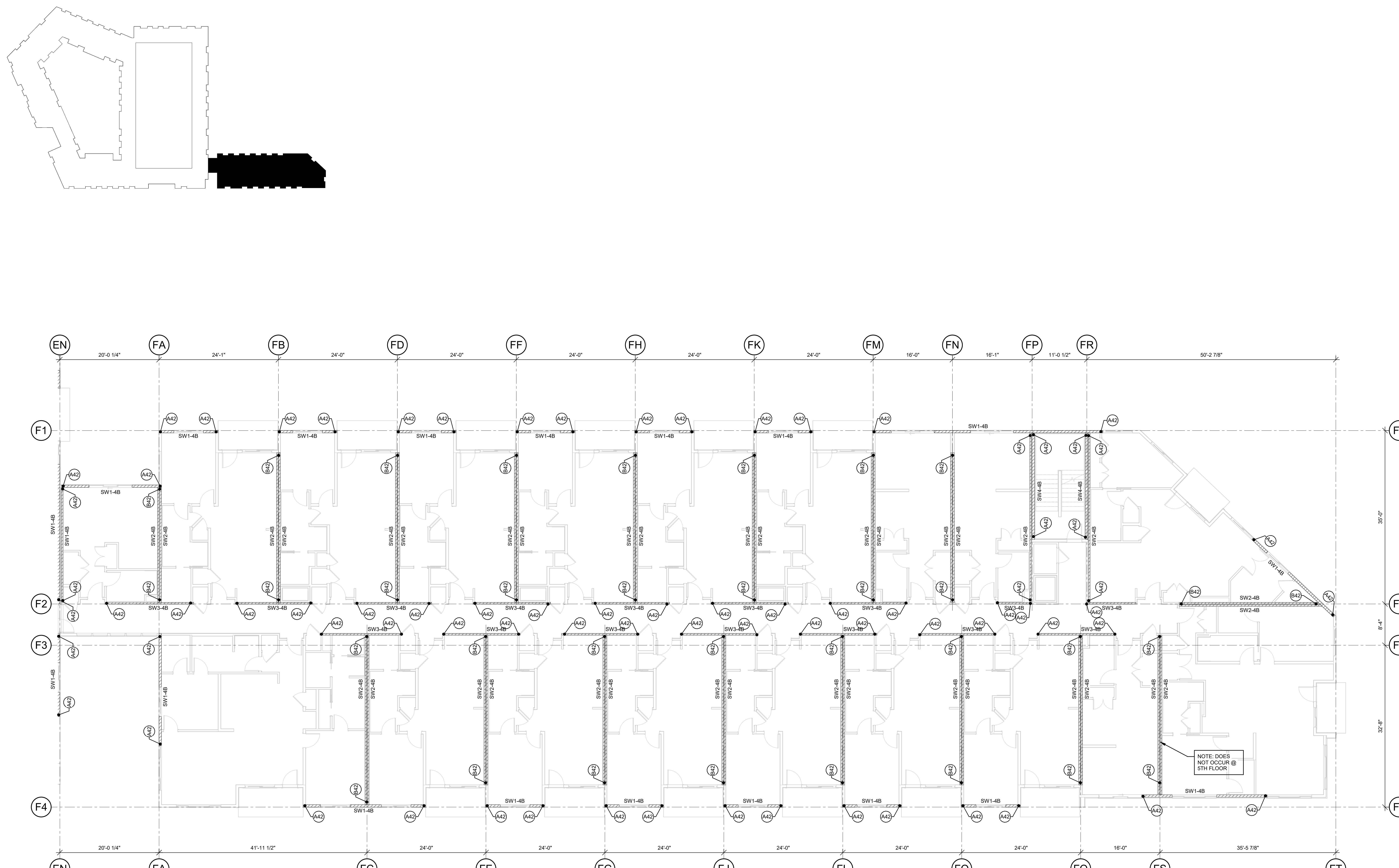
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SHEET TITLE

**BUILDING F  
SHEARWALL PLAN**

SHEET NUMBER

**S1.67F**



**1 BUILDING F SHEARWALL PLAN**  
1/8" = 1'-0"

- NOTES:
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO COLUMN AND STUD BEARING WALL SCHEDULES ON SHEET S0.02.
  - REFER TO SHEAR WALL & HOLD-DOWN SCHEDULES ON SHEET S0.03.
  - SHEARWALLS/HOLD-DOWNS DESIGNATED AS FOLLOWS:
- 
- SHEAR WALL TYPE  
SHEARWALL EXTENTS INDICATED WITH HATCHED AREA  
HOLD-DOWN TYPE MARK: (1) HOLD-DOWN TYPICAL EACH END OF SHEARWALL (OF TYPE INDICATED) U.N.C. PER SHEARWALL SCHED. RE: SCHED. FOR ADD'L SPECIFIC REQ'S
- ALL EXTERIOR WALLS NOT SPECIFICALLY DESIGNATED AS A STRUCTURAL SHEARWALL SHALL BE SHEATHED W/ 7/16" OSB W/ 8d NAILS @ 6" OC EDGES @ 12" FIELD.
  - REFER TO DETAILS 15 THRU 15D ON S0.20 FOR SILL PLATE AND RIM BOARD ATTACHMENT AT EXTENTS OF SHEARWALLS.
  - ADDITIONAL SHEARWALL & HOLD-DOWN INFORMATION FOR THE CLUB AREA, 5TH FLOOR OVER THE CLUB AND EAST TOWER PER S1.17C AND S1.16E.

REVISIONS		
No.	Date	Description
1	5.08.22	Permit Response
2	7.11.22	ADDENDUM 1

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

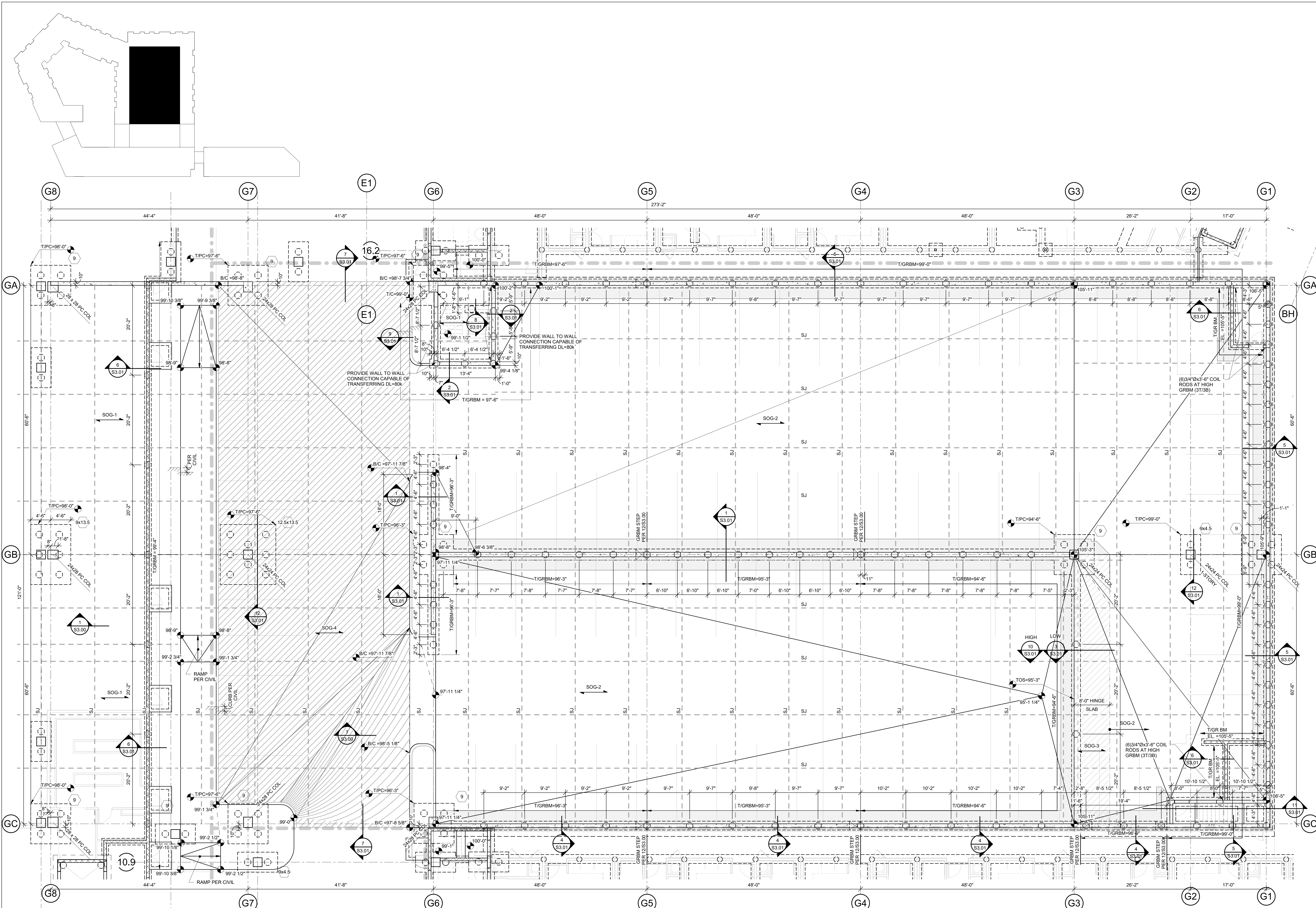
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SHEET TITLE

**GARAGE  
FOUNDATION  
PLAN**

SHEET NUMBER

**S1.71G**



**1 GARAGE FOUNDATION PLAN**  
1/8" = 1'-0"

- FOUNDATION NOTES - GARAGE:
1. REFER TO GENERAL NOTES ON SHEET S0.01.
  2. REFER TO PILE CAP SCHEDULE ON S3.02.
  3. REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
  4. ELEVATION 100'-0" EQUALS CIVIL DATUM ELEVATION 820.67.
  5. TOP OF EXTERIOR FOOTINGS = 98'-0" UNO.
  6. TOP OF INTERIOR PILE CAPS = 98'-6" UNO.
  7. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
  8. REFER TO S3.00-SERIES DRAWINGS FOR TYPICAL FOUNDATION DETAILS.

PILES AND PILE  
DIMENSION ADDED

No.	Date	Description
1	5.08.22	Permit Response

REGISTRATION		

**PROJECT TEAM**

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

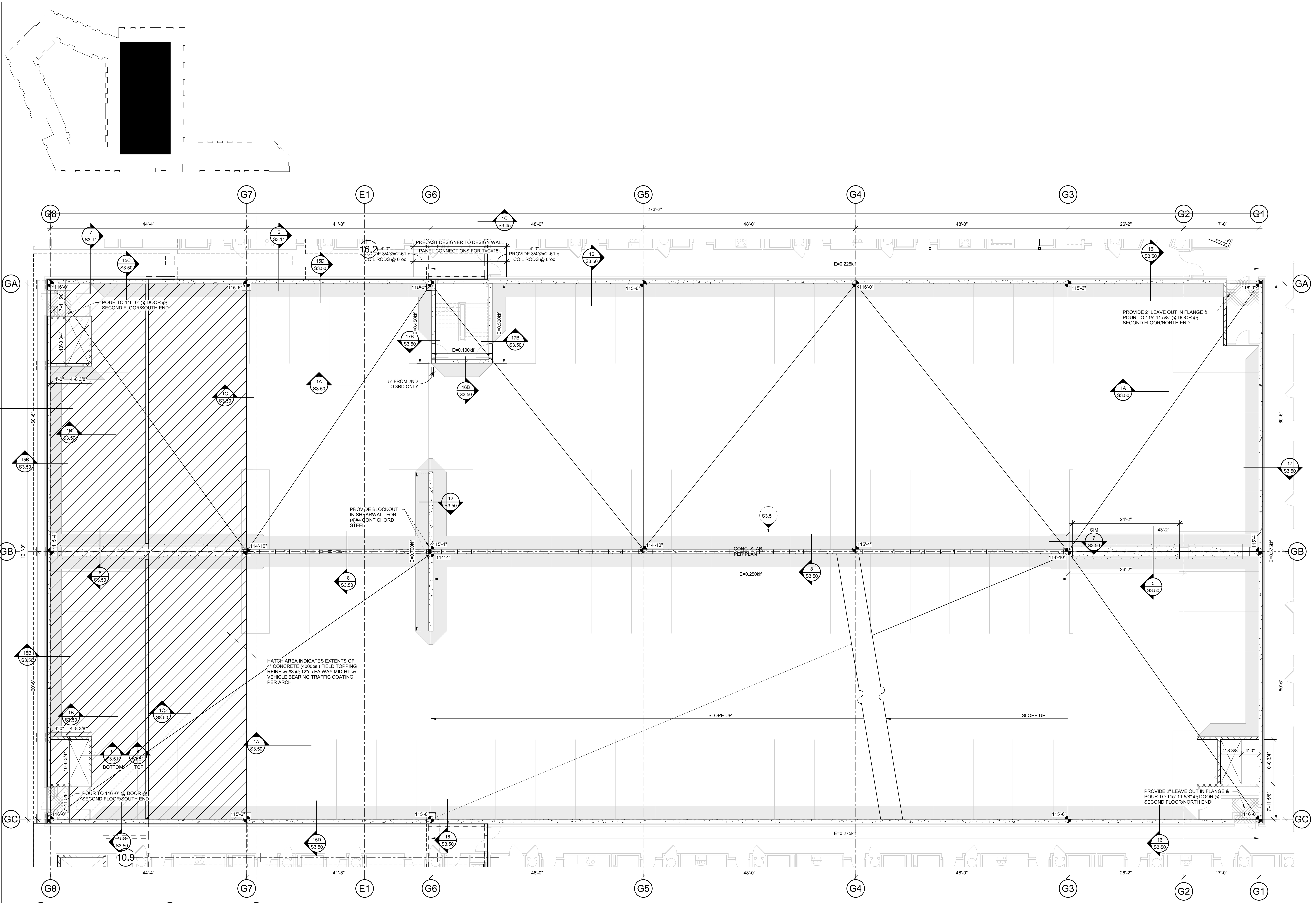
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**SHEET TITLE**

**GARAGE SECOND FLOOR FRAMING PLAN**

**SHEET NUMBER**

**S1.72G**



**1 GARAGE SECOND FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- FRAMING NOTES - GARAGE:**
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
  - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT DRAINS.
  - REFER TO S3.50-SERIES DRAWINGS FOR TYPICAL GARAGE FRAMING DETAILS.
  - ELEVATIONS INDICATED ARE TO TOP OF PRECAST AND DO NOT INCLUDE THE WASH.
  - TOP OF SLAB ELEVATION AT DOORS FROM GARAGE TO APARTMENT SHALL EQUAL THE NOMINAL FLOOR ELEVATION OF THE APARTMENT. FEATHER WASH/TOPPING AT DOOR TO 148 MAX SLOPE.
  - PROVIDE ALLOWANCE OF 700#ft DEAD LOAD IN PRECAST DESIGN AT ALL CMU WALLS SHOWN IN GARAGE.
  - TYPICAL PIPE PROTECTION PER SECTION 7/53.51

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

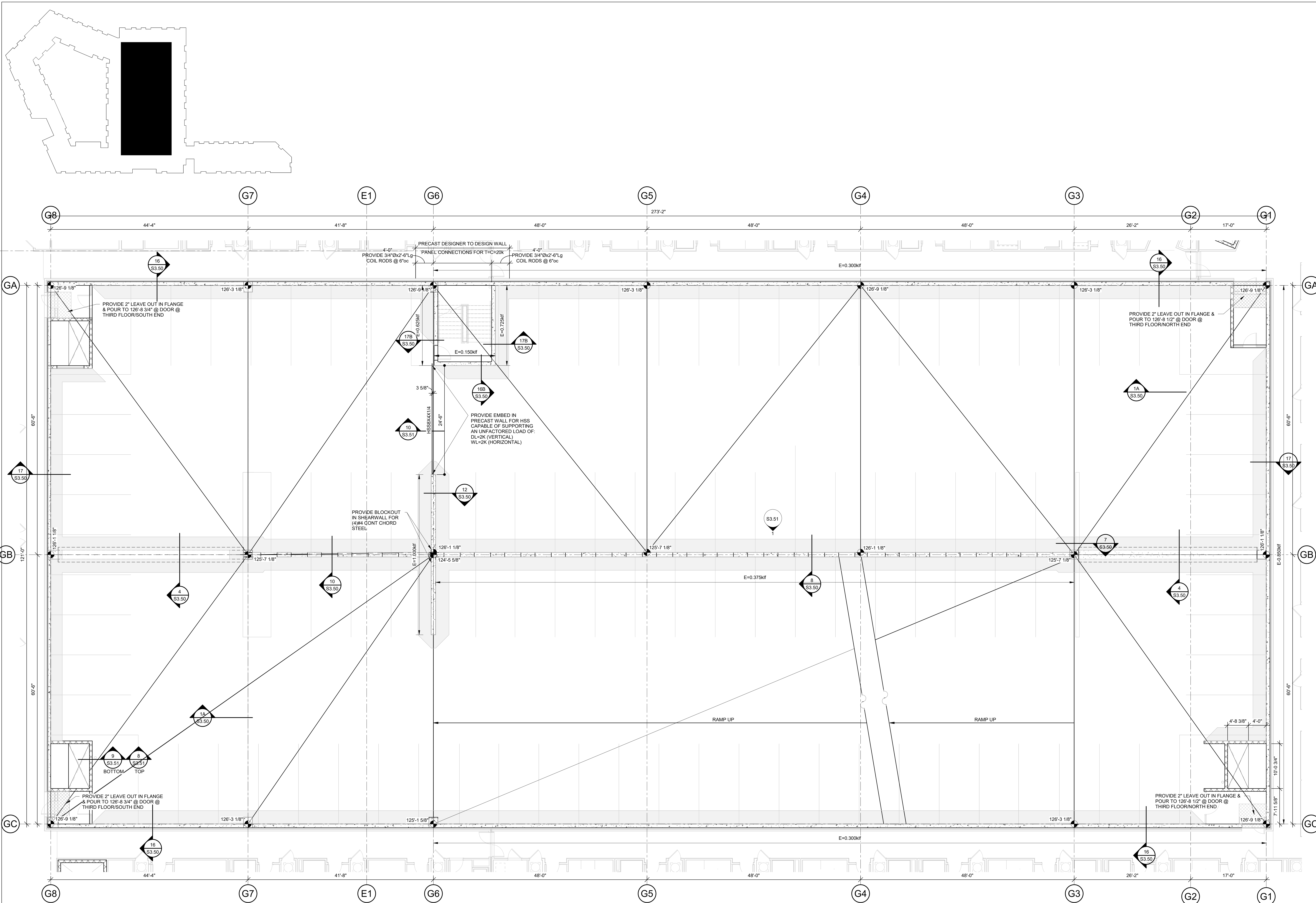
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SHEET TITLE

**GARAGE THIRD FLOOR FRAMING PLAN**

SHEET NUMBER

**S1.73G**



**1 GARAGE THIRD FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- FRAMING NOTES - GARAGE:
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
  - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT DRAINS.
  - REFER TO S3.50-SERIES DRAWINGS FOR TYPICAL GARAGE FRAMING DETAILS.
  - ELEVATIONS INDICATED ARE TO TOP OF PRECAST AND DO NOT INCLUDE THE WASH.
  - TOP OF SLAB ELEVATION AT DOORS FROM GARAGE TO APARTMENT SHALL EQUAL THE NOMINAL FLOOR ELEVATION OF THE APARTMENT. FEATHER WASH/TOPPING AT DOOR TO 1/4" MAX SLOPE.
  - PROVIDE ALLOWANCE OF 700kif DEAD LOAD IN PRECAST DESIGN AT ALL CMU WALLS SHOWN IN GARAGE.
  - TYPICAL PIPE PROTECTION PER SECTION 7/S3.51

REVISIONS		
No.	Date	Description
1	5.08.22	Permit Response

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

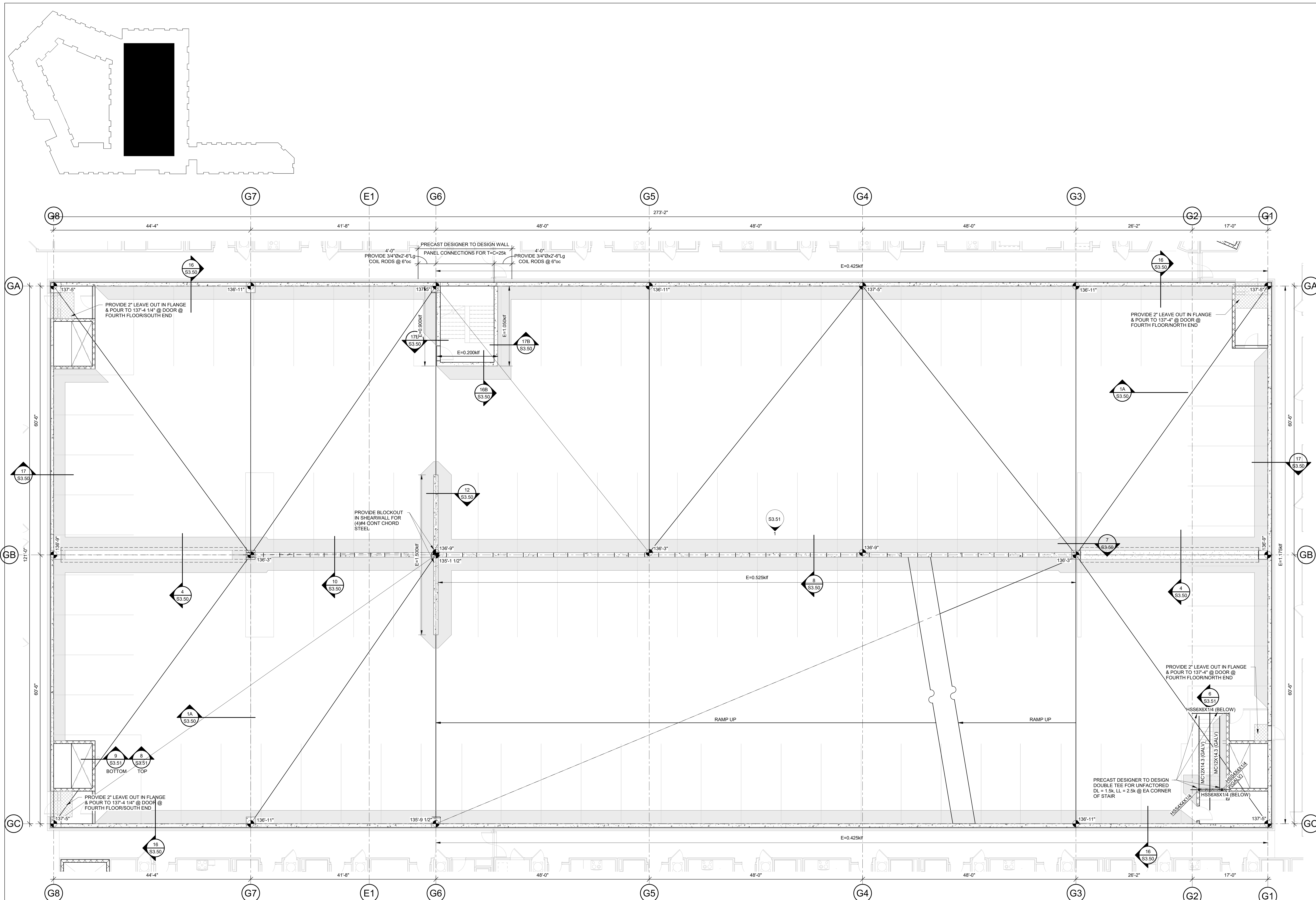
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SHEET TITLE

**GARAGE FOURTH FLOOR FRAMING PLAN**

SHEET NUMBER

**S1.74G**

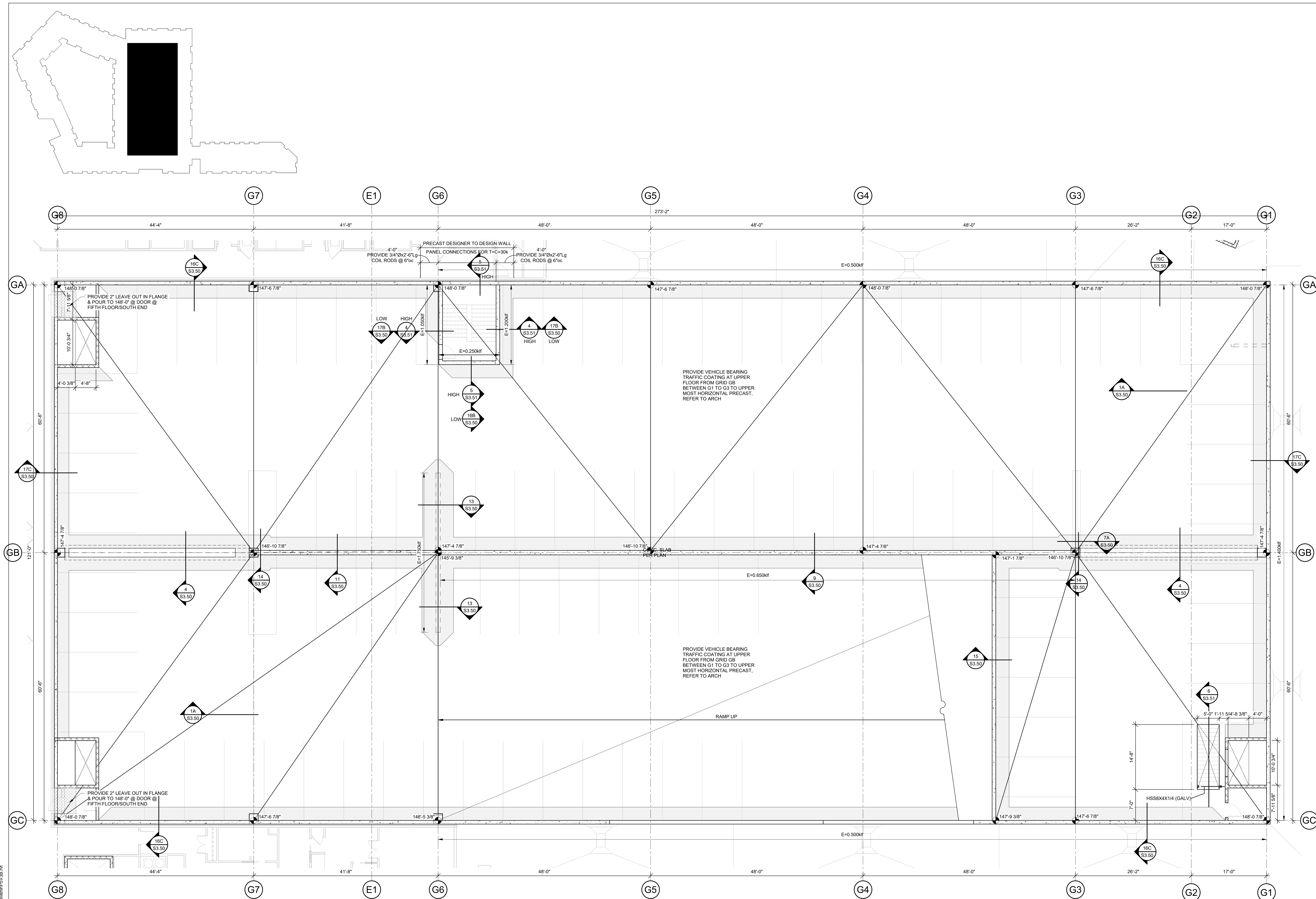


**1 GARAGE FOURTH FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- FRAMING NOTES - GARAGE:
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
  - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT DRAINS.
  - REFER TO S3.50-SERIES DRAWINGS FOR TYPICAL GARAGE FRAMING DETAILS.
  - ELEVATIONS INDICATED ARE TO TOP OF PRECAST AND DO NOT INCLUDE THE WASH.
  - TOP OF SLAB ELEVATION AT DOORS FROM GARAGE TO APARTMENT SHALL EQUAL THE NOMINAL FLOOR ELEVATION OF THE APARTMENT. FEATHER WASH/TOPPING AT DOOR TO 148 MAX SLOPE.
  - PROVIDE ALLOWANCE OF 700kif DEAD LOAD IN PRECAST DESIGN AT ALL CMU WALLS SHOWN IN GARAGE.
  - TYPICAL PIPE PROTECTION PER SECTION 7/S3.51

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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Kansas City, MO 64111 www.bdc-engrs.com



**1 GARAGE FIFTH FLOOR FRAMING PLAN**  
1/8" = 1'-0"

- FRAMING NOTES - GARAGE:
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO CIVIL AND ARCH DRAWING FOR SLAB ELEVATIONS.
  - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF SPOT DRAINS.
  - REFER TO S3.50-SERIES DRAWINGS FOR TYPICAL GARAGE FRAMING DETAILS.
  - ELEVATIONS INDICATED ARE TO TOP OF PRECAST AND DO NOT INCLUDE THE WASH.
  - TOP OF SLAB ELEVATION AT DOORS FROM GARAGE TO APARTMENT SHALL EQUAL THE NOMINAL FLOOR ELEVATION OF THE APARTMENT. FEATHER WASH/TOPPING AT DOOR TO 1:48 MAX SLOPE.
  - PROVIDE ALLOWANCE OF 700kif DEAD LOAD IN PRECAST DESIGN AT ALL CMU WALLS SHOWN IN GARAGE.
  - TYPICAL PIPE PROTECTION PER SECTION 7/S3.51

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REVISIONS		
No.	Date	Description

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

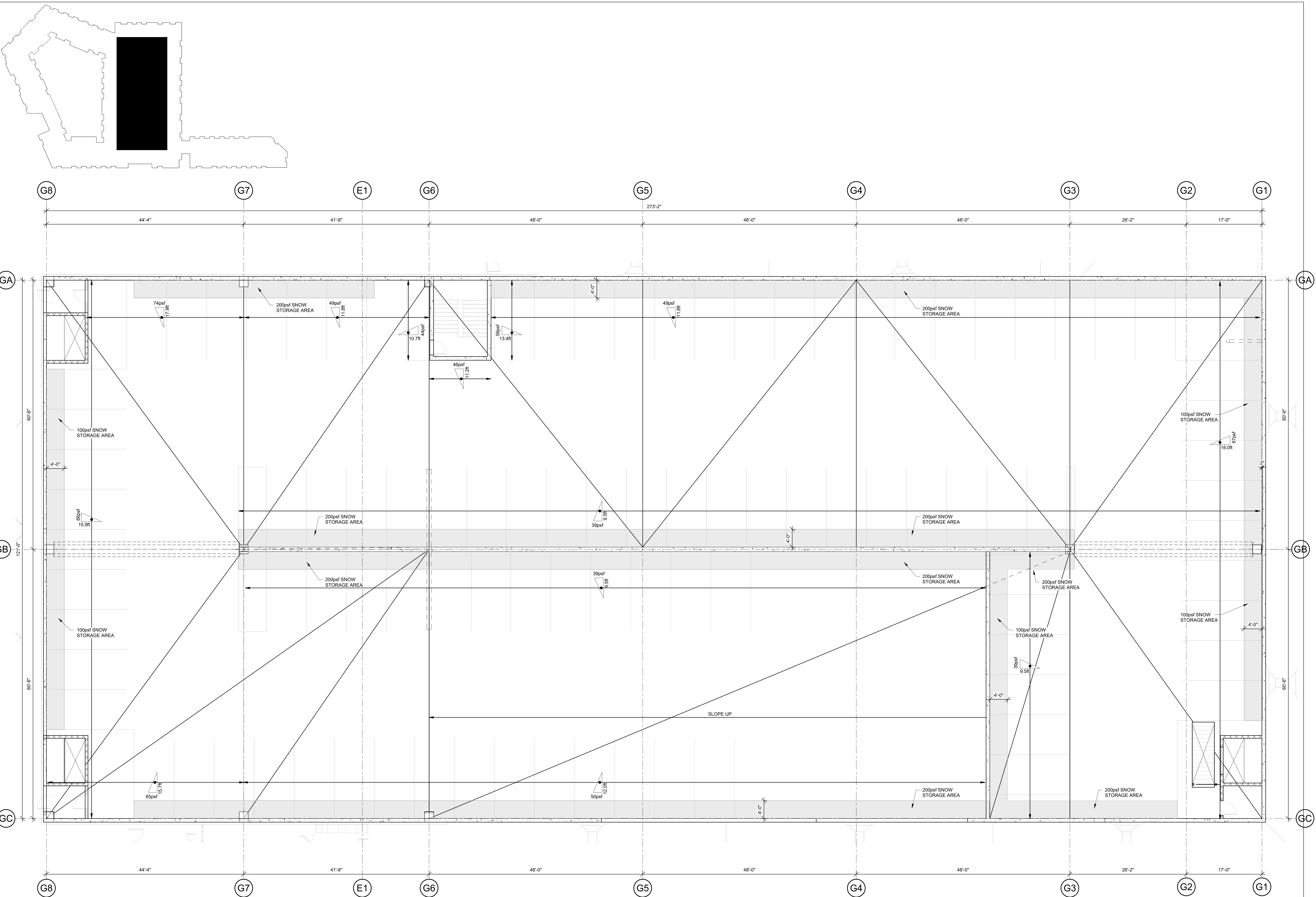
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SHEET TITLE

**GARAGE SNOW  
LOADING PLAN**

SHEET NUMBER

**S1.76G**



**GARAGE SNOW LOADING PLAN**  
**1 AT TOP FLOOR**  
1/8" = 1'-0"

- NOTES:  
1. SNOW STORAGE SHOWN IN HATCH IS ADDITIONAL TO SNOW DRIFT SHOWN WITH TRIANGULAR LOADING SYMBOL.  
2. PROVIDE ALLOWANCE OF 700psf DEAD LOAD IN PRECAST DESIGN AT ALL CMU WALLS SHOWN IN GARAGE.



REVISIONS		
No.	Date	Description
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

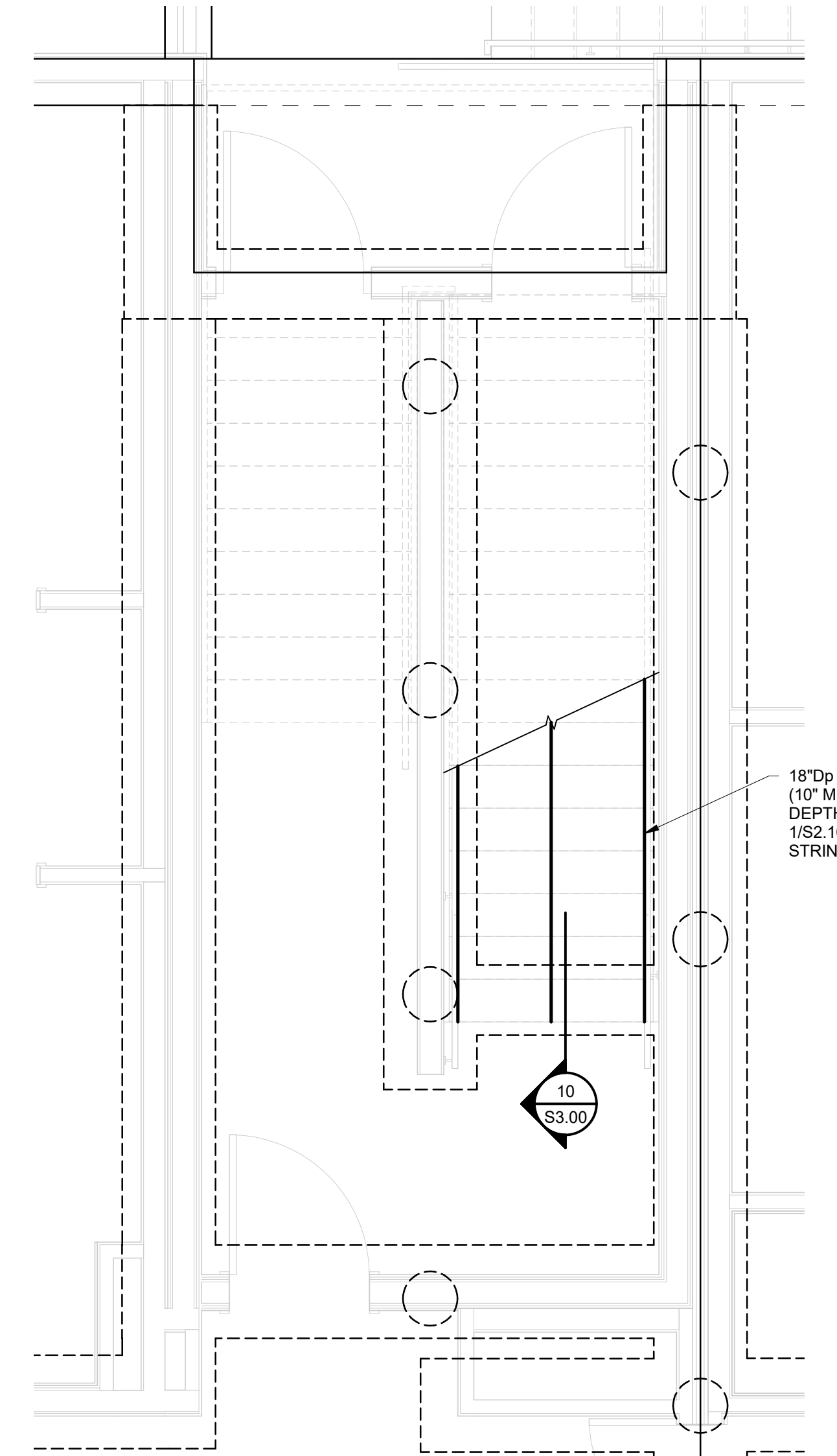
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SHEET TITLE

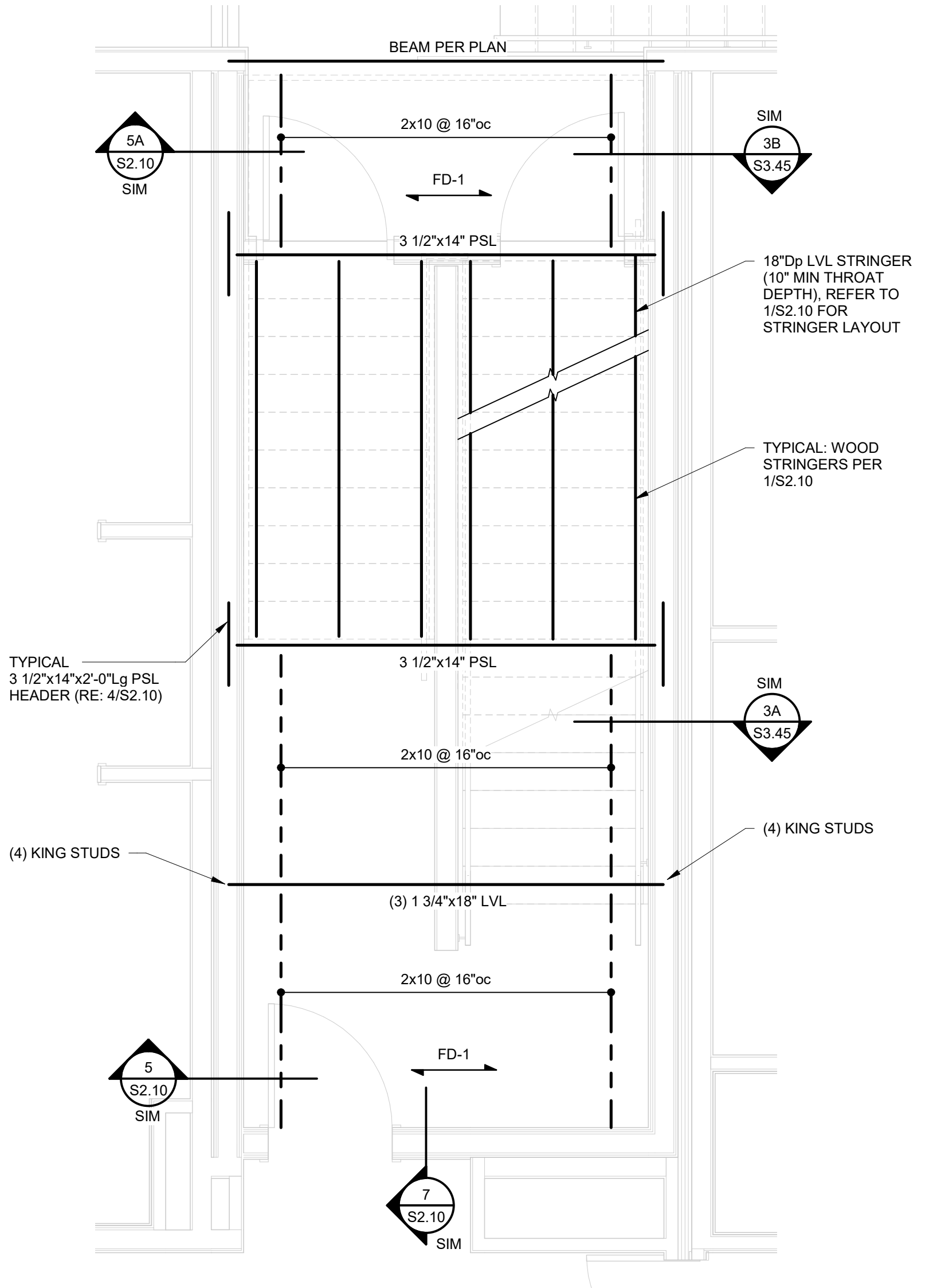
**STAIR FRAMING -  
BUILDING A**

SHEET NUMBER

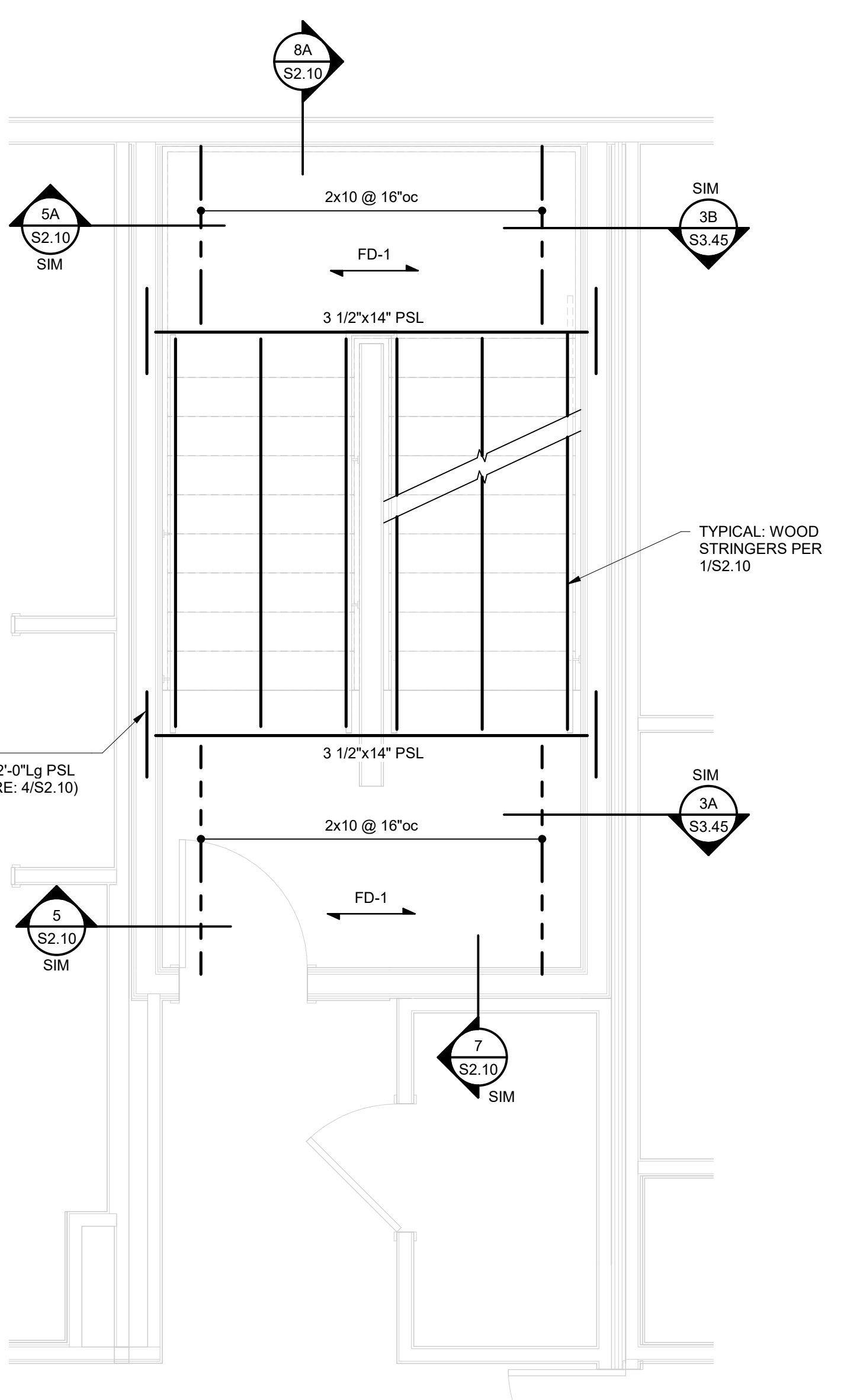
**S2.00**



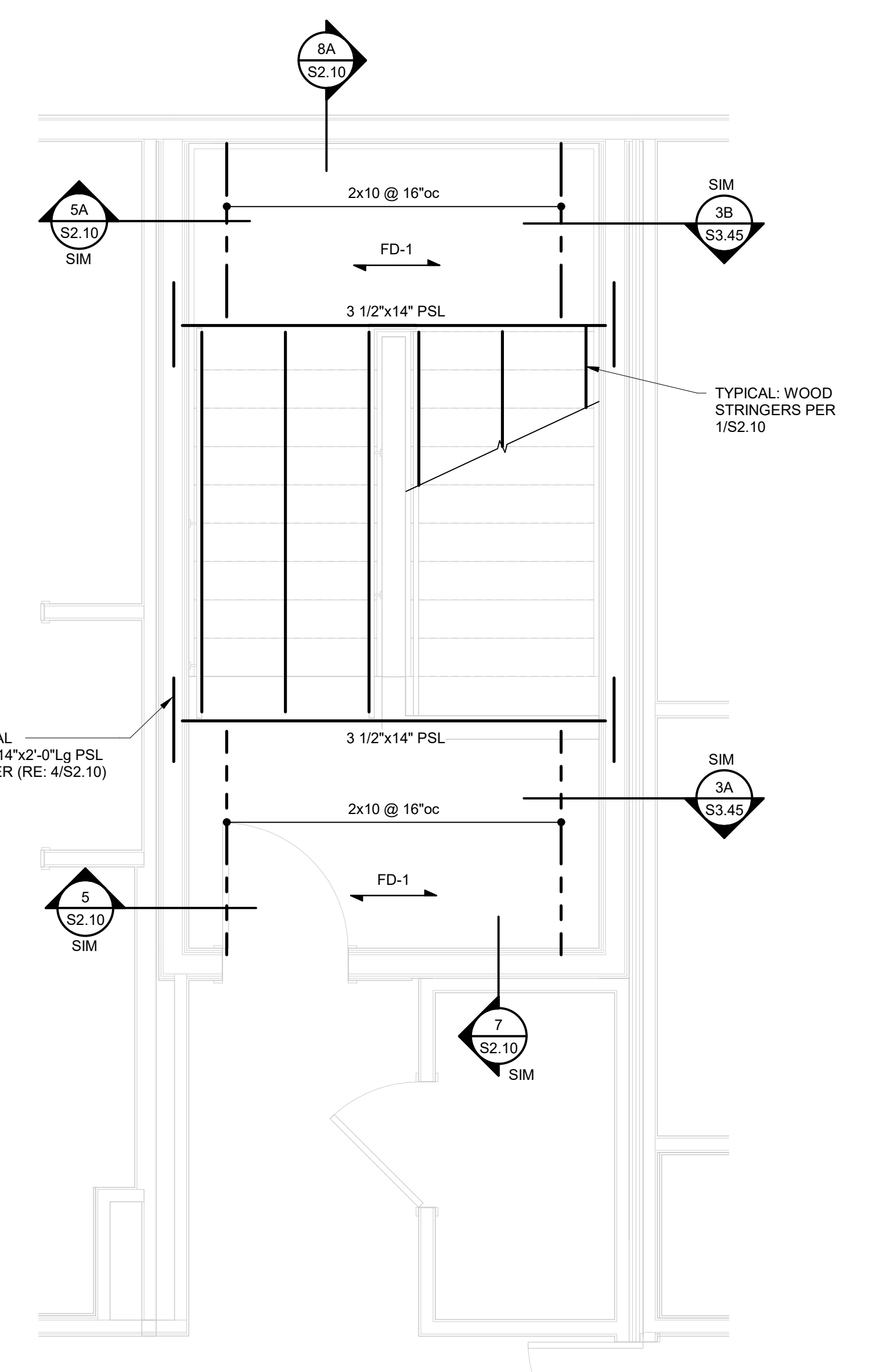
**1 BUILDING A - FOUNDATION STAIR PLAN**  
3/8" = 1'-0"



**2 BUILDING A - SECOND FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**3 BUILDING A - THIRD FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**4 BUILDING A - FOURTH FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"

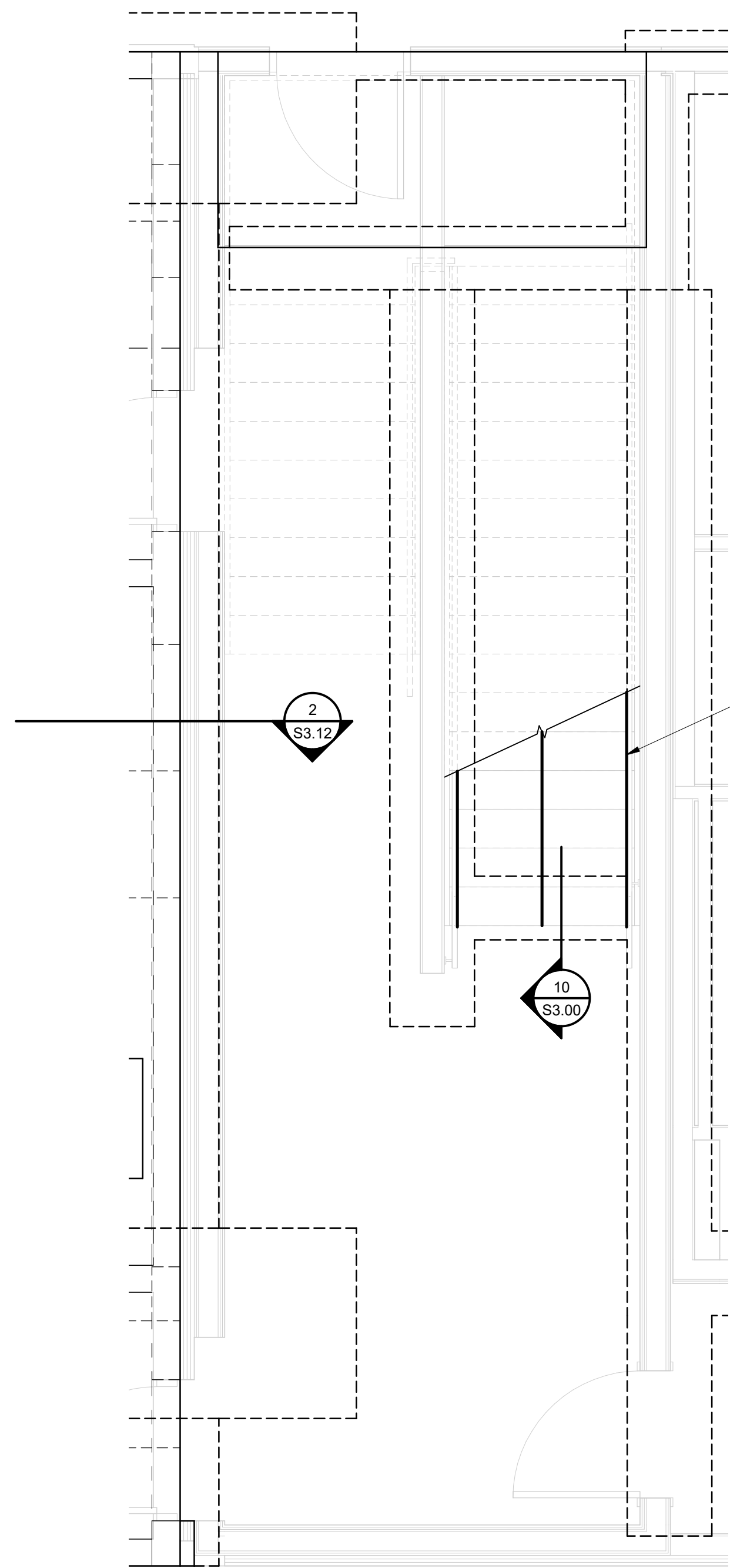
BUILDING A STAIR - JAMB SCHEDULE				
MEMBER	JAMB LEVEL			NOTES
	1ST FLOOR	2ND FLOOR	3RD FLOOR	
2'-0" Lg PSL HEADER	1 JACK / 2 KING	1 JACK / 1 KING	1 JACK / 1 KING	
PSL LANDING BEAM	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	PROVIDE 1/4" x 4 1/2" Lg SDS SCREWS INTO HEADER

- WOOD STAIR FRAMING NOTES:**
- REFER TO GENERAL NOTES ON SHEET S0.01
  - REFER TO STUD BEARING WALL SCHEDULE ON SHEET S0.02
  - REFER TO BUILDING PLANS FOR HEADER AND BEAM CALLOUTS NOT SHOWN IN ENLARGED PLANS. HEADER AND BEAM SCHEDULE ON SHEET S0.02
  - REFER TO STAIR FRAMING DETAILS ON SHEET S2.10

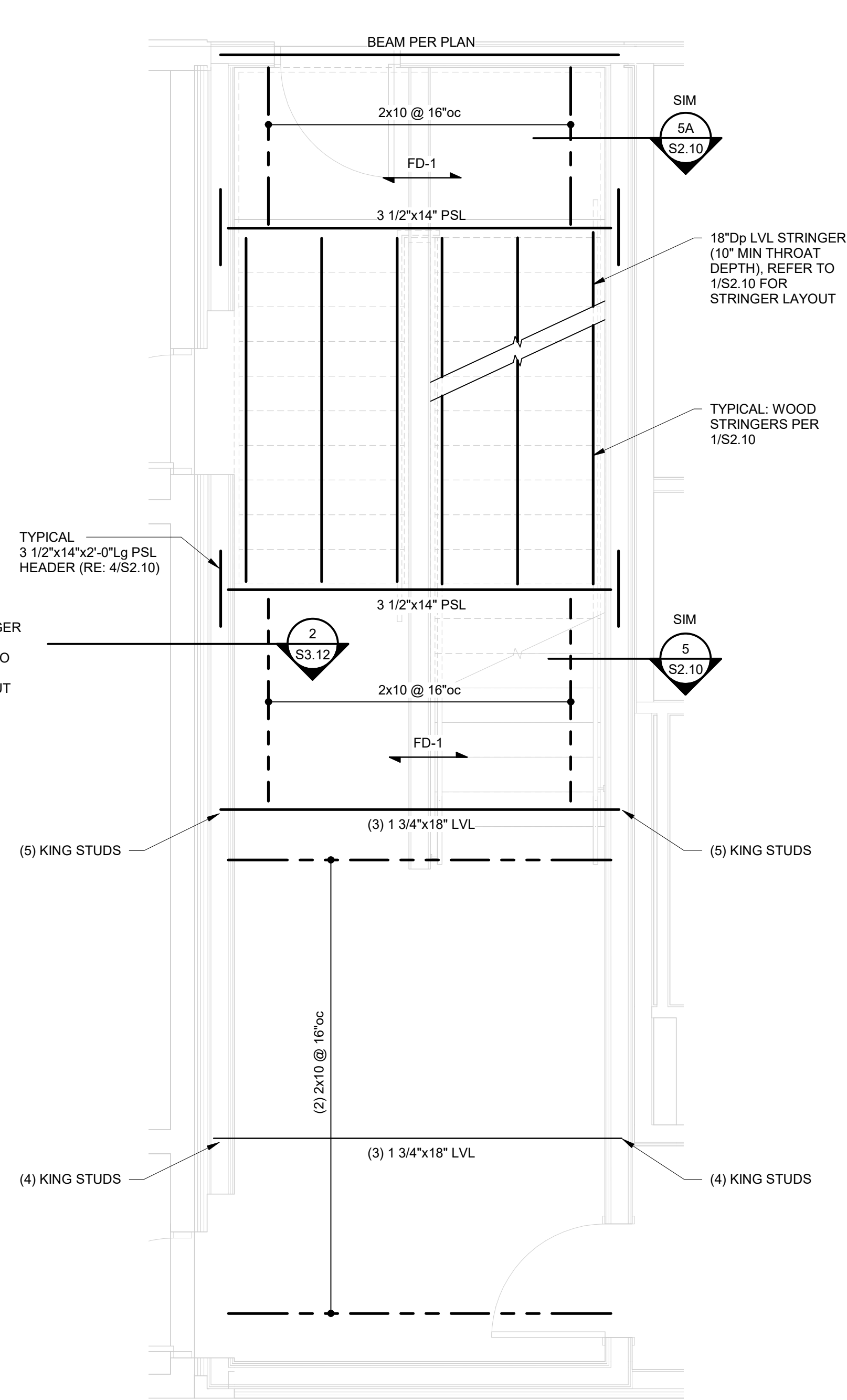


ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

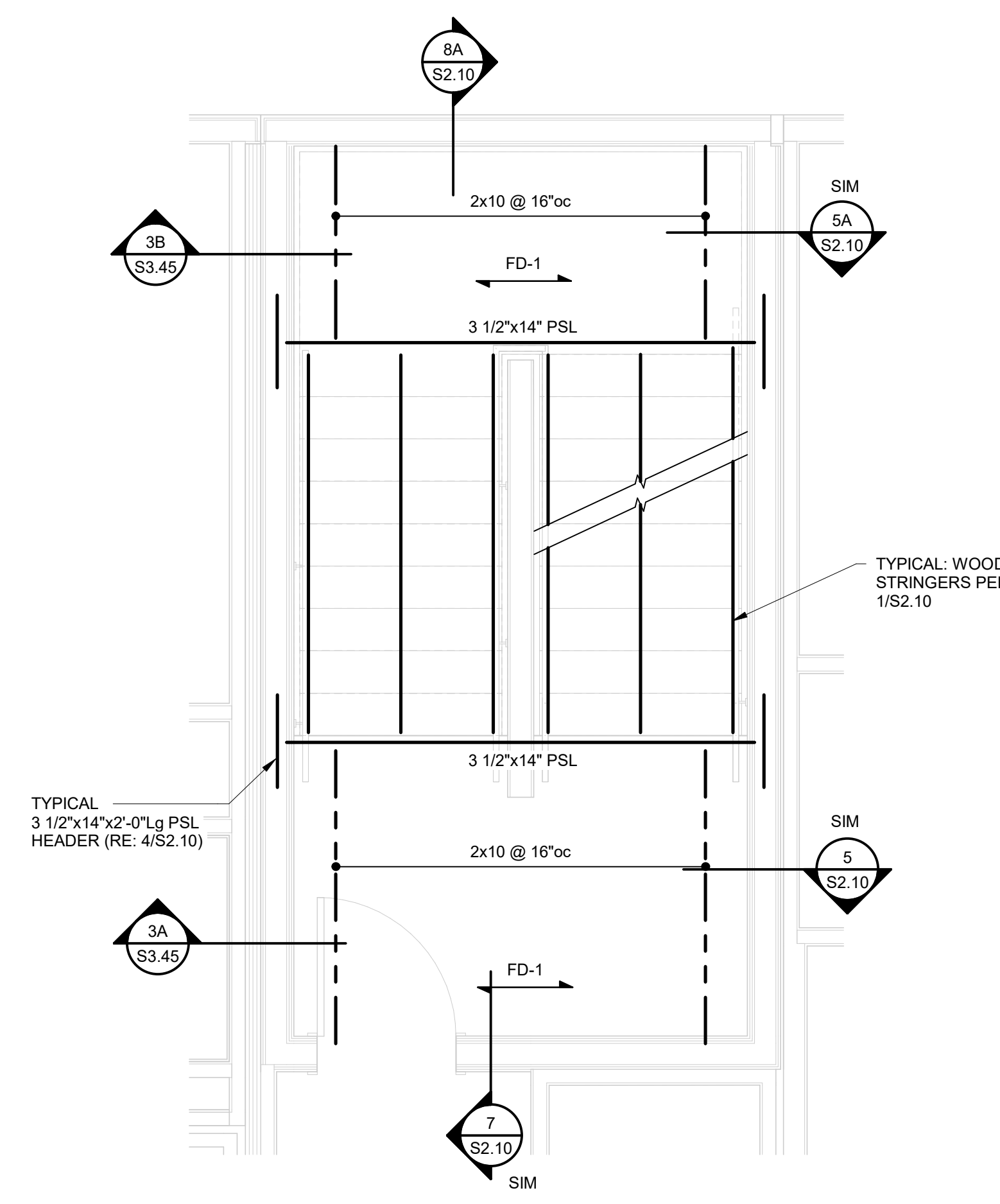
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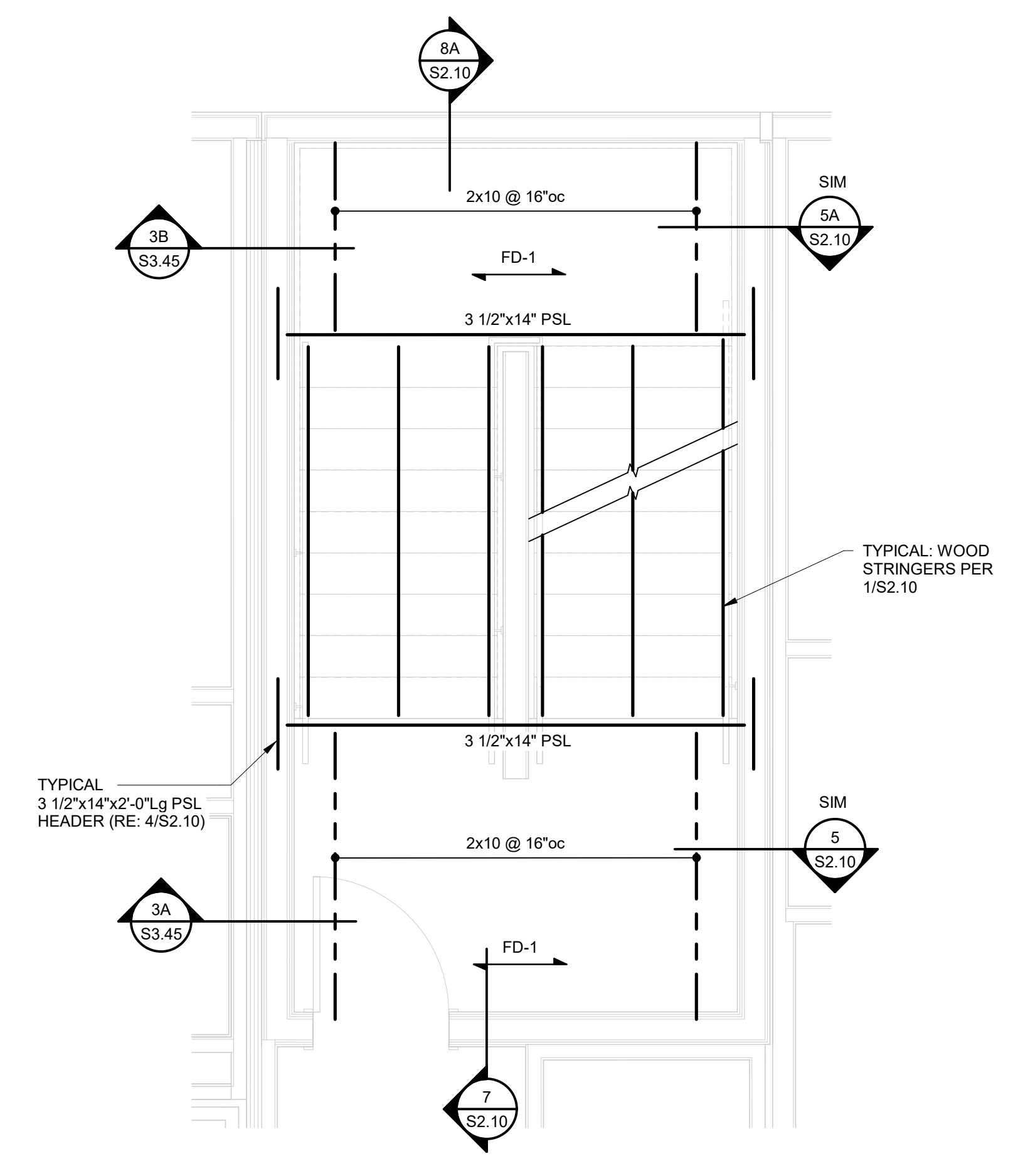
**1 BUILDING B - FOUNDATION STAIR PLAN**  
3/8" = 1'-0"



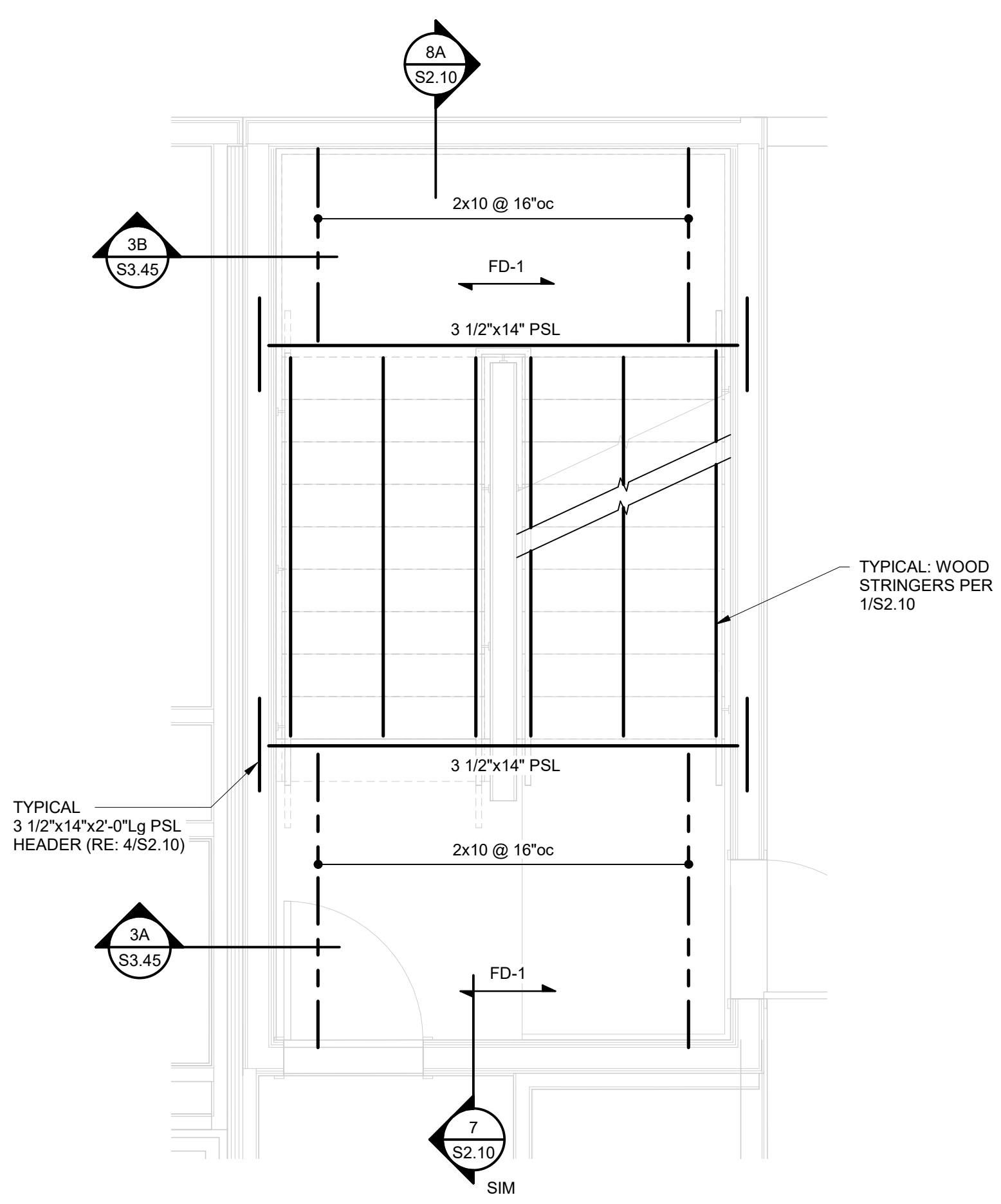
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3/8" = 1'-0"



