

**DESIGN CRITERIA:**

1. GOVERNING CODES AND STANDARDS
  - INTERNATIONAL BUILDING CODE (IBC) 2021 EDITION
  - INTERNATIONAL RESIDENTIAL CODE (IRC) 2018 EDITION
  - AMERICAN CONCRETE INSTITUTE (ACI), BUILDING CODE REQUIREMENT FOR STRUCTURAL CONCRETE, ACI 318-19
  - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), SPECIFICATION FOR STRUCTURAL STEEL BUILDING ANSI/AISC 360-16
  - NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA), SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY
2. DESIGN LOADS
  - A. DEAD LOADS INCLUDE THE WEIGHT OF STRUCTURAL COMPONENTS, AS WELL AS THE WEIGHT OF MECHANICAL, ELECTRICAL EQUIPMENT. ANY CHANGES IN TYPE, SIZE OR LOCATION OF MECHANICAL, ELECTRICAL EQUIPMENT FROM THAT INDICATED ON THE DRAWING SHALL BE REPORTED TO THE ENGINEER PRIOR TO INSTALLATION FOR VERIFICATION OF THE ADEQUACY OF SUPPORTING MEMBERS.
  - B. UNIFORM OCCUPANCY LIVE LOADS:
    - FLOOR 40 PSF
    - OPEN DECK FLOOR 60 PSF
    - ROOF 16 PSF
    - ATTIC (W/O STORAGE) 10 PSF
    - ATTIC (W/ STORAGE) 20 PSF
  - C. CONCENTRATED LIVE LOADS AS SPECIFIED BY THE IBC AND EQUIPMENT WEIGHTS PRODUCING STRESSES GREATER THAN THE TABULATED UNIFORM LIVE LOADS SHALL GOVERN THE DESIGN OF INDIVIDUAL STRUCTURAL ELEMENTS.
  - D. WIND LOADS IN ACCORDANCE WITH THE IBC AND ASCE 7-16
    - RISK CATEGORY II
    - BASIC WIND SPEED 105 MPH (ULT)
    - EXPOSURE B
    - IMPORTANCE FACTOR 1.0
  - E. SEISMIC LOAD IN ACCORDANCE WITH THE IBC AND ASCE 7-16
    - SITE CLASS - C
    - SEISMIC DESIGN CATEGORY - B
    - SEISMIC IMPORTANCE FACTOR - 1.0
    - MAPPED SPECTRAL RESPONSE ACCELERATION, Ss - 0.113 g
    - MAPPED SPECTRAL RESPONSE ACCELERATION, S1 - 0.058 g
    - RESPONSE MODIFICATION COEFFICIENT, R - 3.5
    - LATERAL FORCE RESISTING SYSTEM - MOMENT FRAME & ORDINARY BRACED FRAME
  - F. SNOW LOAD - 5 PSF

**BUILDING PAD PREPARATION AND FOUNDATION DESIGN**

1. FOUNDATION DESIGN AND BUILDING PAD PREPARATION SHALL BE IN ACCORDANCE WITH SUBSURFACE EXPLORATION REPORT NO. ST22-0033, BY WHITWORTH ENGINEERING, FORT WORTH, TEXAS, DATED FEBRUARY 07, 2022, REFER FOUNDATION DRAWINGS FOR MORE INFORMATION.

**GENERAL NOTES:**

1. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ANCHORS, INSERTS, REGLETS AND EMBEDDED ITEMS NOT SHOWN ON STRUCTURAL DRAWINGS. CONTRACTOR IS TO VERIFY DIMENSIONS AT THE SITE. CONTRACTOR IS TO VERIFY MECHANICAL LOADINGS AND LOCATIONS. THE CONTRACTOR IS TO ALSO VERIFY SIZES AND LOCATIONS OF MECHANICAL OPENINGS.
2. CONSTRUCTION EQUIPMENT WITH A TOTAL LOADED WEIGHT OF MORE THAN 3000 POUNDS IS NOT PERMITTED ON THE COMPOSITE FLOOR SLAB WITHOUT PRIOR WRITTEN AGREEMENT OF THE ARCHITECT/ENGINEER.
3. CONSTRUCTION MATERIALS ARE TO BE SPREAD OUT IF PLACED ON FRAME FLOORS OR ROOF. LOAD IS NOT TO EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

**ENGINEERED LUMBER FOR ALL LEVELS:**

1. PRE-ENGINEERED I-JOISTS TO BE LOUISIANA PACIFIC, TRUSS JOIST OR APPROVED EQUAL.
2. MULTIPLE PLY I-JOISTS TO BE CONNECTED PER MANUFACTURER'S SPECIFICATIONS.
3. PRE-ENGINEERED LVL BEAMS TO BE A 2900FB-2.0 BY LOUISIANA PACIFIC OR APPROVED EQUAL.
4. ALTERNATE OPEN-WEB FLOOR OR ROOF JOIST TO BE SUPPLIED BY A TRUSS MANUFACTURER WITH AN APPROVED TEXAS ENGINEER'S SEAL AND SIGNATURE ON TRUSS LAYOUT AND PROFILES.

**FRAMING:**

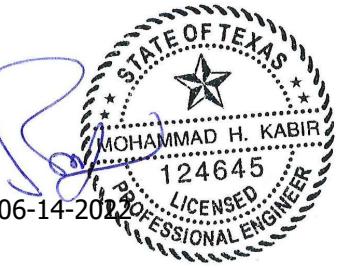
1. ALL EXTERIOR WALL STUD FRAMING SHALL BE 2X6, SYP #2 AT 16" O.C AND INTERIOR WALL STUD FRAMING SHALL BE 2X4, SYP#2 AT 16" O.C AND CONFORM WITH LATEST BUILDING CODE AS ADOPTED BY CITY.
2. INSTALL MULTIPLE 2X STUDS UNDER THE WIDTH OF THE SUPPORTED BEAM UNLESS NOTED OTHERWISE ON FRAMING PLANS.
3. METAL TIES ARE NOT REQUIRED TO CONNECT CEILING JOISTS TO RAFTERS UNLESS NOTED ON FRAMING PLANS. PROVISIONS TO RESIST THE OUTWARD THRUST OF THE ROOF HAVE BEEN MADE BY OTHER METHODS.
4. FLOOR SHEATHING TO BE APA SPAN RATED 3/4" MIN. GLUED AND NAILED TO FLOOR FRAMING.
5. ROOF SHEATHING TO BE MIN. 7/16" OSB.
6. ALL EXTERIOR WALL SHEATHINGS TO BE MIN. 7/16" O.S.B., OR APPROVED EQUAL, NAILED PER CODE.
7. ALL WOOD MEMBERS TO BE #2 SOUTHERN PINE, U.O.N.
8. PROVIDE DOUBLE JOISTS WHERE WALL RUNS PARALLEL TO JOIST.
9. ALL METAL CONNECTORS SHALL BE SIMPSON OR APPROVED EQUAL.
10. ALL NAILING FOR FRAMING SHALL BE PER IRC 2018.

**NON-MASONRY CHIMNEY FRAMING NOTES: ( IF APPLICABLE)**

1. VERTICAL FRAMING IN CHIMNEYS SHALL BE CONTINUOUS #2-2X4 LUMBER FROM WALL TOP PLATE TO TOP OF CHIMNEY. IF SPLICING IS REQUIRED, THE STUD SHALL BE SCABBED WITH A 48" LONG 2X4, CENTERED ABOUT THE SPLICE, USING 2 ROWS OF 12D NAILS SPACED 6" O.C.
2. CORNERS SHALL BE FRAMED WITH A MIN. OF 3 STUDS.
3. THE ENTIRE CHIMNEY STRUCTURE SHALL BE SHEATHED WITH 7/16" OSB WITH VERTICAL GRAINS. HORIZONTAL SPLICES SHALL BE BLOCKED WITH SHEATHING NAILED TO BLOCKS.
4. STUDS SHALL BEAR ON TOP OF WALL PLATES OR BEAMS AS SHOWN ON FRAMING PLANS.

**MK and Associates, Inc.**

Seal:



**Indrasena - New Residence**  
817 Brett Drive, Allen TX 75013

Revision:

1 06-30-22 STAIR LANDING

△ 09-26-22 DIMENSIONS

△ 12-21-22 CITY COMMENTS

JOB No: 220035

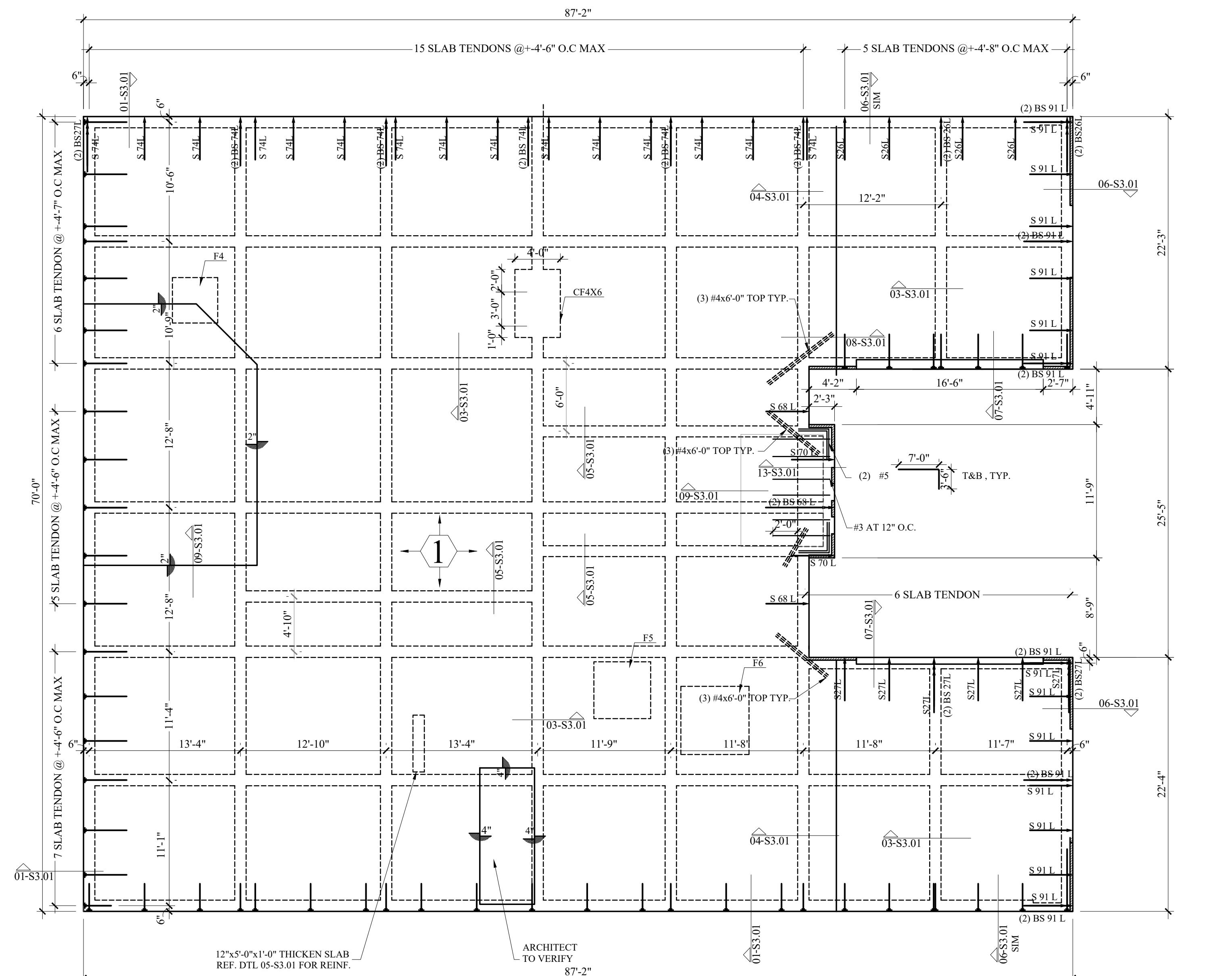
Issue: 06-14-2022

Sheet Name:

GENERAL NOTES

Sheet No.:

S0.01



### FOUNDATION PLAN

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

FOOTING SCHEDULE			
MARK	SIZE	REINFORCING (LONG DIRECTION)	REINFORCING (SHORT DIRECTION)
F4	4'-0" x 4'-0" x 2'-6"	(5) #5 T&B	(5) #5 T&B
F5	5'-0" x 5'-0" x 2'-6"	(6) #5 T&B	(6) #5 T&B
F6	6'-0" x 6'-0" x 2'-6"	(7) #5 T&B	(7) #5 T&B
CF4X6	6'-0" x 4'-0" x 2'-6"	(6) #5 T&B	(8) #5 T&B

