

DESIGN SPECIFICATIONS

DESIGN CODE: 2017 FLORIDA BUILDING CODE – RESIDENTIAL
DESIGN IS VOID ONE YEAR AFTER THE DATE OF THE ORIGINAL PLANS, UNLESS PLANS HAVE BEEN REVIEWED FOR CODE COMPLIANCE.

| DESIGN LOADS: ACTUAL AND UNIFORM | ROOF | FLOOR |
|----------------------------------|------------------------|--------|
| ROOF LOADING (cd=1.25) | (cd=1.00) | |
| TOP CHORD LIVE LOAD | 20 psf | 40 psf |
| TOP CHORD DEAD LOAD | 7 psf (ARCH SHINGLES) | 10 psf |
| TOP CHORD DEAD LOAD | 20 psf (TILE SHINGLES) | 10 psf |
| BOTTOM CHORD LIVE LOAD | 10 psf | 0 psf |
| BOTTOM CHORD DEAD LOAD | 5 psf | 0 psf |

DEFLECTION CRITERIA:
ROOF FRAMING: LIVE LOAD L/240 TOTAL LOAD L/180
FLOOR FRAMING: LIVE LOAD L/360 & TOTAL LOAD L/240
0.75" MAX ANY CASE

WIND LOADING:
ASCE 7/10 FOR WIND UPLIFT, TRUSSES SHALL BE DESIGNED WITH A MIN. DEAD LOAD CONDITION OF 5 PSF TOP CHORD AND 5 PSF BOTTOM CHORD. REACTIONS CALCULATED FOR THE BEARING POINTS OF ROOF TRUSSES SHALL BE REDUCED SPECIFICALLY ATTIC FLOOR LIVE LOADS COMBINED WITH ROOF LIVE LOADS SHALL BE MULTIPLIED BY 0.75 WHEN COMBINED w/ DEAD LOAD.

| | |
|-------------------------------|----------|
| BASIC WIND SPEED (ASCE 7-10) | 130 MPH |
| IMPORTANCE FACTOR | 1.00 |
| MEAN ROOF HEIGHT | 20.0 FT |
| ROOF PITCH | 7/12 |
| BUILDING CATEGORY | C |
| EXPOSURE CATEGORY | C |
| ENCLOSURE CLASSIFICATION | ENCLOSED |
| INTERNAL PRESSURE COEFFICIENT | ± .18 |

MATERIAL SPECIFICATIONS

HARDWARE AND ANCHORS:
ANCHOR BOLTS & THREADED ROD: SHALL BE IN ACCORDANCE WITH ASTM A 307 OR ASTM F 1554 GRADE 36
WASHERS: SHALL BE IN ACCORDANCE WITH ASTM A500 (GRADE B).
NUTS: SHALL BE IN ACCORDANCE WITH ASTM A 563 GRADE 5.
METAL CONNECTORS: ALL METAL CONNECTORS WHICH ARE EXPOSED TO EXTERIOR SHALL BE GALVANIZED.
REINFORIT REBAR/ROD INSTALLATION: EMBEDMENT OF RODS OR REBAR DONNELS SHALL BE 12 BAR DIAMETER MINIMUM. HOLES SHALL BE 1/4" LARGER THAN REBAR SIX AND 1/4" LARGER THAN THREADED ROD SIZE. (U.O.N.)
ANCHORING ADHESIVE: SHALL BE ONE OF THE FOLLOWING PRODUCTS (QUAL CARTRIDGE INSTALLATION ONLY):
EPOXY: ITW RED HEAD AT
REINFORCING STEEL: SHALL BE ASTM A615, GRADE 60.
STRUCTURAL STEEL: SHALL BE ASTM A992, GRADE 50.
WELDED WIRE FABRIC (WWF): SHALL BE ASTM A185.
LAMINATED VENEER LUMBER (LVL): ALL LAMINATED VENEER LUMBER SHALL MEET OR EXCEED THE FOLLOWING DESIGN PROPERTIES – ELASTIC MODULUS (E), 1900ksi, BENDING STRESS (Fb) 2600psi

| COMPONENTS & CLADDING ALLOWABLE DESIGN PRESSURES | | | GARAGE DOOR PRESSURES (PSF) | |
|---|--------------|-------------------|------------------------------------|-------------------------------------|
| TRIBUTARY AREA (sf) | INTERIOR | EDGE STRIP (PSF): | 1 CAR GARAGE DOOR (8'x7') | |
| | ZONE (PSF) | 'a' = 5'-0" | | 2 CAR GARAGE DOOR (16'x7') |
| 10 | +25.6 – 27.7 | +25.6 – 34.2 | +21.8 –23.9 | |
| 50 | +22.9 – 25.0 | +22.9 – 28.8 | | |
| 100 | +21.8 – 23.9 | +21.8 – 26.6 | | |

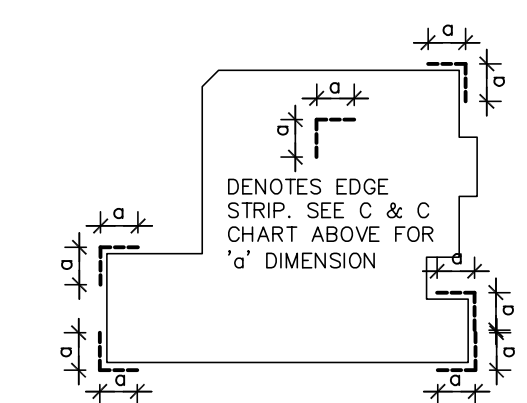
THE VALUES ABOVE ARE ALLOWABLE WIND PRESSURE VALUES (ASD). THE ABOVE WIND PRESSURES HAVE BEEN REDUCED BY 0.60 AS PERMITTED BY THE ALLOWABLE STRESS DESIGN METHODOLOGY. NO FURTHER REDUCTION SHALL BE PERMITTED

COMPONENT & CLADDING WALL ELEMENTS SHALL BE DESIGNED FOR BOTH POSITIVE AND NEGATIVE PRESSURES SHOWN IN TABLE ABOVE.

LINEAR INTERPOLATION IS PERMISSIBLE.

PLUS = PRESSURE AND MINUS = SUCTION.

DESIGN OF WINDOWS/DOORS FASTENING TO THE WALL FRAMING IS THE RESPONSIBILITY OF THE WINDOW/DOOR MANUF./SUPPLIER & SHALL MEET THE ABOVE NOTED POSITIVE AND NEGATIVE PRESSURES.



SCOPE OF SERVICE

MEANS AND METHODS:
THE STRUCTURAL ENGINEER SHALL NOT HAVE CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, OR SEQUENCES; FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR OR ANY OTHER PERSONS PERFORMING THE WORK OR FOR THE FAILURE FOR ANY OF THEM TO CONSTRUCT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

LIMITS OF STRUCTURAL ENGINEERING DESIGN RESPONSIBILITIES:
THE ITEMS SPECIFICALLY DESIGNED BY THE STRUCTURAL ENGINEER ARE LIMITED TO THE FOLLOWING: CONTINUOUS LOAD PATH FOR WIND UPLIFT, WOOD PANEL SHEARWALLS, WALL FRAMING AND REQUIRED SHEATHING AND HEADERS DIRECTLY SUPPORTING ROOF FRAMING. ITEMS NOT DESIGNED PRE-ENGINEERED WOOD FLOOR AND ROOF TRUSSES, FLOOR FRAMING NOT SPECIFICALLY ADDRESSED, TRUSS-TO-TRUSS CONNECTION, AND ANY ARCHITECTURAL, MECHANICAL OR ELECTRICAL SYSTEM.

GENERAL NOTES & CONSTRUCTION SPECIFICATIONS

FLOOR SHEATHING SPECIFICATIONS

23/32" T&G OSB OR PLYWOOD SHEATHING, GLUE AND NAIL WITH 10d COMMON @ 6" O.C. EDGE & FIELD

ROOF SHEATHING SPECIFICATIONS

SHINGLE – MIN. 7/8", 24/16, APA RATED OSB OR PLYWOOD SHEATHING, NAILED w/ 0.113x2" RING SHANK NAILS @ 6" O.C. EDGE & 6" O.C. FIELD (AT GABLE ENDS DECREASE EDGE NAIL SPACING TO 4" O.C. WITHIN 4'-0" OF ROOF EDGE).

TILE – MIN. 15/32" 32/16, APA RATED PLYWOOD SHEATHING, NAILED w/ 0.113x2" RING SHANK @ 6" O.C. EDGE & 6" O.C. FIELD (AT GABLE ENDS DECREASE EDGE NAIL SPACING TO 4" O.C. WITHIN 4'-0" OF ROOF EDGE).

METAL – MIN. 1/2", 24/16, APA RATED PLYWOOD SHEATHING, NAILED w/ 0.113x2" RING SHANK NAILS @ 6" O.C. EDGE & 6" O.C. FIELD (AT GABLE ENDS DECREASE EDGE NAIL SPACING TO 4" O.C. WITHIN 4'-0" OF ROOF EDGE).

WALL SHEATHING SPECIFICATIONS

FLEXIBLE FINISH – MIN. 7/8", 24/16, APA RATED OSB OR PLYWOOD SHEATHING, FASTENED W/ 8d @ 6" O.C. EDGE AND 6" O.C. FIELD. SHEATHING SHALL EXTEND FULL HEIGHT FROM BOTTOM PLATE TO UPPER TOP PLATE. FLEXIBLE FINISH WALLS INCLUDE: WOOD, CEMENT, OR VINYL SIDING, HARDI PANEL & BRICK. ALL OTHER WALL SHALL BE CONSIDERED BRITTLE FINISH.

STUCCO FINISH – MIN. 7/8", 24/16, APA RATED OSB OR PLYWOOD SHEATHING, FASTENED W/ 8d @ 6" O.C. EDGE AND 6" O.C. FIELD. SHEATHING SHALL ORIENTED WITH THE LONG DIMENSION PERPENDICULAR TO THE STUDS. CONTRACTOR MAY USE 1/2" STRUCTURAL 1 GRADE SHEATHING OR 1/2" OSB SHEATHING AND ORIENT THE PANELS VERTICALLY.

MASONRY SPECIFICATIONS

MASONRY HAS BEEN DESIGNED IN ACCORDANCE WITH ACI 530-05, AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI530.1-05. GROUT SHALL BE IN ACCORDANCE WITH ASTM C476 WITH A MINIMUM OF 28 DAY COMPRESSIVE STRENGTH OF 2000 psi PER ASTM C1019. GROUT SHALL HAVE A MAXIMUM COURSE AGGREGATE SIZE OF 3/4" PLACED AT AN 8" TO 11" SLUMP. MORTAR SHALL CONFORM TO ASTM C270 AND TYPE M OR S. TYPE N MORTAR MAY BE USED IN BRICK VENEER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL FLASHING.

CONCRETE MASONRY UNITS (CMU)

CMU SHALL BE IN ACCORDANCE WITH ASTM C90-75, HOLLOW LOAD-BEARING (CMU), TYPE 1, GRADE N-1, NORMAL WEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 psi (f'm=1500 psi). GROUT ALL CELLS CONTAINING VERTICAL REINFORCEMENT IN 5'-0" MAXIMUM LIFTS PROVIDE CLEANOUTS PER ACI 530.1-02 IN THE BOTTOM OF COURSE OF MASONRY WHEN THE WALL HEIGHT EXCEEDS 5'-0".

MASONRY STEMWALLS: ALL CONCRETE MASONRY UNITS SHALL BE COMPOSED OF ASTM C90, E GRADE N-1 HOLLOW CONCRETE MASONRY UNITS WITH TYPE "S" MORTAR. WALL COURSING SHALL BE RUNNING BONDS, STACK BOND SHALL NOT BE USED. GROUT ALL CELLS CONTAINING VERTICAL REINFORCEMENT WITH 3000 PSI PEA ROCK CONCRETE GROUT. SPLICES IN REINFORCING, WHERE PERMITTED, SHALL BE 48 BAR DIAMETERS. ALL EXTERIOR WALLS SHALL BE REINFORCED FULL HEIGHT WITH #4 @ 4'-0" O.C. MAX. AND AT EACH CORNER, WALL END, AND WALL INTERSECTIONS. PROVIDE CONTINUITY OF REINFORCING AT INTERSECTIONS OF PERPENDICULAR MASONRY ELEMENTS BY INSTALLING CORNER BARS, MINIMUM OF 40 BAR DIAMETERS INTO EACH ELEMENT. AT STEMWALL CONSTRUCTED OF 5 OR MORE COURSES, PROVIDE HORIZONTAL JOINT REINFORCEMENT AT 16" O.C. VERTICALLY. (EVERY OTHER COURSE), AND VERTICAL REINF. SHALL BE INCREASED AS NOTED ON 1/51.0, UNLESS NOTED OTHERWISE. LAP JOINT REINFORCING SHALL BE A MINIMUM OF 6".

CONCRETE SPECIFICATIONS

ALL CONCRETE HAS BEEN DESIGNED IN ACCORDANCE WITH ACI 318-08, AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 301. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS CONCRETE AT GARAGE AND PORCH SLABS SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI.

GENERAL NOTES

FOOTING AND FOUNDATIONS

FOOTINGS AND FOUNDATIONS SHALL BE IN ACCORDANCE WITH LOCAL BUILDING CODES. FOOTING HAVE BEEN DESIGNED WITH A SOIL BEARING (DESIGN MAXIMUM) OF 2000 PSF. A SOILS INVESTIGATION REPORT IS RECOMMENDED TO VERIFY SUITABLE SUBSURFACE CONDITIONS. IF THE FOOTING ELEVATIONS SHOWN OCCUR IN A DISTURBED OR UNSTABLE SOIL, THE ENGINEER SHALL BE NOTIFIED. SOIL SHALL BE FREE OF ORGANIC MATERIAL AND COHESIVE (CLAY) SOILS. SOIL COMPACTION AND FILL SHALL BE COMPACTED TO A MIN. OF 95% MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557.

FOUNDATION PLAN ONLY CONVEYS STRUCTURAL INFORMATION. FOR GENERAL FEATURES, CONDUITS, ELECTRICAL EMBEDS, STEP HEIGHTS, ETC., SEE ARCHITECTURAL PLANS. DO NOT SCALE FOOTING DIMENSIONS AND LOCATION FROM THE FOUNDATION PLAN SHOWN ON S1.0. DO NOT DETERMINE FOOTING LOCATION BASED ON EITHER THE ARCHITECTURAL PLAN OR FRAMING PLAN, BUT BY DIMENSIONS PROVIDED ON FOUNDATION PLAN. IF FOOTING SIZE OR LOCATION IS NOT DETERMINED ON PLAN THEN CONTACT ENGINEER OF RECORD (EOR)

UNLESS OTHERWISE NOTED ON DRAWINGS, MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE 3" IN FOOTINGS AND MESH SHALL BE CENTERED IN SLAB ON GRADE. IN ALL CONTINUOUS FOOTINGS PROVIDE #3 @ 48" O.C. OR ROD CHAIRS. PROVIDE CONTINUITY OF REINFORCING AT INTERSECTIONS OF PERPENDICULAR CONCRETE ELEMENTS BY INSTALLING CORNER BARS, MINIMUM OF 40 BAR DIAMETERS INTO EACH ELEMENT. SPLICES IN REINFORCING, WHERE PERMITTED, SHALL BE 48 BAR DIAMETERS

CONCRETE SLABS ON GRADE

SHALL BE INSTALLED OVER MINIMUM 6 MIL POLYETHYLENE VAPOR RETARDER WITH JOINTS LAPPED W/ 6" AND SEALED OVER CLEAN, COMPACTED EARTH OR FILL WITH APPROVED CHEMICAL TREATMENT FOR PREVENTION OF SUBTERRANEAN TERMITES. SAWCUTS: FOR CONTROLLED CRACKING CUT A 1" SAWCUT INTO SLAB IN A 12'x12' GRID WITHIN 12 HOURS OF CONCRETE PLACEMENT, PROVIDE SAWCUTS THROUGH OUT SLAB CALL EOR FOR ALTERNATIVE METHODS.

WOOD FRAMING SPECIFICATIONS

ALL WOOD FRAMING HAS BEEN DESIGNED IN ACCORDANCE WITH NATIONAL DESIGN SPECIFICATIONS (NDS) FOR WOOD CONSTRUCTION, LATEST EDITION. ALL WOOD MEMBERS EXPOSED TO WEATHER OR IN CONTACT WITH MASONRY, CONCRETE OR SOIL SHALL BE PRESURE-TREATED, IF ACC OR NON-DOT BORATE PRESERVATIVE TREATMENT IS USED, ALL ATTACHED FASTENERS SHALL BE HOT DIPPED GALVANIZED. IF AZCA PRESERVATIVE IS USED, ALL ATTACHED FASTENERS SHALL BE STAINLESS STEEL.

PRE-ENGINEERED WOOD TRUSSES

SHALL BEAR THE SEAL OF AN ENGINEER IN THE STATE WHERE PROJECT IS BEING BUILT AND SHALL COMPLY WITH NFPA, TPI, AND AITC 100. CONTRACTOR SHALL VERIFY THAT ADEQUATE TRUSS BRACING IS INSTALLED AT ALL TRUSSES AS INDICATED IN THE TRUSS SHOP DRAWINGS. ALL TRUSS-TO-TRUSS CONNECTIONS AND TRUSS PROFILES ARE THE RESPONSIBILITY OF THE DELEGATED TRUSS ENGINEER. ALL TRUSSES SHALL HAVE TEMPORARY BRACING PER COMMENTARY AND RECOMMENDATION FOR HANDLING, INSTALLING & BRACING METAL PLATE CONNECTED ROOF TRUSSES, HB-91." AT MULTIPLE STRAP CONNECTIONS, SPREAD STRAPS TO AVOID NAILING CONFLICTS THROUGH TRUSSES. WHEN USING (2) STRAPS ON SINGLE PLY TRUSSES, PLACE STRAPS DIAGONALLY ACROSS DBL. TOP PLATE FROM EA. OTHER.