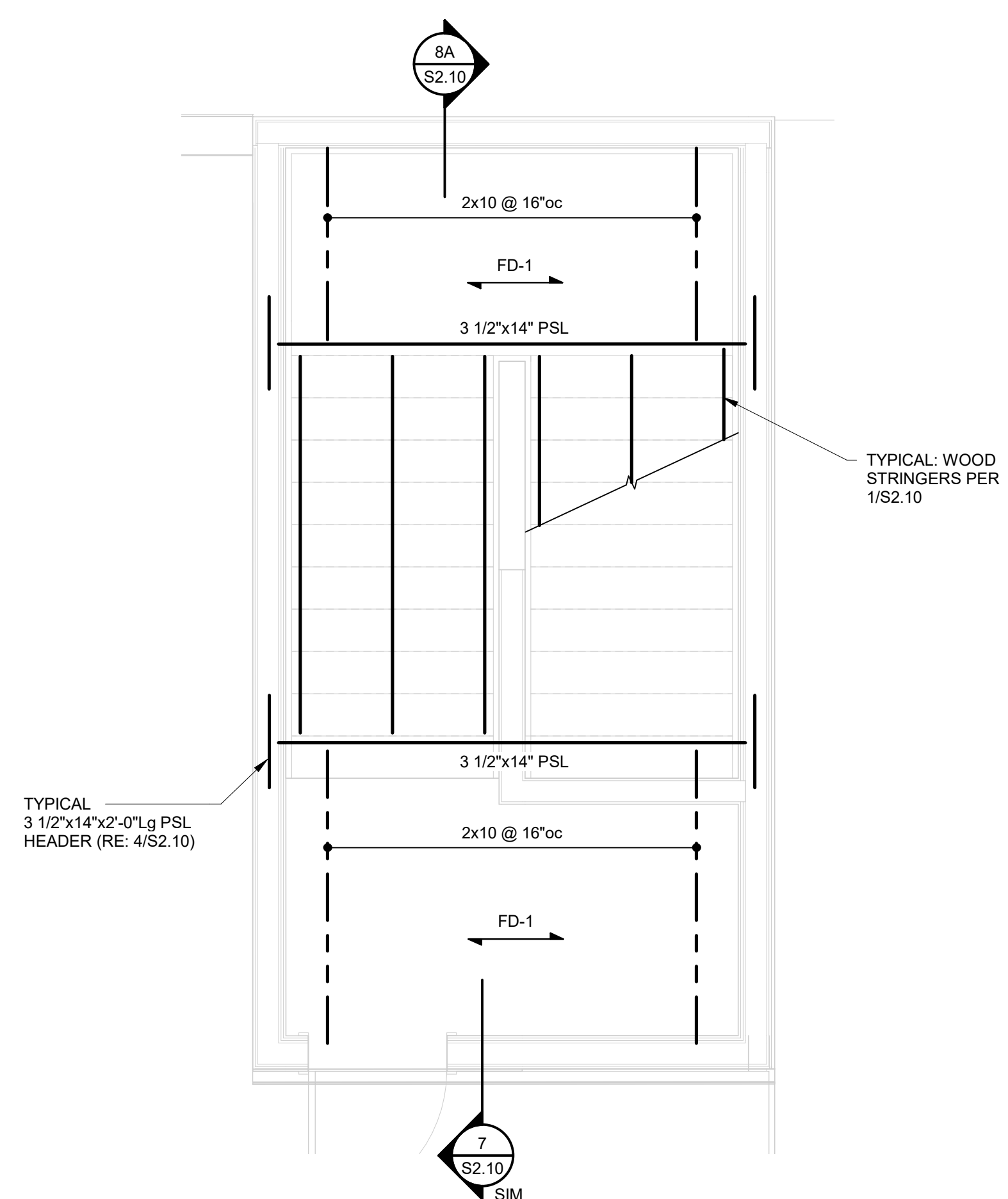
**3 BUILDING B - THIRD FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**4 BUILDING B - FOURTH FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**5 BUILDING B - FIFTH FLOOR FRAMING PLAN**  
3/8" = 1'-0"



**6 BUILDING B - ROOF FRAMING STAIR PLAN**  
3/8" = 1'-0"

MEMBER	JAMB LEVEL					NOTES
	1ST FLOOR	2ND FLOOR	3RD FLOOR	4TH FLOOR	5TH FLOOR	
2'-0"Lg PSL HEADER	1 JACK / 3 KING	1 JACK / 3 KING	1 JACK / 2 KING	1 JACK / 1 KING	1 JACK / 1 KING	
PSL LANDING BEAM	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	PROVIDE 1/4"x64 1/2"Lg SDS SCREWS INTO HEADER

- WOOD STAIR FRAMING NOTES:**
- REFER TO GENERAL NOTES ON SHEET S0.01
  - REFER TO STUD BEARING WALL SCHEDULE ON SHEET S0.02
  - REFER TO BUILDING PLANS FOR HEADER AND BEAM CALLOUTS NOT SHOWN IN ENLARGED PLANS. HEADER AND BEAM SCHEDULE ON SHEET S0.02
  - REFER TO STAIR FRAMING DETAILS ON SHEET S2.10



PARAGON STAR  
NORTH VILLAGE

3200 NW PARAGON PKWY,  
LEE'S SUMMIT, MO 64081

Project No.: 18017.19050.07.19050.08  
Date: 06.28.2022  
Issued For: FOR CONSTRUCTION

REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

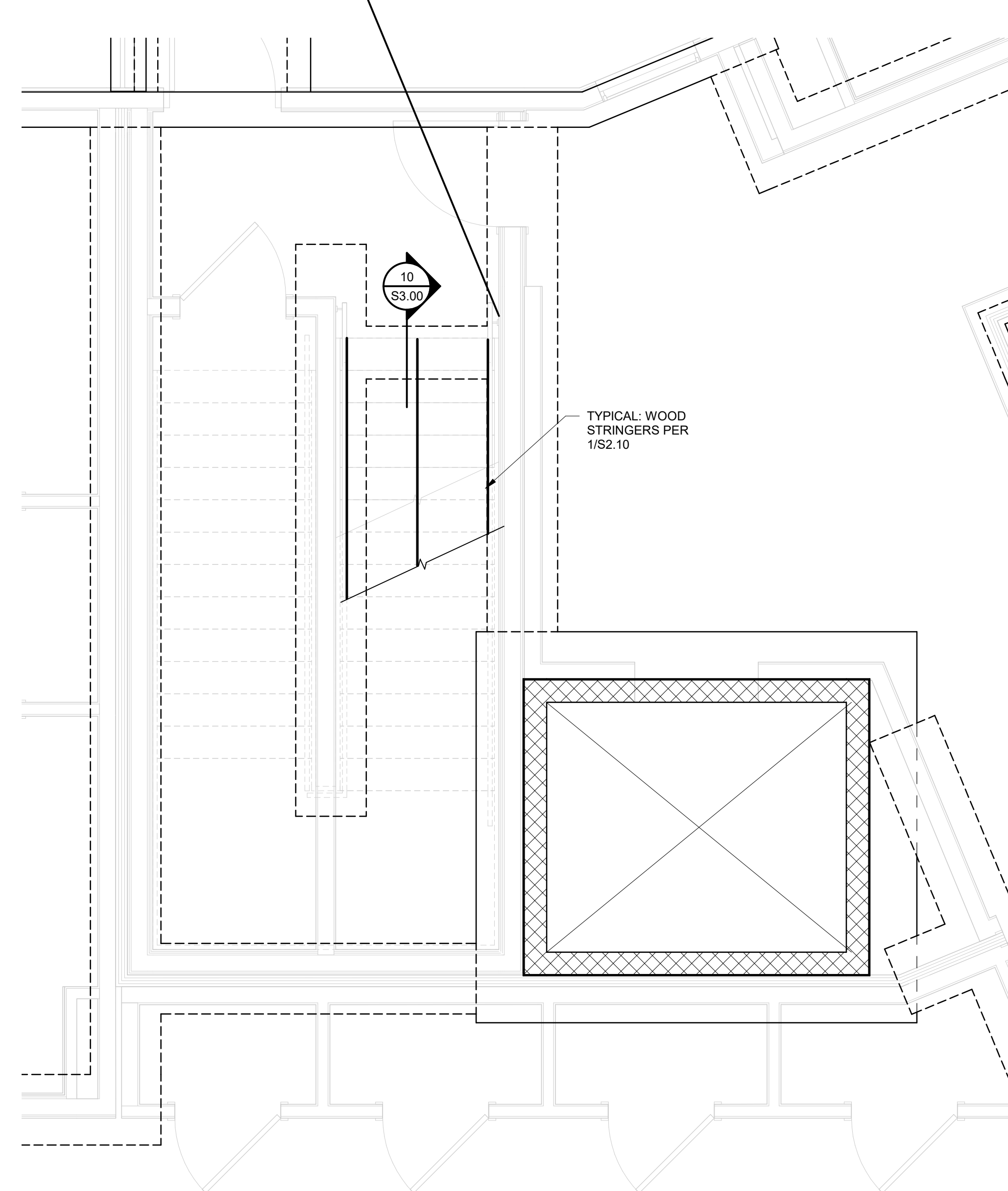
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Structural Engineers  
Since 1957  
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Kansas City, MO 64111 www.bdc-engrs.com

SHEET TITLE

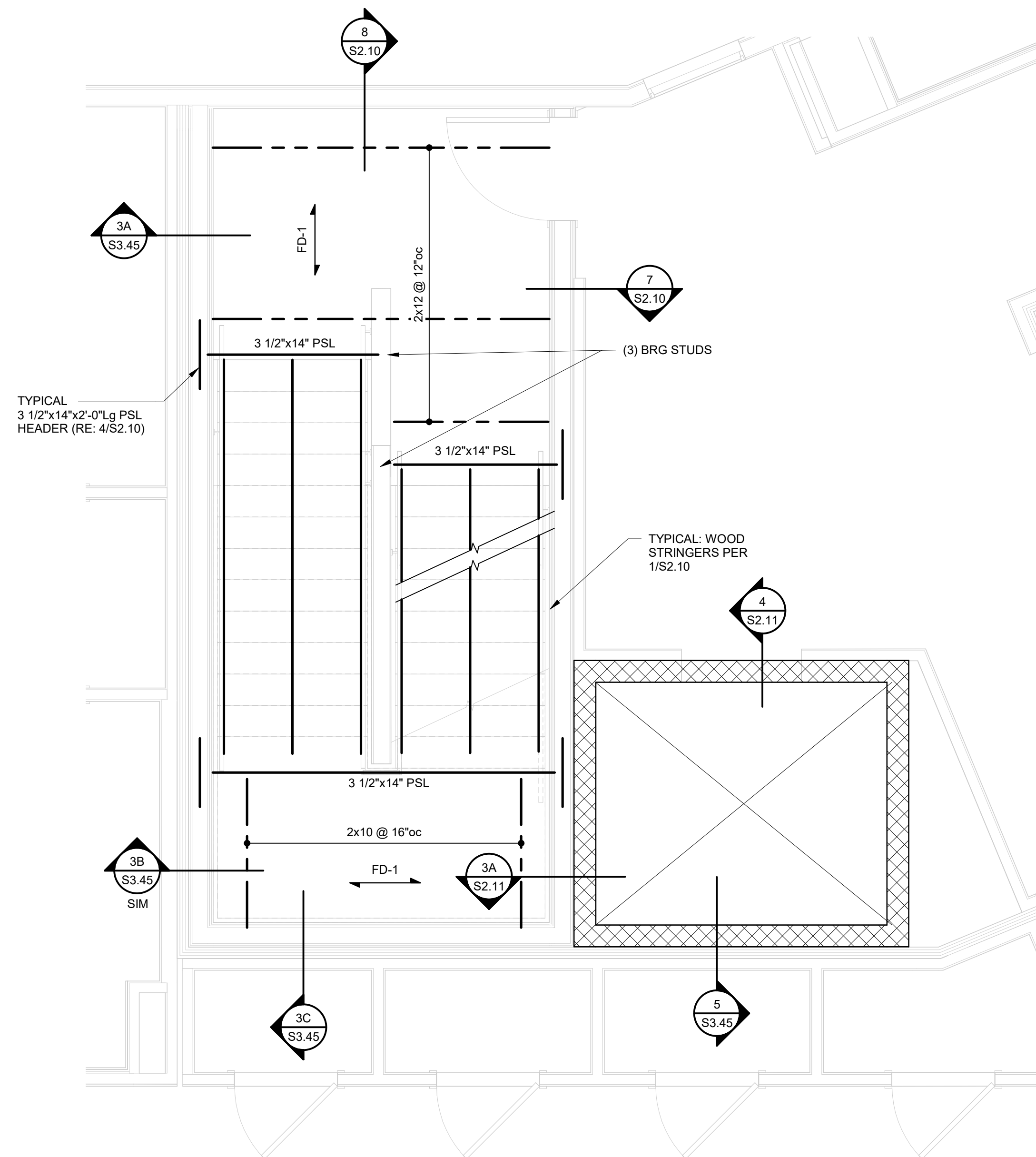
STAIR &  
ELEVATOR  
FRAMING -  
BUILDING C

SHEET NUMBER

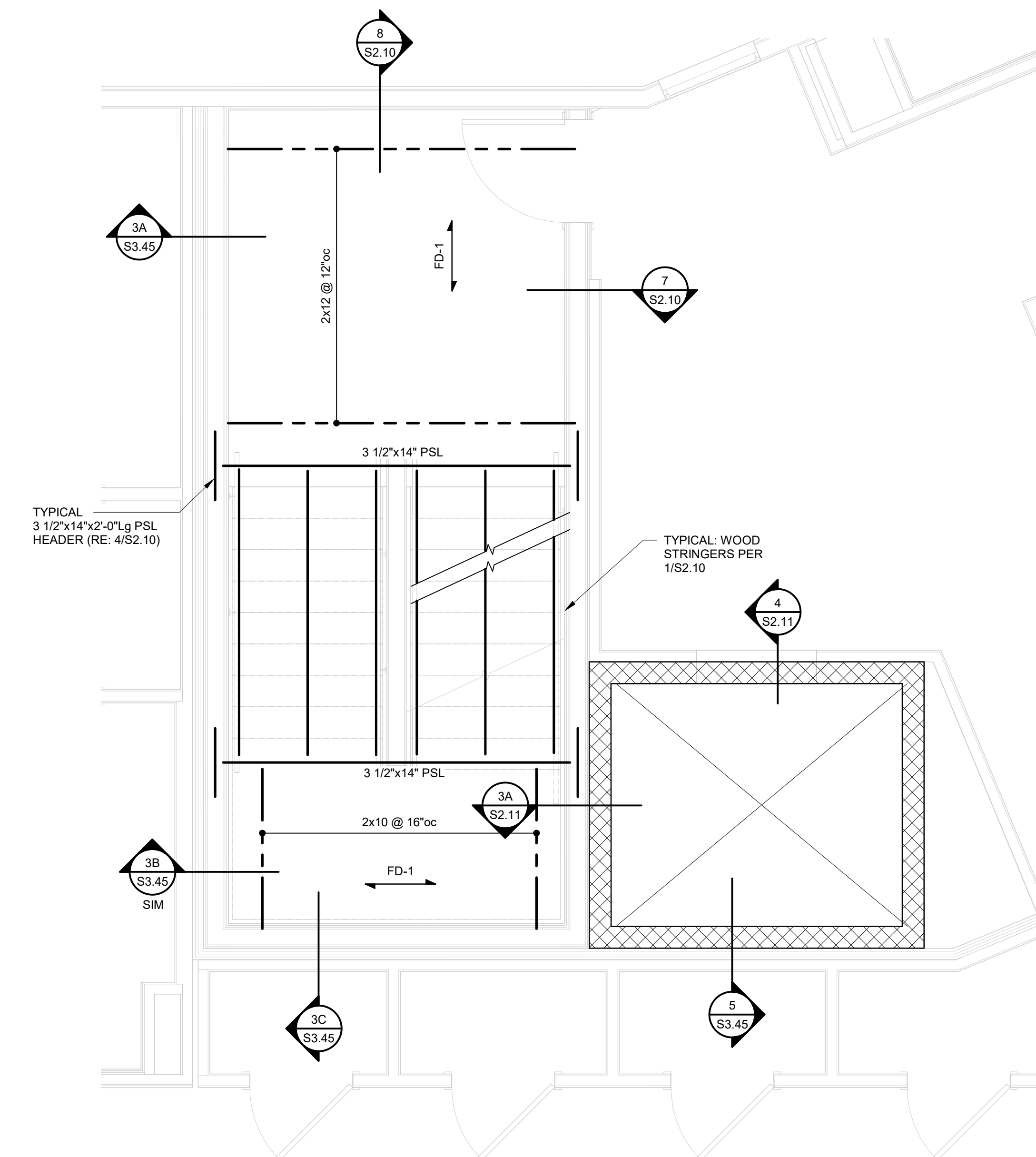
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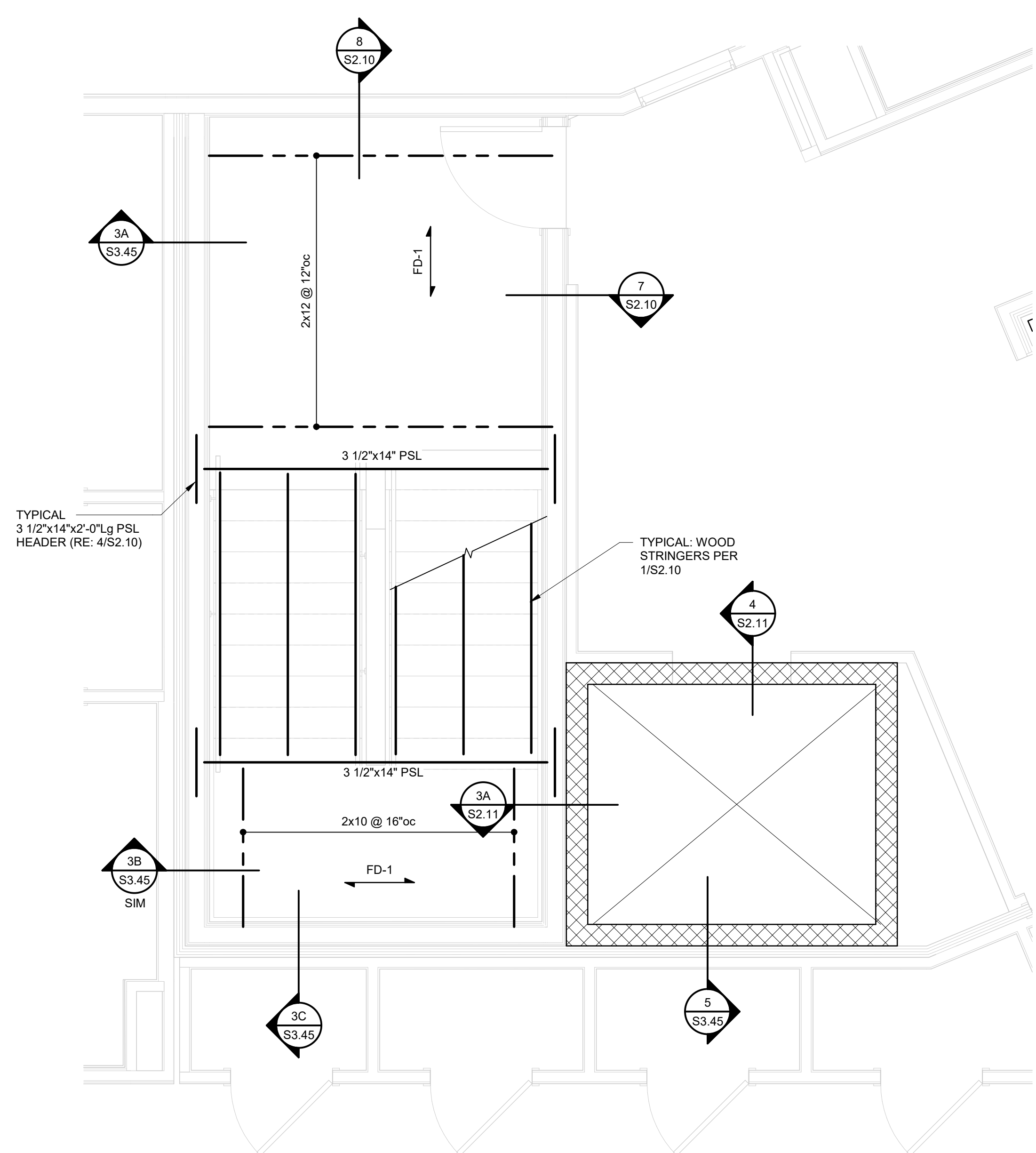
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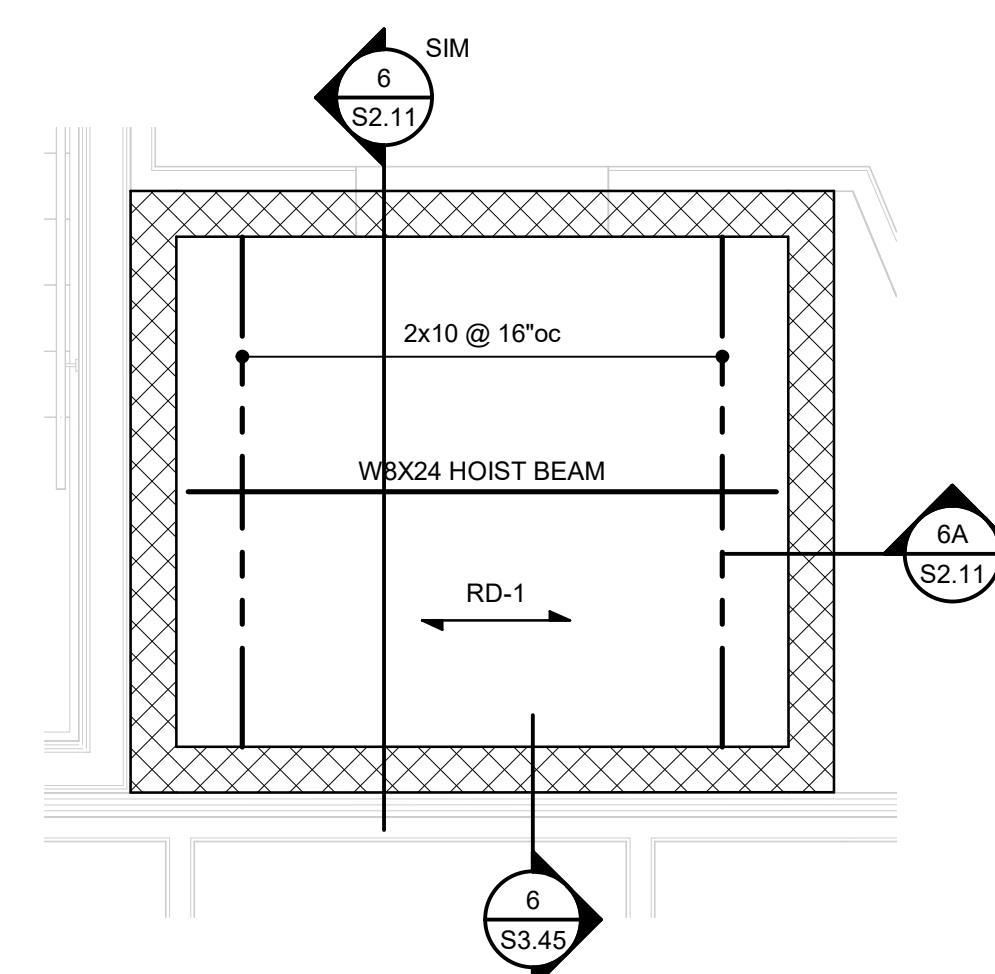
**2 BUILDING C - SECOND FLOOR FRAMING STAIR & ELEVATOR PLAN**  
3/8" = 1'-0"



**3 BUILDING C - THIRD FLOOR FRAMING STAIR & ELEVATOR PLAN**  
3/8" = 1'-0"



**4 BUILDING C - FOURTH FLOOR FRAMING STAIR & ELEVATOR PLAN**  
3/8" = 1'-0"



**6 BUILDING C - ROOF ELEVATOR PLAN**  
3/8" = 1'-0"

MEMBER	JAMB LEVEL			NOTES
	1ST FLOOR	2ND FLOOR	3RD FLOOR	
2'-0"lg PSL HEADER	1 JACK / 2 KING	1 JACK / 1 KING	1 JACK / 1 KING	PROVIDE 1/4"Øx4 1/2"lg SDS SCREWS INTO HEADER
PSL LANDING BEAM	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	

- WOOD STAIR FRAMING NOTES:
- REFER TO GENERAL NOTES ON SHEET S0.01.
  - REFER TO STUD BEARING WALL SCHEDULE ON SHEET S0.02.
  - REFER TO BUILDING PLANS FOR HEADER AND BEAM CALLOUTS NOT SHOWN IN ENLARGED PLANS. HEADER AND BEAM SCHEDULE ON SHEET S0.02.
  - REFER TO STAIR FRAMING DETAILS ON SHEET S2.10.

REVISIONS

No.	Date	Description
2	7.11.22	ADDENDUM 1

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

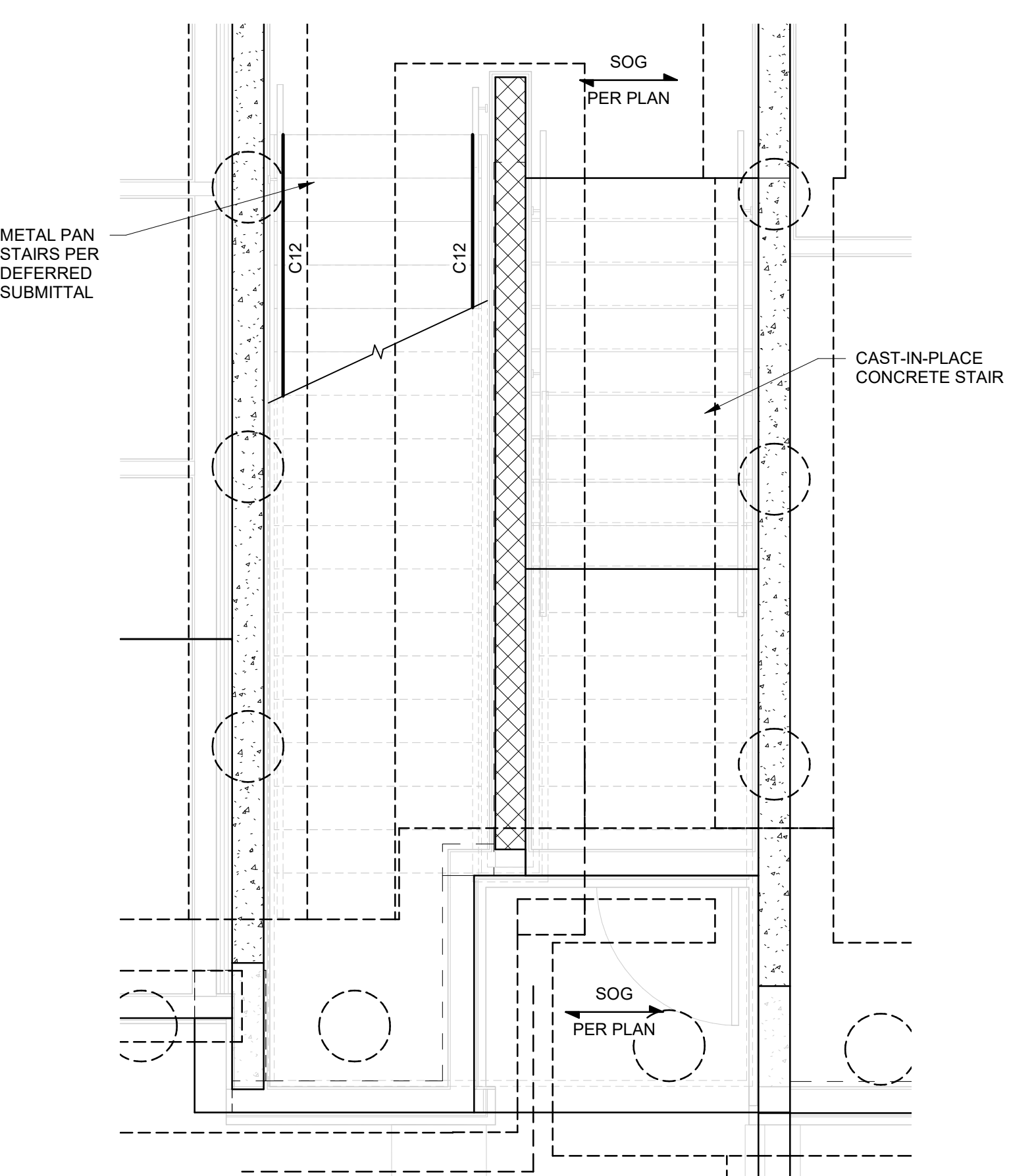
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SHEET TITLE

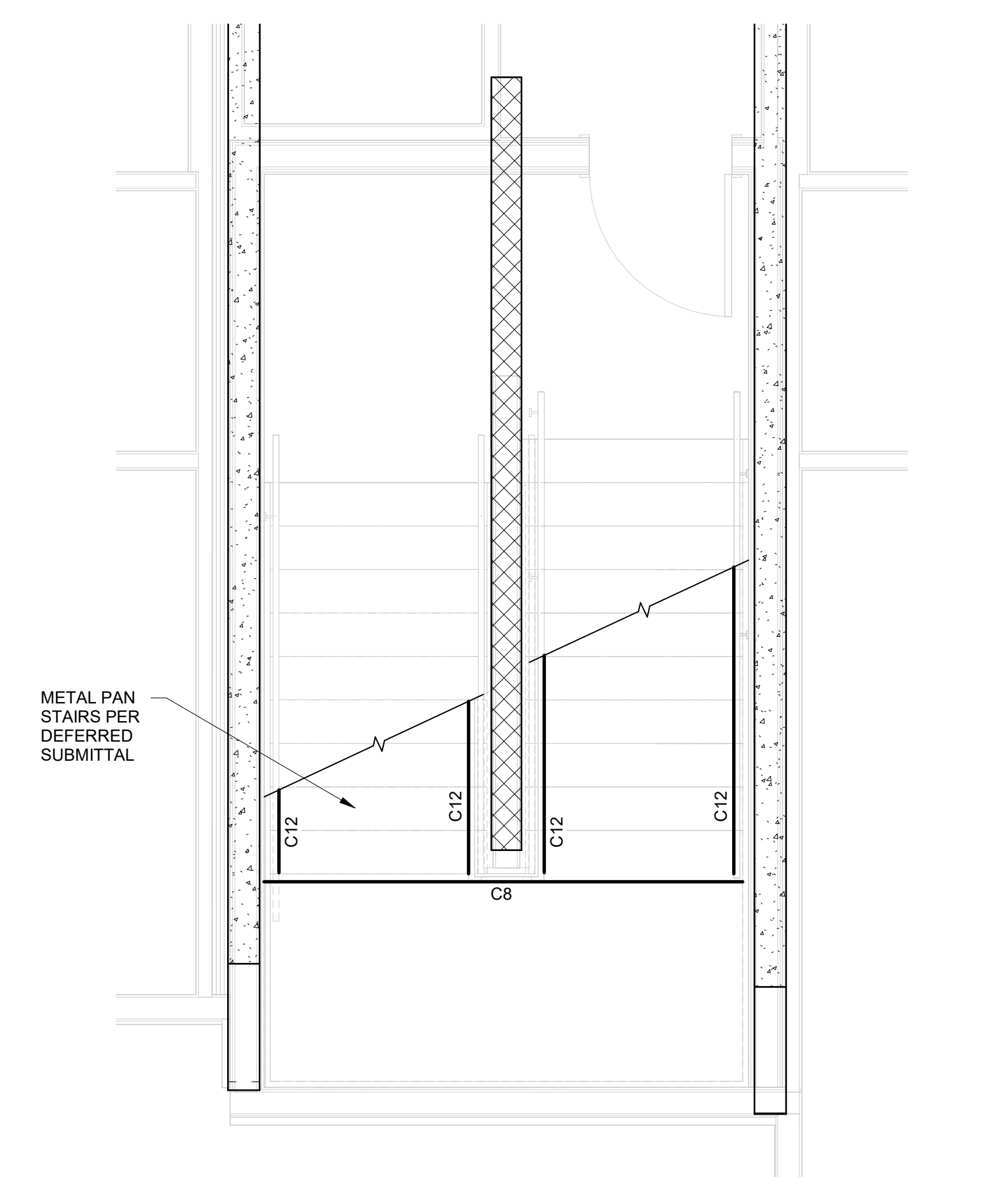
**STAIR &  
ELEVATOR  
FRAMING -  
BUILDING D**

SHEET NUMBER

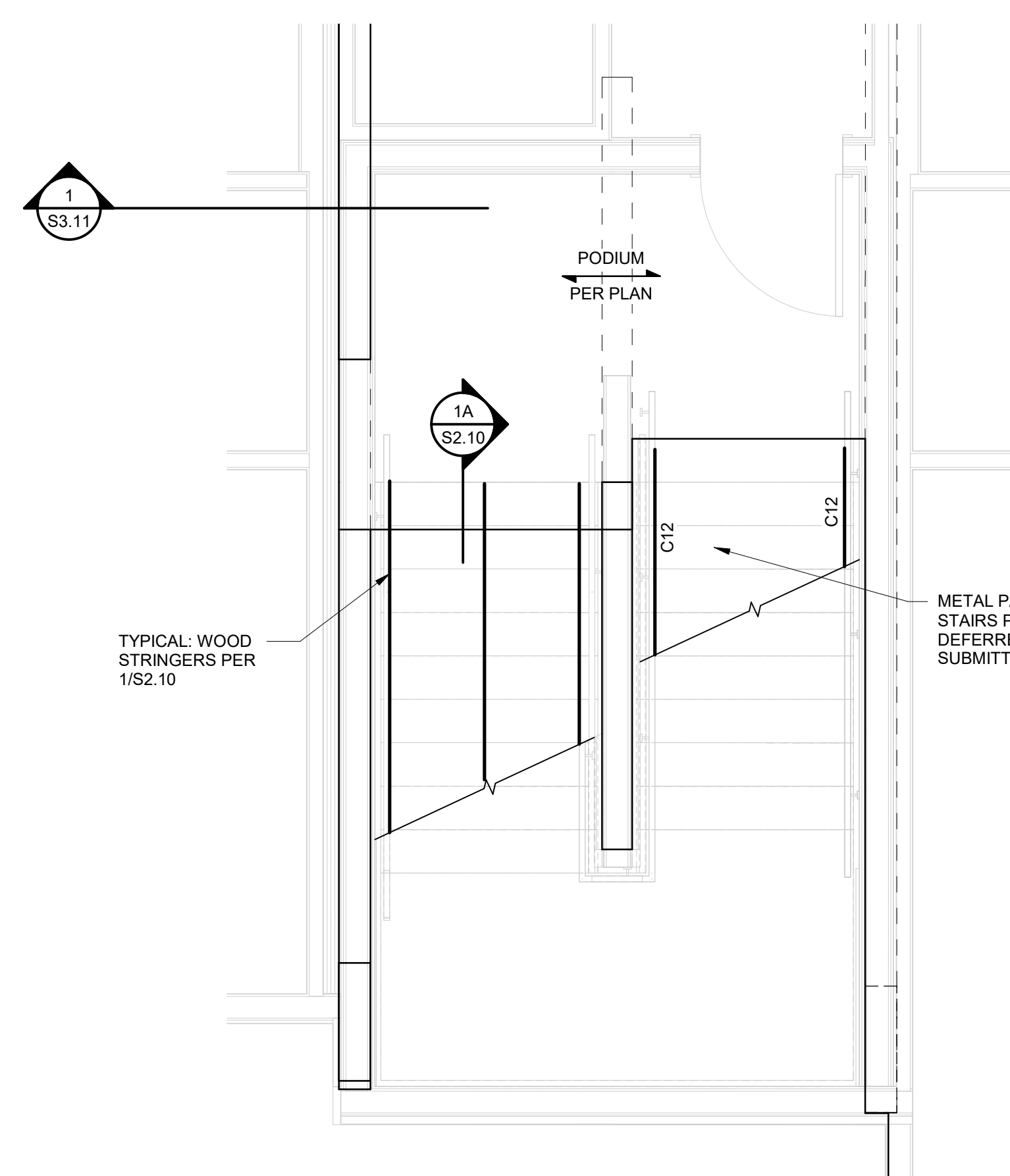
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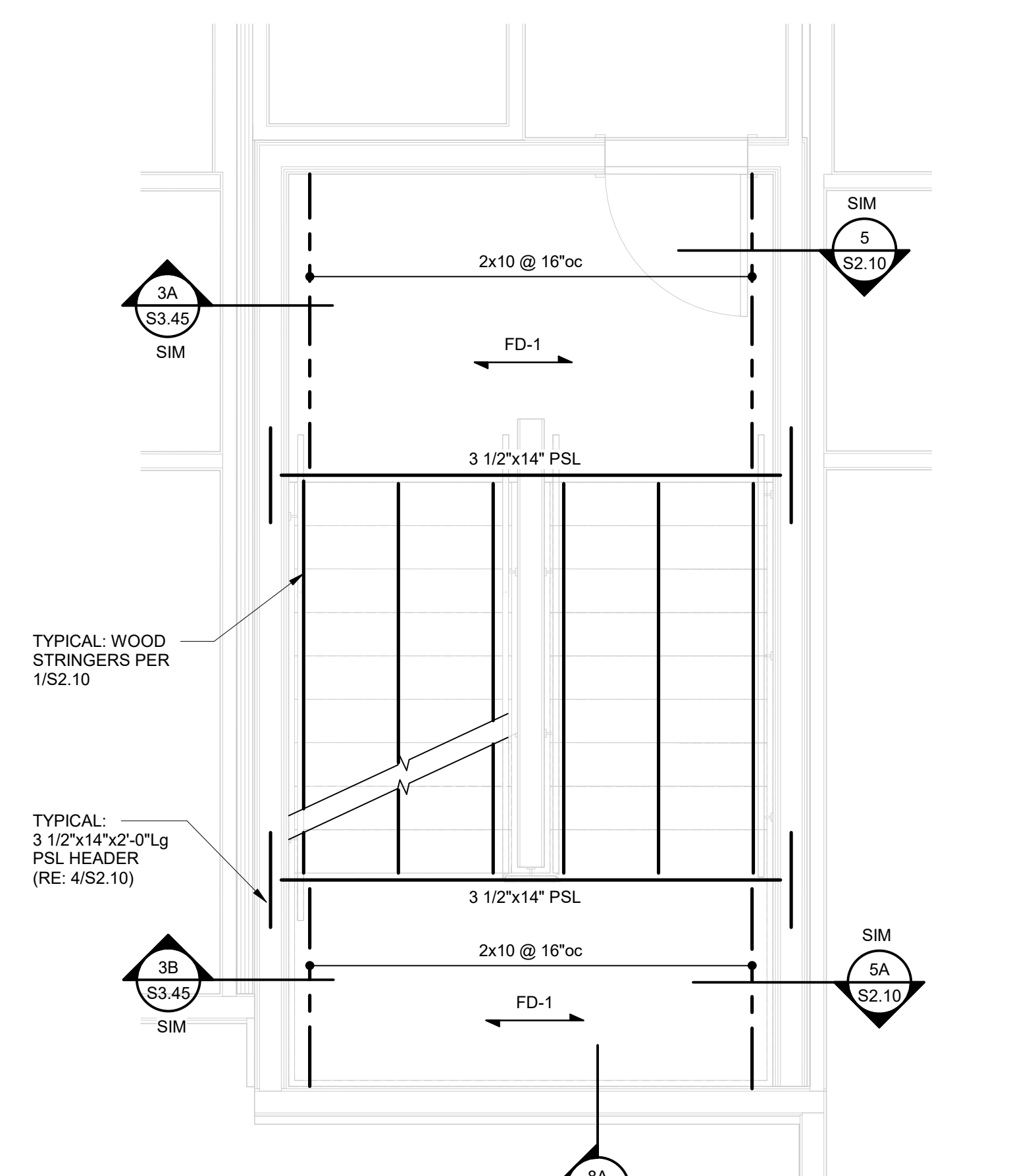
**1 BUILDING D - FOUNDATION STAIR PLAN**  
3/8" = 1'-0"



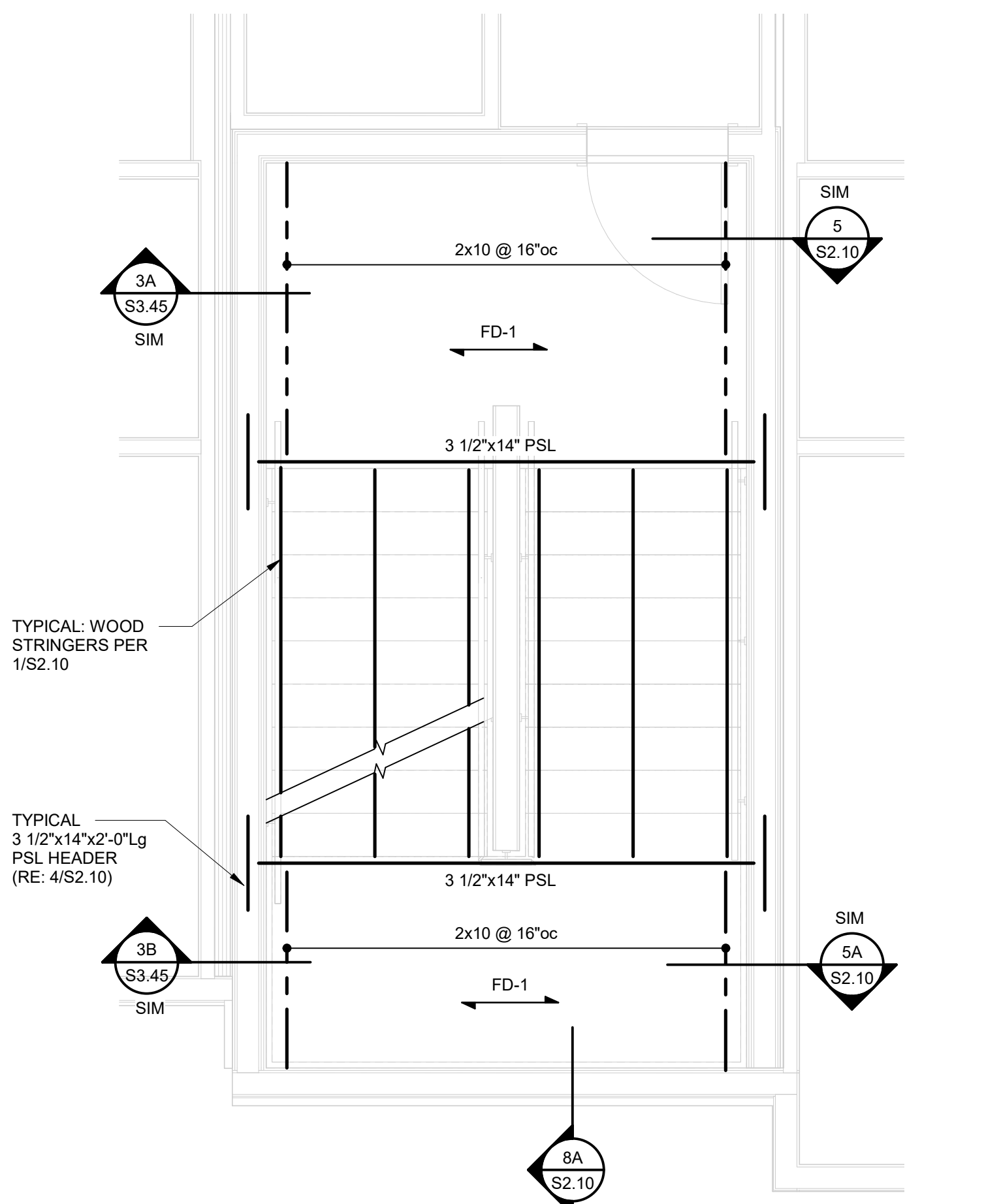
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3/8" = 1'-0"



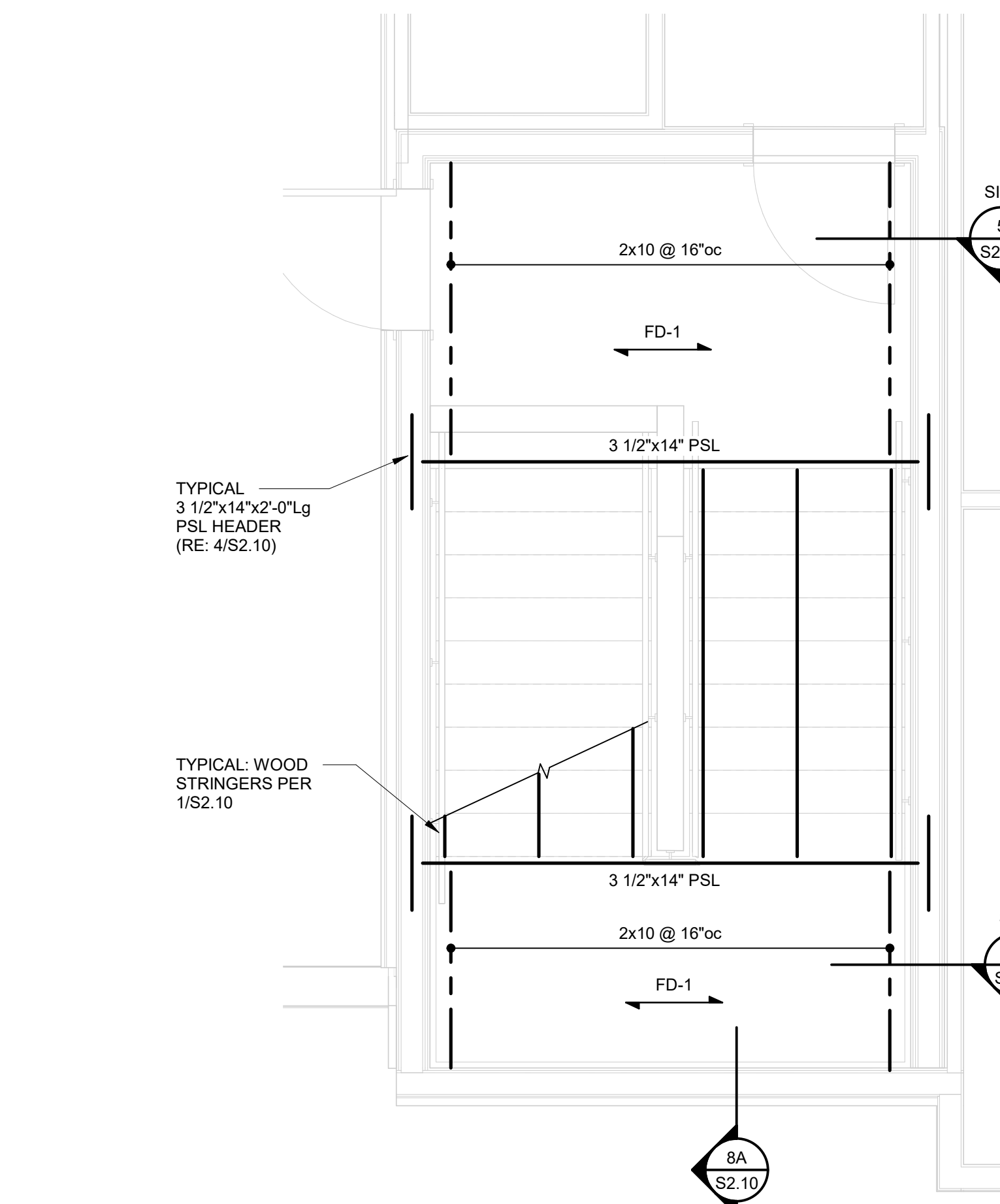
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3/8" = 1'-0"



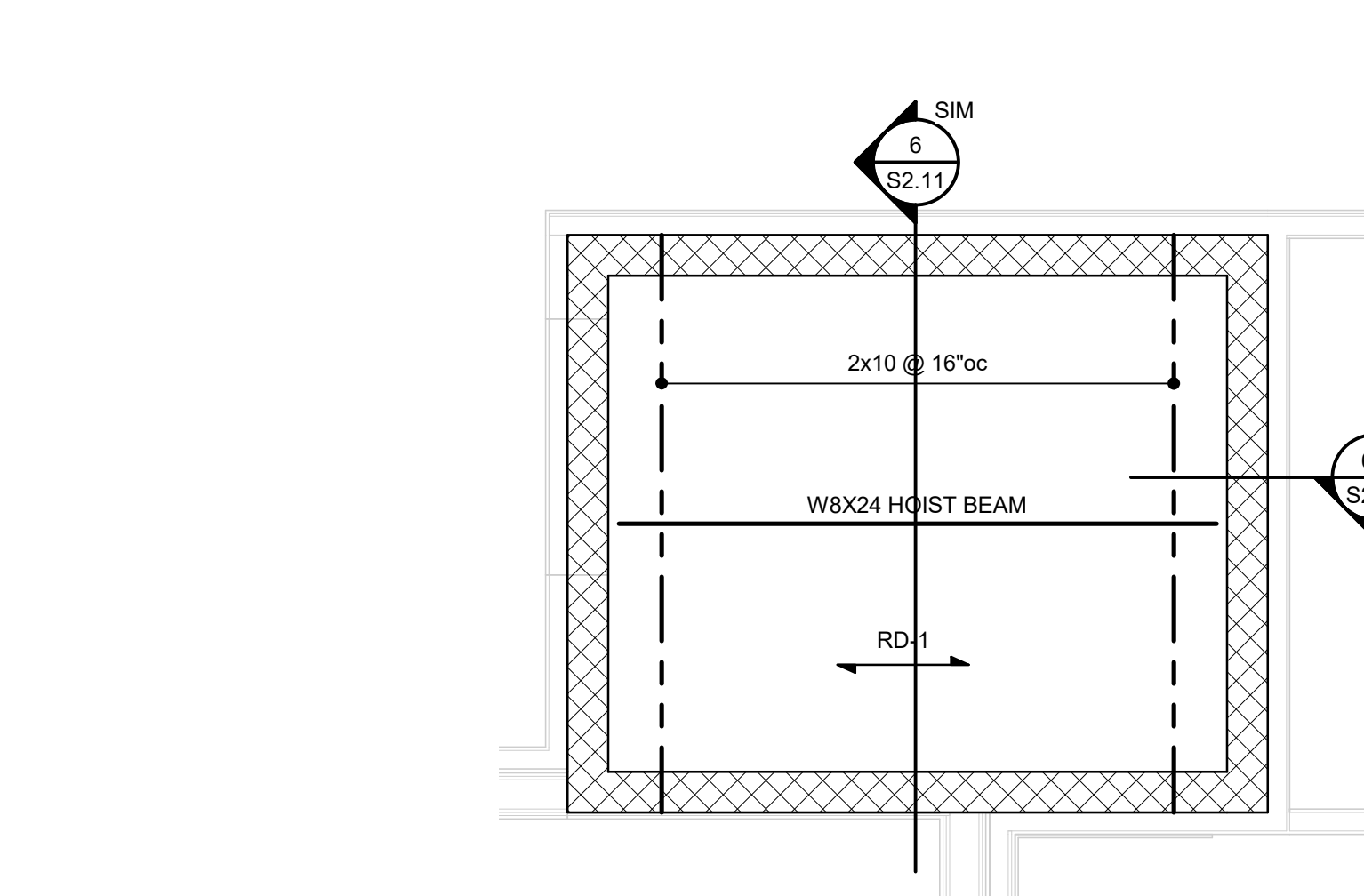
**3 BUILDING D - THIRD FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**4 BUILDING D - FOURTH FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**5 BUILDING D - FIFTH FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**6 BUILDING D - ROOF ELEVATOR PLAN**  
3/8" = 1'-0"

BUILDING D STAIR - JAMB SCHEDULE

MEMBER	JAMB LEVEL			NOTES
	2ND FLOOR	3RD FLOOR	4TH FLOOR	
2'-0"lg PSL HEADER	1 JACK / 2 KING	1 JACK / 1 KING	1 JACK / 1 KING	
PSL LANDING BEAM	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	PROVIDE 1/4"x4 x 1/2"lg SDS SCREWS INTO HEADER

- WOOD STAIR FRAMING NOTES:
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  - REFER TO BUILDING PLANS FOR HEADER AND BEAM CALLOUTS NOT SHOWN IN ENLARGED PLANS. HEADER AND BEAM SCHEDULE ON SHEET S0.02
  - REFER TO STAIR FRAMING DETAILS ON SHEET S2.10



**PARAGON STAR  
NORTH VILLAGE**

3200 NW PARAGON PKWY,  
LEES SUMMIT, MO 64081

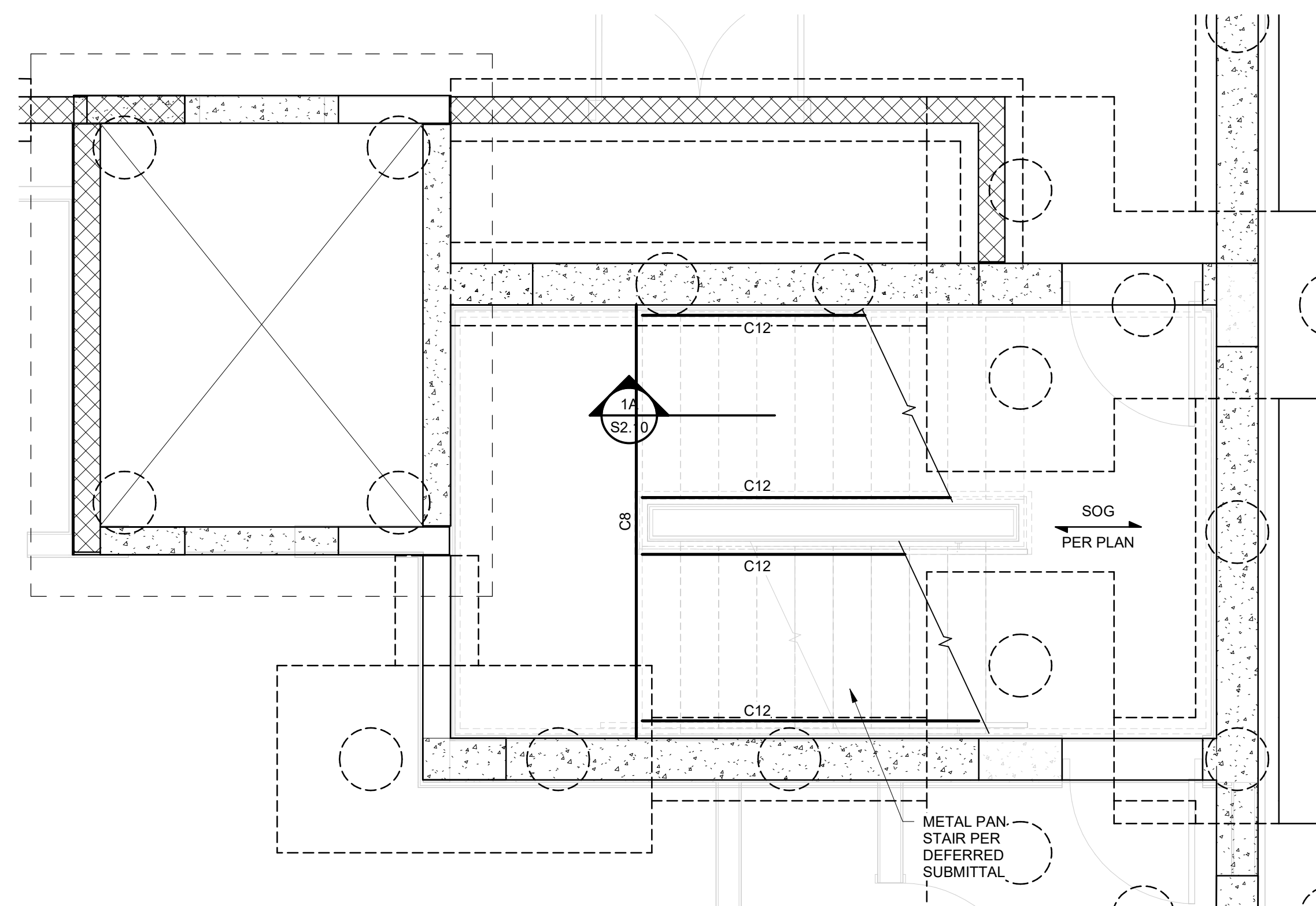
Project No.: 18017.19050.07.19050.08  
Date: 06.28.2022  
Issued For: FOR CONSTRUCTION

REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1

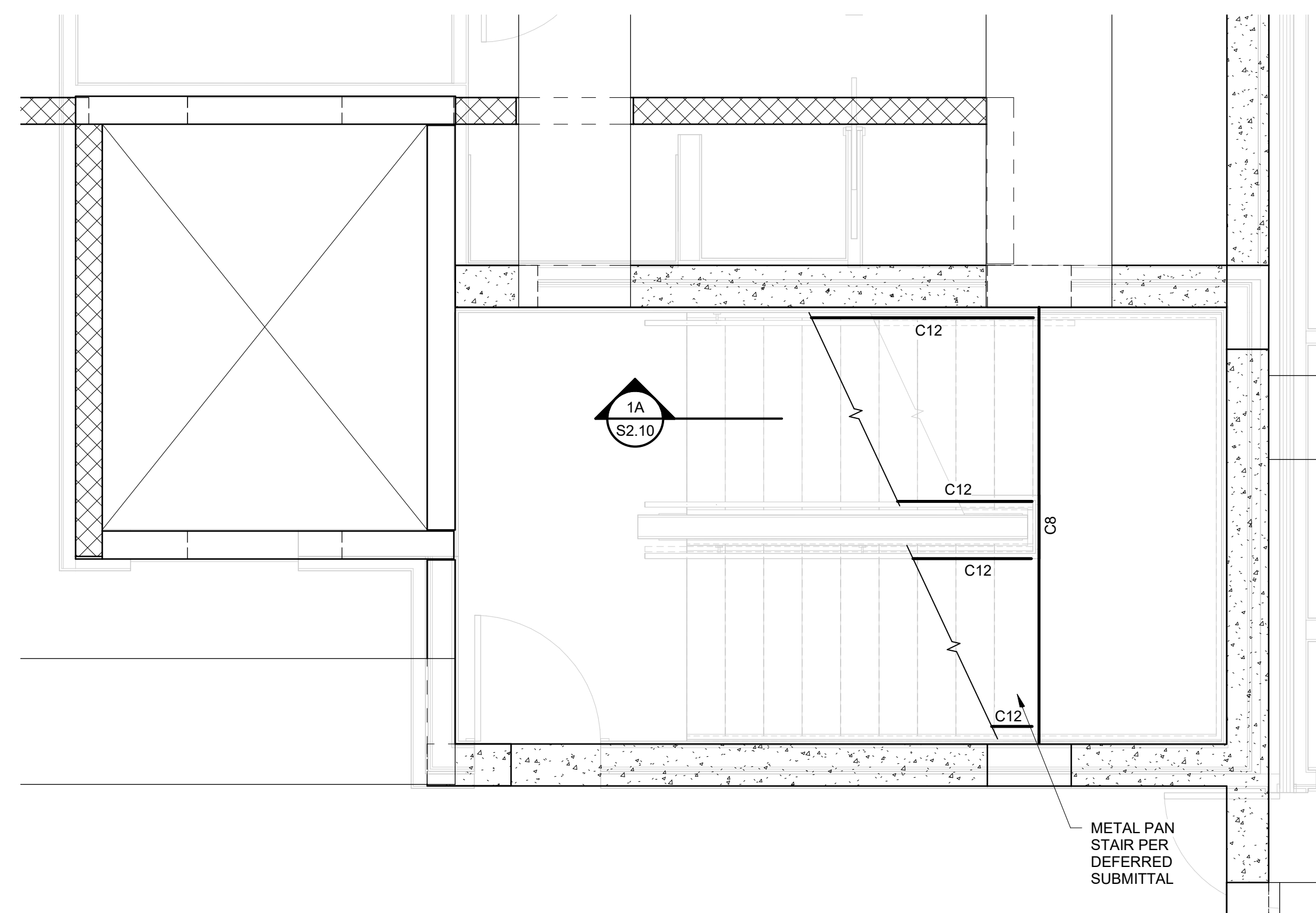
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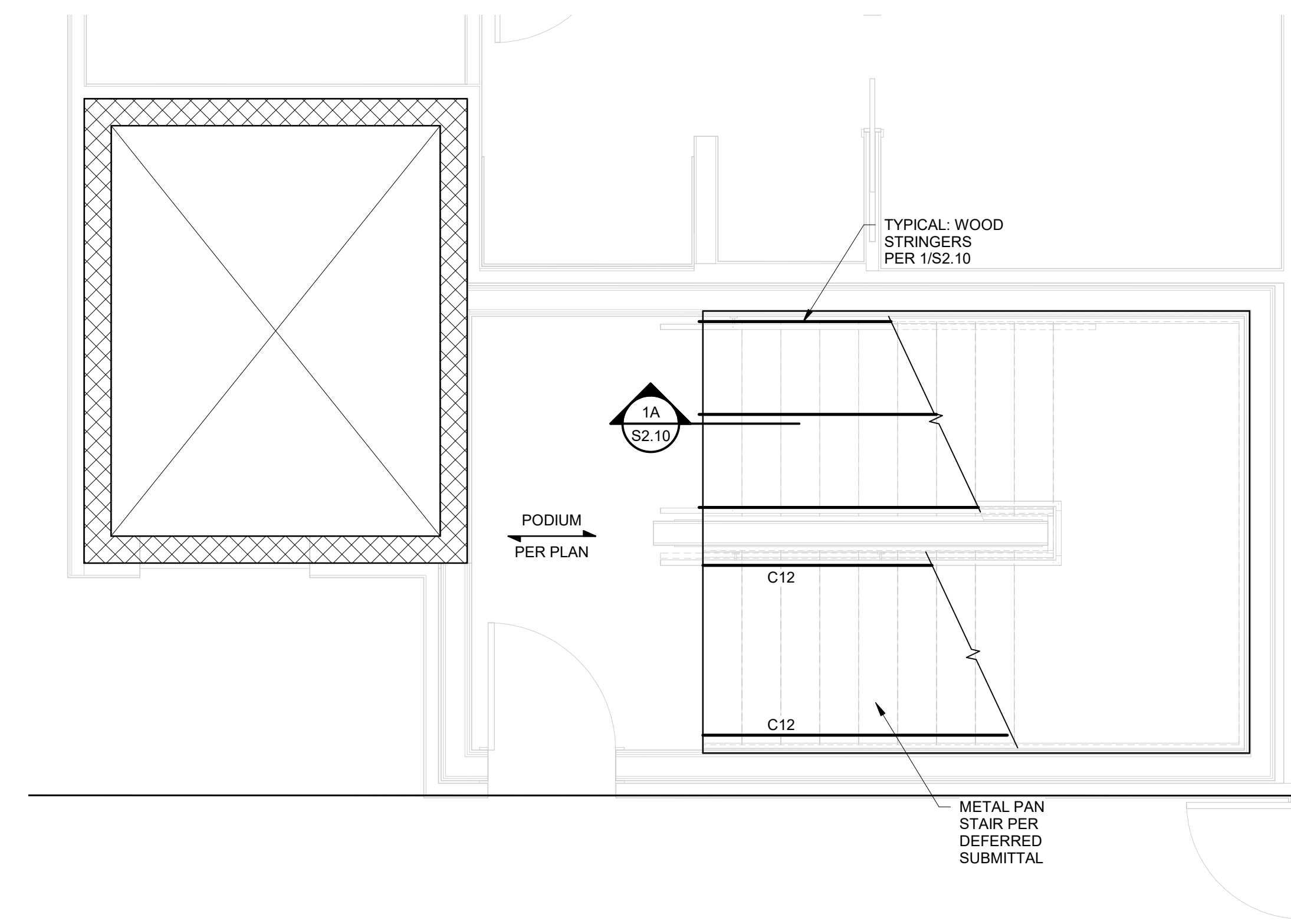
PROJECT TEAM	
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS



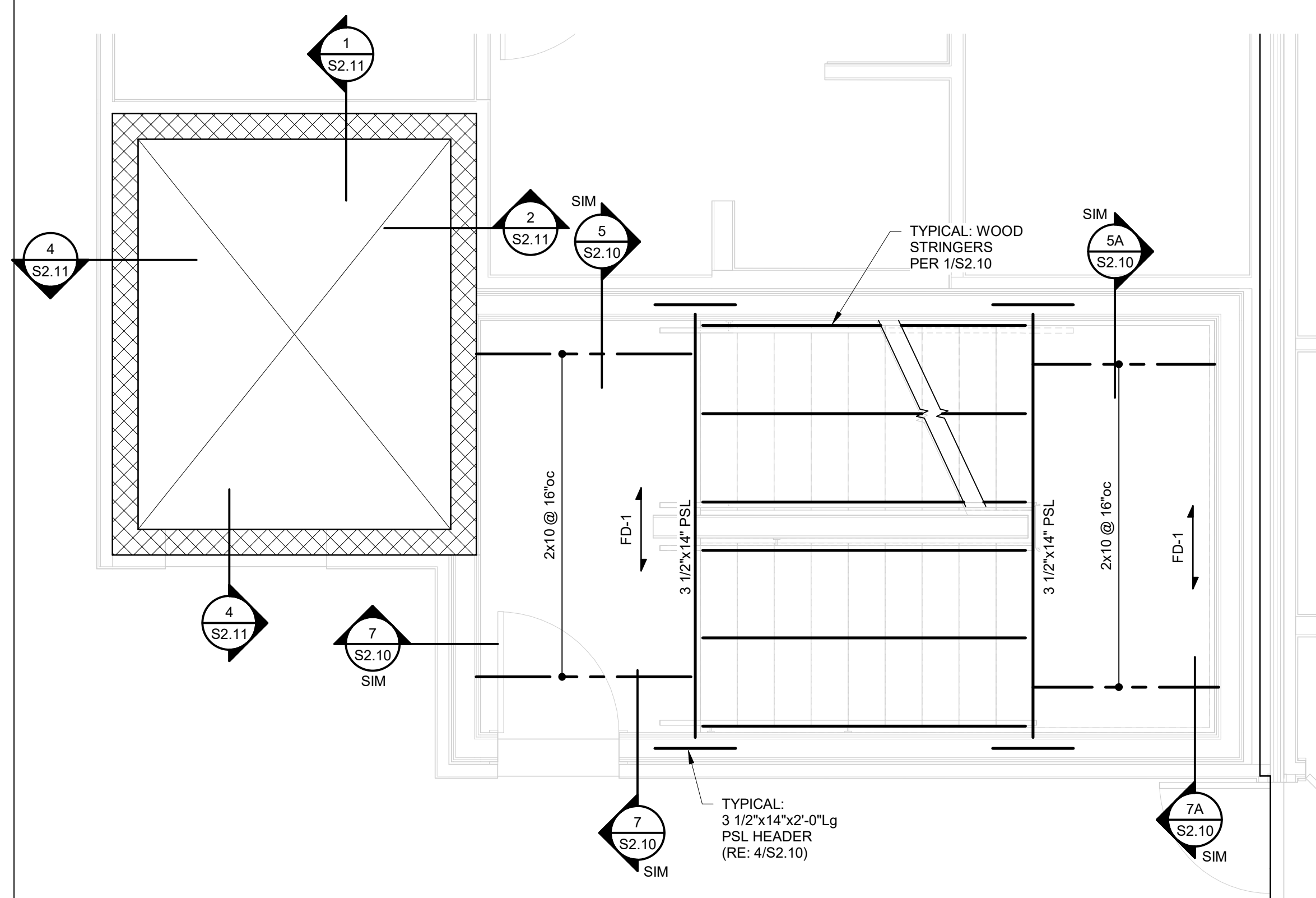
**1 BUILDING E - FOUNDATION STAIR & ELEVATOR PLAN**  
3/8" = 1'-0"