PLAN LEGEND	
1.	DENOTES ONE STRAND TO BE STRESSED
2.	"BS.S." DENOTES TWO STRANDS TO BE STRESSED
3.	DENOTES FACTORY SEATING END
4.	DENOTES CHAIR
5.	DENOTES CHANGE IN ELEVATION

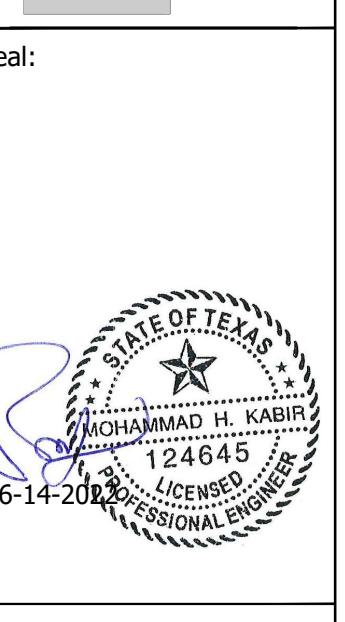
POST-TENSIONED CONCRETE	
1.	ALL CONCRETE CONSTRUCTION TO COMPLY WITH "ACI SPECIFICATION FOR STRUCTURAL CONCRETE" (ACI-301), "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318), PTI GUIDE "SPECIFICATION FOR UNBONDED SINGLE STRAND TENDONS".
2.	CAST IN PLACE CONCRETE SHALL STRICTLY ADHERE TO THE PROPORTIONS ESTABLISHED IN DESIGN MIXES, CONSISTING OF THE ACTUAL MATERIALS TO BE USED DURING CONSTRUCTION, FOR THE SEVERAL STRENGTHS AND USES INTENDED. THESE DESIGN MIXES ARE TO BE PREPARED BY A QUALIFIED LABORATORY.
3.	CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM WEIGHT AND IS TO DEVELOP A MINIMUM COMPRESSIVE STRENGTH $f_c$ OF 3,000 PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
4.	STRANDS SHALL NOT BE STRESSED UNTIL CONCRETE ATTAINS A MINIMUM STRENGTH OF 2,500 PSI. STRESSING SHALL BE PERFORMED BETWEEN 3 AND 10 DAYS FOLLOWING CONCRETE PLACEMENT.
5.	REINFORCEMENT SHALL BE FABRICATED AND PLACED IN CONFORMANCE WITH THE LATEST "ACI STANDARD BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318).
6.	PRESTRESSING STEEL SHALL BE SEVEN-WIRE, STRESS-RELIEVED, LOW RELAXATION STRAND FOR PRESTRESSED CONCRETE MANUFACTURED IN ACCORDANCE WITH ASTM-A16 AND FREE FROM CORROSION HAVING A GUARANTEED MINIMUM ULTIMATE TENSILE STRENGTH OF 270 KSI. ALL PRESTRESSING STRANDS SHALL KEEP AN ACCURATE RECORD OF THE MODULUS OF ELASTICITY OF EACH STRAND OR GROUP OF STRANDS FROM SAME MILL RUN. THIS MODULUS OF ELASTICITY SHALL BE USED TO DETERMINE ACTUAL ELONGATION.
	NOMINAL DIAMETER = 0.5 INCHES
	AREA = 0.153 SQ. INCHES
	ULTIMATE STRENGTH = 270 KSI
	YIELD STRENGTH = 220 KSI
7.	POST-TENSION STRAND SHALL BE COATED WITH CORROSION PREVENTIVE MASTIC AND ENCLOSED IN AN EXTRUDED PLASTIC SUPPAG SHEATHING. TORN OR DAMAGED SHEATHING SHALL BE PATCHED BEFORE CONCRETE POURING.
8.	ALL ANCHORING HARDWARE SHALL MEET THE MINIMUM REQUIREMENTS SET FORTH IN ACI STANDARD BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318, CHAPTER 18, OR PRESTRESSED CONCRETE.
9.	ANCHOR CASTING WITH REUSABLE PLASTIC OR DISPOSABLE STROFON GROMMET SHALL BE USED AT ALL STRESSING ENDS WHERE ANCHORAGE MUST BE RECESSED IN CONCRETE IN ORDER TO RECEIVE REQUIRED CONCRETE COVER.
10.	ANCHOR CASTINGS WITH POWER-SEATED WEDGES SHALL BE USED FOR ALL FIXED-END ANCHORAGE.
11.	TENDONS SHALL BE FABRICATED WITH SUFFICIENT LENGTH BEYOND EDGE FORM TO ALLOW STRESSING. A MINIMUM LENGTH OF ONE FOOT AT EACH STRESSING END IS REQUIRED.
12.	ALL PRESTRESSING STEEL SHALL BE PROTECTED AT THE JOB SITE FROM EXCESSIVE RUST OR OTHER CORROSION PRIOR TO FABRICATION. EXPOSED SUFFICIENT PROTECTION SHALL ALSO BE PROVIDED FOR PRESTRESSING STEEL AT THE ENDS OF MEMBERS TO PREVENT DETERIORATION BY RUST OR CORROSION.
13.	SUFFICIENT CHAIRS SHALL BE PROVIDED TO MAINTAIN VERTICAL ALIGNMENT OF STRANDS. TENDON SUPPORTS SHOULD NOT BE SPACED MORE THAN 4'-0" O.C. IN BOTH DIRECTIONS.
14.	CONCRETE SHALL BE PLACED IN SUCH A MANNER THAT ALIGNMENT OF POST-TENSIONING TENDONS REMAINS UNCHANGED. SPECIAL PROVISION SHALL BE MADE TO ENSURE PROPER VIBRATION OF CONCRETE AROUND ANCHORAGES. USES OF "TRAPEZES" SHALL BE REQUIRED TO SUSPEND CONCRETE PUMP HOSE ABOVE THE PREPARED TENDONS, REINFORCING AND FORMWORK.
15.	INSTALL WEDGES HORIZONTALLY SIDE BY SIDE, NOT VERTICALLY.
16.	ALL STRESSING SHALL BE UNDER THE DIRECT CONTROL OF A PERSON EXPERIENCED AND QUALIFIED IN THAT WORK AND CERTIFIED BY PTI.
17.	ALL PRESTRESSED STEEL SHALL BE STRESSED BY MEANS OF HYDRAULIC JACKS, EQUIPPED WITH ACCURATE READING, CALIBRATED HYDRAULIC PRESSURE. A CALIBRATION CHART WILL ACCOMPANY EACH JACK. MEASURED ELONGATION AND JACK GAUGE READING AGREEMENT WITHIN 10% SHALL BE SATISFACTORY.
18.	IT IS RECOMMENDED THAT THE PRESTRESSING PROCESS BE MONITORED AND RECORDED BY A THIRD-PARTY INSPECTOR.
19.	PRESTRESSING CONTRACTOR AND INSPECTOR SHALL MONITOR AND KEEP A LOG OF JACK PRESSURE, TENDON STRESS, AND ELONGATION FOR EACH STRAND AND INDEX THE STRAND LOCATION ON A PLAN. RECORD INFORMATION SHALL BE FORWARDED TO THE OWNER AND MK ENGINEERS AND ASSOCIATES INC (MKEA) FOR RECORD.
20.	THE MAXIMUM JACKING FORCE TO OVERCOME FRICTION SHALL NOT EXCEED 94% OF THE YIELD STRENGTH OR 80% OF THE SPECIFIED TENSILE STRENGTH OF THE TENDON. MAXIMUM ANCHORAGE STRESS SHALL NOT EXCEED 82% OF YIELD STRENGTH OR 70% OF THE SPECIFIED TENSILE STRENGTH.
21.	TOTAL ELONGATION SHALL BE BASED UPON PL/AE
	P = REQUIRED ANCHORAGE FORCE OF STRAND = 70% ULTIMATE
	L = STRAND LENGTH
	A = CROSS SECTIONAL AREA
	E = MODULUS OF ELASTICITY
22.	AFTER STRESSING IS COMPLETED, TENDONS SHALL BE CUT OR BURNED OFF TO WITHIN ONE INCH FROM THE FACE OF THE ANCHOR.
23.	STRESSING POCKETS SHALL BE FILLED FLUSHED WITH NON-SHRINK GROUT WITHIN 7 DAYS AFTER STRESSING. POCKETS MUST BE CLEANED AND PREPARED PER GROUT MANUFACTURER'S REQUIREMENTS.
24.	VERTICAL PLACEMENT TOLERANCES IN SLAB TENDONS SHALL BE LIMITED TO PLUS OR MINUS 1/4".
25.	HORIZONTAL PLACEMENT TOLERANCES IN SLAB TENDONS SHALL BE LIMITED TO 1". IF IT IS NECESSARY, DEFLECT TENDONS HORIZONTALLY FOR AS MUCH AS 6" MAXIMUM TO AVOID PLUMBING STACKS OR OTHER OBSTRUCTIONS - THIS VARIANCE SHALL BE ACCOMPLISHED BY 20 FT RADIUS TAPER WITH SMOOTH CURVATURES FROM END OF THE TENDON RATHER THAN WITH SHORT RADIUS CURVATURES WITHIN THE IMMEDIATE AREA OF THE OBSTRUCTION.
26.	PENETRATIONS THROUGH BEAMS SHALL BE AT RIGHT ANGLES AND PLACED WITHIN THE MIDDLE THIRD (HEIGHT) OF THE BEAM. IF THIS CANNOT BE ACHIEVED, SUBMIT A PLAN OF APPROVAL OF PENETRATIONS TO THE ENGINEER FOR REVIEW.
27.	PENETRATIONS MUST BE WRAPPED SUCH THAT THERE IS A MINIMUM OF 1/2" CLEAR SPACE AROUND THE PENETRATION AND MUST BE AT LEAST 6" FROM ANY TENDON. MOVE TENDON WITH THE RADIUS REQUIREMENTS IN THESE NOTES TO ACHIEVE CLEARANCES.
28.	JACKING FORCE IS 33 KIPS AND TO BE SEATED AT 28.9 KIPS.
29.	MINIMUM EFFECTIVE PRE-STRESS IS 175 PSI.
30.	STRESS SHORT STRANDS BEFORE LONG STRANDS.

PLAN NOTES	
1.	SLAB THICKNESS T= 4 1/2"
2.	EXTERIOR BEAM, D = 36"
3.	INTERIOR BEAM, D = 30"
4.	BEAM WIDTH, W = 12"
5.	S DENOTES SLAB STRAND
6.	BS DENOTES BEAM STRAND
7.	ALL ELEVATION ARE REFERENCED TO FIRST FLOOR FINISH ELEVATION = 100'-0". REFER TO CIVIL / ARCH'L DRAWINGS FOR ABSOLUTE ELEVATIONS.
8.	BEAM STRANDS SHALL BE STRESSED FROM THE SAME SIDE AS SLAB STRANDS.
	PORCH/PATIO SLAB STEPS 2" AT THRESHOLD AND SLOPES 1/4" PER FOOT AWAY FROM BUILDING. REFER ARCHITECTURAL

GENERAL NOTES	
1.	WATER CONTENT SHALL BE CONTROLLED AND MINIMIZED IN ACCORDANCE WITH ACI'S BUILDING CODE REQUIREMENTS AS REFERENCED ABOVE.
2.	ALL CONVENTIONAL REINFORCING BARS SHALL BE GRADE 60 IN ACCORDANCE WITH ASTM A615.

