

STRUCTURAL GENERAL NOTES – APPLICABLE TO ALL CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS

A. DESIGN SCOPE BY PSE

- Design Shown on drawings by PSE is for the following items.
 - Foundation and framing.
 - Design Shown on PSE drawings does not include: finishes, architectural items, windows, doors, moisture barriers, water proofing, mechanical units, plumbing, or electrical items.
- B. GENERAL REQUIREMENT:
- Furnish all labor, materials, and equipment necessary to complete the work shown or inferred by these drawings.
 - Where construction details are not shown or noted for any part of the work, such details shall be the same as for similar work shown on the drawings.
 - Notes and details on the drawings take precedence over the general notes and typical details in case of conflict.
 - Provide manufacturer's approved product evaluation reports (ICBO reports) and a list of all proposed substitutions to the Engineer for review and written approval before fabrication.
 - Pipes, ducts, sleeves, chases, etc. shall not be placed in slabs, beams, or walls unless specifically shown or noted nor shall any structural member be cut for pipes, ducts, etc., unless specifically shown. Obtain prior written approval for installation of any additional holes, ducts, etc.
 - Locate and protect underground or concealed conduit, plumbing or other utilities where new work is being performed.
 - The contract drawings and specifications represent the finished structure and do not indicate methods, procedures or sequence of construction. The contractor shall take necessary precautions to maintain and insure the integrity of the new and any existing structures during construction. The design stresses shall not be exceeded during construction based on the age of each element. Neither the owner nor Architect/Engineer will enforce safety measure regulations. Contractor shall design, construct and maintain all safety devices, including shoring and bracing for the new and any existing structures and shall be solely responsible for conforming to all local, state and federal safety and health standards, laws and regulations. Observation visits to the site by the engineer shall not include inspection of the above items.
 - Obtain prior written approval for any changes to the drawings.
 - The contractor shall review and compare the structural drawings with all other Construction Documents, such as Architectural, Mechanical and Electrical drawings, specifications, etc. Do not scale drawings. The contractor shall verify dimensions, elevations and all information. Report, in writing, any inconsistencies, errors, or omissions to the Architect/Engineer of record before proceeding with the work.
 - All existing construction shown on schematic only. Contractor is responsible to verify actual conditions and allow for them in his bid. Notify the Architect/Engineer, in writing, in case of any discrepancy between actual conditions and what is shown on the structural drawings before proceeding with the work.
 - See Architectural, Mechanical, Electrical and other drawings for embedded items.
 - Member shall be provided for all members with 30 feet or more of span. Check beam table and contact the Structural Engineer for the amount of camber.
 - Shop drawings:
 - Shop drawings shall be submitted in the form of two copies.
 - Prior to submittals, the general contractor shall review all submittals for conformance with the Construction Documents and shall stamp submittals as being "Reviewed for Conformance".
 - Any detail on the shop drawing that deviates from the Construction Documents shall be marked with the note "This is a change".
 - Shop drawing submittals processed by the Structural Engineer are not Change Orders.
 - Shop drawings shall be submitted to the Architect/Engineer prior to fabrication and construction regarding all structural items including:
 - Concrete and masonry reinforcement, drawings shall conform to ACI 315 and ACI 318.
 - Structural steel, drawings to conform to AISC.
 - Glued-Laminated members, drawings to conform to AITC.
 - Pre-fabricated wood joists and trusses, drawings to conform to ICBO product evaluation report.
 - Wood trusses, drawings to conform to UBC.
 - Shop drawings or calculations submitted for review that require re-submittal for re-review, as determined by the Structural Engineer, shall be billed hourly to the general contractor. Re-review will not proceed without written approval from the general contractor for additional engineering services.
- Submit seismic anchorage calculations stamped by a licensed Professional Engineer for all equipment and components weighing more than 400 lb.
- Submit structural drawings signed and sealed by a professional Engineer licensed in the State where the project is located for any structural member needed for this project that is not designed by P.S.E.
- Any substitutions for structural members, hardware or details shall be reviewed by the Architect and Structural Engineer. Such review will be billed on a time and materials basis to the General Contractor with no guarantee that the substitution will be allowed.
- All communication shall be in writing. No verbal communications, decisions, instructions or approvals shall be valid.

C. CODE AND LOADS:

- All design, material, and construction work for this project shall conform to the 2015 International Building Code (IBC).
- Design parameters.

a. Floor Live Load = 40 psf.	b. Floor Dead Load = 15 psf.
c. Roof Live Load = n_s/o .	d. Roof dead load 15 psf.
e. Ground Snow Load, $P_g = 40$ psf.	f. Flat Roof snow load = 40 psf.
g. Snow Exposure Factor, $C_e = 1.0$	h. Snow Load Importance Factor, $I = 1.0$
i. Thermal Factor, $C_t = 1.0$	j. Ultimate Wind Speed (3 second gust) = 115 mph
k. Wind Importance Factor, $I_w = 1.00$	l. Wind Exposure = C
m. Internal Pressure Coefficient = 0.18	n. Components and Cladding studs = 21 psf
o. Seismic Importance Factor, $I_e = 1.0$	p. $S_s = 0.257$
q. $S_1 = 0.076$	r. Site Class = D
s. $S_{ms} = 0.409$	t. $S_{m1} = 0.181$
u. $S_{ds} = 0.273$	v. $S_{d1} = 0.121$
w. Seismic Design Category = B	x. Basic Seismic Force Resisting System = Stucco Coated Tire Bale Walls
y. Design Base Shear = 0.151 * W	z. Approximate Fundamental Period, $T = 0.175$
aa. Response Modification Factor, $R = 2.0$	bb. Analysis Procedure Used = Equivalent Lateral Force Procedure

D. INSPECTION:

- All construction shall be inspected by the building officials according to the above Code.
- It is recommended that the owner or the contractor hire Precision Structural Engineering or other Qualified Licensed inspectors to provide inspection during construction.

E. CONCRETE:

- MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE.

TYPE OR LOCATION OF CONCRETE	MINIMUM SPECIFIED COMPRESSIVE STRENGTH (F'c)
BASEMENT WALLS, FOUNDATION AND OTHER CONCRETE NOT EXPOSED TO THE WEATHER.	SEVERE 2,500 PSI
BASEMENT SLAB AND INTERIOR SLABS ON GRADE, EXCEPT GARAGE FLOOR SLABS.	2,500 PSI
BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE WORK EXPOSED TO WEATHER.	3,500 PSI
PORCHES CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER, AND GARAGE FLOOR SLABS.	3,500 PSI
- Basement wall, foundation wall, basement slab, slab on grade, all concrete work exposed to weather, and all exterior concrete shall contain the proper admixtures to obtain 5% to 7% Air Entrainment. All interior concrete work shall contain 2% to 4% Air Entrainment.
- Reinforcing Steel:
 - All reinforcing steel shall be ASTM A615 Grade 60.
 - Vertical bars shall be dowelled to supporting members with the same size and spacing of reinforcement shown in the drawing or general notes.
 - Splices shall be 55 bar diameters or 36 inches whichever is greater UON.
- When air temperature is above 80 degrees Fahrenheit, Hot Weather Concrete, ACI 308R shall apply. When the average air temperature is below 40 degree Fahrenheit, Cold Weather Concrete, ACI 306R shall apply.

F. FOUNDATION

- Due to the lack of specific geotechnical information for this site, foundation was designed on an assumed bearing capacity of 1500 PSF. PSE is not responsible for any future defects resulting from unreported condition mitigating the above assumption.
- Soft soil or fill material shall be removed and replaced with competent granular engineering fill or lean concrete. The new fill shall be compacted in 8" layers to gain 98% of its maximum dry density according to ASTM D-698 standard proctor, and be capable of supporting the above bearing capacity.
- Footing shall be stepped as required to maintain minimum required frost depth, below finished grade.
- Use light weight equipment to compact the soil within 2 feet around foundation/basement wall.
- Excavation shall be properly back filled Back fill for walls shall be pervious material. Do not place back fill behind walls before they have attained their design strength. Shore and protect walls from lateral loads until the supporting members are in place and have developed specified strength.
- When the finished crawl space elevation is lower than the outside finished grade, or when it is required by the Geotechnical investigative report or building department, provide 4 inch diam. perforated drain pipe below the top of the footing. Encase the pipe in 18x18 inches free-drain crushed stone and fabric at the perimeter of the crushed stone.
- Roof and area drainage shall be directed away from the foundation.

H. WOOD:

- GENERAL:
- All wood exposed to the weather or in contact with concrete or masonry shall be pressure treated or protected with a waterproof membrane. Newly exposed surfaces resulting from field cutting, boring or handling shall be field treated in accordance with AWPA M-4.
 - Maintain 1/2 inch air space at sides and at ends for beam pockets in concrete or masonry. Minimum bearing is 3 inches UON.
 - Wood framing members, sheathing and combustible materials shall not be placed closer than 2 inches to chimney walls. The gap shall be fire stopped using a minimum of 1 inch thick noncombustible materials, UON.
 - Reference specifications for more requirements.
- IT is required that the contractor keep a copy of the Simpson catalog and/or Simpson Installation Manual on site at all times, and shall be used with the installation process at all Simpson connections.
- MATERIALS
- STICK FRAMING:
- All wood Stick Framing shall be Douglas Fir/Larch #2 (DF #2) or better unless otherwise noted on the drawings. Comply with PS 20, American softwood lumber standard and standard grading rules for western lumber. 19% maximum moisture content at time of placement.
 - All wood members shall be stamped showing wood grade and the grading agency.
 - All timbers to be FSC rated.
 - All materials to be low V.O.C. and non-urea formaldehyde.
- GLUED-LAMINATED TIMBER:
- Glued-Laminated Timber shall be manufactured, inspected, and tested according to:
 - American National Standard for Wood products-Structural Glued Laminated Timber, ANSI/AITC A190.1 -1992
 - Standard Specification for Structural Glued-Laminated Timber of Softwood Species, AITC 117; Manufacturing.
 - Design and Standard Specifications for Hardwood Glued-Laminated Timber, AITC 119.
 - In case of conflict, the most stringent requirement shall apply.
 - Submit certificate by one of the above agencies to the Engineer and the Building Inspector prior to installation.
 - Glued-Laminated timber shall have wet-use adhesive, ASTM D2559. Lamination shall be 2 inches minimum. Appearance shall be industrial, AITC 110.
 - Colorless end sealer shall be applied immediately to the ends of all members after fabrication and field trimming. Members shall be individually wrapped.
 - Pressure treatment shall be provided for all members exposed to weather and not protected by a roof or eave overhang.
 - All cuts, holes, etc. shall be re-coated as recommended by the manufacturer.
 - Glued-Laminated timber shall have the following minimum combination and strength:
 - Beams with simple spans shall have combination 24F-V4 or better.
 - Continuous beams shall have combination as shown on plans.
- JOISTS/ RAFTERS:
- Provide a copy of the manufacturer's approved ICBO product evaluation reports.
 - Wood joists shall be installed according to the manufacturer recommendations and as shown on drawings. Blocking, web stiffeners and bridging etc. shall be as required by the manufacturer's approved ICBO product evaluation reports.
 - All joists, ceiling joists and rafters shall have a minimum of 1-1/2 inches bearing at each end on wood or metal, and not less than 3 inches on masonry or concrete. Use approved joist hanger if bearing is not provided.
 - Install full depth solid blocking or cross bracing at intervals not exceeding 8 feet for all joists and rafters 2x12 inches and deeper.
- STUDS:
- Double full height studs shall be used at both ends of all walls shown on the structural drawings, UON.
 - Studs shall have full bearing on plates and sills.
 - Provide blocking at all ceiling levels.
 - Provide multiple studs under beams or trusses to match width of supported member, typical.
- TOP PLATES AND/OR CHORDS:
- Top plates or chords shall be continuous over headers UON.
 - Top plates shall be two pieces, same size as studs. Stagger splices 4"-0" minimum. Center splices over studs UON.
- SHEATHING:
- All wood structural panels shall be stamped with the appropriate grade trademark of the American Plywood Association (APA).
 - Block structural panel with 2x4 inch flat blocking where noted on roof or floor framing plans. Use ply clips at mid-span of unsupported panel edges.
 - Maintain 1/8" air space between structural panels in walls, floors and roofs at ends and at edges or as specified by the manufacturer.
 - Wood structural panels shall be manufactured using exterior glue and shall be not less than 4x8 feet except at boundaries.

I. WOOD CONNECTIONS:

- It is required that the contractor keep the Simpson catalog and/or Simpson Installation Manual on site at all times to be used during the installation of all typical Simpson connections.
- All exposed steel timber hardware, fasteners and connectors shall be galvanized.
- Connector Hardware model numbers are those for the Simpson-Strong Tie Company. Size and number of nails, screws or bolts to be the maximum specified by the manufacturer UON.
- Nails shall be common wire unless otherwise noted.
- Machine nailing: The use of machine nailing is subject to continued satisfactory performance. Panel nails shall be driven so that the heads are flush with the surface of the panel and the minimum panel edge distance is 1/2 inch. Bolts: maintain a distance not less than 7 bolt diameters from the end and 4 diameters from the edge of the member. Bore holes 1/8" to 1/4" larger than the bolt diameter. All nuts shall be tightened when installed and re-tightened at completion of work or before closing in. Thread projection shall be 1/2 inch minimum beyond the nut. Use 5/16 inch thick X 3" X 3" washers, typ.
- Log screw clearance and lead/pilot holes shall be bored in two stages as follows: The clearance hole for the shank shall have the same diameter as the shank and the same depth of penetration as the length of unthreaded shank. The lead hole for the threaded portion shall have diameter equal to 70% of the shank diameter and a length equal to at least the length of the threaded portion.
- Nails/screws or bolts hold-down anchors shall be installed per manufacturer's approved [IC or ICBO] product evaluation report. Install hold-downs 3/4 inch minimum above the plate to allow for tightening anchor bolt. The hold-down shall be installed tight to the hold-down post without fillers or dopping. Do not bend hold-down anchors.
- Connections shall be as detailed on the drawings. If not shown, minimum connections shall be as follows:
 - Joist or rafter to sill or girder, toe nail.....3-8d
 - Bridging to joist, toenail each end.....2-8d
 - Sill plate to joist or blocking, typical, face nail [SN].....16d at 6" o.c.
 - Double top plates:
 - Lower plate to studs.....3-16d
 - Top plate to lower plate, face nail.....16d @ 12" O.C.
 - Top plate to lower plate at lap Splice [4"-0" minimum].....20-16d minimum UON on drawings.
 - Top plate to lower plate at intersection.....3-16d
 - Stud to sill plate.....4-8d toenails or 2-16d endnail.
 - Double studs, face nail.....16d at 12" o.c.
 - Blocking between joists or rafters to top plate, toenail.....3-8d
 - Continuous header, two pieces.....16d @ 16" o.c. along each edge.
 - Ceiling joists to plate, toenail.....3-8d
 - Continuous header to stud, toenail.....4-8d
 - Ceiling joists, laps over partitions, face nail.....3-16d
 - Ceiling joists to parallel rafters, face nail.....3-16d
 - Built-up corner studs.....16d @ 12" o.c.
 - 5/8" gyp. Sheathing to studs, sill plates & top plates.....8d @ 4" O.C. @ 3/8" from all panel edges and 8" O.C. @ intermediate supports.
- For stick framing construction structural sheathing could be fastened to structural members using 16 gauge wire staples two inches long. Staples shall have a minimum of 3/16" diameter crown width. For roof and floor, staple spacing shall be per plan. For shear wall, spacing should be per shear wall schedule.
- Staples for structural insulated panels, slips shall be per slips notes.
- NOTES: REF: To the above Building Code.