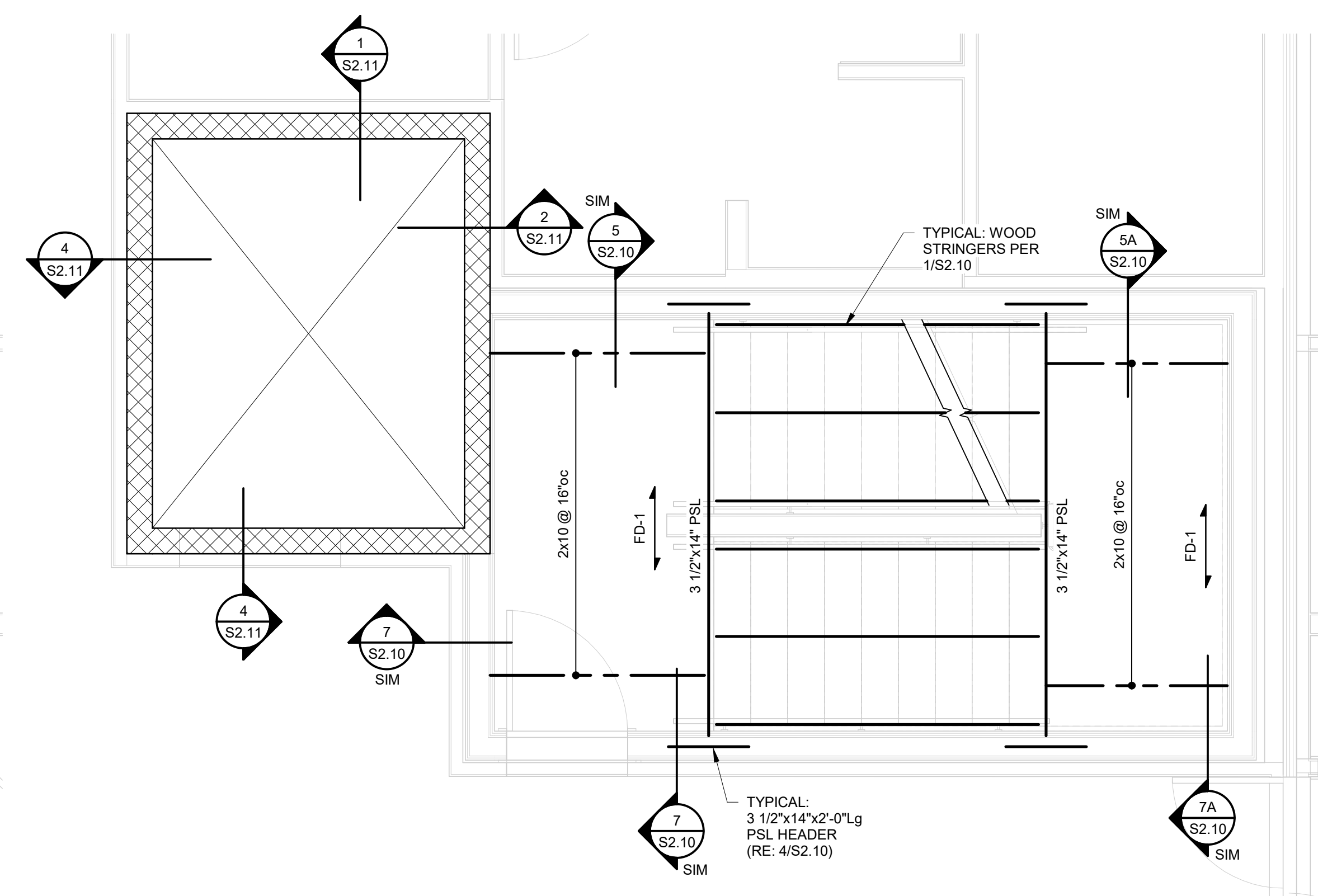
**1A BUILDING E - FOUNDATION STAIR & ELEVATOR PLAN - MID-HEIGHT**  
3/8" = 1'-0"



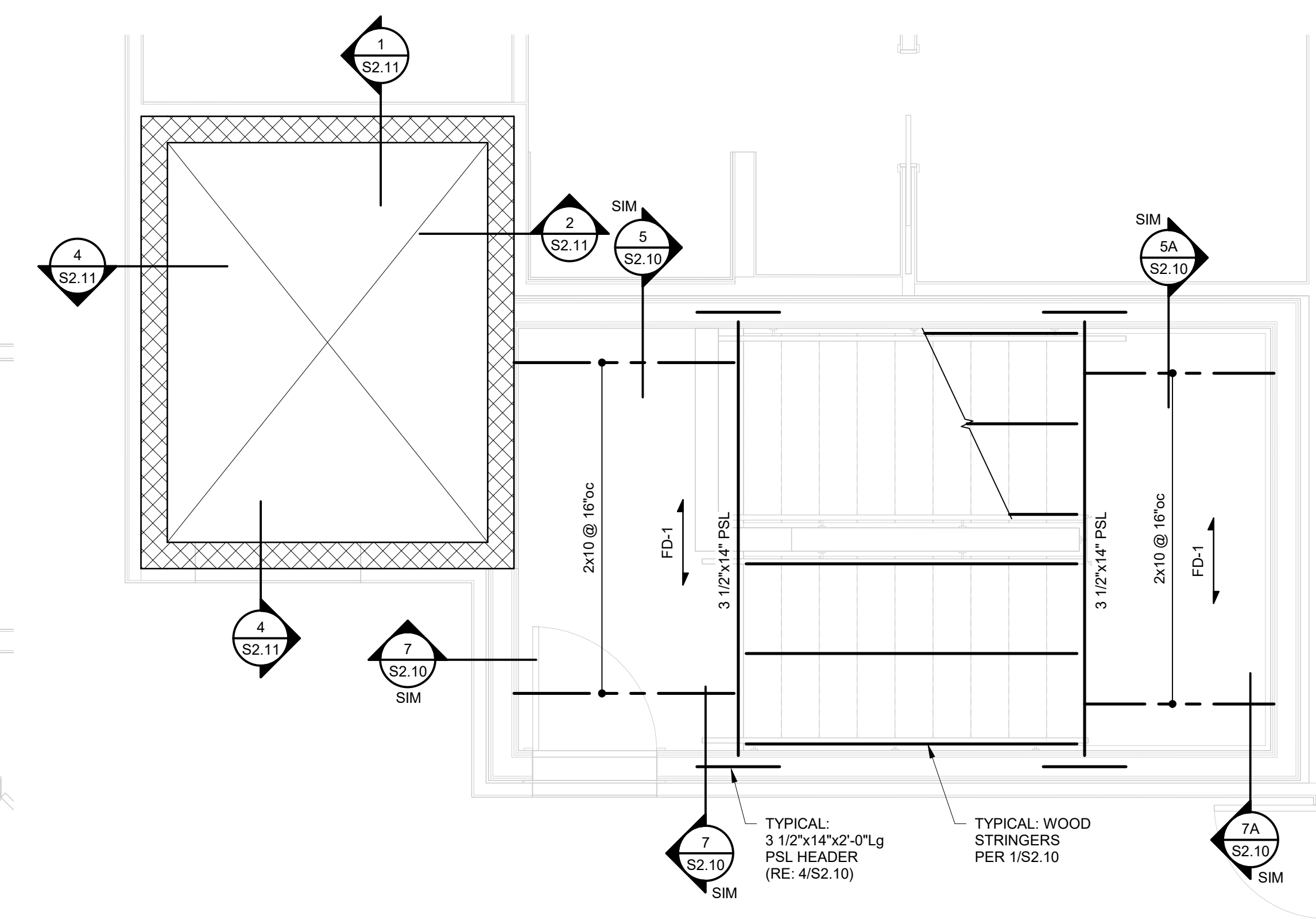
**2 BUILDING E - SECOND FLOOR FRAMING STAIR & ELEVATOR PLAN**  
3/8" = 1'-0"



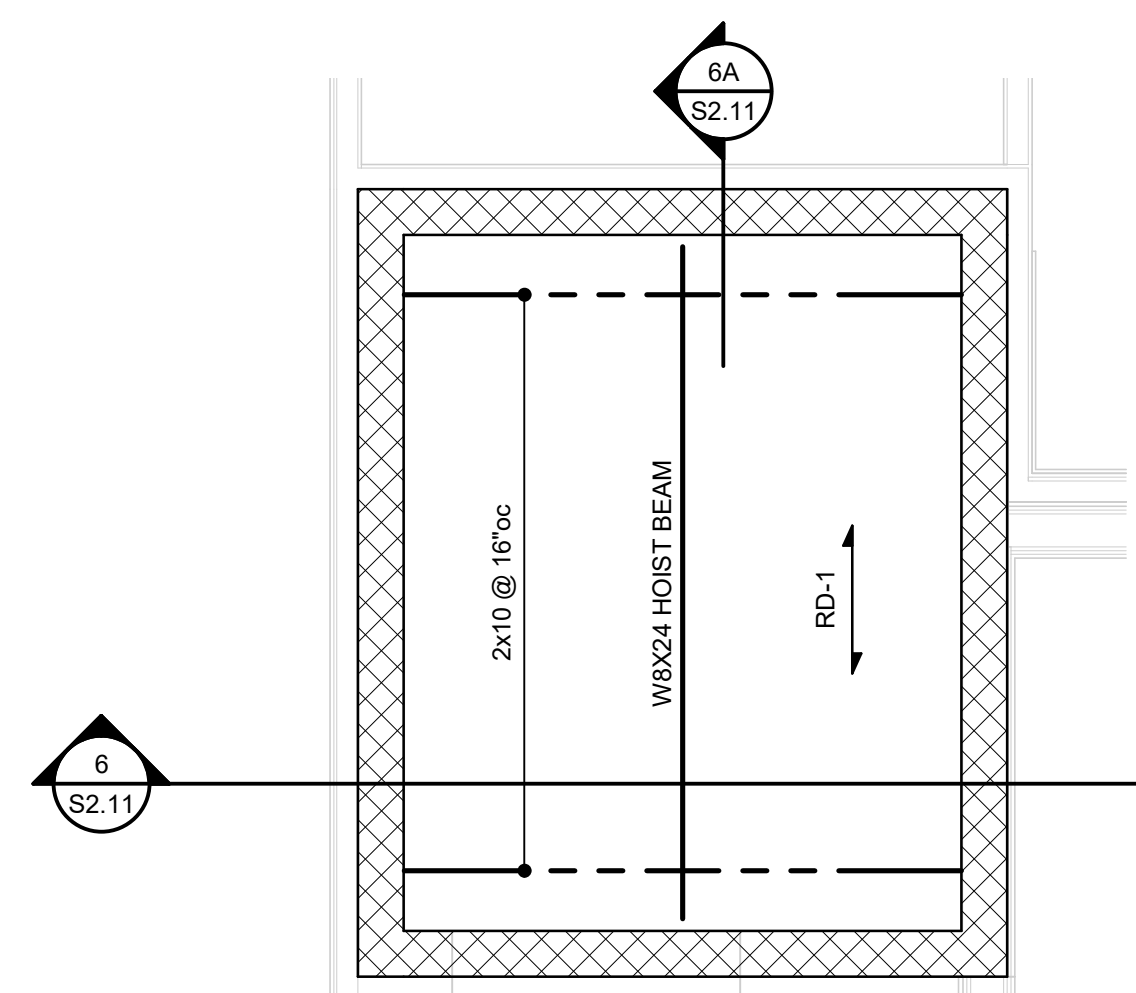
**3 BUILDING E - THIRD FLOOR FRAMING STAIR & ELEVATOR PLAN**  
3/8" = 1'-0"



**4 BUILDING E - FOURTH FLOOR FRAMING STAIR & ELEVATOR PLAN**  
3/8" = 1'-0"



**5 BUILDING E - FIFTH FLOOR FRAMING STAIR & ELEVATOR PLAN**  
3/8" = 1'-0"



**6 BUILDING E - ROOF ELEVATOR PLAN**  
3/8" = 1'-0"

MEMBER	JAMB LEVEL			NOTES
	2ND FLOOR	3RD FLOOR	4TH FLOOR	
2'-0" Lg PSL HEADER	1 JACK / 2 KING	1 JACK / 1 KING	1 JACK / 1 KING	
PSL LANDING BEAM	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	PROVIDE 1/4"Øx4 1/2" Lg SDS SCREWS INTO HEADER

- WOOD STAIR FRAMING NOTES:
- REFER TO GENERAL NOTES ON SHEET S0.01
  - REFER TO STUD BEARING WALL SCHEDULE ON SHEET S0.02
  - REFER TO BUILDING PLANS FOR HEADER AND BEAM CALLOUTS NOT SHOWN IN ENLARGED PLANS. HEADER AND BEAM SCHEDULE ON SHEET S0.02
  - REFER TO STAIR FRAMING DETAILS ON SHEET S2.10

SHEET TITLE  
**STAIR &  
ELEVATOR  
FRAMING -  
BUILDING E**

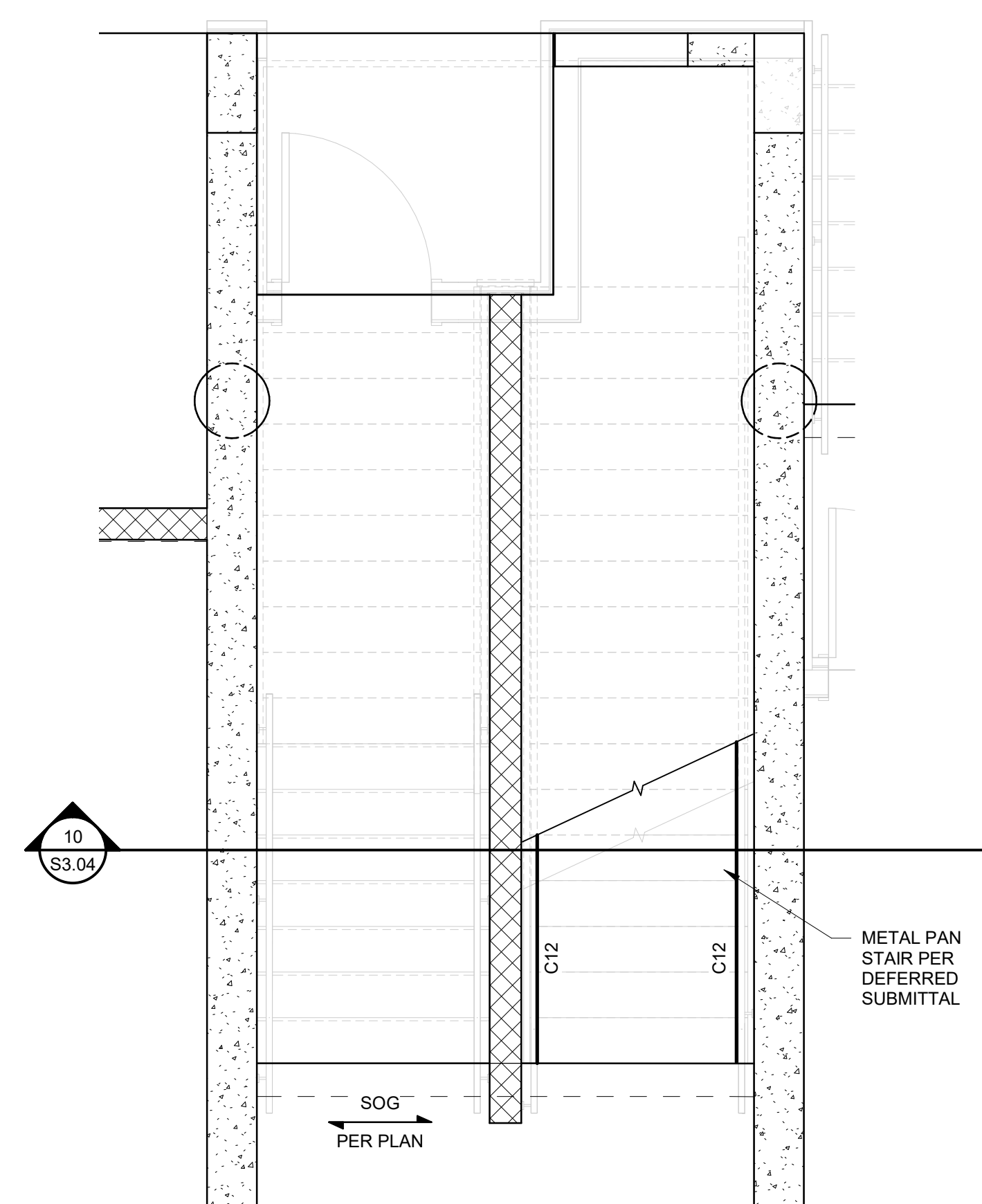
SHEET NUMBER

**S2.04**

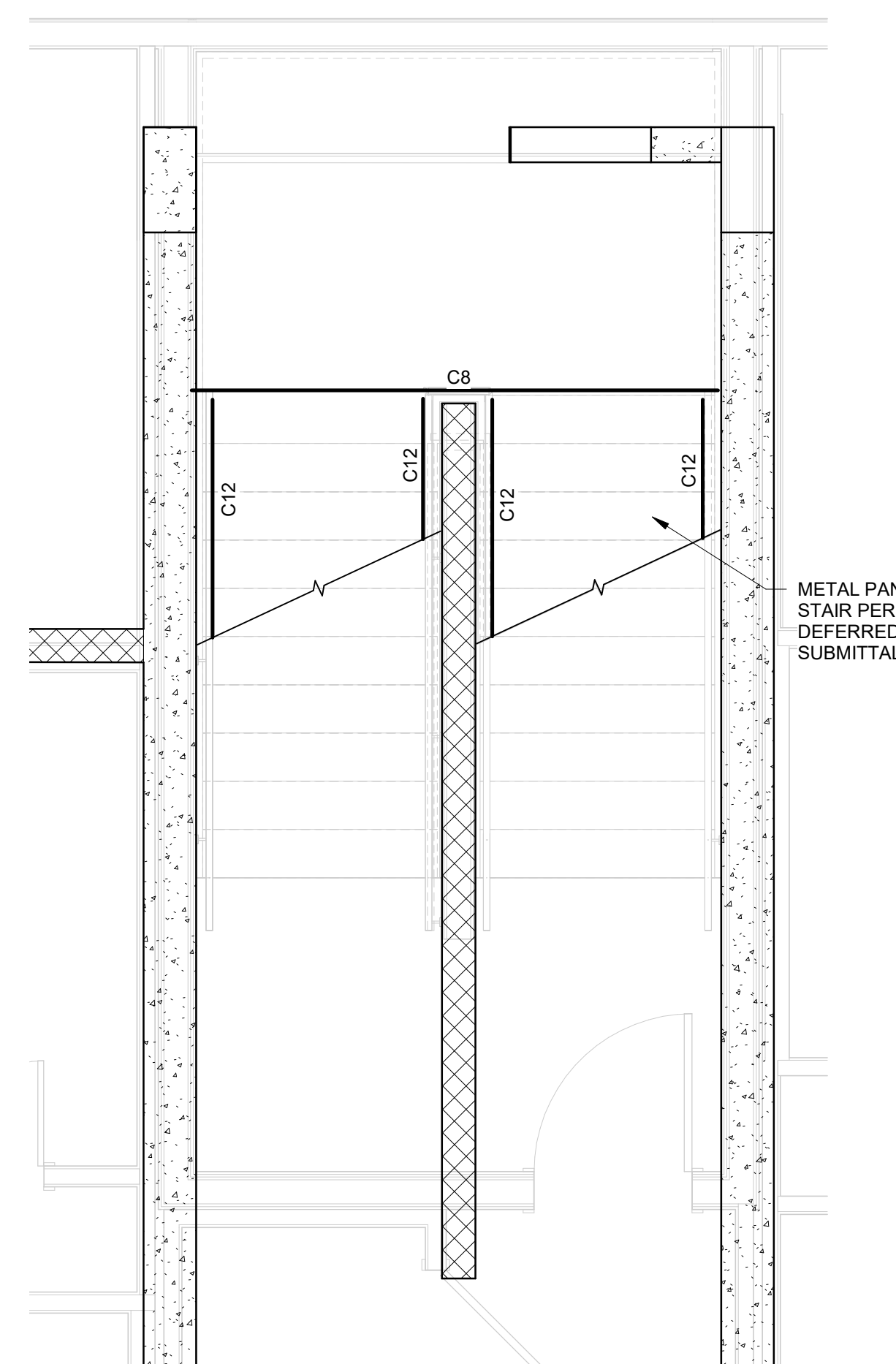


ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

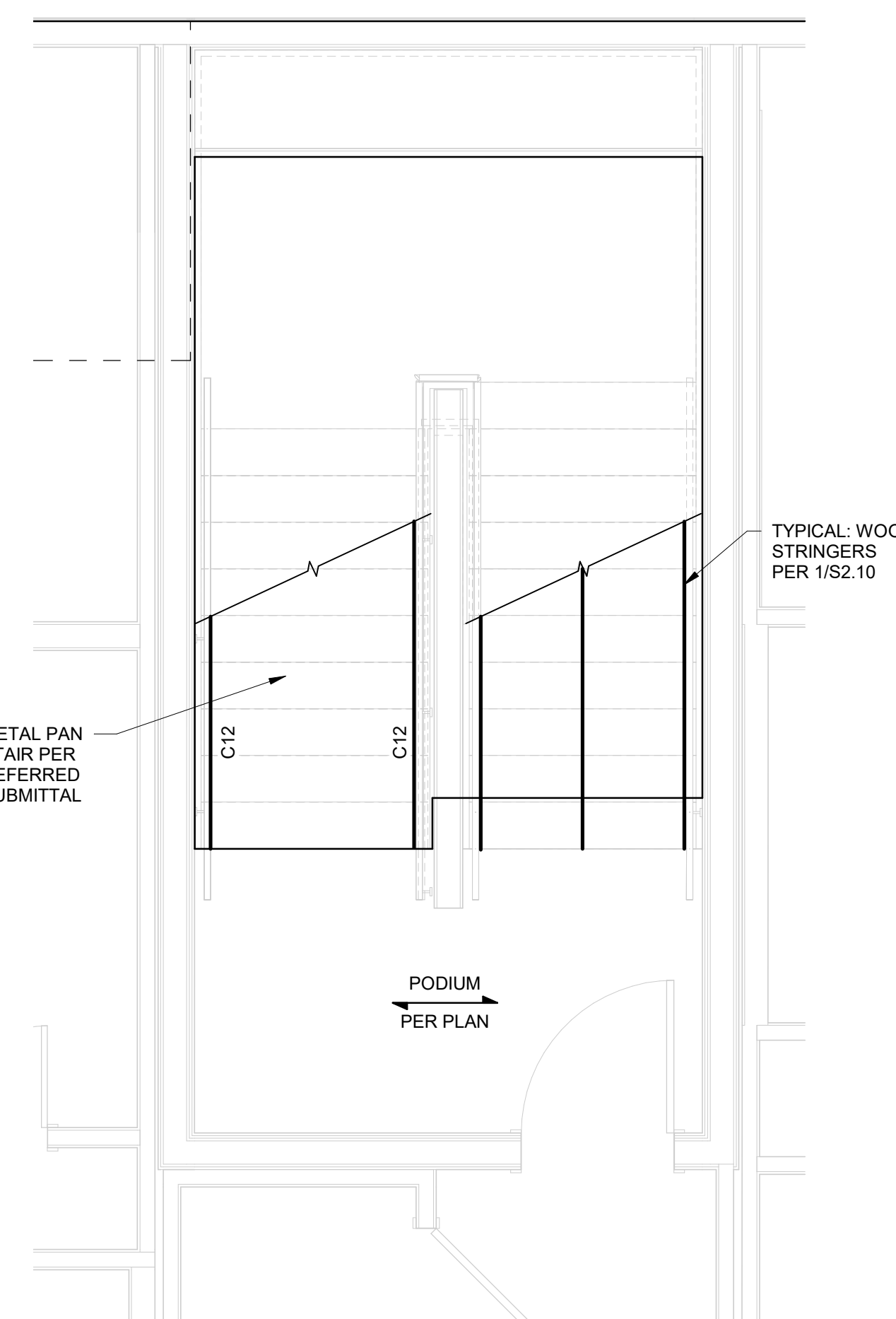
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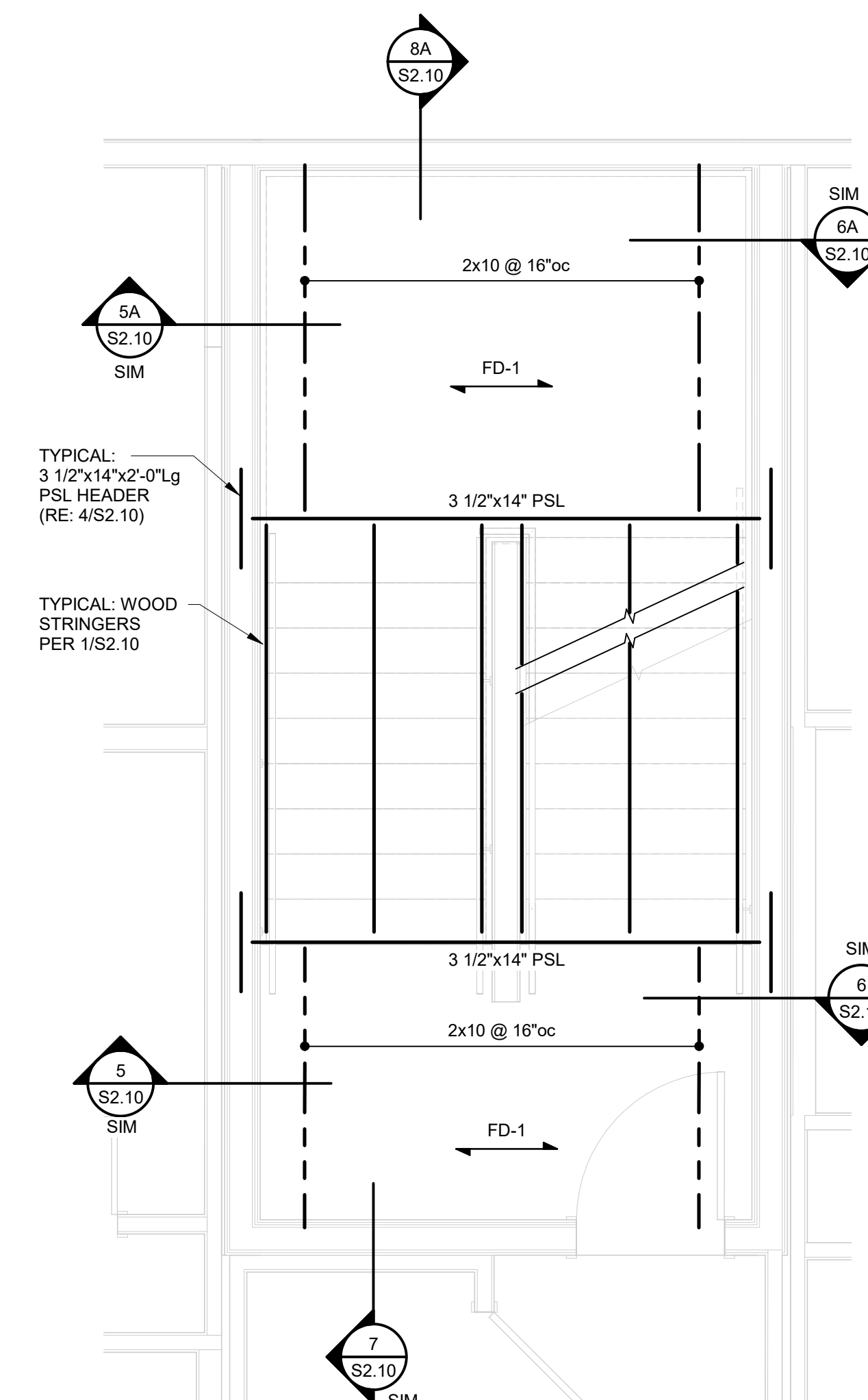
**1 BUILDING F - FOUNDATION STAIR PLAN**  
3/8" = 1'-0"



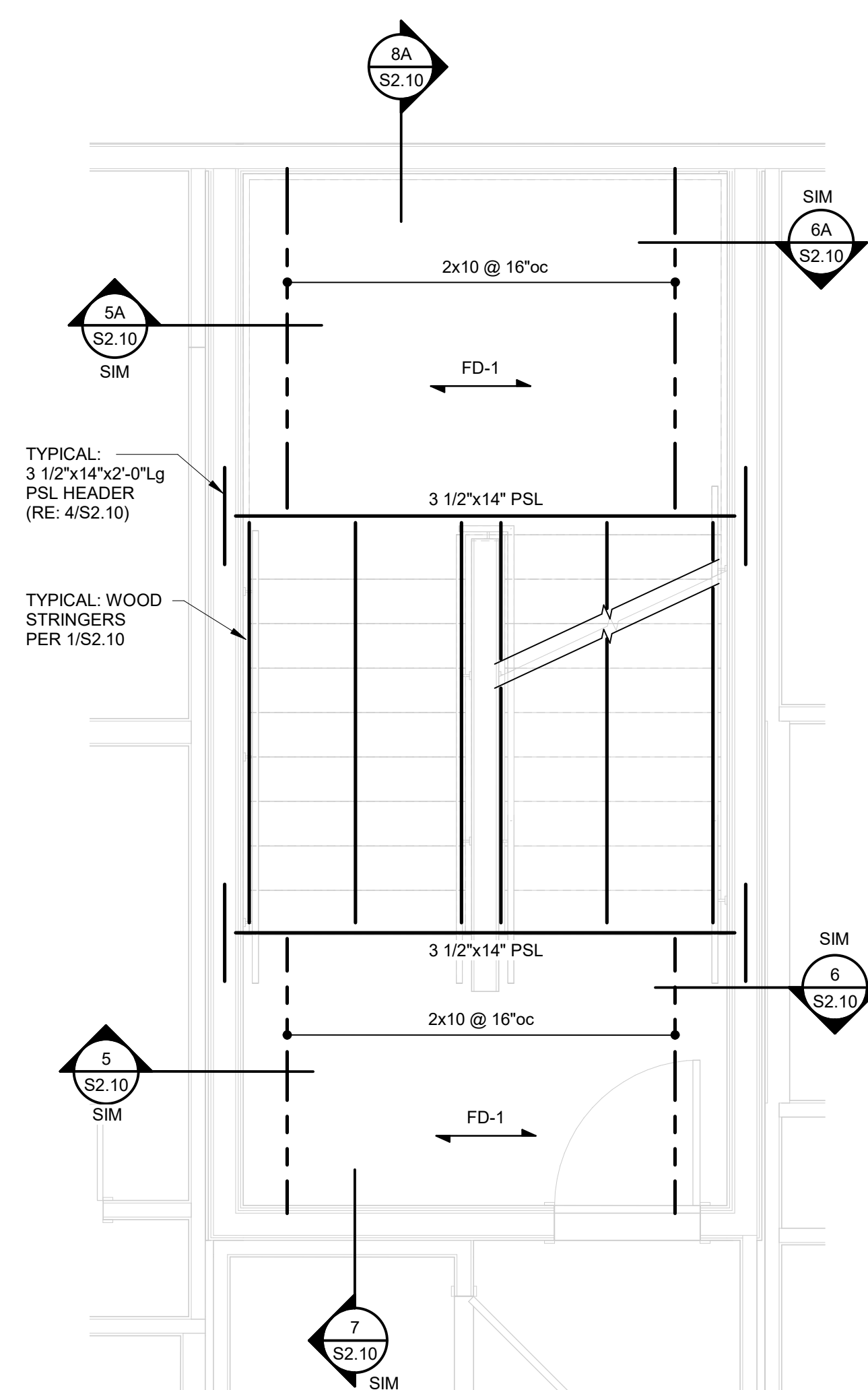
**1A BUILDING F - FOUNDATION STAIR PLAN - MID-HEIGHT**  
3/8" = 1'-0"



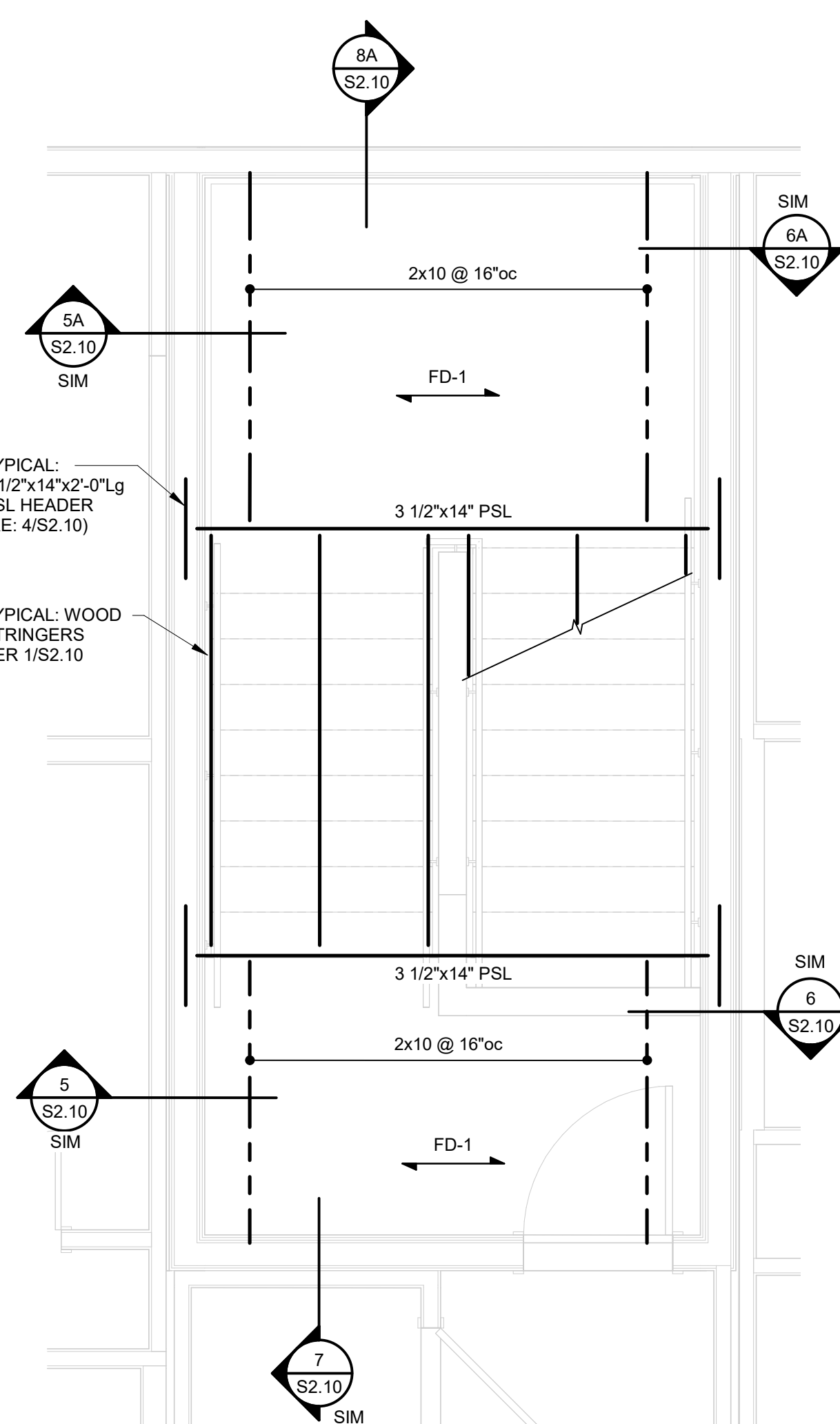
**2 BUILDING F - SECOND FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**3 BUILDING F - THIRD FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**4 BUILDING F - FOURTH FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"



**5 BUILDING F - FIFTH FLOOR FRAMING STAIR PLAN**  
3/8" = 1'-0"

MEMBER	JAMB LEVEL			NOTES
	2ND FLOOR	3RD FLOOR	4TH FLOOR	
2'-0"lg PSL HEADER	1 JACK / 2 KING	1 JACK / 1 KING	1 JACK / 1 KING	
PSL LANDING BEAM	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	LGU3.63-SDS (H=14")	PROVIDE 1/4"x4 1/2"lg SDS SCREWS INTO HEADER.

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- REFER TO GENERAL NOTES ON SHEET S0.01
  - REFER TO STUD BEARING WALL SCHEDULE ON SHEET S0.02
  - REFER TO BUILDING PLANS FOR HEADER AND BEAM CALLOUTS NOT SHOWN IN ENLARGED PLANS. HEADER AND BEAM SCHEDULE ON SHEET S0.02
  - REFER TO STAIR FRAMING DETAILS ON SHEET S2.10



**PARAGON STAR  
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Project No.: 18017.19050.07.19050.08  
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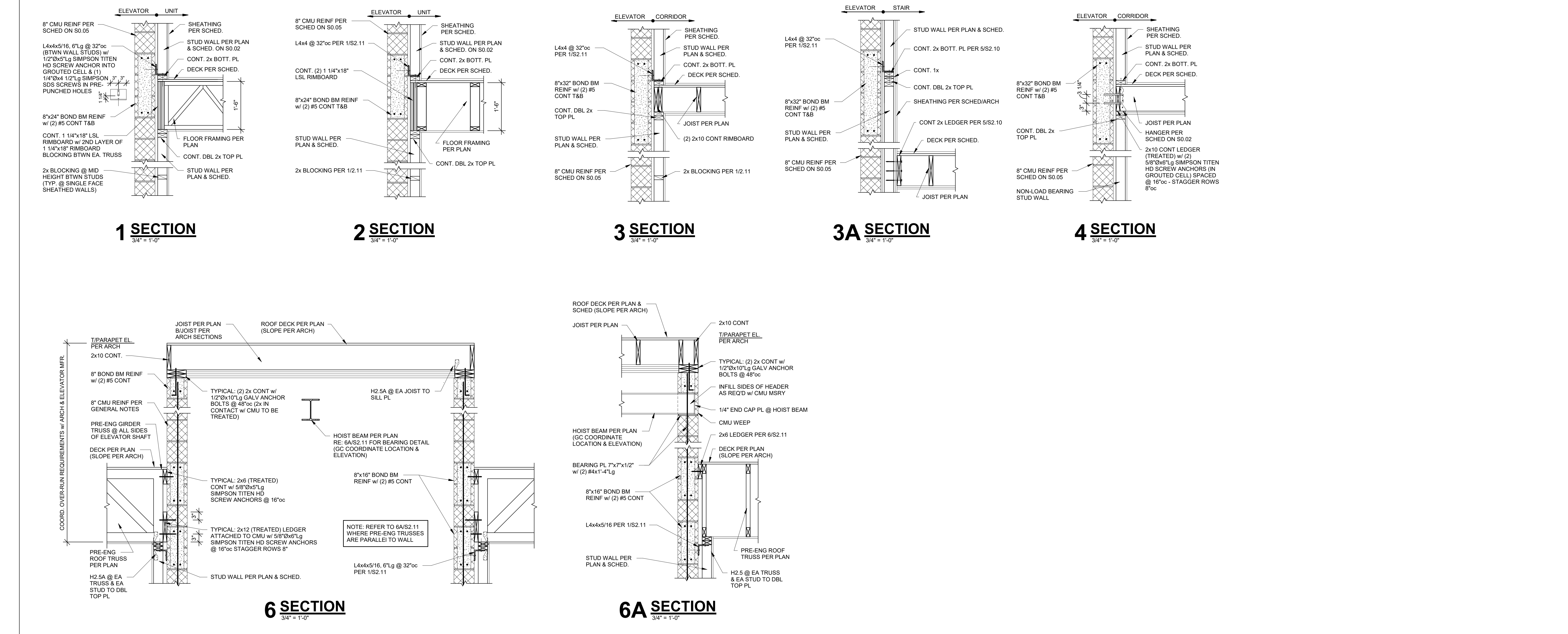


PROJECT TEAM	
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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SHEET TITLE  
**ELEVATOR  
FRAMING DETAILS**

SHEET NUMBER  
**S2.11**



C:\Users\CAB\Documents\FW02101 - S2.11 - Paragon Star\_dewelling\FV02B.rvt



REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

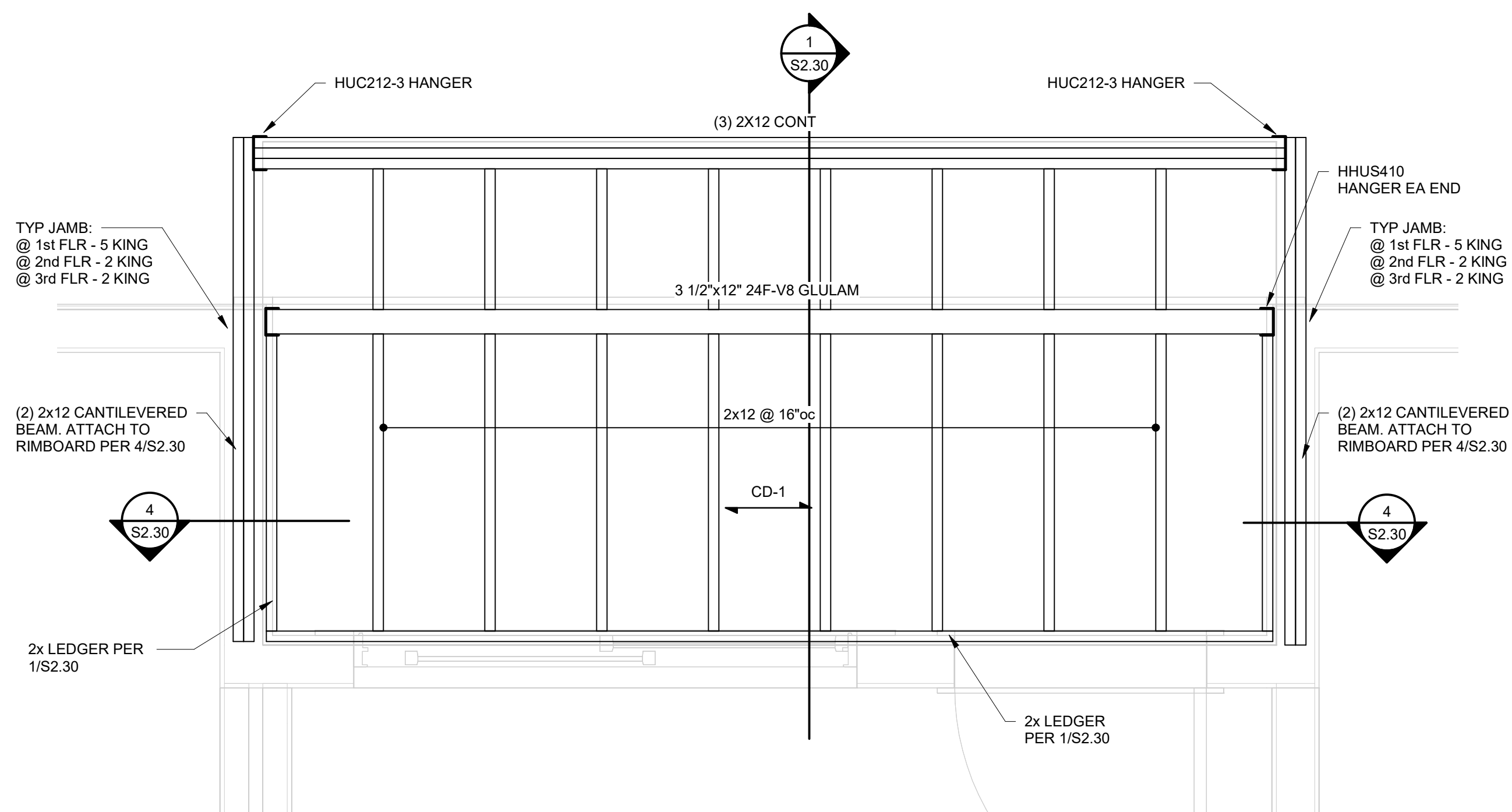
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Kansas City, MO 64111 www.bdc-engrs.com

SHEET TITLE

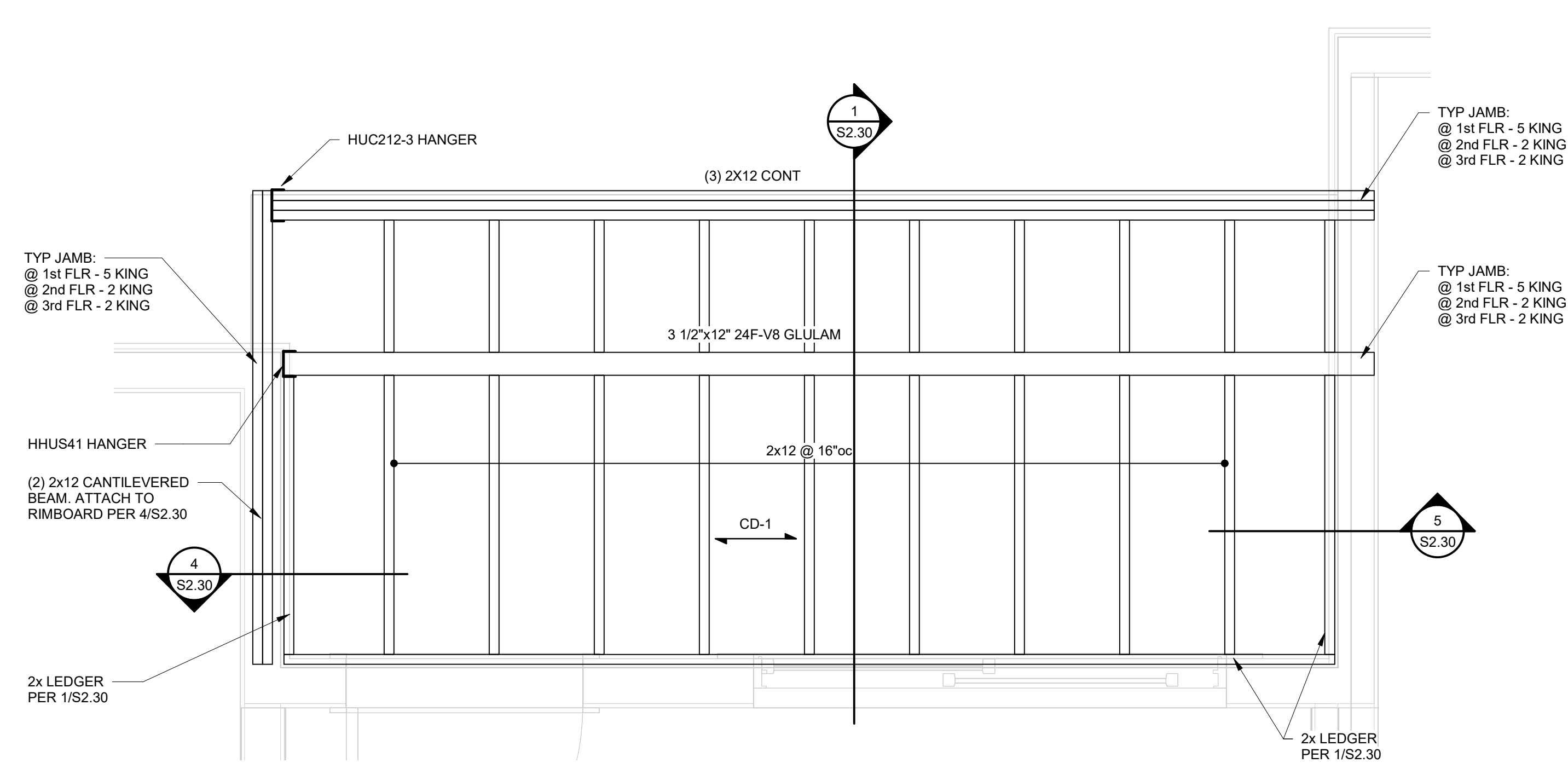
**BALCONY  
FRAMING PLANS**

SHEET NUMBER

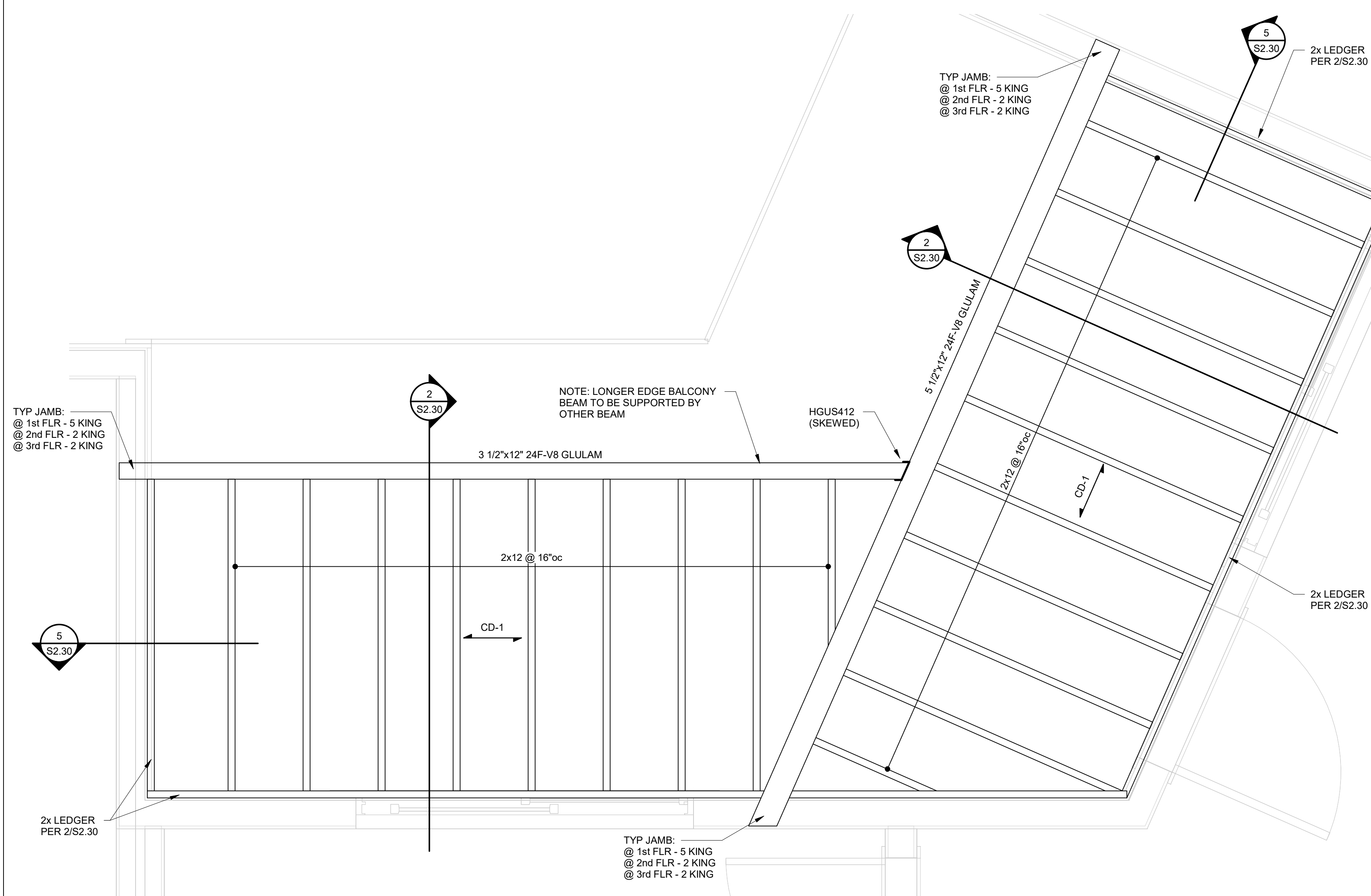
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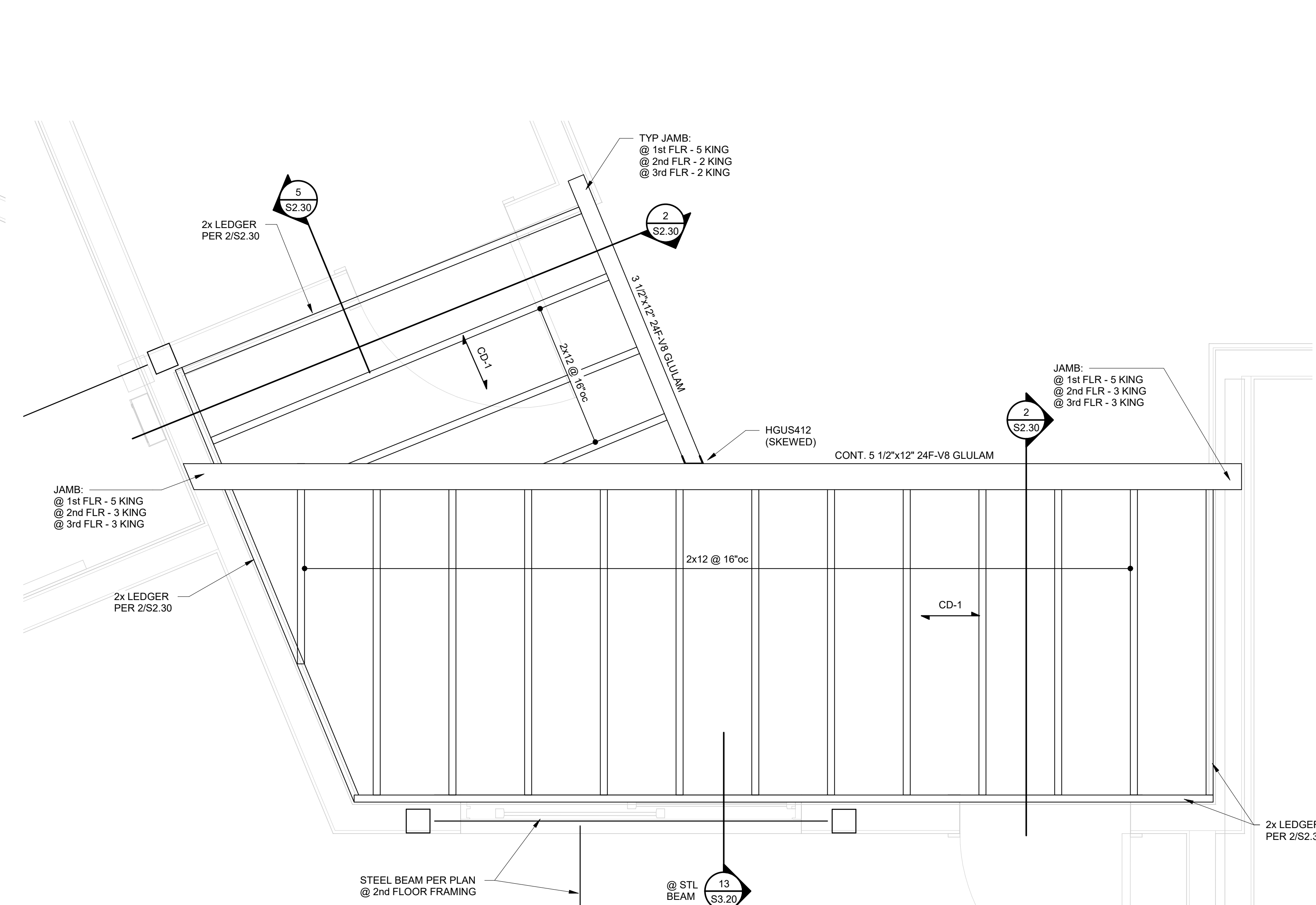
**1 BALCONY FRAMING PLAN**  
3/4" = 1'-0"



**1A BALCONY FRAMING PLAN**  
3/4" = 1'-0"



**2 BALCONY FRAMING PLAN**  
3/4" = 1'-0"



**2A BALCONY FRAMING PLAN**  
3/4" = 1'-0"

**BALCONY FRAMING NOTES:**  
1. ALL EXTERIOR FRAMING MATERIAL SHALL BE MOISTURE-RESISTANT TREATED.  
2. REFER TO GENERAL NOTE "11.4" FOR BALCONY FRAMING DIMENSIONAL LUMBER MATERIAL.  
3. REFER TO GENERAL NOTE "11.1" FOR BALCONY FRAMING GLULAM MATERIAL SPECIFICATIONS.  
4. REFER TO STRUCTURAL BUILDING PLANS FOR BUILDING FRAMING INFORMATION.  
5. REFER TO HANGER SCHEDULE ON S0.02 FOR TYPICAL BALCONY MEMBER HANGERS UNLESS NOTED OTHERWISE.

REVISIONS		
No.	Date	Description
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

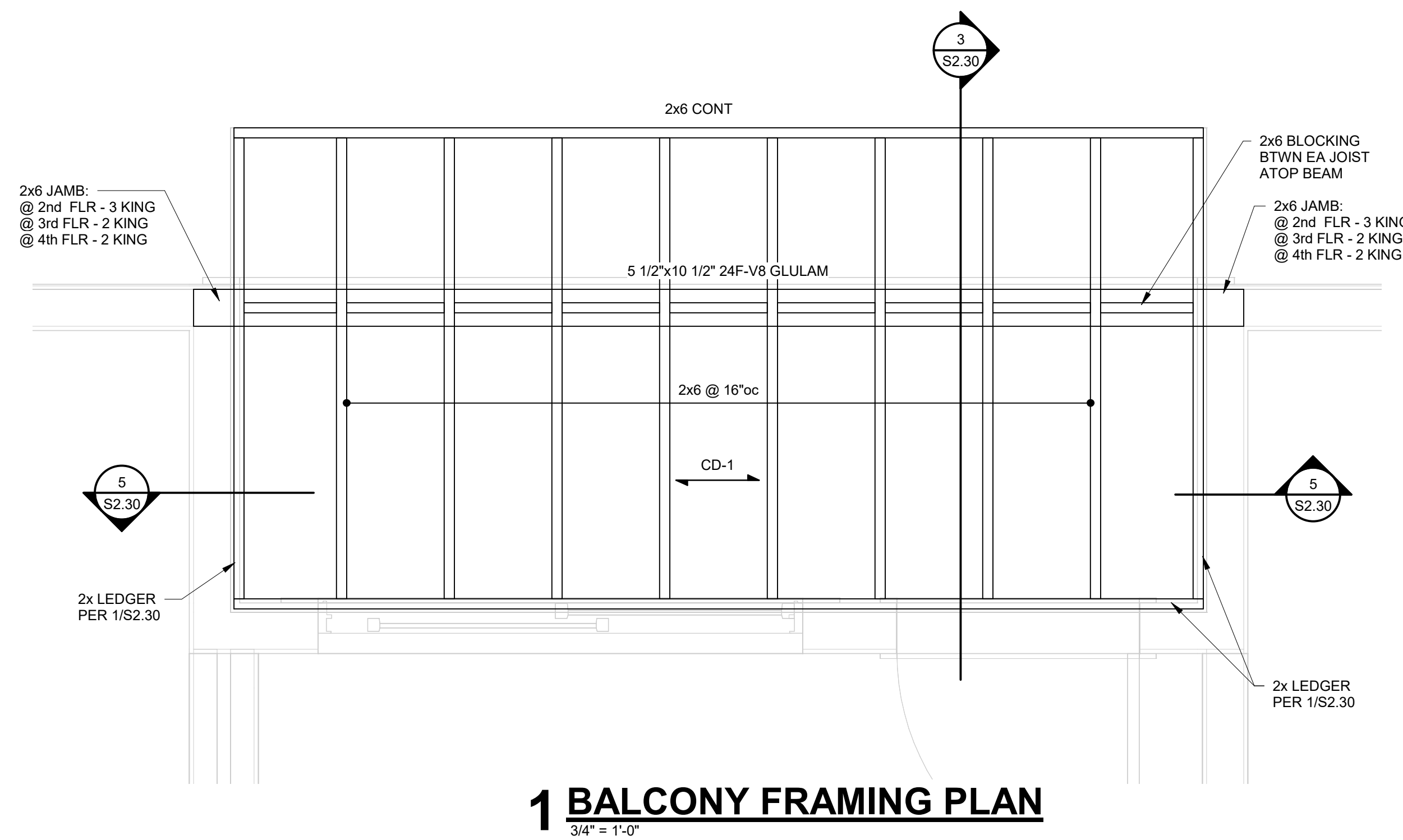
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 Kansas City, MO 64111 www.bdc-engrs.com

SHEET TITLE

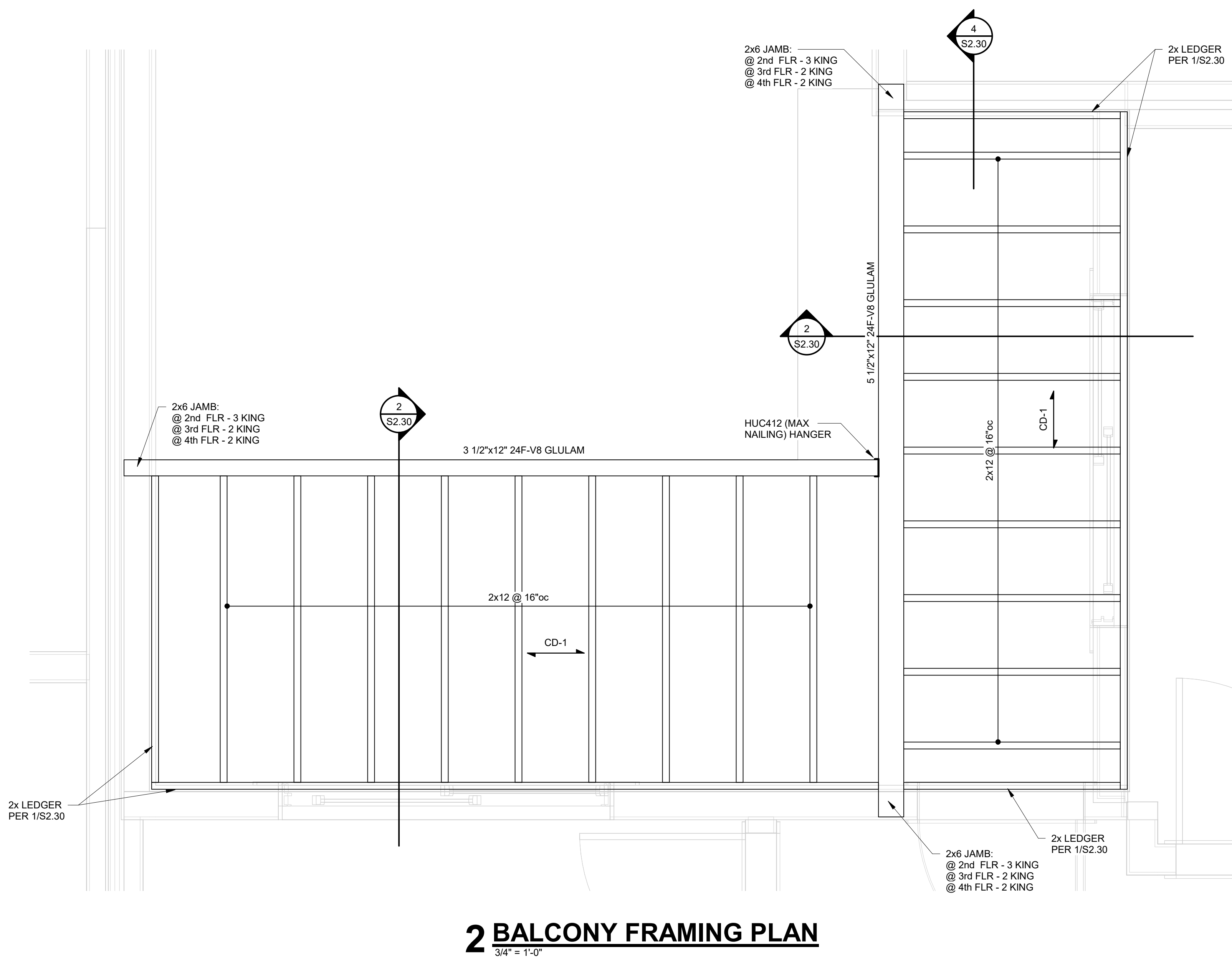
BALCONY FRAMING PLANS

SHEET NUMBER

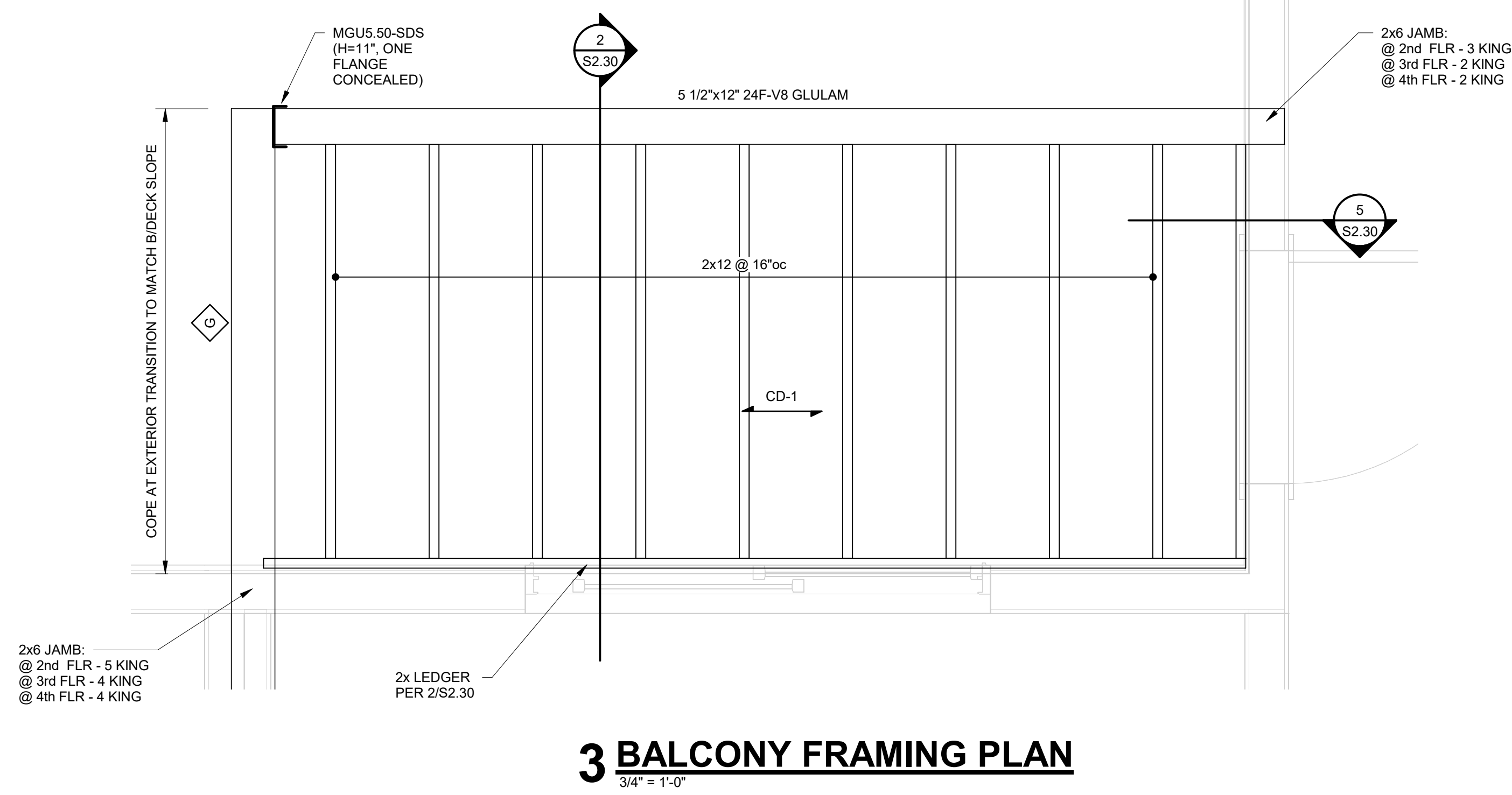
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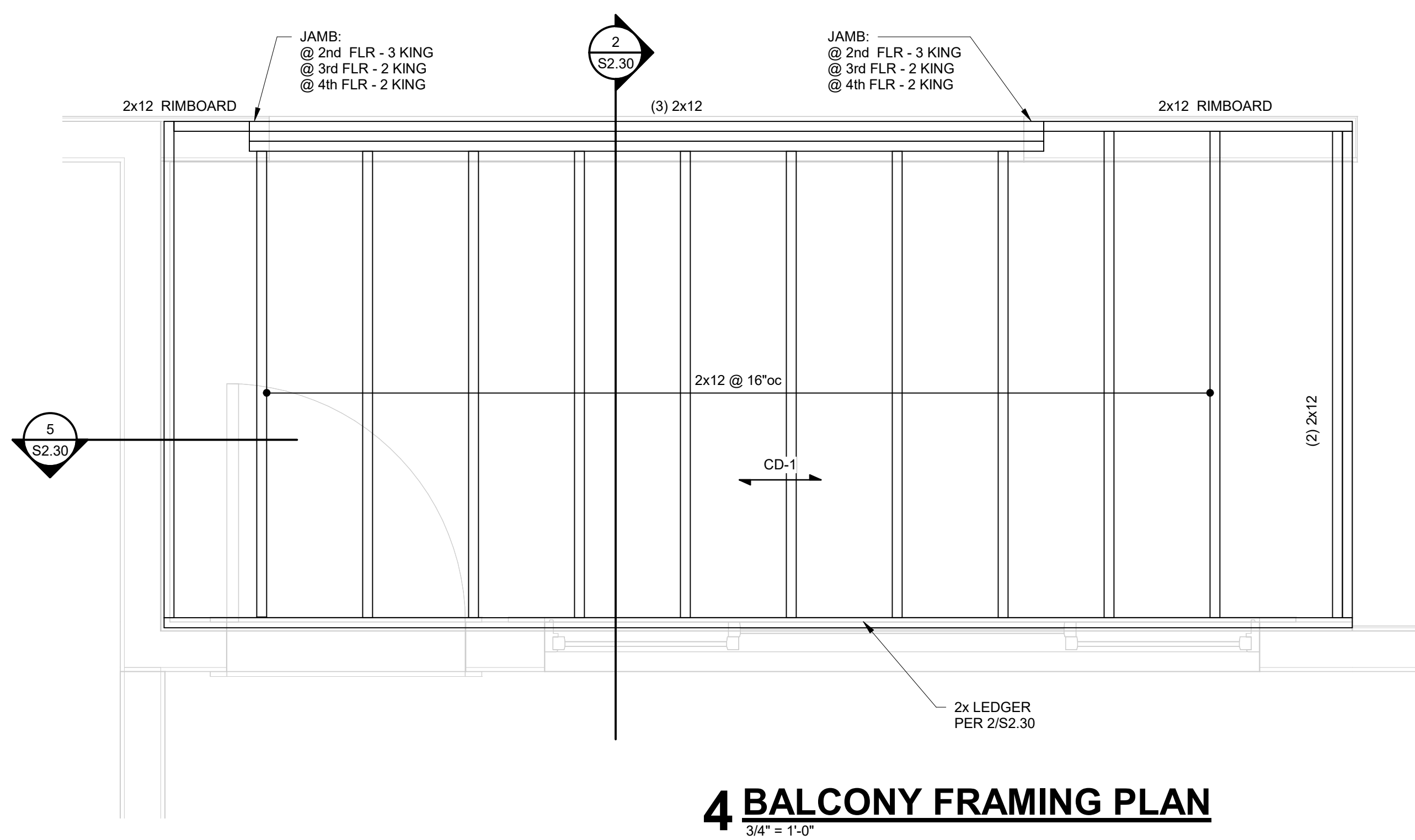
**1 BALCONY FRAMING PLAN**  
 3/4" = 1'-0"



**2 BALCONY FRAMING PLAN**  
 3/4" = 1'-0"



**3 BALCONY FRAMING PLAN**  
 3/4" = 1'-0"



**4 BALCONY FRAMING PLAN**  
 3/4" = 1'-0"

- BALCONY FRAMING NOTES:
- ALL EXTERIOR FRAMING MATERIAL SHALL BE MOISTURE-RESISTANT TREATED.
  - REFER TO GENERAL NOTE "11.1" FOR BALCONY FRAMING DIMENSIONAL LUMBER MATERIAL.
  - REFER TO GENERAL NOTE "11.1" FOR BALCONY FRAMING GLULAM MATERIAL SPECIFICATIONS.
  - REFER TO STRUCTURAL BUILDING PLANS FOR BUILDING FRAMING INFORMATION.
  - REFER TO HANGER SCHEDULE ON S0.02 FOR TYPICAL BALCONY MEMBER HANGERS UNLESS NOTED OTHERWISE.