ROOF COVERING SPECIFICATIONS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE ROOF COVERING SYSTEM. ASPHALT SHINGS SHALL COMPLY WITH ASTM D3161 AND BE INSTALLED ACCORDING TO THE MANUFACTURER'S REQUIREMENTS. CLAY AND TILE ROOFS SHALL BE INSTALLED PER THE "CONCRETE AND CLAY ROOF TILE INSTALLATION MANUAL," AND THE MANUFACTURER'S REQUIREMENTS. STANDING SEAM METAL ROOFS SHALL COMPLY WITH ASTM E1514 AND BE INSTALLED ACCORDING TO THE MANUFACTURER'S REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL METAL FLASHING AND VALLEY MATERIALS.

WATERPROOFING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN/INSTALLATION OF ALL WATER PROOFING.

WOOD FASTENING SCHEDULE

| MEMBERS | CONNECTION TYPE | FASTENER |
|--------------------------------|-----------------|---------------------------|
| TOP PLATE TO TOP PLATE | FACE NAIL | 2-GUN NAILS @ 12" STAG. |
| TOP PLATE, LAPS/INTERSECTION | FACE NAIL | (2-16d) 3-GUN NAILS |
| DBL. TOP PLATE TO STUD | FACE NAIL | (2-16d) 3-GUN NAILS |
| RIM JOIST TO TOP PLATE | TOE NAIL | (8d @ 6") GUN NAIL @ 6" |
| CEILING JOIST TO TOP PLATE | TOE NAIL | (3-8d) 5-GUN NAILS |
| CEILING JOIST, OVER PARTITIONS | FACE NAIL | (3-16d) 4-GUN NAILS |
| CEILING JOIST TO ROOF RAFTER | FACE NAIL | (6-16d) 8-GUN NAILS |
| JOIST/TRUSS TO PLATE | TOE NAIL | (2-16d) 3-GUN NAILS |
| RAFTER TO PLATE | TOE NAIL | (3-8d) 3-GUN NAILS |
| JACK RAFTER TO HIP | TOE NAIL | (3-10d) 4-GUN NAILS |
| ROOF RAFTER TO 2x... RIDGE BM. | TOE NAIL | (2-16d) 3-GUN NAILS |
| CONT. HEADER, TWO PIECES | FACE NAIL | 16d @ 16" O.C. @ EDGE |
| CONT. HEADER TO STUD | TOE NAIL | (3-16d) 4-GUN NAILS |
| STUD TO SOLE PLATE | TOE NAIL | (3-16d) 4-GUN NAILS |
| SOLE PLATE TO JOIST/BLOCKING | FACE NAIL | (16d @ 16") GUN NAIL @ 8" |

NAIL SPECIFICATIONS

3"x0.131" = GUN NAILS
2"x0.113" = 8d
3"x0.148" = 10d
1 1/2"x0.148" = 10d x 1 1/2"

BRICK NOTES / LINTEL SCHD

| LINTEL DIMENSION | MIN. BRG. | MAX. SPAN |
|----------------------|-----------|-----------|
| 13 1/2 x 3 1/2 x 1/4 | 4" | 6'-0" |
| 14 x 3 1/2 x 1/4 | 6" | 8'-0" |
| 15 x 3 1/2 x 1/4 | 6" | 10'-0" |
| 16 x 3 1/2 x 1/4 | 6" | 12'-0" |
| 17 x 3 1/2 x 1/4 | 6" | 16'-0" |

1. STEEL LINTELS TO BE MINIMAL 36" LINTEL MUST HAVE CORROSION RESISTANT COATING OF EPOXY BASED PAINT.

2. LINTEL MORE THAN 8'-0". SHOULD BE LATERALLY SUPPORTED NOT TO EXCEED 6 FT. O.C. w/ 2-1/2"x3" WD. SCREWS INTO HEADER PROVIDE A 1/2" VERTICAL SLOTTED HOLE FOR SCREW.

3. BRICK VENEER ATTACHMENT: HORIZONTAL TIES @ 24" O.C., VERT. TIES @ 12" O.C. (FOR 110mph WIND-ZONE VERT. TIES @ 16" O.C.). AT ALL OPENINGS SPACE TIES WITHIN 12" OF OPENINGS. PROVIDE 3/8" WEEP HOLES @ 33" O.C. IMMEDIATELY ABOVE FLASHING.

BRICK VENEER ATTACHMENT: HORIZONTAL TIES @ 24" O.C., VERT. TIES @ 12" O.C. (FOR 110mph WIND-ZONE VERT. TIES @ 16" O.C.). AT ALL OPENINGS SPACE TIES WITHIN 12" OF OPENINGS. PROVIDE 3/8" WEEP HOLES @ 33" O.C. IMMEDIATELY ABOVE FLASHING.

SECTION VIEW OF BRICK LINTEL

USP CONNECTORS

| CONNECTOR | UPLIFT | FASTENERS | FL# CODE |
|------------|--------|-----------|--------------------------|
| SYP | SPF | | |
| USP A35 | 450 | 450 | (9)10d x 1 1/2" |
| USP RT7 | 585 | 495 | (5)8d EA. END |
| USP RT8A | 775 | 650 | (5)10d x 1 1/2" EA. END |
| USP MTW12 | 1195 | 860 | (7)10d x 1 1/2" EA. END |
| USP HTW20 | 1450 | 1245 | (12)10d x 1 1/2" EA. END |
| USP MSTA24 | 1640 | 1455 | (9)10d EA. END |
| USP MSTA36 | 2065 | 2065 | (13)10d EA. END |
| USP LTS20B | 1105 | 1105 | 1/2" ROD TO FTG. |
| USP JUS28 | 1305 | 1305 | (6)10d TO HEADER |
| USP HTT16 | 4290 | 4290 | 3/4" ROD TO FTG. |
| USP HTT22 | 5370 | 5370 | 3/4" ROD TO FTG. |
| USP PAU44 | 2535 | | 3/4" ROD W/ (12)16d |
| USP PAU66 | 2535 | | 3/4" ROD W/ (12)16d |
| USP MSTM24 | 1545 | 1455 | (5)1/4"x2-1/4" TAPCONS |

SIMPSON CONNECTORS

| CONNECTOR | UPLIFT | FASTENERS | FL# CODE |
|-----------|--------|-----------|--------------------------|
| SYP | SPF | | |
| A35 | 450 | 450 | 12-8d x 1 1/2" |
| H25T | 600 | 520 | 5-8d EA. END |
| HTS16 | 1150 | 1085 | 16-10d EA. END |
| MTS12 | 1000 | 860 | 7-10d x 1 1/2" EA. END |
| HTS20 | 1450 | 1245 | 24-10d x 1 1/2" EA. END |
| MSTA24 | 1765 | 1270 | 9-10d EA. END |
| MSTA36 | 2050 | 1870 | 13-10d EA. END |
| HTT4 | 3480 | 3080 | 18-16d TO TRUSS/BREAM |
| | | | 1-3/4" ROD TO FTG. |
| HTT5 | 5250 | 4670 | 32-16d TO TRUSS/BREAM |
| | | | 1-3/4" ROD TO FTG. |
| LUS28 | 930 | 780 | 6-10d TO HEADER |
| | | | 4-10d TO JOIST |
| HU410 | 905 | 785 | 14-16d TO HEADER |
| | | | 6-16d TO JOIST |
| ABU44 | 2200 | | 3/4" ROD EPOKID 6" MIN |
| ABU66 | 2300 | | 3/4" ROD EPOKID 6" MIN |
| SET | N/A | N/A | SIMPSON EPOXY-TIE |
| LT20B | 1675 | 1675 | 10-16d TO STUD/BEAM/POST |
| LSTA12 | 805 | 695 | 1-1/2" ROD TO FTG. |
| LSTA12 | 805 | 695 | 10-10d |
| CS16 | 1705 | 1705 | 13-8d |

12-8d x 1 1/2"

5-8d EA. END

16-10d EA. END

7-10d x 1 1/2" EA. END

24-10d x 1 1/2" EA. END

9-10d EA. END

13-10d EA. END

18-16d TO TRUSS/BREAM

1-3/4" ROD TO FTG.

32-16d TO TRUSS/BREAM

1-3/4" ROD TO FTG.

6-10d TO HEADER

4-10d TO JOIST

14-16d TO HEADER

6-16d TO JOIST

3/4" ROD EPOKID 6" MIN

3/4" ROD EPOKID 6" MIN

SIMPSON EPOXY-TIE

10-16d TO STUD/BEAM/POST

1-1/2" ROD TO FTG.