J. ABBREVIATIONS:

AB ANCHOR BOLT	EQ EQUAL	LL LIVE LOAD	RFT RAFTERS
ADD ADDITIONAL	ES EACH SIDE	MATL MATERIAL	STRUCTURAL GENERAL
ALT ALTERNATE	EW EACH WAY	MAX MAXIMUM	NOTES
APA AMERICAN PLYWOOD ASSOCIATION	FA FRAMING ANCHOR	MB MACHINE BOLT	SEP SEPARATION
ARCH ARCHITECTURAL	FD FROST DEPTH	MFR MANUFACTURER	SN SIMILAR
B BOTTOM	FF FINISHED FLOOR	MIN MINIMUM	SN SHEAR NAIL
BLKG BLOCKING	FN FIELD/INTERMEDIATE	MTL METAL	SNL SNOW LOAD
BN BOUNDARY NAIL	FS FINISH	NO NUMBER	SPEC SPECIFICATION
BOF BOTTOM OF FOOTING	FS FAR SIDE	NS NEAR SIDE	STD STANDARD
CBC CALIFORNIA BUILDING CODE	FTG FOOTING	NTS NOT TO SCALE	STGR STAGGER
CJ CONSTRUCTION JOINT OR CONTROL JOINT	GALV GALVANIZED	OC ON CENTER	STIFF STIFFENERS
CLR CENTER LINE	GC GENERAL CONTRACTOR	OD OUTSIDE DIAMETER	T TOP
CLR CLEAR	GEOTECHNICAL INVESTIGATION REPORT	ODFSC OREGON ONE & TWO FAMILY DWELLING SPECIALTY CODE	TB TOP & BOTTOM
CONN CONNECTION	GLB GRADE	OH OPPOSITE HAND	TD TYPICAL DETAILS
CONT CONTINUOUS	GLD GLUED LAMINATED BEAM	OSB ORIENTED STRAND BOARD	THK THICKNESS/THICK
DBL DOUBLE	HDR HEADER	OSSC OREGON STRUCTURAL SPECIALTY CODE	TG TONGUE & GROOVE
DM DIMENSION	HGR HANGER	OSV ON SITE VERIFY	THK THICKNESS/THICK
DL DEAD LOAD	HSH HORIZONTAL SLOTTED HOLES	OUT TO OUT OF BEARING	TOP TOP OF BEAM
DL DITTO (REPEAT)	ICBO INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS	PERP PERPENDICULAR	TOP TOP OF FOOTING
DWG DRAWING	ICB INSIDE DIAMETER	PL PLATE	TOP TOP OF WALL
DWL DOWN	INT INTERIOR	PJL POUND PER LINEAR FOOT	TRT TYPICAL
E EXISTING	JOINT JOINT	PSE PRECISION STRUCTURAL	UBD UNIFORM BUILDING CODE
EA EACH	LDGR LEDGER	ENG ENGINEERING	UNT UNLESS OTHERWISE NOTED
EF EACH FACE	LGST LIGHT GAUGE STEEL	PT PRESSURE TREATED	VSH VERTICAL SLOTTED HOLES
EL ELEVATION	COLD-FORMED STEEL	PLW PLATE WASHER	WN WOOD
EMBED EMBEDMENT	ENR ENGINEER OF RECORD	REF REFERENCE	WEN WELDED WIRE FABRIC
EN EDGE NAIL		REN ROOF EDGE NAILING	W WITH
EOR ENGINEER OF RECORD		REIN REINFORCEMENT	W/O WITHOUT

K. EARTHEN\ ADOBE FLOOR NOTES:

- Earthen\Adobe floor is not a dirt of mud floor.
 - Earthen\ Adobe floor consists of several layers, see the description below. Also, refer to detail 1\5xx
- DISCRETION OF THE LAYERS FORM BOTTOM UP:
- SUBSTRATE LAYER:
 - Soil supporting below the earthen floor shall be:
 - Free loam topsoil, organic matter debris or forging objects.
 - Solid and compacted. Use hand tamper or plate compactor to ensure compaction.
 - CAPILLARY BREAK:
 - 4 inches of free drain rock, 1 inch angular rock \ or pes gravel.
 - CAPILLARY BREAK:
 - 6 mil, or 10 mil better, vapor barrier is required in all livable spaces. 6 inches of overlap minimum.
 - INSULATION:
 - R-15 Rigid/non-comprisable non-biodegradable insulation is required for regions with cold weather.
 - Check with your local building department. Insulation save you on energy and give you a better comfort level.
 - BASE LAYER:
 - INGREDIENTS:
 - Could be made from local soil if it contains the right ingredients.
 - Main ingredients:
 - 15-25 Clay; no more 1/3 inch particles.
 - 75 to 85 course(concrete) sand, 1/8" sifted sand;
 - Fiber such as straw or Microsynthetic Fibers such as FIBERMESH → 150 by Fibermish 1lb per yard.
 - Optional for high traffic area. Hydrated lime, about 7 to 10 %

INSTALLATION

- Water. Use water with caution to give you a past that is as thick as you can. Too much water will cause more drying and shrinkage cracks.
 - Installation is similar to that of concrete slab.
 - Make a batch of your mix. Ingredient must be mixed thoroughly.
 - Place the mix at the farthest corner of your floor.
 - Roughly, pack the mixture into place, a bit higher than your final elevation.
 - Level the floor with a long straight 2x4.
 - Let the floor dry completely. Don't let freeze until its is 100% dry.
- Notes: Another option for this base layer is to use adobe bricks.

7. TOP LAYER, 1 INCH THICK OR LESS:

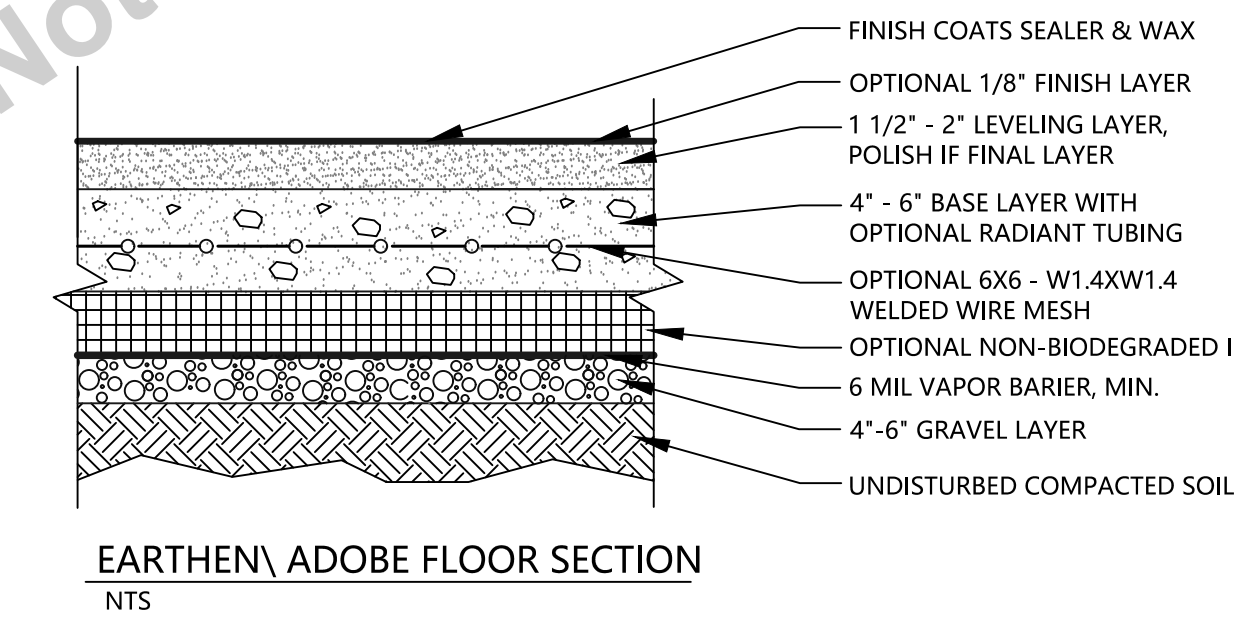
- Some mixture as above except:
- Use 1/2" sieve to screen your soil.
 - Coped the straw, or fibers, to 1 inch or shorter.
 - The mixture should be creamy and smooth.
 - Float the floor with magnesium float and dine tune the surface.
8. THE FINISH:
- Apply 1 to 4 coats of clay paint, also call it alis.
 - When the above coats are totally dry, it may be 6 to 12 months, apply Sealer.
 - The most common sealers are hardening oils, hard transparent, water resistance, but breathable resin.
 - The sealer shall be applied in multiple layers, and each subsequent layer is thinned with a solvent to promote deep absorption into the adobe surface.
 - Common thinning solvents include citrus solvent (d-limonene based) or mineral spirits (petroleum based).
 - You can add pigment to your sealer if you want to enhance the color of our floor.
 - Optional: wax the floor to improve durability, abrasion resistance and yield a smooth and luxurious surface similar to wood floors.
 - Provide Pads on the bottom of furniture.
 - Avoid frequent mopping. This will strip the oils and/or wax.

OPTIONAL ADDITIONAL TO EARTHEN FLOOR

- Tiles, rocks, flagstone or a grid of wood or plastic strips can be inlaid into the wet earth to add character.
- The above option must be leveled with the floor's final surface so it does not pose any hazards.

THE FINAL FLOOR:

- The final floor shall not be dusty, crumbly or dirty floor. It should be similar, but not exactly like, to wood floors.
- EARTHEN\ADOBE FLOORS SHALL NOT BE USED AT:
- Below Flood elevation in Flood-prone regions; Basement floor (unless well water proofed); Garages; Mud or Utility rooms; Bathrooms.



EARTHEN\ ADOBE FLOOR SECTION
NTS

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 infomd@structure1.com

LICENSED IN 48 STATES

Construction Types:
 Light Gauge Steel, Straw Bales, Bamboo, Log, Timber/Wood, Structural Insulated Panels/SiPs, Masonry, Steel, Concrete, Modular Homes/Factory Built Housing (FBI), Coffee Shop, ICF, etc. Commercial or Residential.

Project:

Tirebale Home

Owner:

Stamp:
 Preliminary Drawings, Not for Construction or Bid

REVISIONS:

MARK	DATE:	BY:

DRAWN BY: I. ELAYEB

DS. BY: BILL TAHA

CHK BY: BILL TAHA

DATE: 08-01-19

PROJECT #:
 KF217-275

TITLE:
 GENERAL NOTES

PAGE NO:
 S1

THE DOCUMENTS, IDEAS, AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF PRECISION STRUCTURAL ENGINEERING, AND IS NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF PSE.

Structural details for this project are for illustration only. They are not drawn to scale unless noted otherwise. Contractor must verify all dimensions before fabrication or construction. Do not scale drawings.

L. NOTES FOR TIREBALES CONSTRUCTION:

GENERAL

- Whole tire shall be baled by a proper vertical tire/tyre wire or steel straps Baler Machine.
- Five or more of 0.115 inch diameter or bigger wire or equivalent steel straps shall be used for the tire/tyre bales.
- The baler shall compress and wrap approximately 100 whole recycled/waste passenger, light and commercial truck tires into dense bales that weight about 2200 lb.
- Tire/tyre Bale approximate dimensions varies from to are 30 x 52 x 60 to 30 x 48 x 72 inches, however sizes vary based on the bale machine used. Also, Half tire/tyre bales can be made.
- Tire/tyre bales shall be strong enough to support load of 100,000 pounds without destroying the wires /steel strap or the bale.
- Tire bales shall be stacked in running bond like a brick flat with the 30 inch dimension oriented vertically and the long length of the wires/straps coordinated horizontally and parallel to the wall. Refer to details this sheet and next sheet.
- Bales should be securely baled using stainless steel or heavy gauge baling wire, free of any contaminants, such as petroleum products, weed seeds, or animal matter.
- STACKING: Scrap tire bales should be stacked, staggering the joints so that the vertical connections are offset from one another, preferably in alternating / brick style. In most applications they should not be stacked directly on top of each other or stacked at more than a 45 degree angle. For maximum stability, bales should be stacked
- One story buildings with maximum stack of four bales shall be allowed.
- The tire bales shall be covered with blown-on plaster or stucco after they are placed – and the roof shall be installed as soon as possible. This will prevent water from getting into bales.
- Tire bales are a fire hazard before applying the stucco. Care must be taken to avoid accidental ignition of tire bales during construction.
- The final walls shall be covered with cement stucco/plaster per plans. The thickness of the stucco shall vary to fully fill the gaps between tires and tire bales. The minimum thickness shall be 1.5 inch at the thinnest location.
- Remove vegetation for at least 30 feet around the building;
- Use non-combustible building material on the exterior of the building such as roofing materials, roof vents, soffits, fascia boards, siding, etc per your local building department requirement.
- All construction shall comply with Guidance for Use of Scrap Tires In Civil Engineering Applications by New Mexico Environment Department, Environmental Protection Division, Sold Waste Bureau. www.nmemv.state.nm.us
- Civil Engineering Applications that use tire bales or scrap tires must follow applicable federal, state, and local regulations. They must be constructed in a stable manner so that no scrap tires can break away from their parent structure and become "fugitives". This Guidance provides practices that assist in meeting that end. A list of applicable statutes and regulations are provided, as well as New Mexico Environment Department (N MED) application forms. In general, both loose scrap tires and scrap tire bales must be anchored in order to prevent any movement of the resulting structure. Loose scrap tires should be filled with dirt, sand, rocks, or other inert material. In most applications, it is required that loose and baled scrap tires be covered with cement material as shown on these plans.

DEFINITIONS:

- "Scrap tire baling" means the process by which scrap tires are mechanically compressed and bound into block form.
- "Tire" means a continuous solid or pneumatic rubber covering that encircles the wheel of a motor vehicle.

LIST OF ADDITIONAL APPLICABLE STATUTES AND REGULATIONS.

- International Fire Code and as amended by the local building department.
- Local building codes, zoning ordinances and other local regulations.