SITE PREPARATION NOTES	
1.	SITE GRADING AND DRAINAGE AROUND THE FOUNDATION SHALL BE MAINTAINED AT ALL TIMES IN SUCH A MANNER THAT SURFACE OR GROUND WATER WILL NOT COLLECT AROUND THE SLAB. ADEQUATE POSITIVE DRAINAGE SHALL BE PROVIDED SLOPING AWAY FROM THE FOUNDATION WITH A SLOPE OF 2-5% (1/4"-5/8" PER FOOT) FOR A MINIMUM DISTANCE OF 5'-0" FROM EDGE OF FOUNDATION.
2.	FOR FINAL GRADES, THERE SHALL BE POSITIVE DRAINAGE SLOPING AWAY FROM THE SLAB. A MINIMUM OF 6" CLEARANCE BETWEEN TOP OF SLAB AND OR BRICK-LEDGE AND SOIL SURFACE SHALL BE MAINTAINED.
3.	BEAM TRENCHES SHALL BE CLEAN PER PLAN. BEAM BOTTOMS MUST BE FOUNDED IN AT LEAST 12" OF UNDISTurbed SOIL OR PROPERLY COMPACTED FILL, UNLESS PIERS ARE SPECIFIED.
4.	AT CONTRACTOR'S OPTION, A SAND CUSHION OR THIN LAYER OF SELECT FILL MAY BE USED AS THE TOP LAYER FOR THE PAD. EXISTING SOILS MAY BE USED AS LONG AS THEY PRESENT NO HAZARD TO THE POLYETHYLENE VAPOR BARRIER.
5.	A LAYER OF 10 MIL POLYETHYLENE WITH LAPPED JOINTS BETWEEN THE SAND/EXISTING MATERIAL AND SLAB SHALL BE REQUIRED.
6.	CONSTRUCTION JOINTS ARE PROHIBITED.
7.	TENDONS AND BARS SHALL BE SUPPORTED BY CHAIRS SPACED AT A 4' MAXIMUM INTERVAL AND TIED AT ALL INTERSECTIONS TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT. S-HOOKS MAY NOT BE USED FOR TENDON TIES.
8.	CONCRETE SHALL BE VIBRATED TO INSURE CONSOLIDATION AROUND TENDON ANCHORAGES.
9.	SLAB STRAND LOCATIONS MAY BE PLACED WITHIN 8" OF PLAN LOCATION TO MAINTAIN PROPER CLEARANCES. CENTER TO CENTER DISTANCE OF SLAB STRAND SHOULD NOT BE MORE THAN 5'-0" O.C.
10.	WHERE DISCREPANCIES BETWEEN SLAB DIMENSIONS AND ARCHITECTURAL PLANS ARE NOTICED, THE ARCHITECTURAL PLANS SHALL CONTROL.
11.	COORDINATE STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWINGS FOR ALL OPENINGS, DROPS, INSERTS, SLOPES, BRICK-LEDGES, AND OTHER RELATED ITEMS.
12.	IF SOLID ROCK IS ENCOUNTERED DURING TRENCHING OF BEAMS, BEAM DEPTH MAY BE REDUCED, BUT MUST MAINTAIN A MINIMUM OF 12" SOIL COVER UPON FINAL GRADE.
13.	PLUMBING LINES SHALL NOT BE LOCATED PARALLEL TO THE INSIDE OF THE BEAMS.
14.	SIDEWALKS AND DRIVES SHALL BE GRADED TO SLOPE AWAY FROM THE FOUNDATION TO ELIMINATE AND PREVENT PONDING OF WATER.
15.	TREES AND SHRUBS SHOULD NOT BE LOCATED CLOSER TO THE FOUNDATION THAN A HORIZONTAL DISTANCE EQUAL TO ROUGHLY 1/2 OF THE TREE'S OR SHRUB'S MATURE HEIGHT.
16.	THE DESIGN BASED UPON GEOTECH REPORT NO. ST22-0033 BY WHITWORTH ENGINEERING, FORT WORTH, TX DATED FEBRUARY 07, 2022.

**MK and Associates, Inc.**  
817 Brett Drive, Allen TX 75013

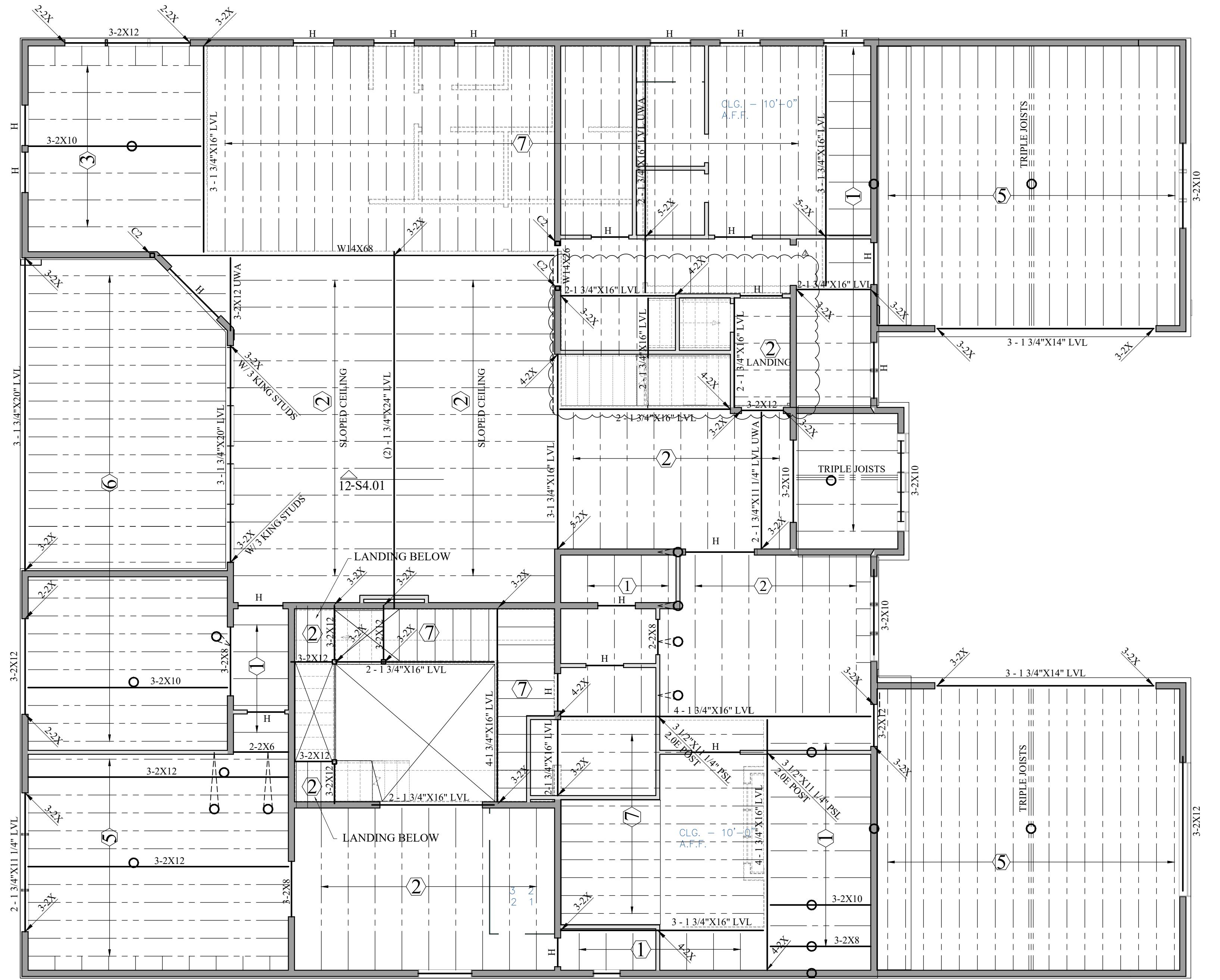


Revision: 1-06-30-22 STAIR LANDING  
2-09-26-22 DIMENSIONS

JOB No: 220035  
Issue: 06-14-2022  
Sheet Name: FOUNDATION PLAN  
Sheet No.: 2

S1.01

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STRUCTURAL : CONST. ADMINISTRATION : PRJCT. MANAGEMENT



### 1ST FLOOR CEILING AND 2ND FLOOR FRAMING PLAN

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

#### KEY NOTE:

- (1) CEILING FRAMING TO BE 2X6 @ 24" O.C. (MAX), U.O.N.
- (2) CEILING FRAMING TO BE 2X8 @ 24" O.C. (MAX), U.O.N.
- (3) CEILING FRAMING TO BE 2X10 @ 24" O.C. (MAX), U.O.N.
- (4) CEILING FRAMING TO BE 2X12 @ 24" O.C. (MAX), U.O.N.
- (5) CEILING FRAMING TO BE 2X12 @ 16" O.C. (MAX), U.O.N.
- (6) CEILING FRAMING TO BE 2X8 @ 16" O.C. (MAX), U.O.N.
- (7) FLOOR FRAMING TO BE 16" DEEP PJI-60 JOISTS @ 16" O.C. (MAX), U.O.N.

#### PLAN NOTE:

1. PROVIDE ONE ADDITIONAL JOIST UNDER WALL WHERE JOISTS RUNNING PARALLEL TO WALL (TYP), U.O.N.
2. "H" DENOTES HEADERS - REFER SPAN CHART ON S4.00.
3. PROVIDE 1/2"ØX12" LONG ANCHOR BOLTS @ 32'-0" O.C. FOR ALL EXTERIOR AND INTERIOR BEARING WALLS.
4. ADJUST JOIST SPACING TO AVOID CONFLICT WITH FLOOR OPENINGS.
5. PROVIDE DOUBLE JOIST AROUND OPENINGS.
6. PROVIDE DOUBLE JOIST UNDER TUB.
7. PROVIDE 3-2X6 STUDS AT EACH END OF ALL LVL AND 3-2X12 BEAMS, U.O.N. USE 1/2" PLYWOOD SPACERS AS REQ'D. IN BETWEEN MEMBERS TO FLUSH W/ WALL.
8. ALL FLOOR BEAMS SHALL BE FLUSH WITH FLOOR JOISTS, U.O.N.
9. ALL EXTERIOR WALL SHEATHING SHALL BE 7/16 OSB.
10. ALL C1 SHALL BE 10X10 POST GRADE S.Y.P. SELECT STRUCTURAL, PRESSURE-TREATED - ATTACHED TO CONC. W/ SIMPSON ABU1010Z
11. ALL C2 SHALL BE HSS4X4X5/16 OR STD PIPE STEEL COLUMN.
12. PRE-ENGINEERED OPEN-WEB TRUSSES CAN BE USED AT CONTRACTOR'S OPTION - DESIGNED BY OTHERS.
13. ALL BEARING WALLS SHALL BE 2X AT 16" O.C., U.O.N.
14. PROVIDE DOUBLE 2X6 STUDS @ 12" O.C. AT BALLOON FRAMING WALL.
15. ALL FLOOR BEAMS SHALL BE FLUSH WITH FLOOR JOISTS U.O.N.
16. WHEN MULTIPLE PLIES OF LVL OR 2X12'S BEAMS ARE USED, FASTEN ALL PLIES USING 3 ROWS OF 12D BOX NAILS (0.128X3.25) AT 12" O.C. MAXIMUM END DISTANCE NOT TO EXCEED 6". CLINCH NAILS WHERE POSSIBLE.
17. STAIR FRAMING SHALL BE BY OTHERS.
18. "UWA" DENOTES UNDER WALL.