10-10d

13-8d



04/03/20
Christopher J Sabourin PE
FL PE#71461

PLAN NAME
BZEC
SSE No.
20-0121

ISSUE DATE
PERMIT 04.10.20

REVISIONS DATE

STRUCTURAL ENGINEERING FOR
GOMEZ/TURNER
561 SW MEADOW WOOD GLN
LAKE CITY, FL

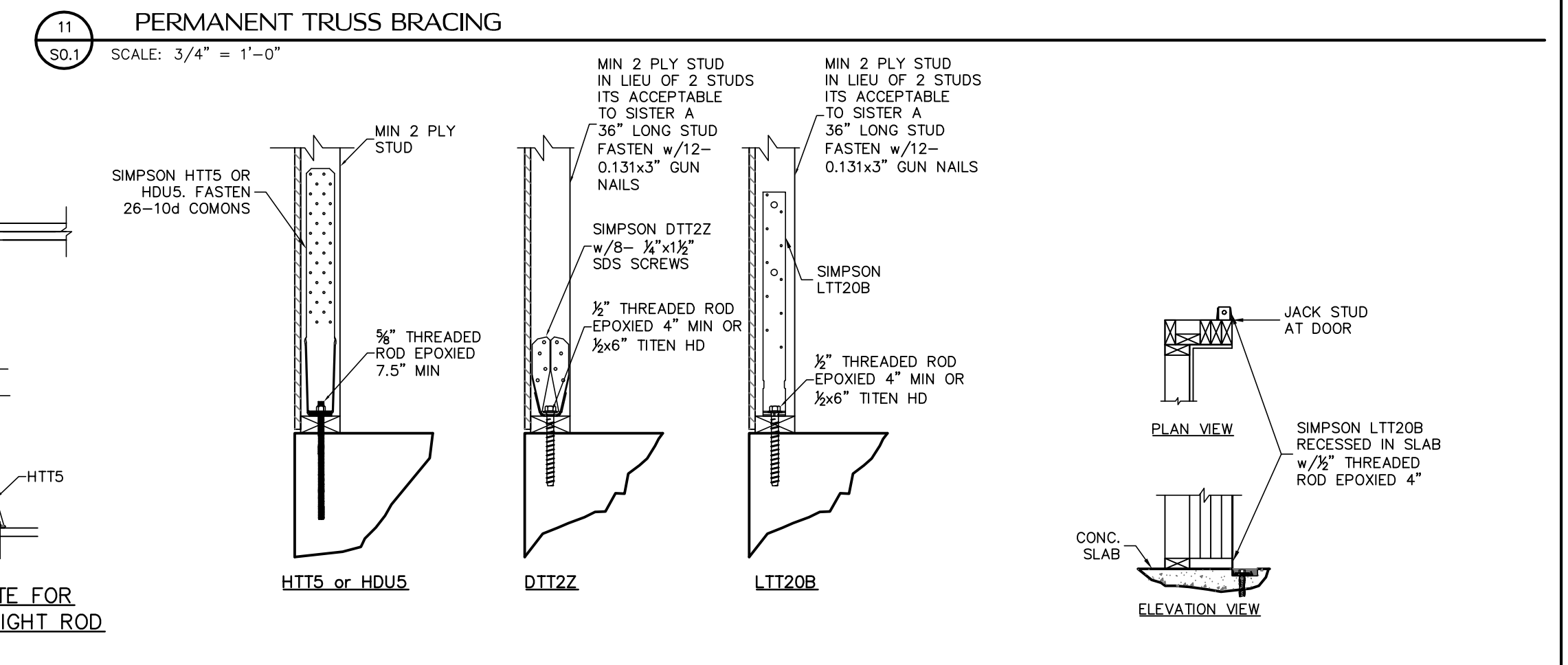
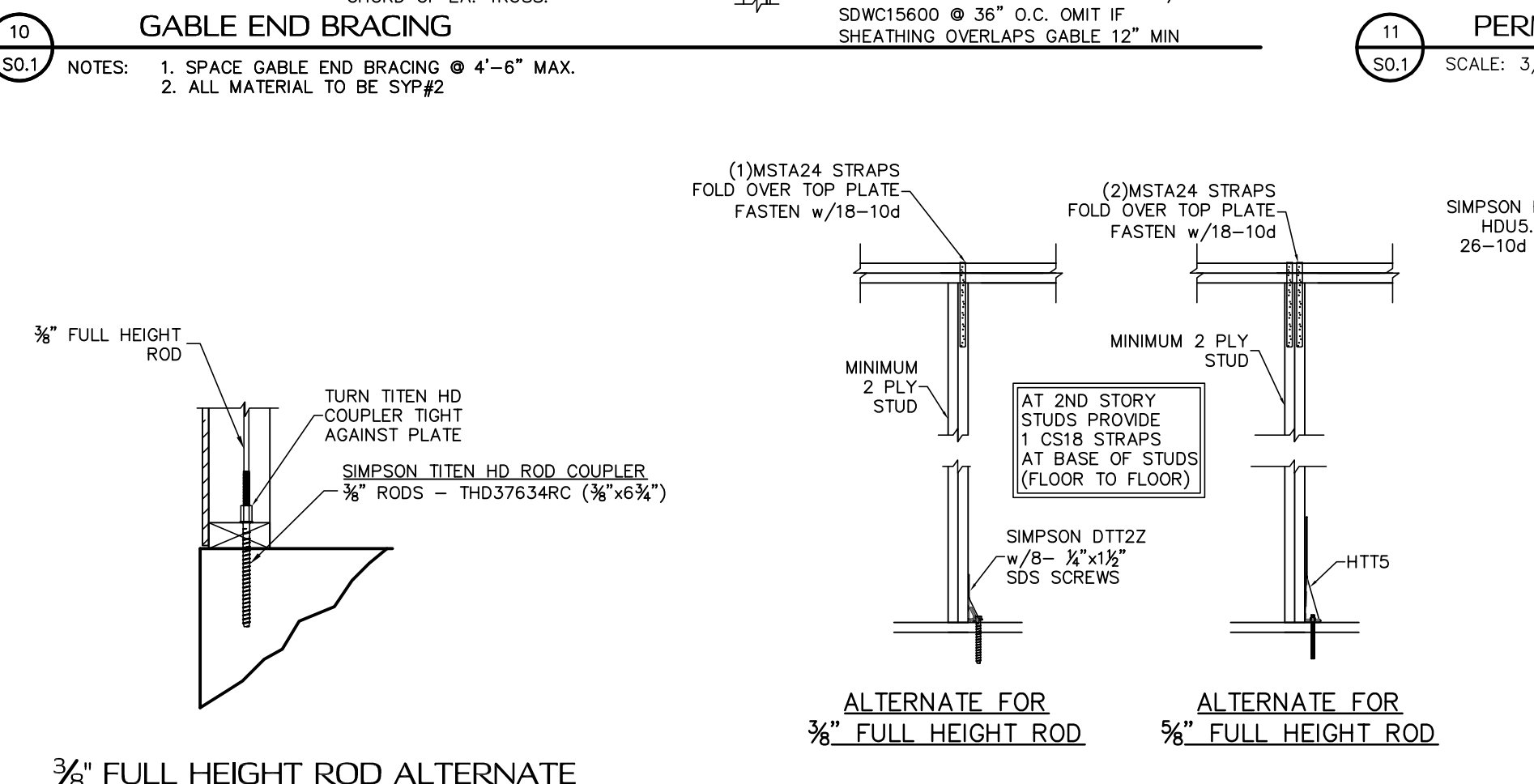
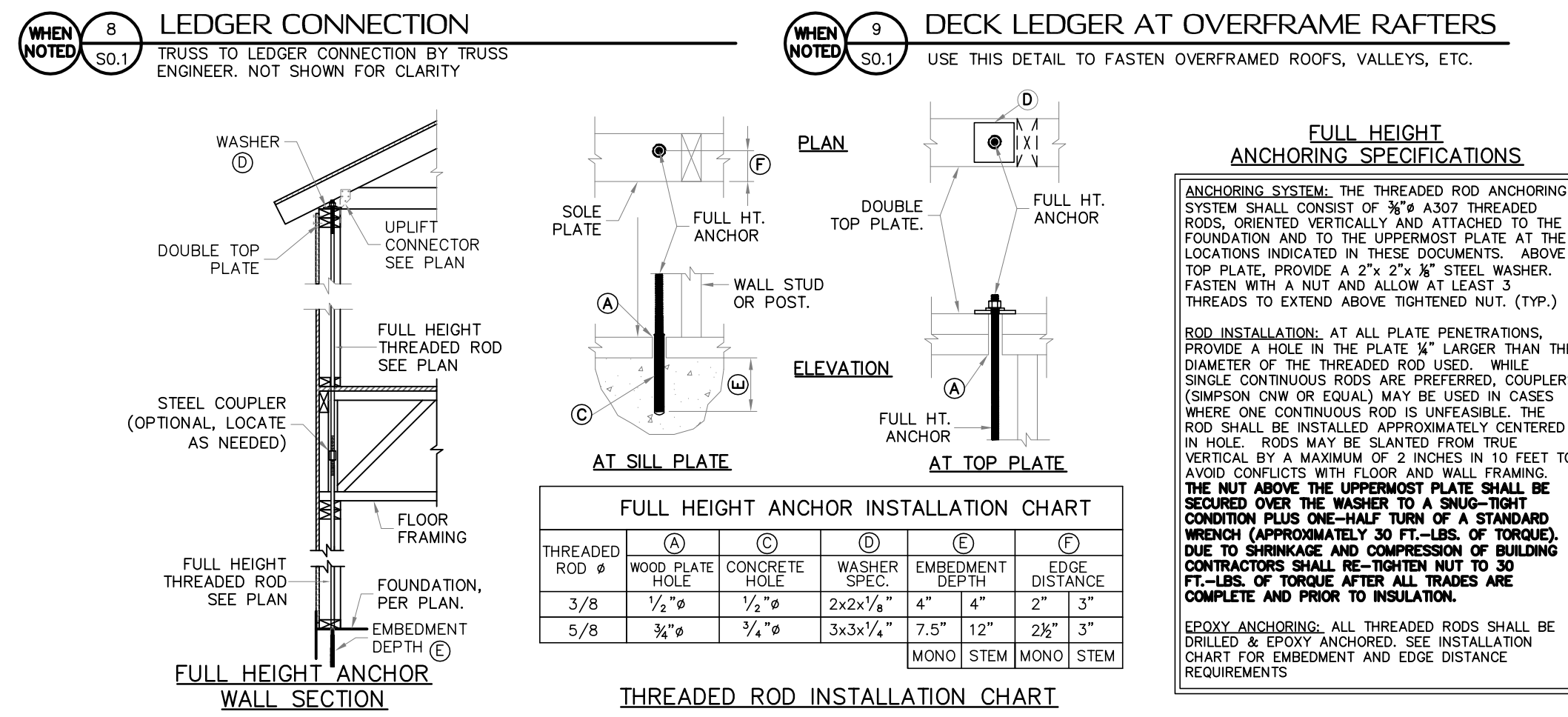
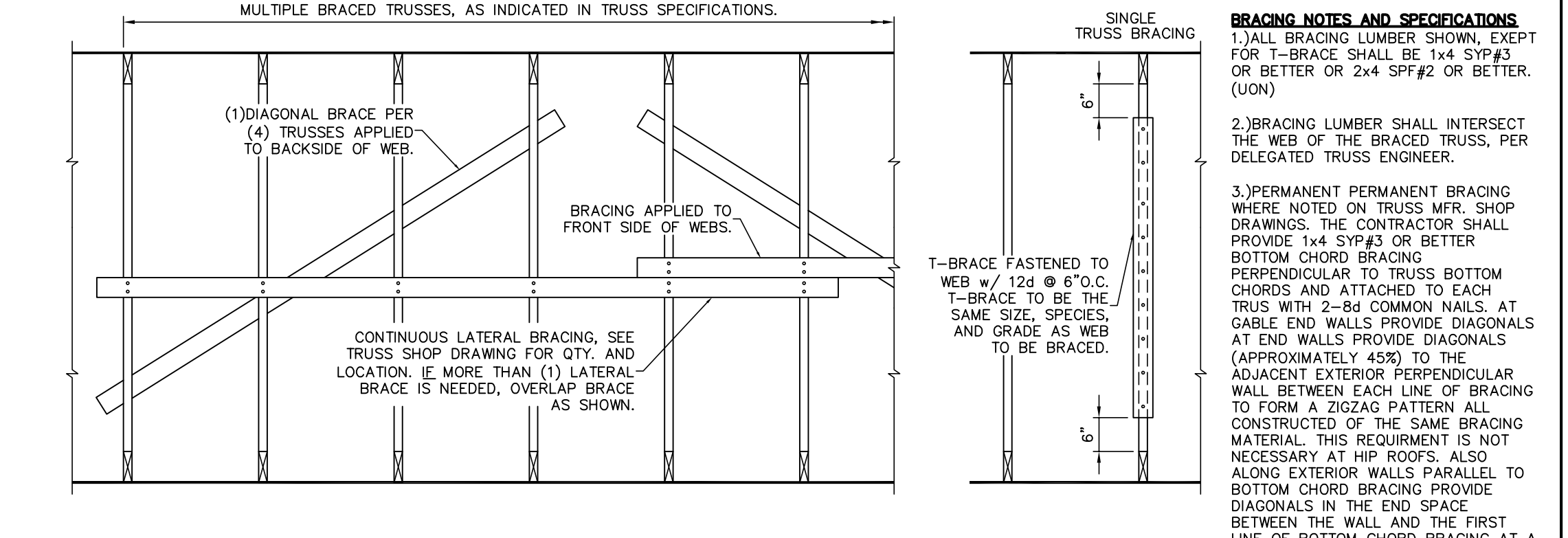