REFERENCES:

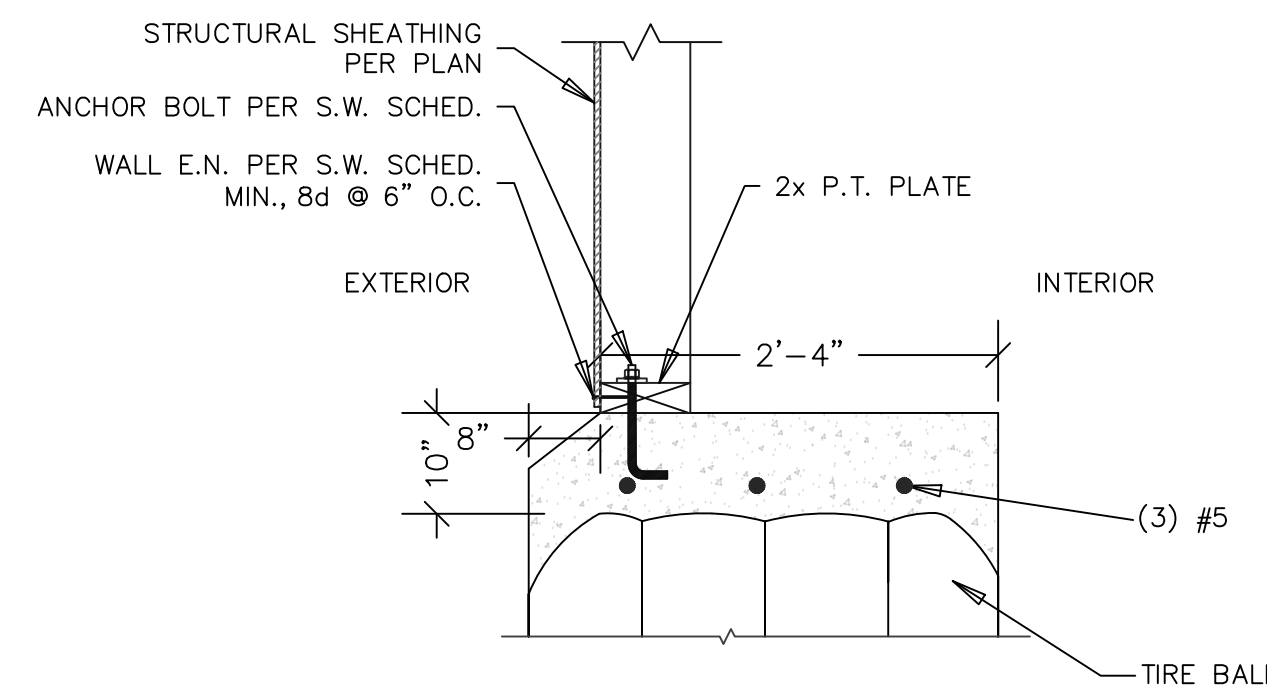
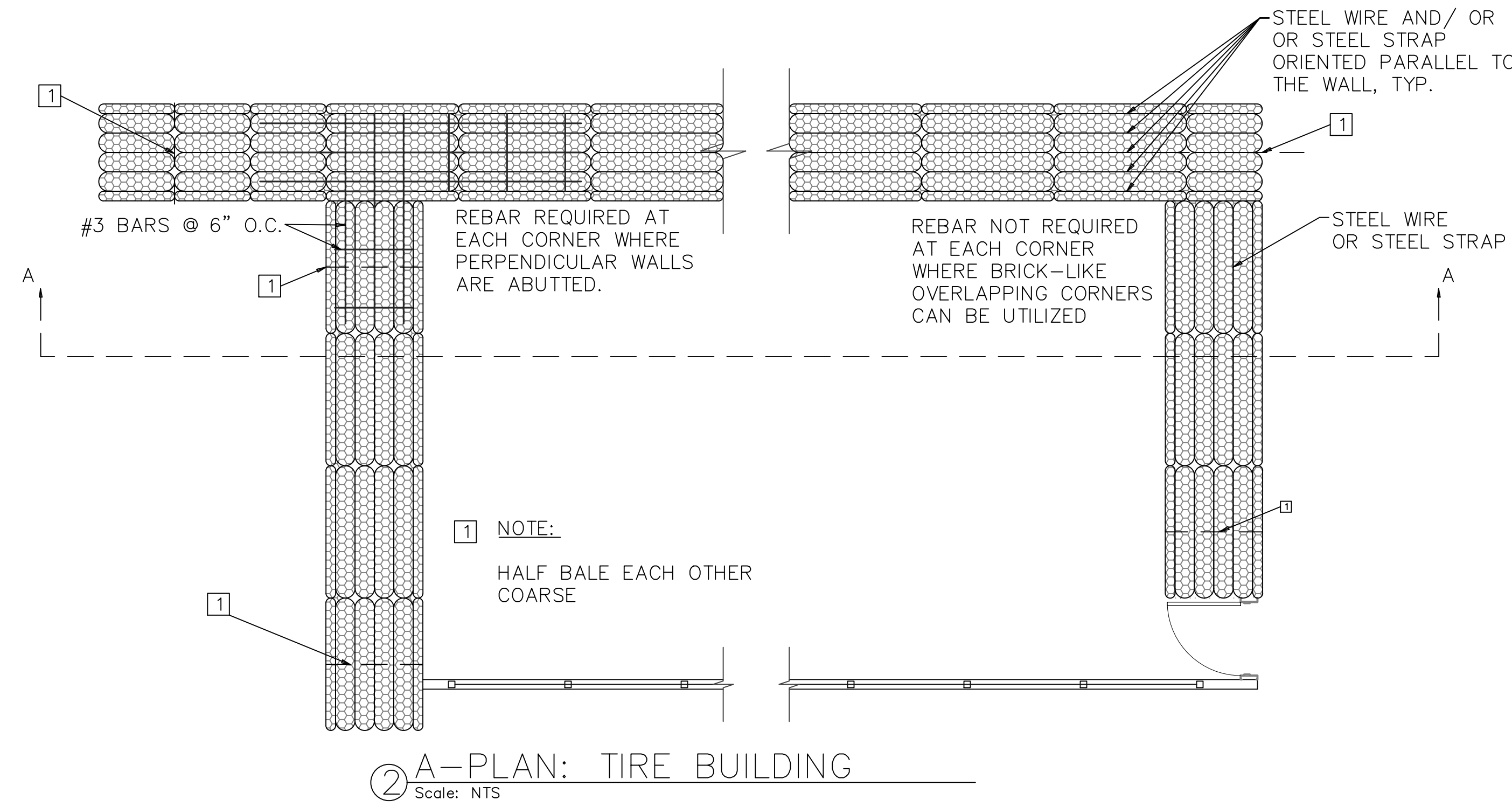
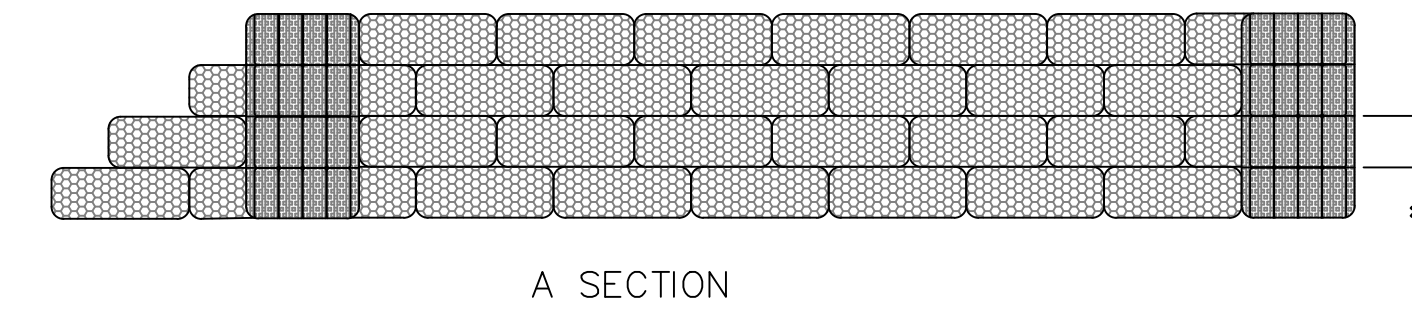
- Guidance for Use of Scrap Tires In Civil Engineering Applications by New Mexico Environment Department, Environmental Protection Division, Sold Waste Bureau. www.nmemv.state.nm.us
- Other references are also used.

TIREBALE WALL SCHEDULE

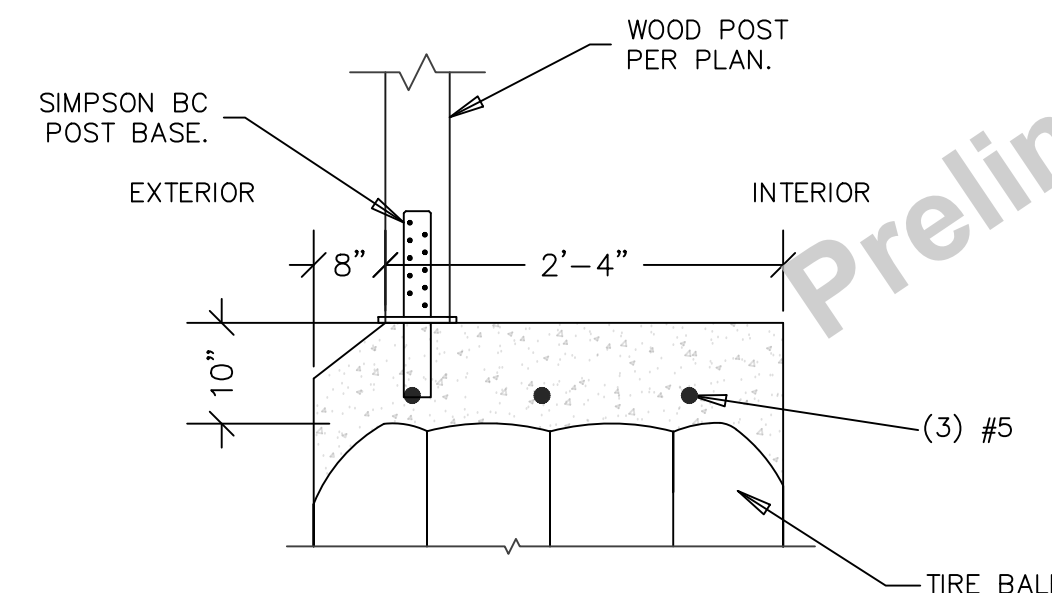
Wall type	Exterior stucco type	Exterior mesh skin reinforcement (2)	Interior stucco type	Interior mesh skin reinforcement (2)	Staple Number & Type
(1)					
TB1	Cement	2"x2" Gauge 12 Mesh	Cement	2"x2" Gauge 12 Mesh	16 GA @ 12" o.c., staggered, vertical and horiz.
TB2			NOT USED		
TB3			NOT USED	2"x2" Gauge 14 Mesh	
TB4			NOT USED		

- MIN LENGTH (WIDTH) OF STUCCO WALL (FT) PER PLAN
- (1) STUCCO OVER TIRE BALE STRUCTURAL PANEL MARK
- (2) Fasten Mesh to: a-Top Beam, b-Bottom Beam, c-All vertical posts and studs, with 14 gauge staples at all mesh crossings, max. spacing = 2" O.C.
- (3) Install #4 cross ties and 12 gauge loops as shown on PSE drawings.
- (4) Install tie mesh and rebar to w/ 16 ga - 0.75"x1.5" staple @ 12" o.c. vertically and 12" o.c. horizontally stagger typ

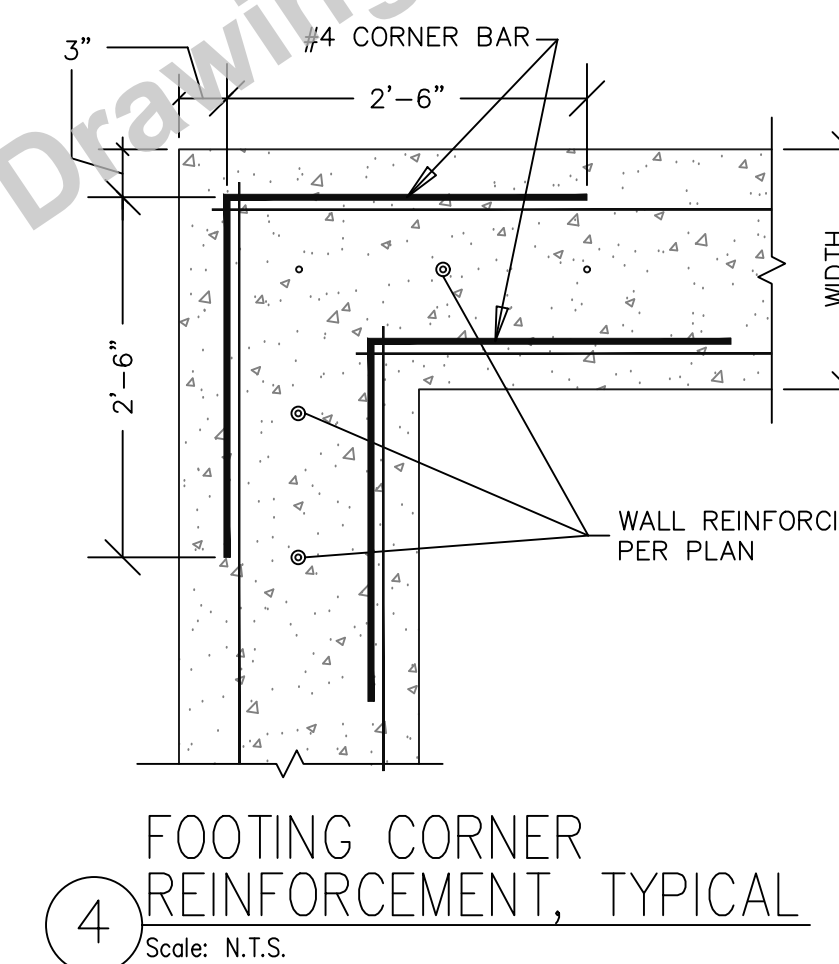
1 TIRE BALE WALL SCHEDULE
SCALE: NTS



3A TYPICAL WOOD WALL TO TIREBALE CONNECTION
NTS



3B TYPICAL WOOD POST TO TIREBALE CONNECTION
NTS



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Project:
 Tirebale Home

Owner:

Stamp:
 Preliminary Drawings,
 Not for Construction
 or Bid

REVISIONS:

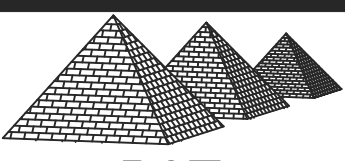
MARK	DATE:	BY:

DRAWN BY: I. ELAYEB
 DS. BY: BILL TAHA
 CHK BY: BILL TAHA
 DATE: 08-01-19

PROJECT #:
 KF217-275

TITLE:
 TIREBALE NOTES & DETAILS

PAGE NO:



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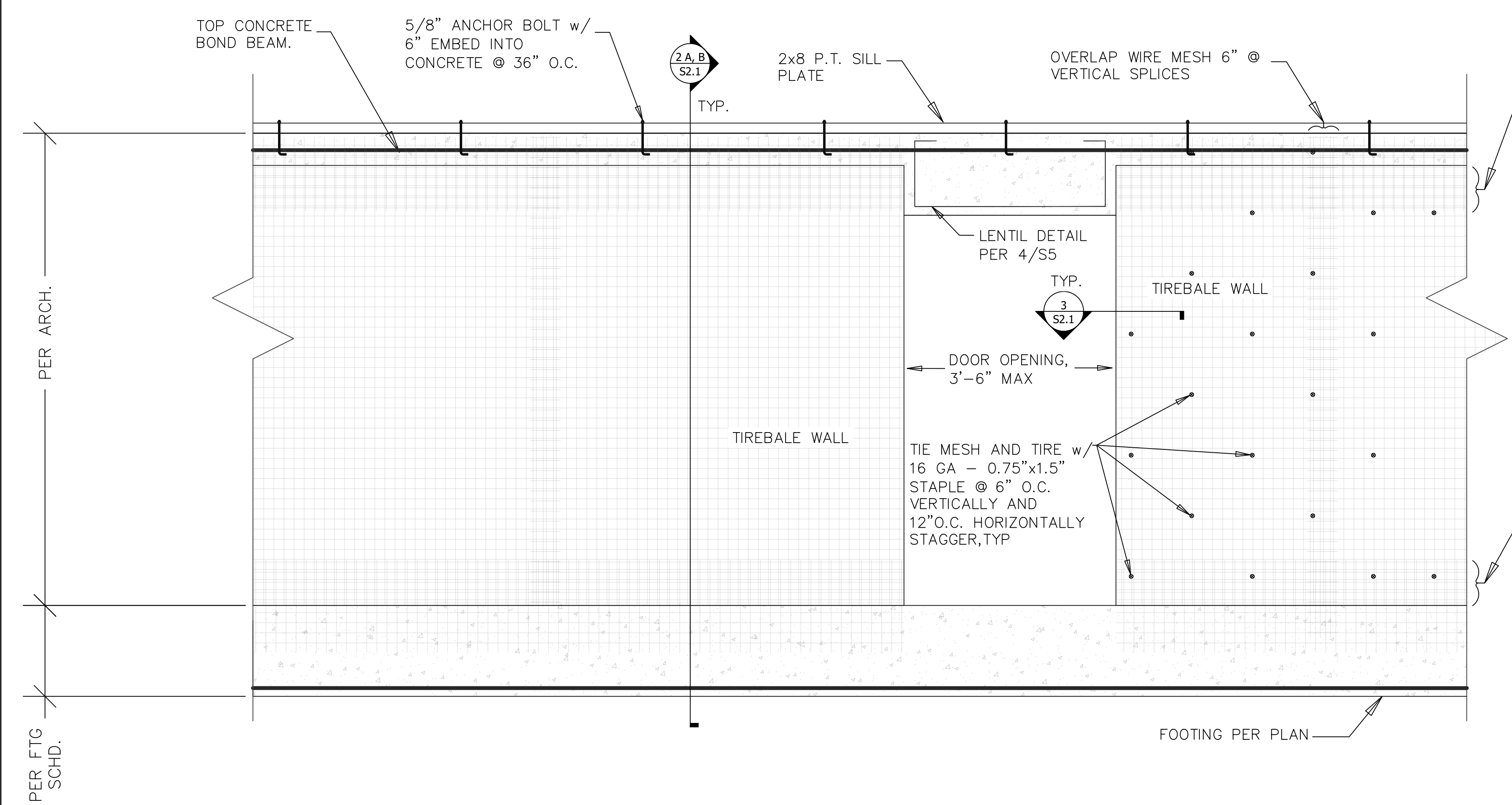
TITLE:

TIREBALE DETAILS

PAGE NO:

S2.1

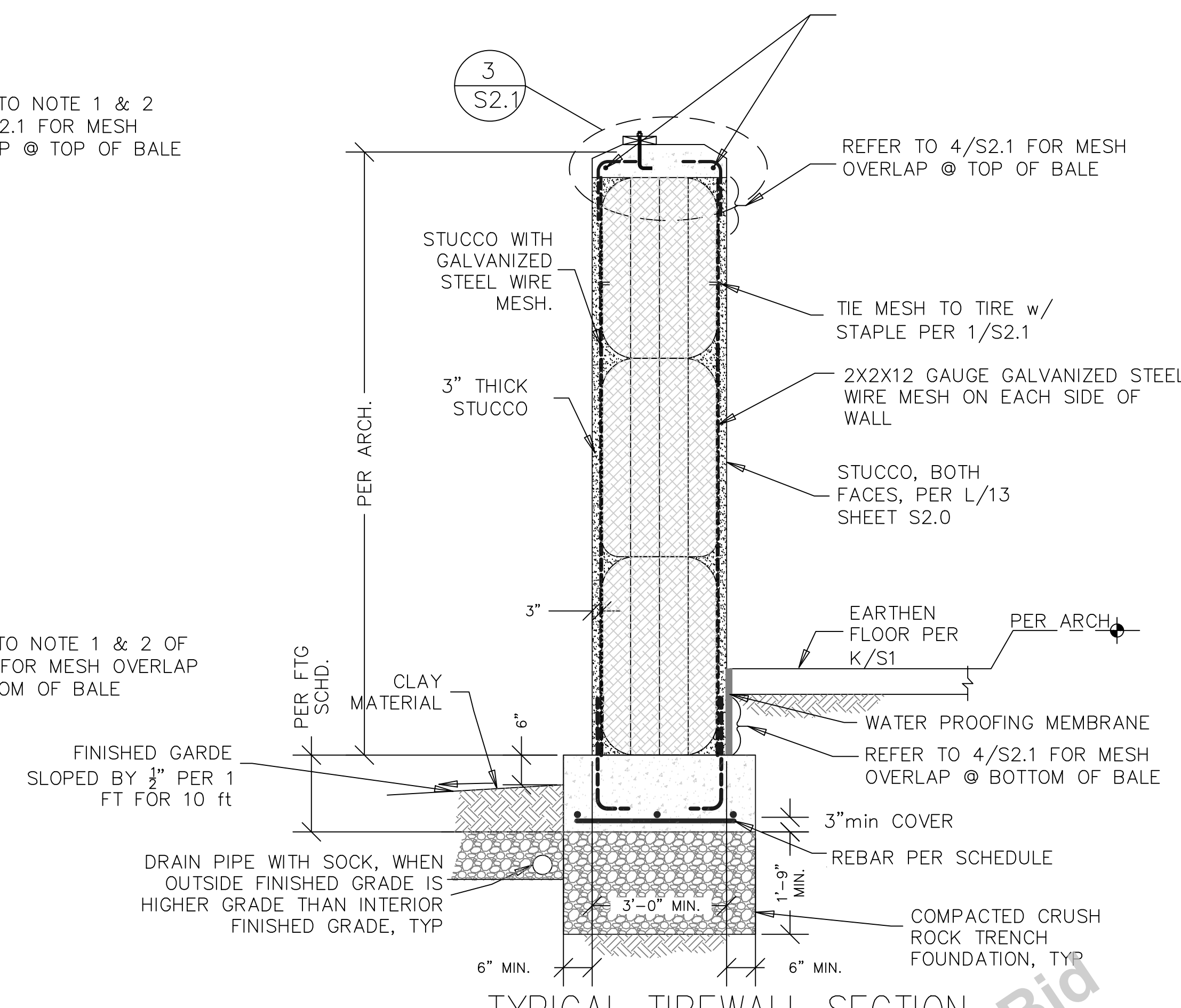
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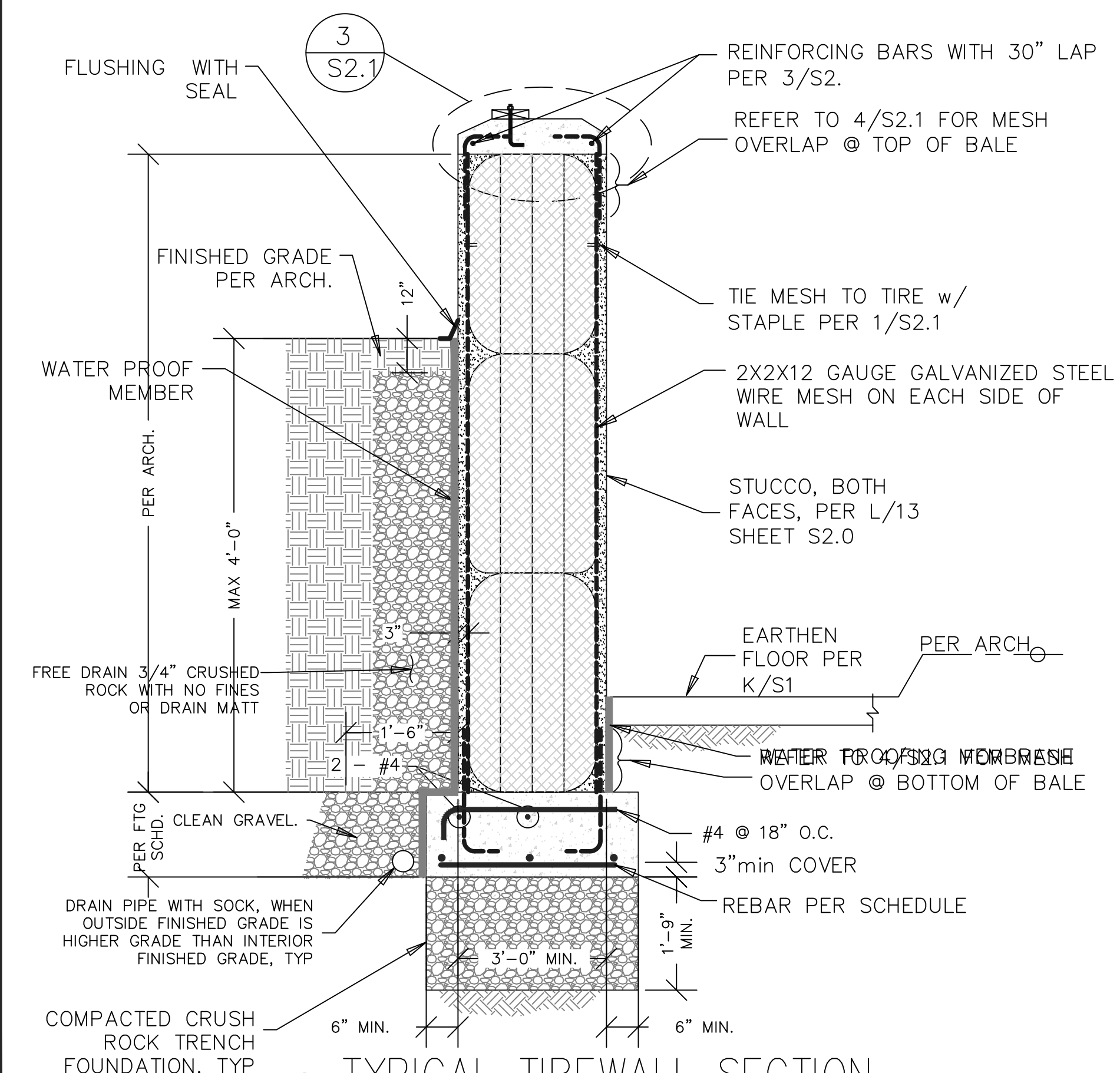
1 TYPICAL TIREBALE WALL
NTS