### Indrasena - New Residence

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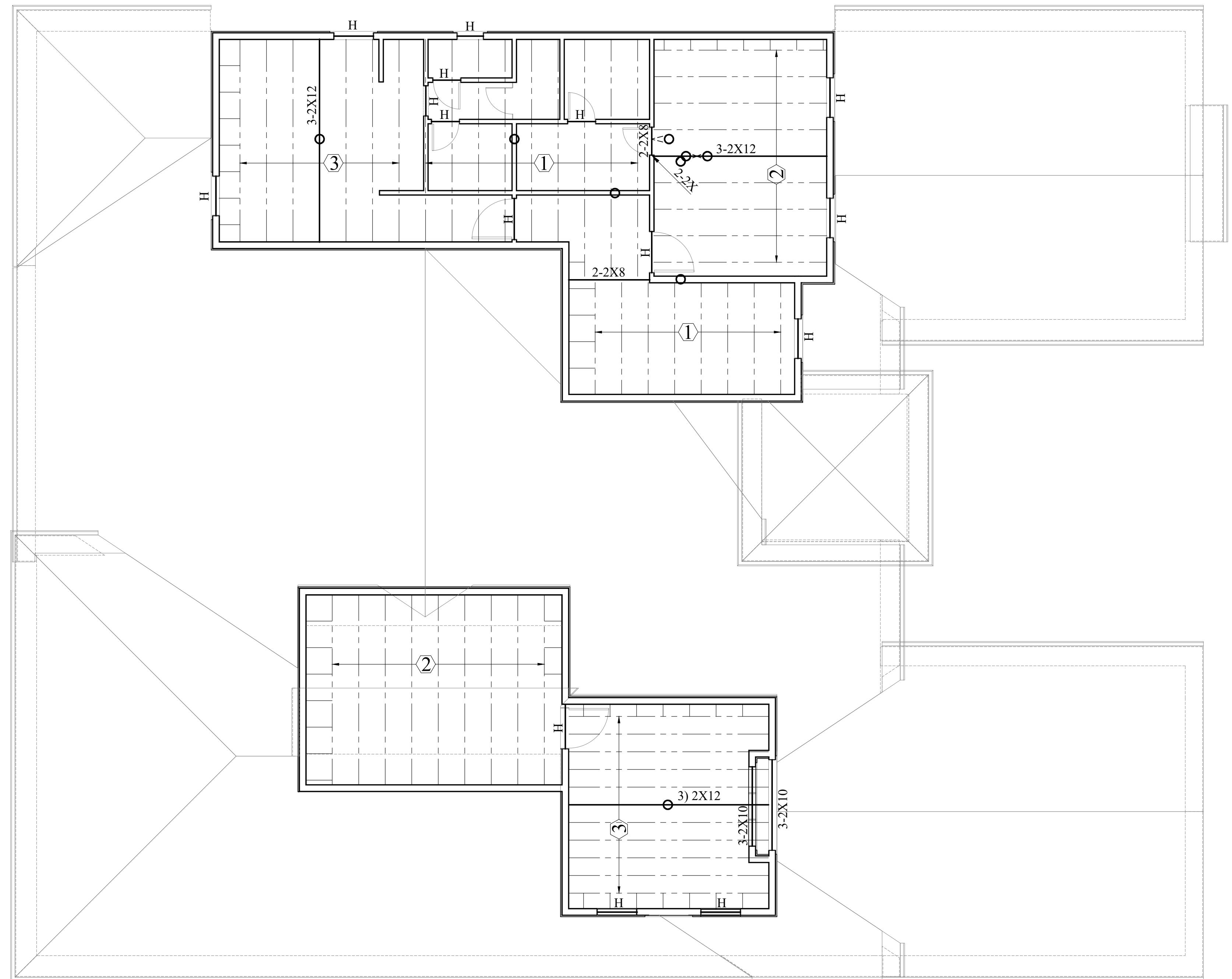
JOB No: 220035

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Sheet Name:  
1ST FLOOR CEILING &  
2ND FLOOR FRAMING  
PLAN

Sheet No.:

S1.02



### 2ND CEILING FRAMING PLAN

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

#### PLAN NOTES:

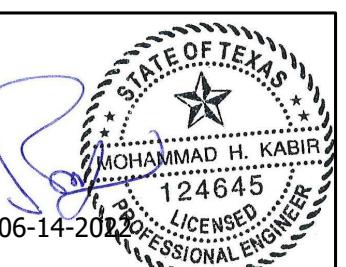
1. REFER TO S1.02 FOR INFORMATION NOT REPEATED.
2. PROVIDE TRIPLE CEILING JSTS (MIN) IF THERE ARE ANY HVAC UNITS SITTING ON CEILING JSTS.
3. SINGLE LVL BEAM OF SAME WIDTH CAN BE USED IN LIEU OF MULT-PLY LVL BEAMS.

#### KEY NOTES:

- ① 2X6 @ 24" O.C. (MAX), U.O.N.
- ② 2X10 @ 24" O.C. (MAX), U.O.N.
- ③ 2X12 @ 24" O.C. (MAX), U.O.N.

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Seal:



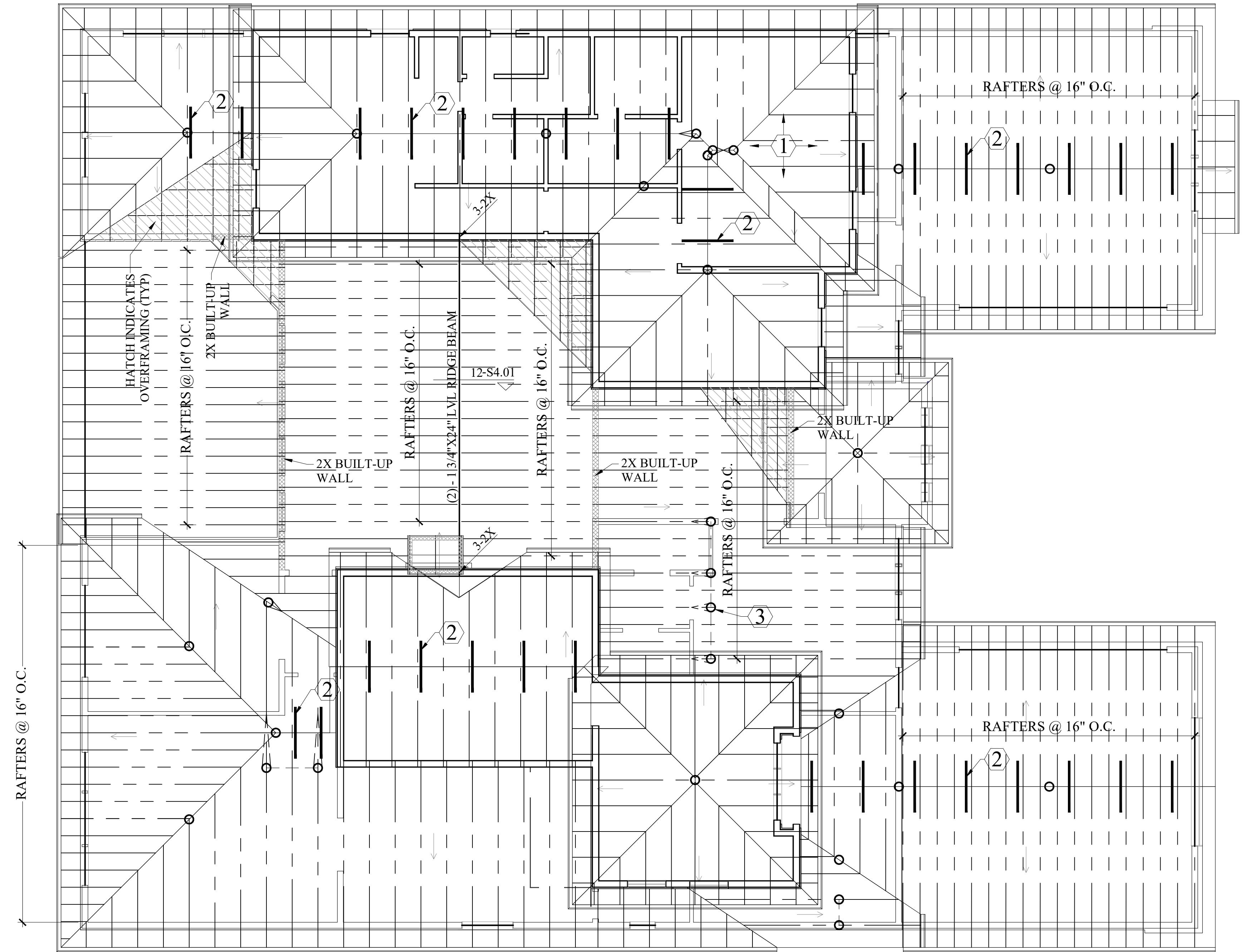
Revision:  
1\_06-30-22 STAIR LANDING

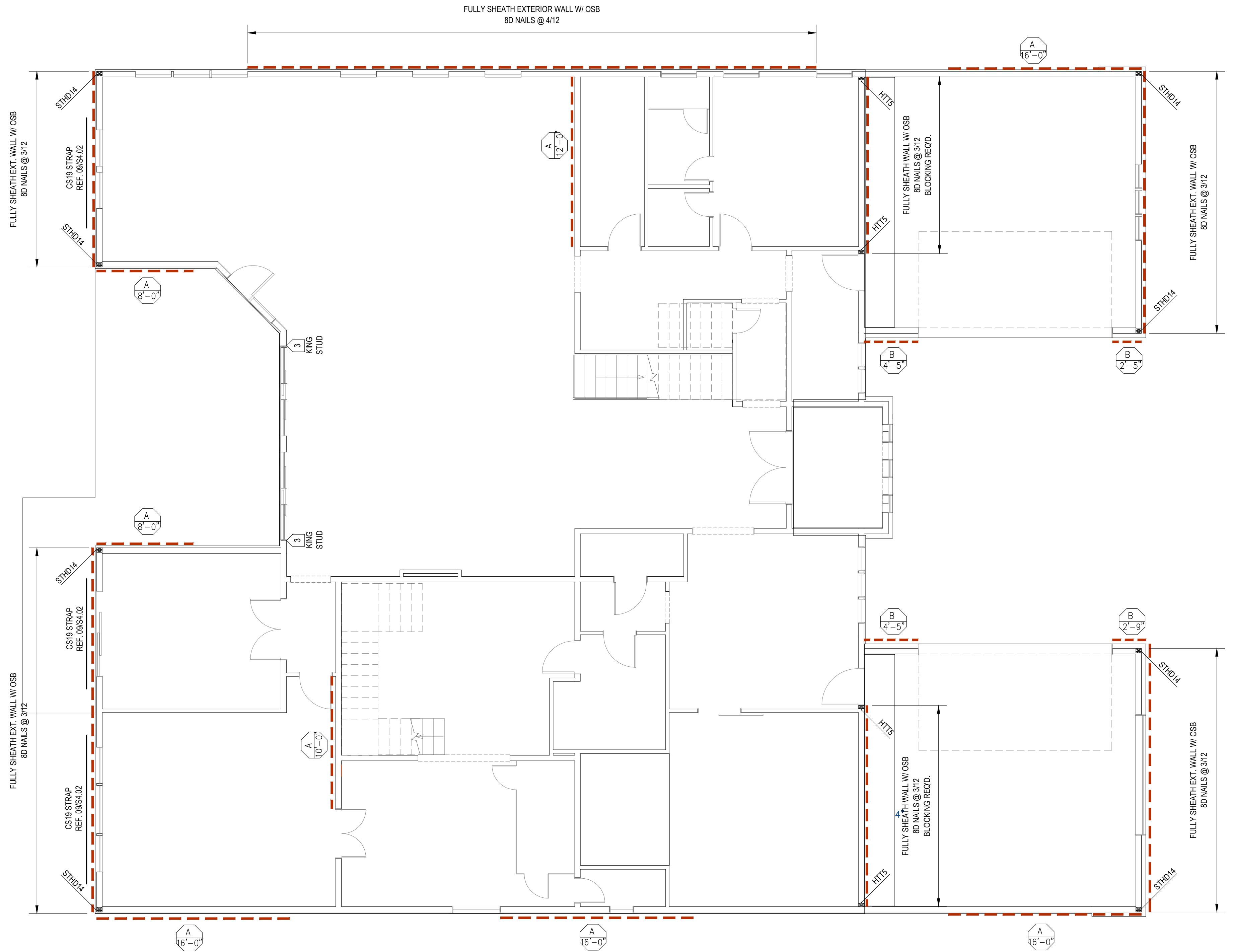
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2ND FLOOR CEILING FRAMING PLAN

Sheet No.:

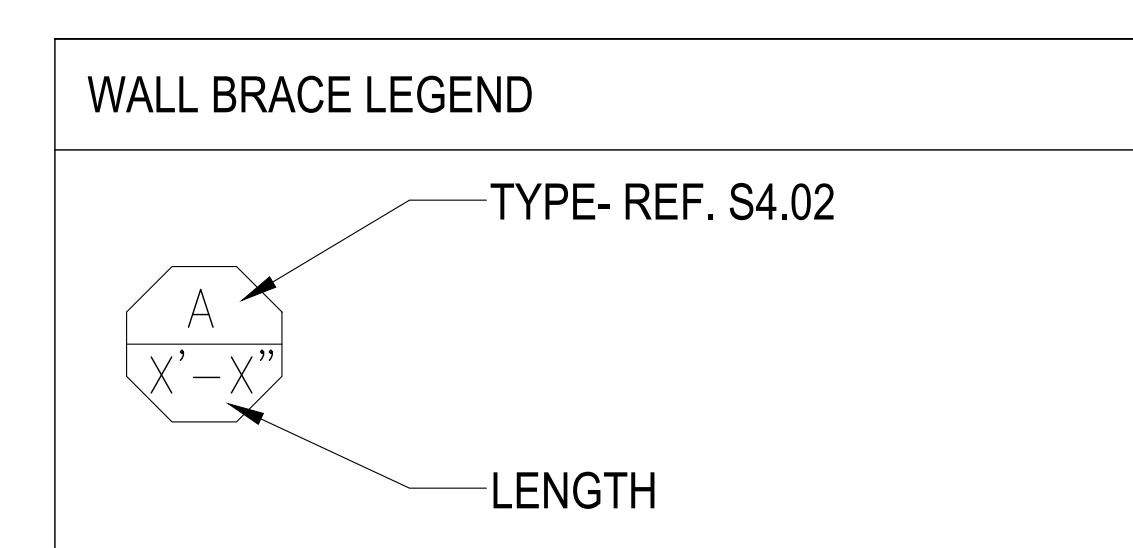
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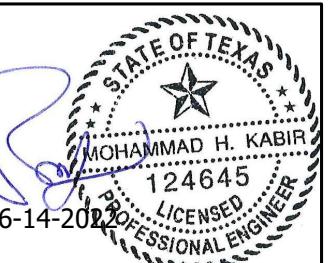
## 1ST FLOOR WALL BRACE PLAN