# PARAGON STAR NORTH VILLAGE

3200 NW PARAGON PKWY -  
LEES SUMMIT, MO 64081

Project No.: 18017.19050.07.19050.08  
Date: 06.28.2022  
Issued For: FOR CONSTRUCTION

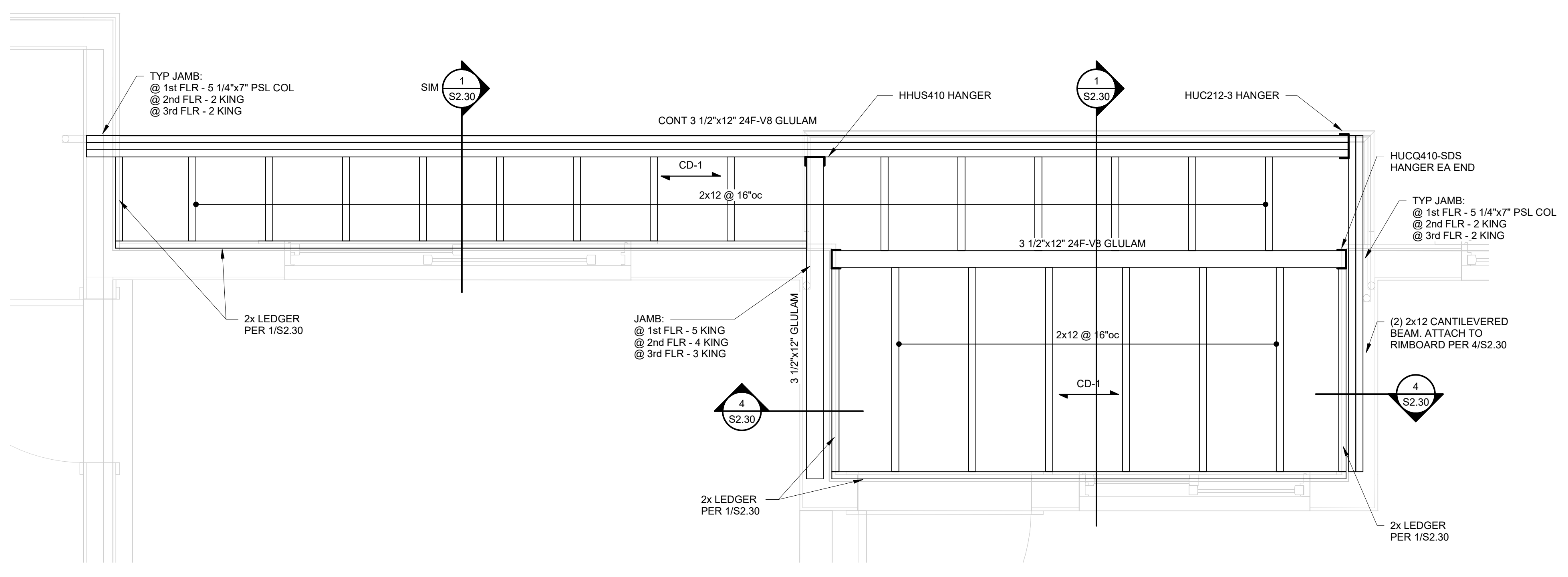
REVISIONS		
No.	Date	Description
3	7.20.22	ADDENDUM 2

### REGISTRATION



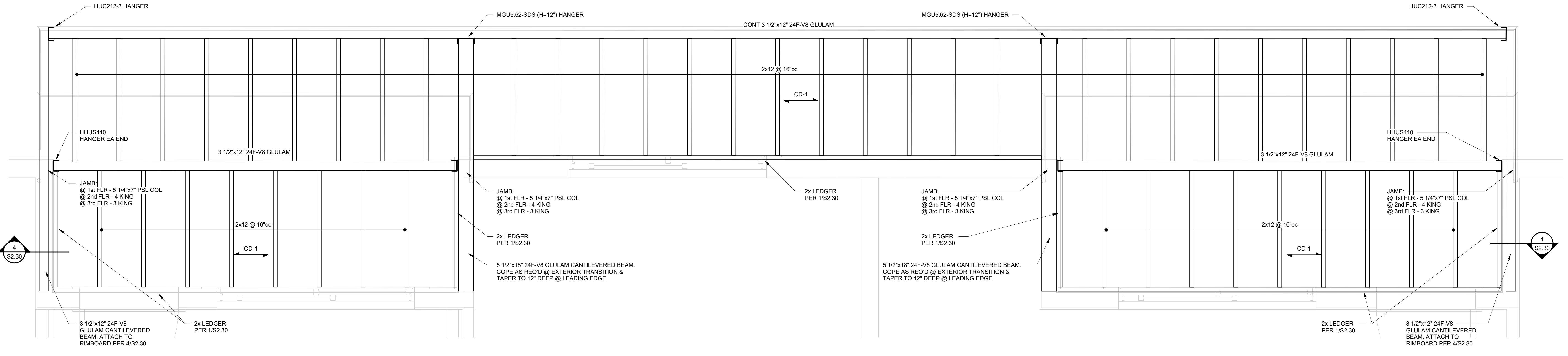
### PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS



## 1 BALCONY FRAMING PLAN

3/4" = 1'-0"



## 2 BALCONY FRAMING PLAN

3/4" = 1'-0"

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2	7.11.22	ADDENDUM 1

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CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
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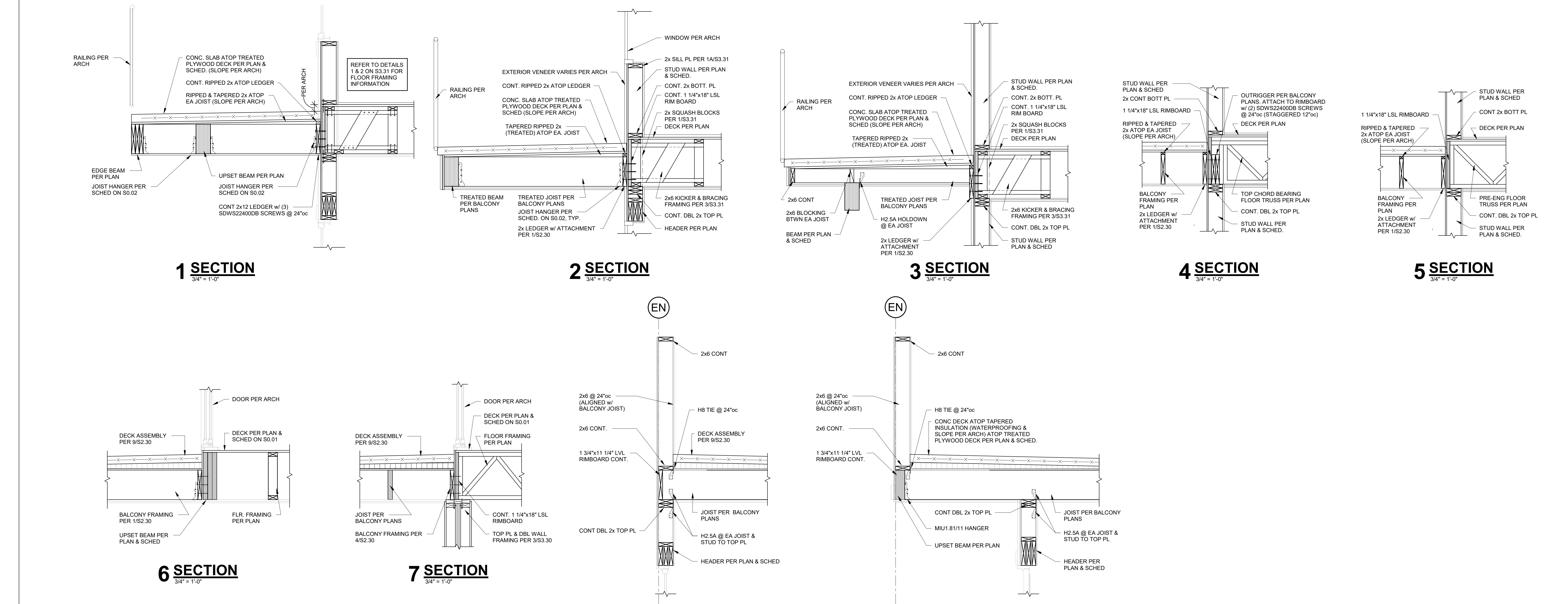
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SHEET TITLE

**BALCONY FRAMING DETAILS**

SHEET NUMBER

**S2.30**



REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1

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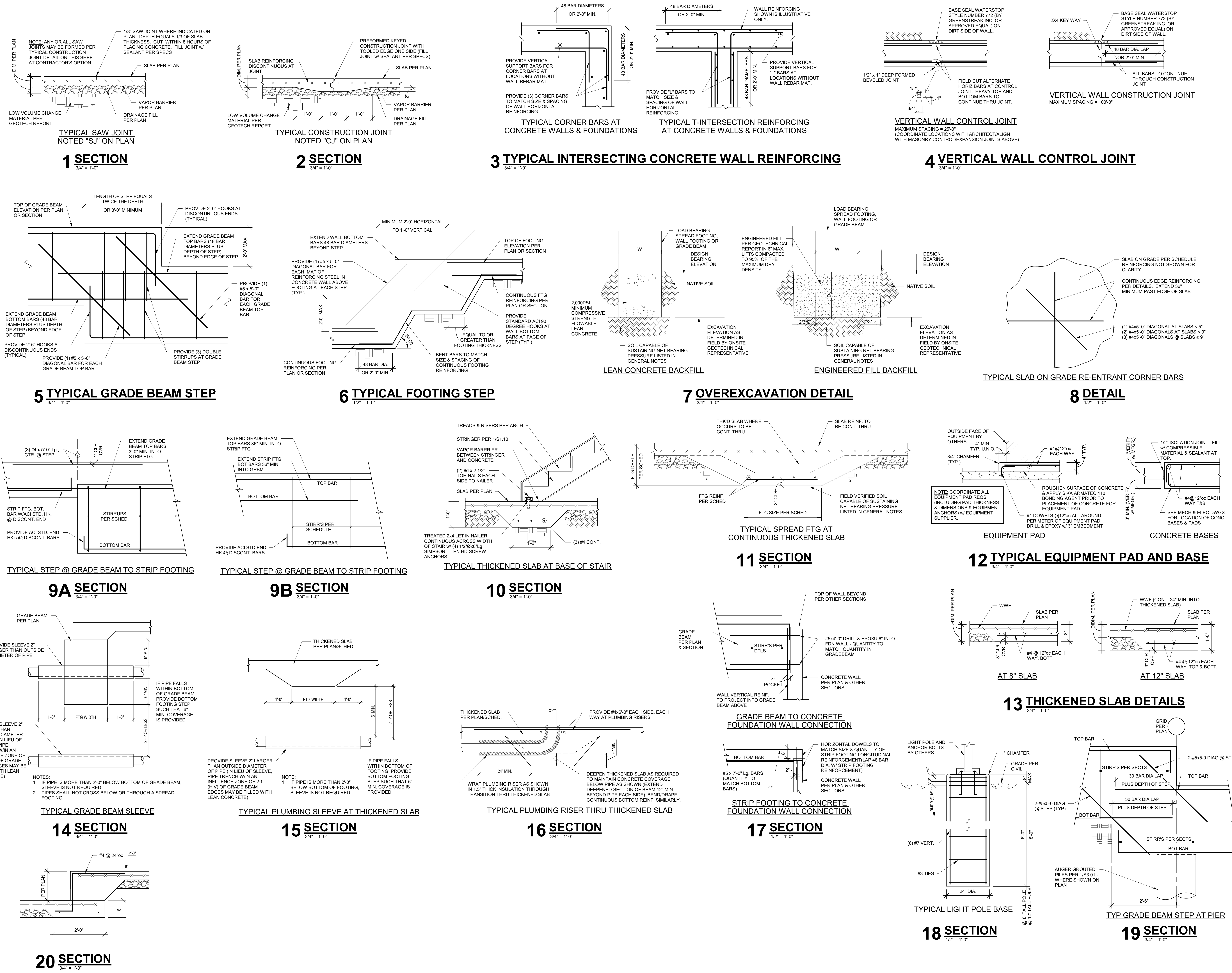
PROJECT TEAM	
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CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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SHEET TITLE  
**TYPICAL FOUNDATION DETAILS**

SHEET NUMBER

**S3.00**

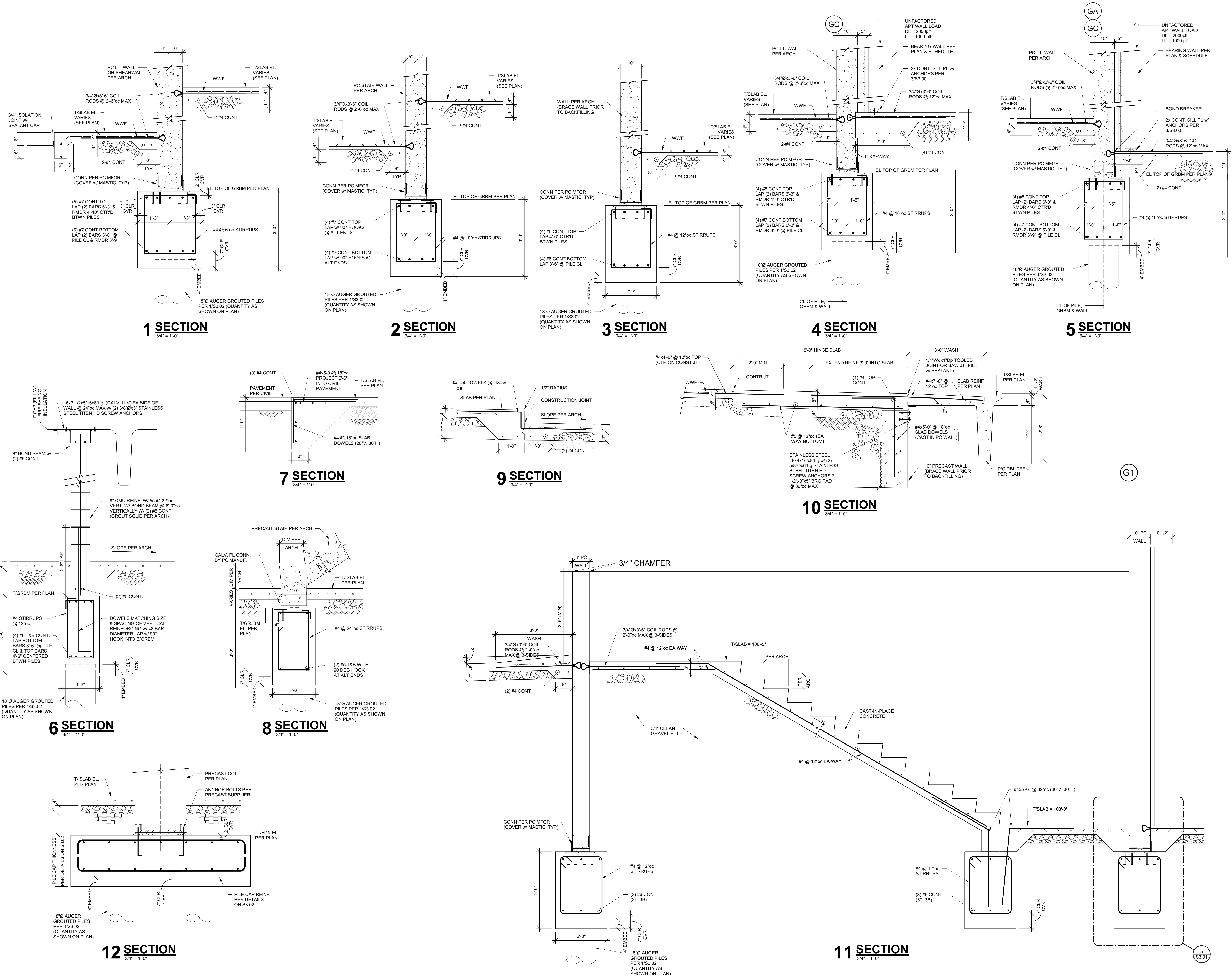


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ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
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STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
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FIRE PROTECTION	LATIMER SOMMERS
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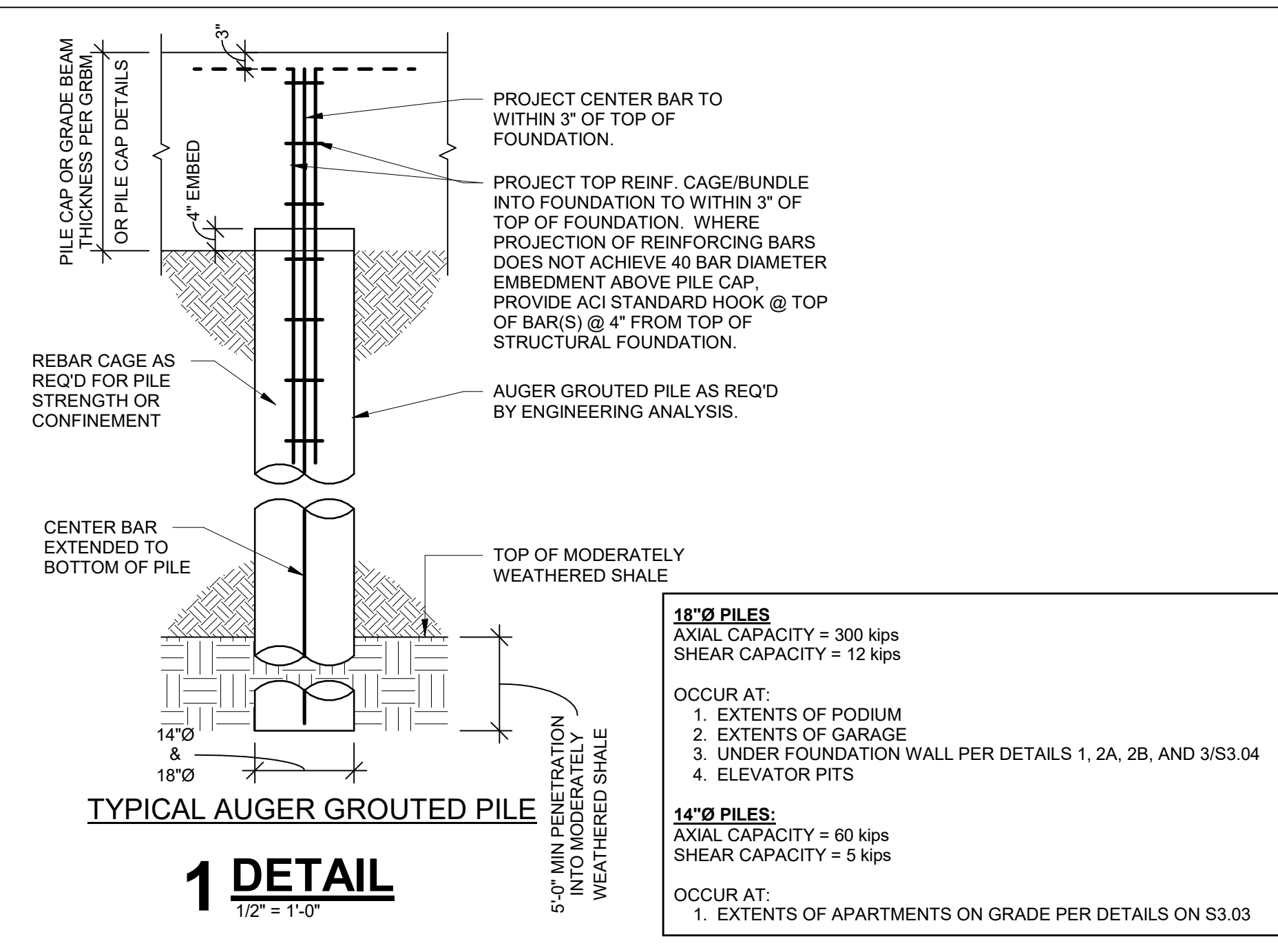
REVISIONS

No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2



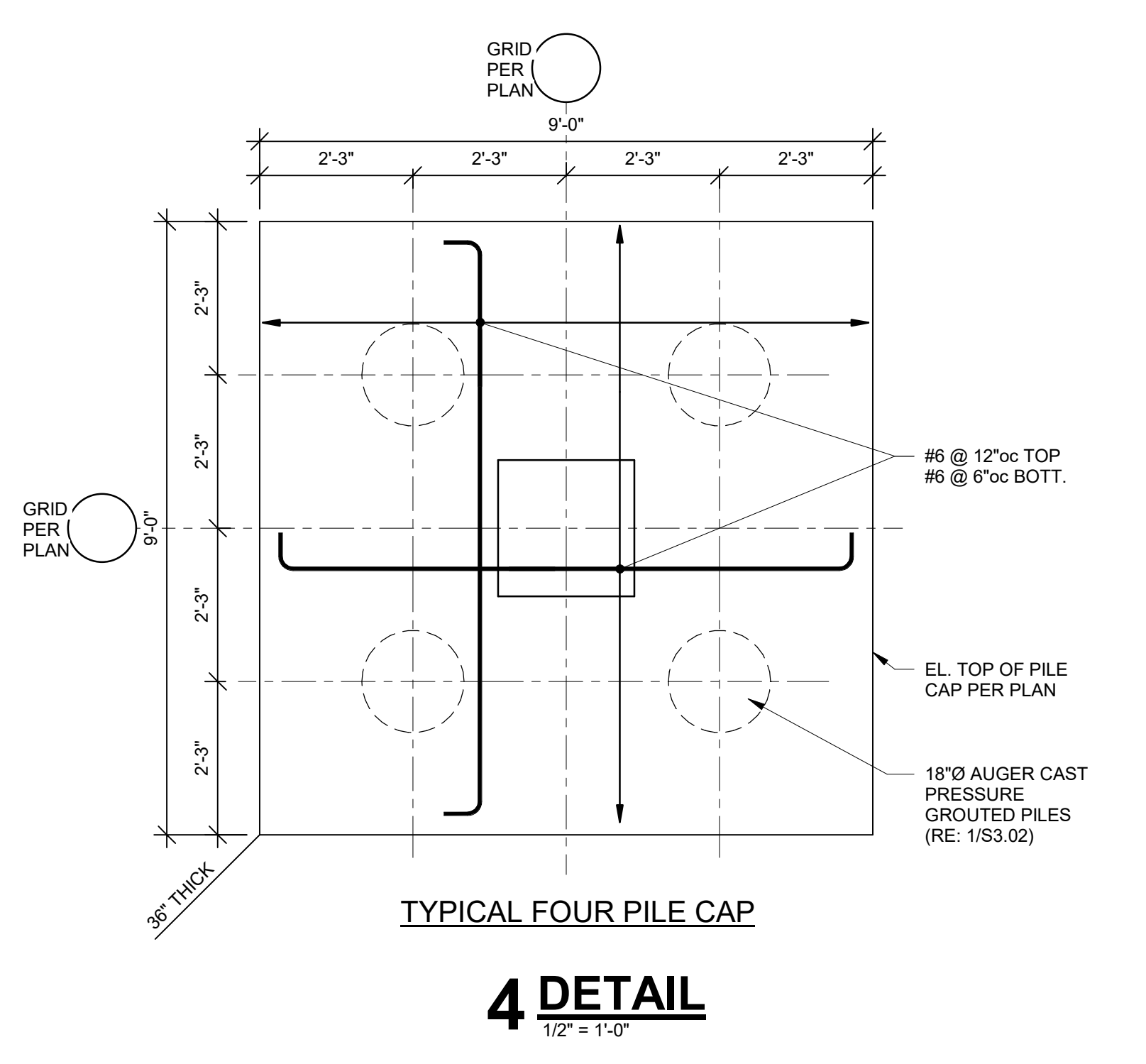
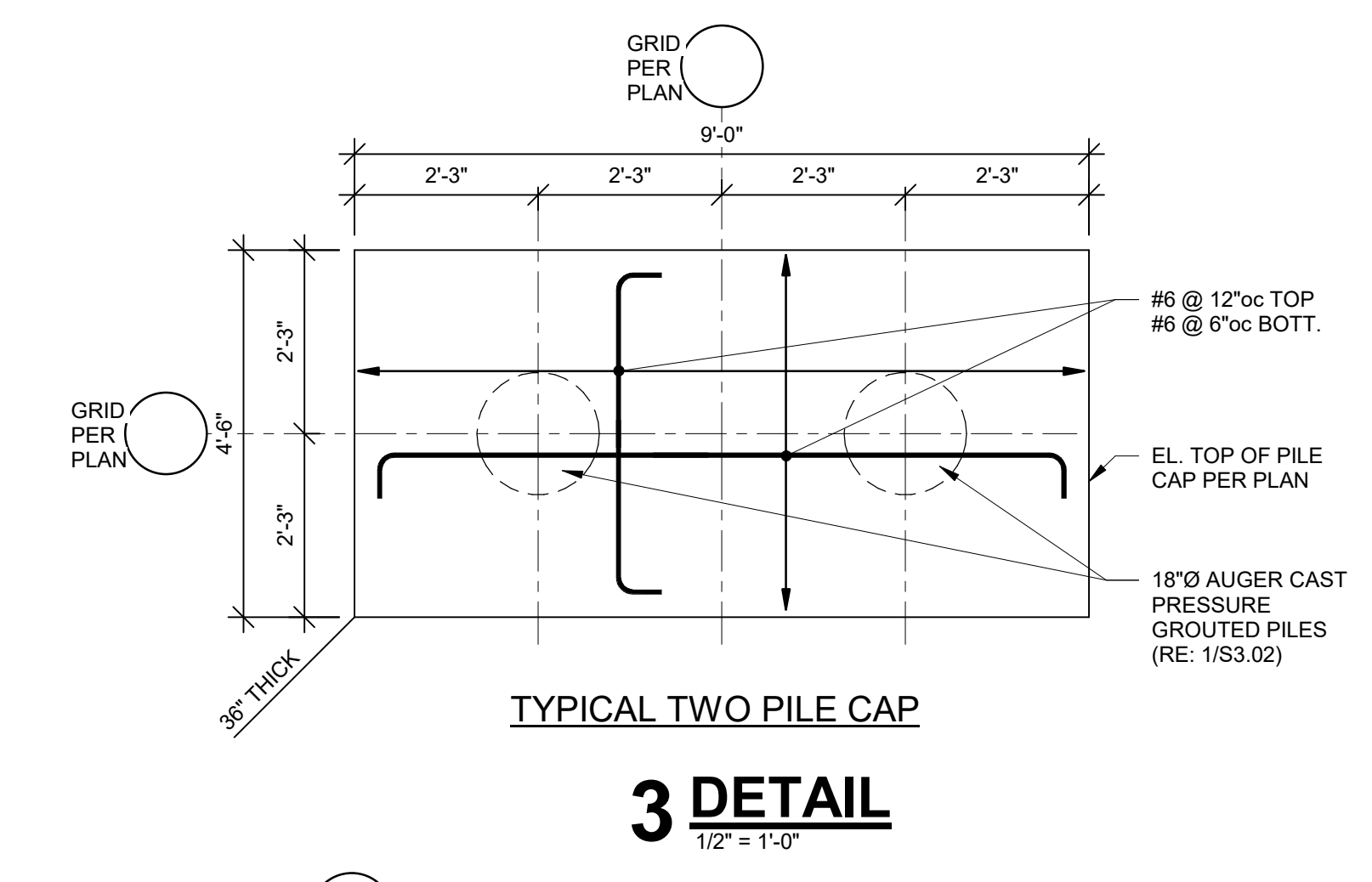
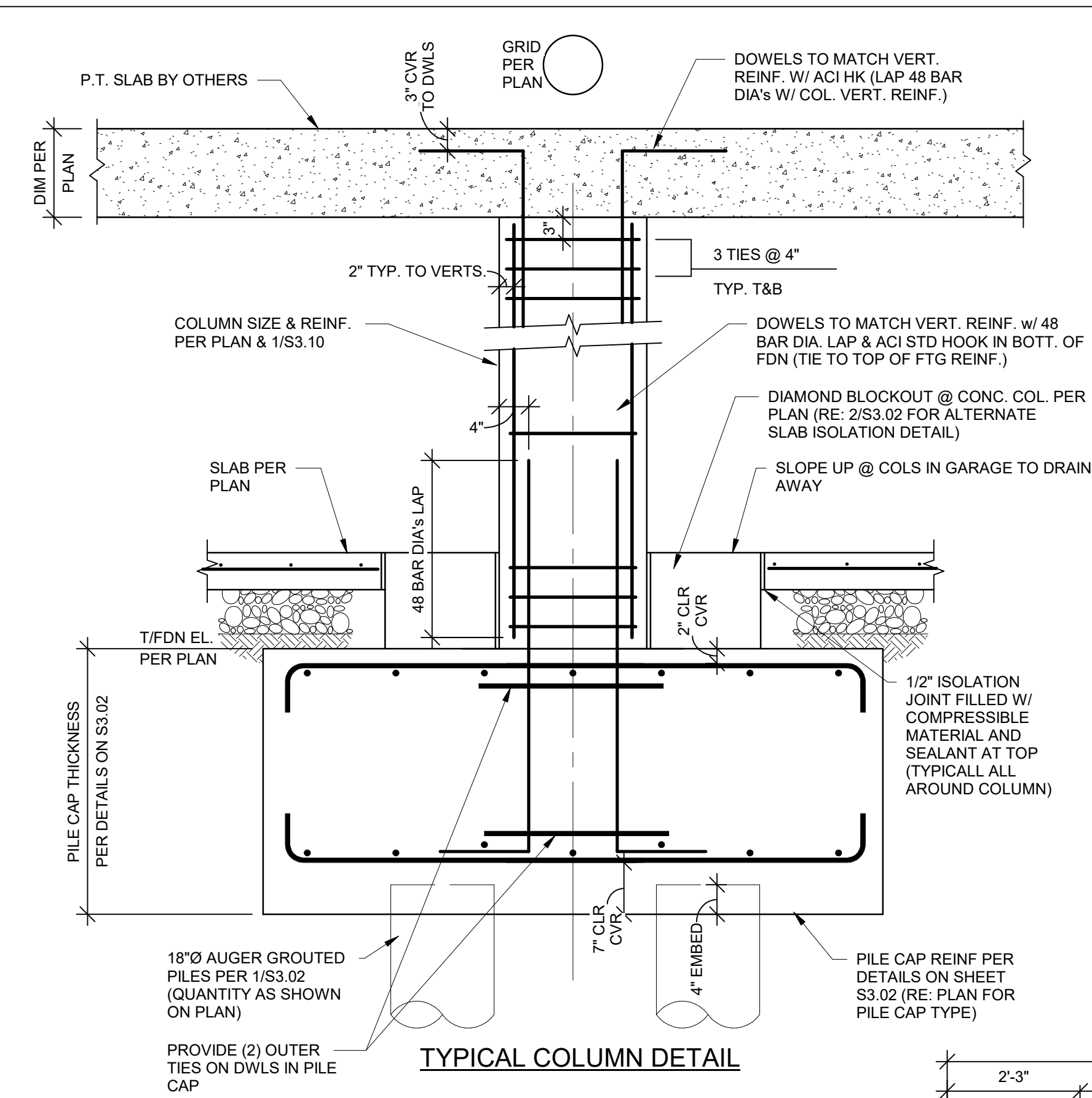
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
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**18"Ø PILES**  
AXIAL CAPACITY = 300 kips  
SHEAR CAPACITY = 12 kips  
OCCUR AT:  
1. EXTENTS OF PODIUM  
2. EXTENTS OF GARAGE  
3. UNDER FOUNDATION WALL PER DETAILS 1, 2A, 2B, AND 3/S3.04  
4. ELEVATOR PITS

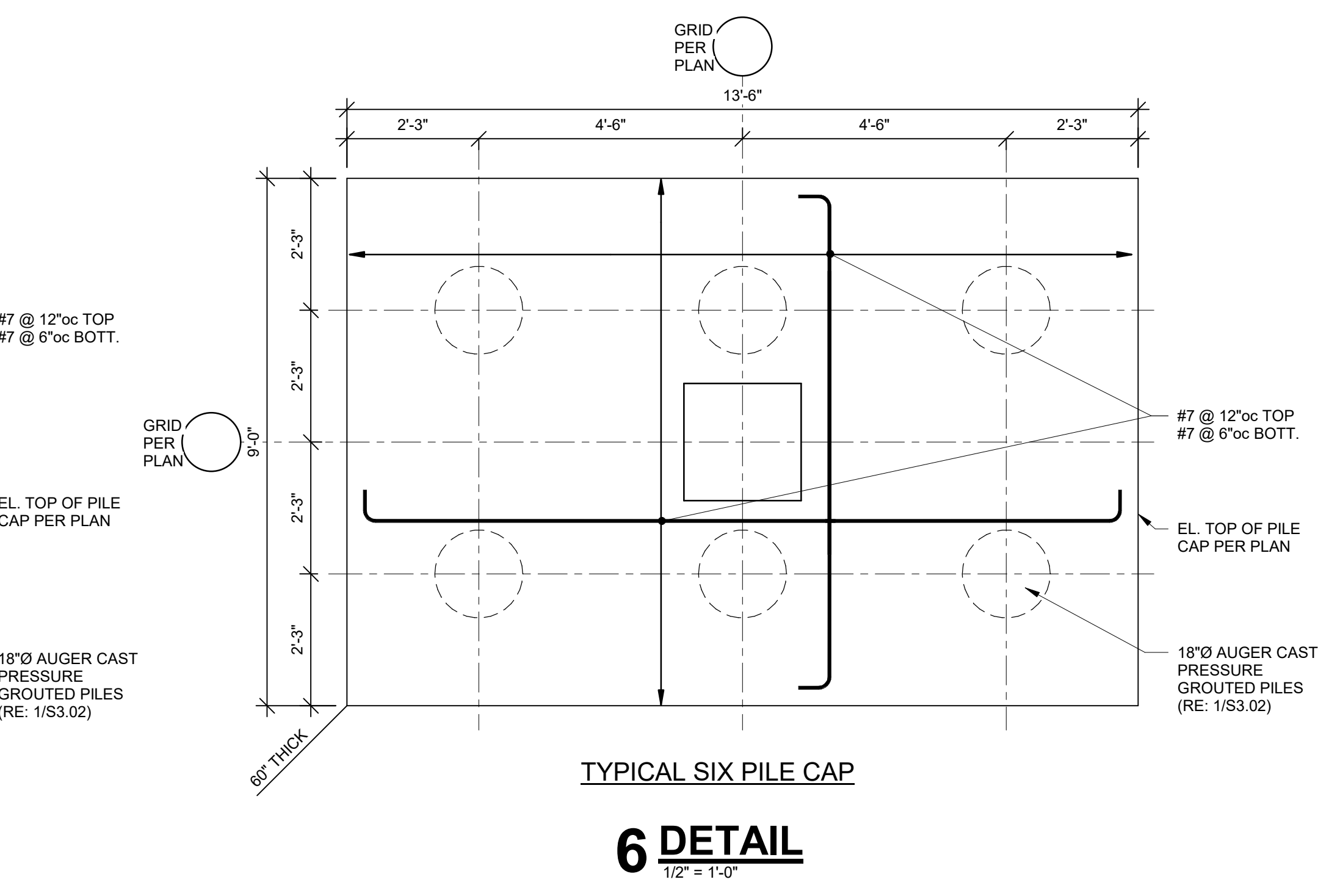
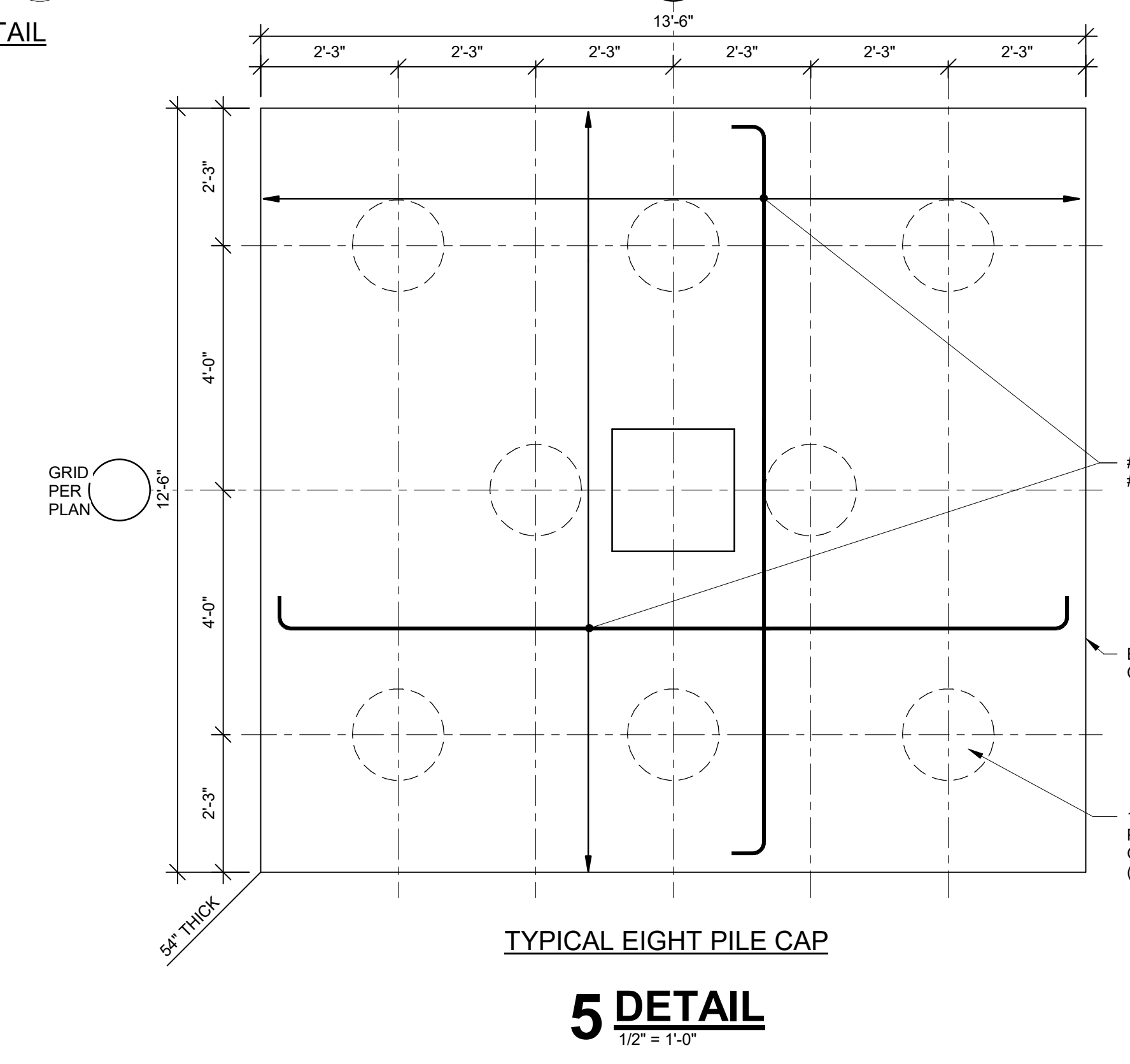
**14"Ø PILES**  
AXIAL CAPACITY = 60 kips  
SHEAR CAPACITY = 5 kips  
OCCUR AT:  
1. EXTENTS OF APARTMENTS ON GRADE PER DETAILS ON S3.03



**PILE CAP SCHEDULE**

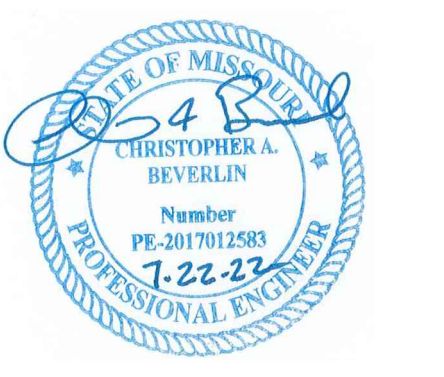
TYPE	FOOTING SIZE (FT.) THICKNESS (IN.)	QTY/SIZE OF BARS EACH WAY
3.5	3'-6" x 3'-6" x 30" w/ 14"Ø PILE	#5 @ 6"oc BOTTOM / #5 @ 12"oc TOP
4.3	9'-0" x 4'-6" x 36"	#6 @ 6"oc BOTTOM / #6 @ 12"oc TOP
9	9'-0" x 9'-0" x 36"	#7 @ 6"oc BOTTOM / #7 @ 12"oc TOP
9x13.5	9'-0" x 13'-6" x 60"	#7 @ 6"oc BOTTOM / #7 @ 12"oc TOP
12.5x13.5	12'-6" x 13'-6" x 54"	#7 @ 6"oc BOTTOM / #7 @ 12"oc TOP

- NOTE:
- EXTERIOR PILE CAPS SHALL BE POURED MONOLITHIC WITH GRADE BEAMS AND EXTERIOR.
  - PROVIDE #4 @ 12"oc. EACH WAY IN TOP OF FTG. AT ALL MOMENT FRAMES AND AT BRACE BAY COLUMNS.
  - CENTER PILE CAPS ON COLUMNS AND/OR WALL CENTER LINES PER PLAN, UNLESS OTHERWISE NOTED.
  - PROVIDE ACI STANDARD HOOK AT EACH END OF BARS.



REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
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ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

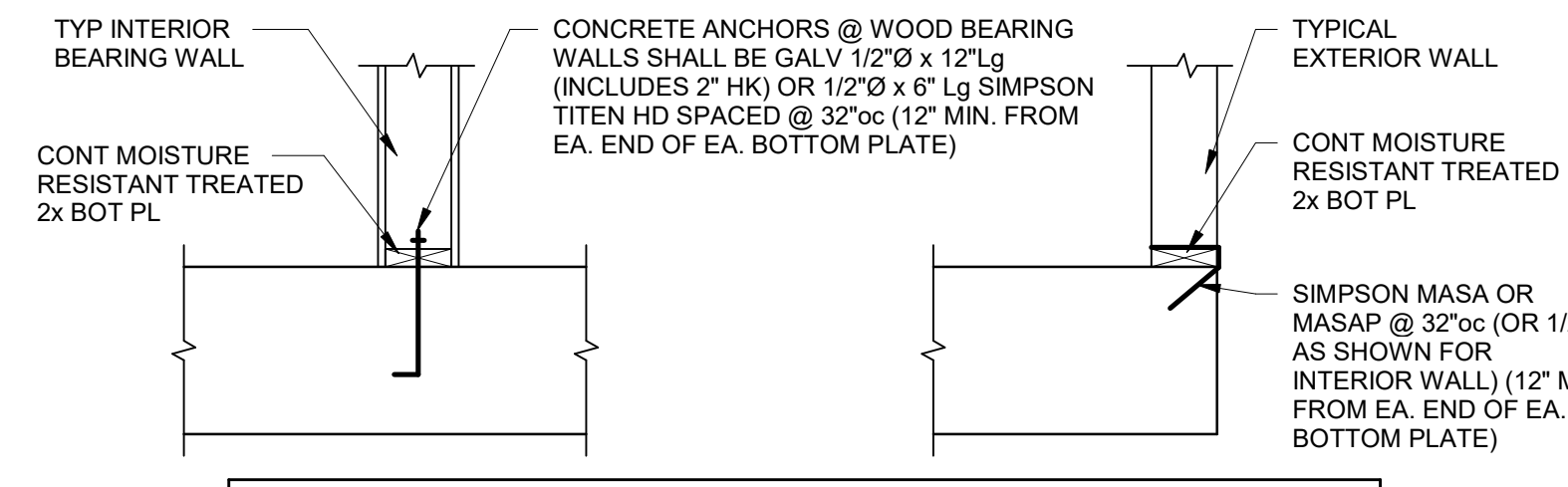
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SHEET TITLE

APARTMENT FOUNDATION DETAILS

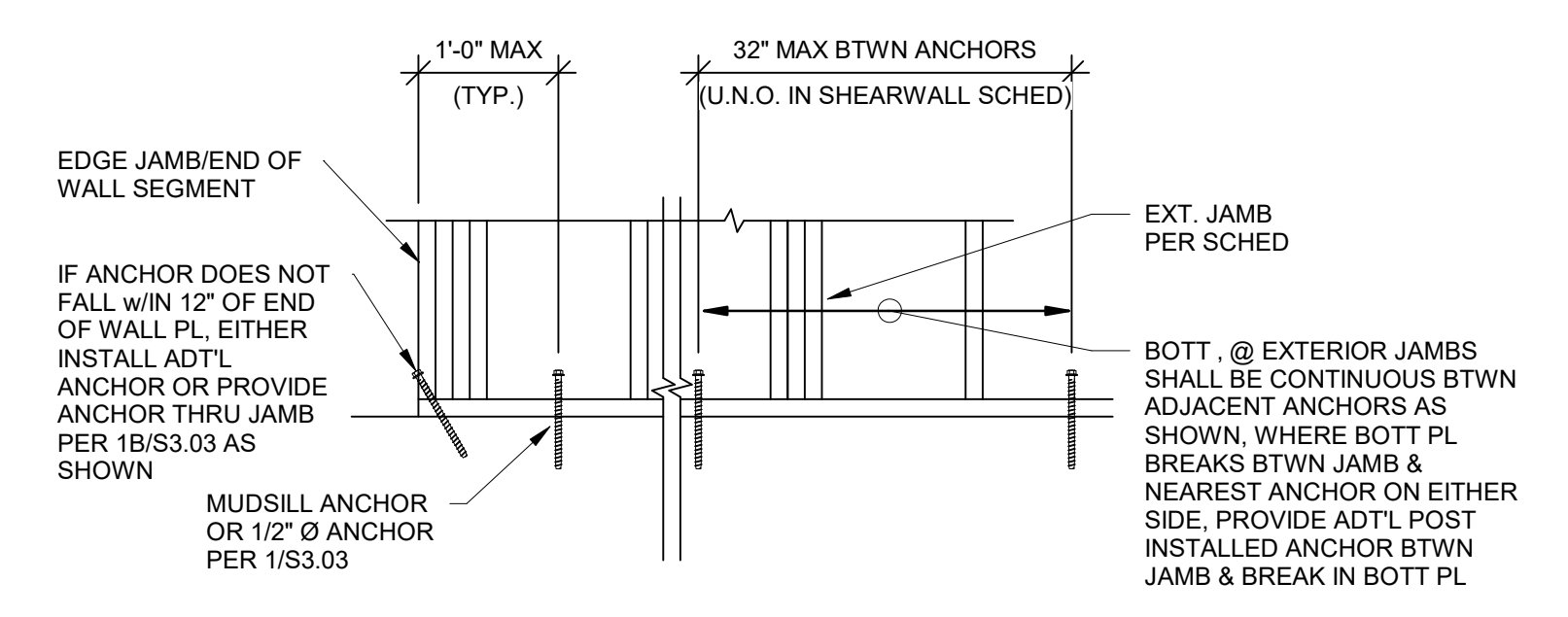
SHEET NUMBER

S3.03



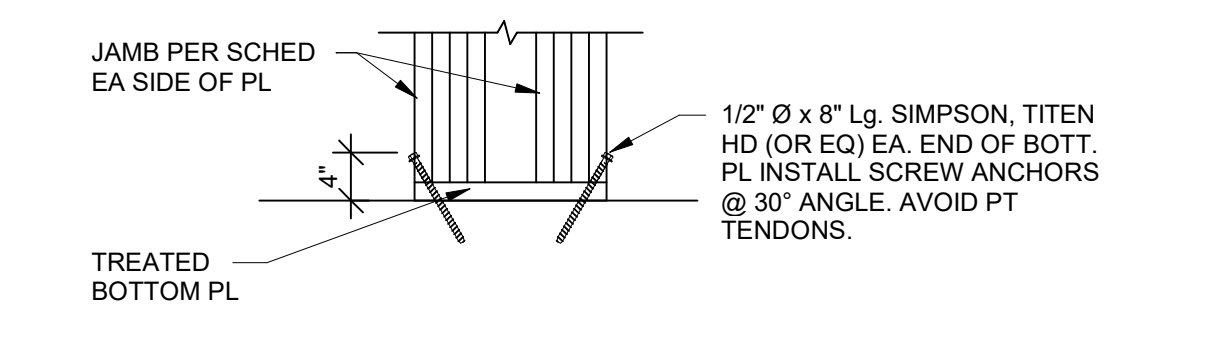
TYPICAL BOTT. PL CONNECTION TO CONCRETE

**1 SECTION**  
3/4" = 1'-0"



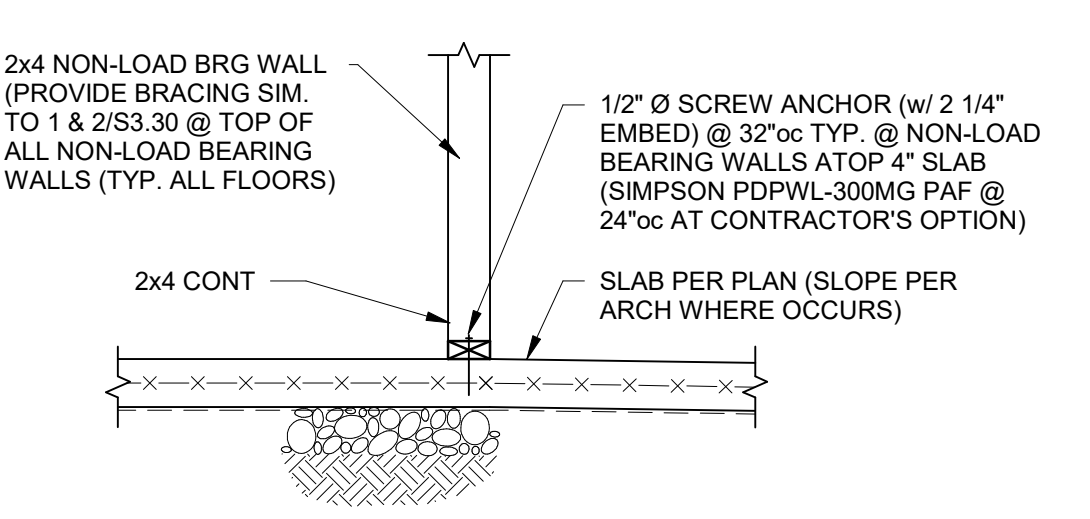
TYPICAL BOTT. PL CONNECTION TO CONCRETE AT EXTERIOR JAMBS & ENDS OF WALL

**1A SECTION**  
3/4" = 1'-0"

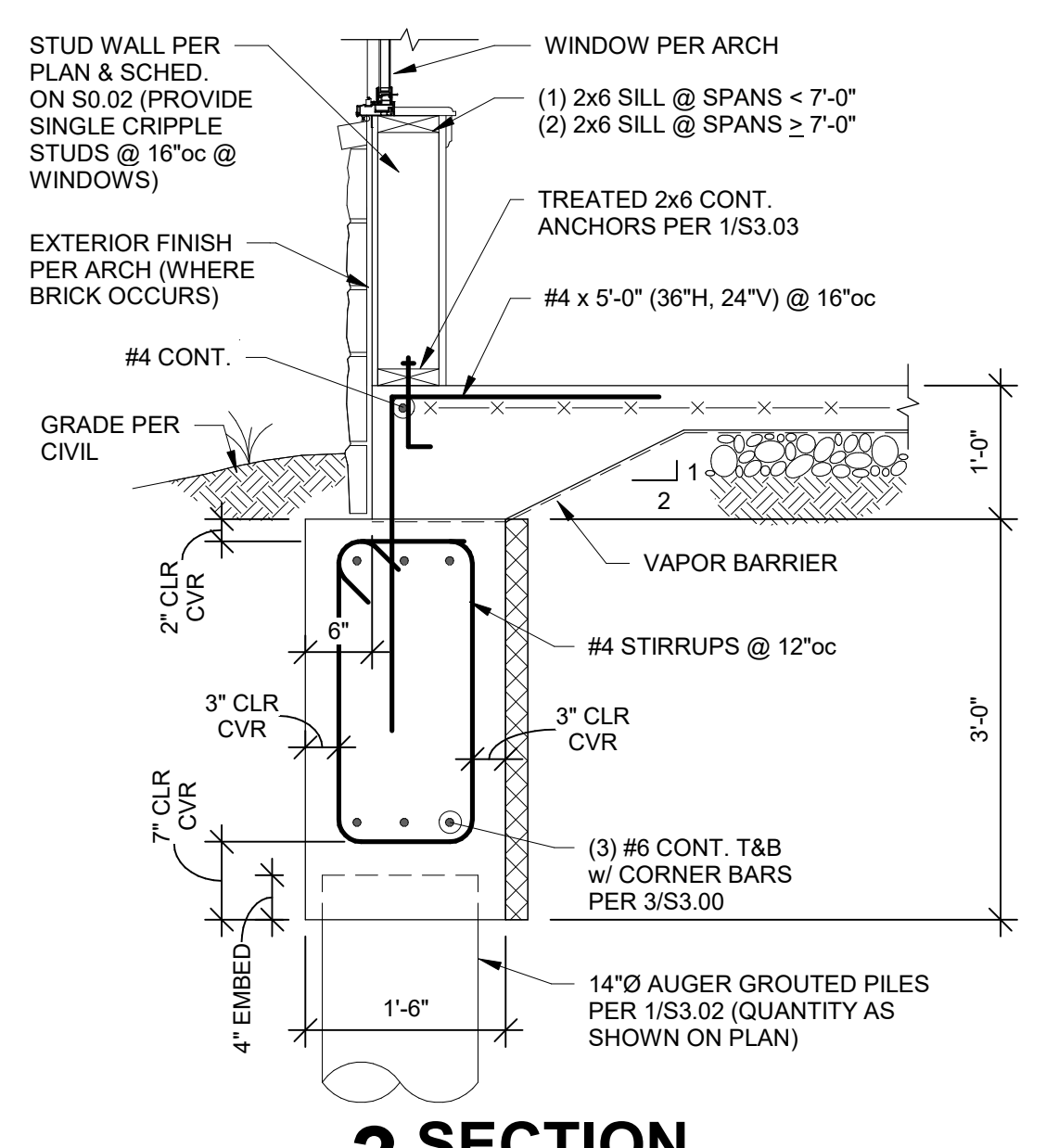


TYPICAL BOTT. PL CONNECTION TO CONCRETE AT SHORT PL SEGMENTS & JAMBS

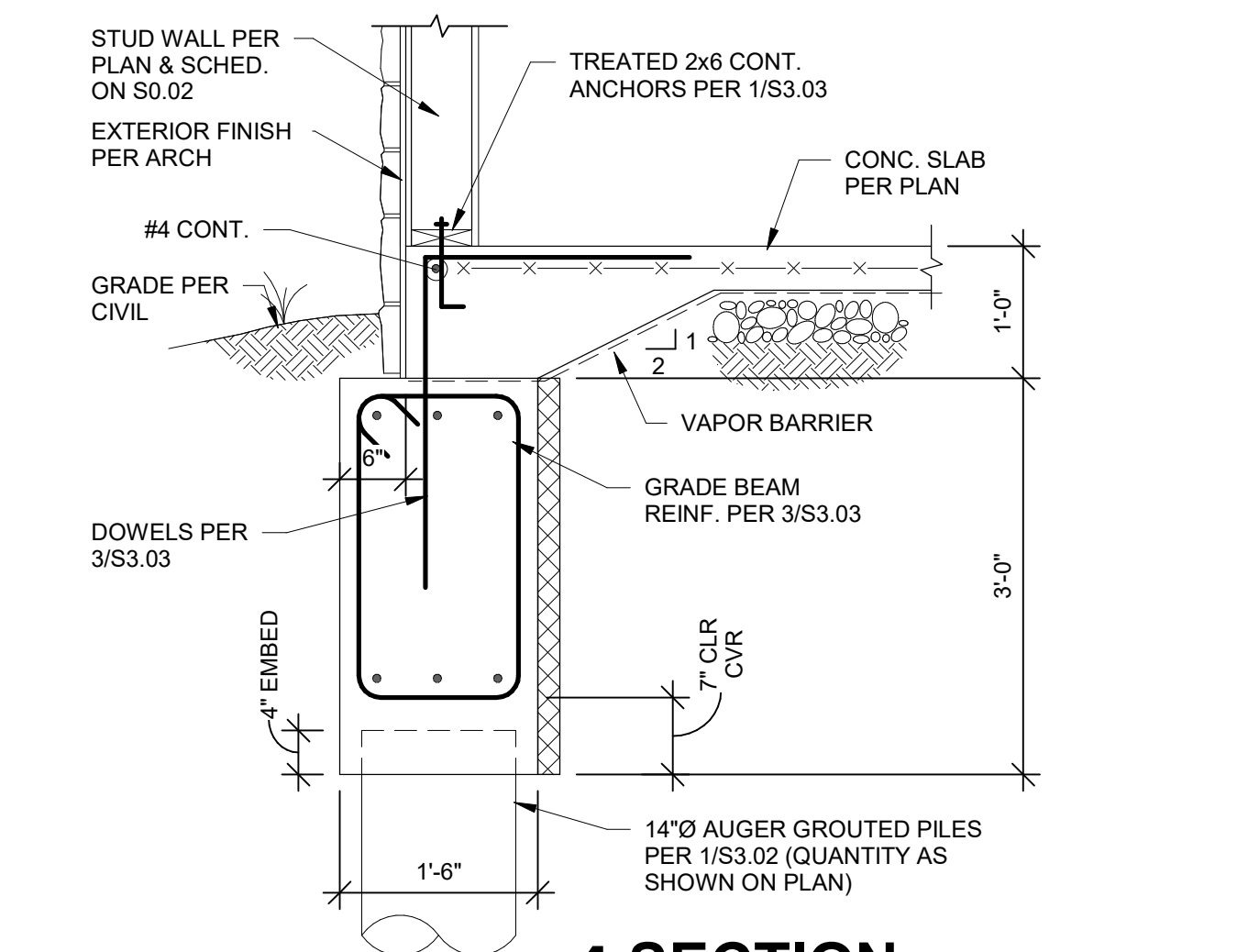
**1B SECTION**  
3/4" = 1'-0"



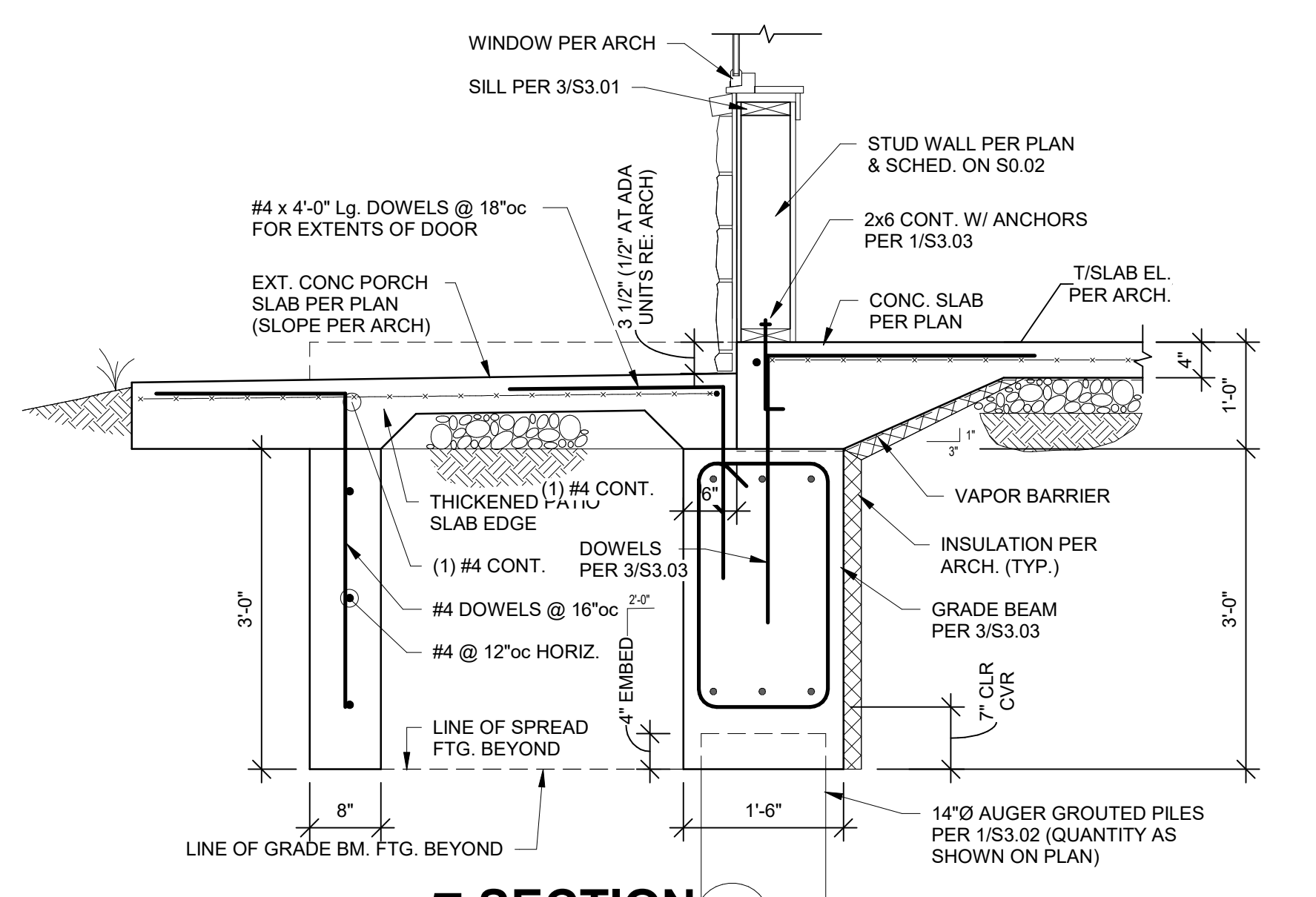
**2 SECTION**  
3/4" = 1'-0"