REFER TO NOTE 1 & 2 OF 4/S2.1 FOR MESH OVERLAP @ TOP OF BALE

REFER TO NOTE 1 & 2 OF 4/S2.1 FOR MESH OVERLAP @ BOTTOM OF BALE

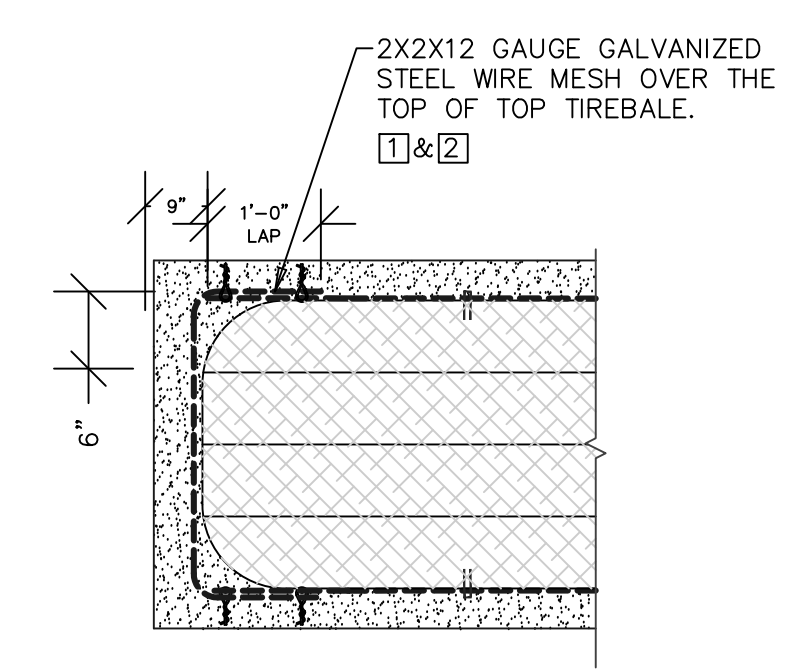


2A TYPICAL TIREWALL SECTION
NTS



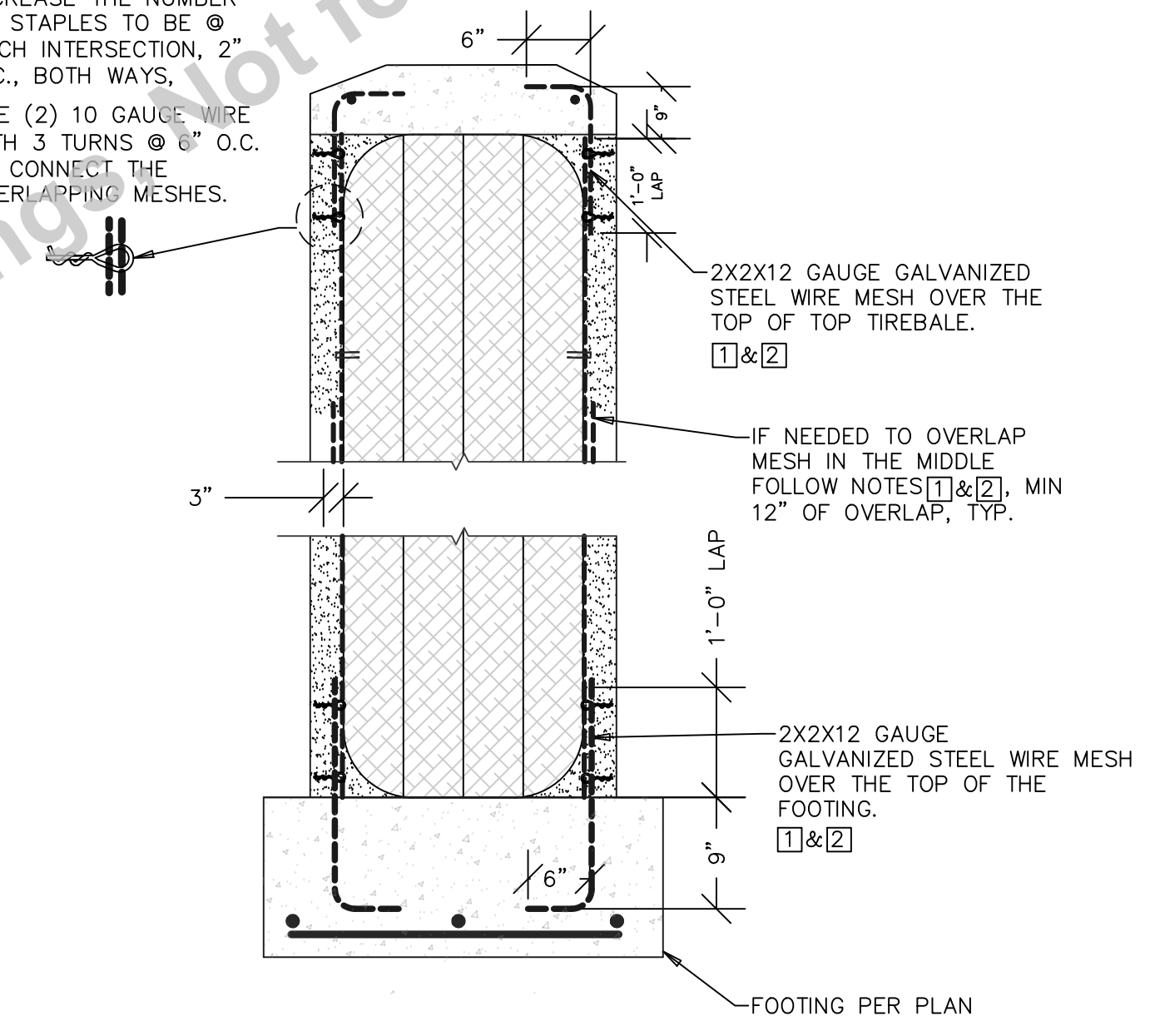
2B TYPICAL TIREWALL SECTION
NTS

- AT OVERLAPPING MESHES
- INCREASE THE NUMBER OF STAPLES TO BE @ EACH INTERSECTION, 2" BOTH WAYS.
 - USE (2) 10 GAUGE WIRE WITH 3 TURNS @ 6" O.C. TO CONNECT THE OVERLAPPING MESHES.



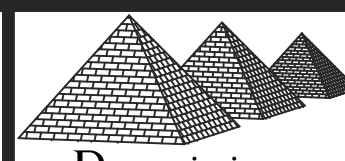
3 TYPICAL WIRE MESH LAYOUT @ WALL OPENING, TYP.
NTS

- AT OVERLAPPING MESHES, INCREASE THE NUMBER OF STAPLES TO BE @ EACH INTERSECTION, 2" O.C., BOTH WAYS.
- USE (2) 10 GAUGE WIRE WITH 3 TURNS @ 6" O.C. TO CONNECT THE OVERLAPPING MESHES.



4 TYPICAL WIRE MESH LAYOUT @ TOP & BOTTOM OF WALL, TYP.
NTS

Structural details for this project are for illustration only. They are not drawn to scale unless noted otherwise. Contractor must verify all dimensions before fabrication or construction. Do not scale drawings.



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DRAWN BY: I. ELAYEB
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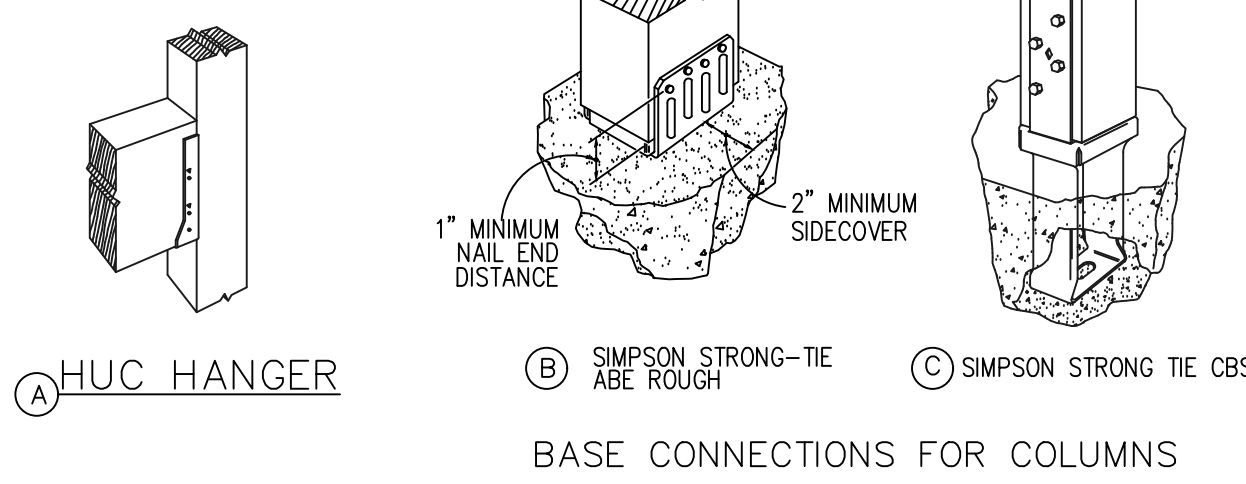
PROJECT #:
KF217-275

TITLE:
 TYPICAL DETAILS

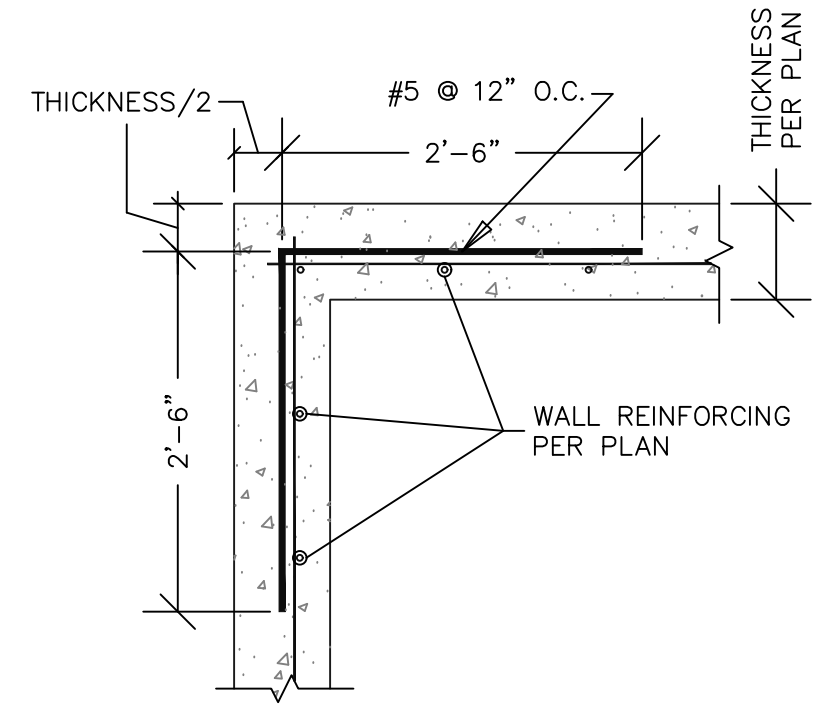
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S2.2

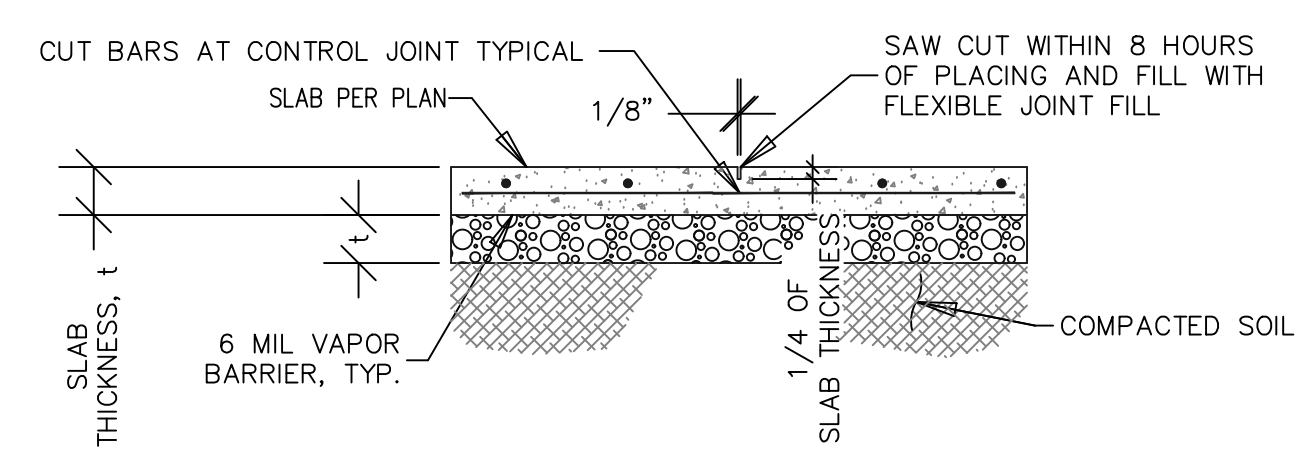
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1 POST CONNECTION DETAILS
 Scale: N.T.S.



2 WALL FOOTING CORNER REINFORCEMENT, TYPICAL
 Scale: N.T.S.



3 NOT USED
 Scale: N.T.S.

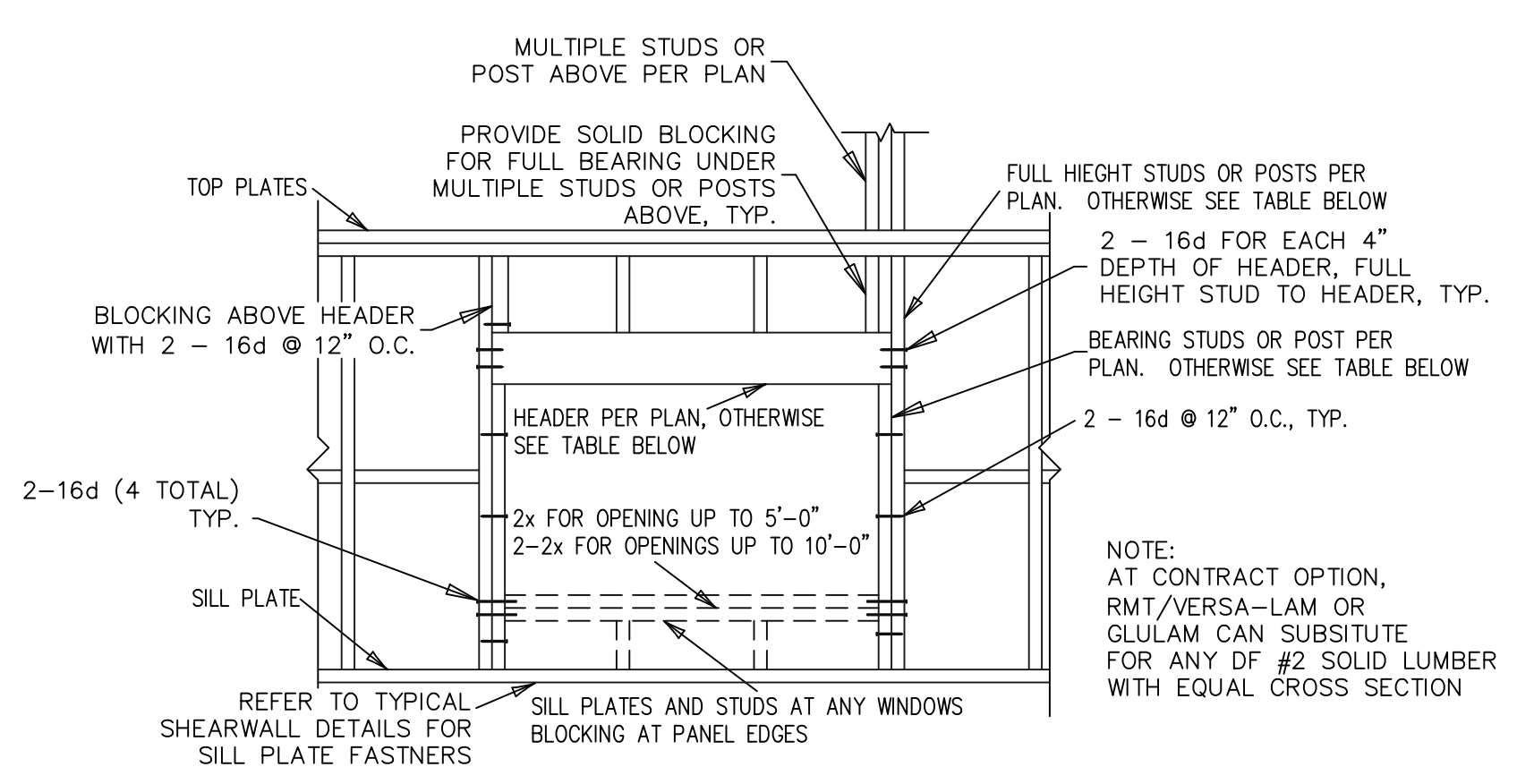
ASD CAPACITY (plf) *Co		MARK (1)	WALL SHEATHING EDGE NAILING (EN)	FOUNDATION PLATE ANCHOR BOLTS (AB) (7)	BOTTOM PLATE SHEAR NAILING (SN)	AT ROOF OR FLOOR, BLOCKING TO WALL, TOP SILL PLATE	SHEATHING	NOTES:
WIND	SEISMIC							
		'X' 1			NOT USED			(1) MIN LENGTH (WIDTH) OF SHEAR WALL (F1) PER PLAN
		'X' 2			NOT USED			(2) WOOD STRUCTURAL PANEL MARK
		'X' 3			NOT USED			(3) THIS SHEARWALL SCHEDULE SHALL SUPERCEDE ANY CONFLICTING CALLS ON TYPICAL DETAILS.
		'X' 4			NOT USED			(4) NAILING AT INTERMEDIATE SUPPORTS, (FIELD NAILING) SHALL BE SAME PENNY AS EDGE NAILS SPACED @ 6" O.C.
		'X' 5	10d @ 4"	5/8" DIAM. @ 32"	16d @ 4"	8d @ 4" O.C. TOE NAILS & A36 @ 16" O.C.	7/16" APA PLYWOOD ONE SIDE	(5) REFER TO TYPICAL DETAILS 3 THROUGH 7 THIS SHEET.
490	350	'X' 6						(6) FOR WALL TYPES 1 AND 2: a. SILL PLATE SHALL BE 3x (2 1/2") PT LUMBER b. AT ADJACENT PANEL EDGES, STUDS SHALL BE 3" THICK OR TWO STUDS NAILED WITH 2-16D @ 6" O.C. VERTICALLY
		'X' 7						(7) FOR WALL TYPE 3, 4, AND 5: a. AT ADJACENT PANEL EDGES, STUDS SHALL BE 3" THICK OR TWO STUDS NAILED WITH 2-16D @ 6" O.C. VERTICALLY
		'X' 8						(8) MINIMUM AMOUNT OF STUDS SHALL BE 2x6 @ 16" O.C. FOR EXTERIOR WALLS, 2x4 @ 24" O.C. FOR INTERIOR WALLS, UNLESS NOTED OTHERWISE ON PLANS.
								(9) ANCHOR BOLTS SHALL BE CENTERED IN PLATE AND BETWEEN 7" AND 12" FROM SILL PLATE ENDS, WITH 3" x 3" x 0.229" STEEL PLATE WASHER PROVIDE TWO AB'S PER PIECE OF SILL PLATE, MIN. EMBEDMENT SHALL BE 7" INTO CONCRETE AND MASONRY, MINIMUM SPACING SHALL BE PER THIS SCHEDULE BUT NOT MORE THAN 48" O.C. THE PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SHEATHED SIDE.
								(10) SILL PLATE SHALL BE 2x PT LUMBER MINIMUM.
								(11) WALLS SHALL BE BLOCKED, ALL SHEATHING EDGES SHALL OVERLAP AND BE NAILED TO A 2X MEMBER.