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



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Seal:



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Firm REGISTRATION : CONST. ADMINISTRATION : PRJCT. MANAGEMENT

Revision:  
1\_06-30-22 STAIR LANDING

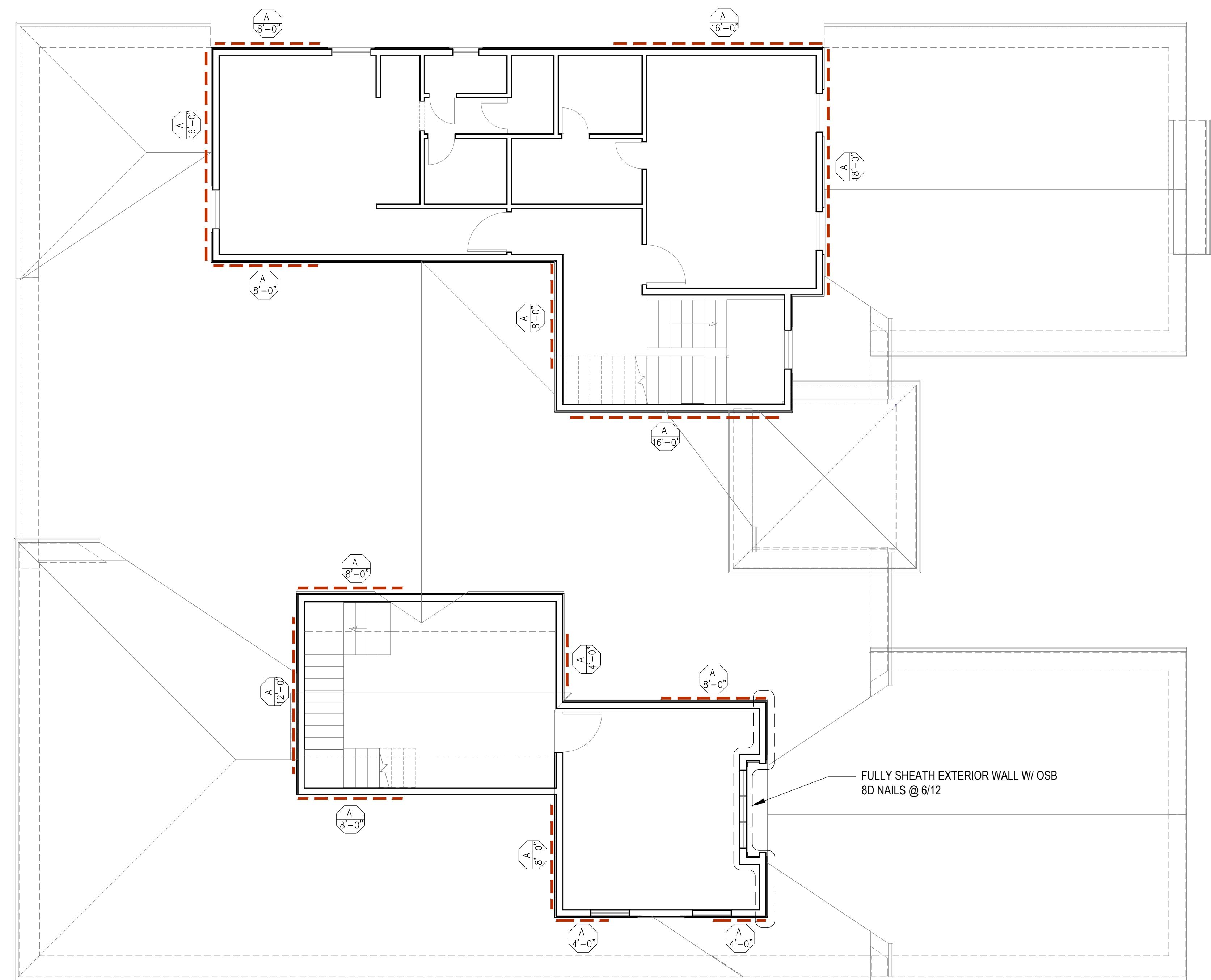
JOB No:  
220035

Issue:  
06-14-2022

Sheet Name:  
WALL BRACE  
PLAN 1ST FLOOR

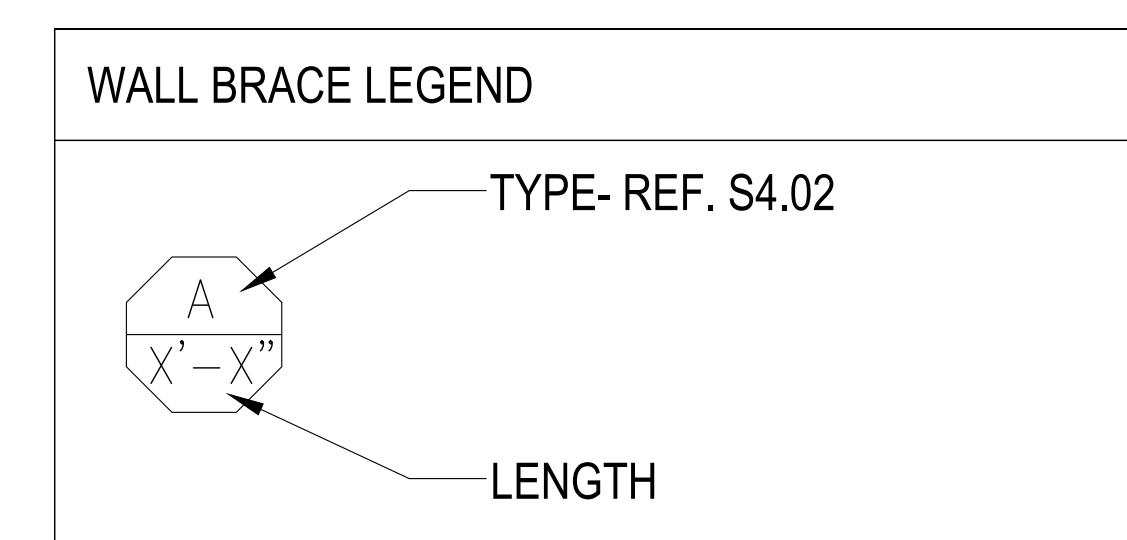
Sheet No.:

S2.01



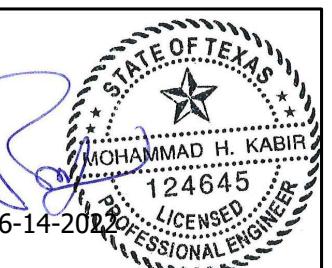
## 2ND FLOOR WALL BRACE PLAN

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



**Indrasena - New Residence**  
817 Brett Drive, Allen TX 75013

Seal:



**MK and Associates, Inc.**

400 Cristholm Place, Suite 106  
Plano, TX 75075  
D (214) 253-2906 : Email: info@mkaanc.com  
Firm REGISTRATION : F10656  
STRUCTURAL : CONST. ADMINISTRATION : PRJCT. MANAGEMENT

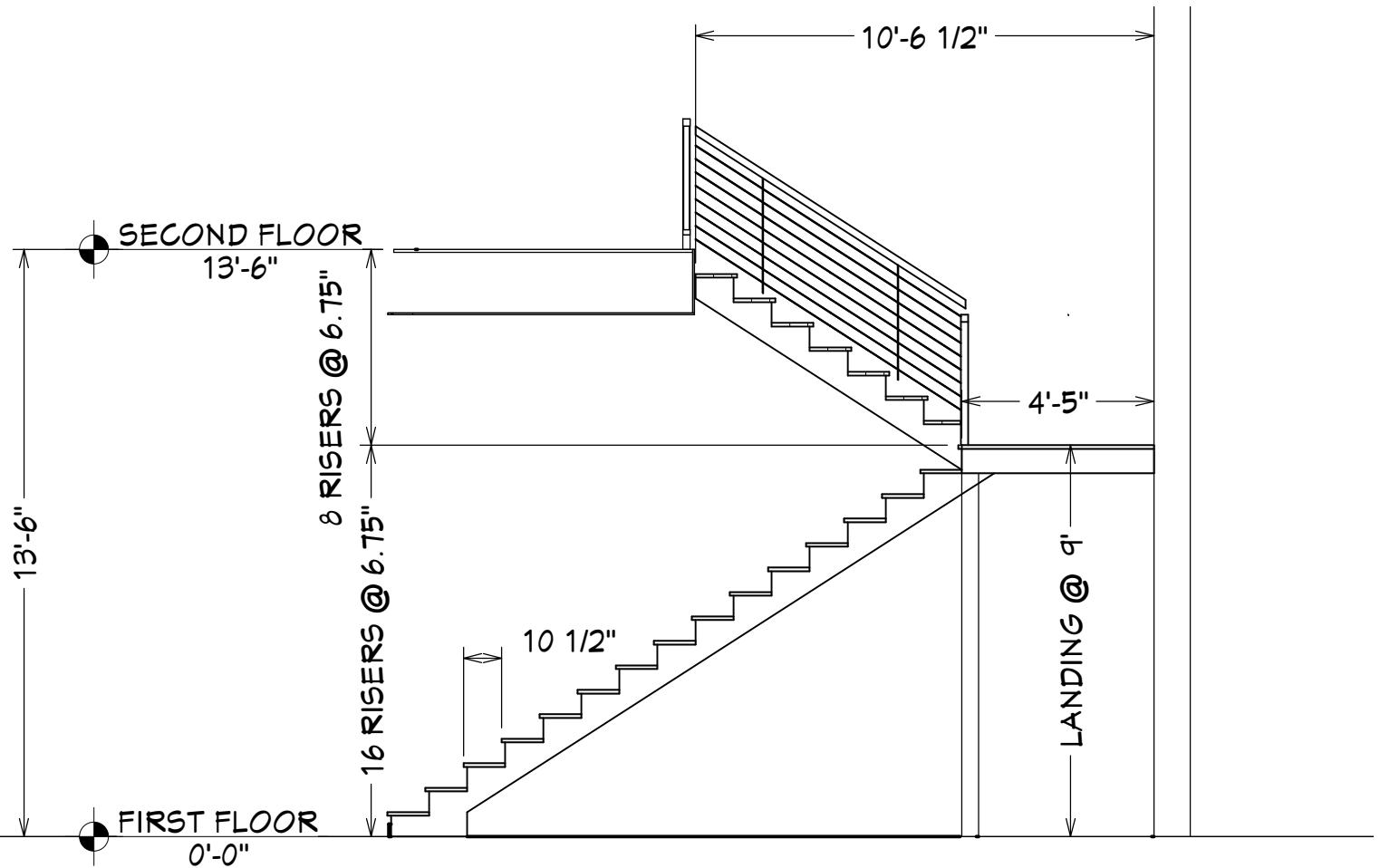
Revision:  
1\_06-30-22 STAIR LANDING

JOB No: 220035

Issue: 06-14-2022

Sheet Name: WALL BRACE PLAN 2ND FLOOR

Sheet No.: S2.02





Seal:

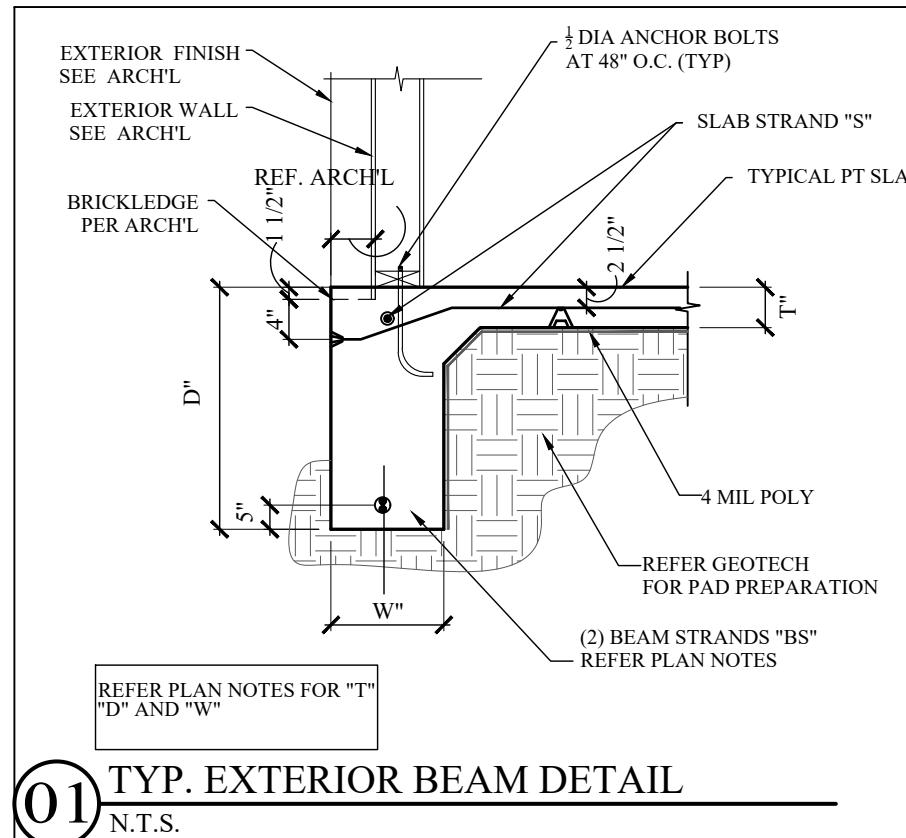


## Indrasena - New Residence

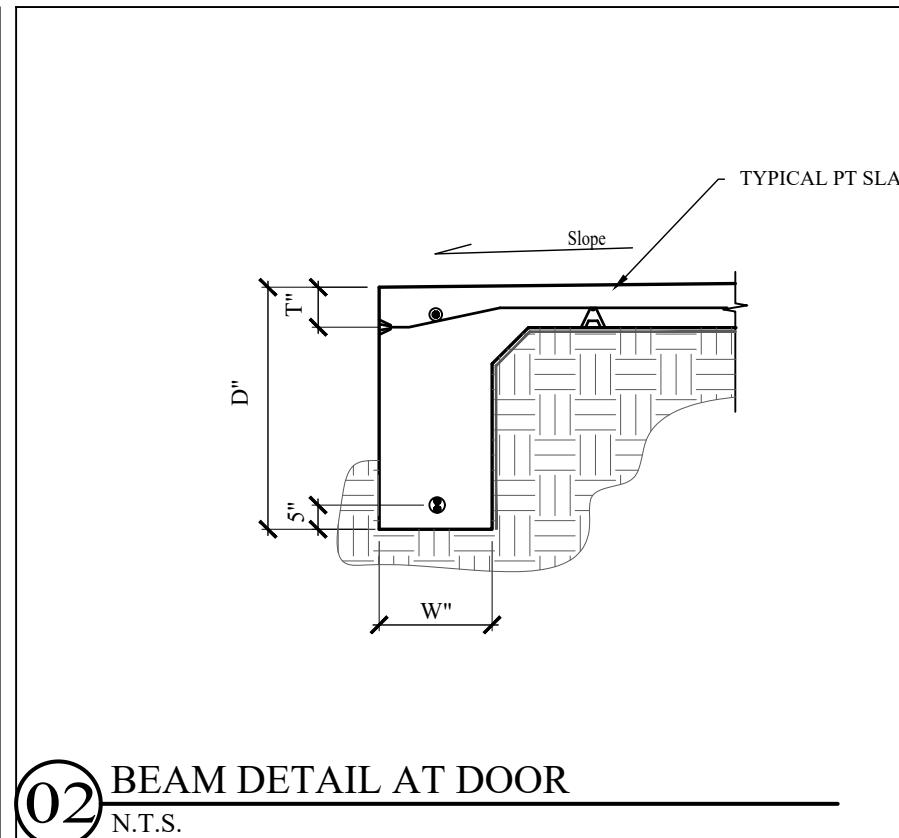
817 Brett Drive, Allen TX 75013

Revision:	1_06-30-22 STAIR LANDING
JOB No:	220035
Issue:	06-14-2022
Sheet Name:	FOUNDATION DETAILS
Sheet No.:	