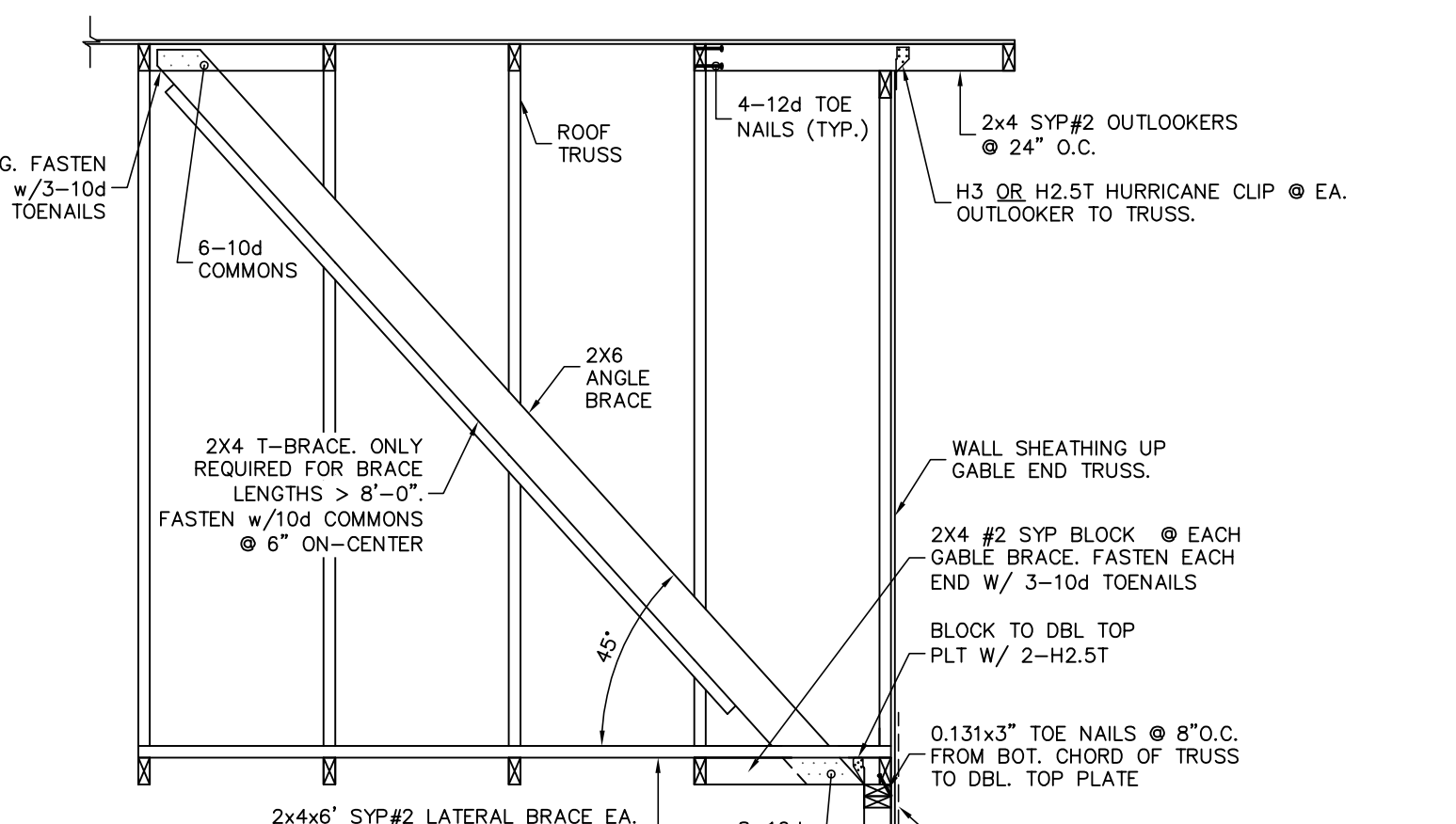
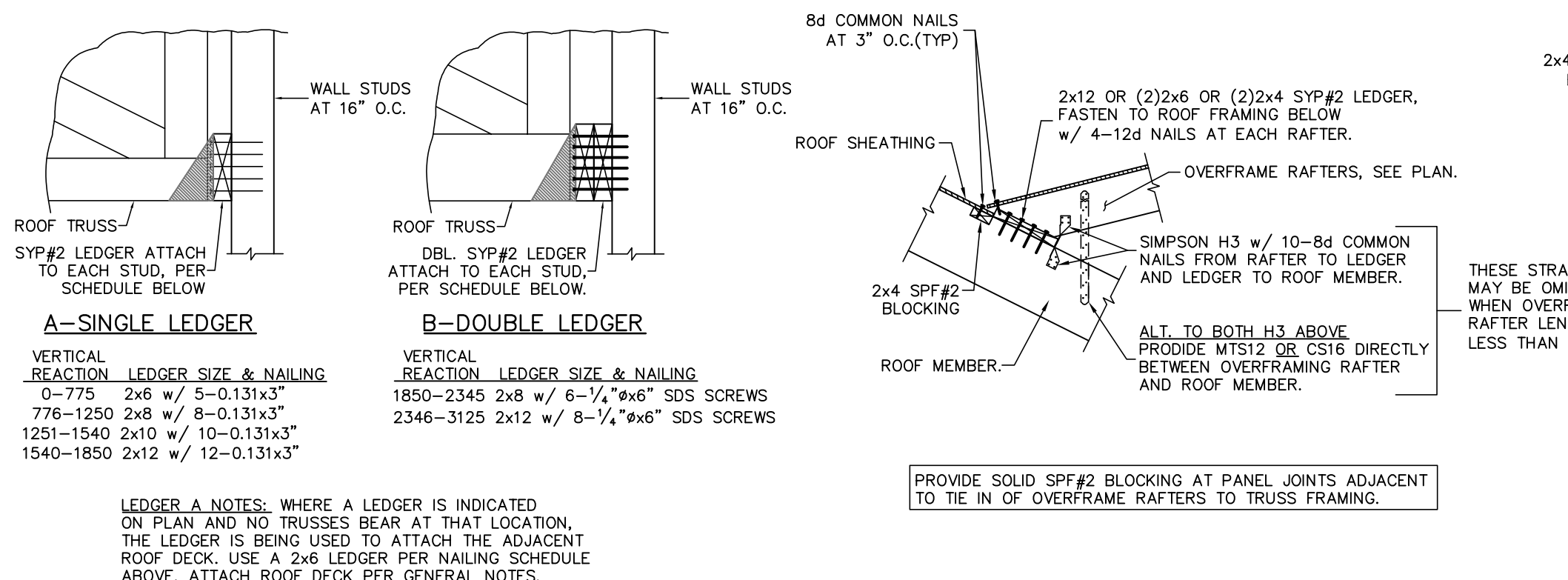
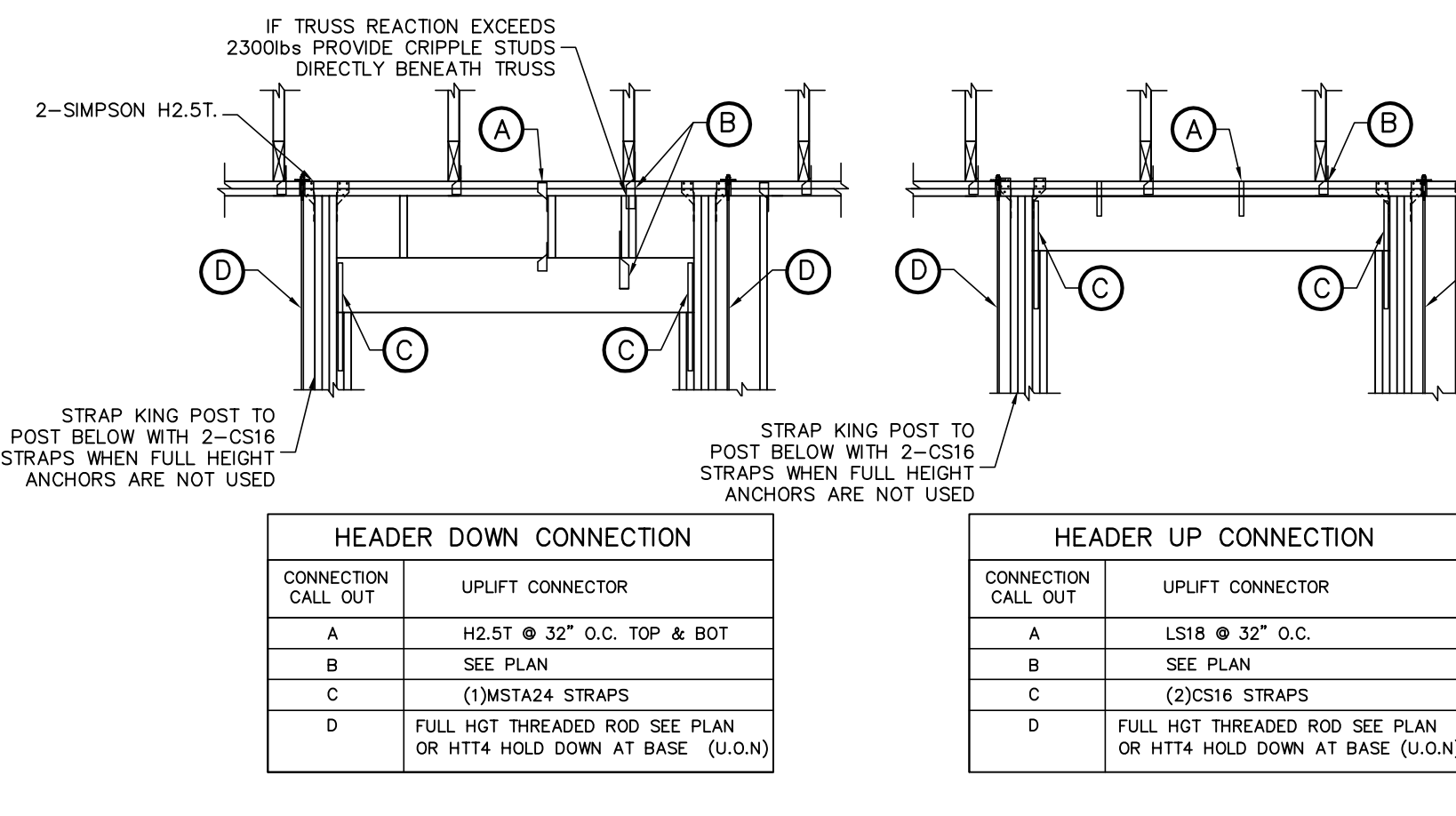
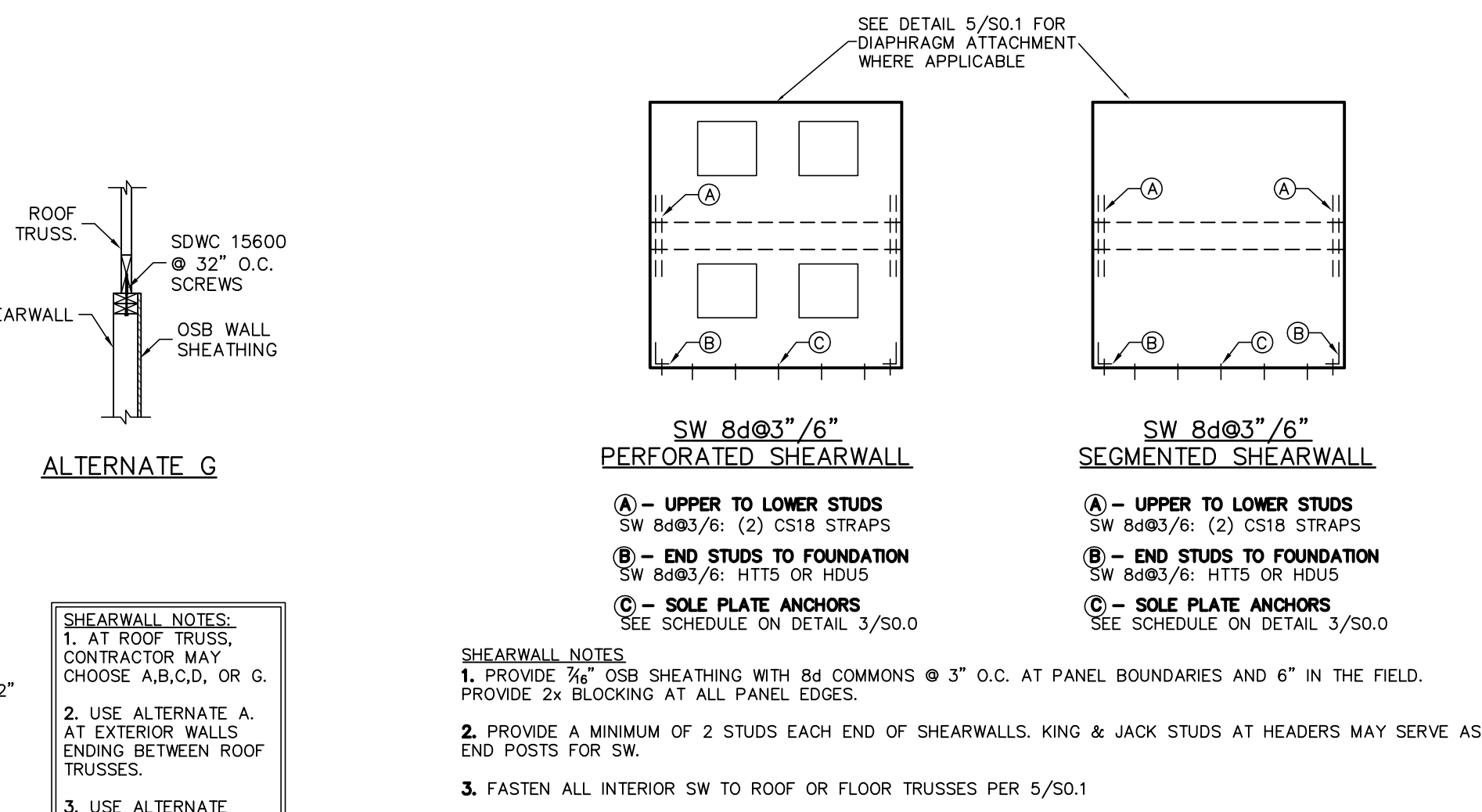
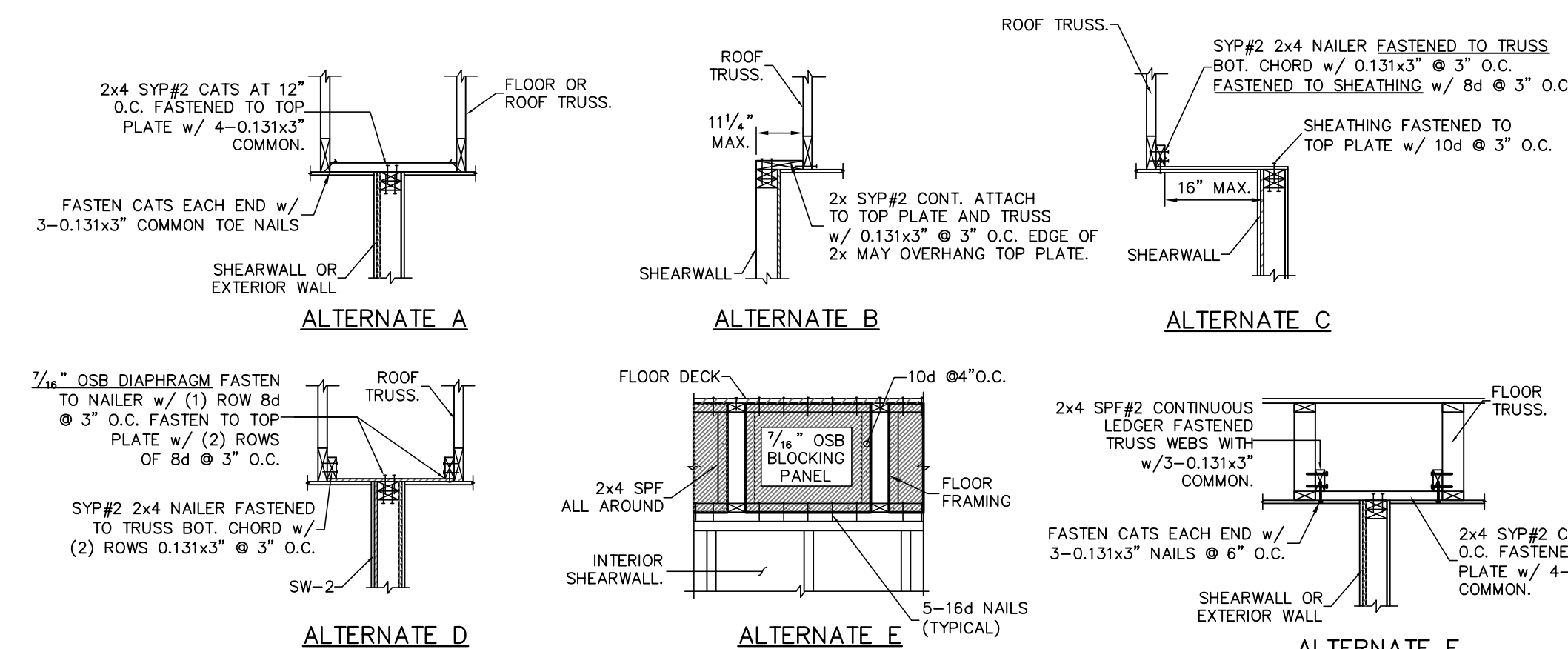
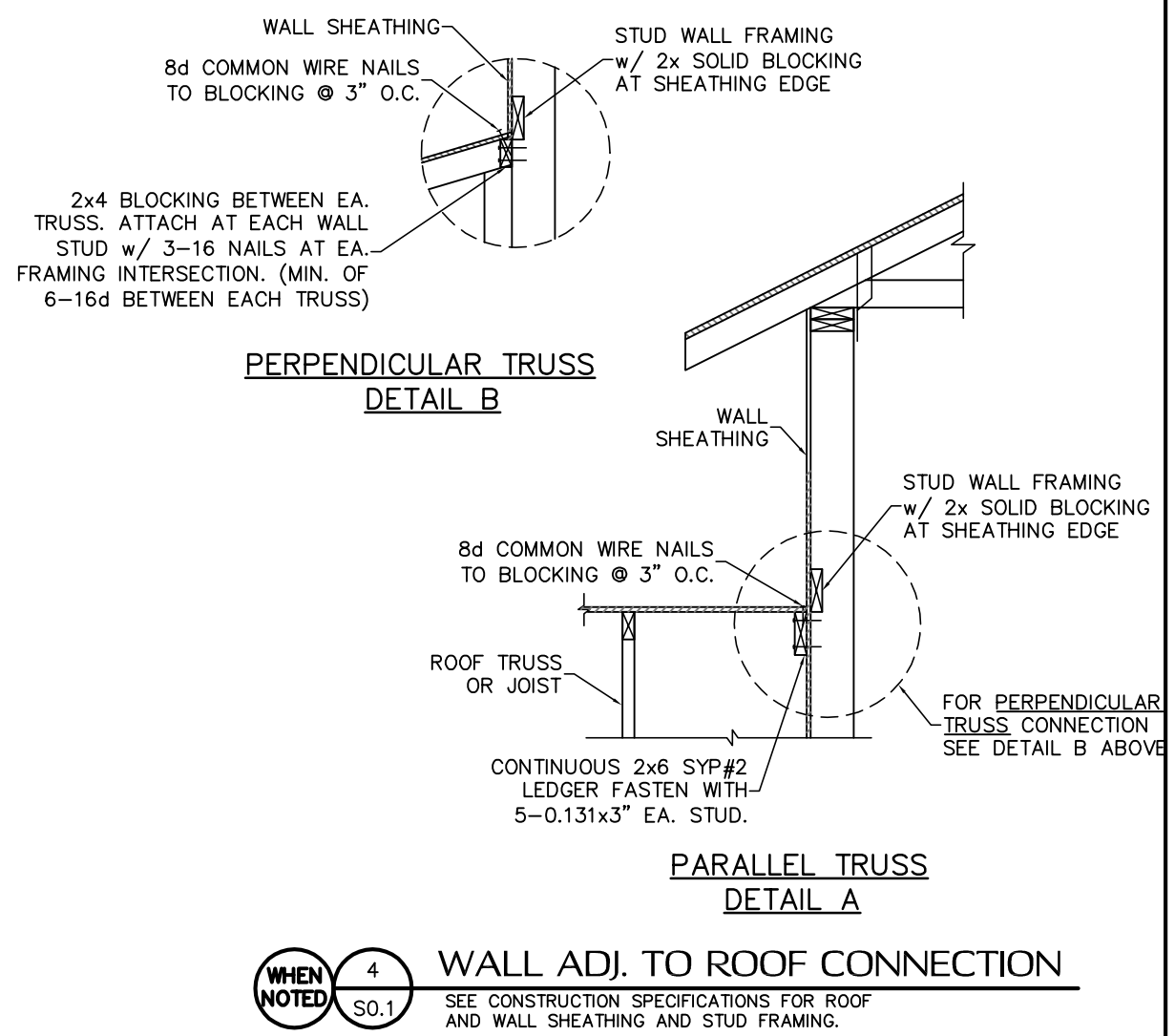
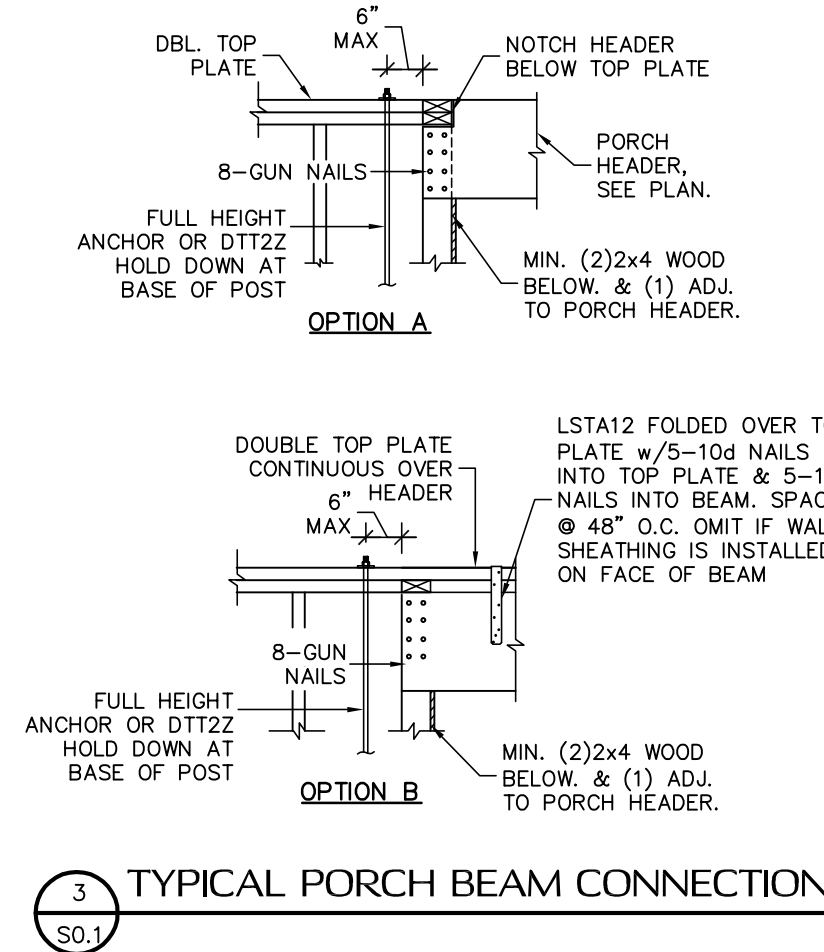
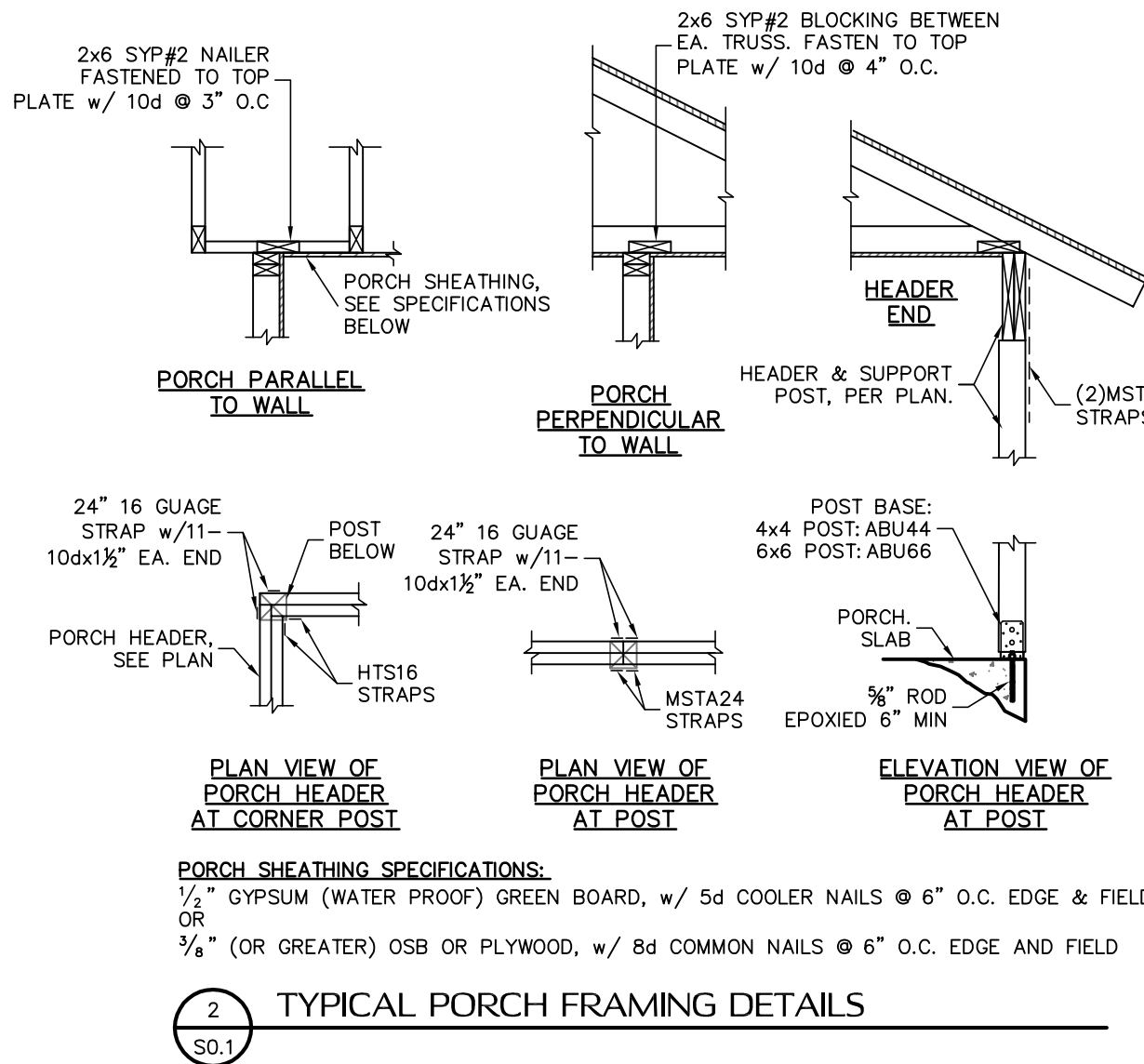
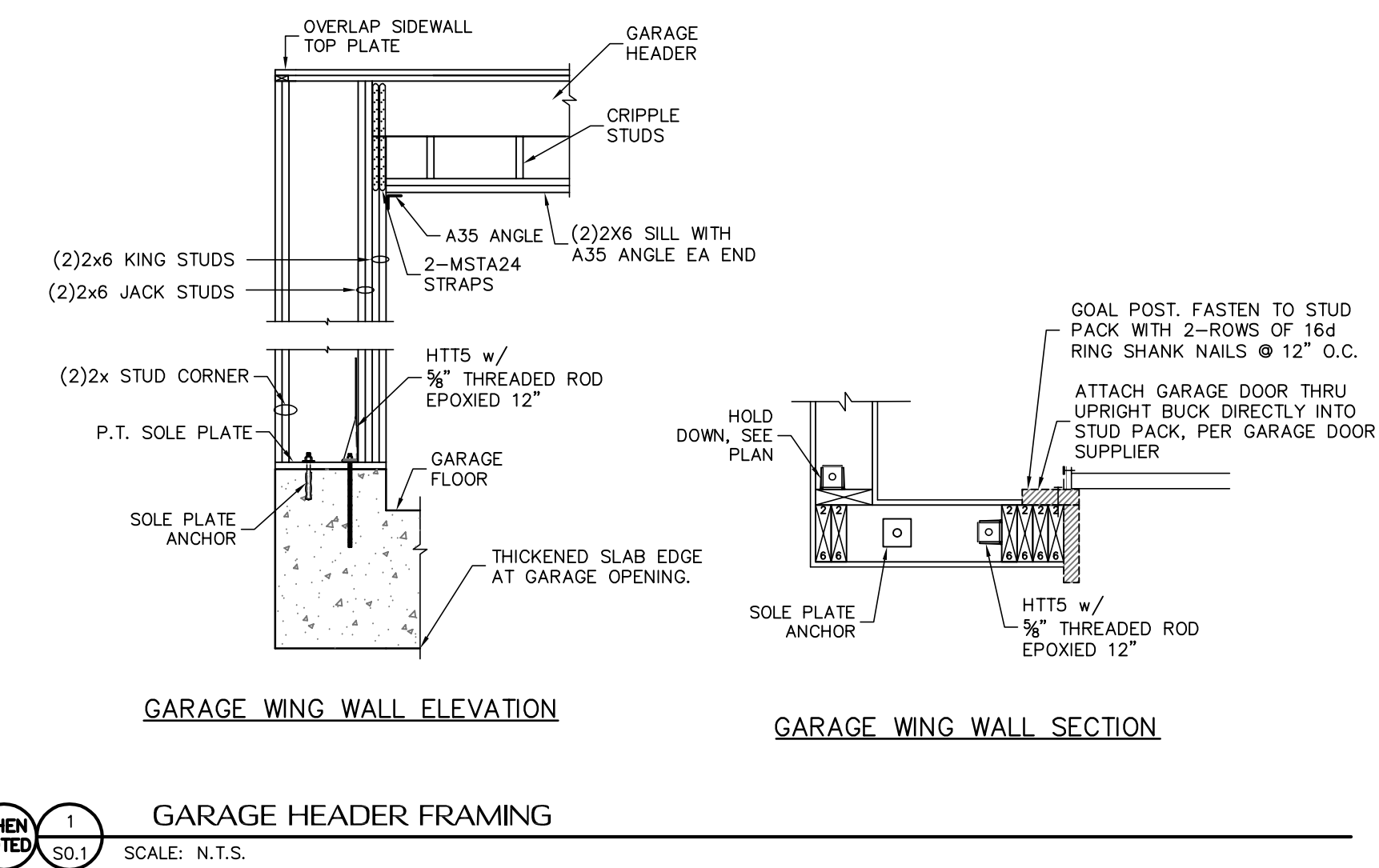
FIELD ALTERATION