4 WOOD SHEARWALL SCHEDULE
 Scale: N/A

HOLDOWN BRACKET	SIMPSON STRAP	ANCHOR BOLT (f _c =2500 psi min)	EMBED LENGTH	STUDS/POST	EDGES (in. min.)			MIN. STEMWALL WIDTH	NOTES	CAPACITY (lbs.) ASD
					CORNER	END	EDGE			
HDU4-SDS2.5	-	SB5x24	18"	2 - 2x STUDS OR 1 - 4x POST	4 1/4"	4 1/4"	1 3/4"	6"	-	4,565

NOTE: IT MAY BE NECESSARY TO THICKEN THE FOOTING BELOW SOME ANCHORS TO PROVIDE REQ. EMBED LENGTH AND CLEAR SPACING.

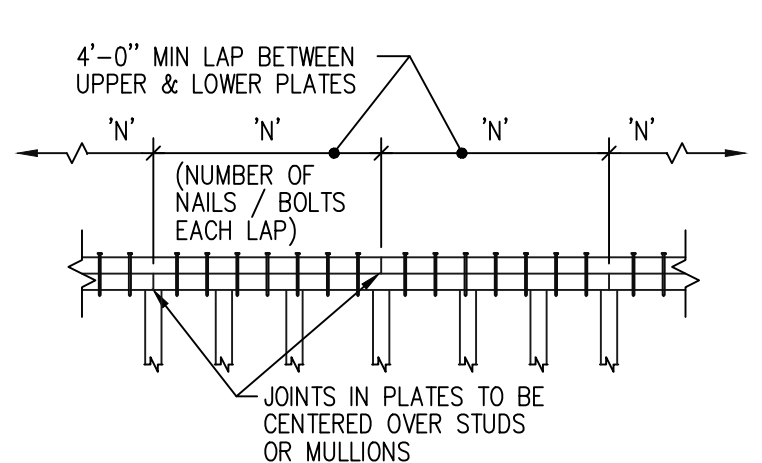
5 HOLDOWN SCHEDULE
 Scale: N/A



6 HEADER SCHEDULE AND TYPICAL DETAILS
 Scale: N.T.S.

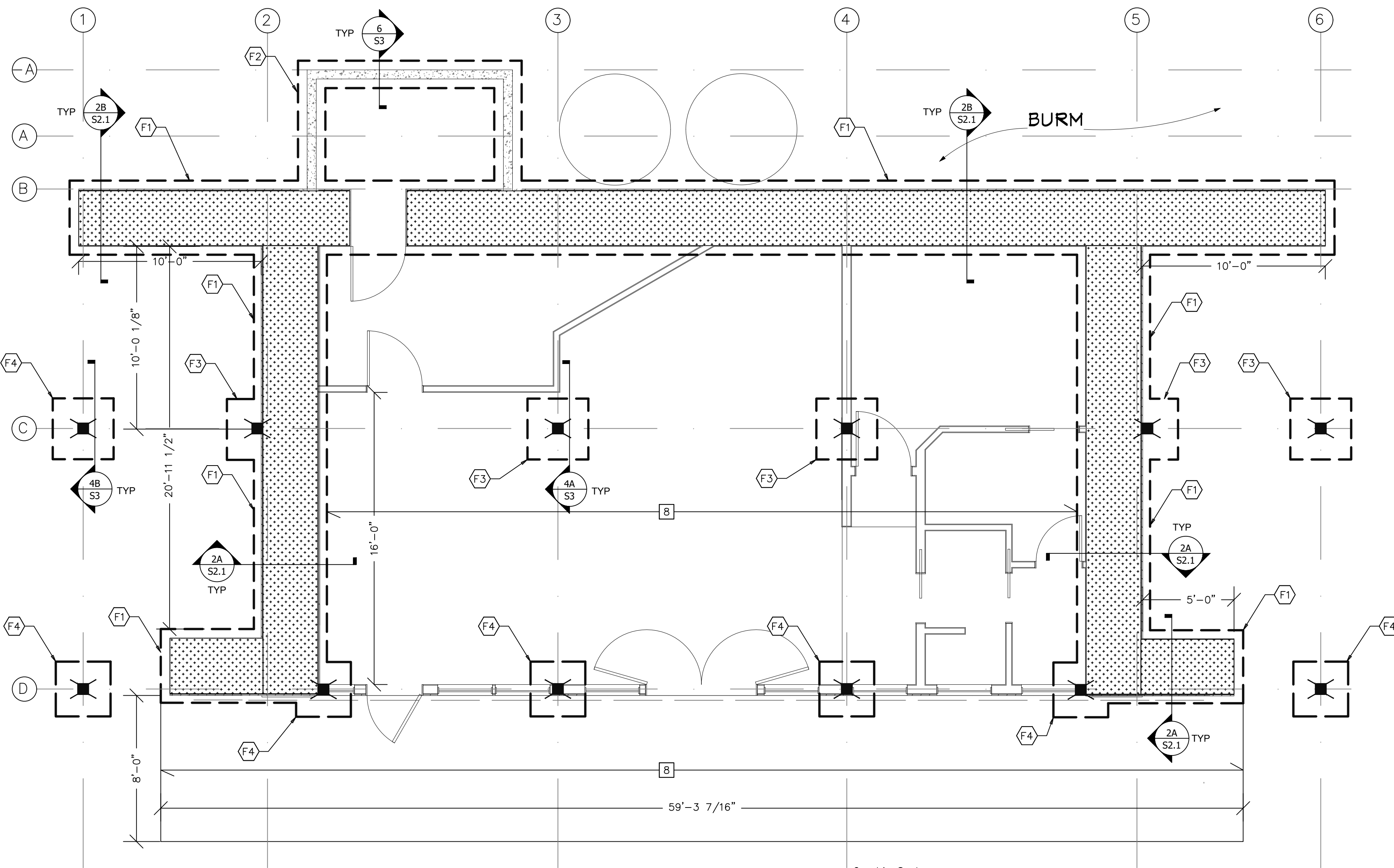
MARK	OPENING (SPAN)	COMBINATION	HEADER SIZE	BEARING STUDS	FULL HEIGHT STUDS
H101	UP TO: 5'-6"	DF #2	4x10 OR 2-2x10	ONE	ONE

NOTE:
 AT CONTRACT OPTION, RMT/VERSA-LAM OR GLULAM CAN SUBSTITUTE FOR ANY DF #2 SOLID LUMBER WITH EQUAL CROSS SECTION



MARK	N (NUMBER)	CONNECTOR
MINIMUM	20	16d
A	-	-
B	-	16d

7 TYPICAL TOP PLATE SPLICE DETAILS, UON
 Scale: N.T.S.



1 FOUNDATION PLAN
 APPROXIMATE SCALE: 1/4"=1'-0"
 DO NOT SCALE DRAWINGS

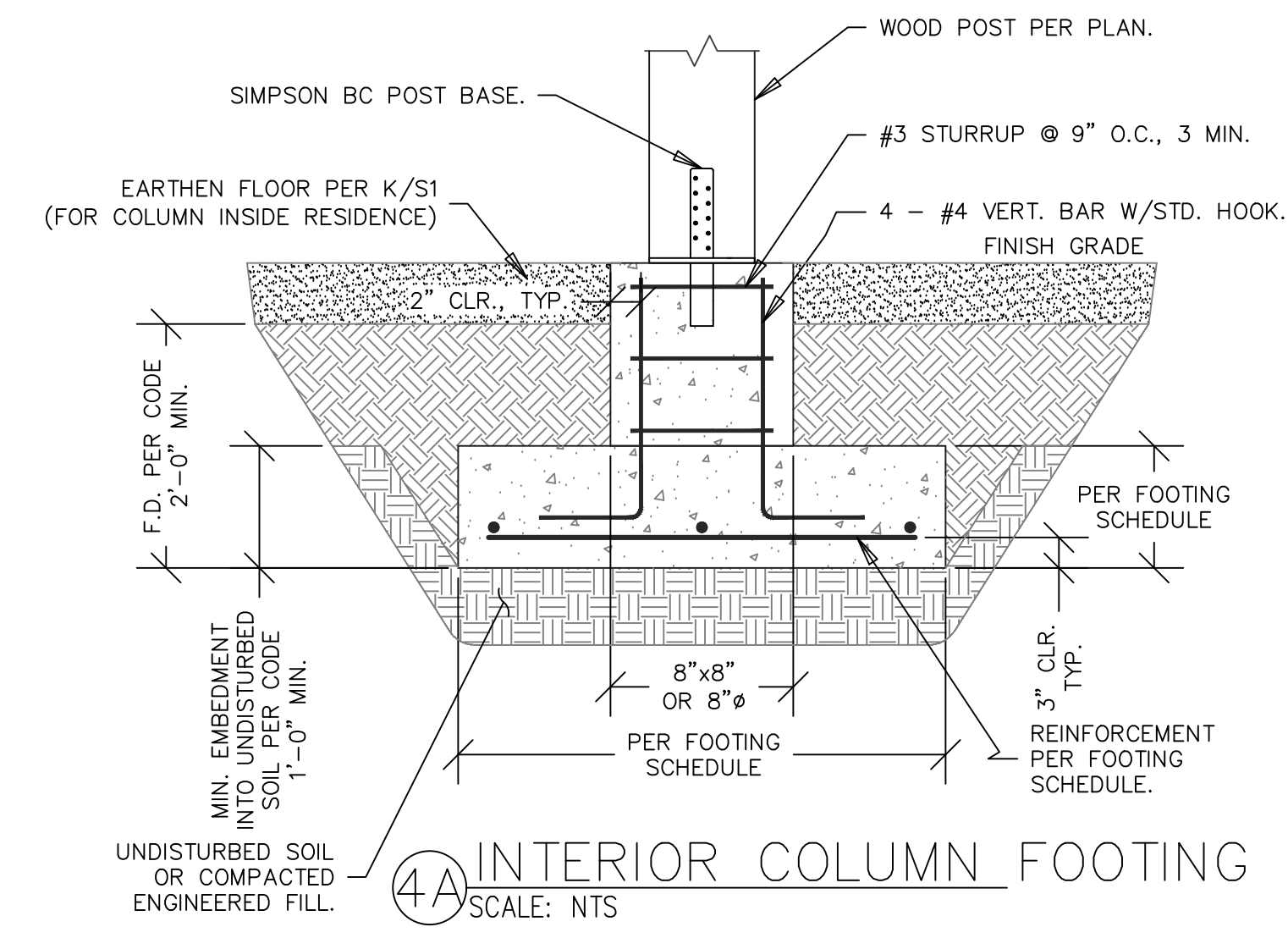
MARK	DIMENSION			TOP REINFORCEMENT		BOTTOM REINFORCEMENT		DETAIL NO./REMARKS
	LENGTH A	WIDTH B	DEPTH D	LONGITUDINAL	TRANSVERSE	LONGITUDINAL	TRANSVERSE	
F1	CONT.	PER S2.1	1'-0"	-	-	3-#4	#4@18" O.C.	2A, B/S2
F2	CONT.	3'-0"	1'-0"	-	-	3-#4	-	5/S3
F3	3'-6"	3'-6"	1'-0"	-	-	3-#4	3-#4	-
F4	3'-0"	3'-0"	1'-0"	-	-	3-#4	3-#4	-

2 COLUMN FOOTING SCHEDULE
 N.T.S.

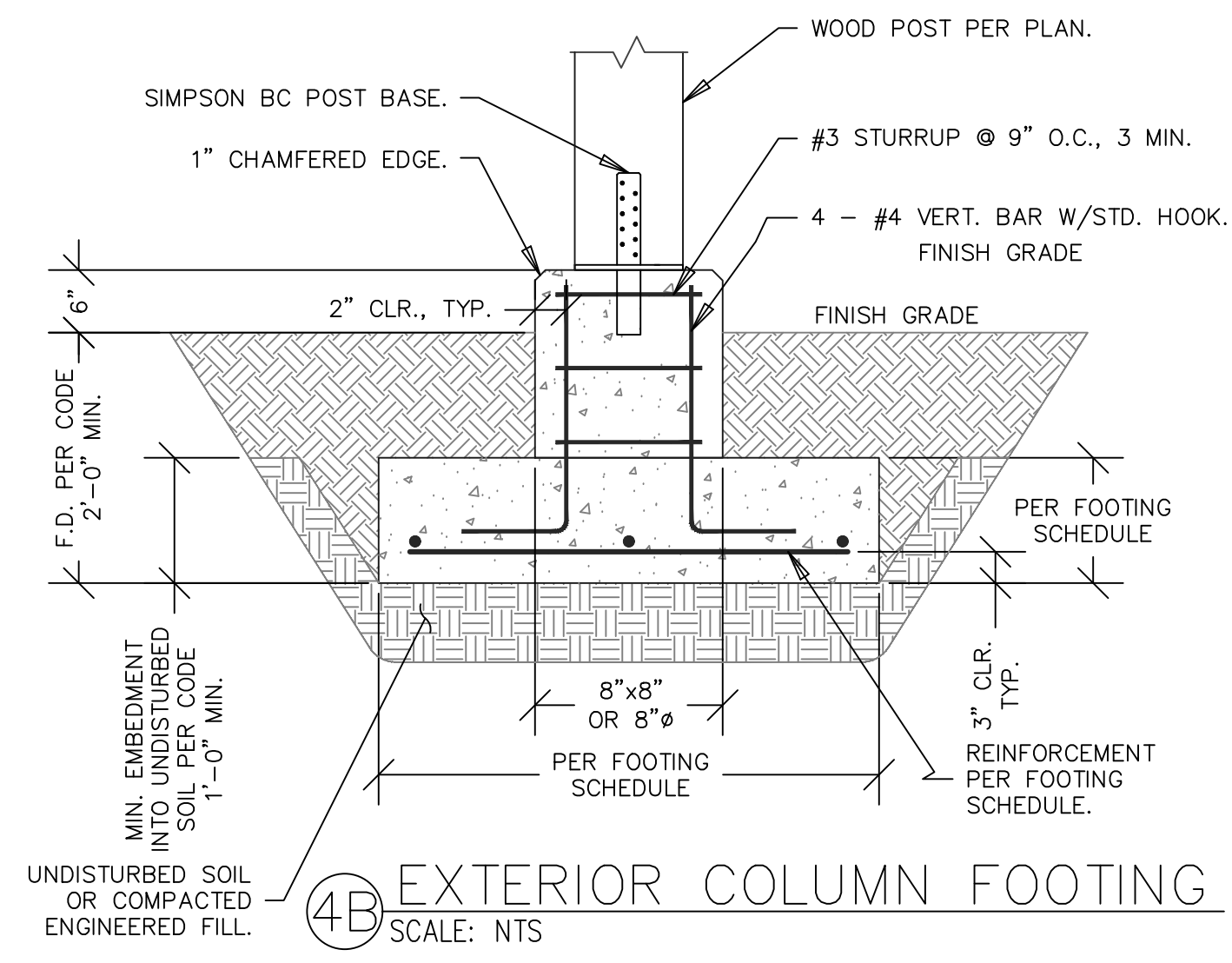
3 NOT USED
 N.T.S.