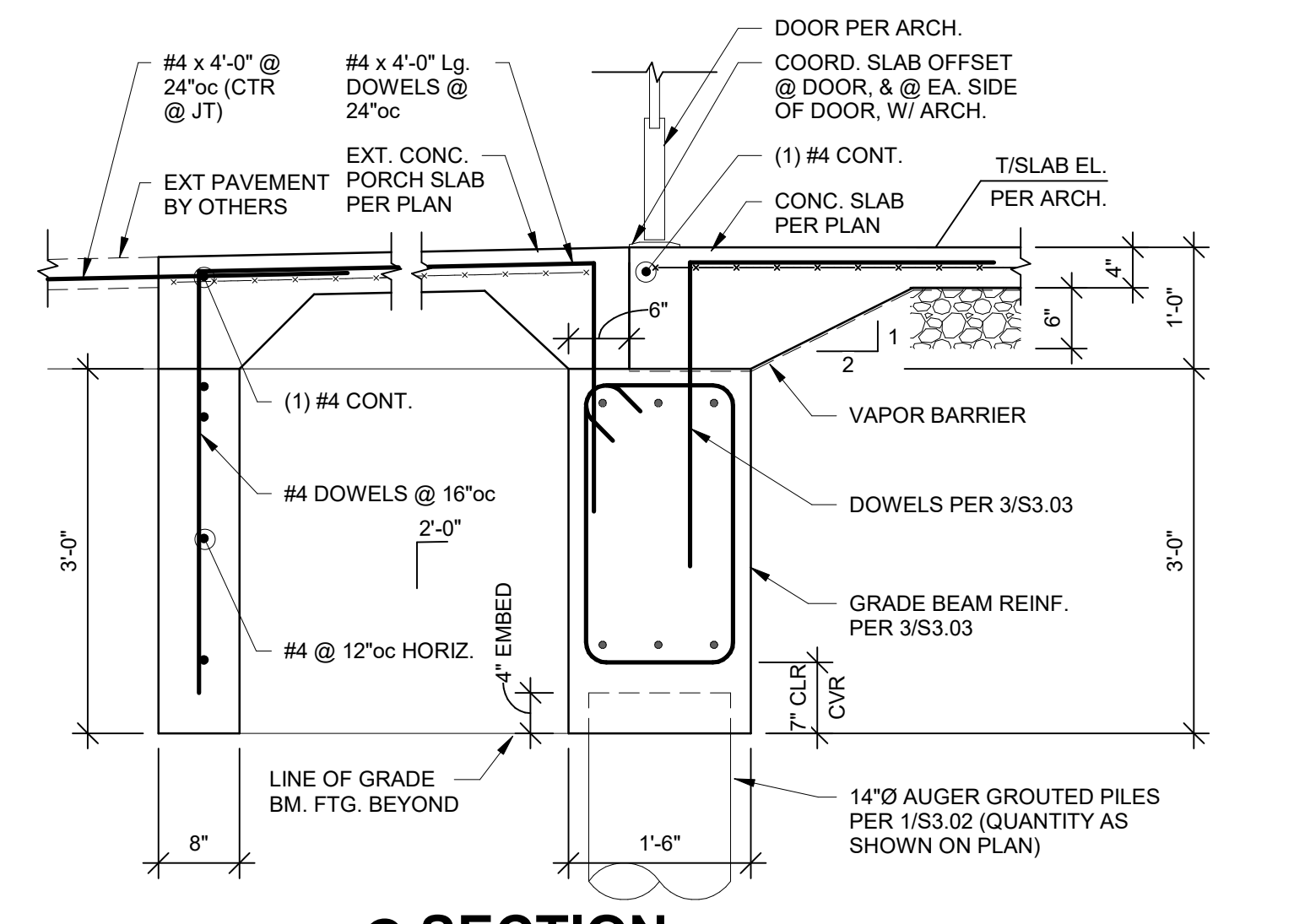
**3 SECTION**  
3/4" = 1'-0"



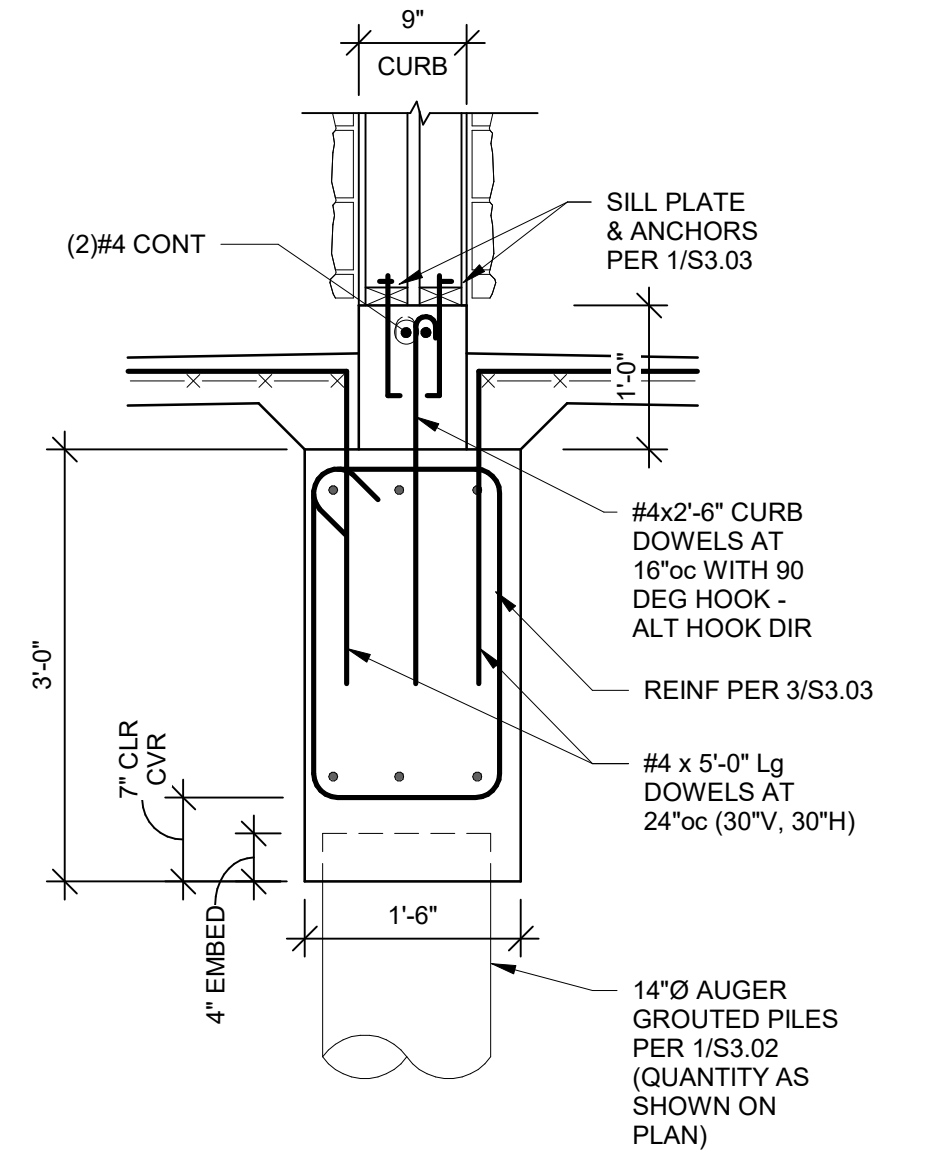
**4 SECTION**  
3/4" = 1'-0"



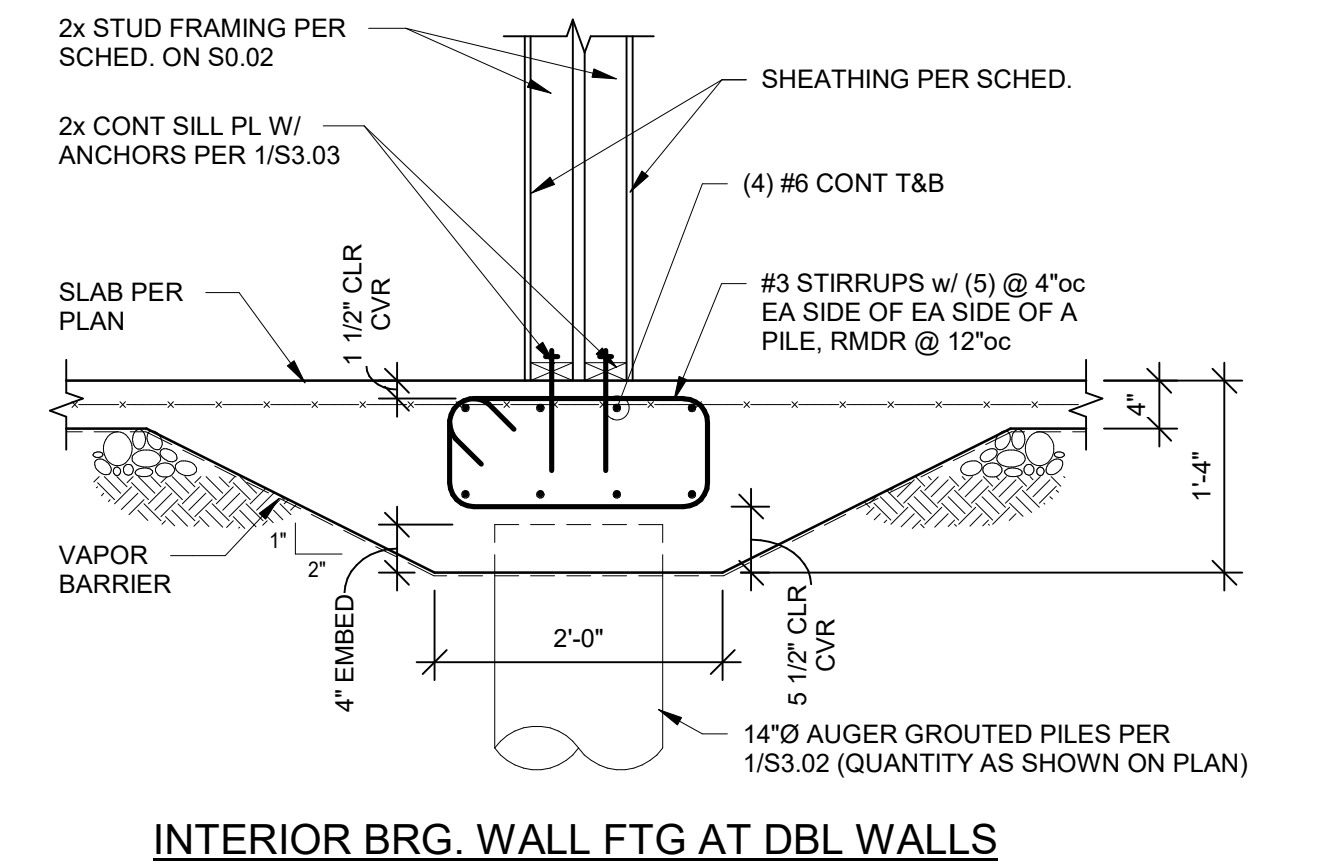
**5 SECTION**  
3/4" = 1'-0"



**6 SECTION**  
3/4" = 1'-0"

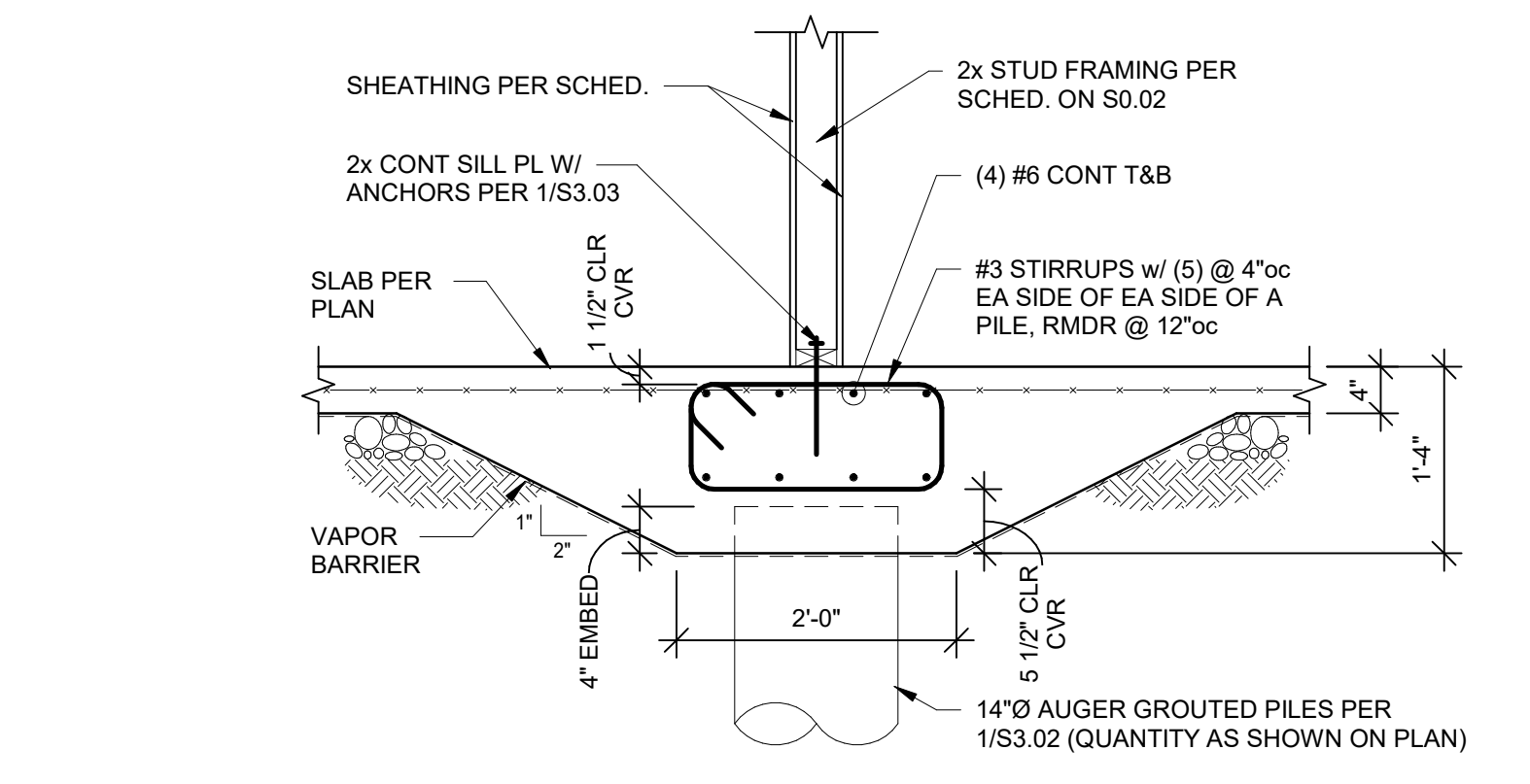


**7 SECTION**  
3/4" = 1'-0"



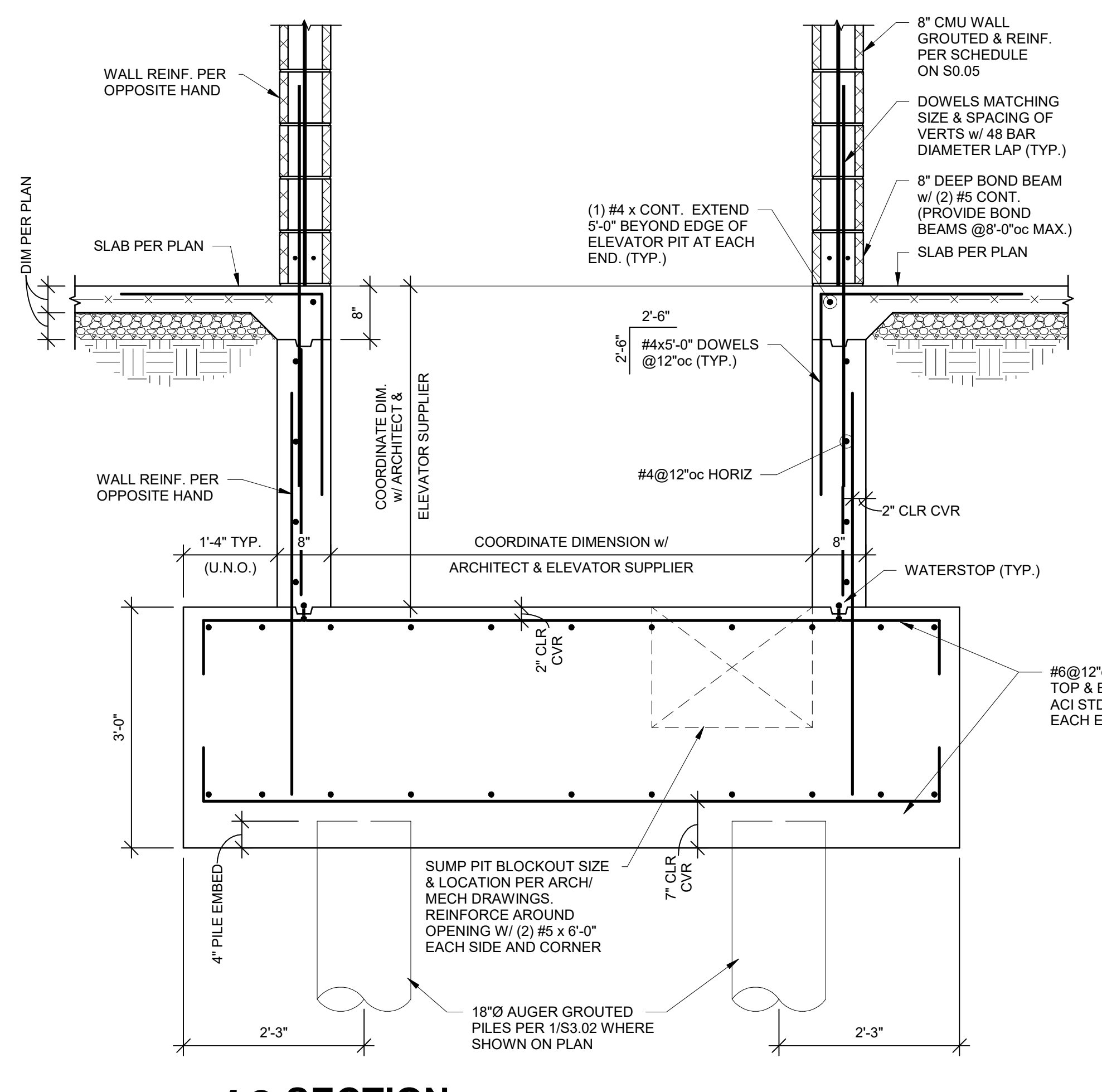
INTERIOR BRG. WALL FTG AT DBL WALLS

**8 SECTION**  
3/4" = 1'-0"

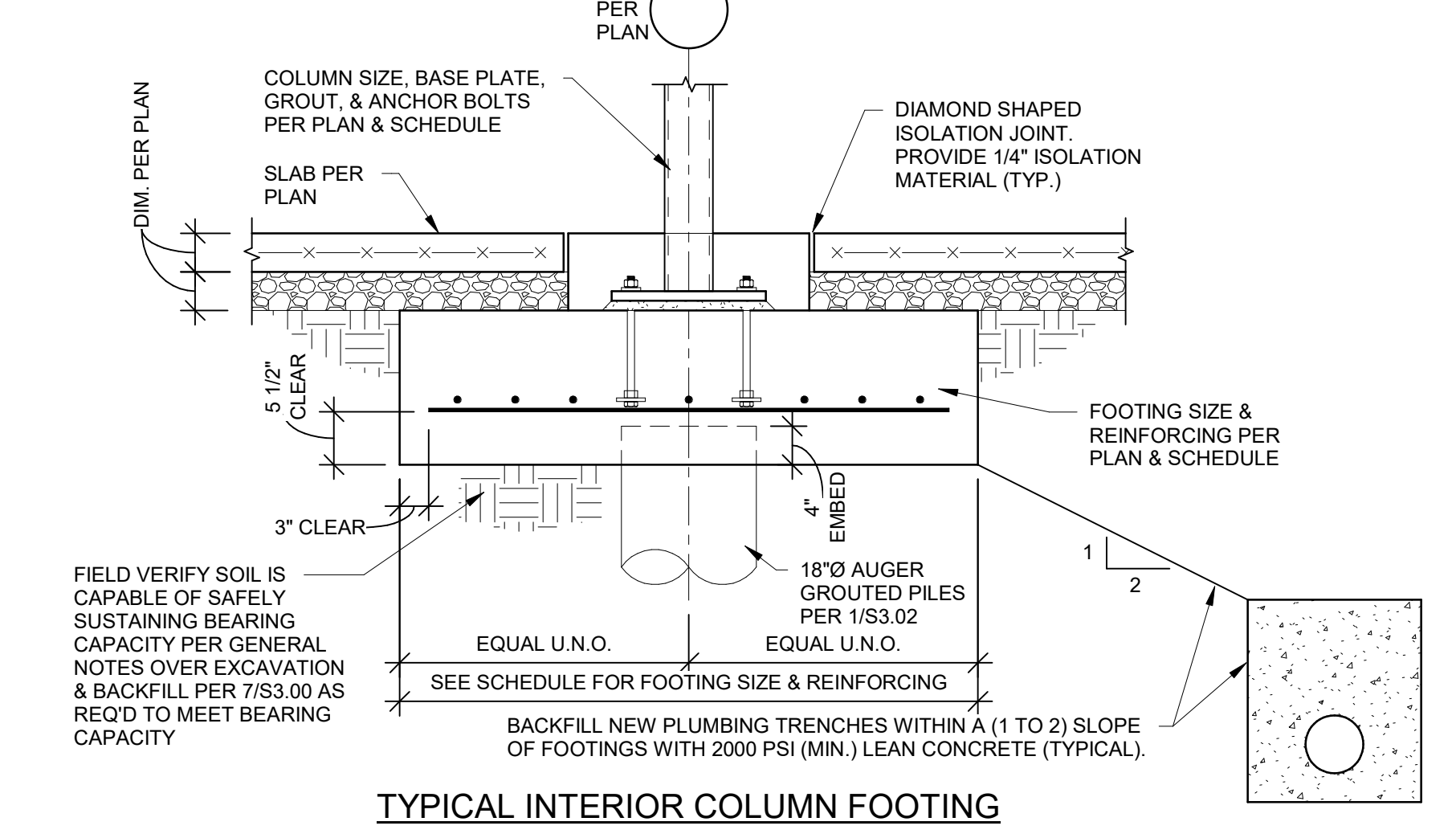


INTERIOR BRG. WALL FTG AT SINGLE WALLS

**9 SECTION**  
3/4" = 1'-0"



**10 SECTION**  
3/4" = 1'-0"



TYPICAL INTERIOR COLUMN FOOTING

**11 SECTION**  
3/4" = 1'-0"





REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

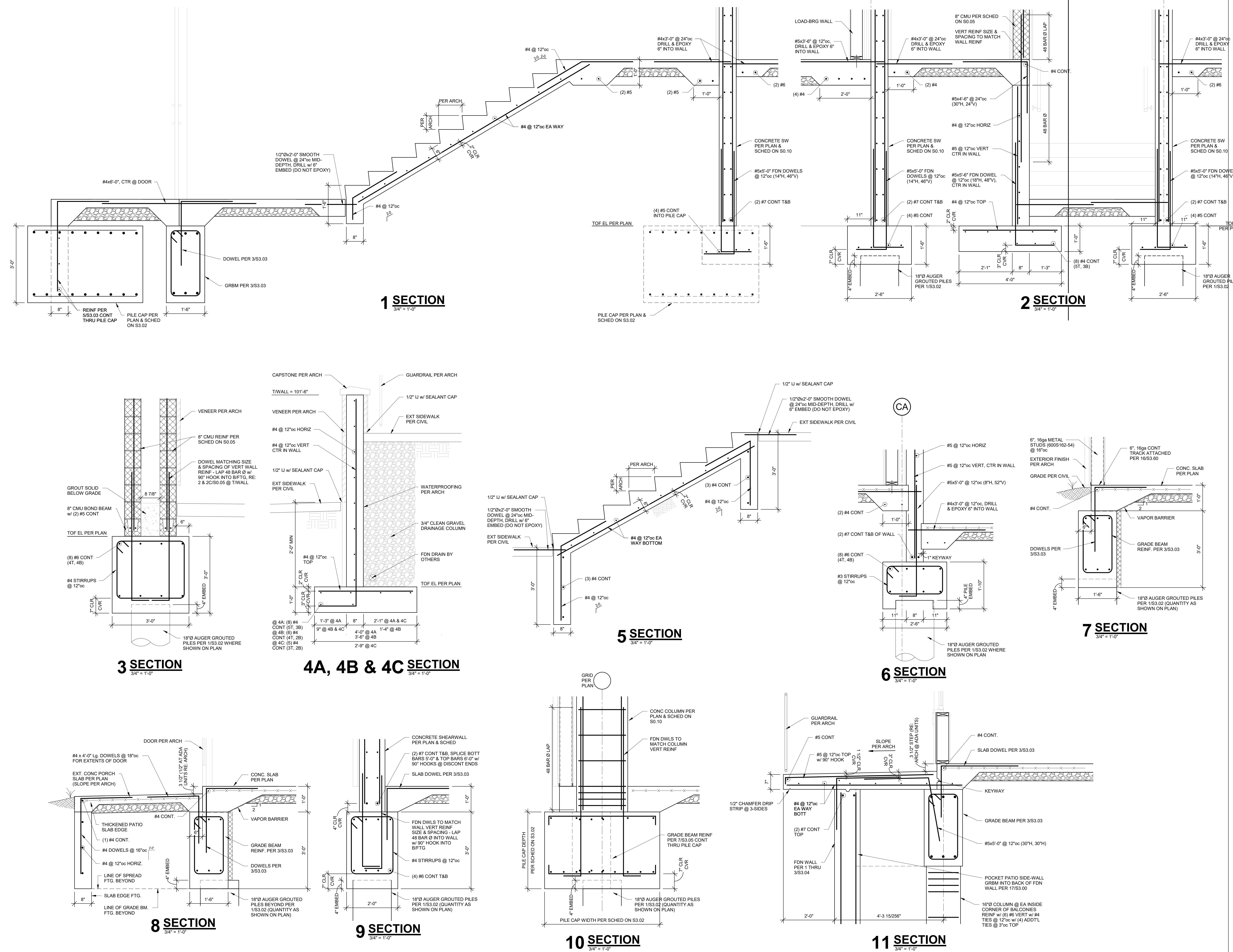
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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SHEET TITLE  
**FOUNDATION DETAILS**

SHEET NUMBER

**S3.05**



REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

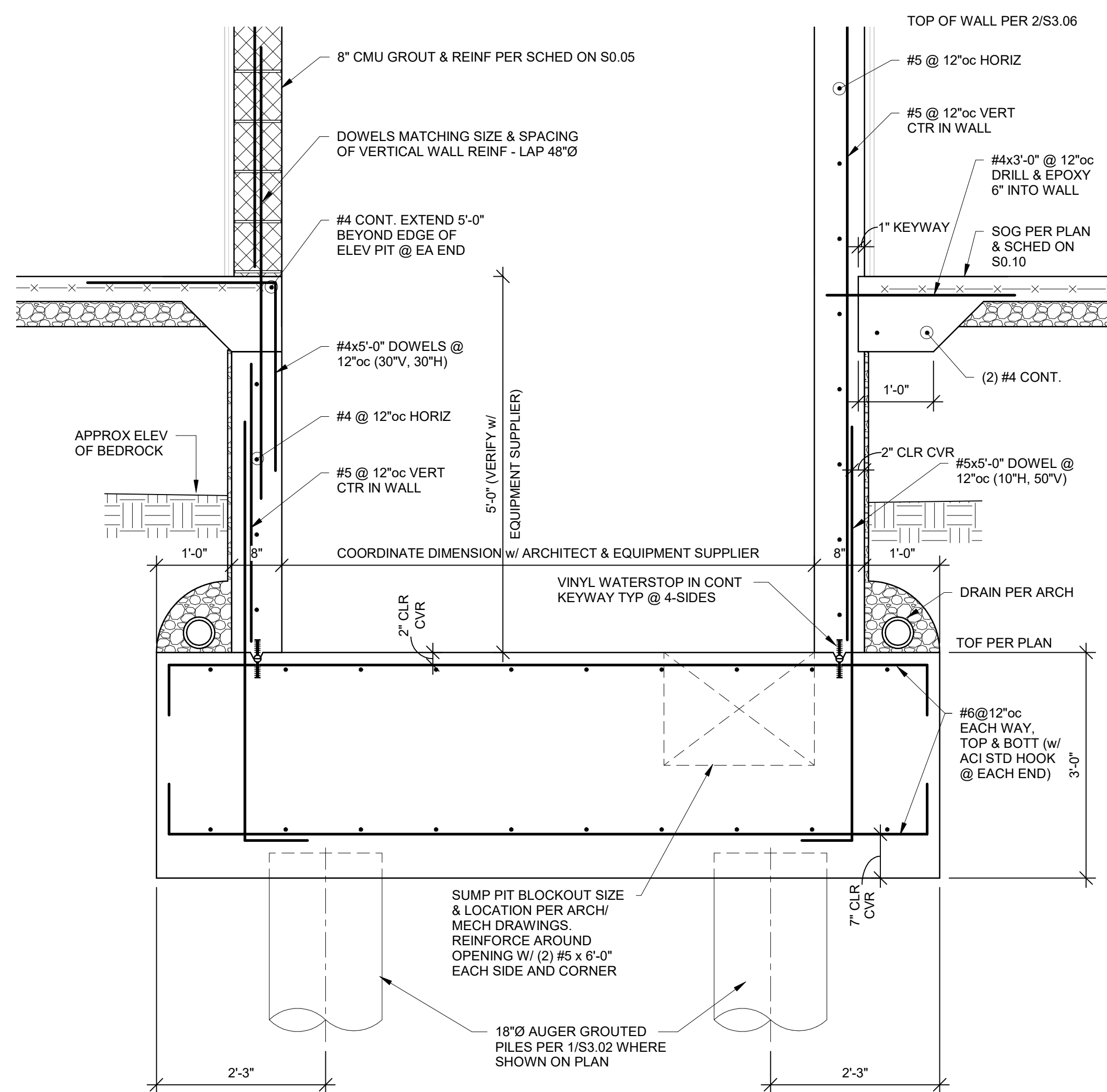
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SHEET TITLE

**FOUNDATION  
DETAILS**

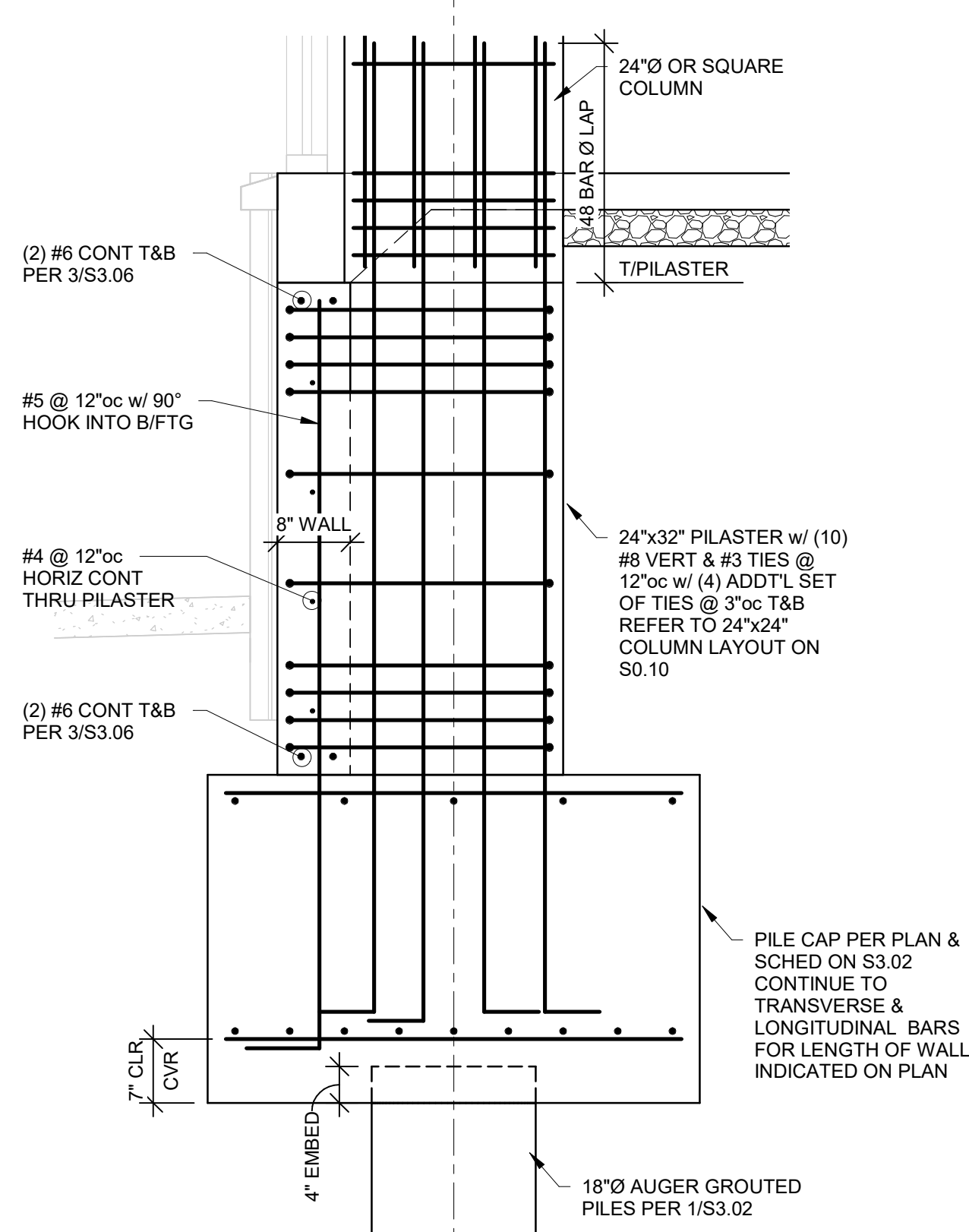
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**S3.06**

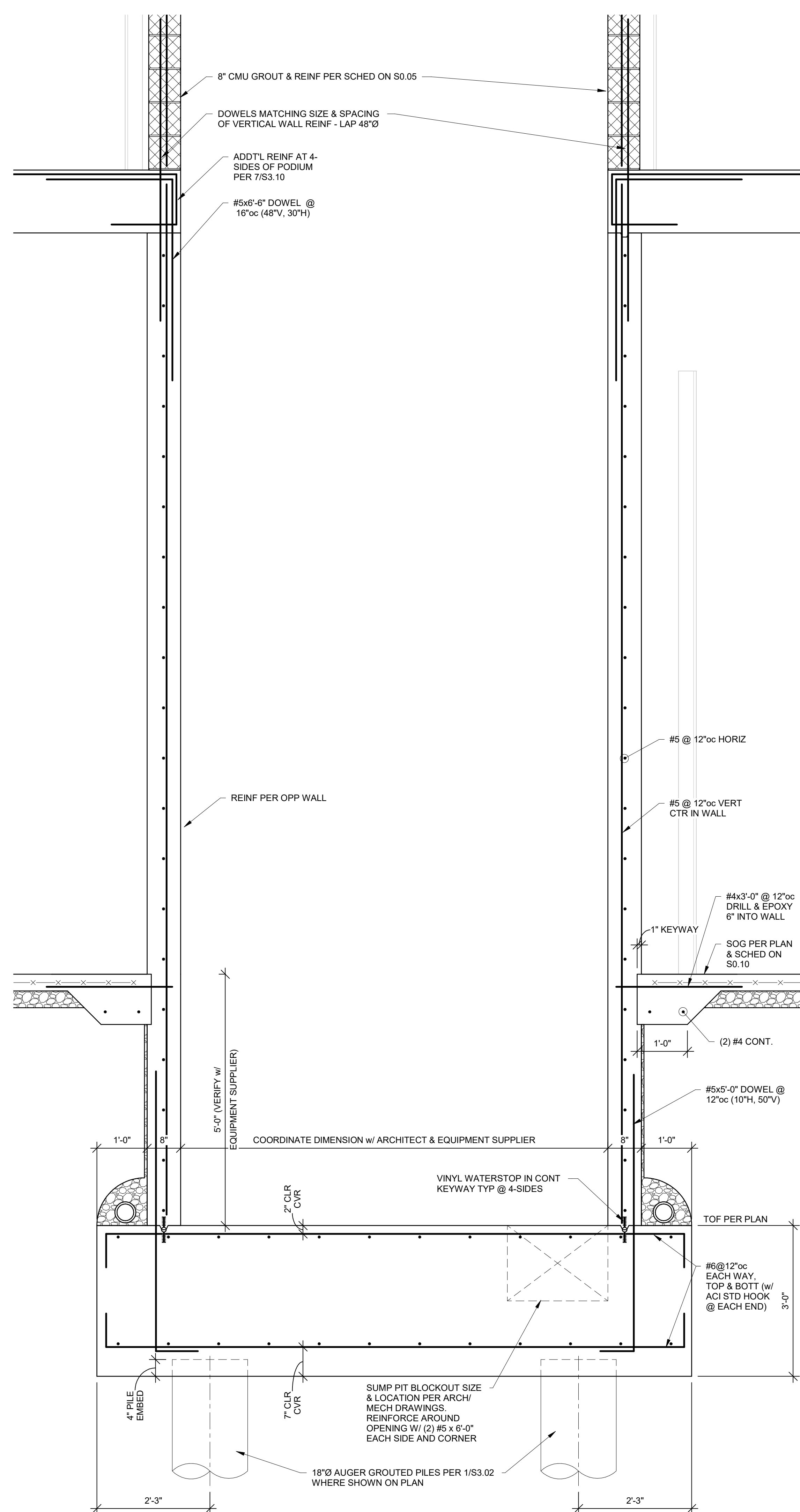


**1 SECTION**  
3/4" = 1'-0"

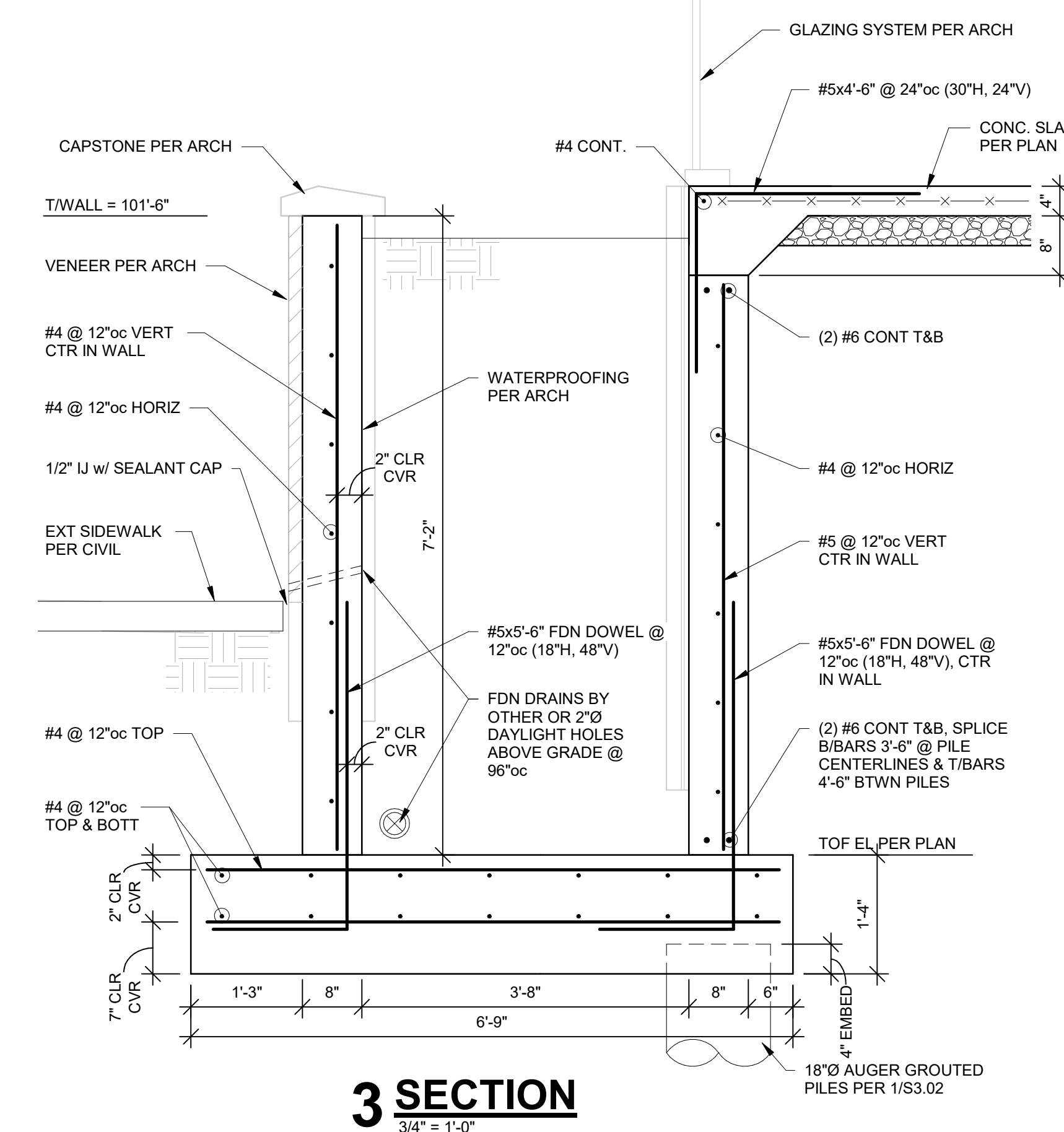
F.2



**4 SECTION**  
3/4" = 1'-0"



**2 SECTION**  
3/4" = 1'-0"



**3 SECTION**  
3/4" = 1'-0"



REVISIONS		
No.	Date	Description
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
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STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

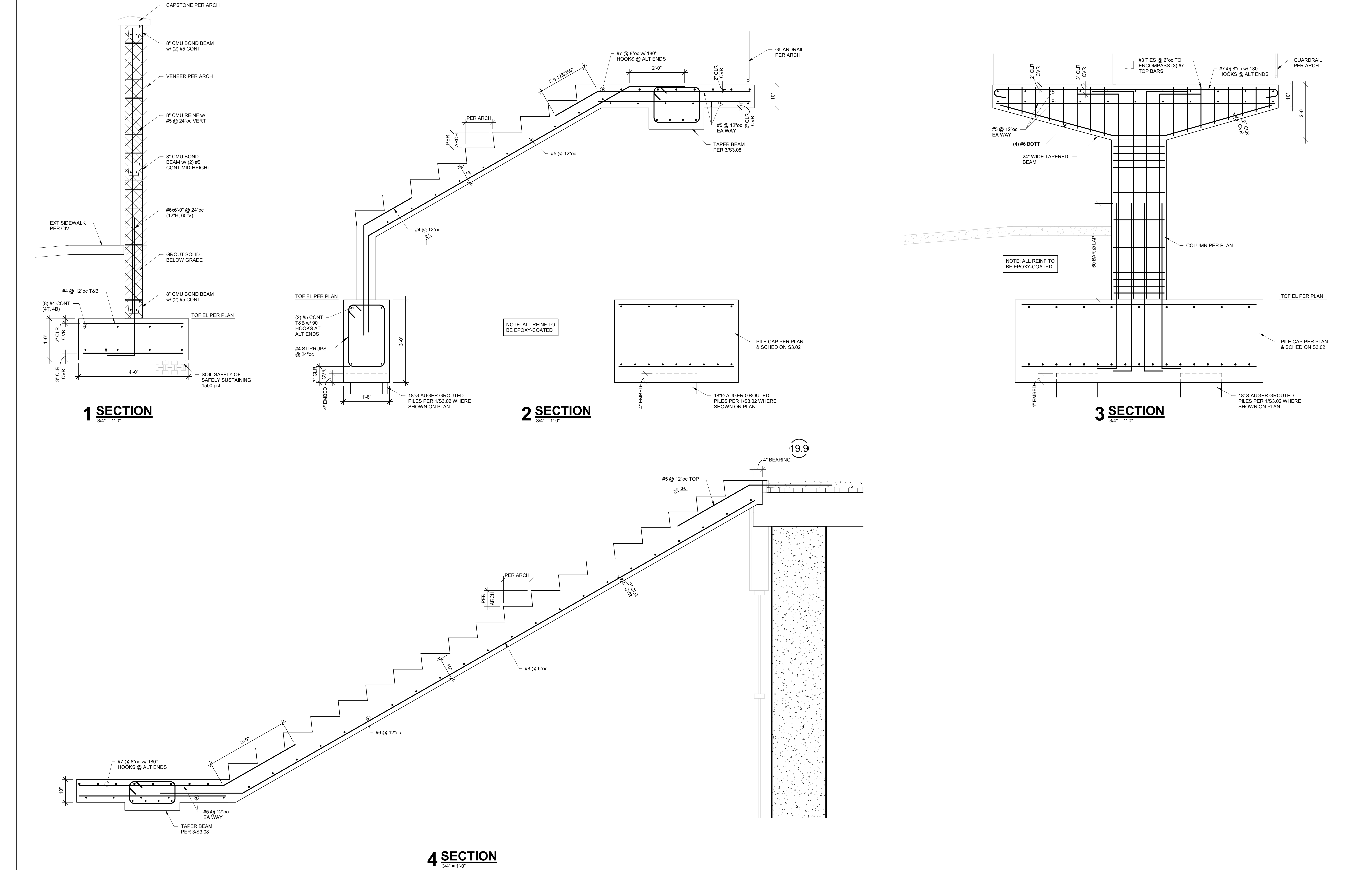
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**FOUNDATION  
DETAILS**

SHEET NUMBER

**S3.08**



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No.	Date	Description
2	7.11.22	ADDENDUM 1

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PROJECT TEAM

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LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
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FIRE PROTECTION	LATIMER SOMMERS
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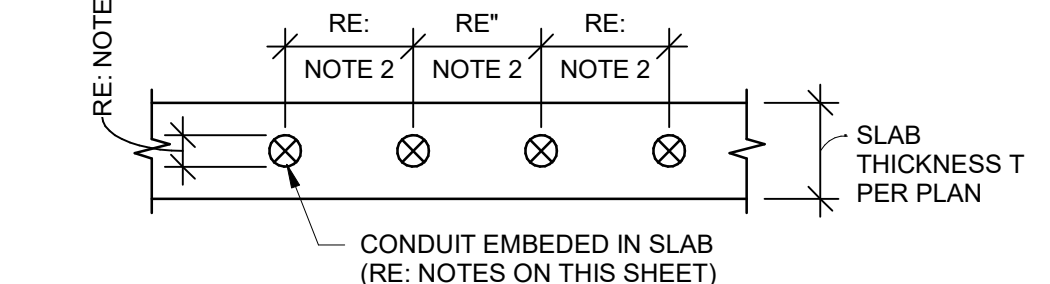
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**CONCRETE FRAMING DETAILS**

SHEET NUMBER

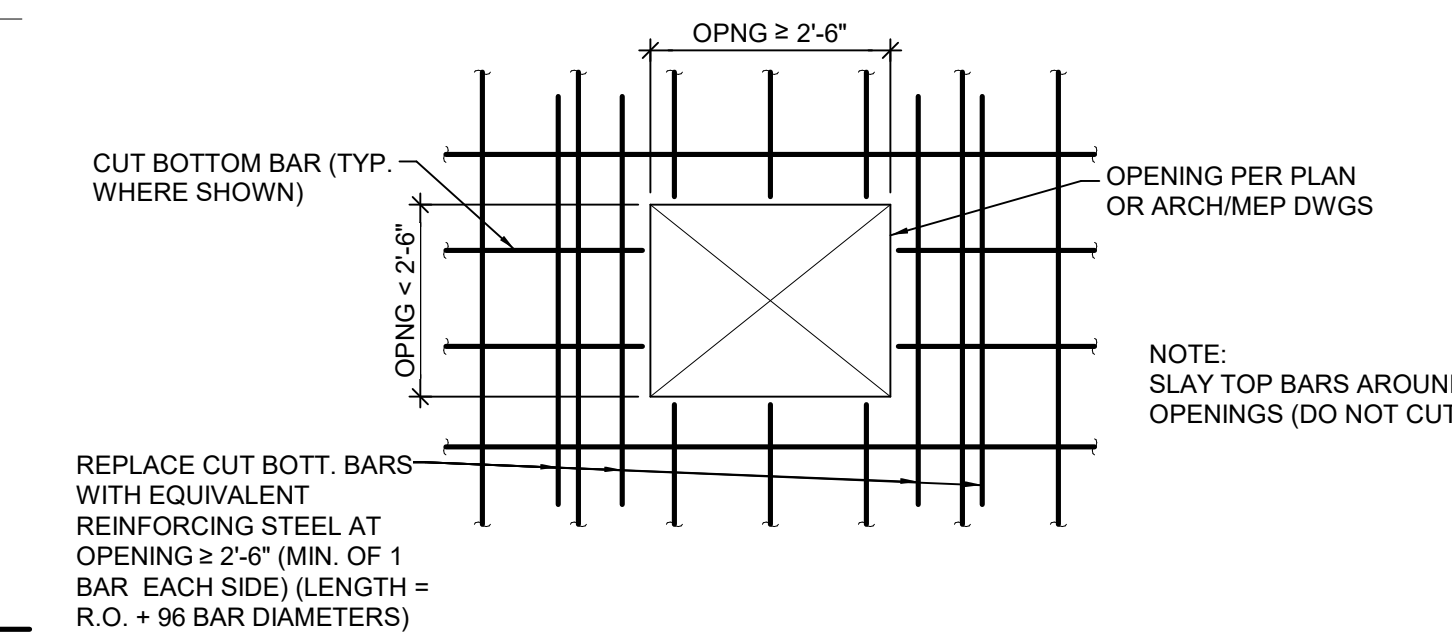
**S3.10**

- NOTES:
- MAX. CONDUIT DIAMETER SHALL NOT EXCEED 1/3 OF THE OVERALL THICKNESS OF THE SLAB
  - CONDUITS SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTER
  - CONDUITS ARE NOT PERMITTED WITHIN 24" OF THE FACE OF A COLUMN
  - CONDUITS SHALL BE PLACED AS CLOSE TO MID-DEPTH OF SLAB AS POSSIBLE
  - THE CROSSING OF CONDUITS SHOULD BE AVOIDED WHERE POSSIBLE. RE-ROUTE CONDUITS WHERE POSSIBLE TO AVOID CROSSING WITH THE SLAB
  - CONCRETE COVERAGE FOR CONDUITS SHALL BE THE SAME AS THE REQUIREMENTS FOR REINFORCING (THIS INCLUDES WHERE CONDUITS CROSS; RE: NOTE 5)
  - ALUMINUM CONDUITS & PIPES SHALL NOT BE EMBEDDED IN CONCRETE.



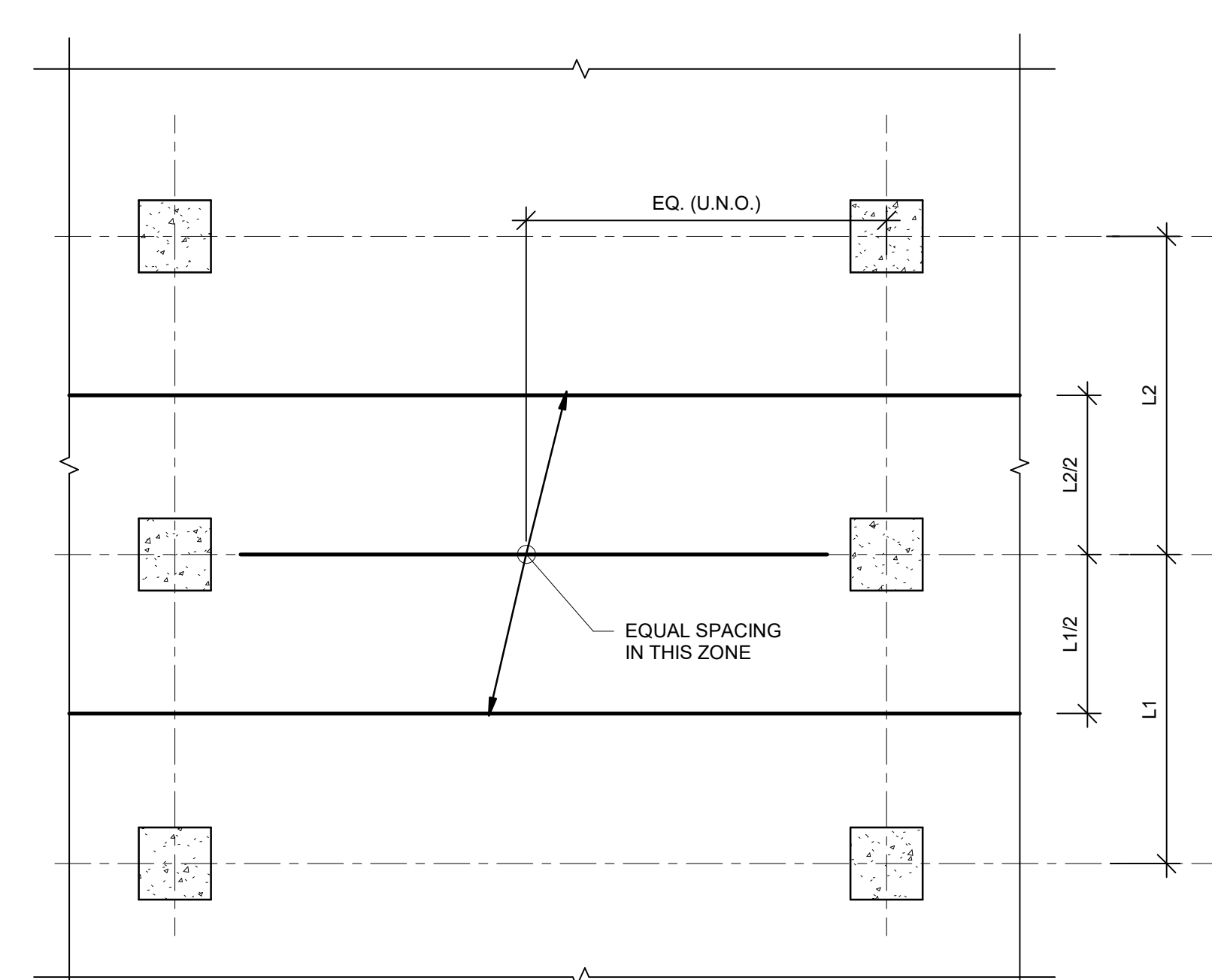
**TYPICAL CONDUIT EMBEDMENT IN SLAB**

**4 DETAIL**  
3/4" = 1'-0"



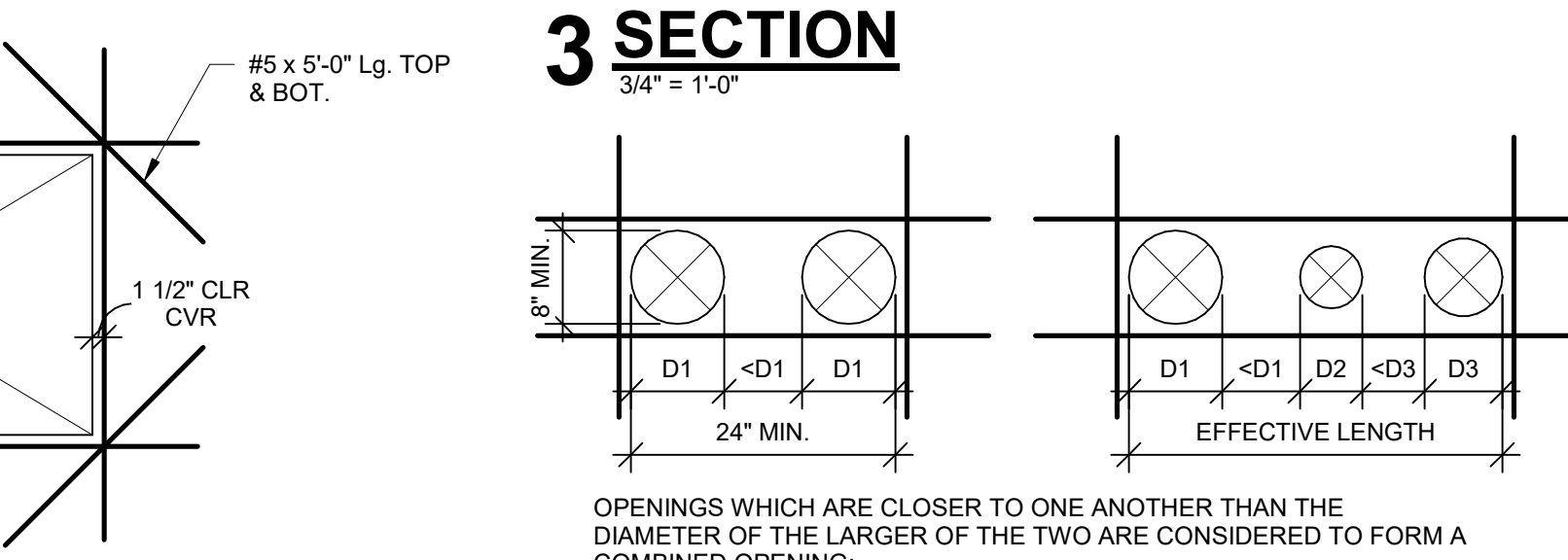
**TYPICAL BOTTOM REINFORCING AT INTERIOR OPENING IN PODIUM**

**5 DETAIL**  
1/2" = 1'-0"



**TYPICAL MIDSPAN BOTTOM BAR PLACEMENT (WHERE SHOWN ON PLAN, U.N.O.)**

**3 SECTION**  
3/4" = 1'-0"



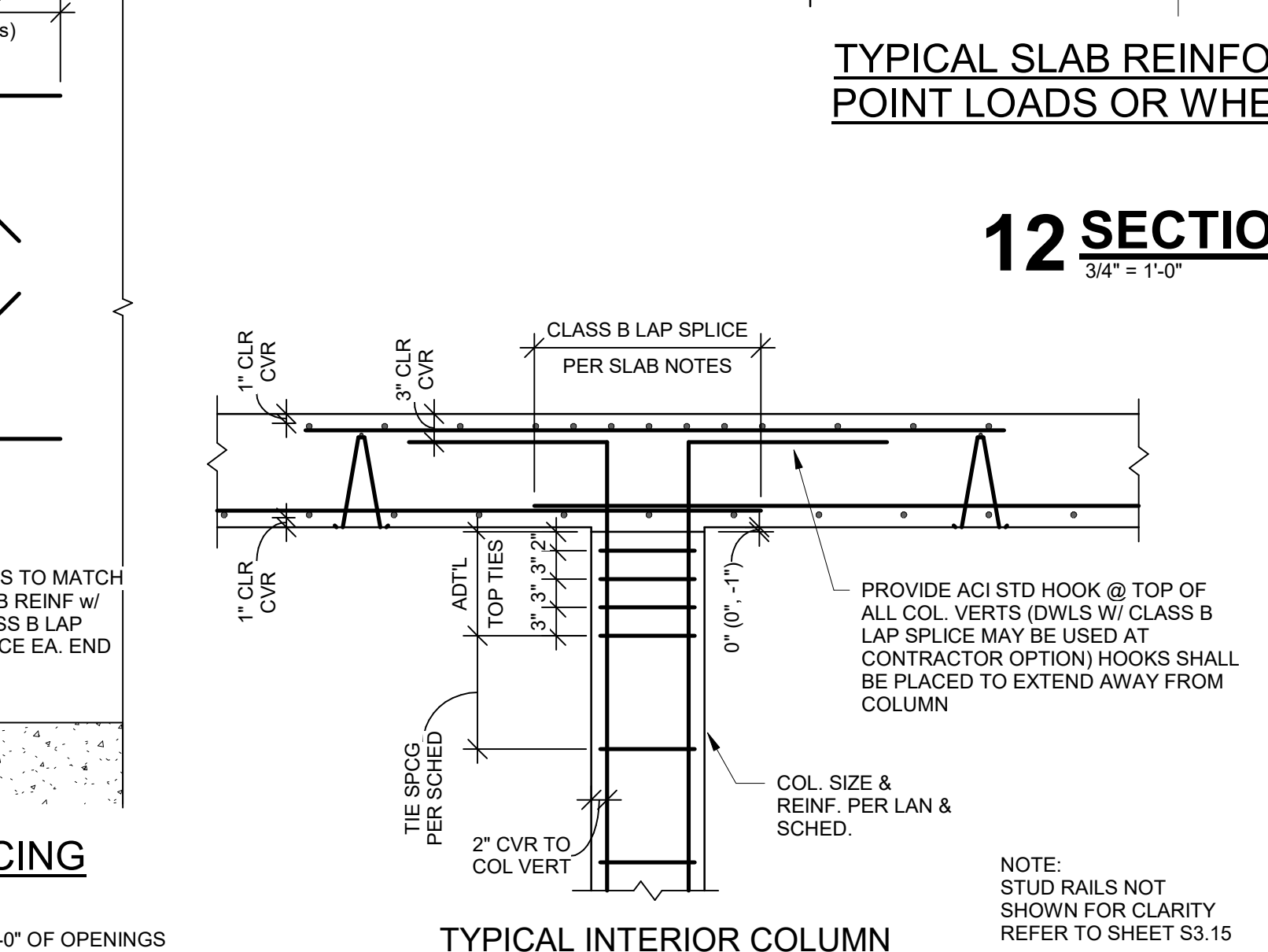
**TYPICAL SLAB REINFORCING UNDER POINT LOADS OR WHERE INDICATED**

**8A SECTION**  
1/2" = 1'-0"

MAX. OPENING DIM.	REINFORCING
12" TO 18"	(1) #5 EA. SIDE
18" TO 2'-6"	(1) #5 EA. SIDE
2'-6" & LARGER	(2) #5 TOP & BOT. EA. SIDE

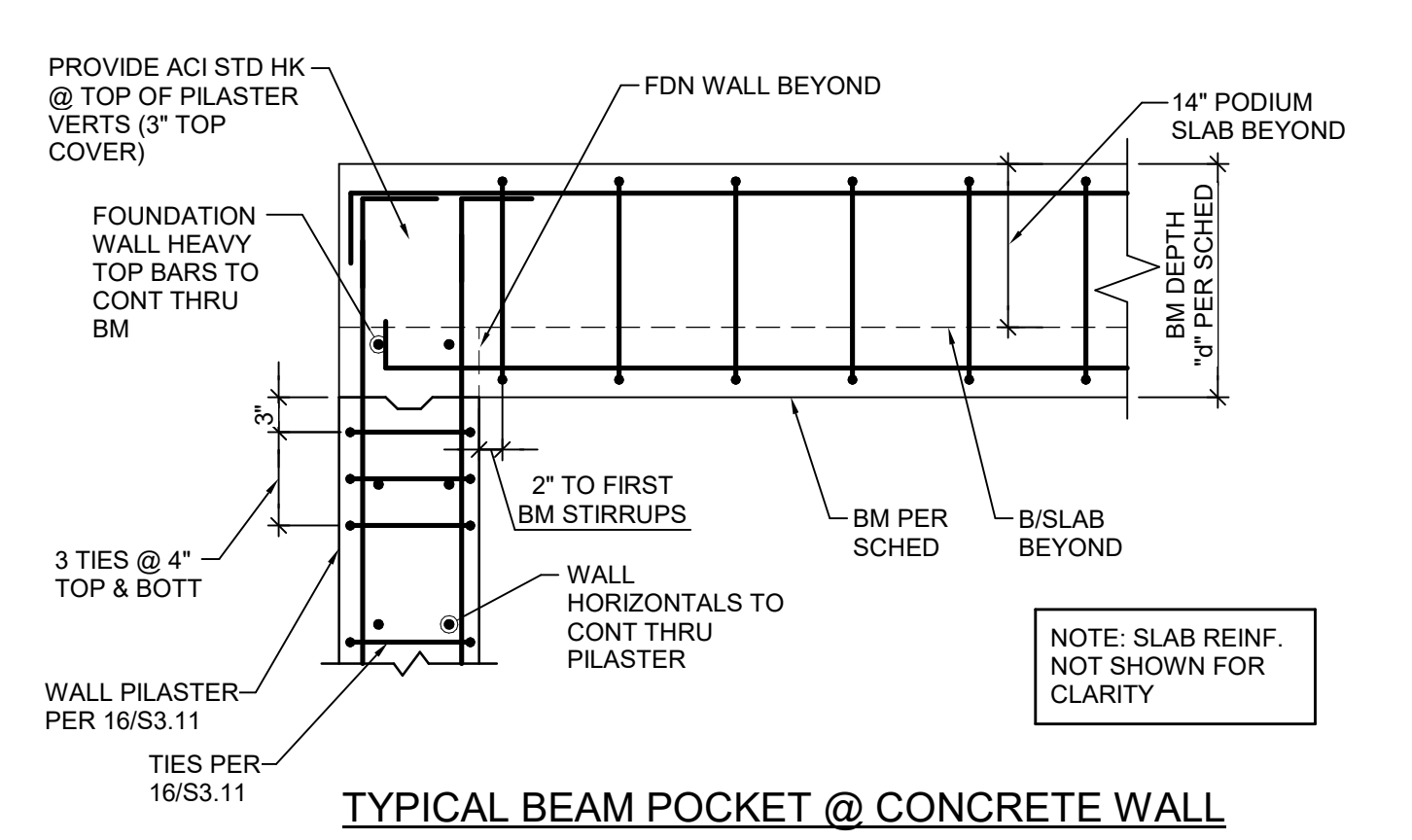
NOTES:  
1. ALL OPENINGS LARGER THAN 12" SHALL BE TRIMMED AS SHOWN.  
2. THIS REINF. IS IN ADDITION TO REINF. SHOWN ON PLANS.  
3. FOR MULTIPLE OPENINGS SEE 8A/S3.10.