CONTRACTOR SHALL CONTACT CHRISTOPHER SABOURIN PE PRIOR TO MAKING ANY STRUCTURAL FIELD MODIFICATIONS WHICH MAY VARY FROM THE INTENT OF THE ORIGINAL CONSTRUCTION DOCUMENTS. ANY FIELD ALTERATIONS MADE PRIOR TO BEING APPROVED BY CHRISTOPHER SABOURIN MAY RESULT IN ADDITIONAL ENGINEERING OR INSPECTION FEES.

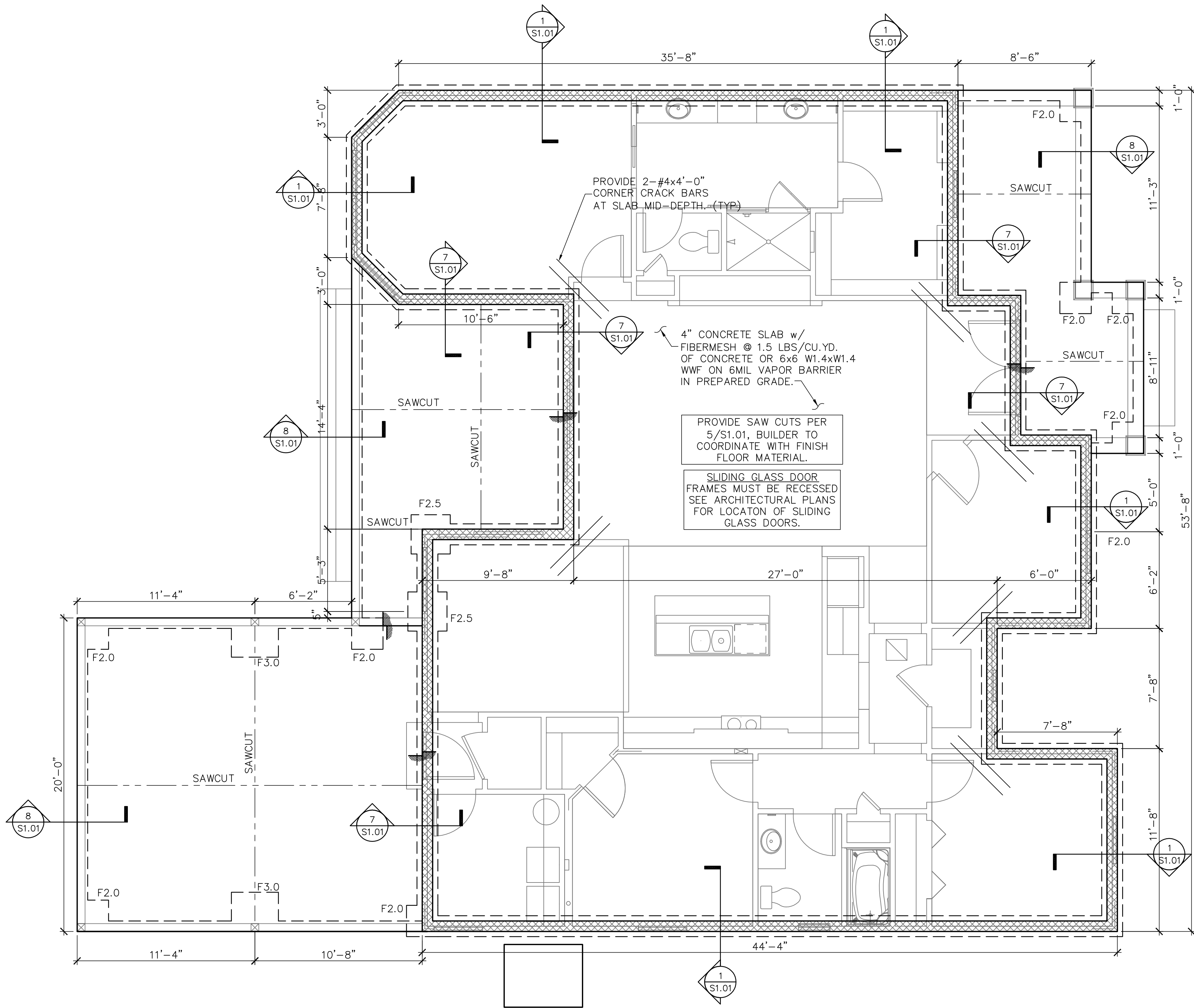
SCALING
DO NOT SCALE DIMENSIONS FROM THESE DRAWINGS. IF A DIMENSION IS UNCLEAR REFER TO THE ARCHITECTURAL DRAWINGS OR CONTACT THE E.O.R.

TYPICAL FRAMING DETAILS

SHEET
S0.1
SHEET 2 OF 7



| FOOTING SCHEDULE AND NOTES | | | | |
|--|--------|-------|-------|-------------------|
| TYPE | LENGTH | WIDTH | DEPTH | BOTTOM BARS |
| F2.0 | 2'-0" | 2'-0" | 1'-0" | 3-#5 EA. WAY BOT. |
| F2.5 | 2'-6" | 2'-6" | 1'-0" | 3-#5 EA. WAY BOT. |
| F3.0 | 3'-0" | 3'-0" | 1'-0" | 3-#5 EA. WAY BOT. |
| F3.5 | 3'-6" | 3'-6" | 1'-0" | 4-#5 EA. WAY BOT. |
| F4.0 | 4'-0" | 4'-0" | 1'-0" | 4-#5 EA. WAY BOT. |
| F4.5 | 4'-6" | 4'-6" | 1'-0" | 4-#5 EA. WAY BOT. |
| 1. THIS FOUNDATION PLAN ONLY CONVEYS STRUCTURAL INFO. RELATED TO THE FOUNDATION. FOR GENERAL FEATURES, DIMENSIONS, CONDUITS, ELECTRICAL EMBEDS, STEP HEIGHTS, ECT., SEE ARCH. PLAN. ARCHITECTURAL PLAN SHOWN HERE IN FOR REFERENCE ONLY. | | | | |
| 2. FTGS. & FND. SHALL BE IN ACCORDANCE w/ LOCAL BUILDING CODES. | | | | |
| 3. SOIL COMPACTION AND FILL SHALL BE COMPACTED TO A MIN. OF 95% MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557. | | | | |

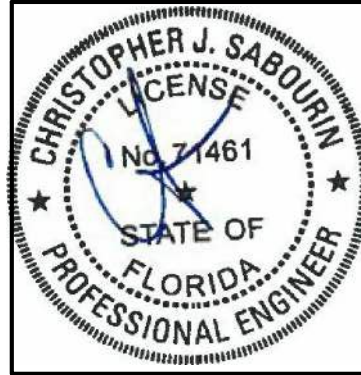


FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

| SYMBOLS LEGEND | |
|----------------|----------------------------|
| ---- | DESIGNATES FOOTING LINE |
| ---- | DESIGNATES SAWCUT LINE |
| //// | INTERIOR LOAD BEARING WALL |
| //// | DESIGNATES SLAB RECESS |

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04.03.20
Christopher J Sabourin PE
FL PE #71461

| |
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| PLAN NAME |
| BZEC |
| SSE No. |
| 20-0121 |

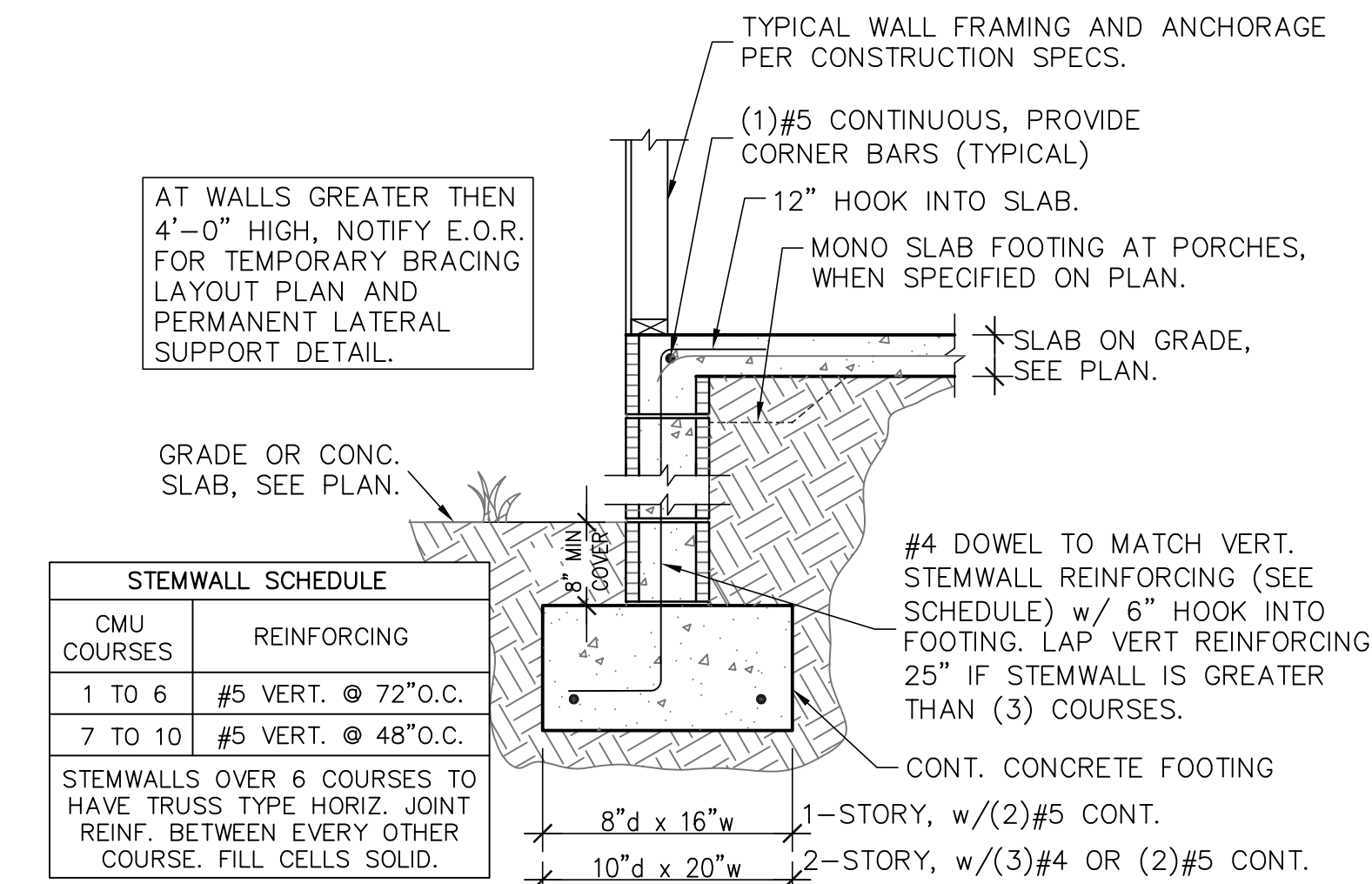
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STRUCTURAL ENGINEERING FOR
GOMEZ/TURNER
561 SW MEADOW WOOD GLN
LAKE CITY, FL

FIELD ALTERATION
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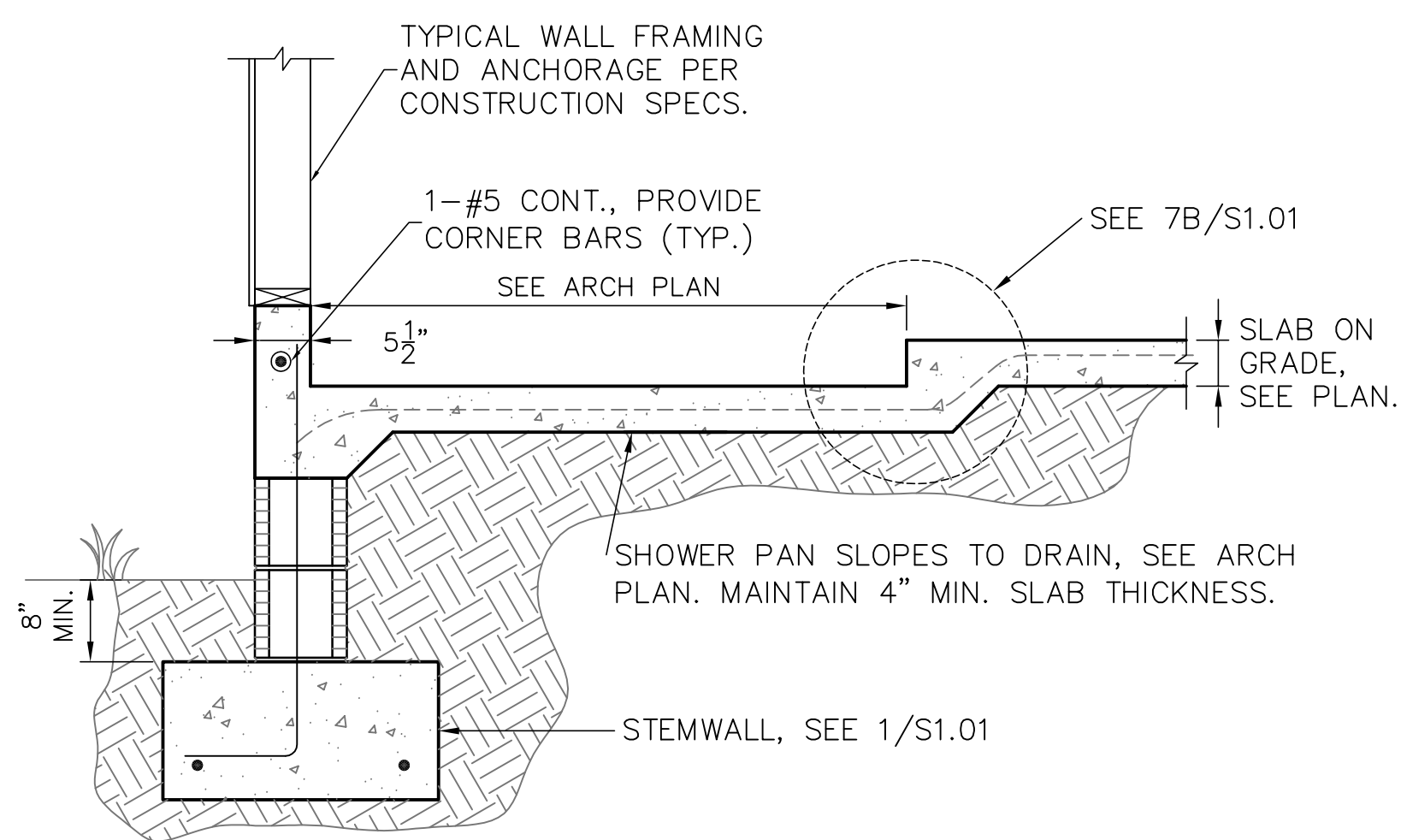
SCALING
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FOUNDATION
PLAN



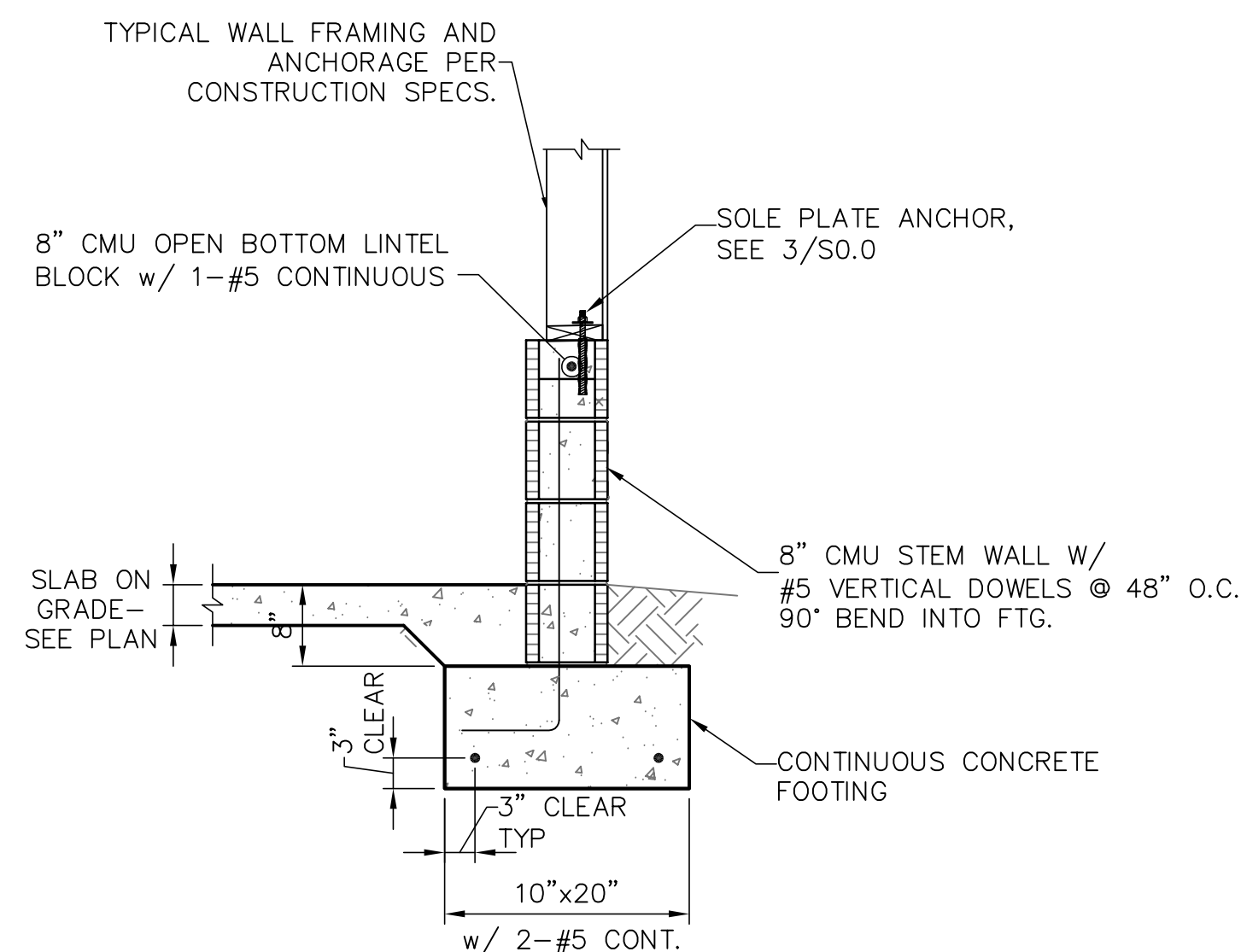
1 STEMWALL FOOTING

S1.01 SCALE: 3/4" = 1'-0"