- LEGEND:**
- CONCRETE AND/OR MASONRY WALL
 - COLUMN SUPPORTING NEXT FLOOR/ROOF UP.
 - DISCONTINUOUS COLUMN SUPPORTING THIS FLOOR/ROOF.
 - COLUMN BELOW AND COLUMN ABOVE THIS FLOOR.
 - INDICATES SHEET NOTES.
 - INDICATES FOOTING MARK, REFER TO FOOTING SCHEDULE.
 - INDICATES COLUMN MARK, REFER TO COLUMN SCHEDULE.
 - n Numerical value, 1, 2, 3 etc.

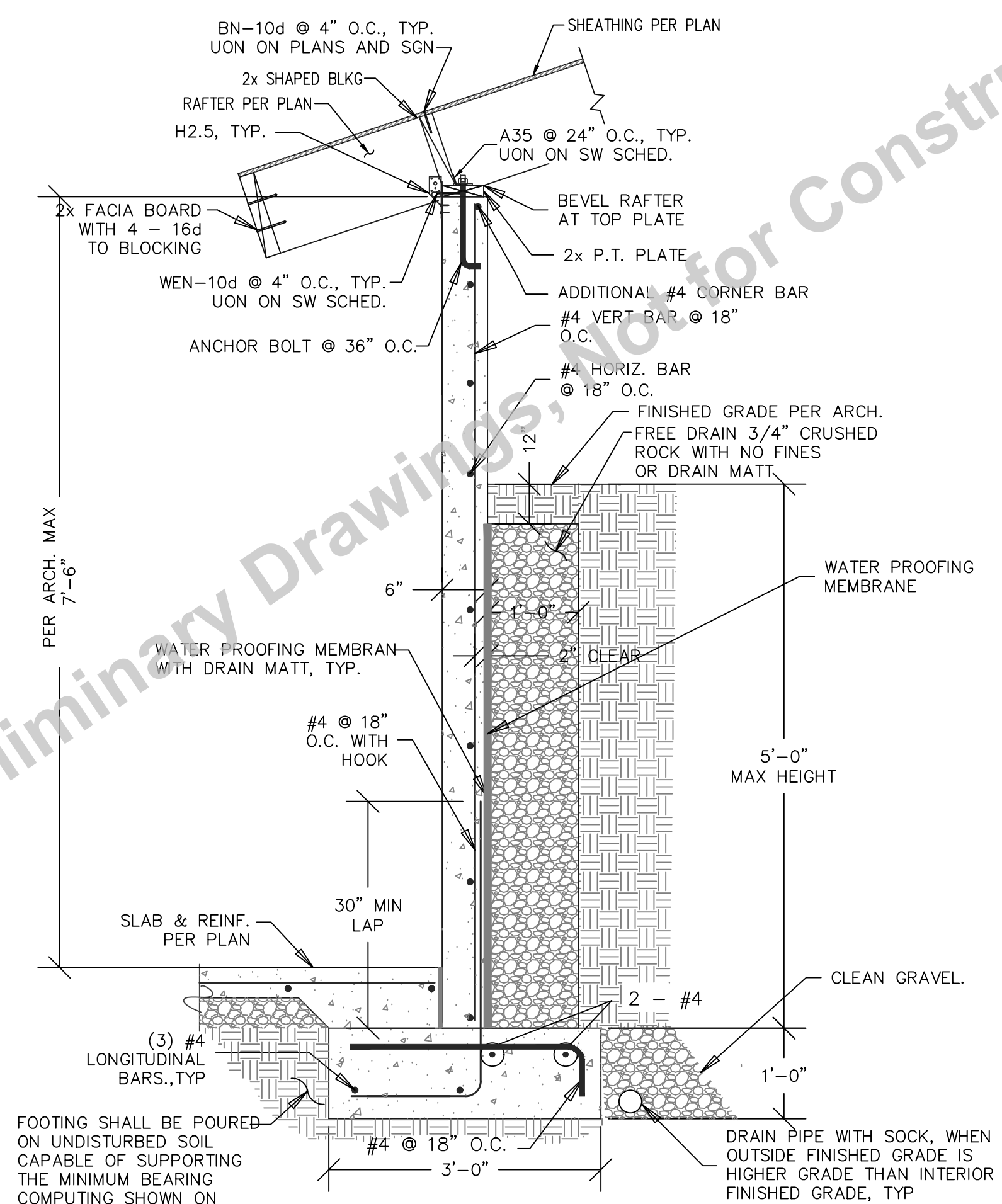
- SHEET NOTES:**
- 1 REFER TO S1 FOR STRUCTURAL GENERAL NOTES AND TO OTHER SHEETS FOR DETAILS.
 - 2 VERIFY ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.
 - 3 PROVIDE MULTIPLE STUDS UNDER BEAMS OR TRUSSES TO MATCH WIDTH OF SUPPORTED MEMBER, TYP. STUDS SHALL BE CONTINUED IN LOWER FLOORS AND/OR CRAWL SPACE TO FOOTING, TYP.
 - 4 CONTINUE ALL COLUMNS, POSTS AND BEARING STUDS OF THE HEADERS IN THE FLOORS ABOVE TO THE CONCRETE FOUNDATION OR CONCRETE STEM WALL, UNLESS THEY ARE SUPPORTED BY A BEAM OR HEADER, TYPICAL, UNLESS NOTED OTHERWISE.
 - 5 CENTER FOOTING UNDER WALLS AND POSTS UNLESS OTHERWISE NOTED ON PLANS AND/OR DETAILS.
 - 6 IT IS REQUIRED THAT NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD SHALL BE USED FOR WOOD MEMBERS THAT ARE EXPOSED TO WEATHER WITHOUT PROTECTION FROM ROOF SUCH AS BALCONIES, DECKS OR PORCHES ETC, TYPICAL.
 - 7 ALL WOOD MEMBERS IN CONTACT WITH GROUND OR CONCRETE SHALL BE PRESERVATIVE-TREATED, TYPICAL.
 - 8 EARTHEN FLOOR PER ITEM K/S1.



4A INTERIOR COLUMN FOOTING
 SCALE: NTS



4B EXTERIOR COLUMN FOOTING
 SCALE: NTS



5 RETAINING WALL DETAIL
 NTS

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 Tirebale Home

Owner:

Stamp:
 Preliminary Drawings, Not for Construction or Bid

REVISIONS:

MARK	DATE	BY:

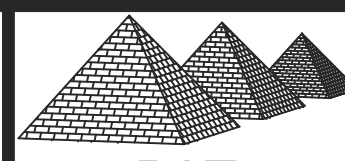
DRAWN BY: I. ELAYEB
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 CHK BY: BILL TAHA
 DATE: 08-01-19

PROJECT #:
 KF217-275

TITLE:
 FOUND. PLAN

PAGE NO:

S3



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Housing (FBIH), Coffee Shop,
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Construction
or Bid

REVISIONS:

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DRAWN BY: I. ELAYEB

DS. BY: BILL TAHA

CHK BY: BILL TAHA

DATE: 08-01-19

PROJECT #:
KF217-275

TITLE:
LOFT FRAMING
PLAN

PAGE NO:

S4

LEGEND:

- DISCONTINUOUS SHEAR WALL AND/OR LOAD BEARING WALL SUPPORTING/BELOW THIS FLOOR/ROOF.
- SHEAR WALL AND/OR LOAD BEARING WALL ABOVE THIS FLOOR.
- SHEAR WALL/BEARING WALL BELOW AND ABOVE THIS FLOOR.
- NON-LOAD BEARING WALL BELOW THIS FLOOR.
- NON-LOAD BEARING WALL ABOVE THIS FLOOR.
- COLUMN SUPPORTING NEXT FLOOR/ROOF UP.
- DISCONTINUOUS COLUMN SUPPORTING THIS FLOOR/ROOF.
- COLUMN BELOW AND COLUMN ABOVE THIS FLOOR.
- STUB, SHORT, POST.
- INDICATES SHEET NOTES.
- INDICATES COLUMN MARK, REFER TO COLUMN SCHEDULE.
- INDICATES HOLD-DOWN MARK, REFER TO HOLD-DOWN SCHEDULE.
- INDICATES SHEAR WALL/LOAD BEARING WALL MARK, REFER TO SHEAR WALL SCHEDULE 1/S2.
- n NUMERICAL VALUE, 1, 2, 3 ETC.

SHEET NOTES:

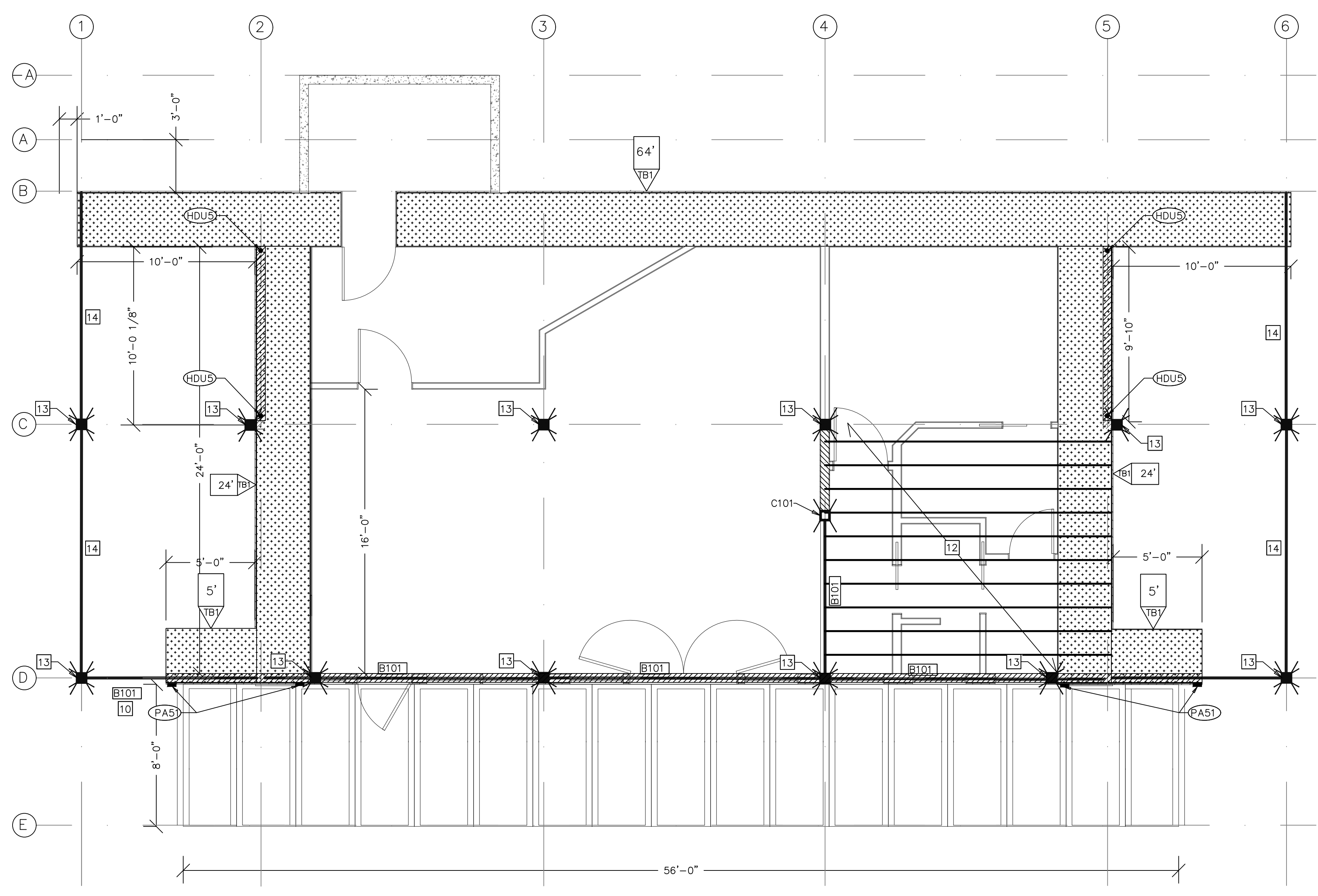
- 1 REFER TO S1 FOR STRUCTURAL GENERAL NOTES AND TO ROOF DETAIL SHEETS FOR CONSTRUCTION DETAILS.
- 2 VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.
- 3 PROVIDE MULTIPLE STUDS UNDER BEAMS OR TRUSSES TO MATCH WIDTH OF SUPPORTED MEMBER, TYP. STUDS SHALL BE CONTINUED IN LOWER FLOORS AND/OR CRAWL SPACE TO FOOTING, TYP.
- 4 ROOF DRAINAGE SHALL BE DIRECTED AWAY FROM FOUNDATION.
- 5 PROVIDE SOLID BLOCKING UNDER POSTS AND MULTIPLE STUDS TO TRANSFER LOADS TO POSTS/STUDS BELOW.
- 6 LAY FLOOR AND ROOF STRUCTURAL PANELS WITH THE LONG DIMENSION AT RIGHT ANGLE TO SUPPORTS AND CONTINUOUS OVER TWO OR MORE SPANS.
- 7 ROOF SHEATHING SHALL BE 5/8" THICK APA PLYWOOD OR ORIENTED STRAND BOARDS WITH 24"/16" SPAN RATING. USE 8d @ 4" O.C. (BN) AT EXTERIOR WALLS AND INTERIOR SHEAR WALLS. 8d @ 6" O.C. (REN) AT PANEL EDGES AND 8d @ 10" O.C. AT INTERMEDIATE SUPPORTS, UNO. MINIMUM PENETRATION IS 1 5/8" INTO FRAMING.
- 8 LIMIT LIVE LOAD DEFLECTION TO SPAN OVER 360 FOR RAFTERS, JOISTS, BEAMS.
- 9 ROOF STRUCTURAL SHEATHING SHALL BE CONTINUOUS OVER THE MAIN FRAMING MEMBERS. A SECOND LAYER OF STRUCTURAL SHEATHING SHALL BE APPLIED OVER THE ROOF OVERSTACK (OVERBUILD) AREAS.
- 10 IT IS REQUIRED THAT NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD SHALL BE USED FOR WOOD MEMBERS THAT ARE EXPOSED TO WEATHER WITHOUT PROTECTION FROM ROOF SUCH AS BALCONIES, DECKS OR PORCHES ETC, TYPICAL.
- 11 CONTINUE ALL COLUMNS, POSTS AND BEARING STUDS OF THE HEADERS TO THE CONCRETE FOUNDATION OR CONCRETE STEM WALL. UNLESS THEY ARE SUPPORTED BY A BEAM OR HEADER IN THE FLOORS BELOW, TYPICAL, UNLESS NOTED OTHERWISE.
- 12 JOISTS: 2X12 @ 16" O.C.
- 13 CONTINUOUS COLUMN FROM FOUNDATION TO ROOF PER SS.
- 14 DECORATIVE BEAM BY OWNER CHOICE, IF USED, SIZE SHALL BE 6X12 DF-L #2.