**12 SECTION**  
3/4" = 1'-0"



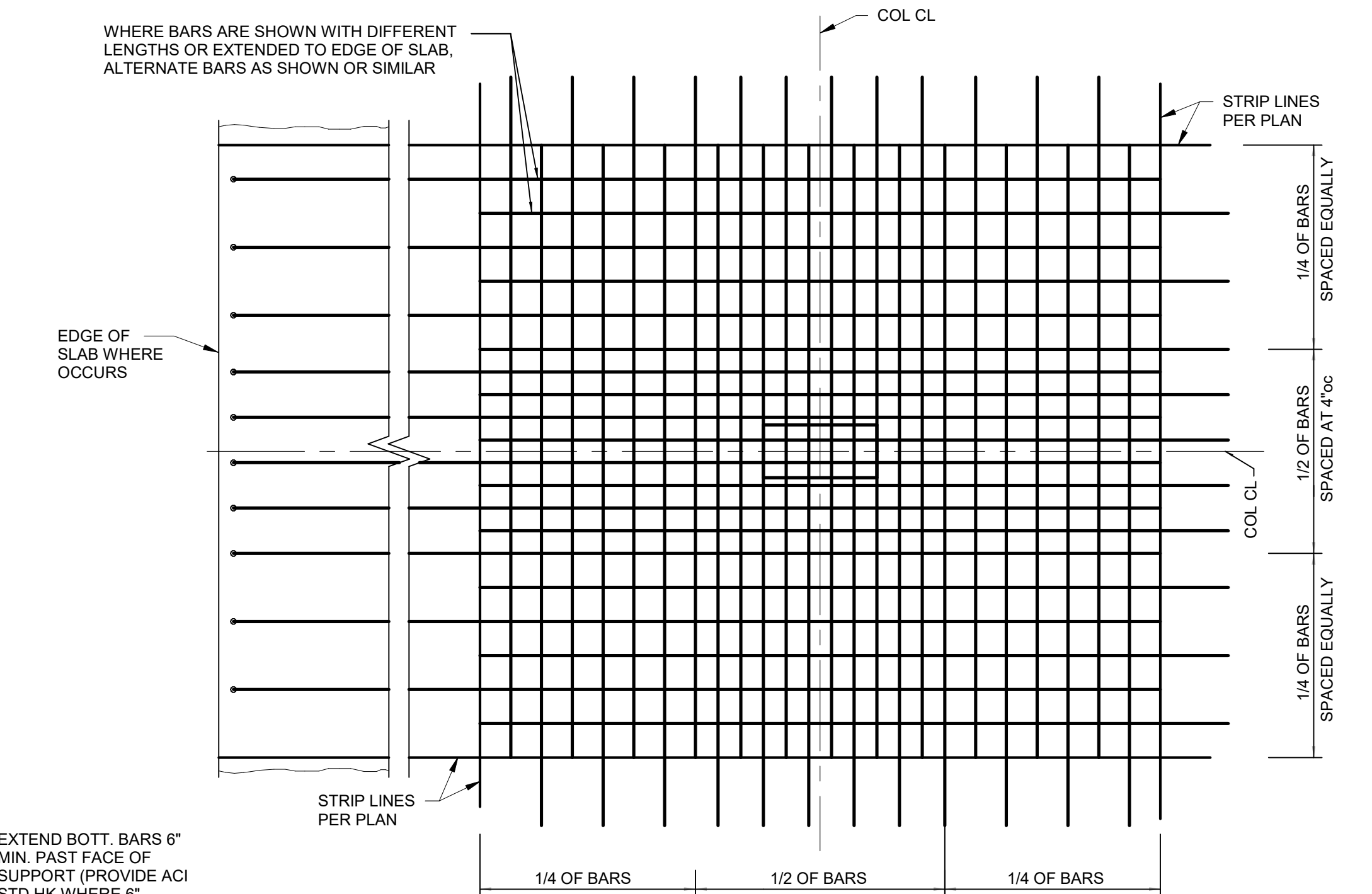
**TYPICAL INTERIOR COLUMN**

**13 SECTION**  
3/4" = 1'-0"



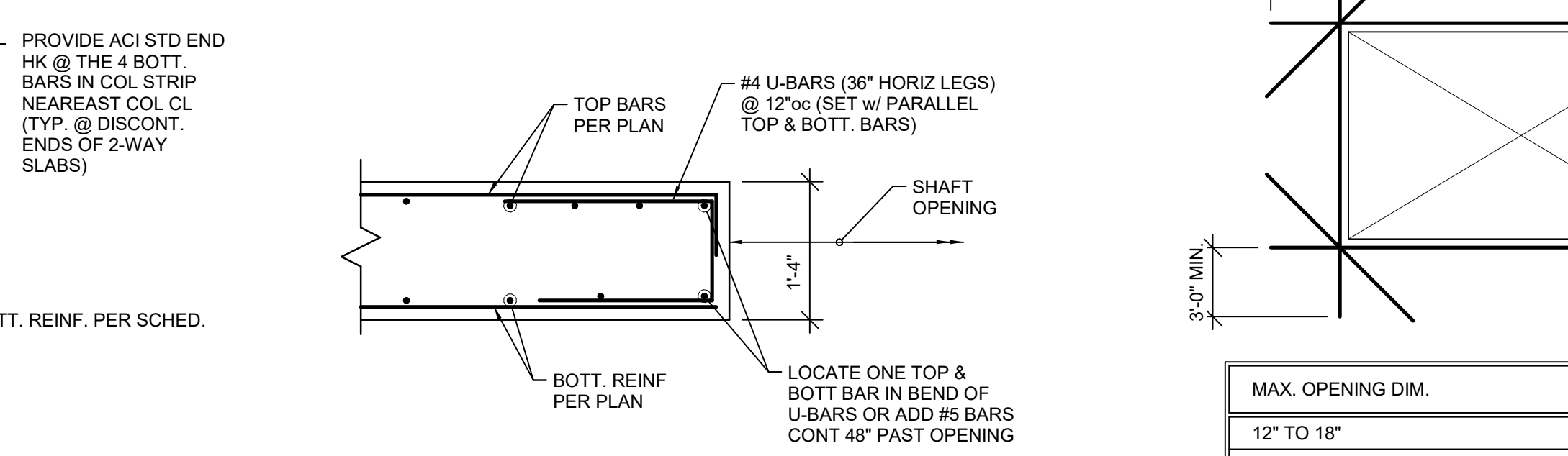
**TYPICAL BEAM POCKET @ CONCRETE WALL**

**14 SECTION**  
3/4" = 1'-0"



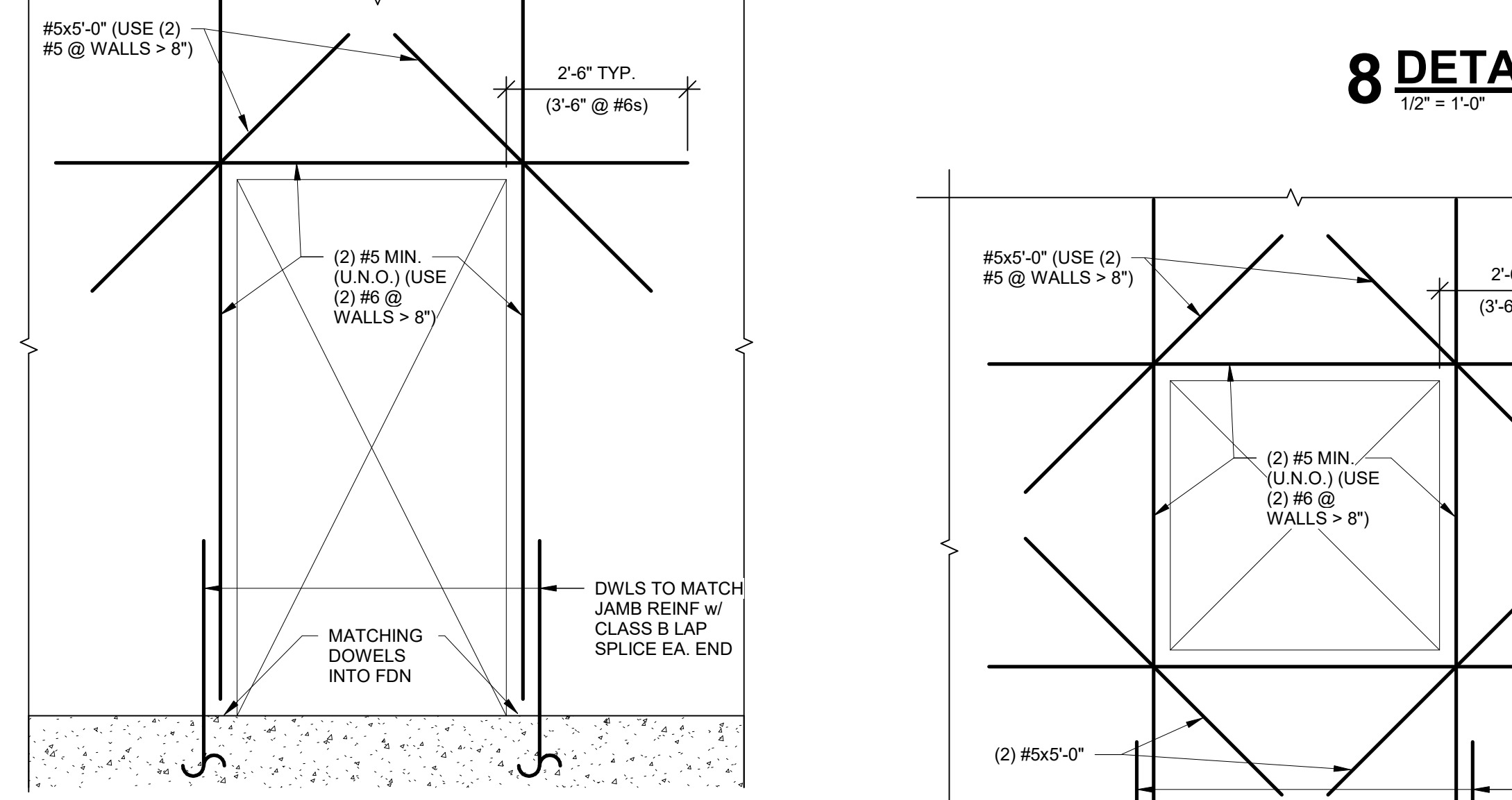
**TYPICAL WALL OPENING REINFORCING**

**2 DETAIL**  
3/8" = 1'-0"



**TYPICAL WALL OPENING REINFORCING**

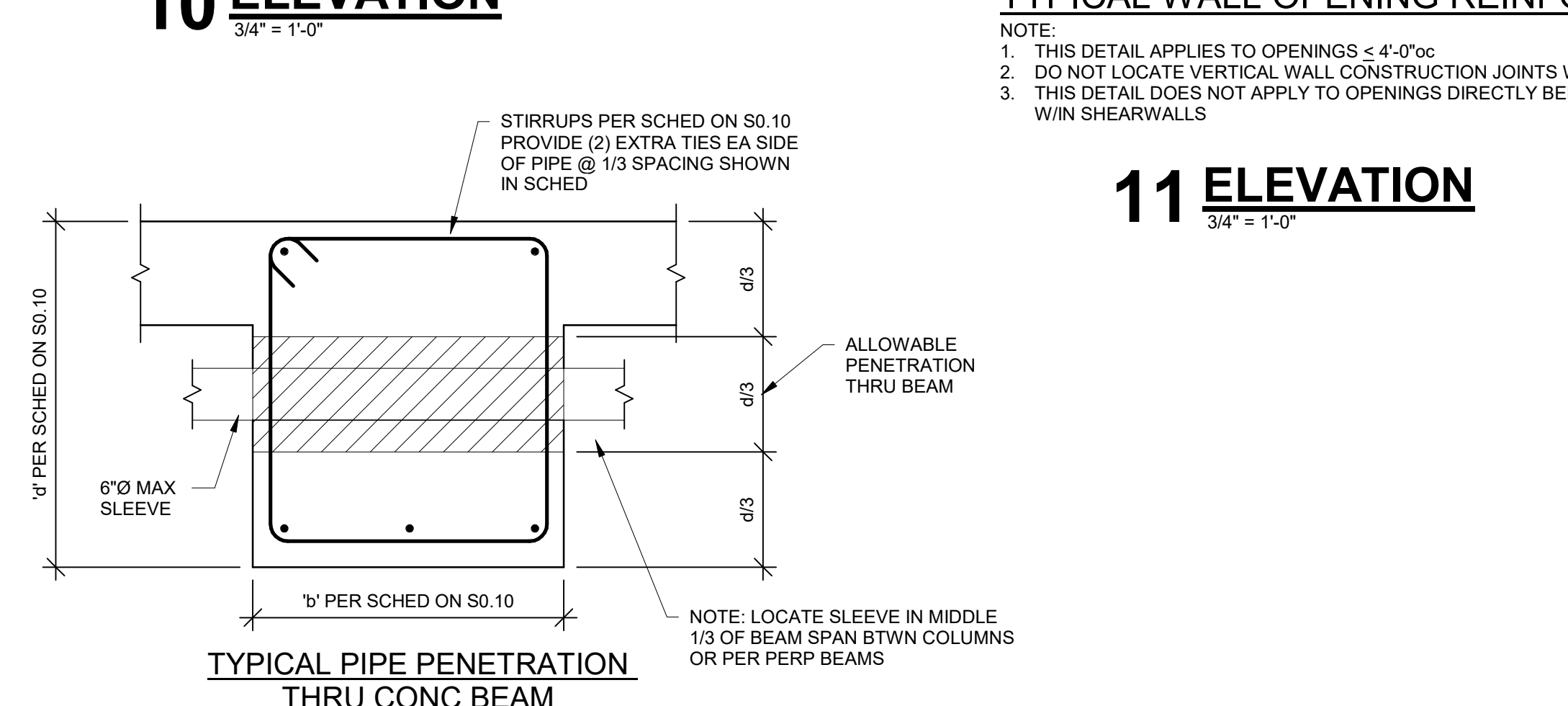
**7 SECTION**  
3/4" = 1'-0"



**TYPICAL WALL OPENING REINFORCING**

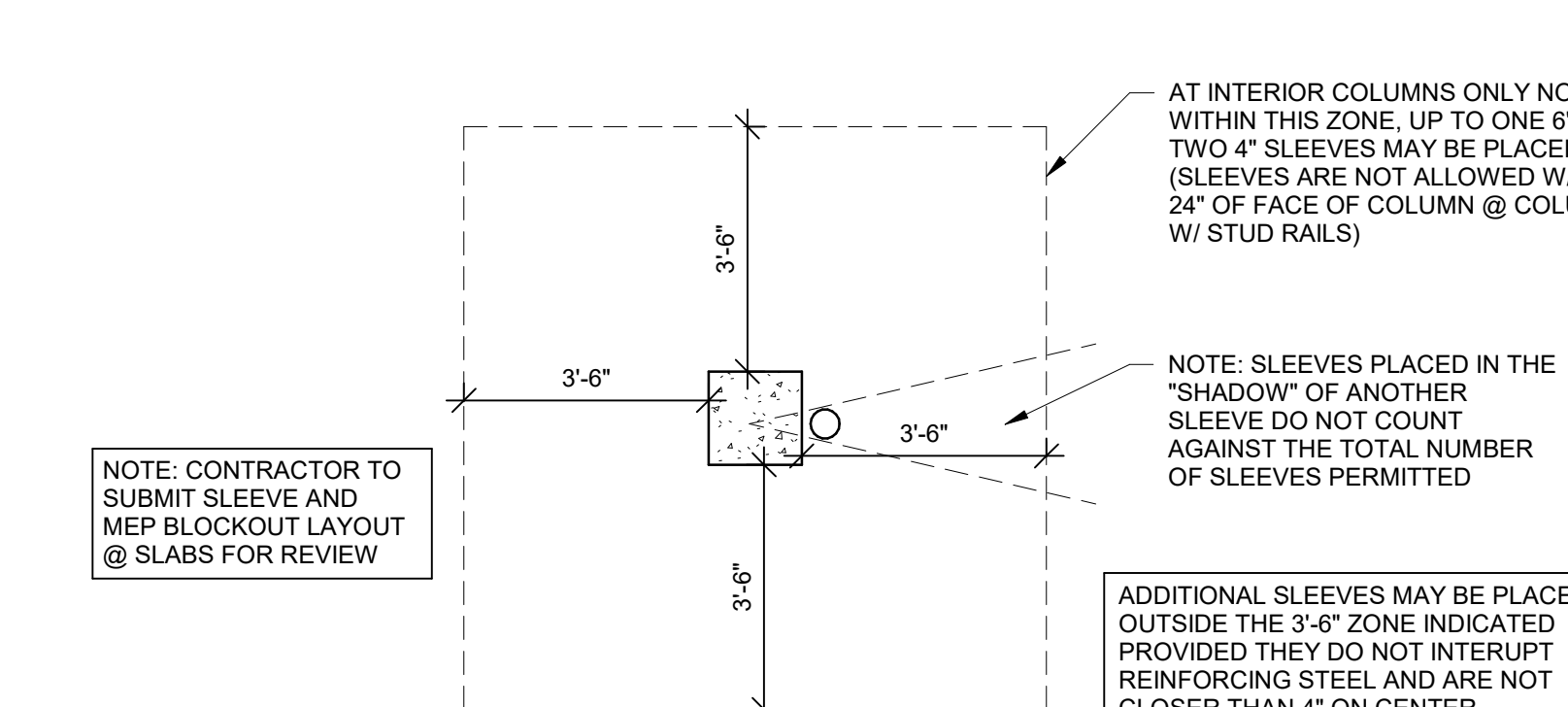
NOTE:  
1. THIS DETAIL APPLIES TO OPENINGS < 4'-0" OC.  
2. DO NOT LOCATE VERTICAL WALL CONSTRUCTION JOINTS WITHIN 5'-0" OF OPENINGS.  
3. THIS DETAIL DOES NOT APPLY TO OPENINGS DIRECTLY BELOW POINT LOADS OR WITHIN SHEARWALLS.

**11 ELEVATION**  
3/4" = 1'-0"



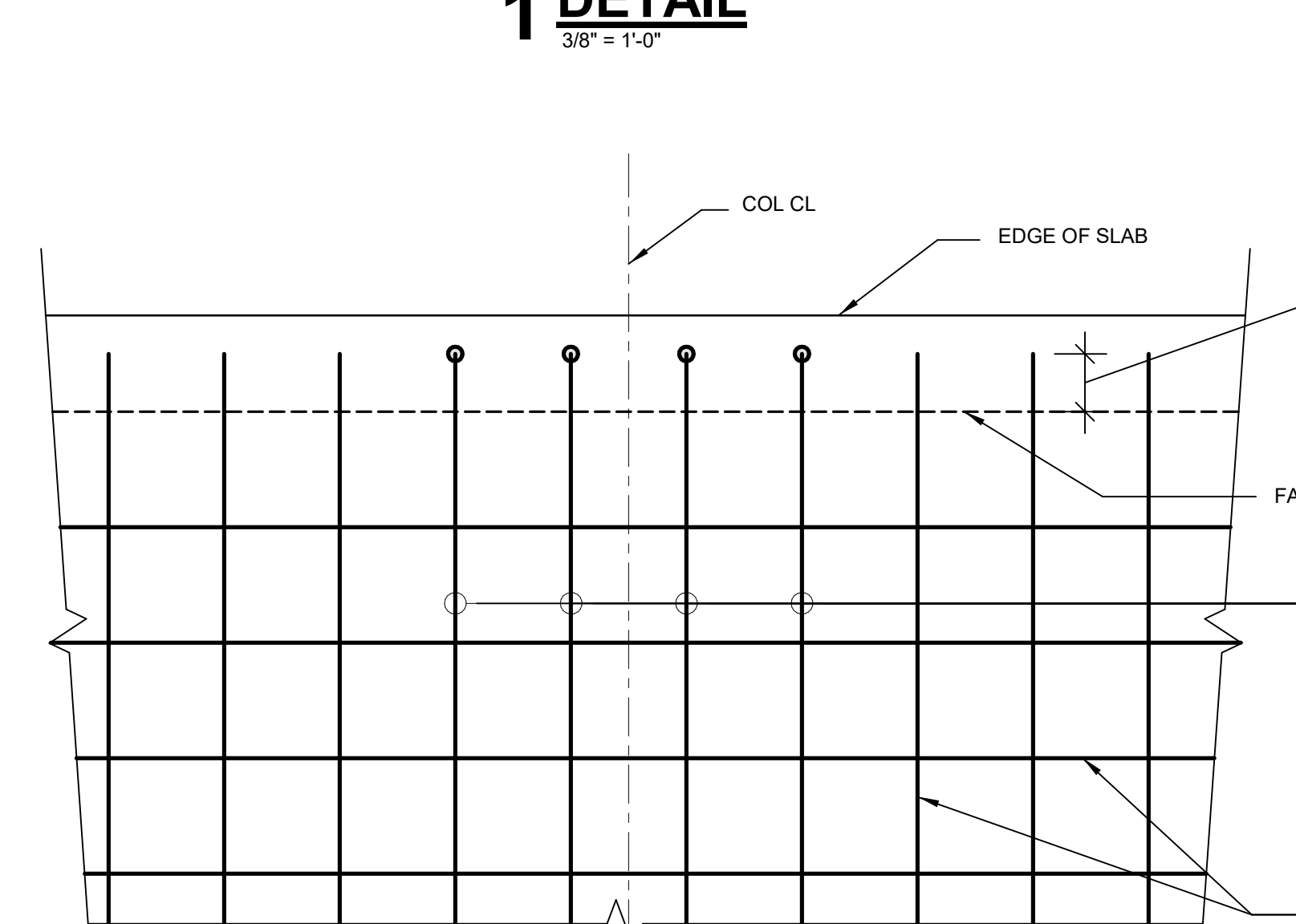
**TYPICAL PIPE PENETRATION THRU CONC BEAM**

**16 SECTION**  
3/4" = 1'-0"



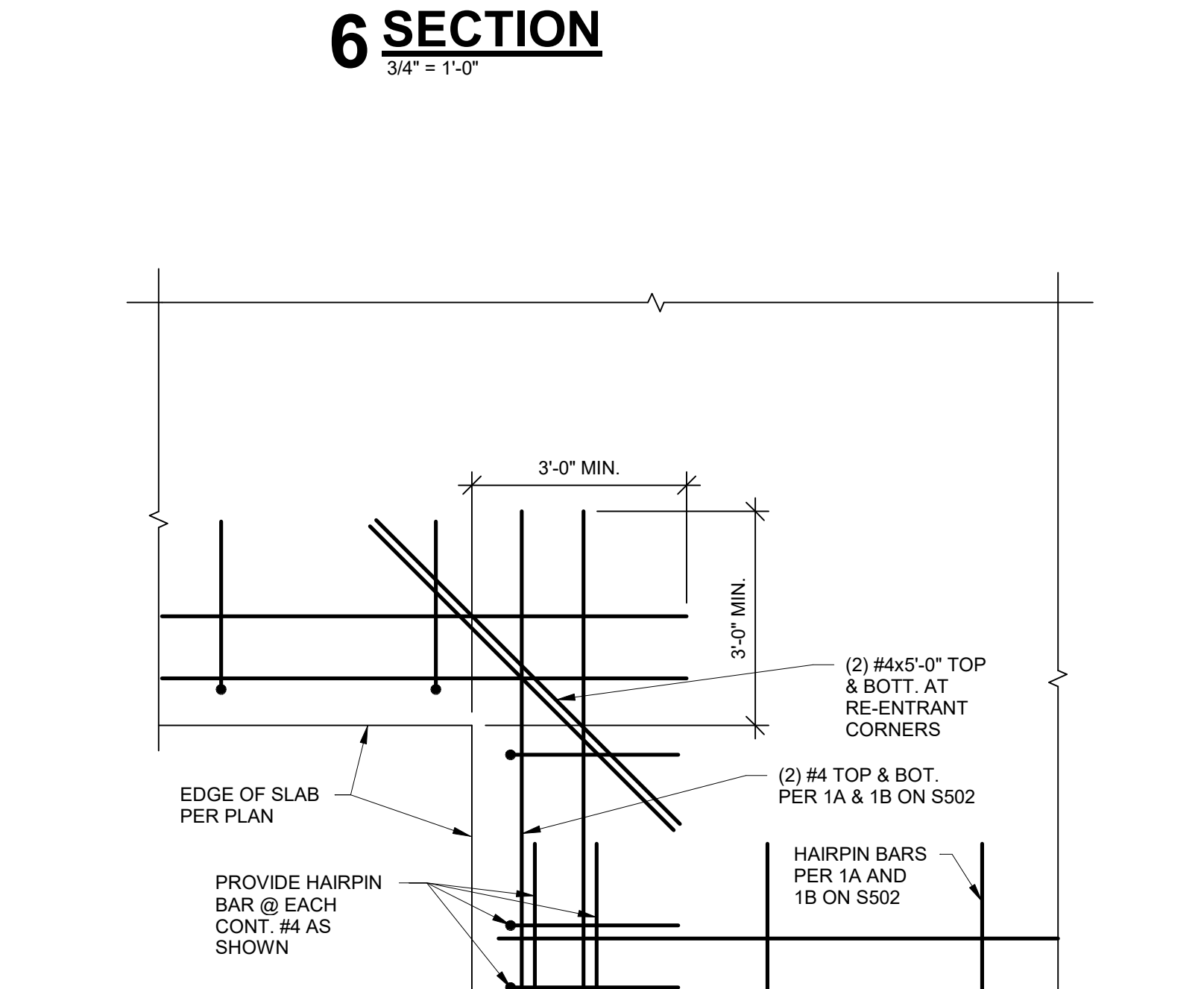
**TYPICAL SLEEVE IN PODIUM SLAB RESTRICTIONS**

**1 DETAIL**  
3/8" = 1'-0"



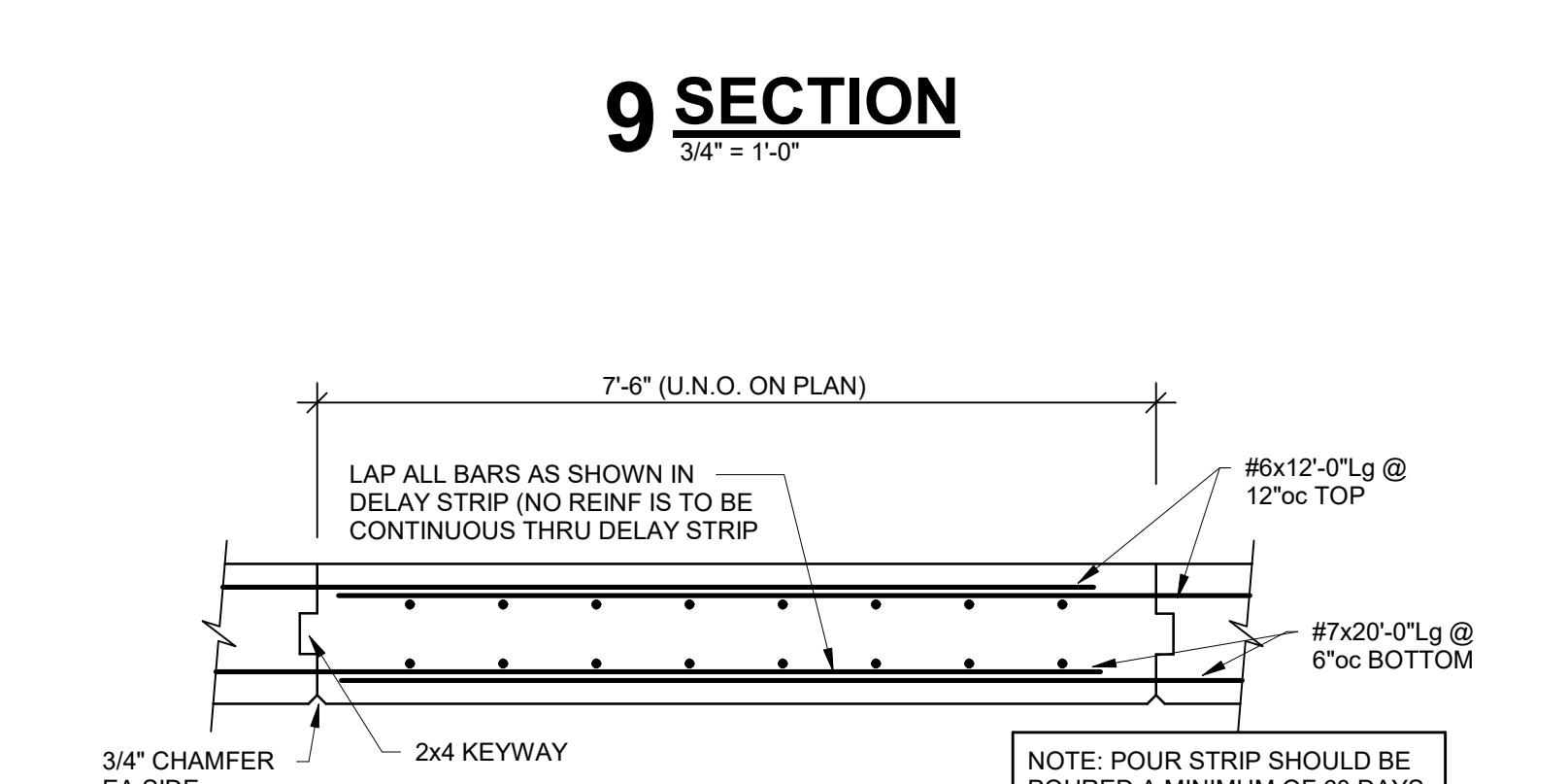
**TYP. BOT. REINF. DETAIL @ PERIMETER OF 2 WAY SLABS**

**6 SECTION**  
3/4" = 1'-0"



**TYPICAL REINFORCING AT RE-ENTRANT CORNERS OF ELEVATED SLAB**

**9 SECTION**  
3/4" = 1'-0"



**TYPICAL DELAY POUR STRIP SECTION**

**15 SECTION**  
3/4" = 1'-0"



**TYPICAL DELAY POUR STRIP SECTION**

**15 SECTION**  
3/4" = 1'-0"





**PARAGON STAR  
NORTH VILLAGE**

3200 NW PARAGON PKWY,  
LEE'S SUMMIT, MO 64081

Project No.: 18017.19050.07.19050.08  
Date: 06.28.2022  
Issued For: FOR CONSTRUCTION

REVISIONS		
No.	Date	Description
3	7.20.22	ADDENDUM 2

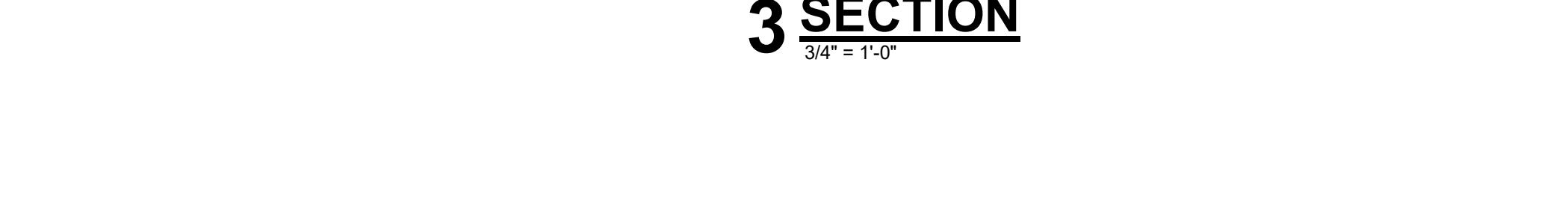
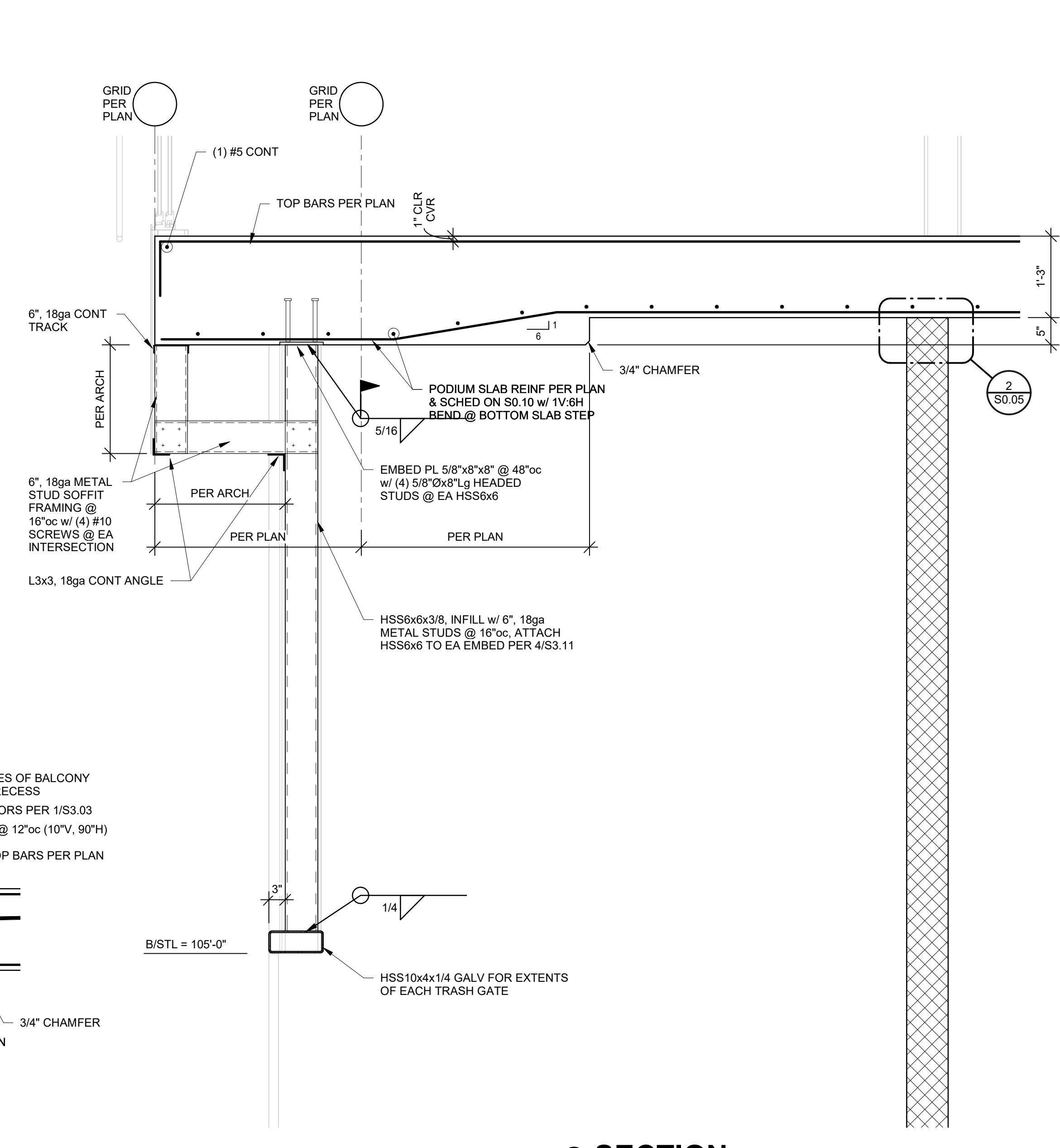
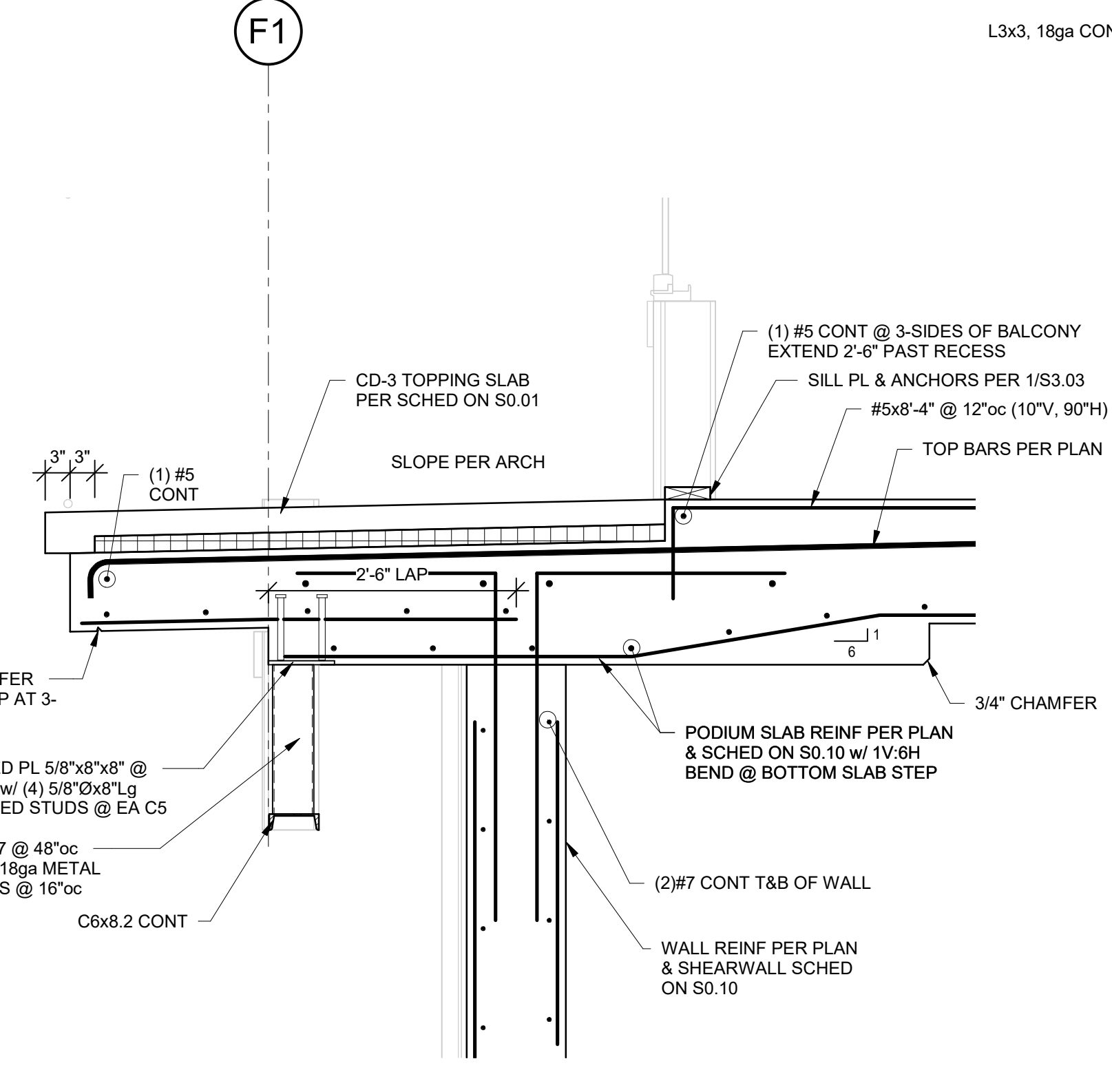
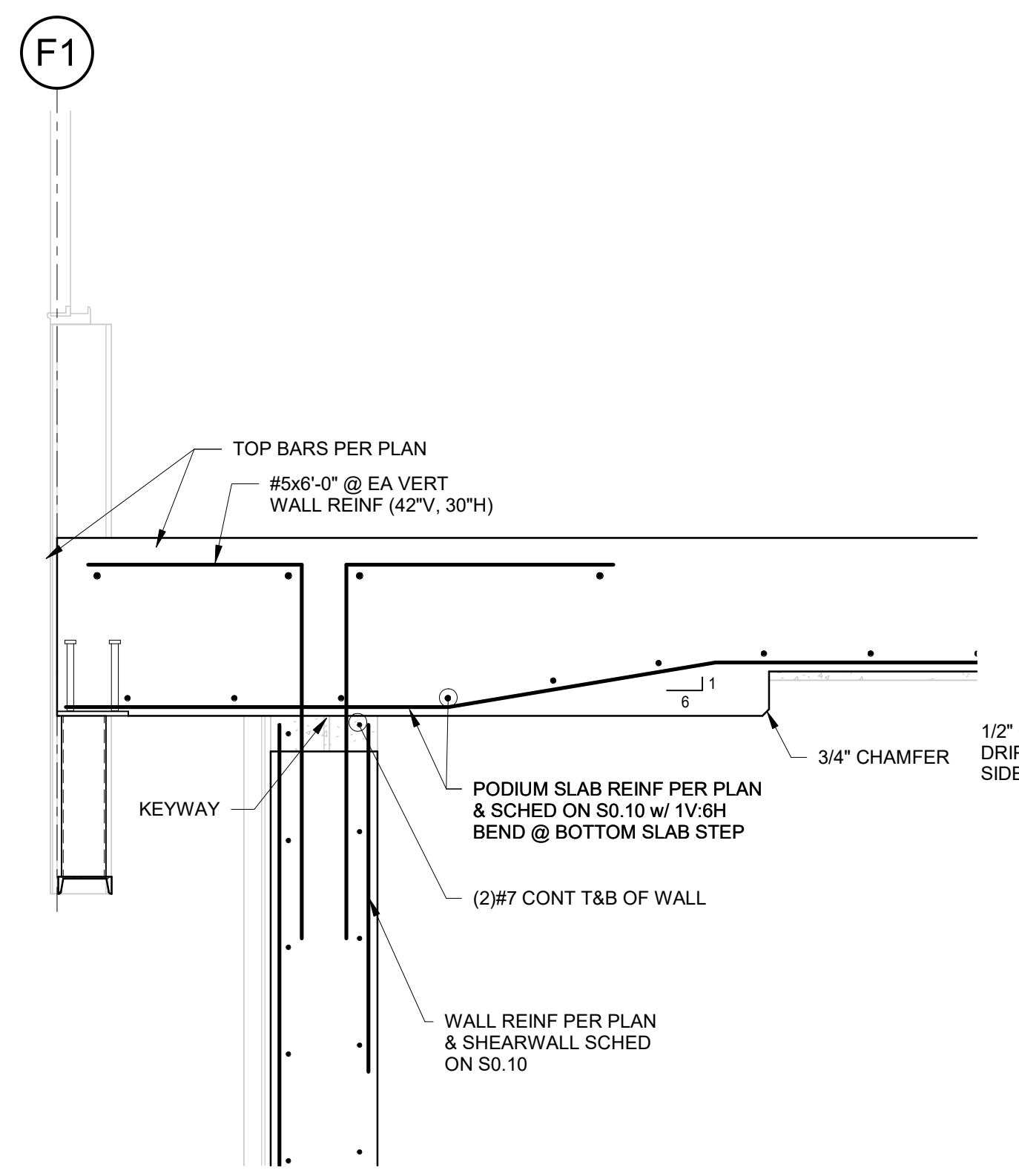
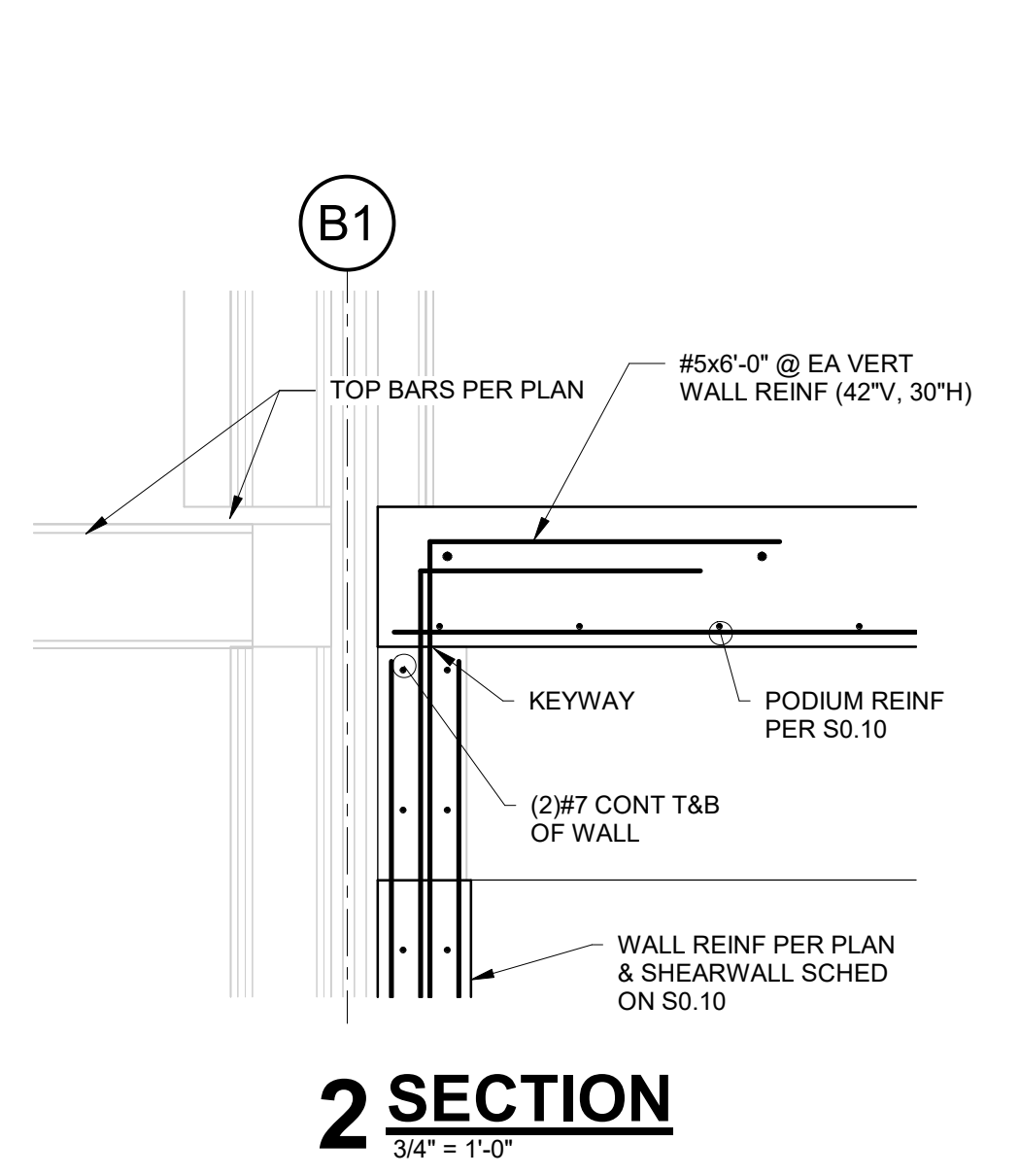
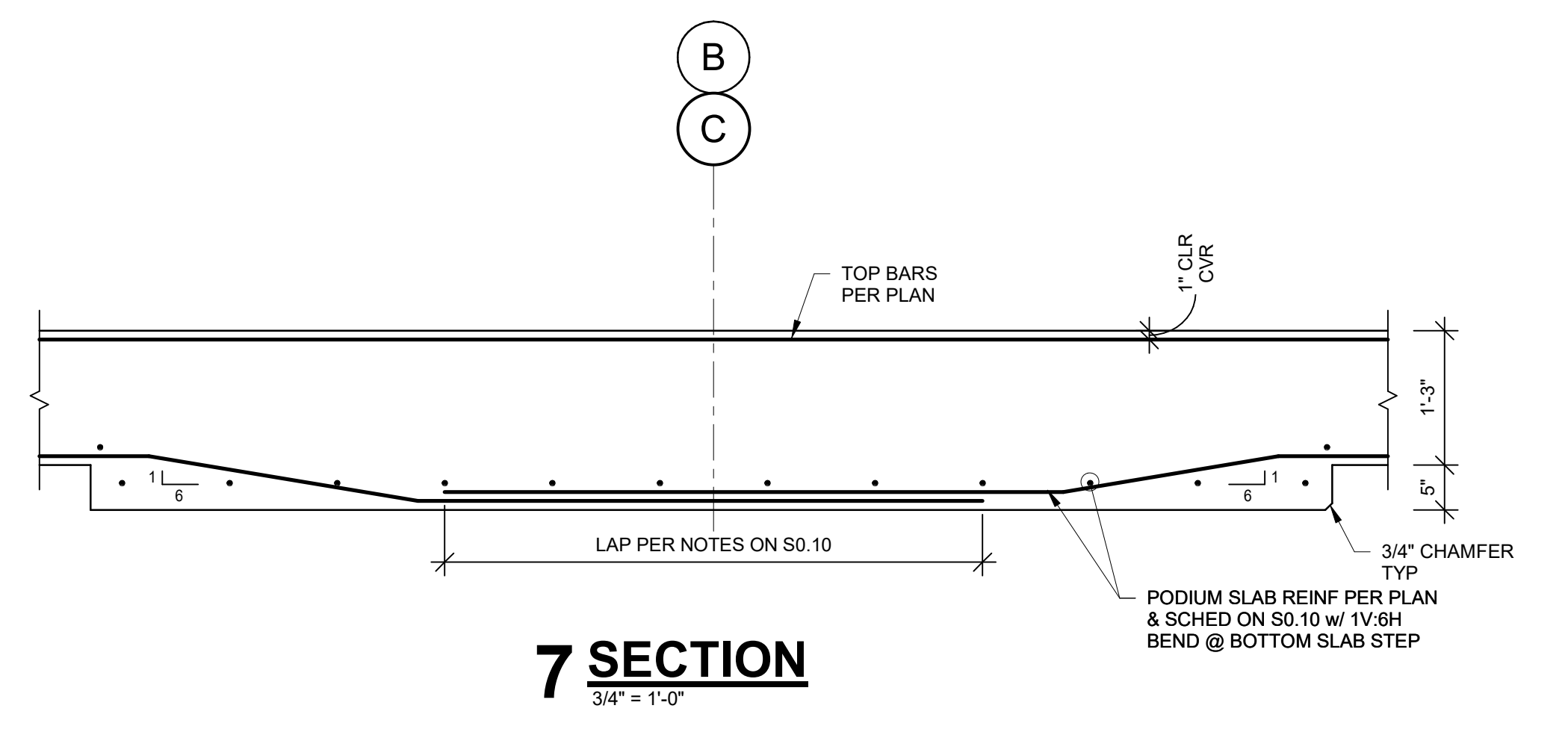
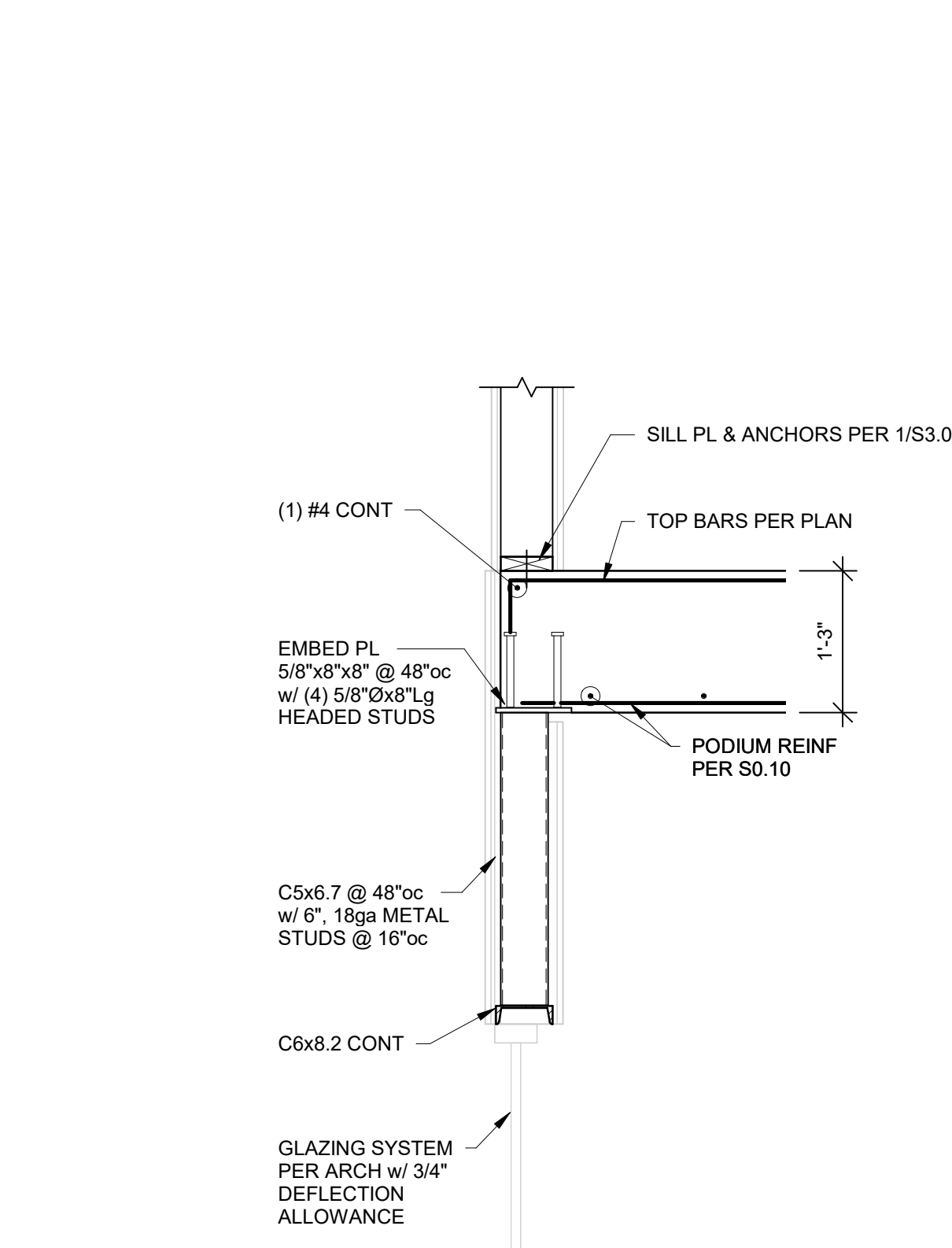
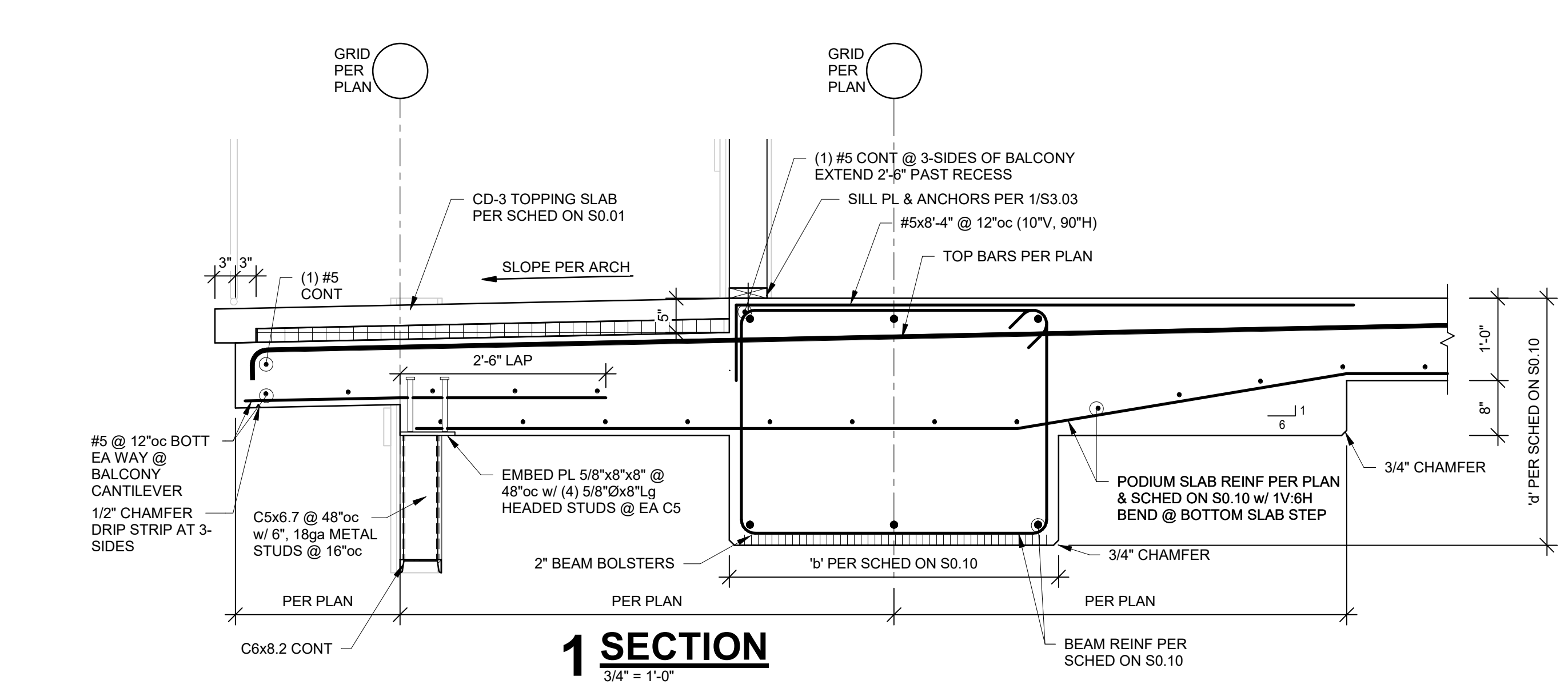


PROJECT TEAM	
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

**BOB D. CAMPBELL & CO.**  
Structural Engineers Since 1957  
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Kansas City, MO 64111 www.bdc-engrs.com

SHEET TITLE  
**CONCRETE  
FRAMING DETAILS**

SHEET NUMBER  
**S3.12**



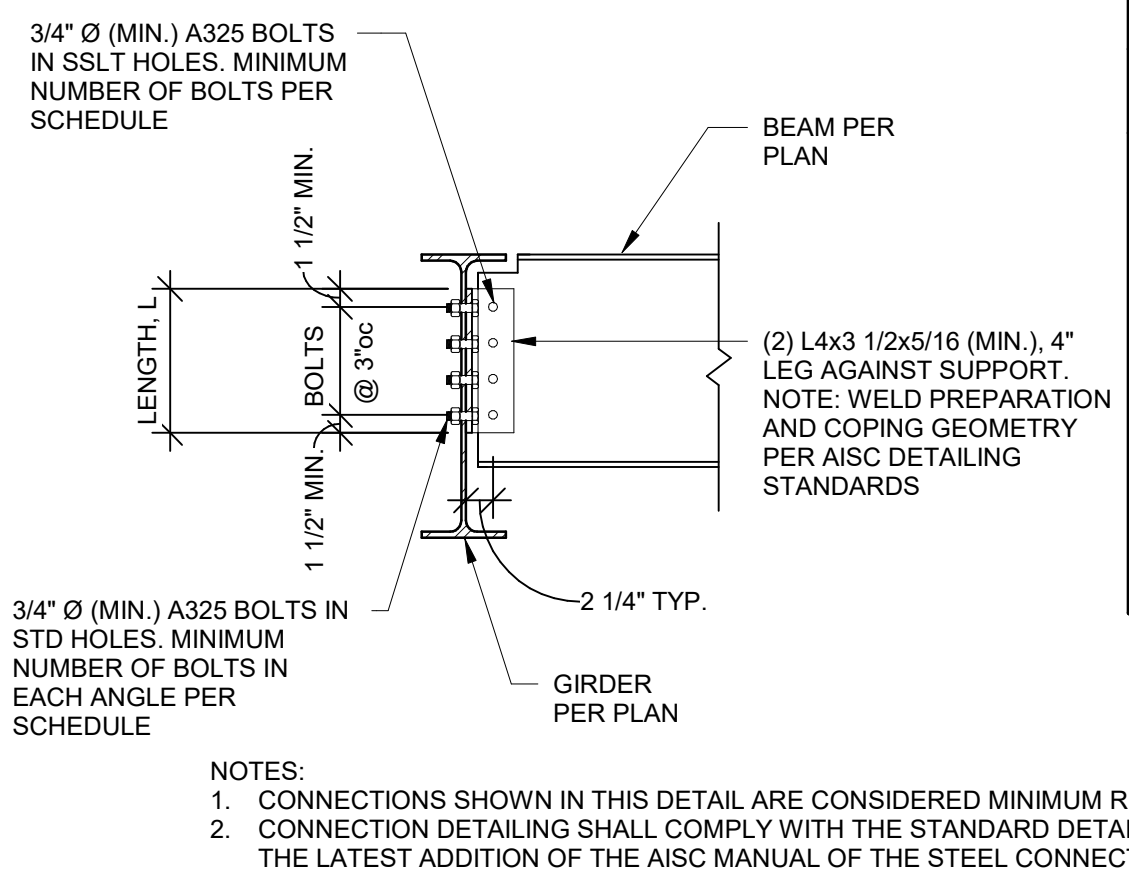
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ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

Beam Connection Design Forces	
Member Size	End Reaction (U.N.O)
MC12X14.3	20.16 kip

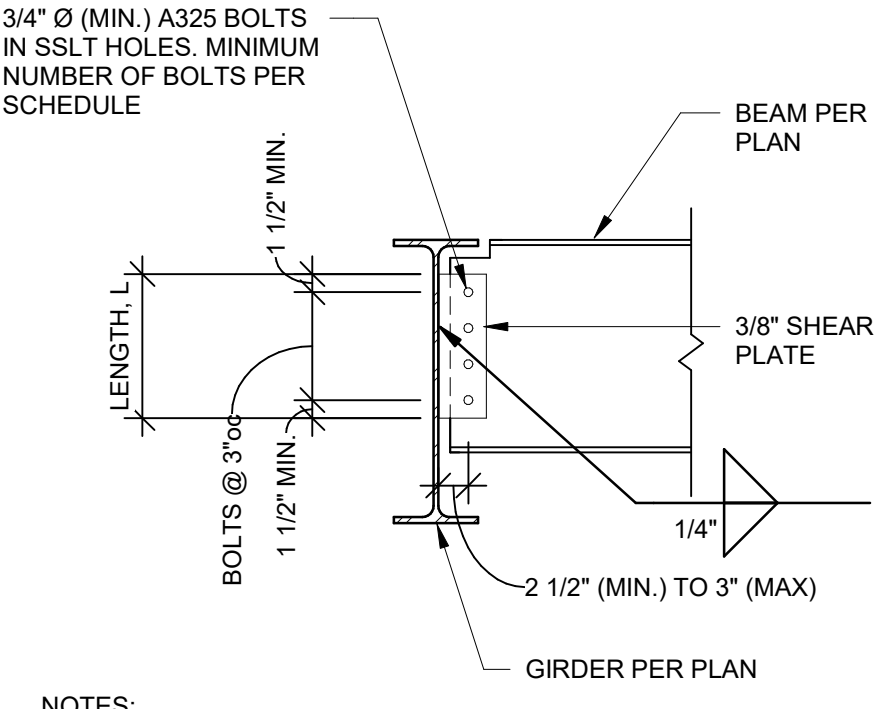


MINIMUM CONNECTION SCHEDULE		
BEAM SIZE	MINIMUM "N" QUANTITY 3/4" BOLTS IN WEB	MINIMUM LENGTH, "L" (IN)
W8,C8	2	6
W10,C10	2	6
W12,C12	2	6
W14,C15	3	9
W16	3	9
W18	4	12
W21	4	12
W24	5	15

- SCHEDULE NOTES:
- ALL BOLTS SHALL BE 3/4" Ø ASTM A325.
  - ALL BOLTS SHALL HAVE HEAVY HEX NUTS.
  - ALL BOLTS SHALL BE FULLY PRE-TENSIONED.

TYPICAL BEAM TO GIRDER CONNECTION

**1 DETAIL**  
3/4" = 1'-0"

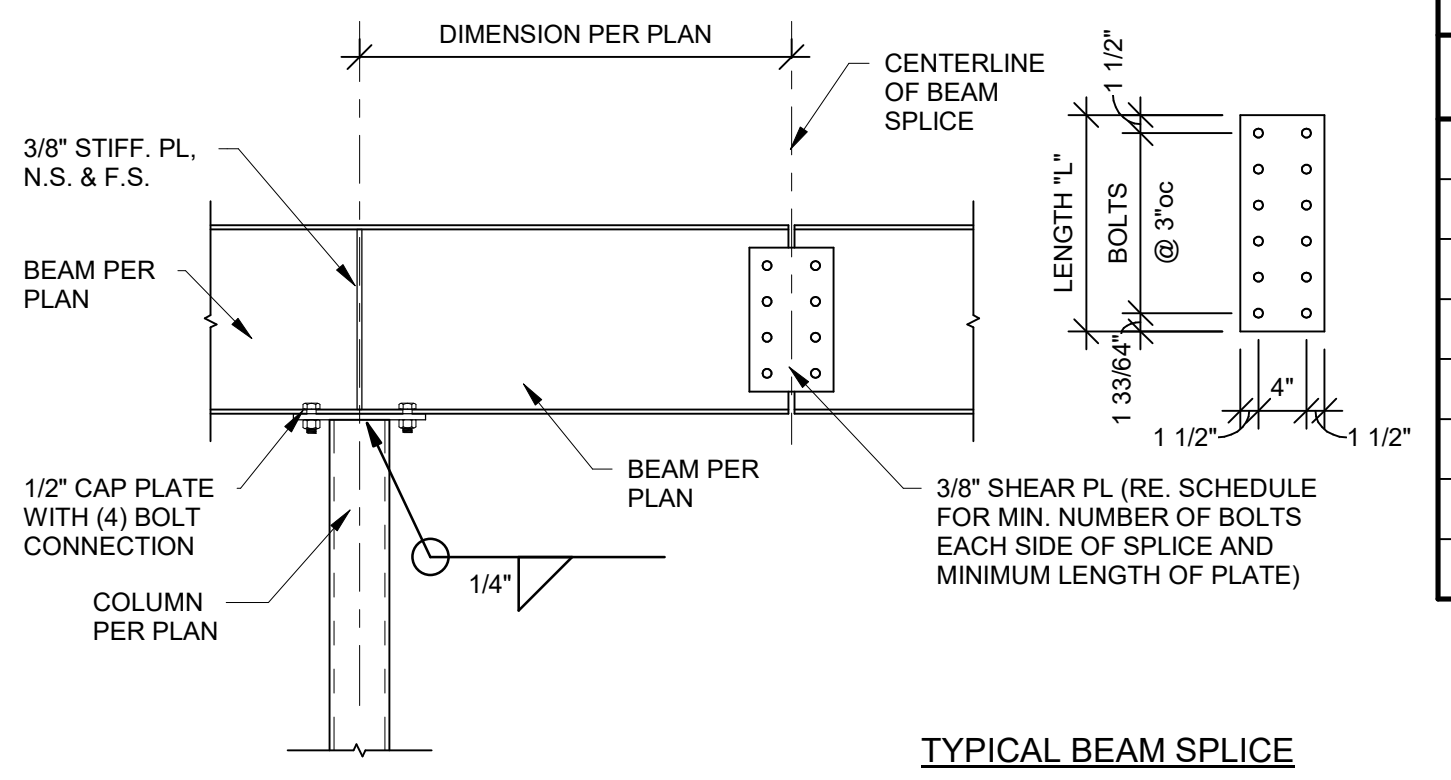


MINIMUM CONNECTION SCHEDULE		
BEAM SIZE	MINIMUM "N" QUANTITY 3/4" BOLTS IN WEB	MINIMUM LENGTH, "L" (IN)
W8,C8	2	6
W10,C10	2	6
W12,C12	2	6
W14	3	9
W16	3	9
W18	4	12
W21	4	12
W24	5	15

- SCHEDULE NOTES:
- ALL BOLTS SHALL BE 3/4" Ø ASTM A325.
  - ALL BOLTS SHALL HAVE HEAVY HEX NUTS.
  - ALL BOLTS SHALL BE FULLY PRE-TENSIONED.
  - CLIP ANGLES PER 195310 MAY BE USE AT CONTRACTORS OPTION.