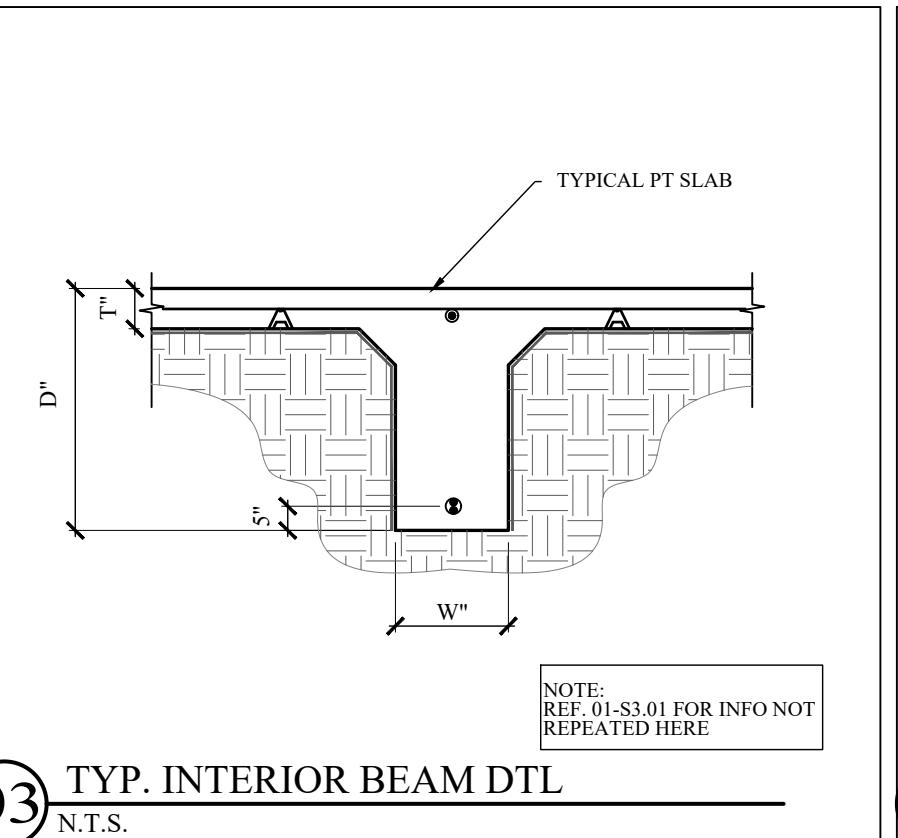
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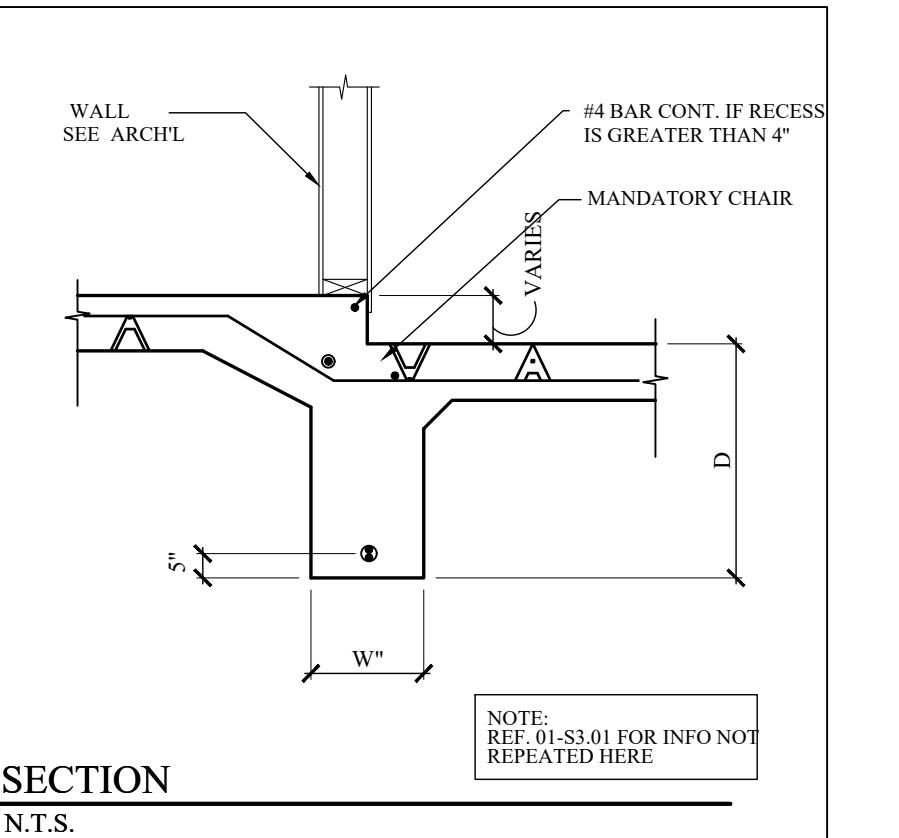
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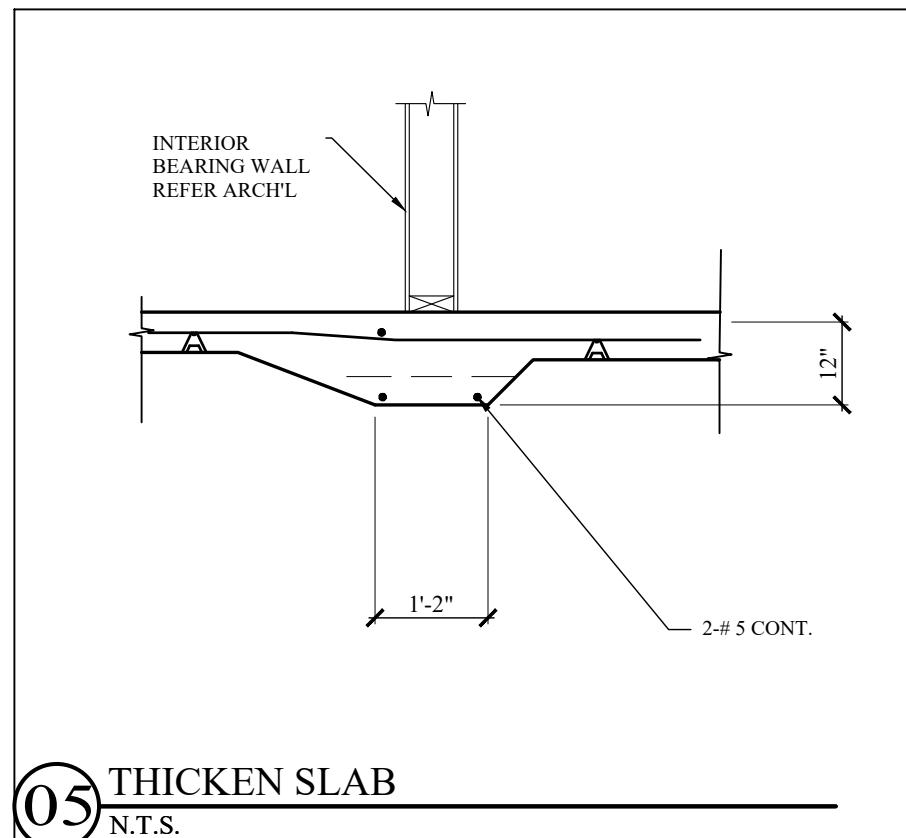
02 BEAM DETAIL AT DOOR  
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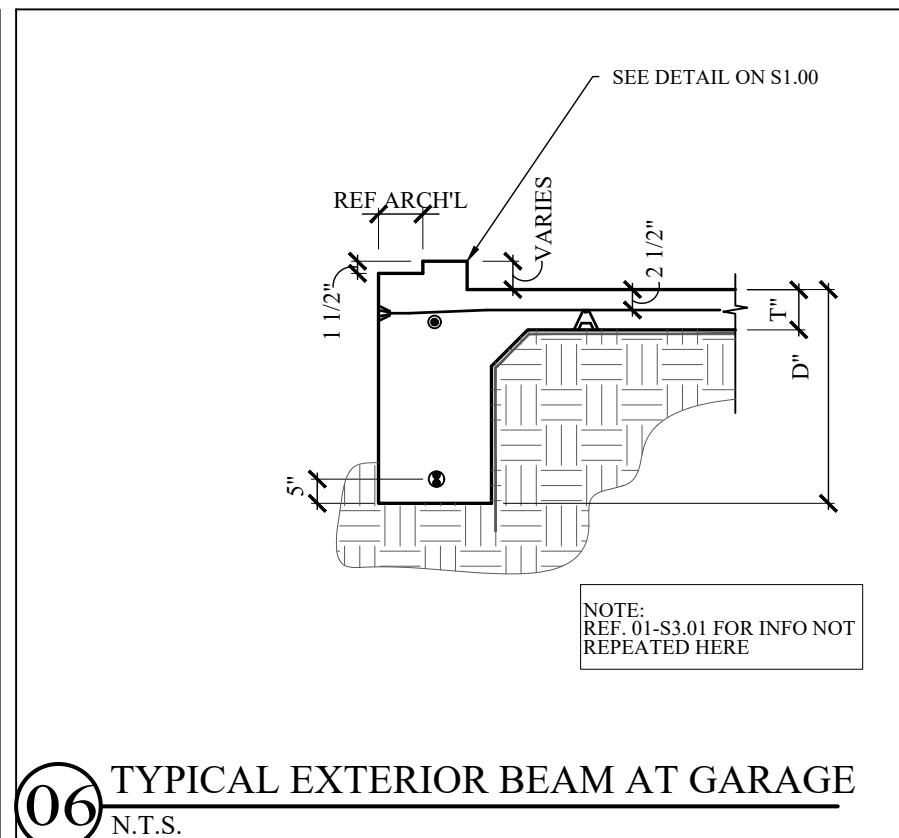
03 TYP. INTERIOR BEAM DTL  
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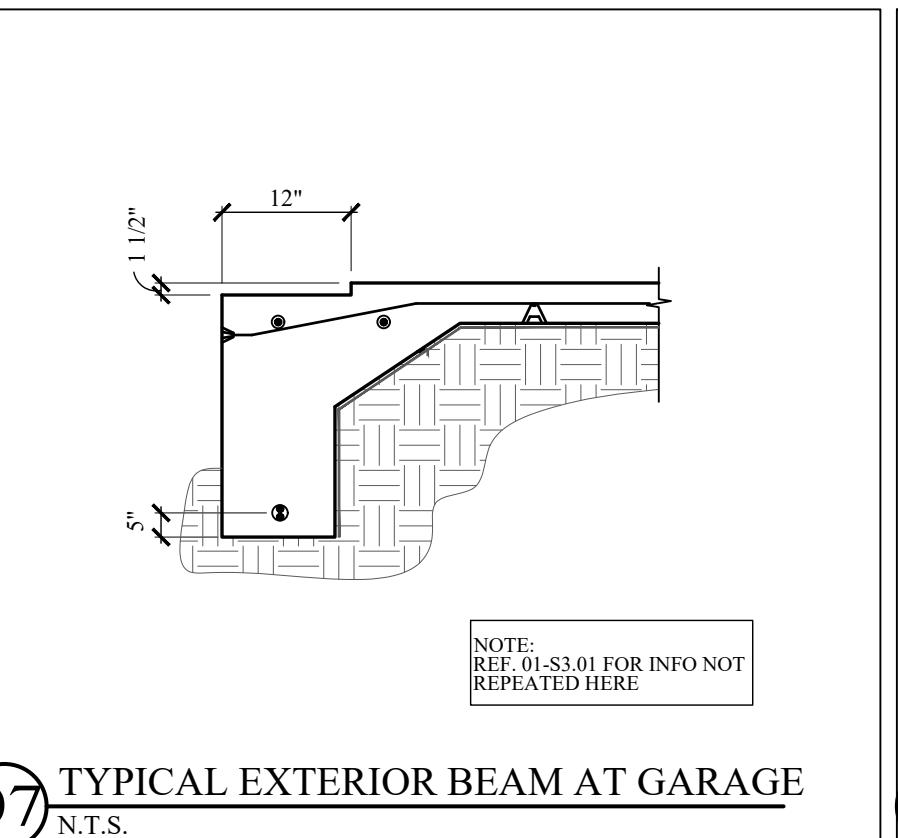
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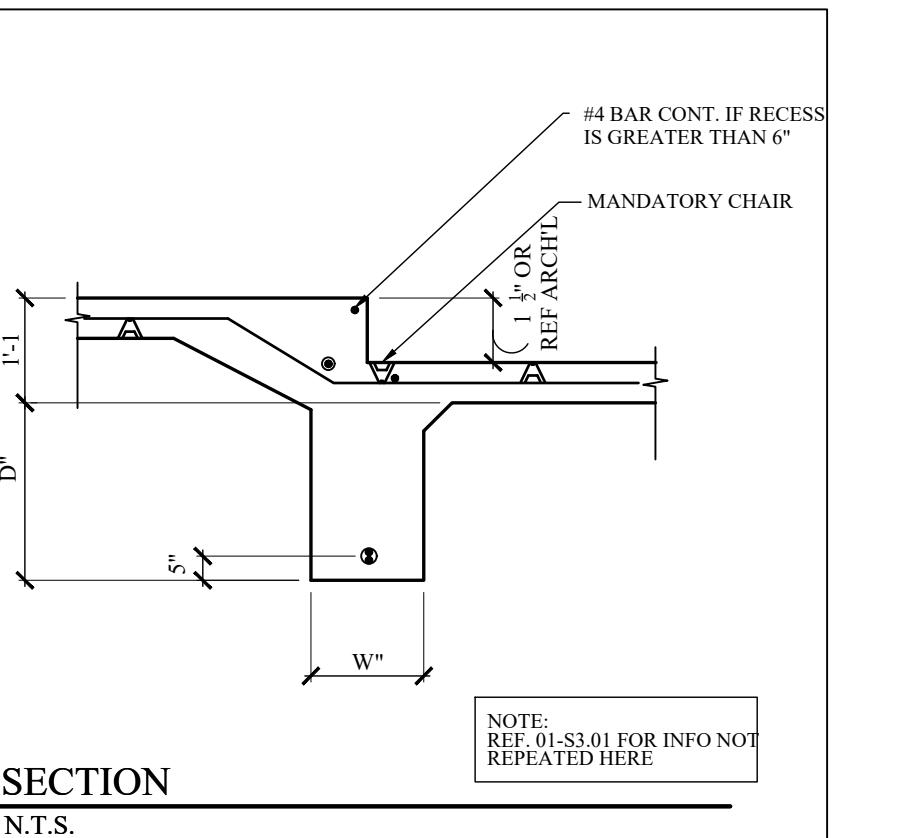
05 THICKEN SLAB  
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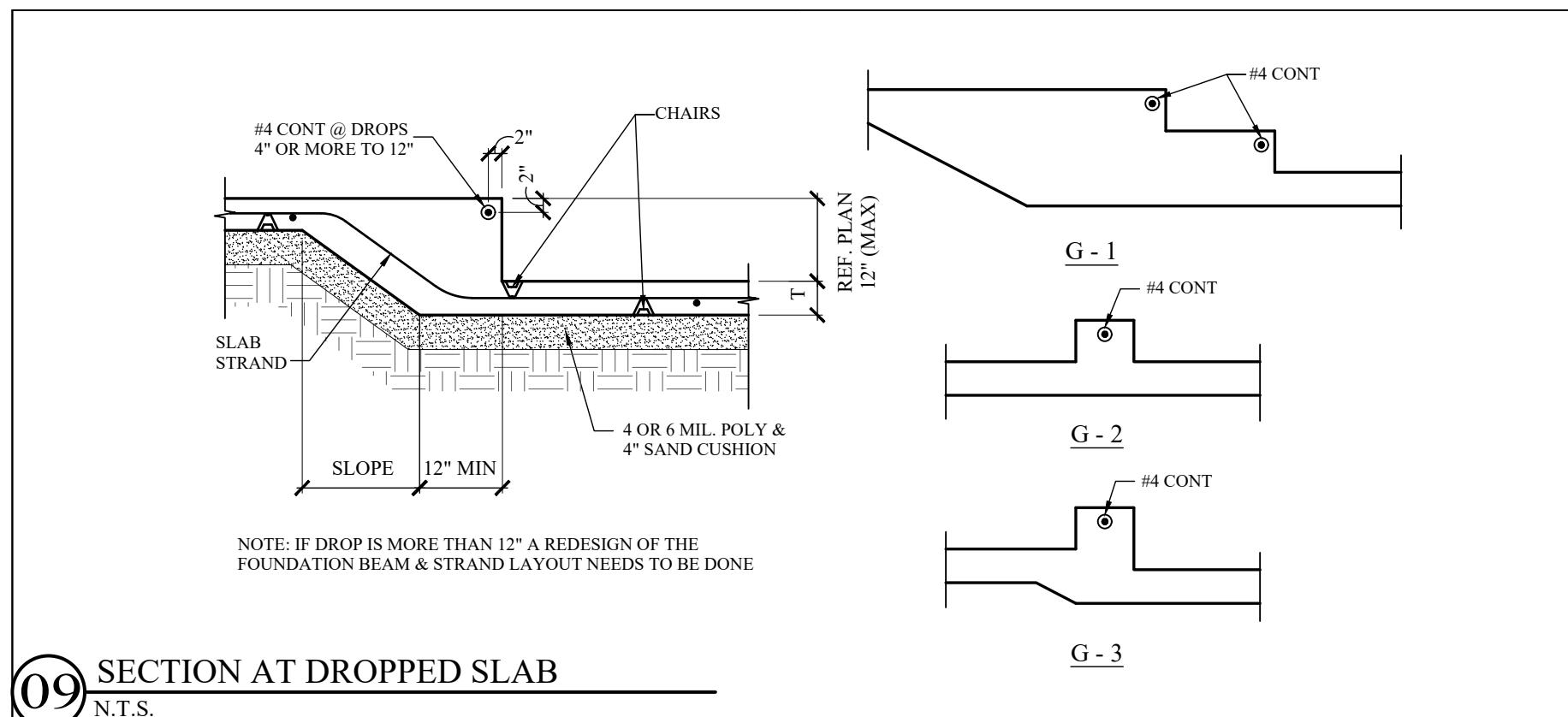
06 TYPICAL EXTERIOR BEAM AT GARAGE  
N.T.S.