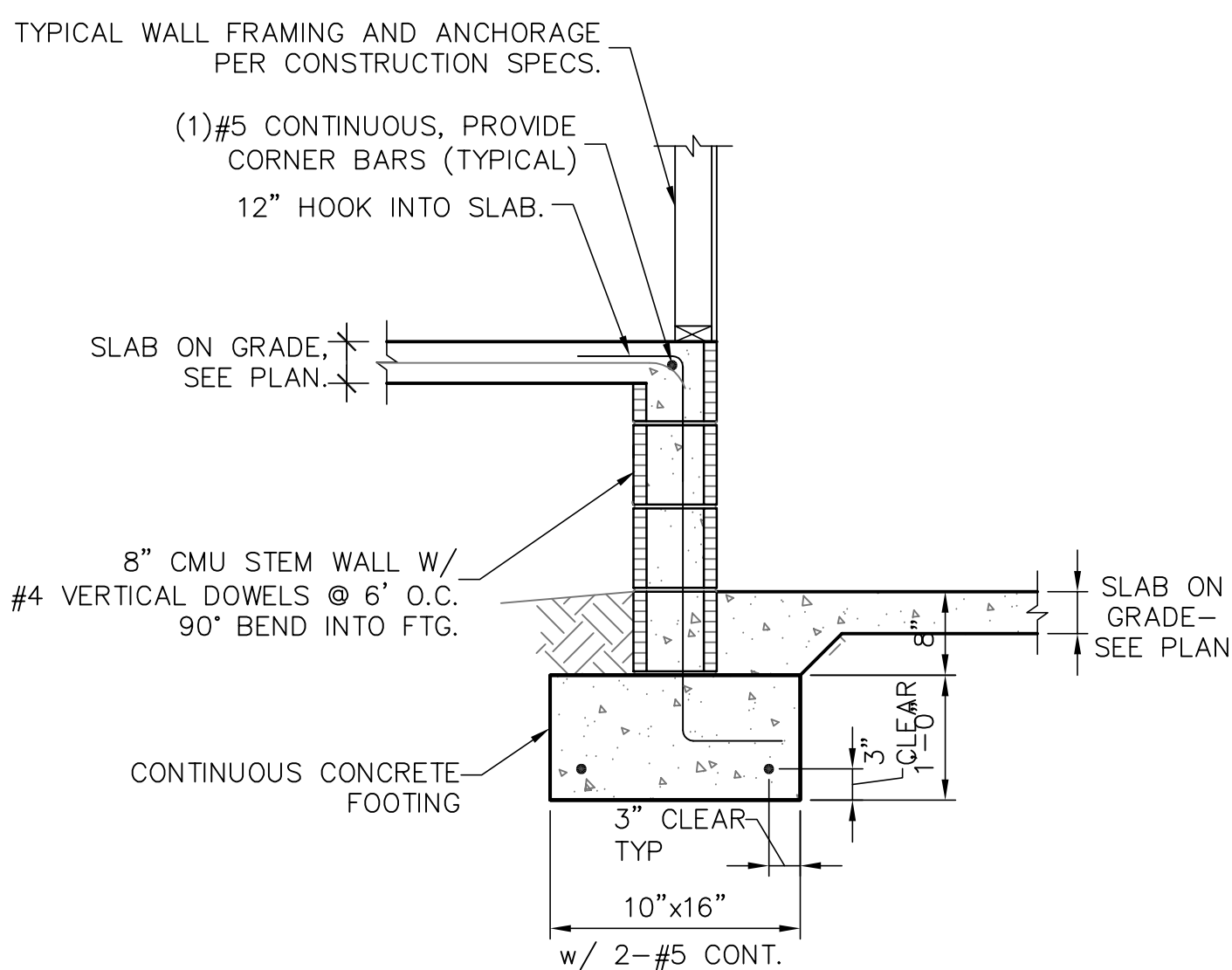
2 FOOTING W/ SHOWER RECESS

S1.01 SCALE: 3/4" = 1'-0"



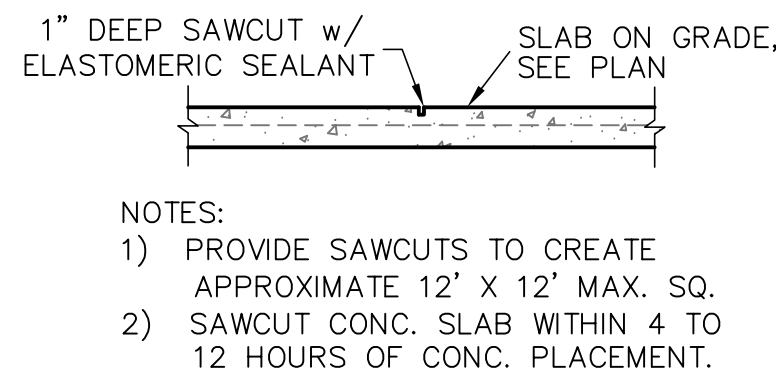
3 GARAGE STEM WALL

S1.01 SCALE: 3/4" = 1'-0"



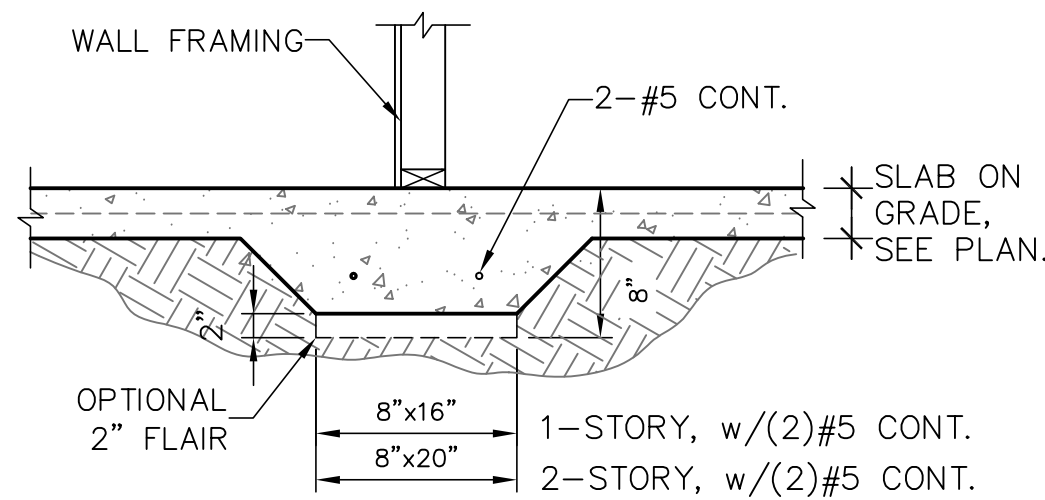
4 STEMWALL AT GARAGE

S1.01 SCALE: 3/4" = 1'-0"



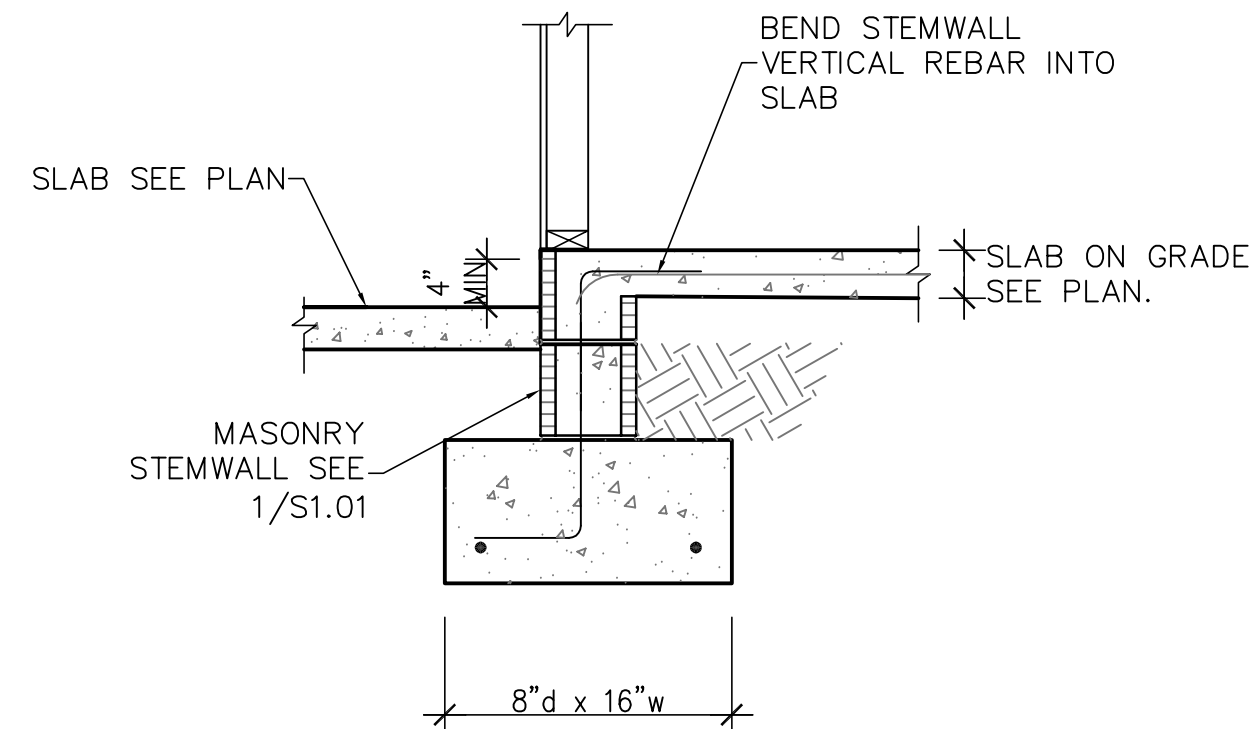
5 SAW CUT DETAIL

S1.01 SCALE: 3/4" = 1'-0"



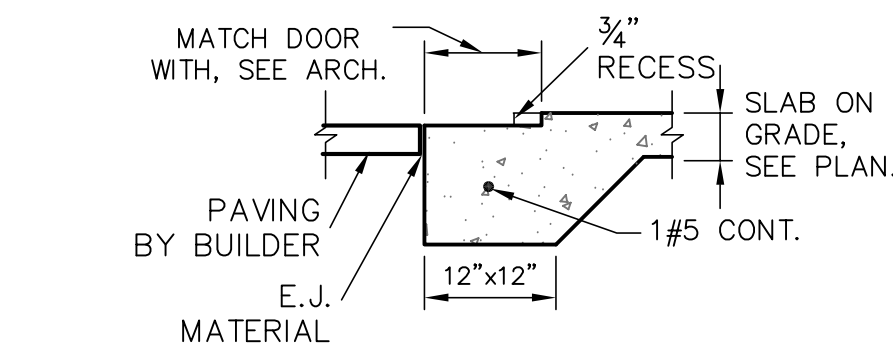
6 BEARING AT INTERIOR

S1.01 SCALE: 3/4" = 1'-0"

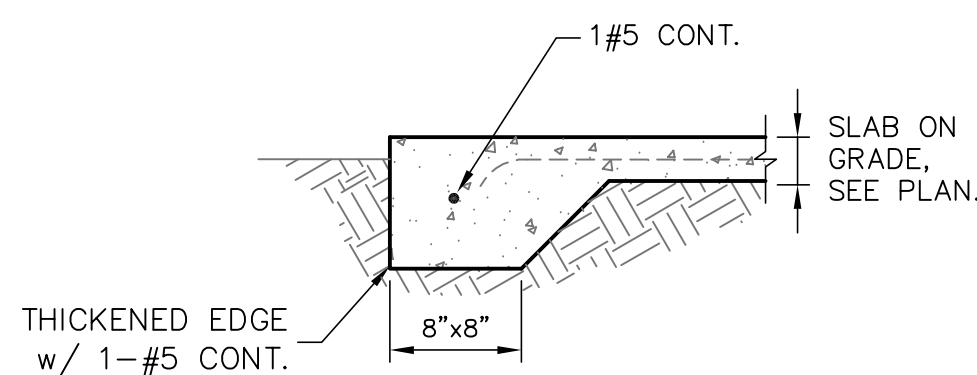


7 STEMWALL FOOTING AT PORCH

S1.01 SCALE: 3/4" = 1'-0"



AT GARAGES

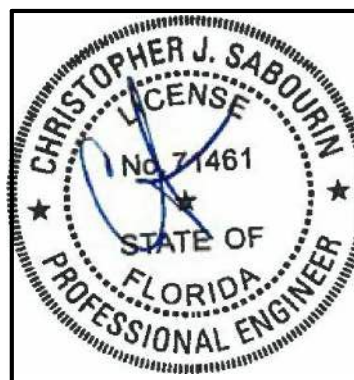


AT PORCHES

8 THICKENED SLAB

S1.01 SCALE: 3/4" = 1'-0"

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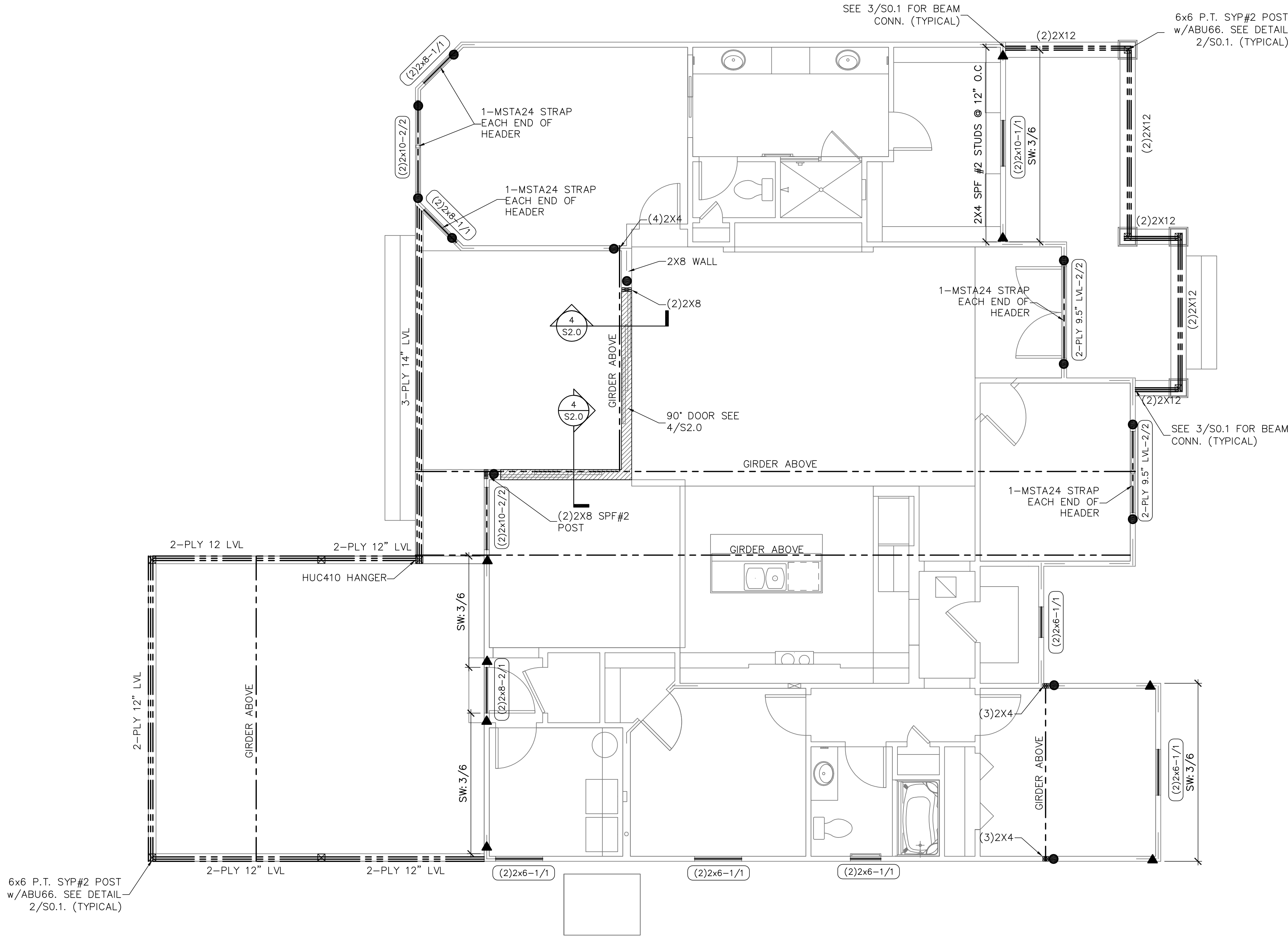
STRUCTURAL ENGINEERING FOR
GOMEZ/TURNER
561 SW MEADOW WOOD GLN
LAKE CITY, FL

FIELD ALTERATION
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MISC
FRAMING
DETAILS

SHEET
S1.01
SHEET 4 OF 7



SHEARWALL NOTE: SW: 3/6

SW: 3/6 DESIGNATES SHEARWALL
NAILING - 8d @ 3" EDGE AND 6" "FIELD"

SOLE PLATE ANCHORS - SEE SCHEDULE ON
ON DETAIL 3/SO.0

FIRST FLOOR FRAMING PLAN

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

SYMBOLS LEGEND

| | |
|--|---|
| | DESIGNATES SHEARWALL. THE HIDDEN LINE DESIGNATES SIDE OF WALL. THE SHEARWALL SHEATHING TO BE APPLIED. 8d @ 3" EDGE & 6" O.C. IN THE FIELD |
| | DESIGNATES THE HEADER SIZE, NUMBER OF PLY'S & JACK/KING STUDS NEEDED FOR SUPPORT HEADER. |
| | BEAM OR TRUSS, SEE PLAN |

ANCHOR LEGEND

| | |
|--|---|
| | 3/8" A307 DIAMETER FULL HEIGHT THREADED ROD, SEE DETAIL 12/SO.1 |
| | 3/8" A307 DIAMETER FULL HEIGHT THREADED ROD, SEE DETAIL 12/SO.1 |
| | 3/8" A307 DIAMETER THREADED ROD TERMINATES AT FIRST FLOOR TOP PLATE, SEE DETAIL 12/SO.1 |
| | 3/8" A307 DIAMETER THREADED ROD TERMINATES AT FIRST FLOOR TOP PLATE, SEE DETAIL 12/SO.1 |
| | SIMPSON HTTS SEE DETAIL 15/SO.1 |
| | SIMPSON DT12Z SEE DETAIL 15/SO.1 |
| | SIMPSON LT20B SEE DETAIL 15/SO.1 |

WALL STUD SCHEDULE

| LOCATION | PLATE HEIGHT | STUD SIZE & SPACING |
|----------|------------------|--|
| EXTERIOR | 9'-1" MAX | 2x4 SPF#2 @ 16" O.C. |
| EXTERIOR | 10'-1" MAX | 2x6 SPF#2 @ 16" O.C. OR 2x4 SPF#2 @ 12" O.C. |
| EXTERIOR | 10'-1" TO 14'-0" | 2x6 SPF#2 @ 16" O.C. |
| INTERIOR | 10'-0" MAX | 2x4 SPF#2 @ 16" O.C. |
| INTERIOR | 12'-0" MAX | 2x6 SPF#2 @ 16" O.C. OR 2x4 SPF#2 @ 12" O.C. |

STUD NOTES:

- 1.) WALL STUDS SPECIFIED ON PLAN SUPERSEDE THIS TABLE
- 2.) MINIMUM STUD SIZE AND SPACING ARE SHOWN. CONTRACTOR MAY INCREASE STUD SIZE TO MEET ARCHITECTURAL REQUIREMENTS.
- 3.) SPF DENOTES SPRUCE PINE FIR. SYP DENOTES SOUTHERN YELLOW PINE.
- 4.) USE SYP#2 FOR ALL TOP PLATES AND SOLE PLATES.
- 5.) FASTEN BOTTOM PLATE OF INTERIOR LOAD BEARING WALLS TO CONCRETE SLAB w/16d MASONRY CUT NAILS @ 16" O.C. MINIMUM. SEE 3/SO.0 FOR ADDITIONAL ANCHORS AT SHEARWALLS.