TYPICAL BEAM TO GIRDER CONNECTION

**2 DETAIL**  
3/4" = 1'-0"

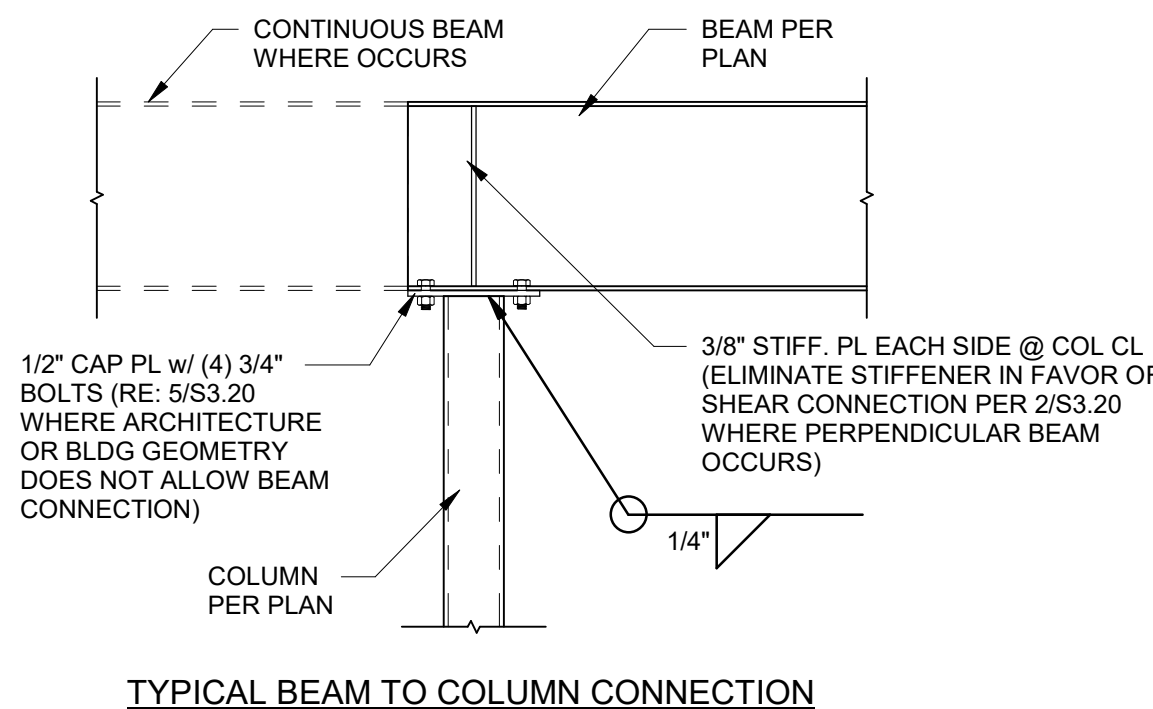


MINIMUM CONNECTION SCHEDULE		
BEAM SIZE	MINIMUM "N" QUANTITY 3/4" BOLTS IN WEB	MINIMUM LENGTH, "L" (IN)
W8,C8	2	6
W10,C10	3	9
W12,C12	3	9
W14,C15	3	9
W16	4	12
W18	5	15
W21	6	18
W24	6	18

- SCHEDULE NOTES:
- ALL BOLTS SHALL BE 3/4" Ø ASTM A325.
  - ALL BOLTS SHALL HAVE HEAVY HEX NUTS.
  - ALL BOLTS SHALL BE FULLY PRE-TENSIONED.

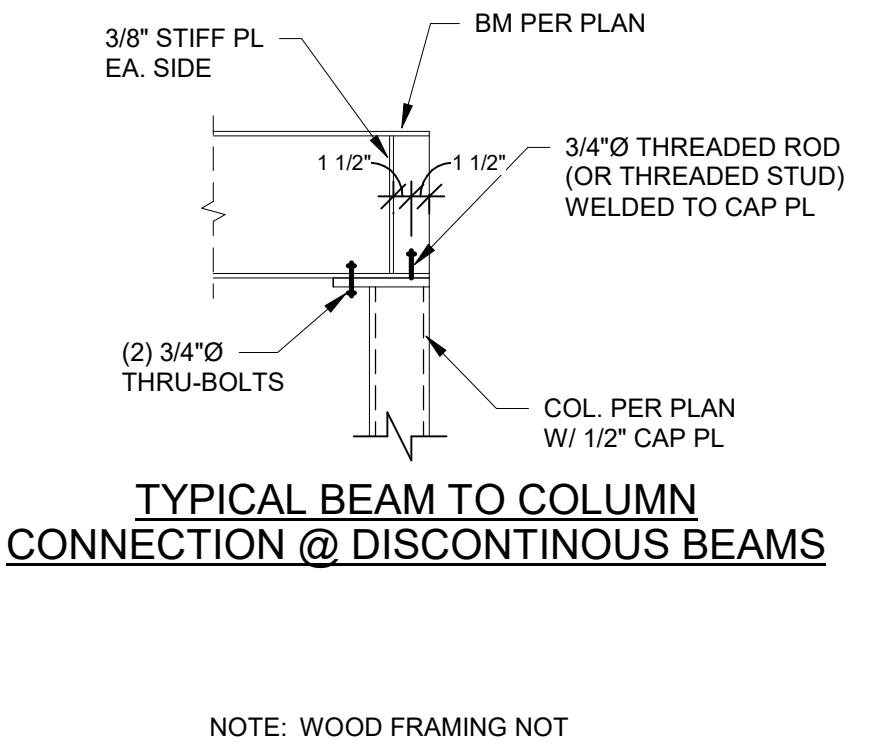
TYPICAL BEAM SPLICE

**3 DETAIL**  
3/4" = 1'-0"



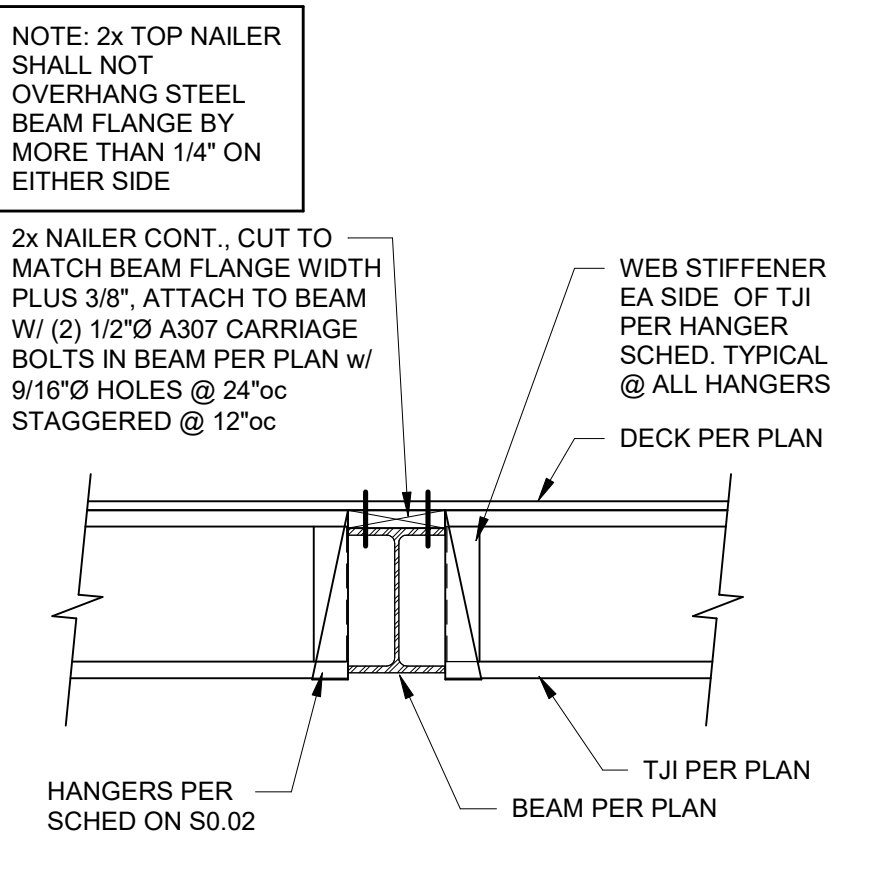
TYPICAL BEAM TO COLUMN CONNECTION

**4 DETAIL**  
3/4" = 1'-0"



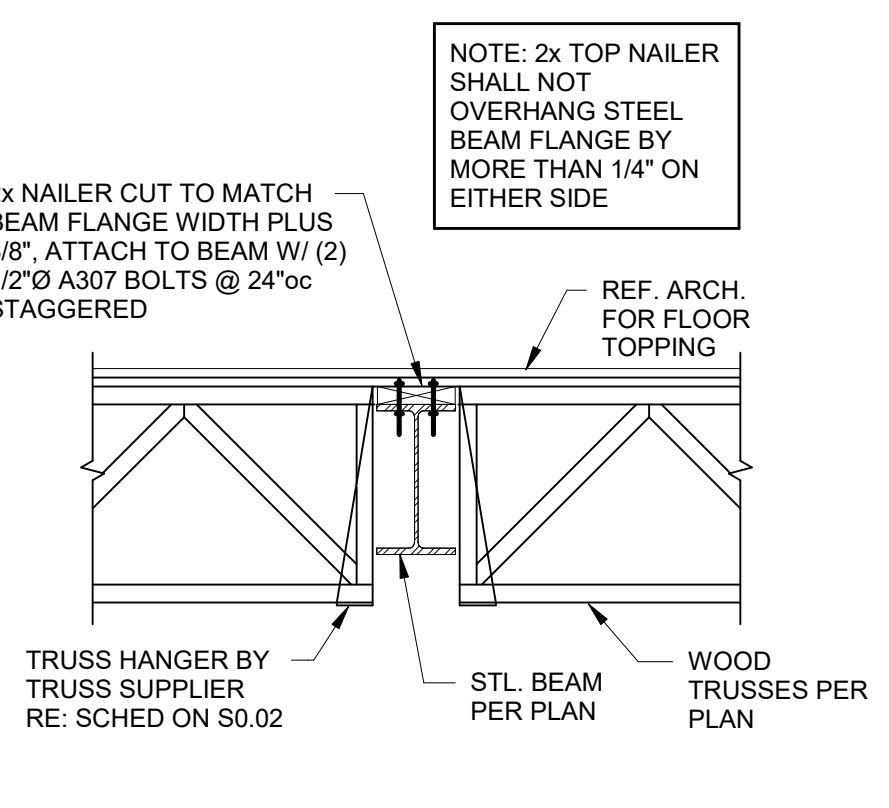
TYPICAL BEAM TO COLUMN CONNECTION @ DISCONTINUOUS BEAMS

**5 SECTION**  
3/4" = 1'-0"



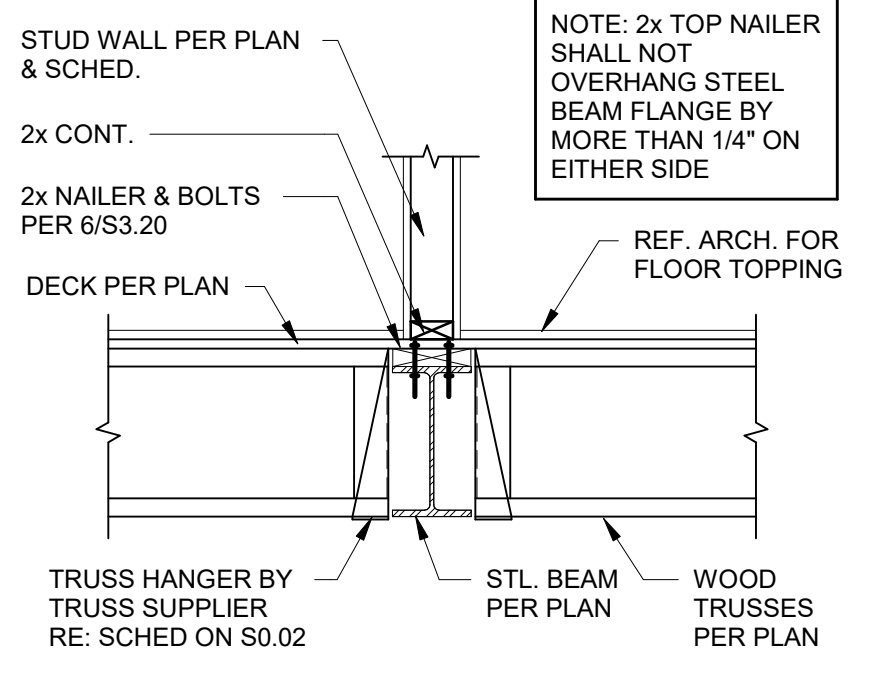
TYPICAL BEAM TO COLUMN CONNECTION @ DISCONTINUOUS BEAMS

**6 SECTION**  
3/4" = 1'-0"



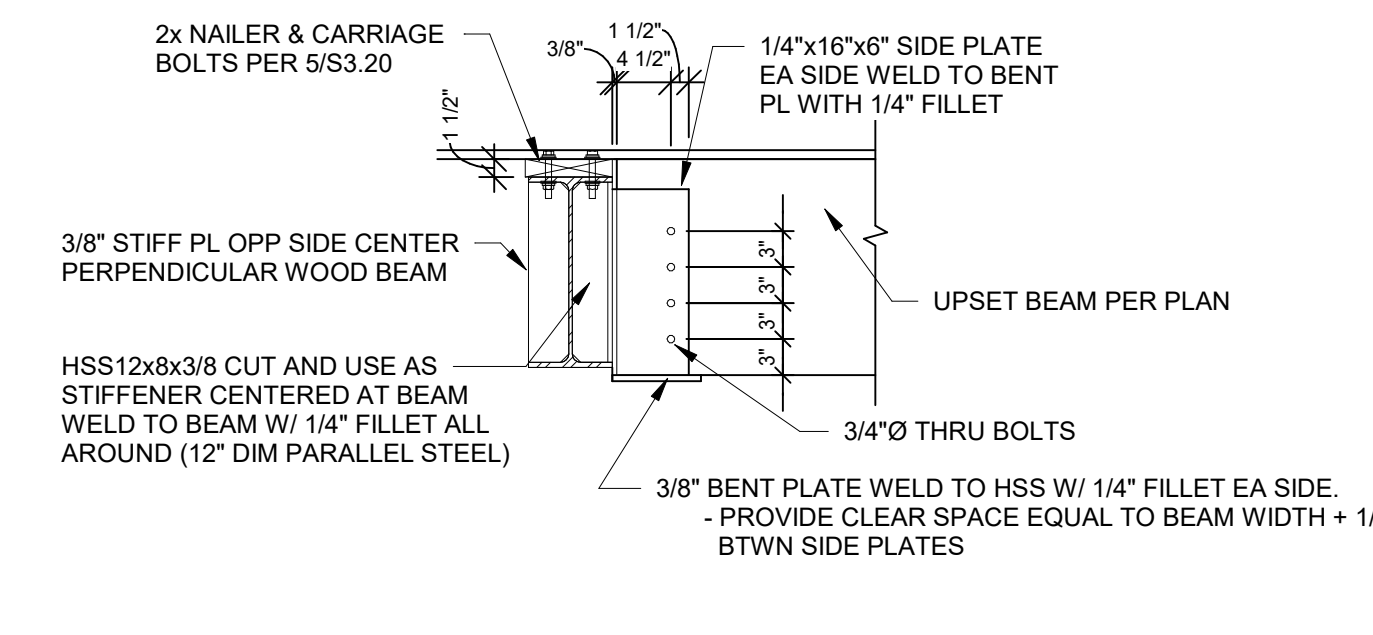
TYPICAL BEAM TO COLUMN CONNECTION @ DISCONTINUOUS BEAMS

**6A SECTION**  
3/4" = 1'-0"



TYPICAL BEAM TO COLUMN CONNECTION @ DISCONTINUOUS BEAMS

**7 SECTION**  
3/4" = 1'-0"



TYPICAL BEAM TO COLUMN CONNECTION @ DISCONTINUOUS BEAMS

**8 DETAIL**  
3/4" = 1'-0"

**NOT USED**

**NOT USED**

**NOT USED**

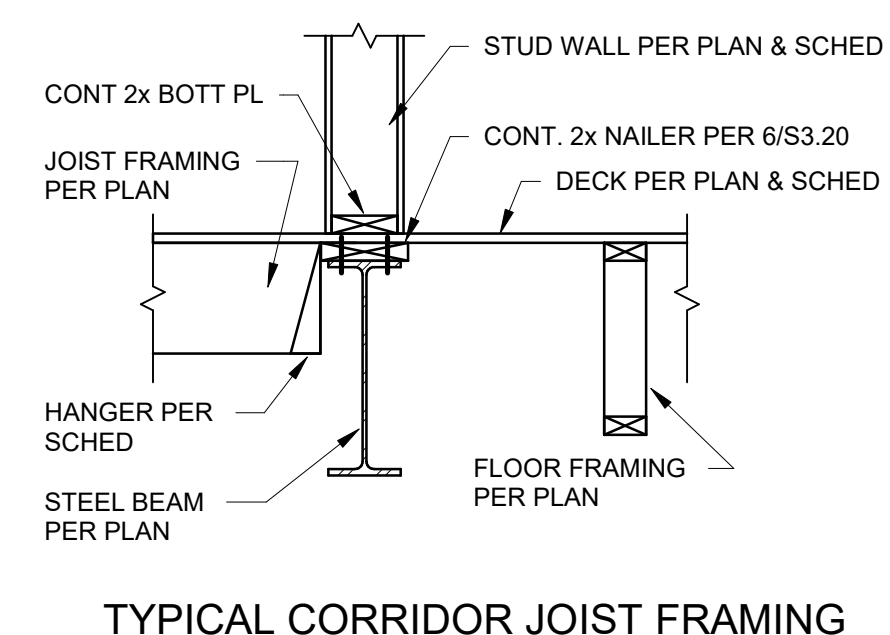
**NOT USED**

**8A SECTION**  
1 1/2" = 1'-0"

**9 SECTION**  
1 1/2" = 1'-0"

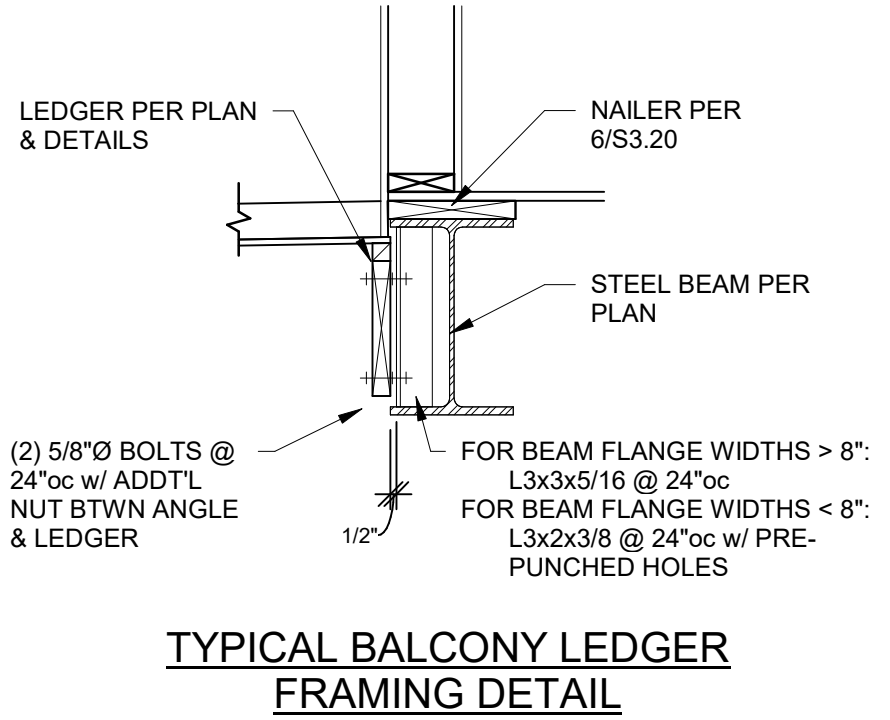
**10 SECTION**  
1 1/2" = 1'-0"

**11 SECTION**  
1 1/2" = 1'-0"



TYPICAL CORRIDOR JOIST FRAMING

**12 SECTION**  
3/4" = 1'-0"



TYPICAL BALCONY LEDGER FRAMING DETAIL

**13 SECTION**  
3/4" = 1'-0"

REVISIONS

No.	Date	Description
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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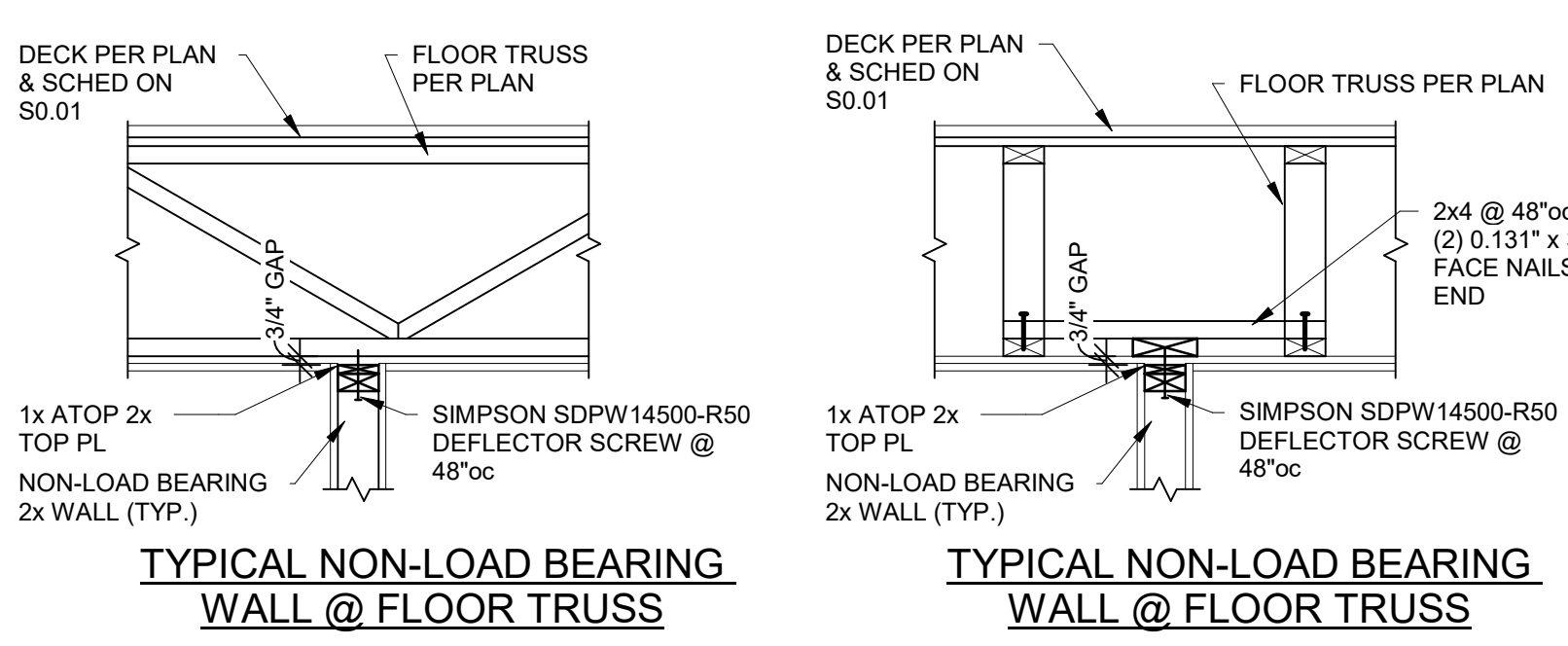
SHEET TITLE

WOOD FLOOR  
FRAMING DETAILS

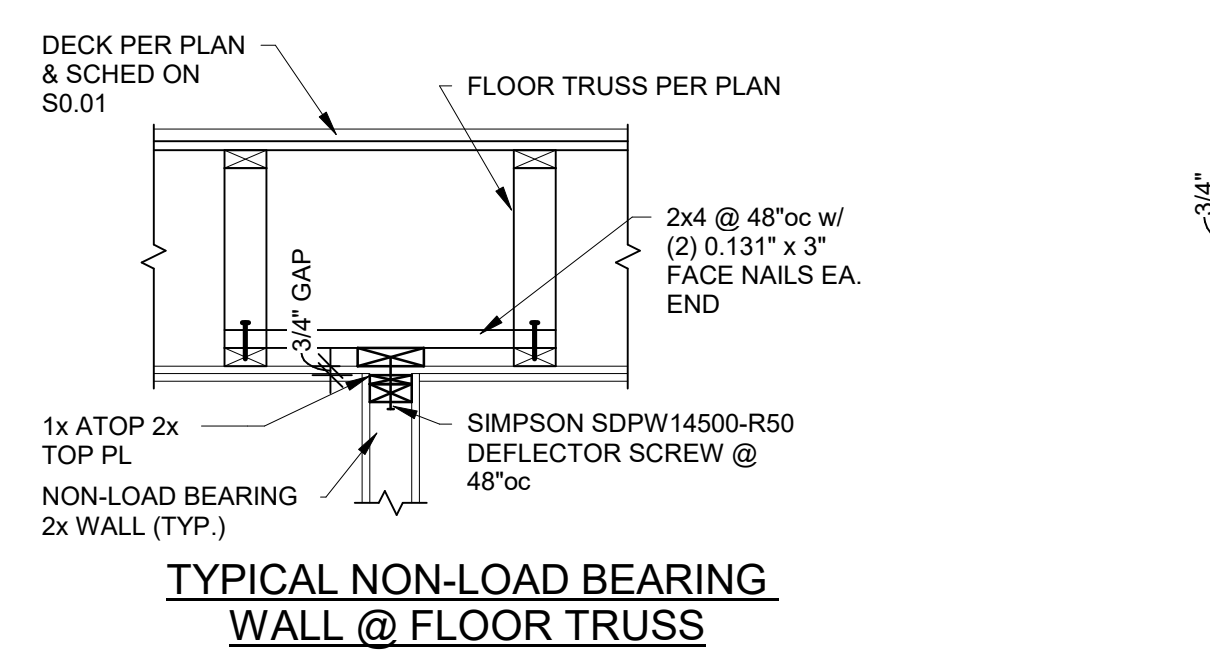
SHEET NUMBER

**S3.30**

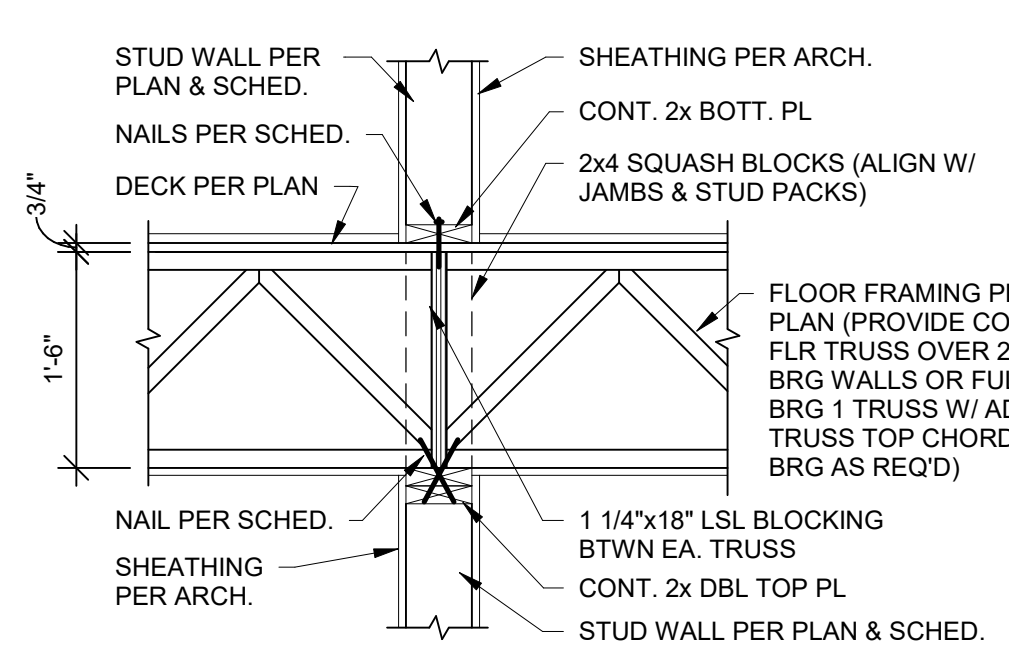
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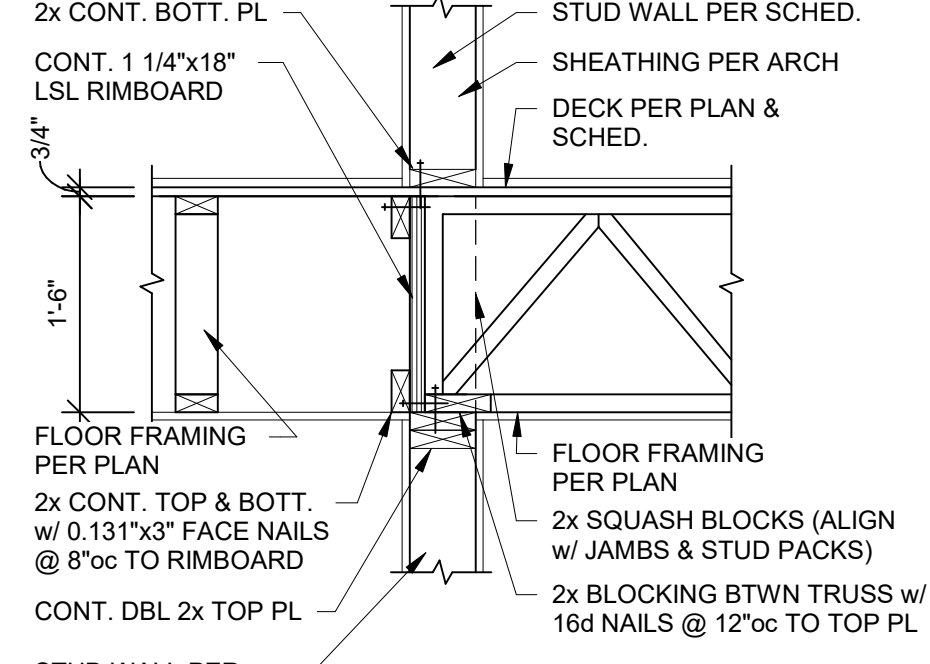
**1 SECTION**  
3/4" = 1'-0"



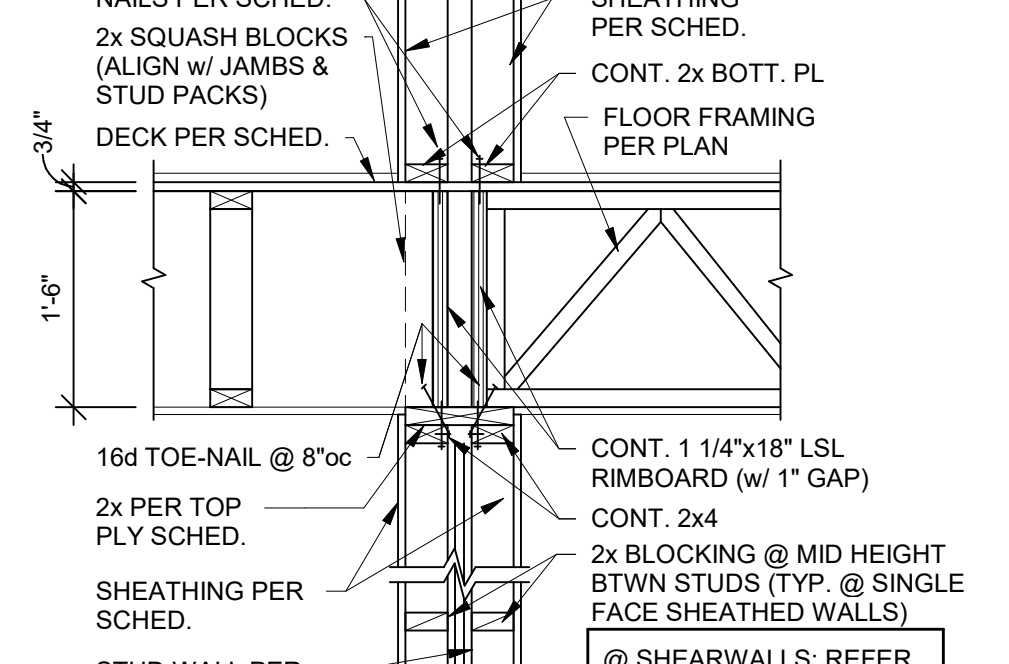
**2 SECTION**  
3/4" = 1'-0"



**2A SECTION**  
3/4" = 1'-0"



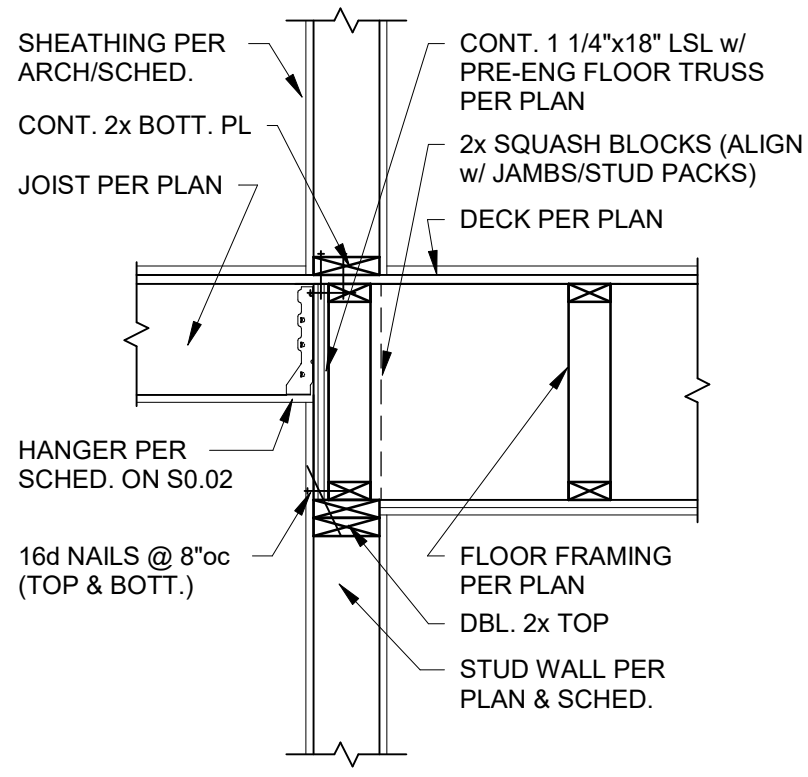
**3 SECTION**  
3/4" = 1'-0"



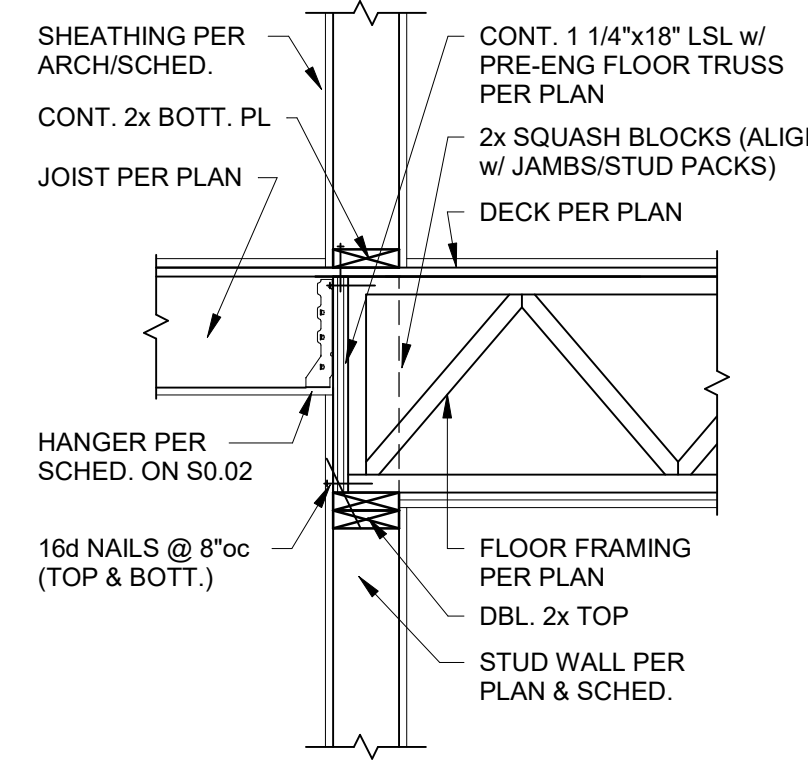
**3A SECTION**  
3/4" = 1'-0"

TOP PLY SCHEDULE

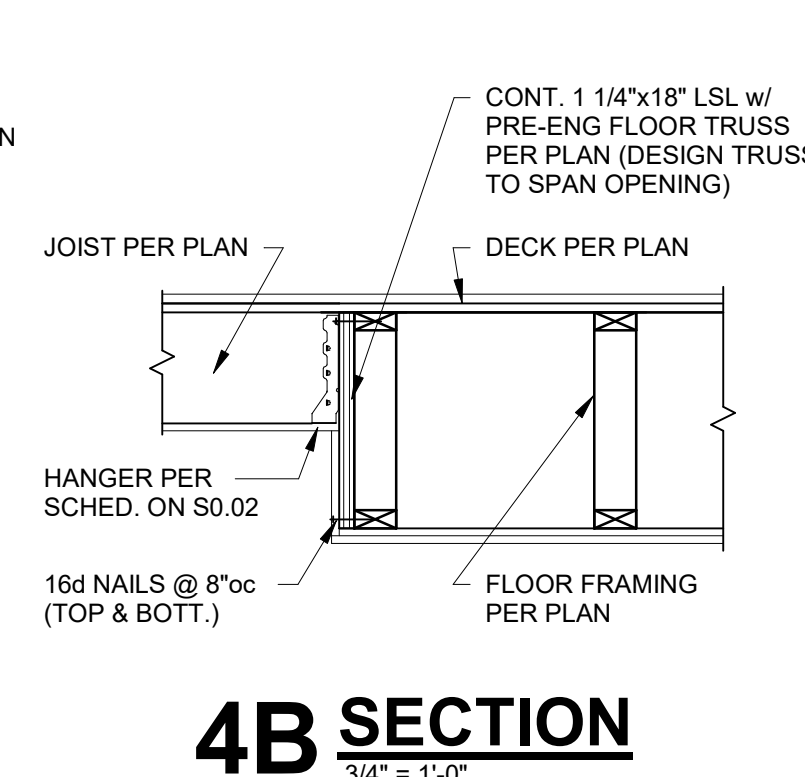
WALL STUD SIZE	TOP PLY SIZE
DBL 2x4	2x10
2x4 & 2x6	2x12
DBL 2x6	2x12



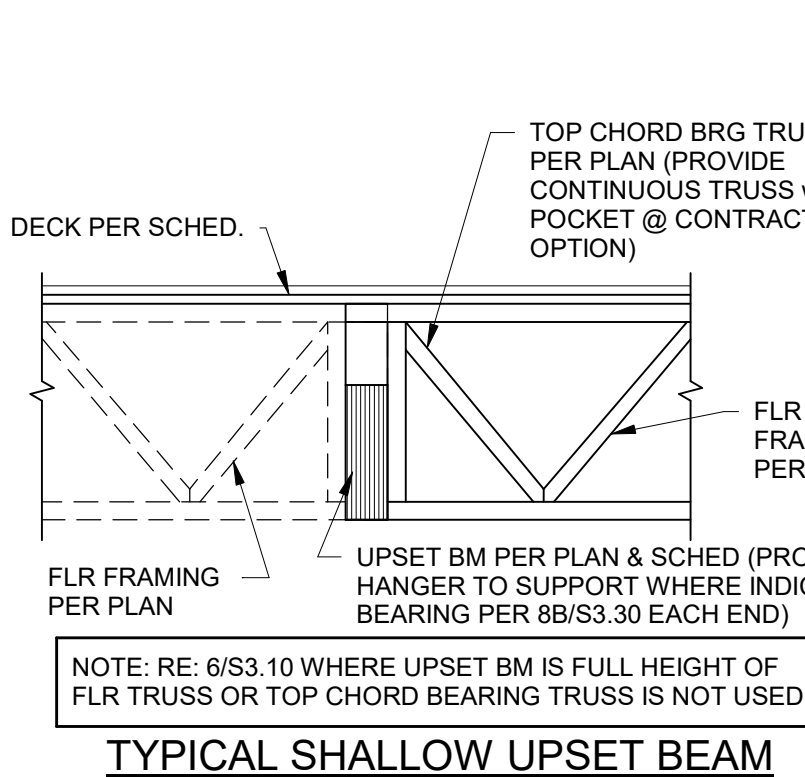
**4 SECTION**  
3/4" = 1'-0"



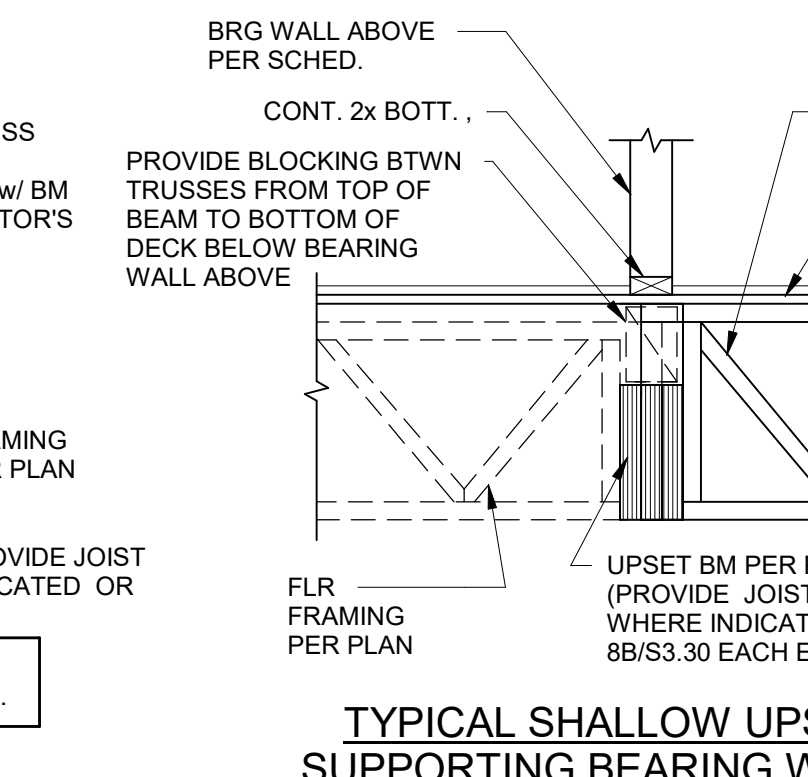
**4A SECTION**  
3/4" = 1'-0"



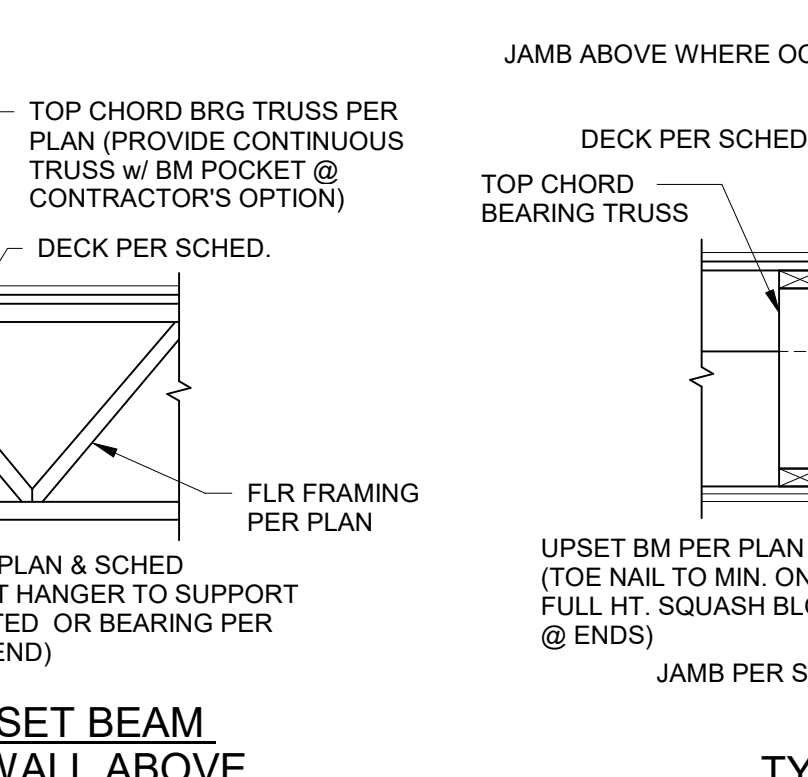
**4B SECTION**  
3/4" = 1'-0"



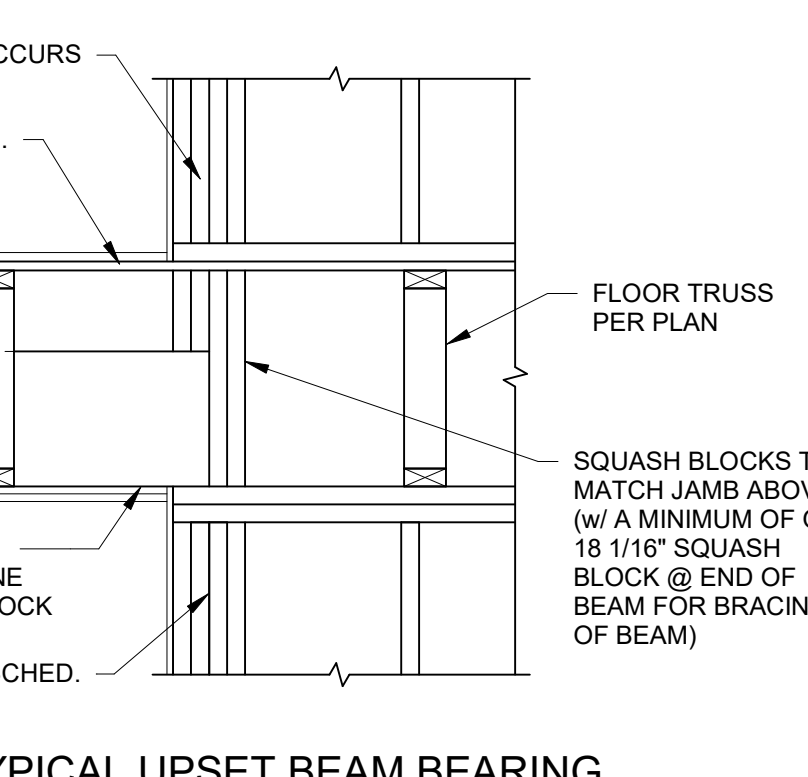
**TYPICAL SHALLOW UPSET BEAM WITHOUT BEARING WALL ABOVE**



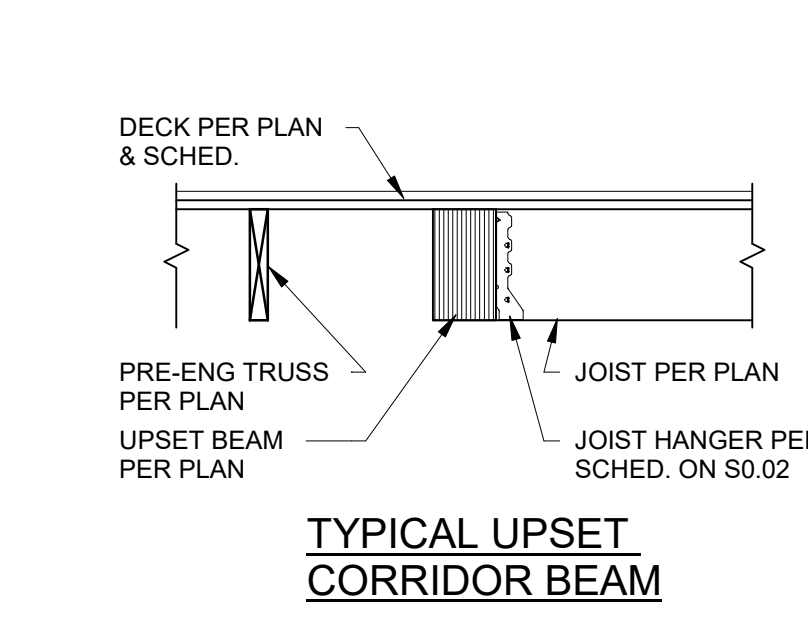
**5 SECTION**  
3/4" = 1'-0"



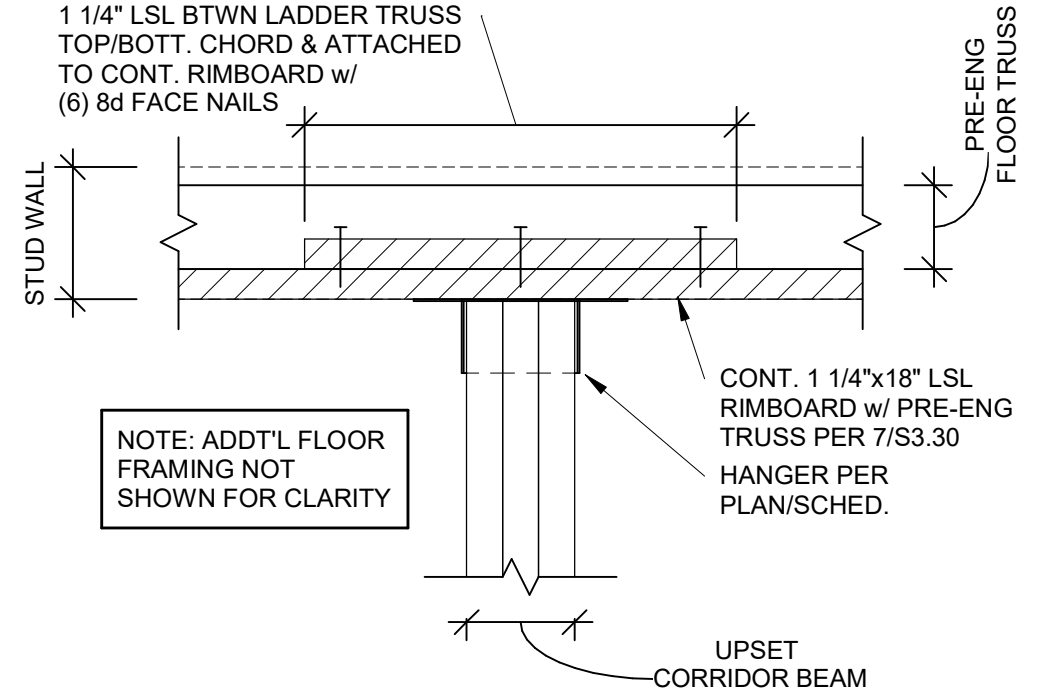
**5A SECTION**  
3/4" = 1'-0"



**6 SECTION**  
3/4" = 1'-0"



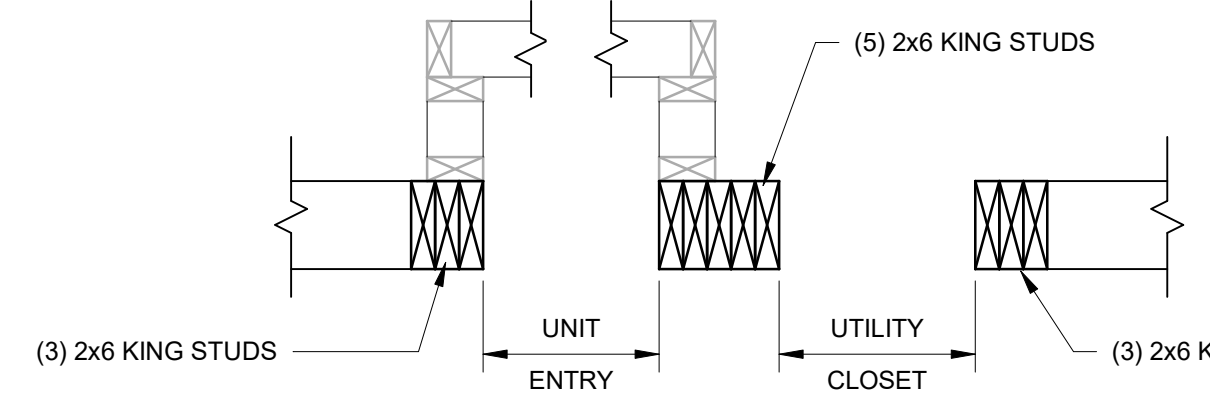
**7 SECTION**  
3/4" = 1'-0"



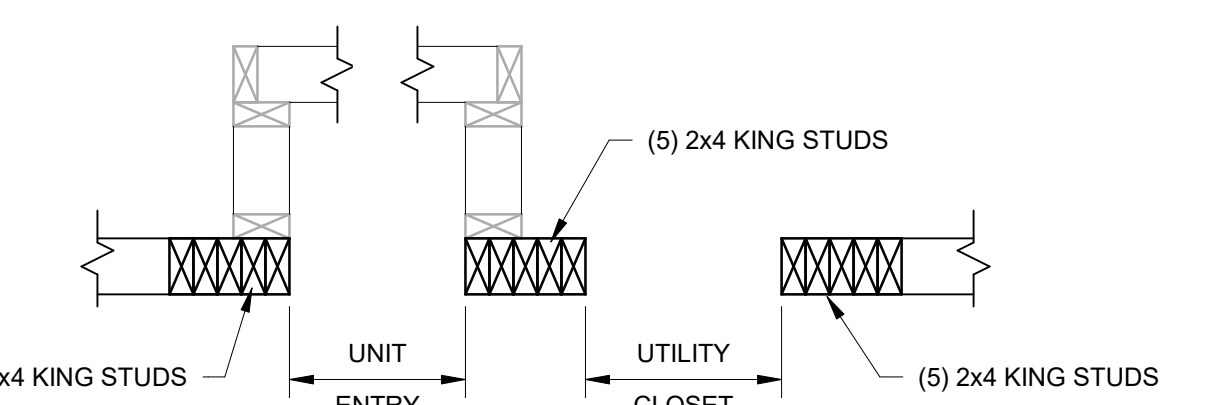
**7A SECTION**  
1 1/2" = 1'-0"

**NOT USED**

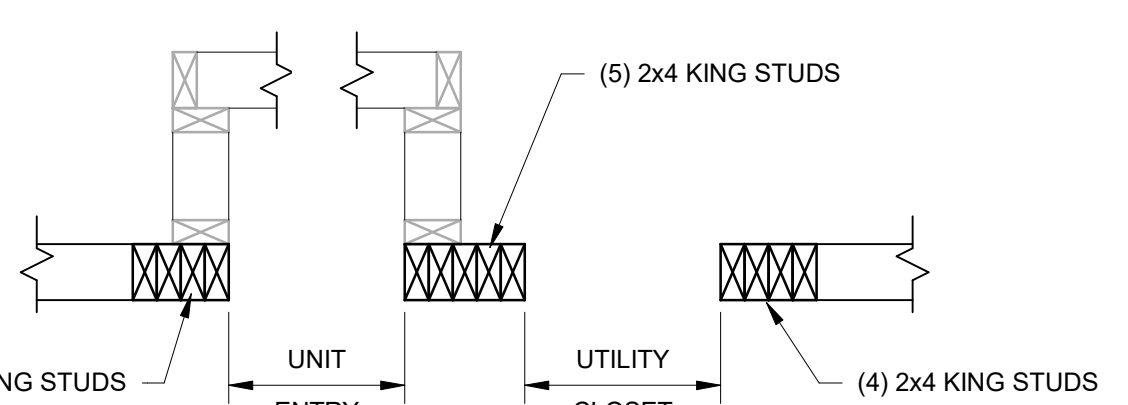
**8 SECTION**  
1 1/2" = 1'-0"



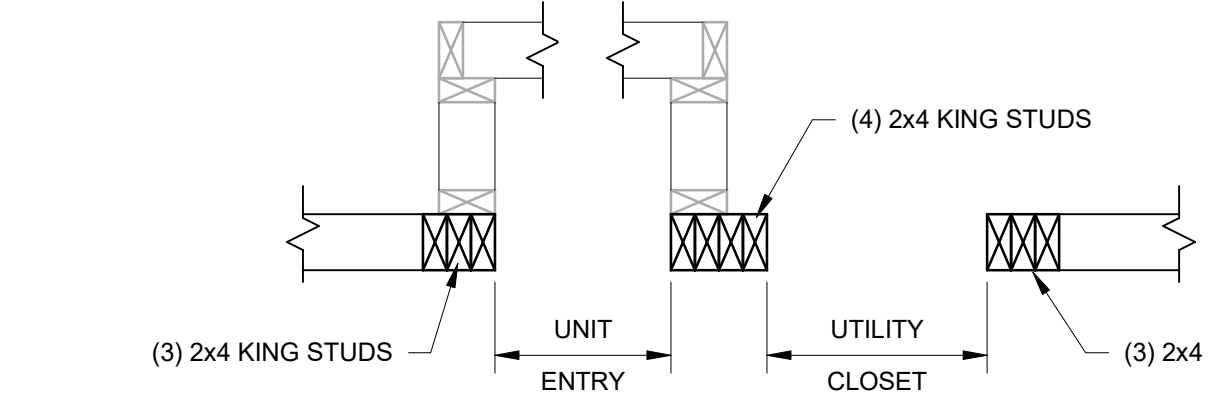
**8A DETAIL**  
1" = 1'-0"



**8B DETAIL**  
1" = 1'-0"



**8C DETAIL**  
1" = 1'-0"



**8D DETAIL**  
1" = 1'-0"

REVISIONS		
No.	Date	Description

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

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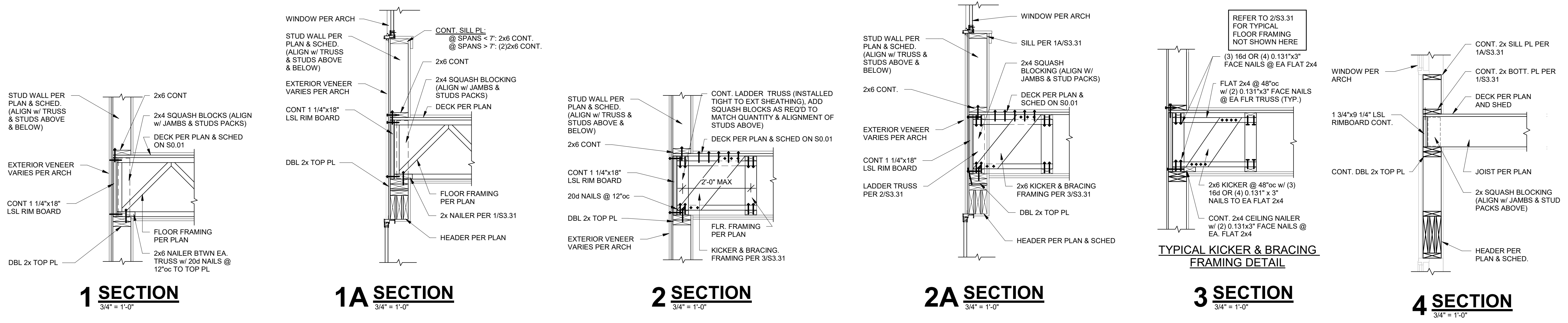
SHEET TITLE

**WOOD FLOOR  
FRAMING DETAILS**

SHEET NUMBER

**S3.31**

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REFER TO 2/S3.31 FOR TYPICAL FLOOR FRAMING NOT SHOWN HERE

(3) 16d OR (4) 0.131"x3" FACE NAILS @ EA FLAT 2x4

FLAT 2x4 @ 48"oc w/ (2) 0.131"x3" FACE NAILS @ EA FLR TRUSS (TYP.)