MARK	WIDTH (INCHES)	DEPTH (INCHES)	COMBINATION	REMARKS
B101	6	12	DF-L #2	-

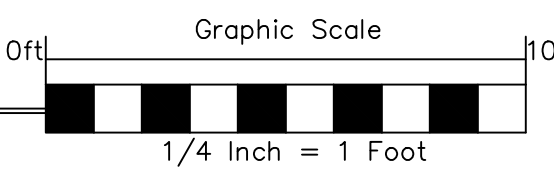
2 WOOD BEAM SCHEDULE
N.T.S.

MARK	SIZE	TYPE	BASE CONNECTION TYPE	TOP CONNECTION TYPE	REMARKS
C101	6X6	DF-L #2	BC66	CC66	-
-	-	-	-	-	-

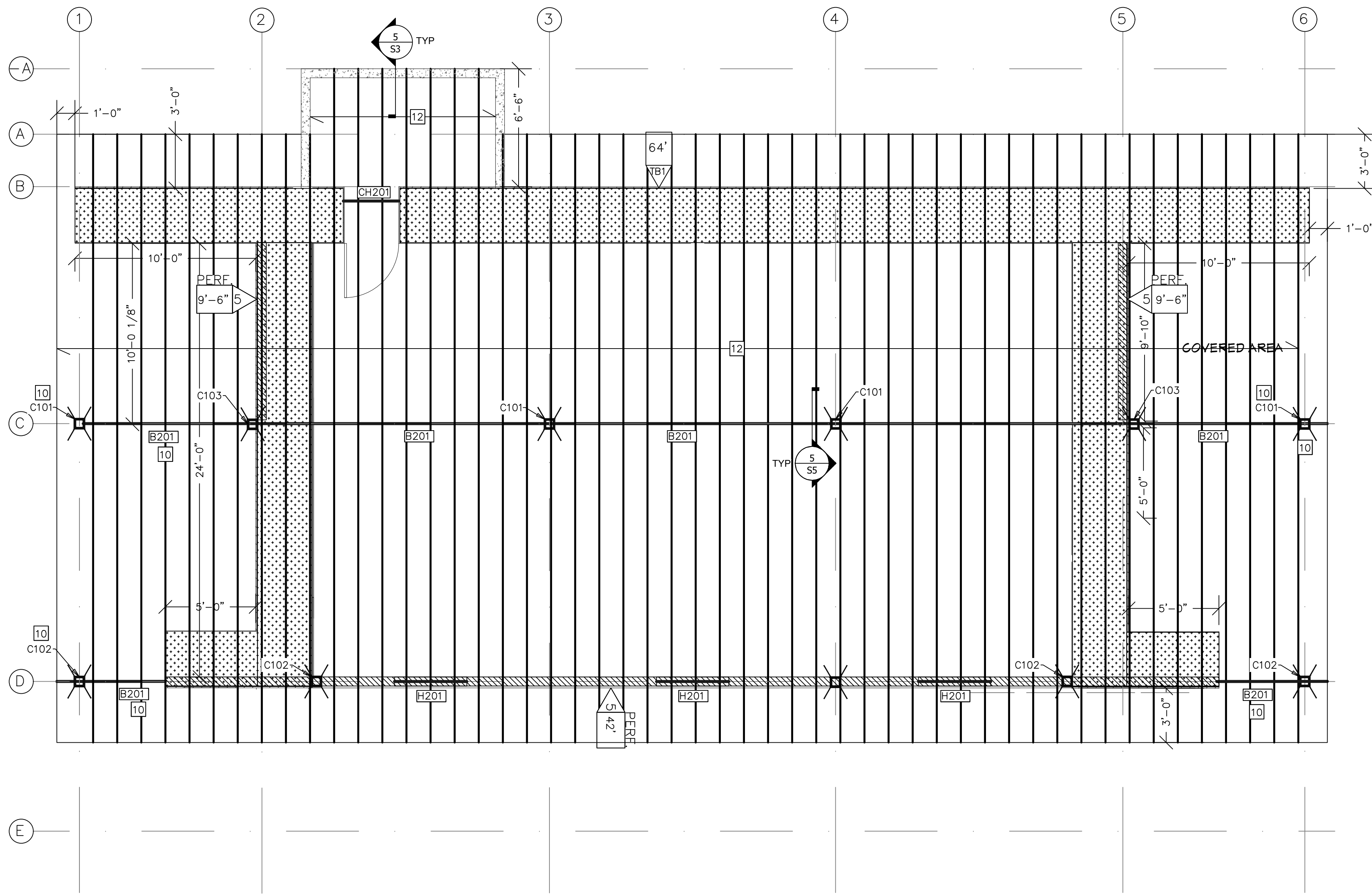
3 COLUMN SCHEDULE
N.T.S.



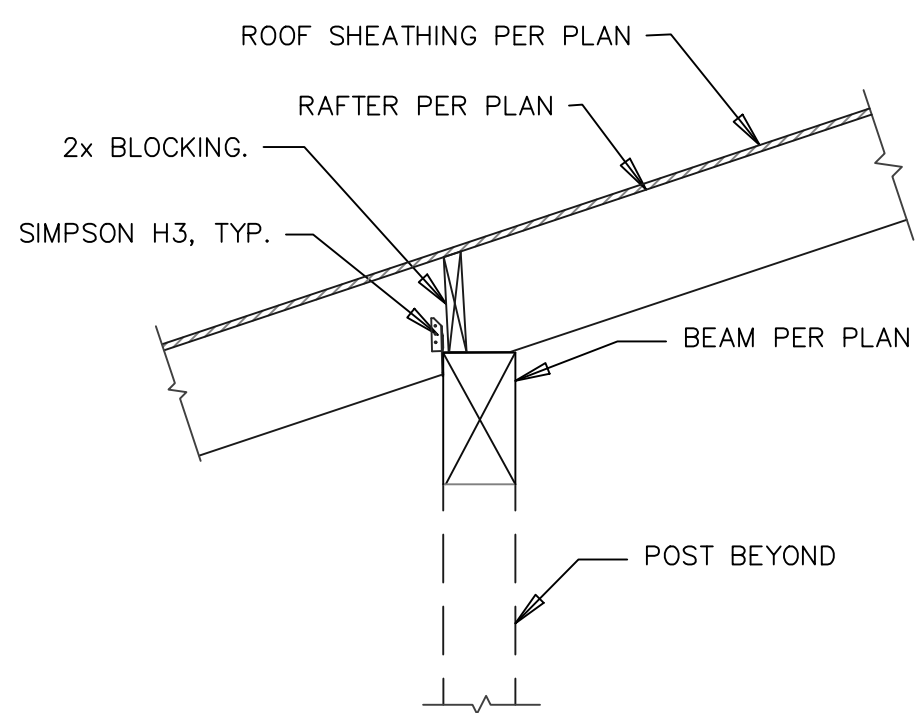
1 LOFT FRAMING PLAN
APPROXIMATE SCALE: 1/4"=1'-0"
DO NOT SCALE DRAWINGS



Preliminary Drawings, Not for Construction



1 ROOF FRAMING PLAN
 APPROXIMATE SCALE: 1/4"=1'-0"
 DO NOT SCALE DRAWINGS



5 WOOD RAFTER TO BEAM
 Scale: N.T.S.

MARK	WIDTH (INCHES)	DEPTH (INCHES)	COMBINATION	REMARKS
B201	6	12	DF-L #2	-
B102				-
B103				-

2 WOOD BEAM SCHEDULE
 N.T.S.

MARK	SIZE	TYPE	BASE CONNECTION TYPE	TOP CONNECTION TYPE	REMARKS
C101	6X6	DF-L #1	BC66	CC66	-
C102	6X6	DF-L #2	BC66	CC66	-
C103	6X6	DF-L #2	BC66	CC66	WRAP COLUMN IN #30 FELT BUILDING PAPER PROVIDE WIRE MESH AND STUCCO OVER COLUMN

3 COLUMN SCHEDULE
 N.T.S. COLUMN BELOW, SUPPORTING THIS FLOOR/ROOF LEVEL.

MARK	DEPTH (IN)	BOTTOM BARS	TOP BARS	STIRRUP SPACING(S)
CH201	16	4 - #4	3 - #4	#4 @ 9"

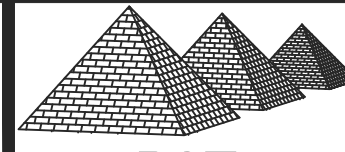
4 CONCRETE LINTEL SCHEDULE
 Scale: N.T.S.

LEGEND:

- DISCONTINUOUS SHEAR WALL AND/OR LOAD BEARING WALL SUPPORTING/BELOW THIS FLOOR/ROOF.
- SHEAR WALL AND/OR LOAD BEARING WALL ABOVE THIS FLOOR.
- SHEAR WALL/BEARING WALL BELOW AND ABOVE THIS FLOOR.
- NON-LOAD BEARING WALL BELOW THIS FLOOR.
- NON-LOAD BEARING WALL ABOVE THIS FLOOR.
- COLUMN SUPPORTING NEXT FLOOR/ROOF UP.
- DISCONTINUOUS COLUMN SUPPORTING THIS FLOOR/ROOF.
- COLUMN BELOW AND COLUMN ABOVE THIS FLOOR.
- STUB, SHORT, POST.
- INDICATES SHEET NOTES.
- INDICATES COLUMN MARK, REFER TO COLUMN SCHEDULE.
- INDICATES HOLD-DOWN MARK, REFER TO HOLD-DOWN SCHEDULE.
- INDICATES SHEAR WALL/LOAD BEARING WALL MARK, REFER TO SHEAR WALL SCHEDULE 1/S2.
- n NUMERICAL VALUE, 1, 2, 3 ETC.

SHEET NOTES:

- 1 REFER TO S1 FOR STRUCTURAL GENERAL NOTES AND TO ROOF DETAIL SHEETS FOR CONSTRUCTION DETAILS.
- 2 VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.
- 3 PROVIDE MULTIPLE STUDS UNDER BEAMS OR TRUSSES TO MATCH WIDTH OF SUPPORTED MEMBER, TYP. STUDS SHALL BE CONTINUED IN LOWER FLOORS AND/OR CRAWL SPACE TO FOOTING, TYP.
- 4 ROOF DRAINAGE SHALL BE DIRECTED AWAY FROM FOUNDATION.
- 5 PROVIDE SOLID BLOCKING UNDER POSTS AND MULTIPLE STUDS TO TRANSFER LOADS TO POSTS/STUDS BELOW.
- 6 LAY FLOOR AND ROOF STRUCTURAL PANELS WITH THE LONG DIMENSION AT RIGHT ANGLE TO SUPPORTS AND CONTINUOUS OVER TWO OR MORE SPANS.
- 7 ROOF SHEATHING SHALL BE 5/8" THICK APA PLYWOOD OR ORIENTED STRAND BOARDS WITH 24"/16" SPAN RATING. USE 8d @ 4" O.C. (BN) AT EXTERIOR WALLS AND INTERIOR SHEAR WALLS. 8d @ 6" O.C. (REN) AT PANEL EDGES AND 8d @ 10" O.C. AT INTERMEDIATE SUPPORTS. UN. MINIMUM PENETRATION IS 1 5/8" INTO FRAMING.
- 8 LIMIT LIVE LOAD DEFLECTION TO SPAN OVER 360 FOR RAFTERS, JOISTS, BEAMS.
- 9 ROOF STRUCTURAL SHEATHING SHALL BE CONTINUOUS OVER THE MAIN FRAMING MEMBERS. A SECOND LAYER OF STRUCTURAL SHEATHING SHALL BE APPLIED OVER THE ROOF OVERSTACK (OVERBUILD) AREAS.
- 10 IT IS REQUIRED THAT NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD SHALL BE USED FOR WOOD MEMBERS THAT ARE EXPOSED TO WEATHER WITHOUT PROTECTION FROM ROOF SUCH AS BALCONIES, DECKS OR PORCHES ETC, TYPICAL.
- 11 CONTINUE ALL COLUMNS, POSTS AND BEARING STUDS OF THE HEADERS TO THE CONCRETE FOUNDATION OR CONCRETE STEM WALL. UNLESS THEY ARE SUPPORTED BY A BEAM OR HEADER IN THE FLOORS BELOW, TYPICAL, UNLESS NOTED OTHERWISE.
- 12 RAFTERS: 2X12 @ 16" O.C.



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LICENSED IN 48 STATES

Construction Types:
 Light Gauge Steel, Straw Bales, Bamboo, Log, Timber/Wood, Structural Insulated Panels/SIPs, Masonry, Steel, Concrete, Modular Homes/Factory Built Housing (FBI), Coffee Shop, C/P etc. Commercial or Residential.

Project:

Tirebale Home

Owner:

Stamp:
 Preliminary Drawings,
 Not for Construction
 or Bid

REVISIONS:

MARK	DATE	BY:

DRAWN BY: I. ELAYEB

DS. BY: BILL TAHA

CHK BY: BILL TAHA

DATE: 08-01-19

PROJECT #:

KF217-275

TITLE:

ROOF

FRAMING PLAN

PAGE NO:

S5

Preliminary Drawings, Not for Construction