COMBINED USE PANEL NOTES

1. EXTERIOR WALL SHEATHING SHALL BE CONTINUOUS FROM BOTTOM PLATE TO UPPER MOST TOP PLATE. SEE DETAIL 6/SO.1 FOR SHEATHING SPLICE LOCATIONS FOR MULTI STORY CONDITIONS
2. SEE SHEET SO.0 FOR WALL SHEATHING SPECIFICATIONS.
3. UPPER MOST TOP PLATE SUPPORTING ROOF MEMBERS SHALL BE STRAPPED AS SHOWN IN DETAIL 1/SO.0

GENERAL NOTES

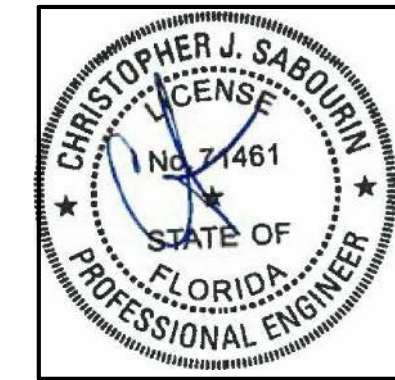
1. SEE DETAIL 2/SO.0 FOR WALL FRAMING DETAIL. SEE WALL STUD SCHEDULE THIS SHEET FOR STUD SIZES AND SPACING. AT GIRDERS AND BEAMS, PROVIDE STUDS BELOW TO MATCH BEAM/GIRDER PLIES.
2. SEE SHEET SO.0 FOR ROOF AND FLOOR SHEATHING SPECIFICATIONS.
3. WHERE FRAMING MEMBERS CONSIST OF MULTIPLE PLIES (BEAMS, HEADER, AND STUDS) FASTEN PLIES TOGETHER PER DETAIL 6/SO.0
4. INSTALL SOLE PLATE ANCHORS PER DETAIL 3/SO.0
5. AT SHEARWALLS, PROVIDE DIAPHRAGM ATTACHMENT PER DETAIL 5/SO.1
6. FOR ATTACHMENT OF EXTERIOR WALLS THAT TERMINATE BETWEEN TRUSSES, SEE 5A/SO.1
7. AT PORCHES, SEE DETAIL 2/SO.1 FOR FRAMING AND HOLD DOWNS

SOLE PLATE ANCHOR SPACING SCHD

| | |
|--------------------------------------|-------------------------------|
| ALL EXTERIOR WALL UNLESS OTHER NOTED | 42" O.C. |
| SHEARWALLS (SW 8d@3"/6") | 24" O.C. |
| SOLE PLT @ # | WHEN NOTED ON PLAN SEE NOTE 2 |

1. INSTALL SOLE PLATE ANCHORS PER DETAIL 3/SO.0
2. ANCHOR SPACING SHALL BE AS NOTED. FOR EXAMPLE - SOLE PLT @ 36" = 36" ON-CENTER SPACING

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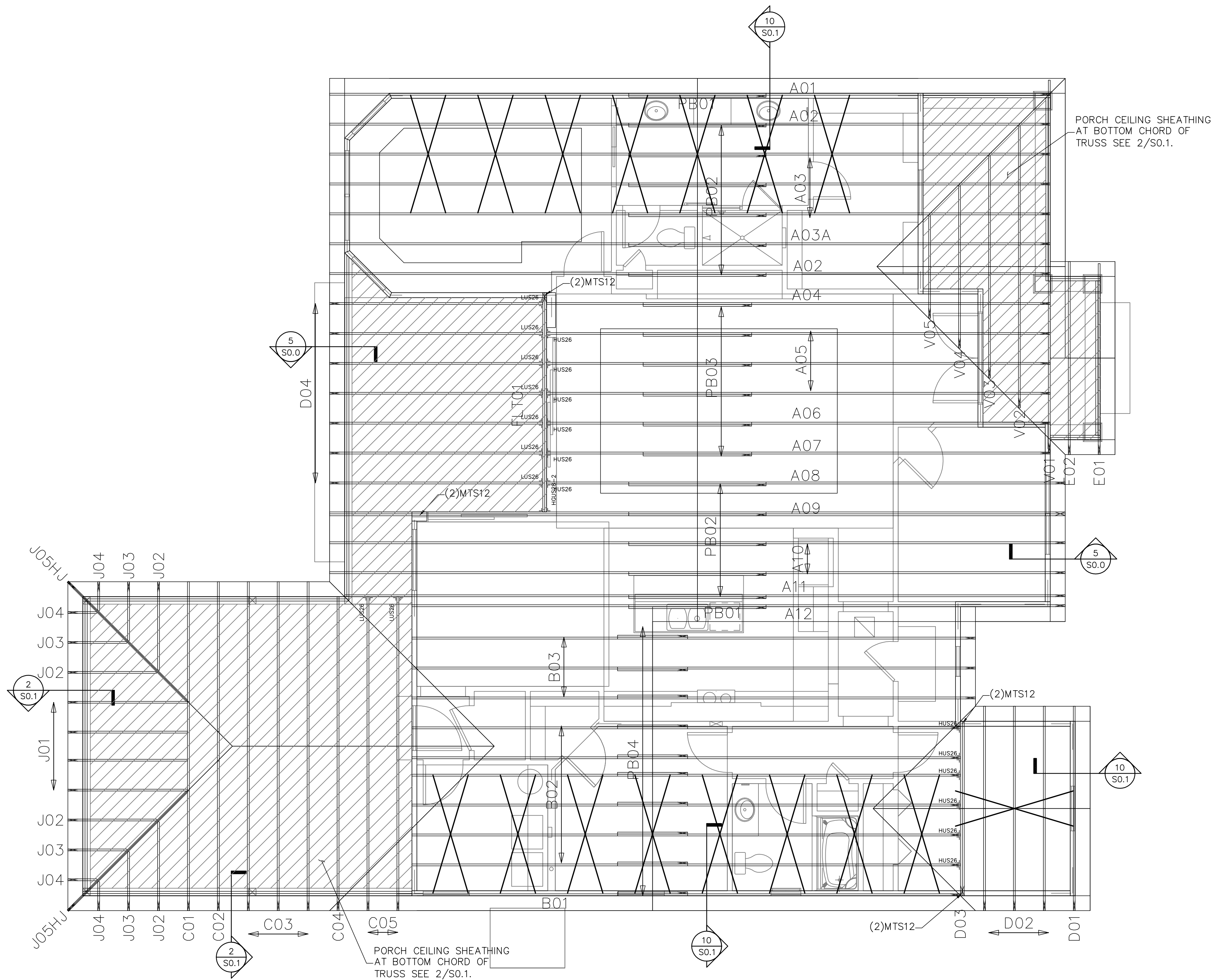
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FIRST FLOOR
FRAMING
PLAN

SHEET
S1.1
SHEET 5 OF 7



ROOF TRUSS PLACEMENT PLAN
SCALE: 1/4" = 1'-0"

SYMBOLS LEGEND

HTS16

DESIGNATES UPLIFT CONNECTION.

FRAMING PLAN NOTES:

1. FOR TYPICAL ROOF SHEATHING AND FRAMING, SEE SHEET S0.0.
2. FOR SPECIFIC UPLIFT CONNECTORS, SEE PLAN, MIN. (3)SDWC CONNECTOR.
3. FOR GENERAL DESIGN SPECIFICATIONS SEE SHEET S0.0.
4. WHEN USING (2)H2.5T CLIPS ON 1 1/2" WIDE LUMBER, PLACE CLIPS DIAGONALLY ACROSS DOUBLE TOP PLATE FROM EACH OTHER.

TRUSS FASTENING DETAILS

STUD DIRECTLY BELOW TRUSS

SDWC15600

TOP PLATE TO STUD SDWC15600

TRUSS TIE DOWN WITH SIMPSON SDWC

Rafter to Top Plate shown
Truss to Top Plate similar

Optimal 22 1/2°

30° 10° 0°

1/2" Max

SDWC15600

TOP PLATE TO STUD SDWC15600

Note:

1. Sloped-roof rafters may be sloped up to and including a 12:12 pitch and must be "birds-mouth" cut.
2. Reference detail 4 for installation instructions.

SIMPSON SDWC INSTALLATION RANGE

STUD NOT DIRECTLY BELOW TRUSS

SDWC15600

Note:

Reference detail 2a for installation angle limit

SDWC INSTALLATION

Rafter to Top Plate shown
(Truss to Top Plate similar)

12" max

STUD NOT DIRECTLY BELOW TRUSS

Do not install SDWC in hatched area

SDWC15600

Overhang

1 1/2" MIN
2" MAX

SDWC INSTALLATION RANGE

Rafter or Truss

x" minimum edge distance for full values (with or without a plate splice)

Splice may be in upper or lower plate

x" from top plate

splice Offset for full values

STUD NOT DIRECTLY BELOW TRUSS

SDWC AT TOP PLATE SPLICE

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04.03.20

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STRUCTURAL ENGINEERING FOR
GOMEZ/TURNER
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LAKE CITY, FL

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SCALING

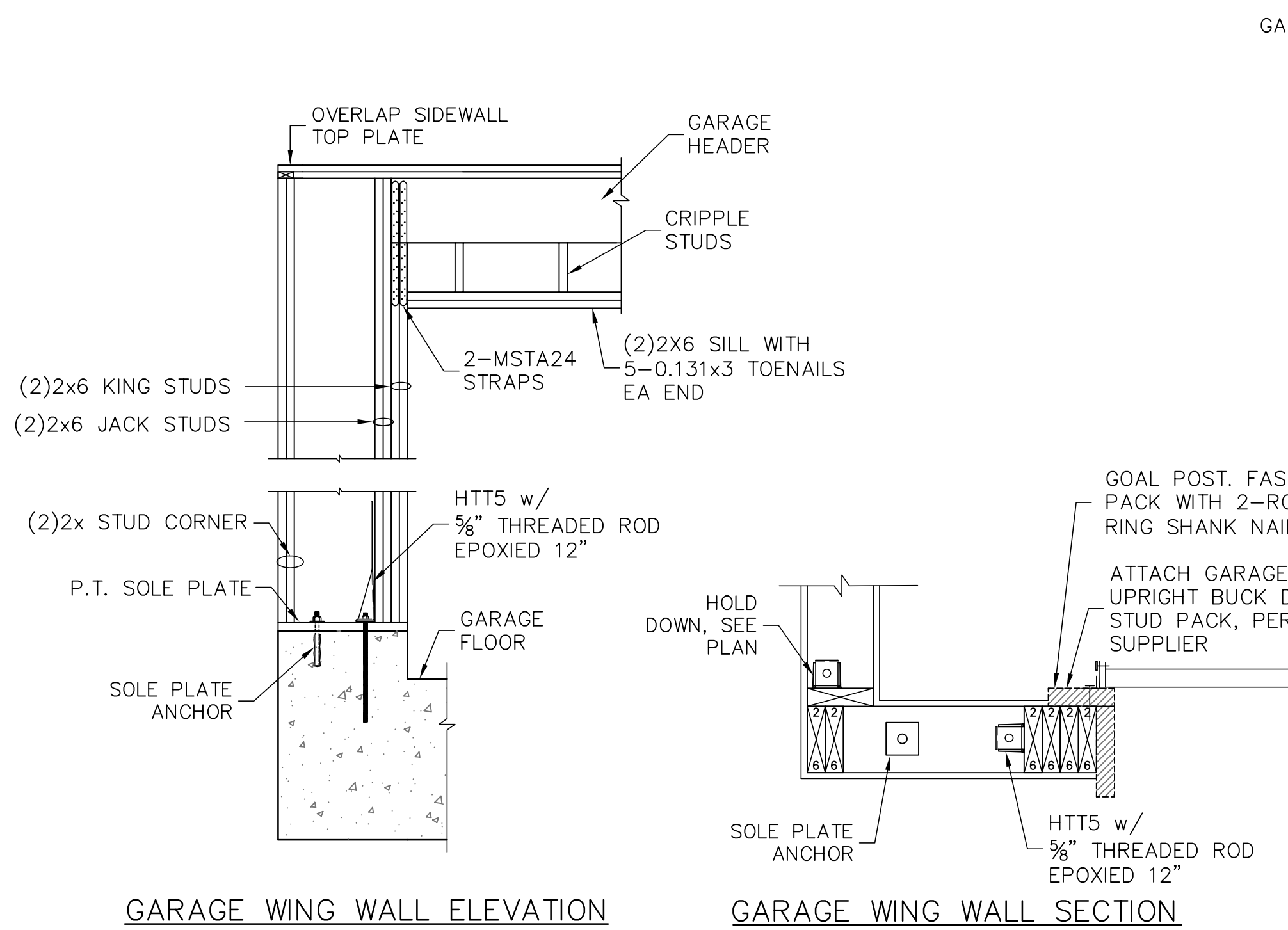
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ROOF TRUSS
PLACEMENT
PLAN