**TYPICAL KICKER & BRACING FRAMING DETAIL**



REVISIONS		
No.	Date	Description
1	7.11.22	ADDENDUM 1
2	7.20.22	ADDENDUM 2

**REGISTRATION**



**PROJECT TEAM**

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

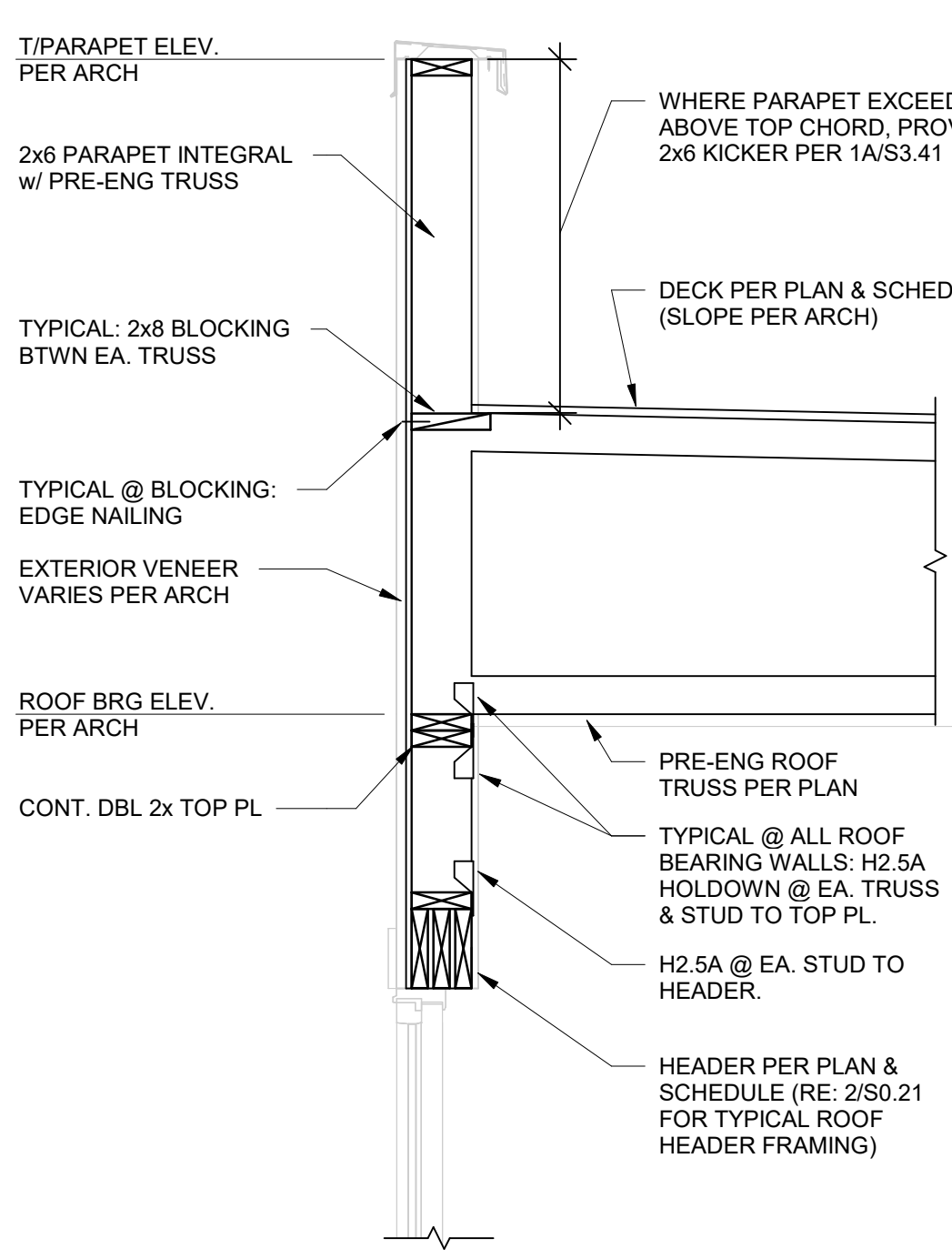
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Kansas City, MO 64111 www.bdc-engr.com

SHEET TITLE

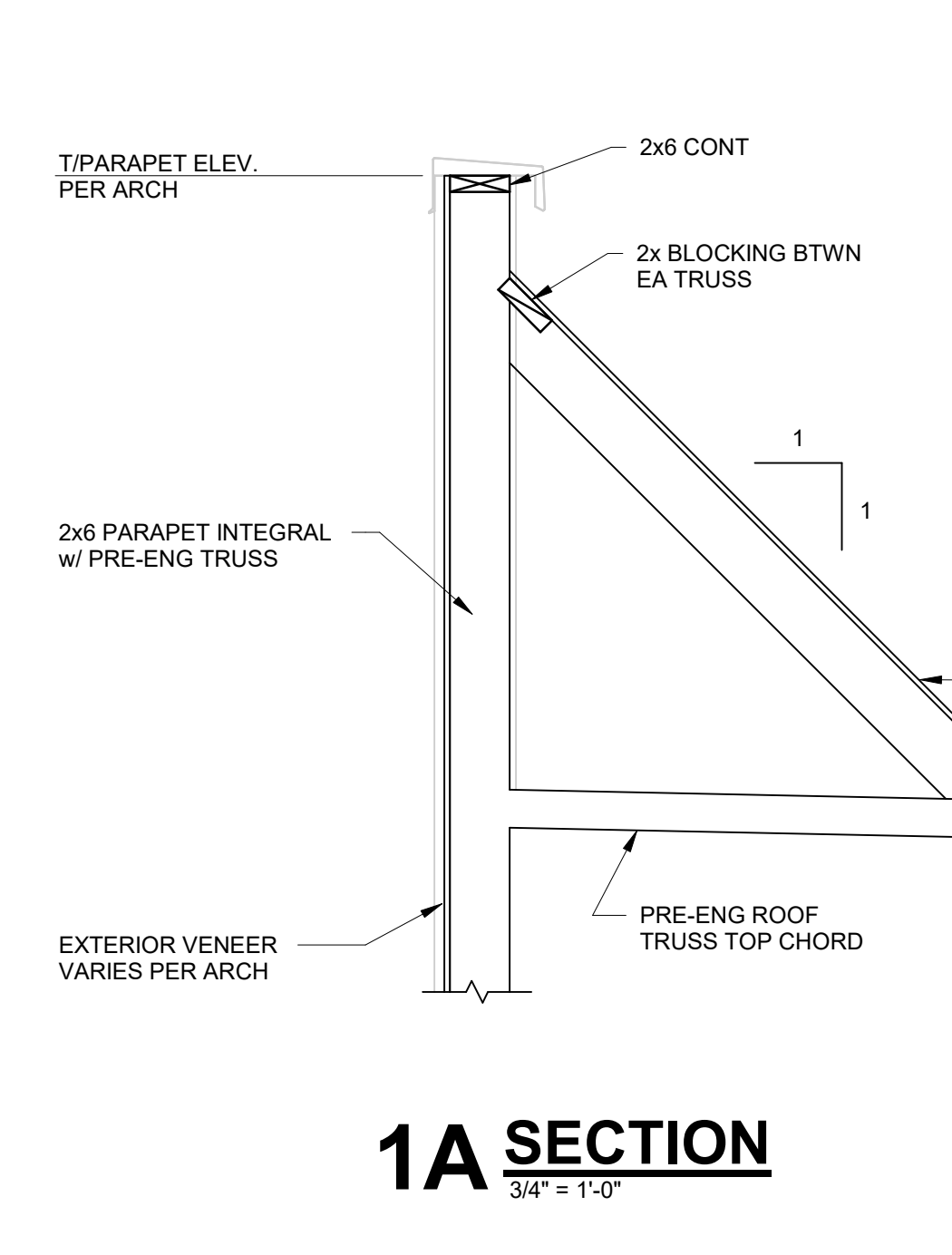
**WOOD ROOF  
FRAMING DETAILS**

SHEET NUMBER

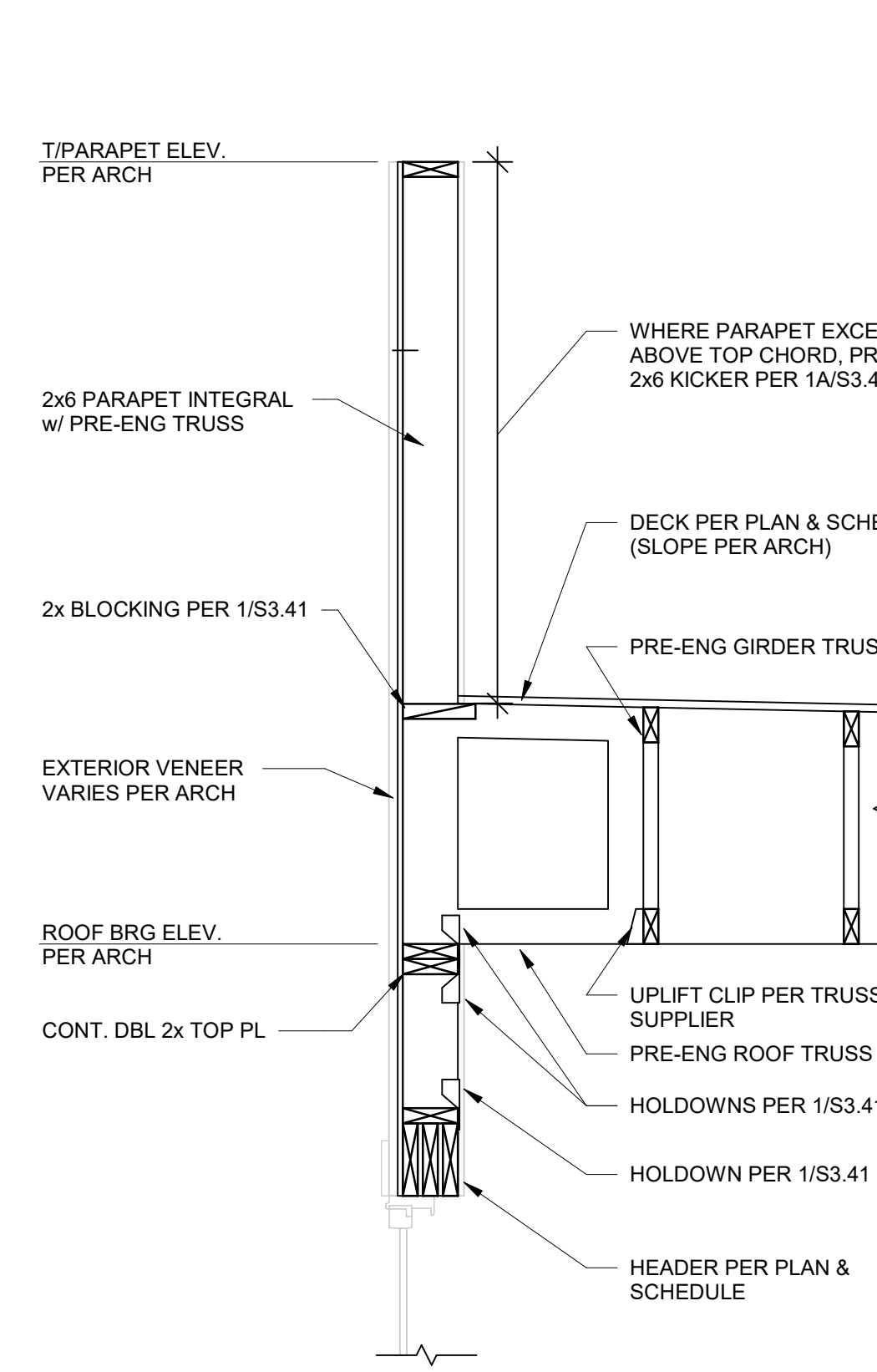
**S3.41**



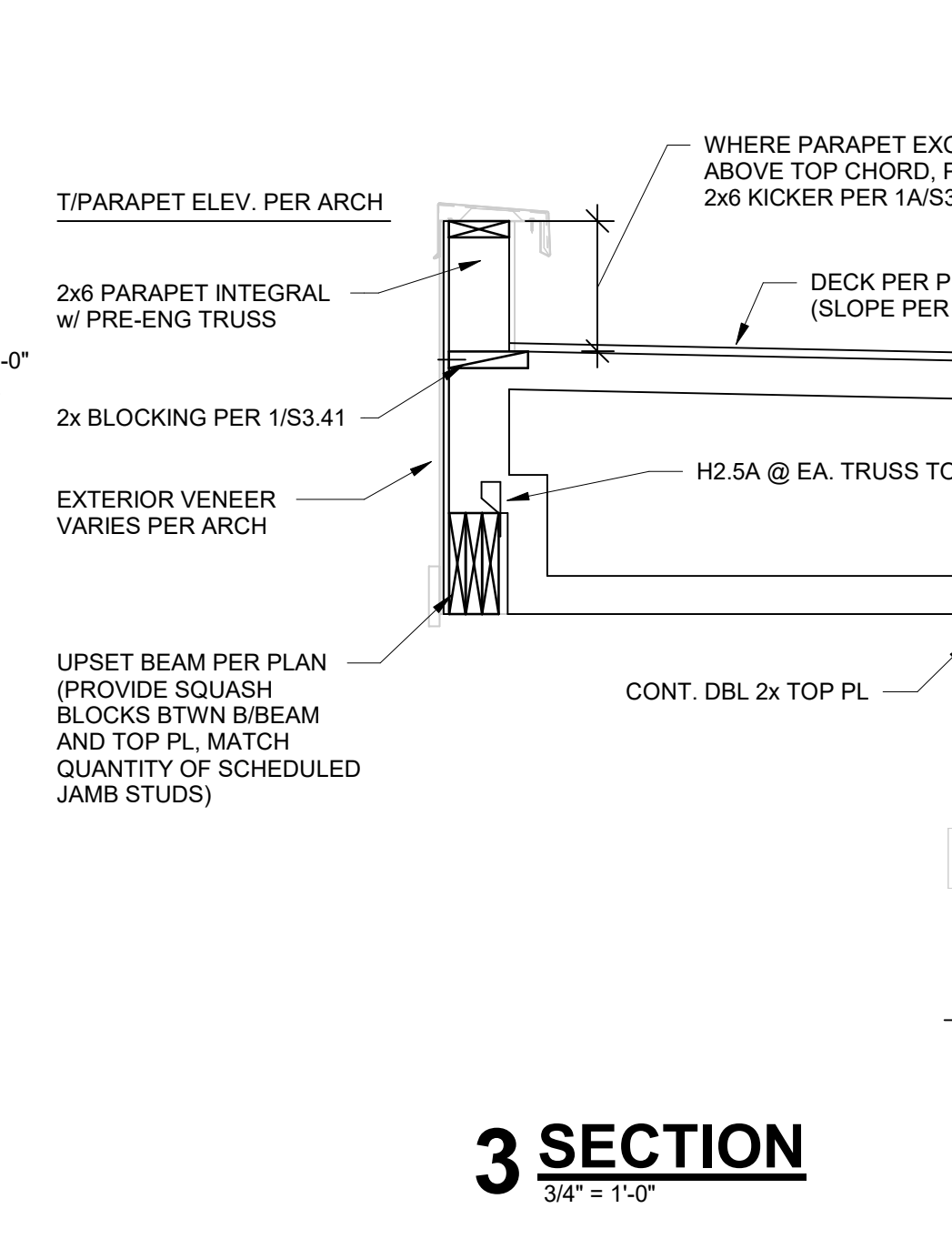
**1 SECTION**  
3/4" = 1'-0"



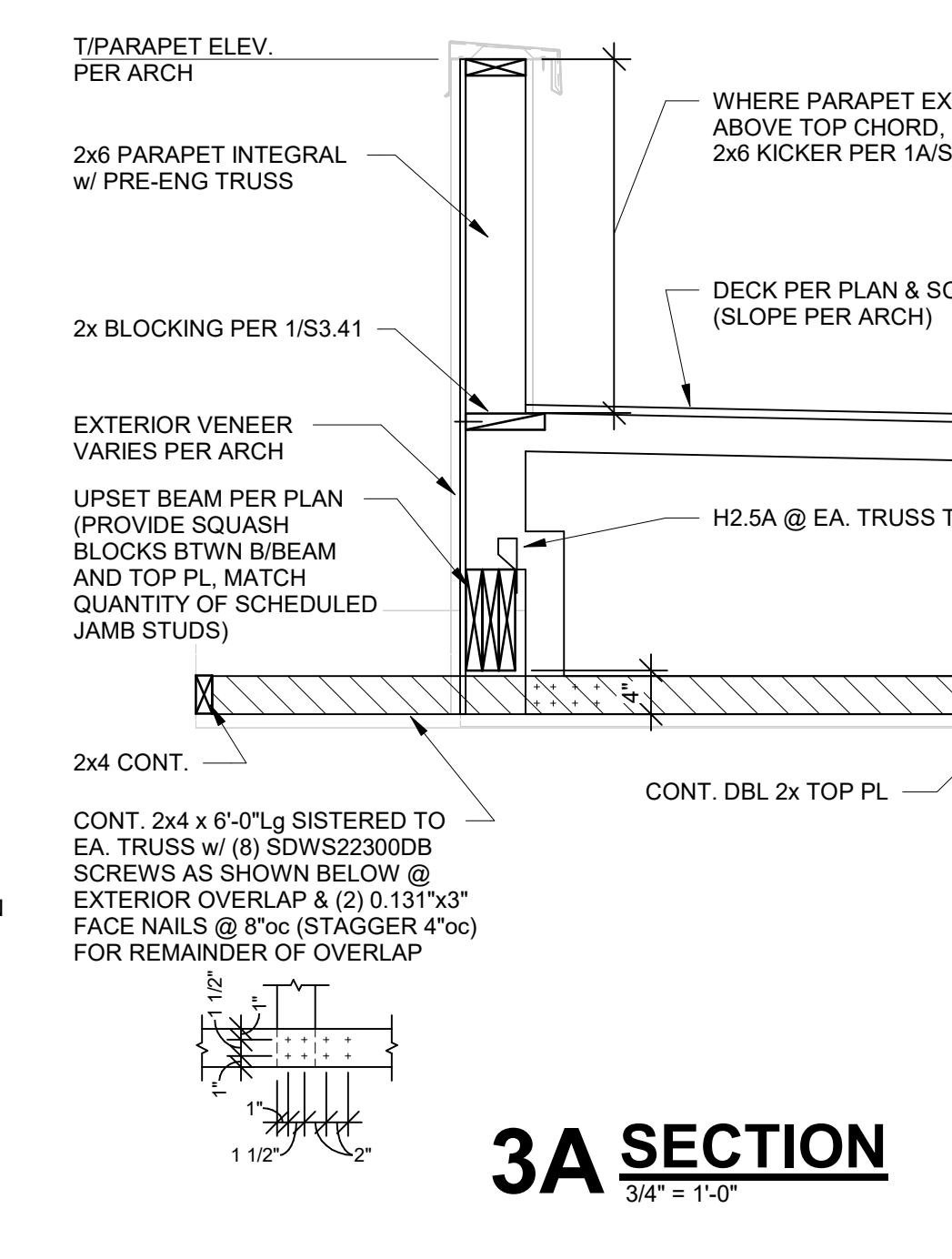
**1A SECTION**  
3/4" = 1'-0"



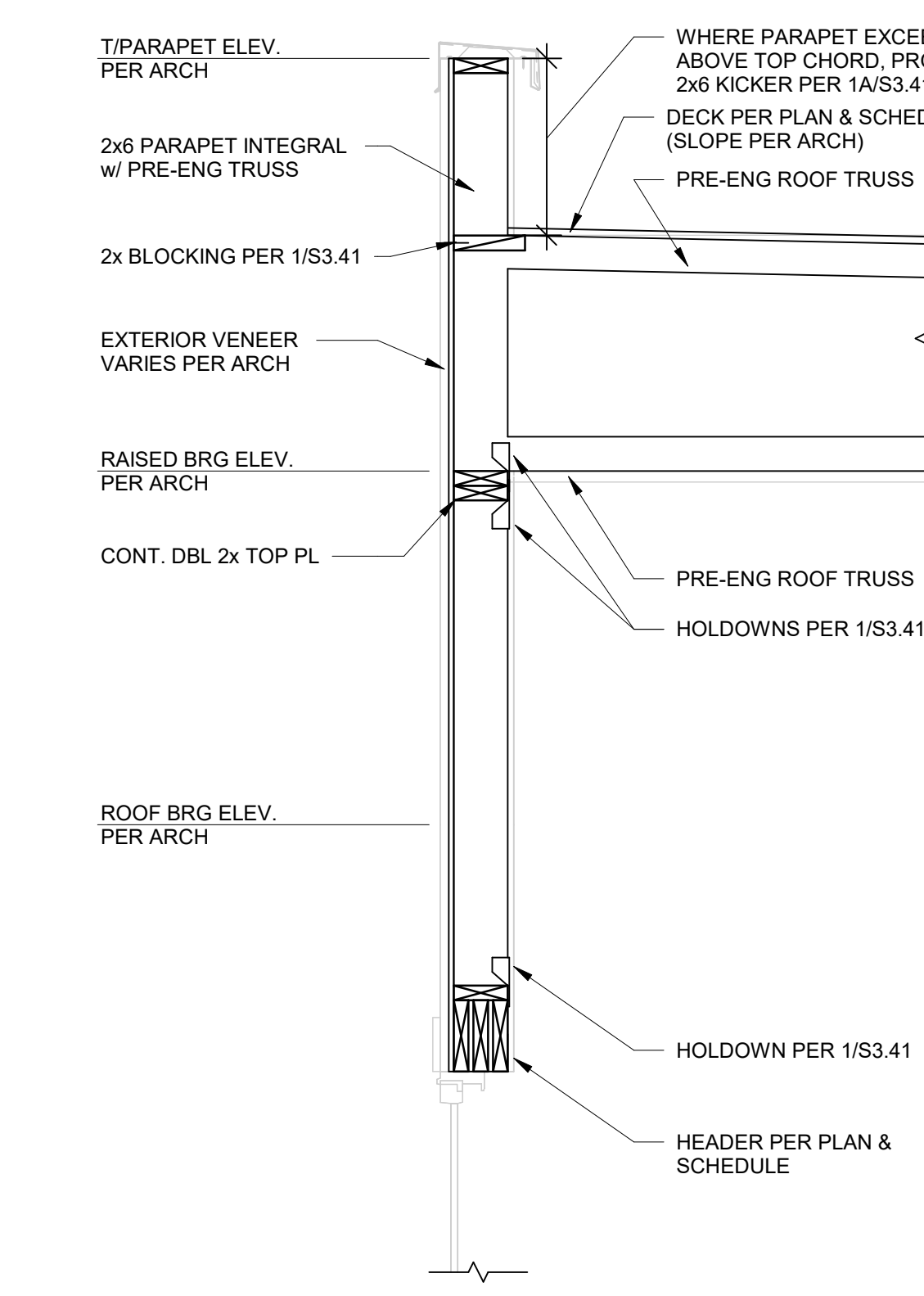
**2 SECTION**  
3/4" = 1'-0"



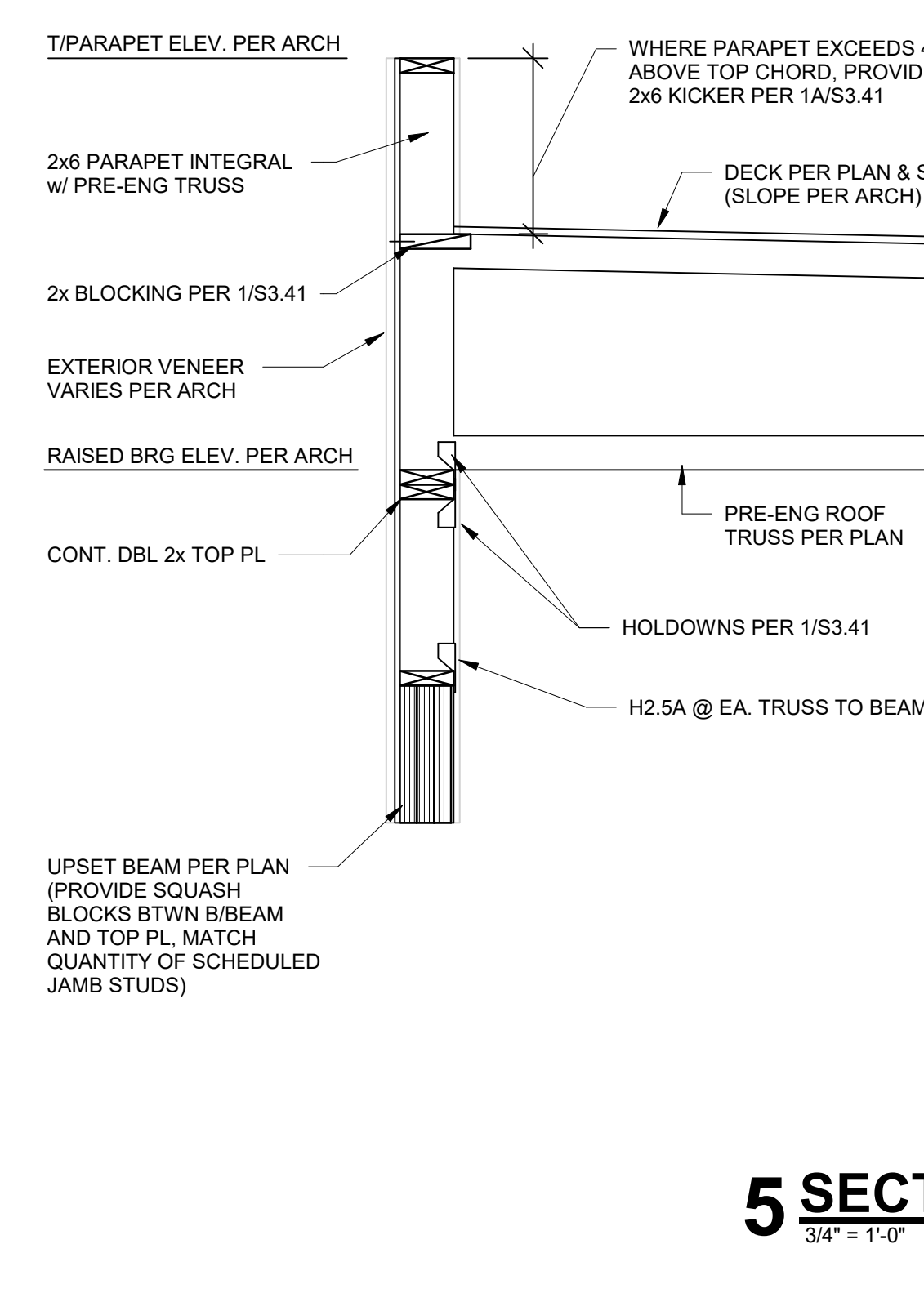
**3 SECTION**  
3/4" = 1'-0"



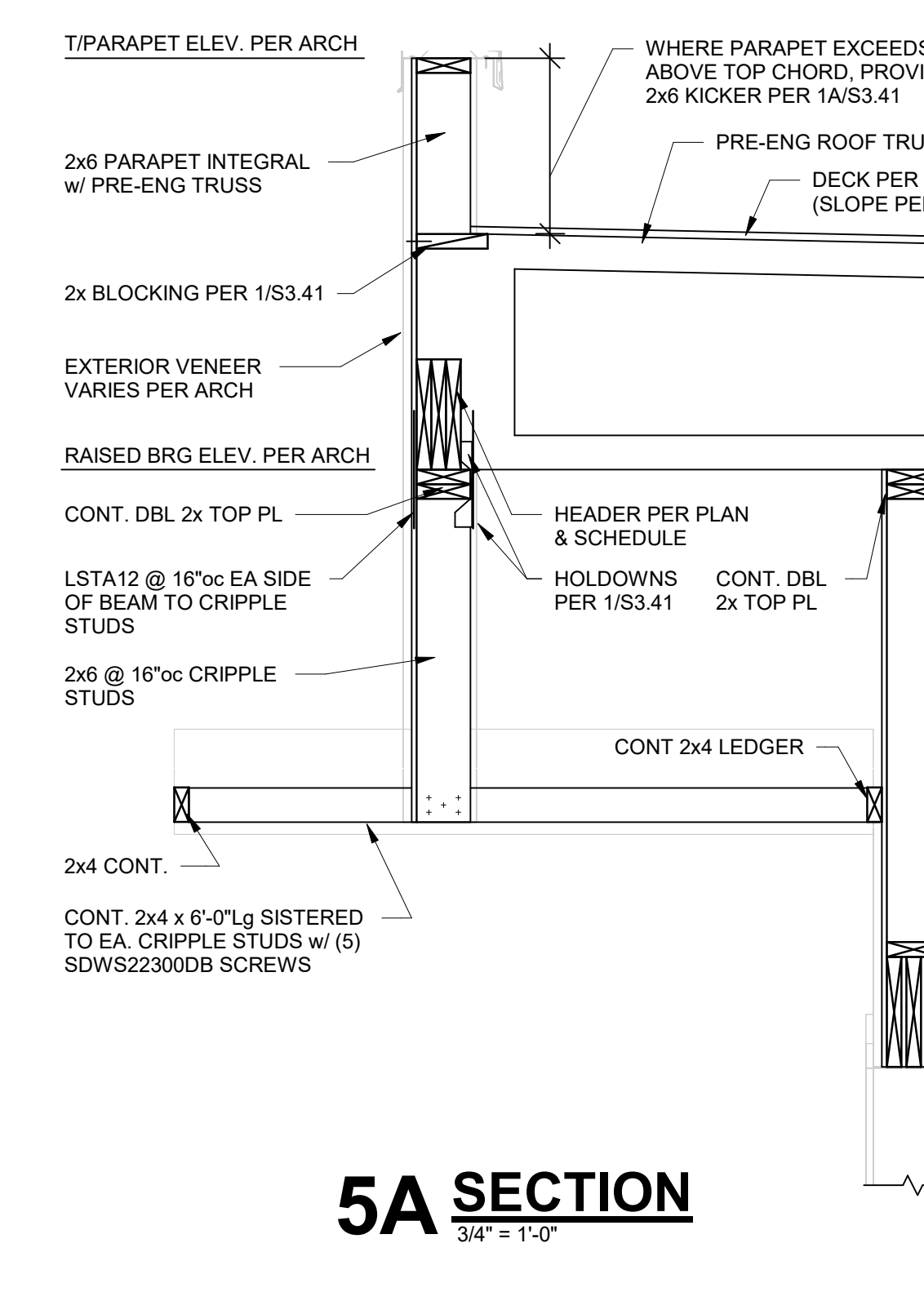
**3A SECTION**  
3/4" = 1'-0"



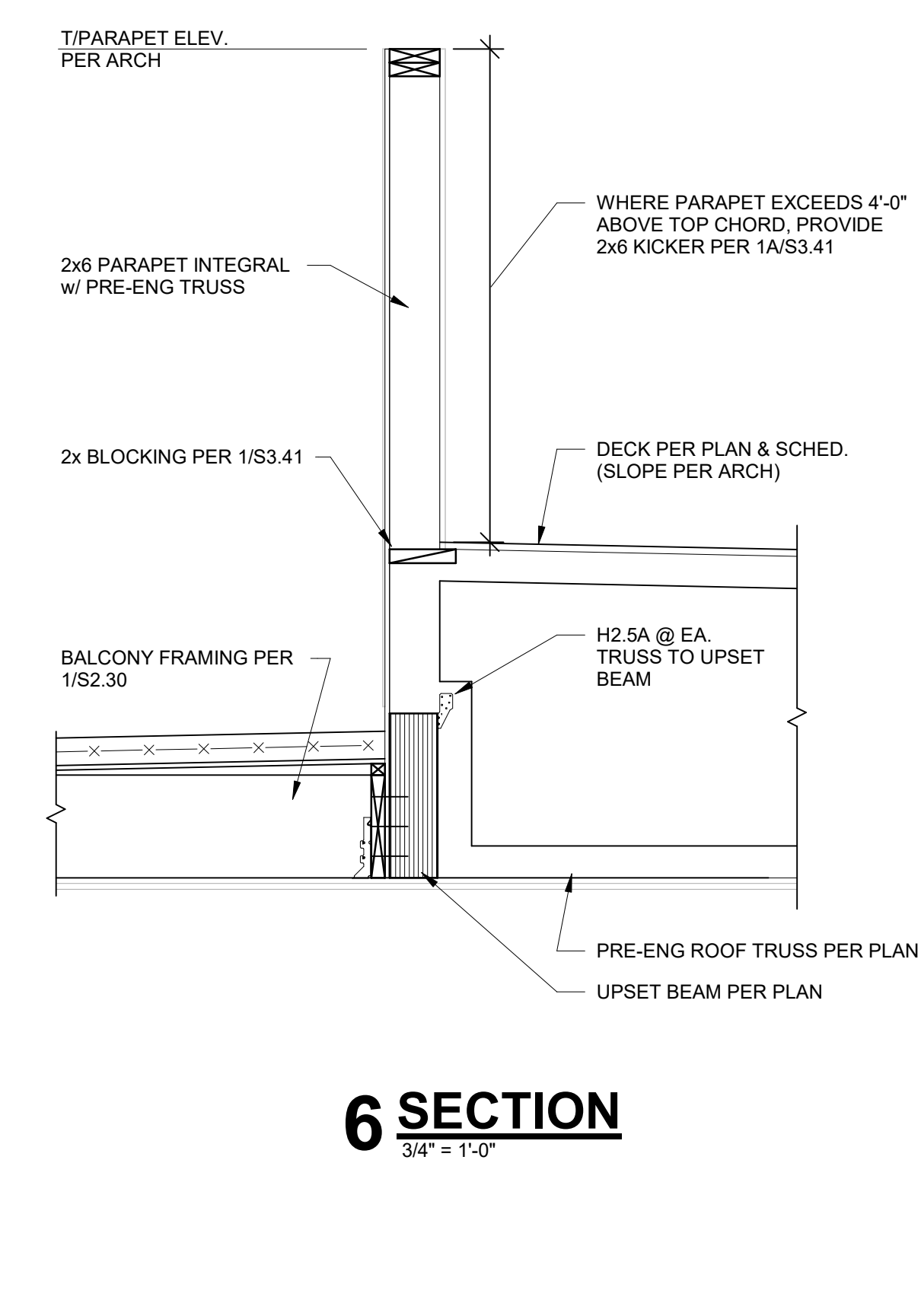
**4 SECTION**  
3/4" = 1'-0"



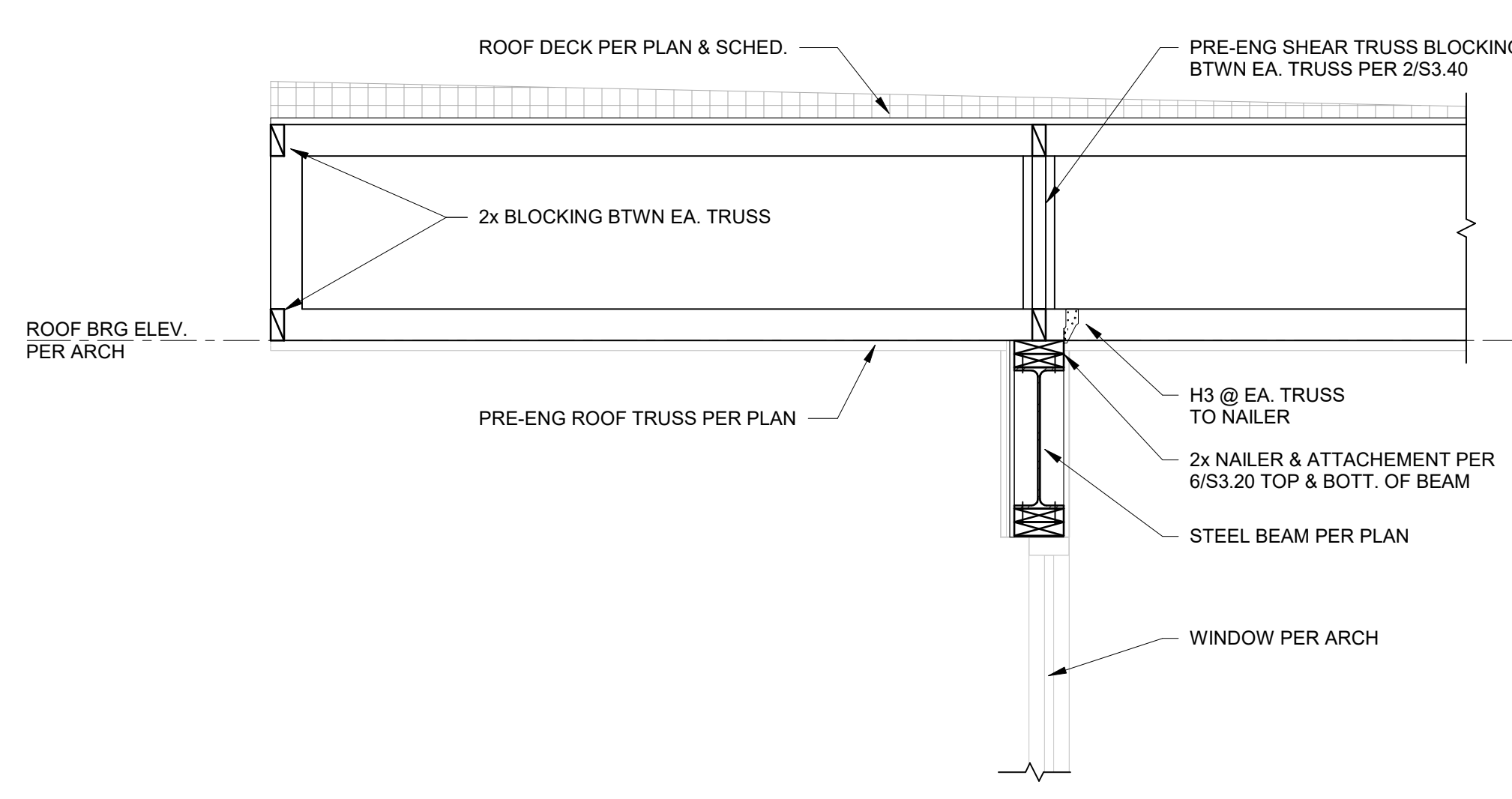
**5 SECTION**  
3/4" = 1'-0"



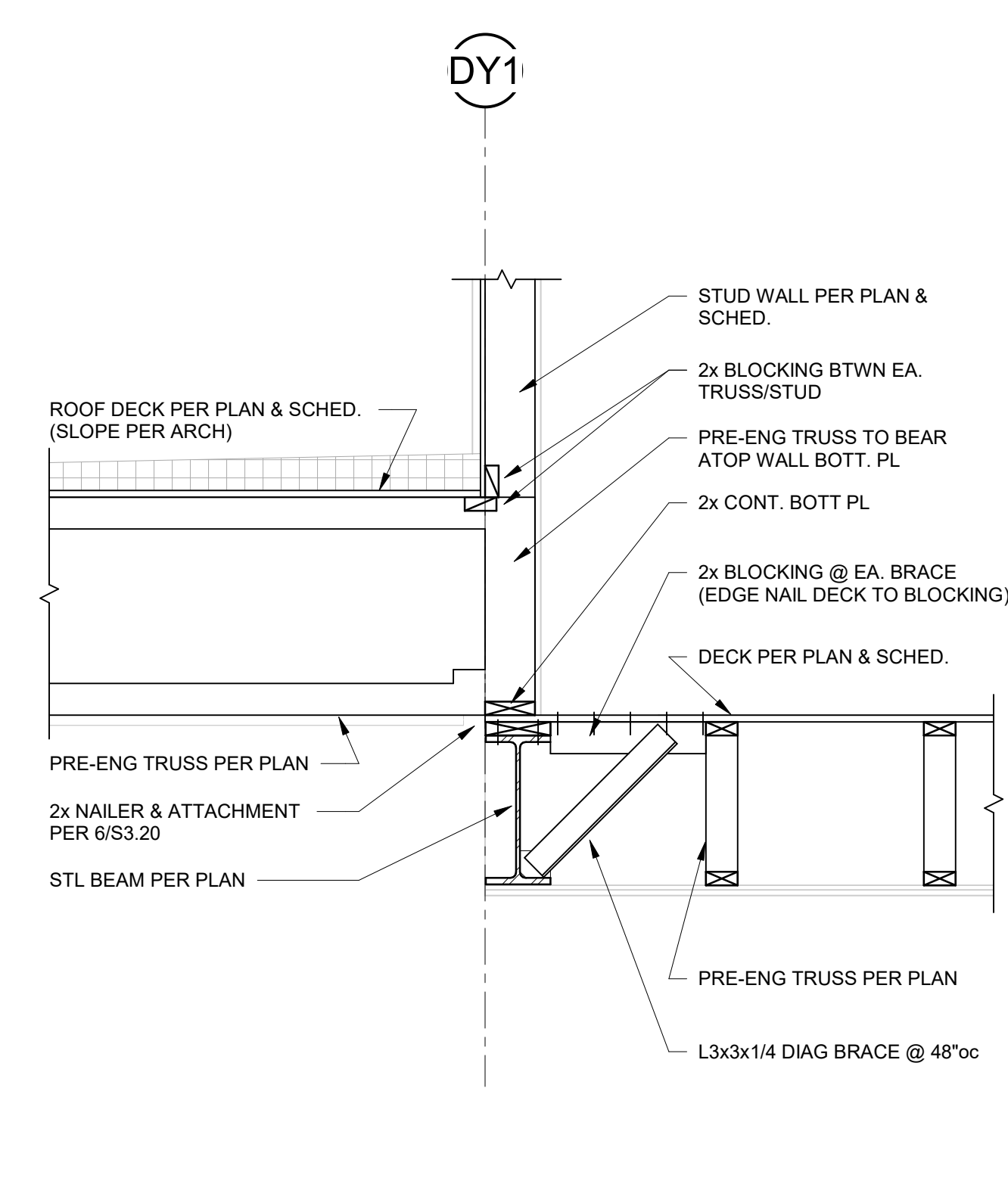
**5A SECTION**  
3/4" = 1'-0"



**6 SECTION**  
3/4" = 1'-0"



**7 SECTION**  
3/4" = 1'-0"



**8 SECTION**  
3/4" = 1'-0"

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REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

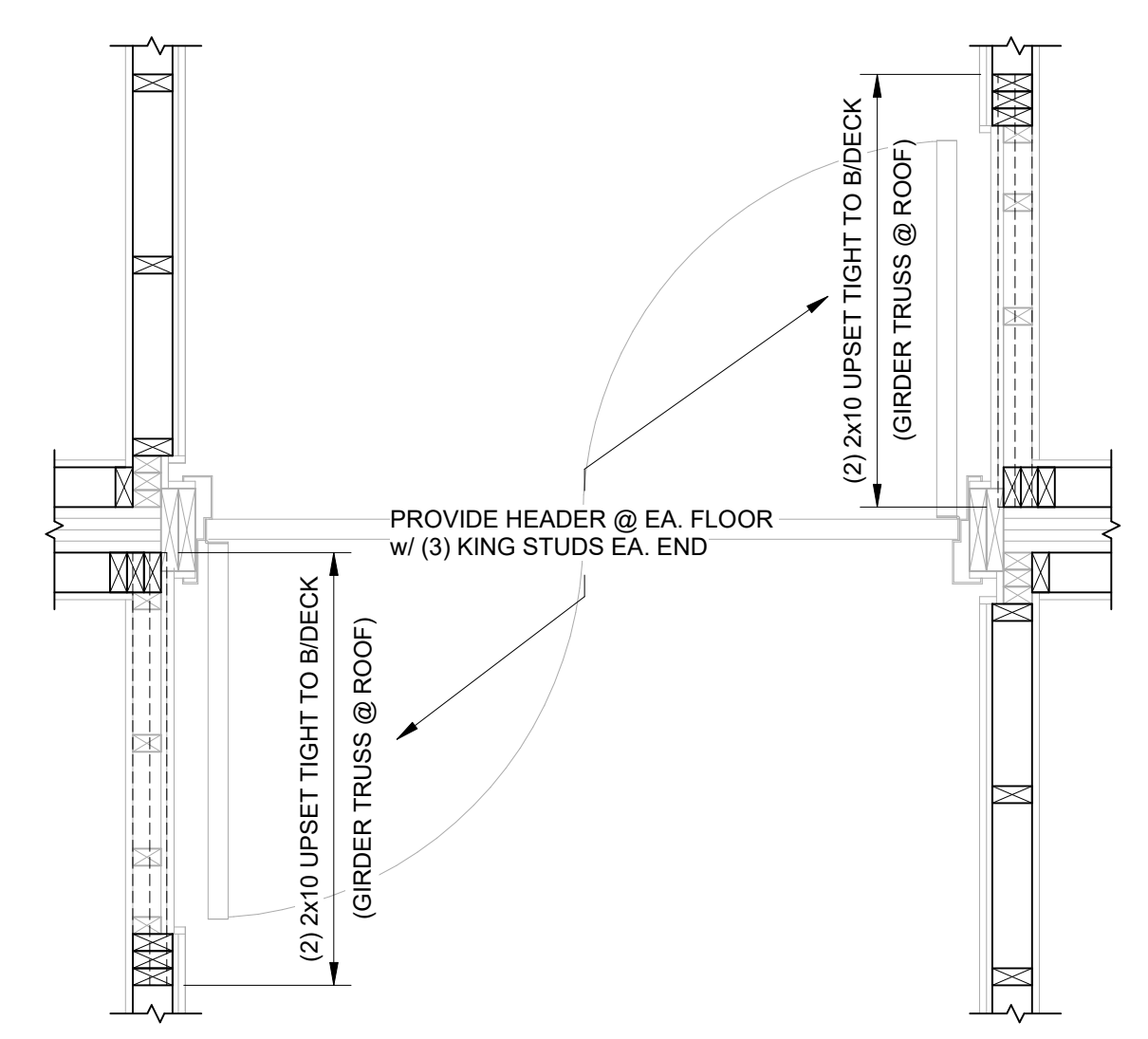
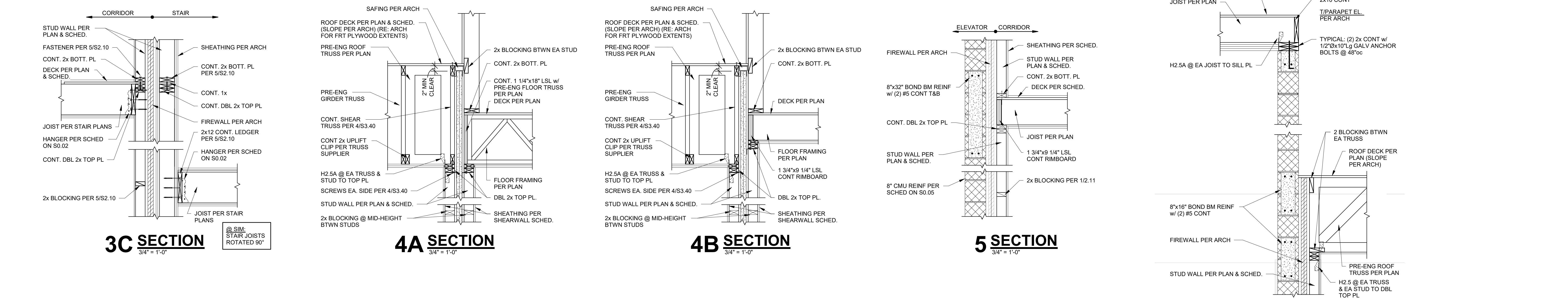
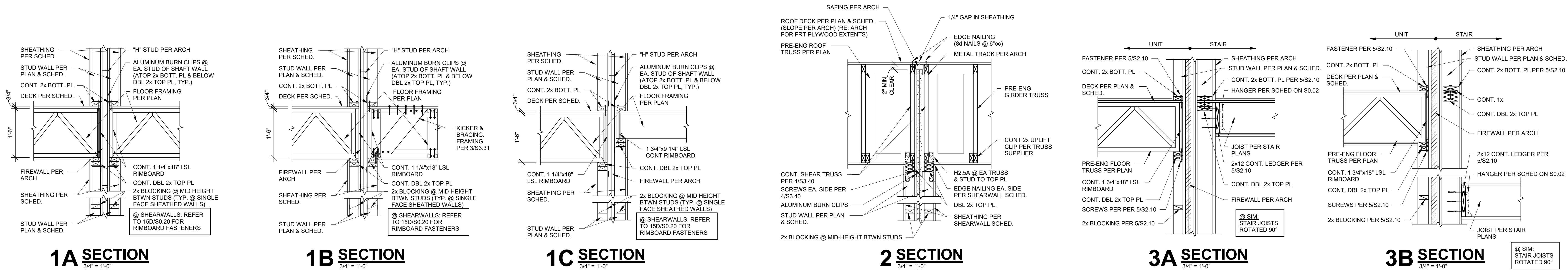
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SHEET TITLE

WOOD FIREWALL  
DETAILS

SHEET NUMBER

**S3.45**





REVISIONS

No.	Date	Description

REGISTRATION



PROJECT TEAM

ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

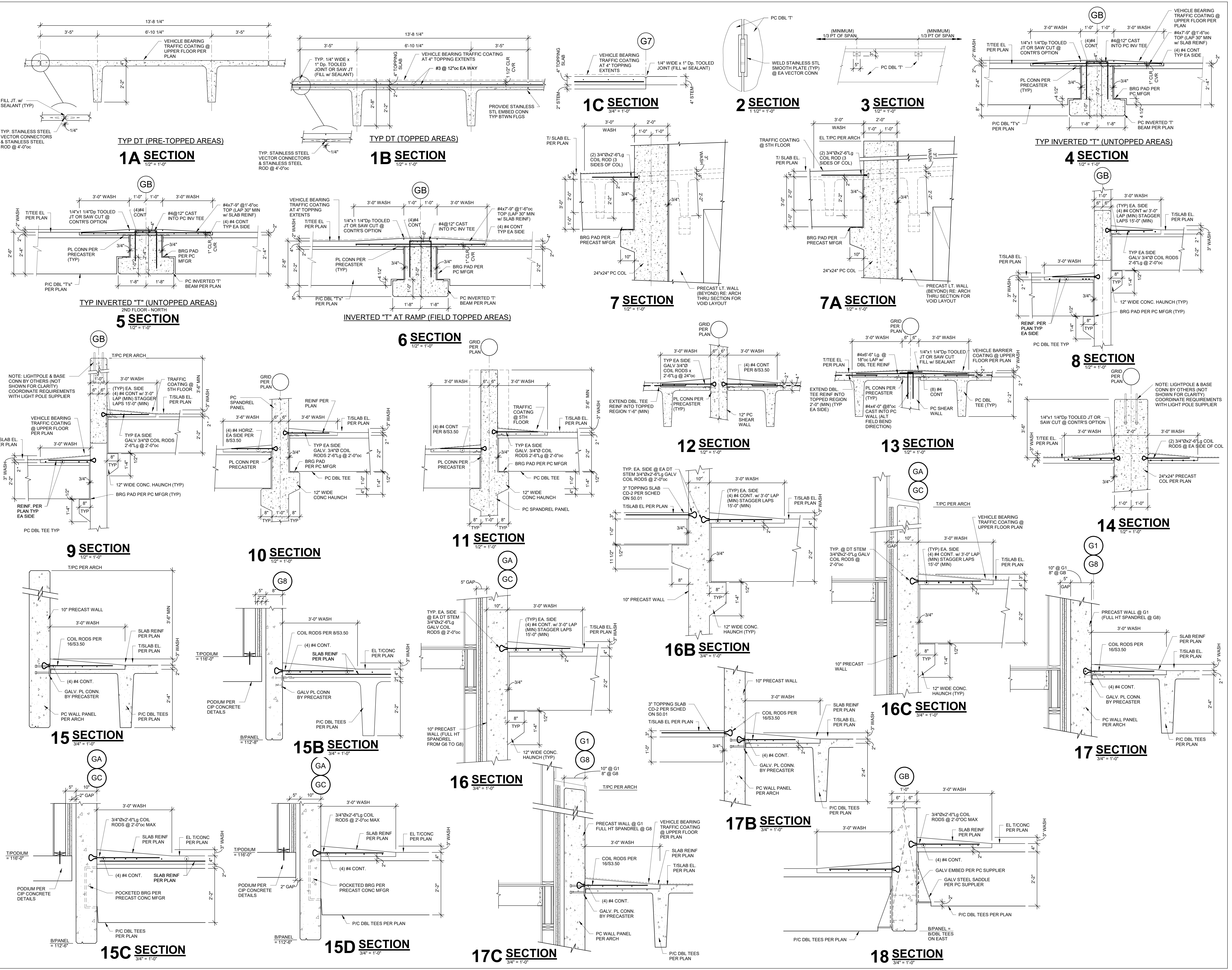
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Kansas City, MO 64111  
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SHEET TITLE

**PRECAST  
GARAGE FRAMING  
DETAILS**

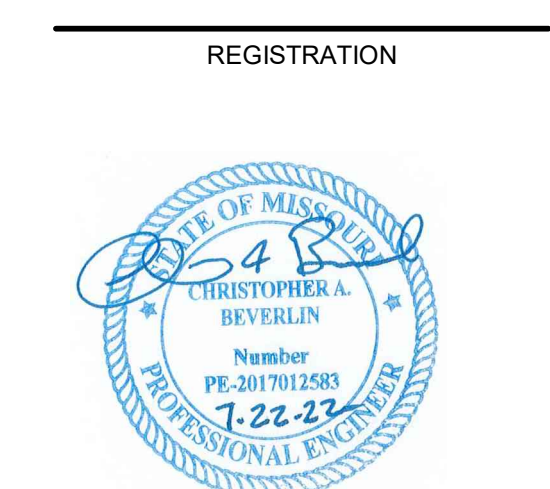
SHEET NUMBER

**S3.50**



C:\Users\CAB\Documents\FWD101-S21-Paragon Star\_cab\enr\F3\GB\_V12

REVISIONS		
No.	Date	Description

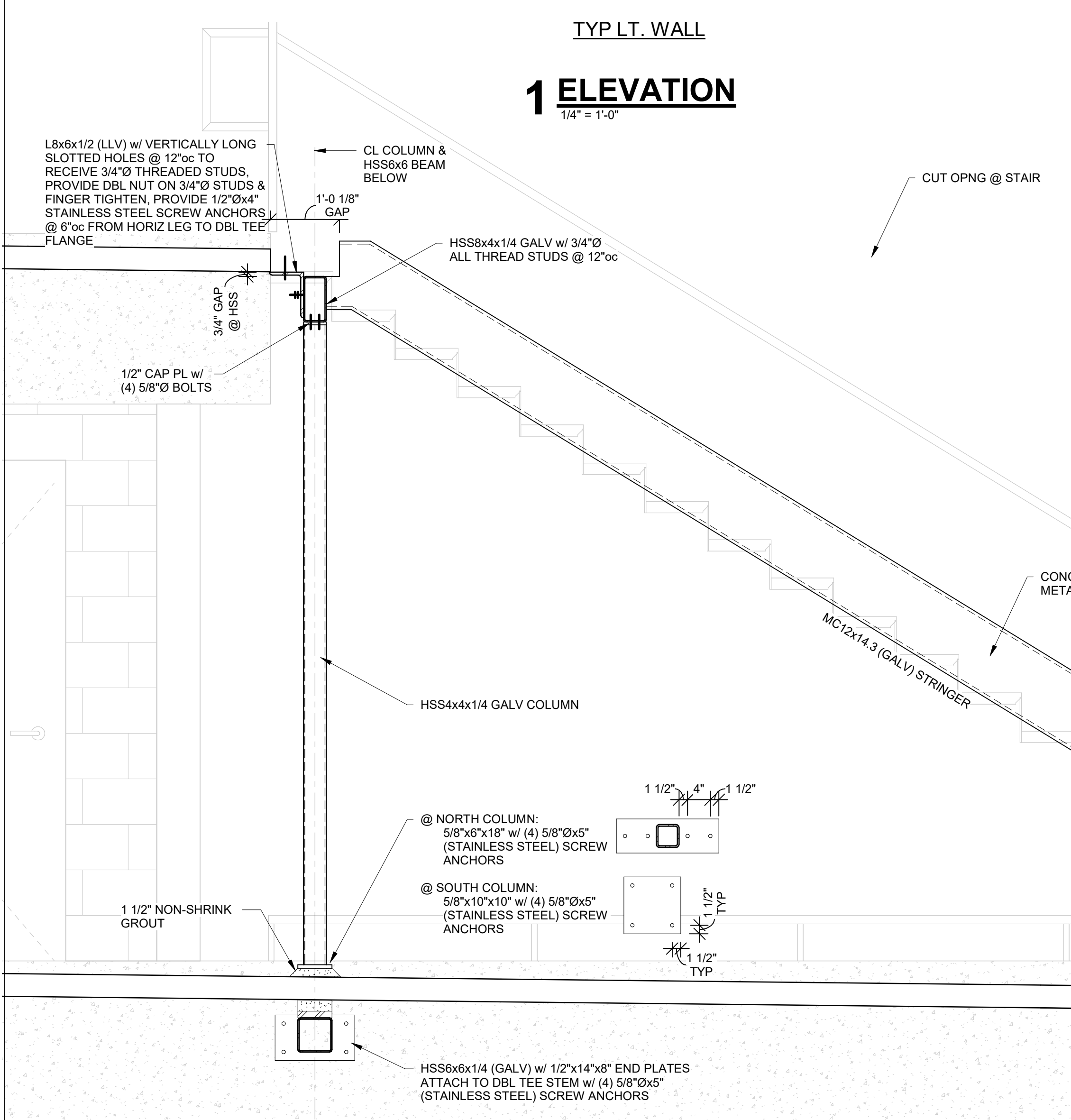
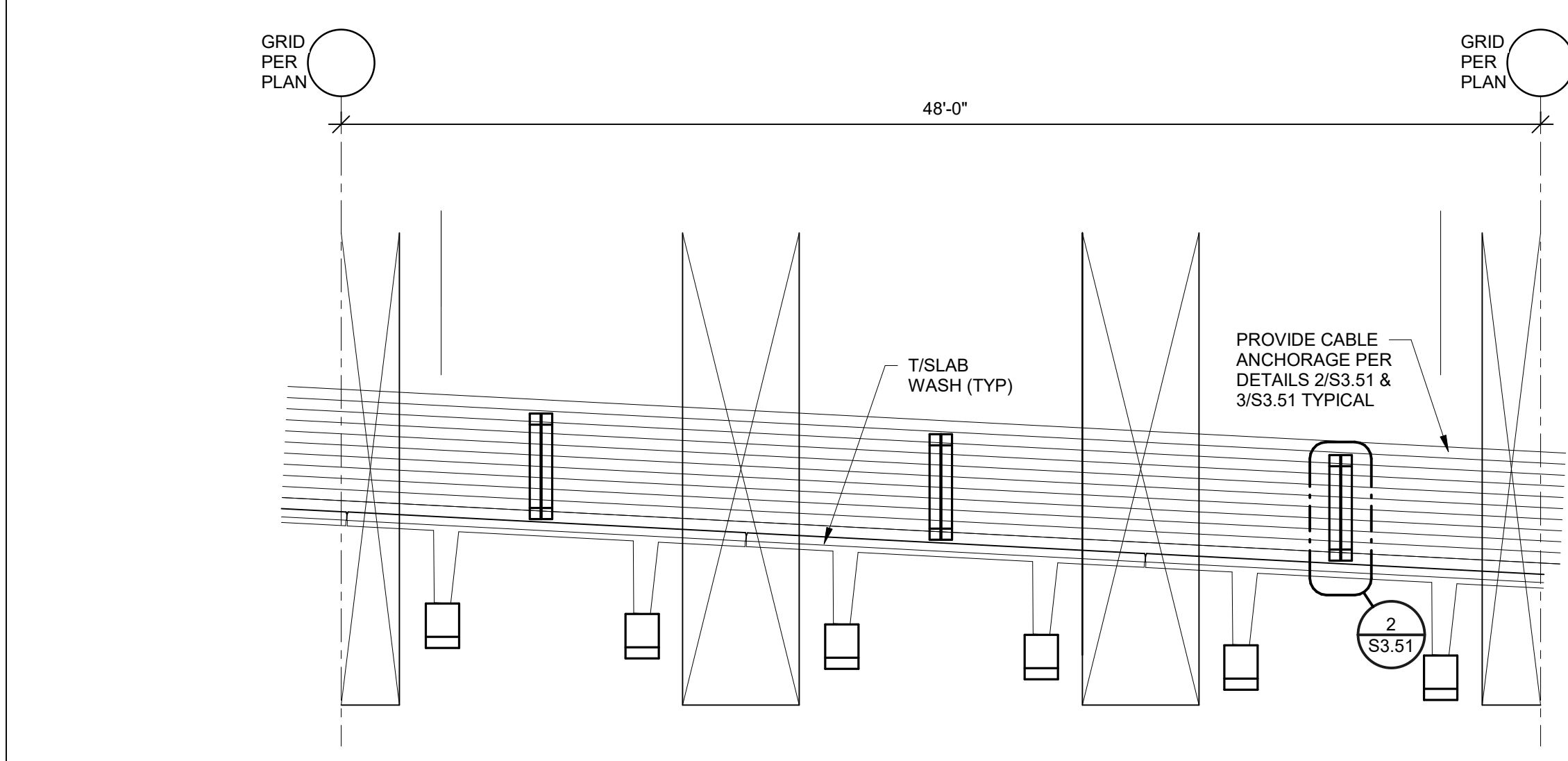


PROJECT TEAM	
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
ELECTRICAL	LATIMER SOMMERS
FIRE PROTECTION	LATIMER SOMMERS
CONTRACTOR	BRINKMANN CONSTRUCTORS

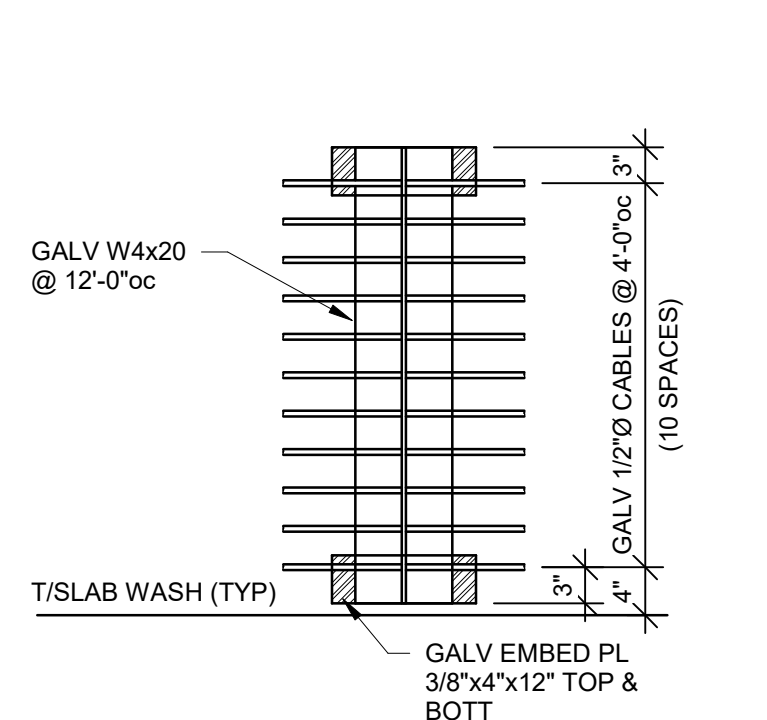
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SHEET TITLE  
**PRECAST GARAGE FRAMING DETAILS**

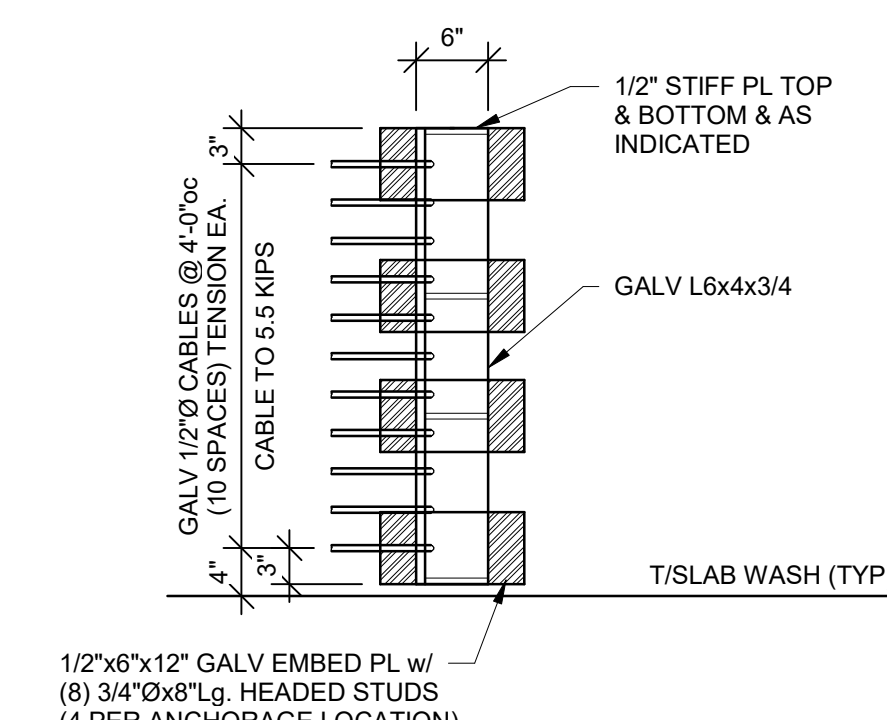
SHEET NUMBER  
**S3.51**



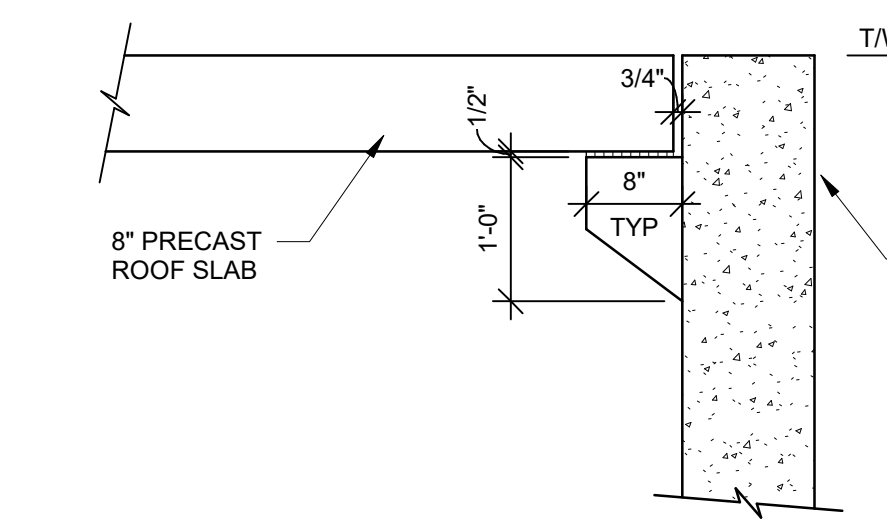
**1 ELEVATION**  
1/4" = 1'-0"



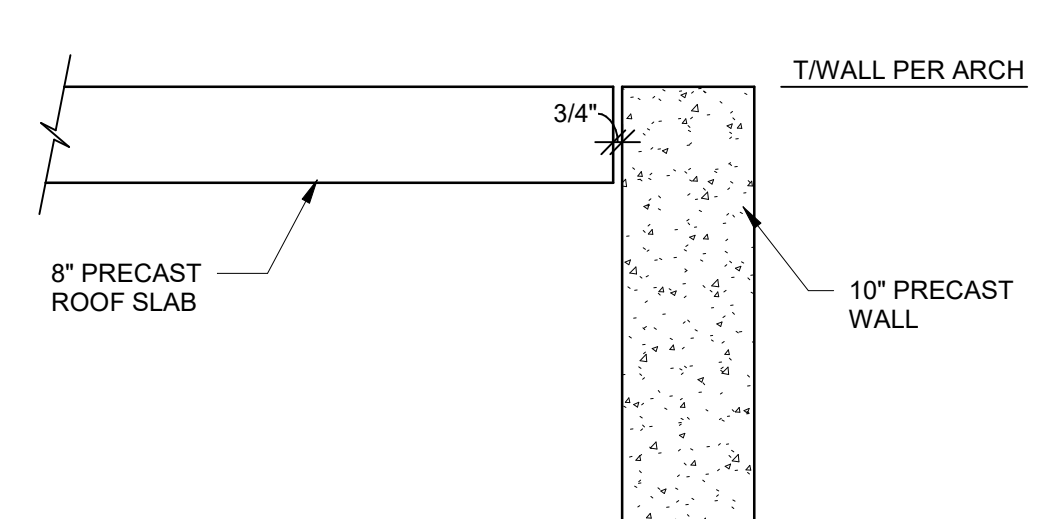
**TYPICAL CABLE SUPPORT DETAIL**  
3/4" = 1'-0"



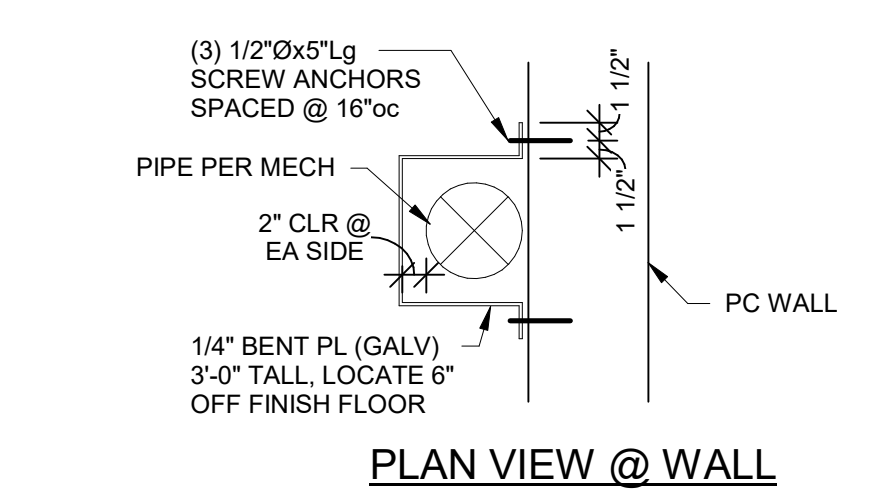
**TYPICAL CABLE END ANCHORAGE DETAIL**  
NOTE: TENSION EA CABLE TO 5.5kips  
3/4" = 1'-0"



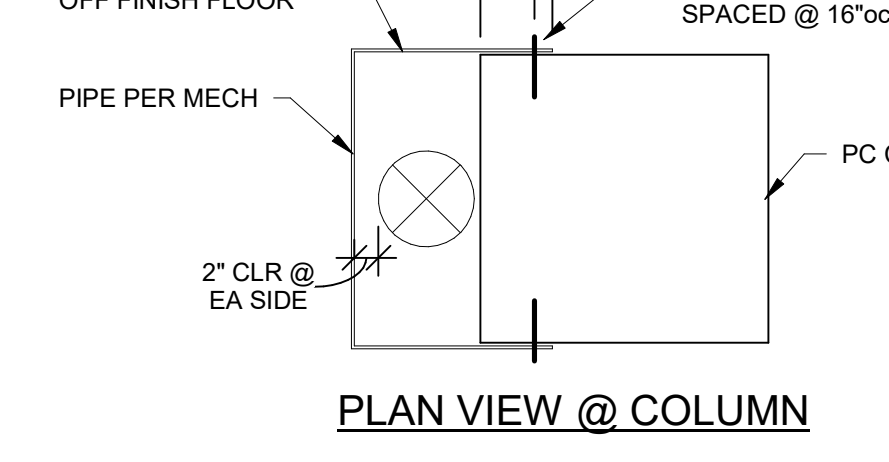
**4 SECTION**  
3/4" = 1'-0"



**5 SECTION**  
3/4" = 1'-0"

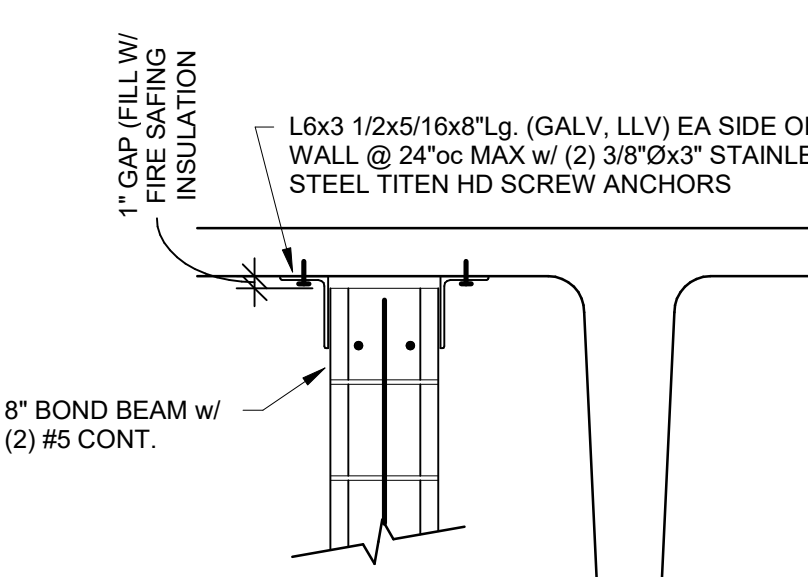


**PLAN VIEW @ WALL**



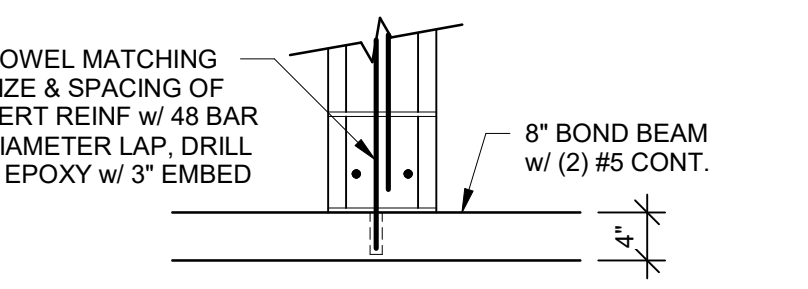
**PLAN VIEW @ COLUMN**

**7 TYPICAL PIPE PROTECTION DETAIL**  
3/4" = 1'-0"



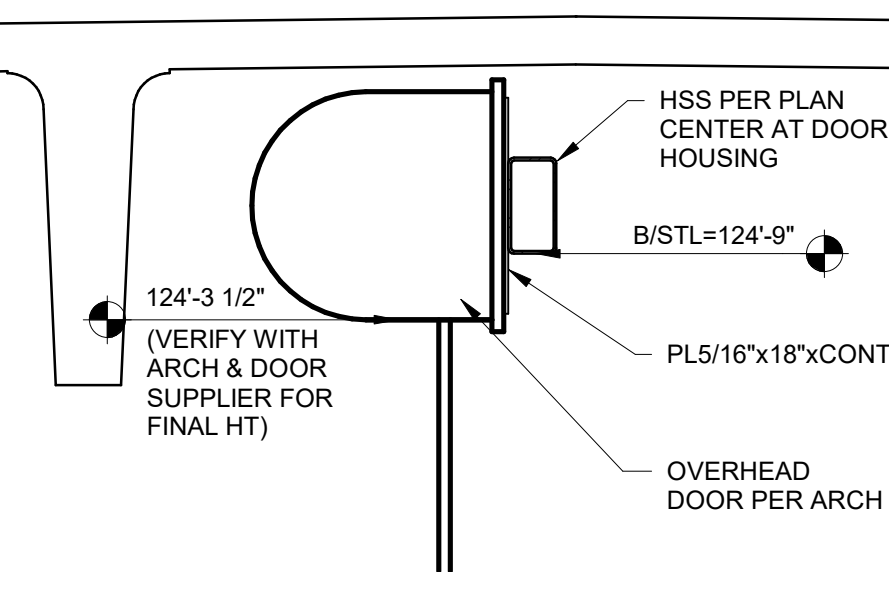
**TYPICAL TOP CMU TO PRECAST**

**8 SECTION**  
3/4" = 1'-0"



**TYPICAL BOTTOM CMU TO PRECAST**

**9 SECTION**  
3/4" = 1'-0"



**10 SECTION**  
3/4" = 1'-0"

REVISIONS		
No.	Date	Description
2	7.11.22	ADDENDUM 1
3	7.20.22	ADDENDUM 2



PROJECT TEAM	
ARCHITECT	FINKLE-WILLIAMS ARCHITECTURE
CIVIL	GBA ENGINEERS
LANDSCAPE	LAND 3
STRUCTURAL	BOB D. CAMPBELL
PLUMBING	LATIMER SOMMERS
MECHANICAL	LATIMER SOMMERS
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