SHEET

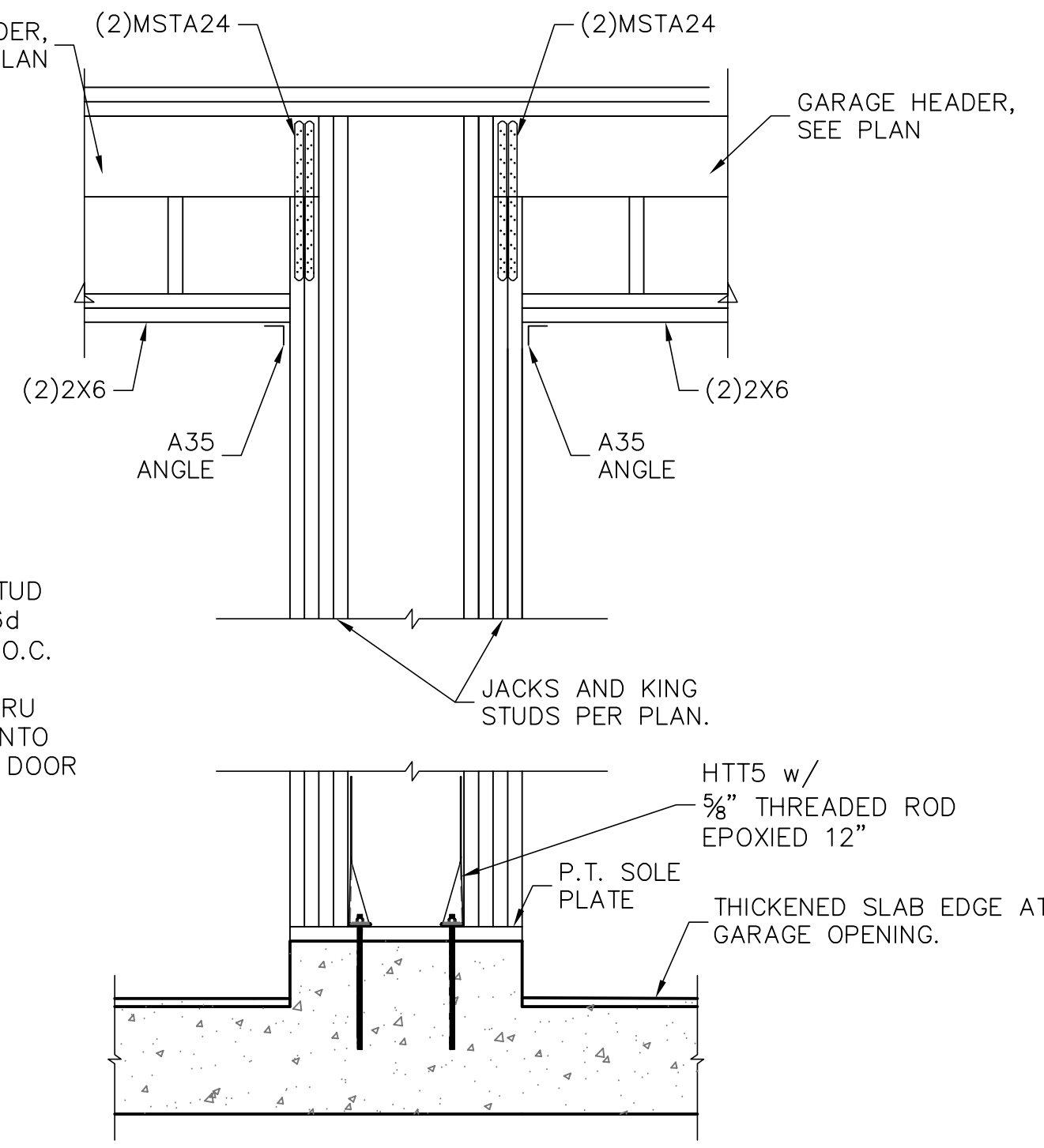
S1.2

SHEET 6 OF 7



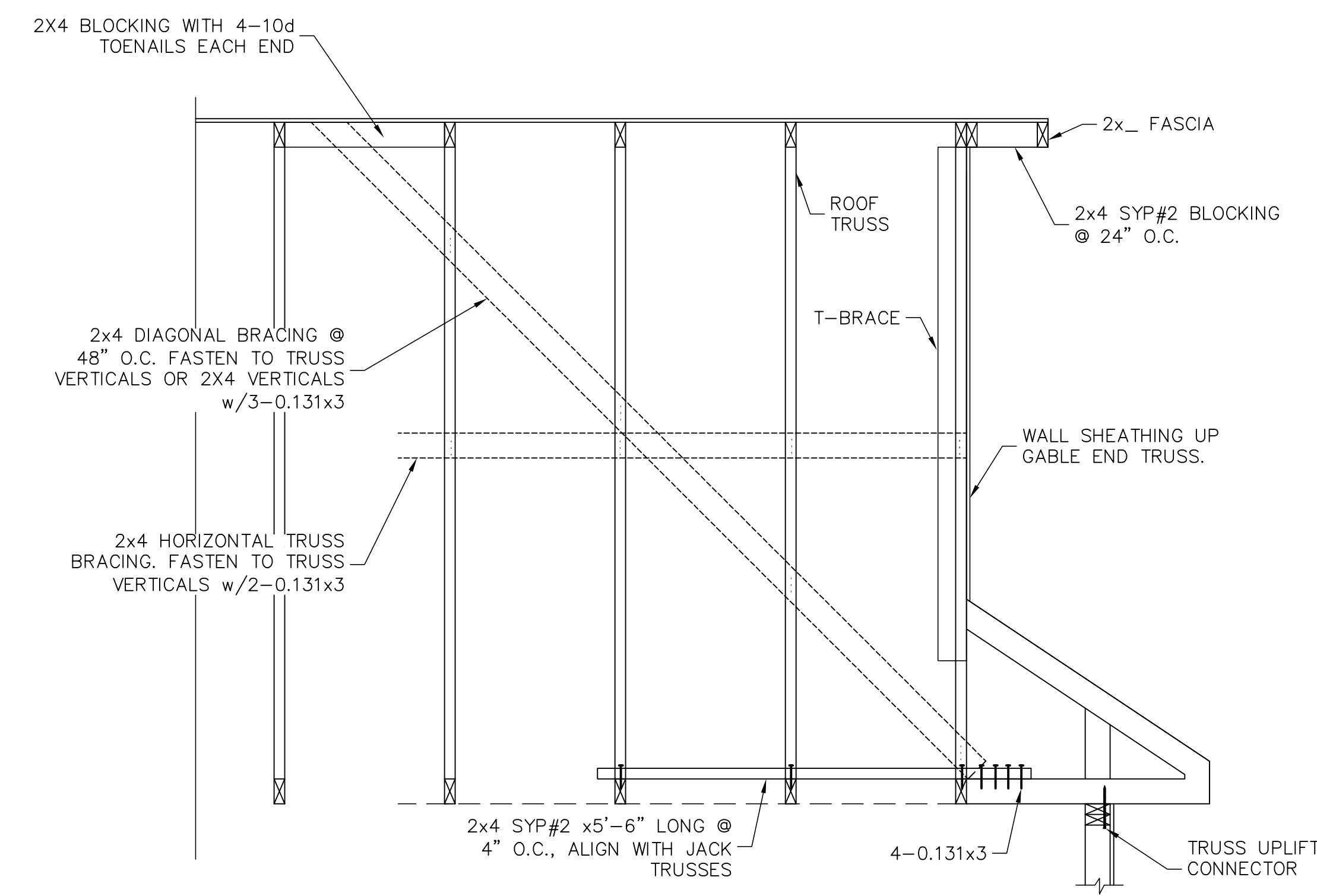
GARAGE WING WALL ELEVATION

GARAGE WING WALL SECTION



GARAGE CENTER WALL FRAMING

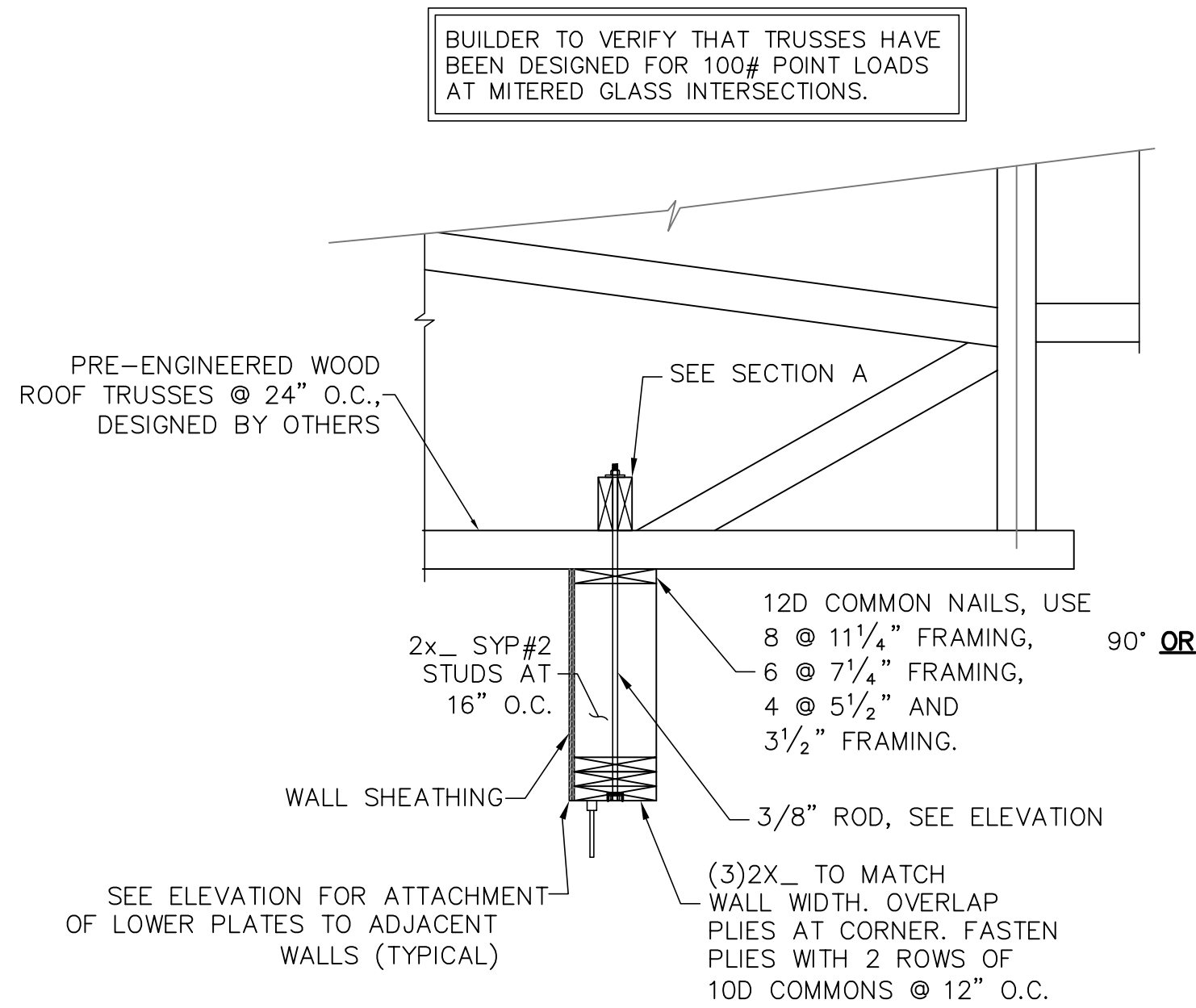
SCALE: NTS



GABLE END BRACE DETAIL

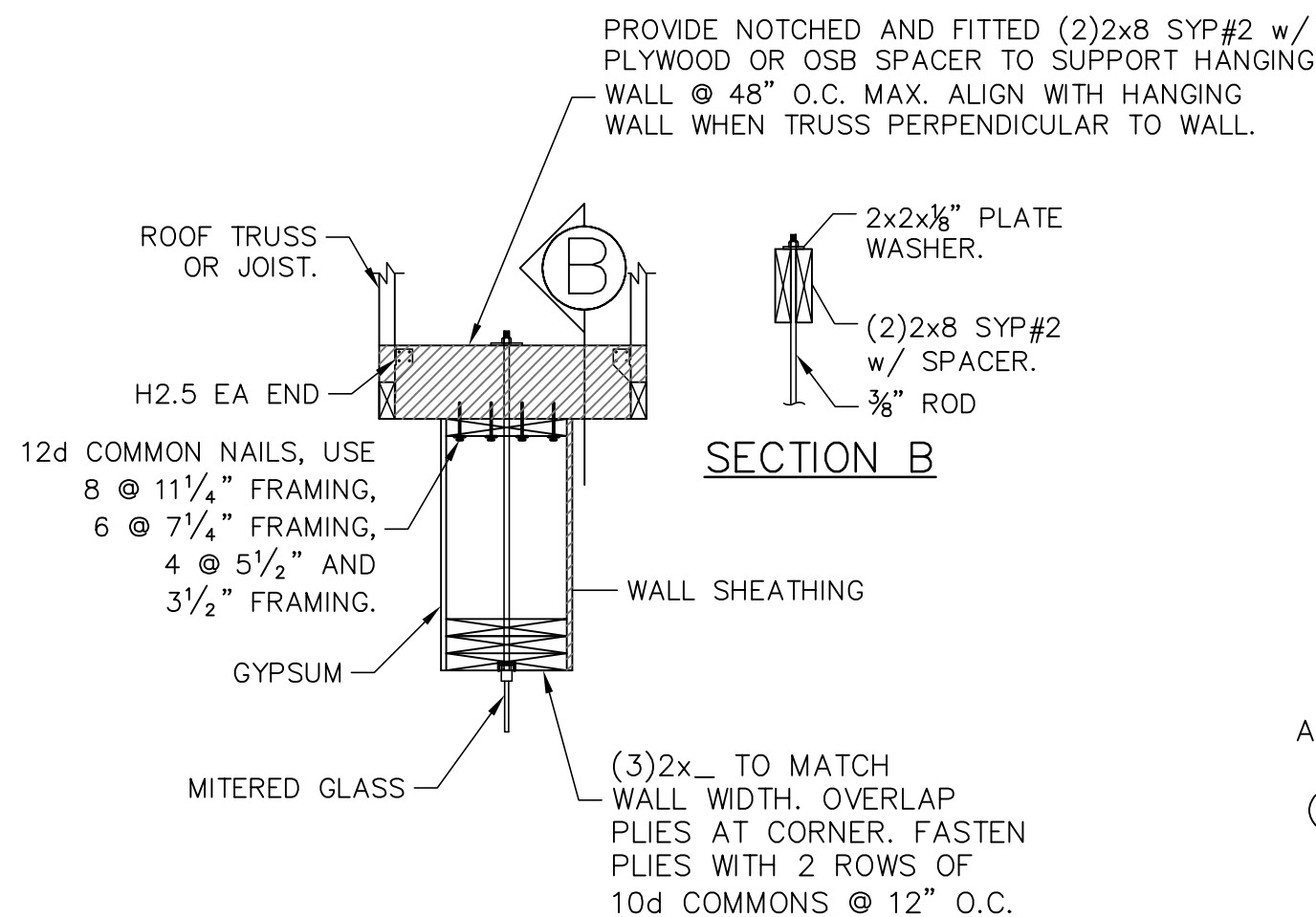
TYPICAL GARAGE HEADER/JACK CONNECTION

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



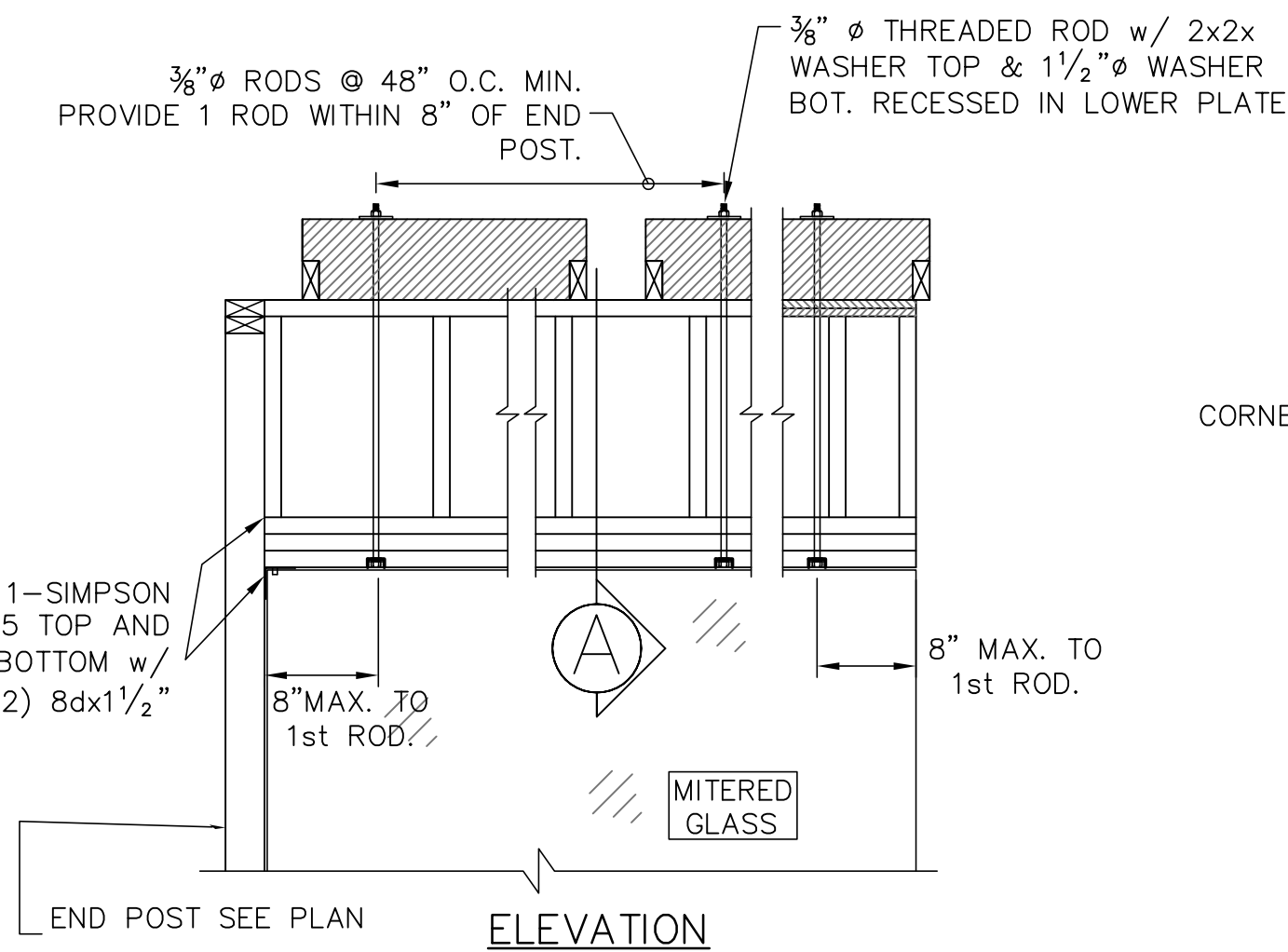
MITERED WINDOW HEAD FRAMING

SCALE: N.T.S.

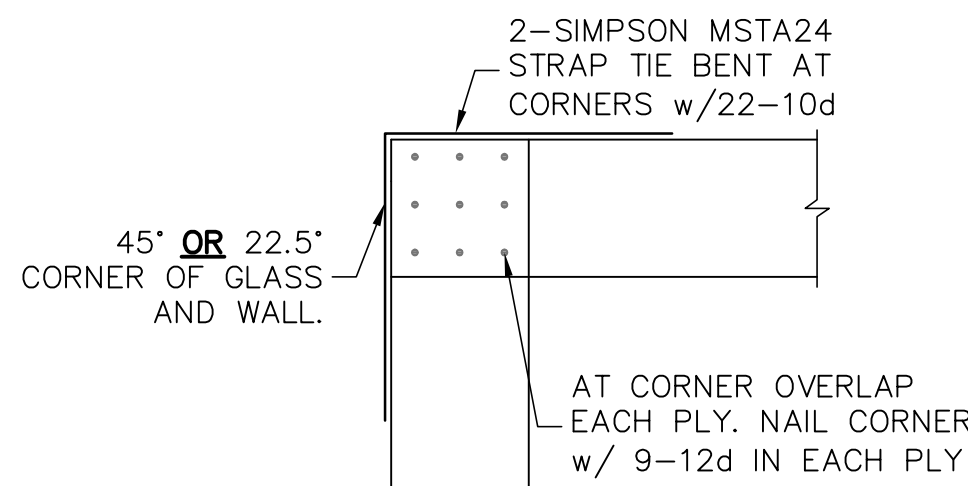


SECTION A

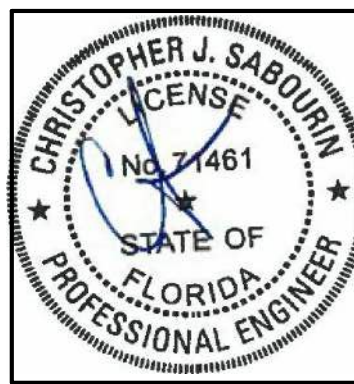
SECTION B



ELEVATION



SECTION AT CORNER



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MISC. FRAMING
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