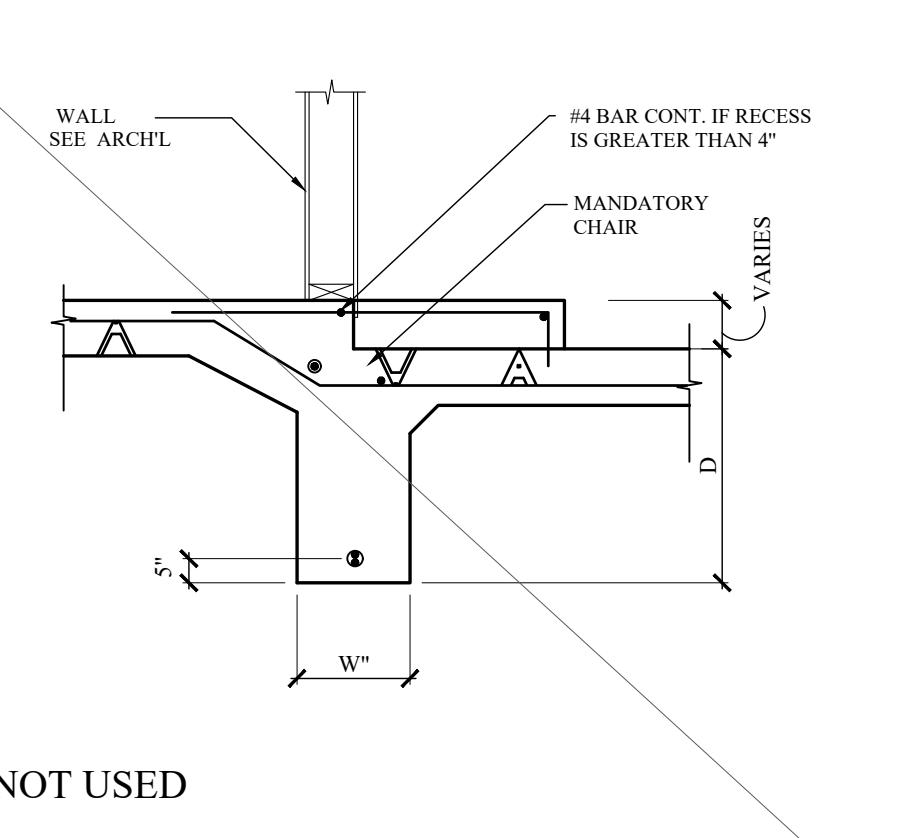
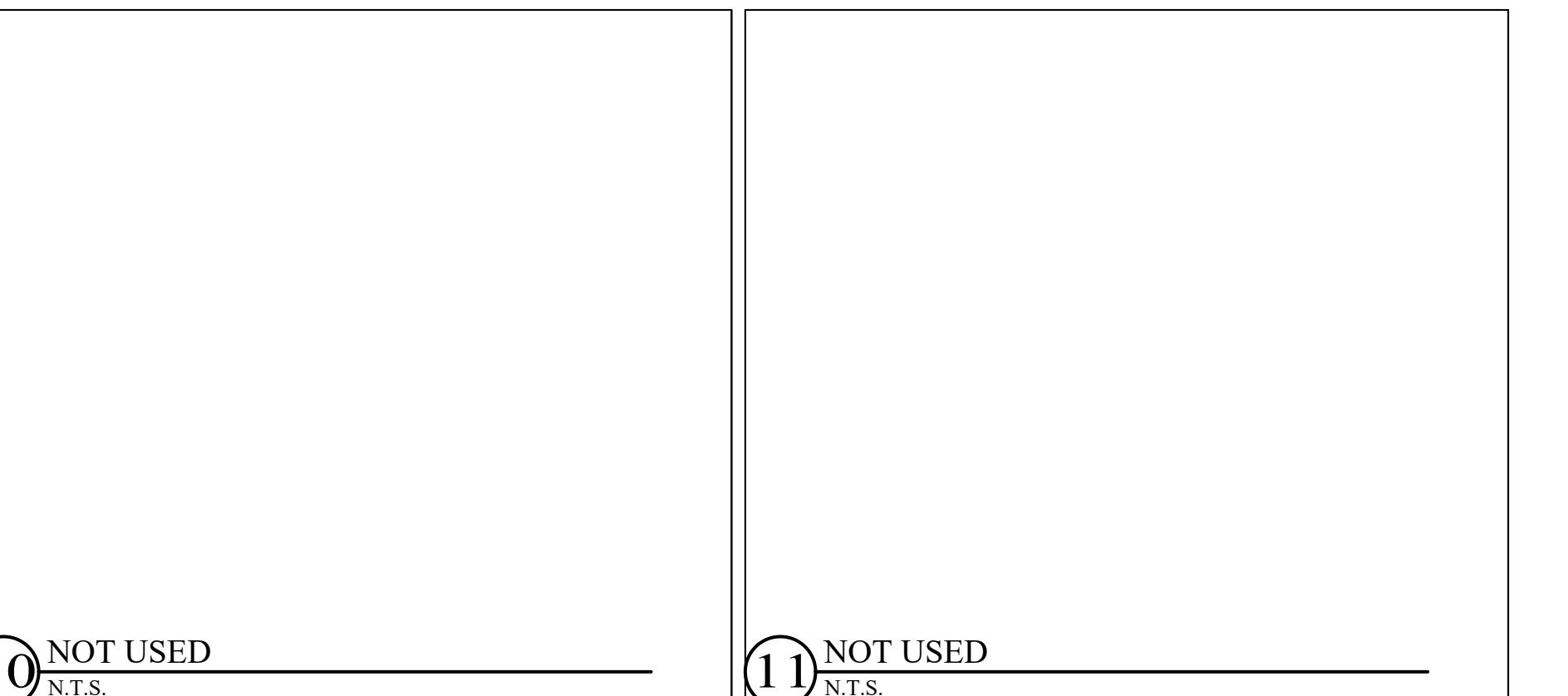
07 TYPICAL EXTERIOR BEAM AT GARAGE  
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08 SECTION  
N.T.S.

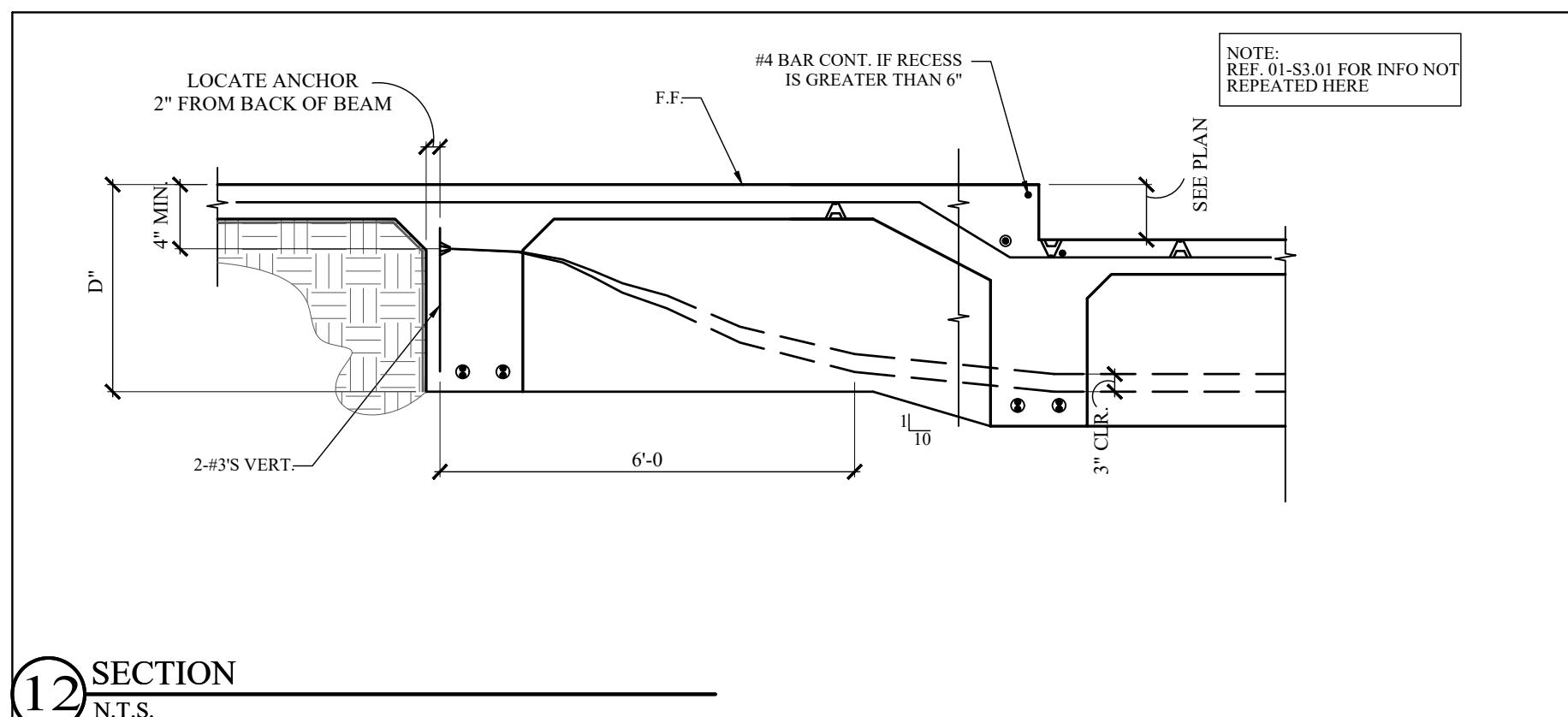


09 SECTION AT DROPPED SLAB  
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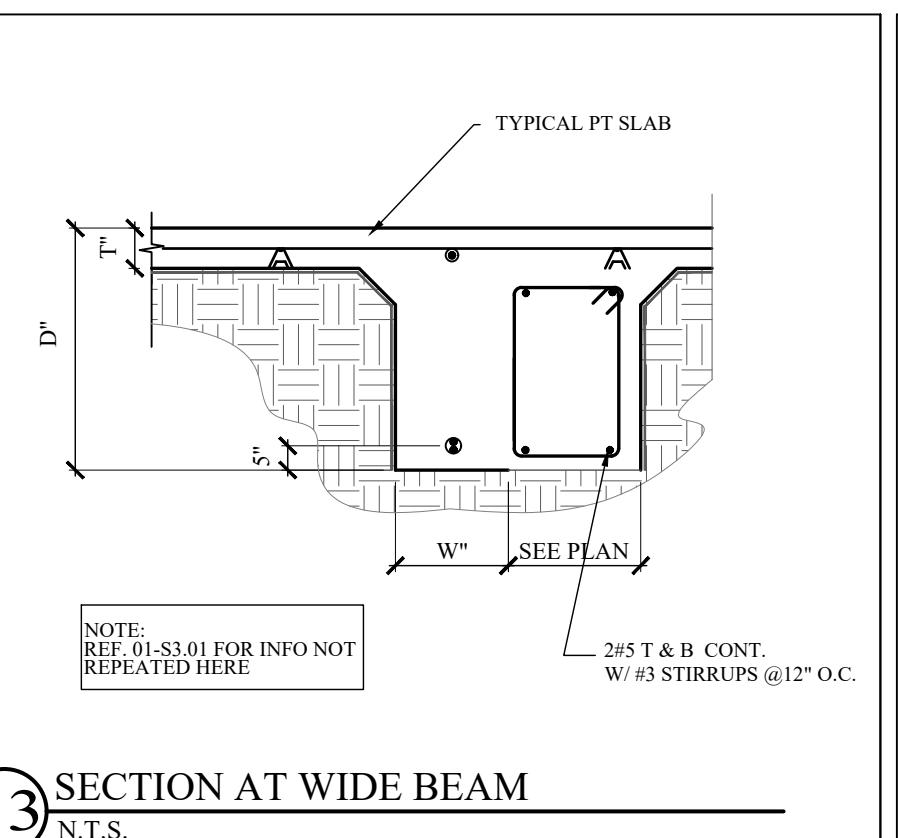


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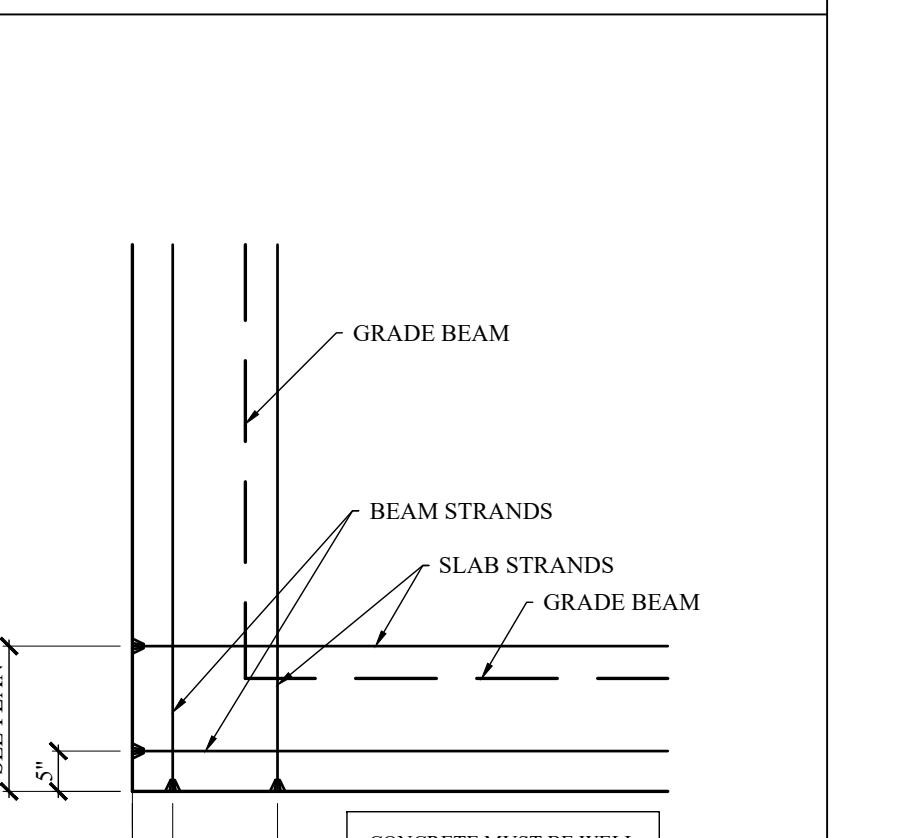
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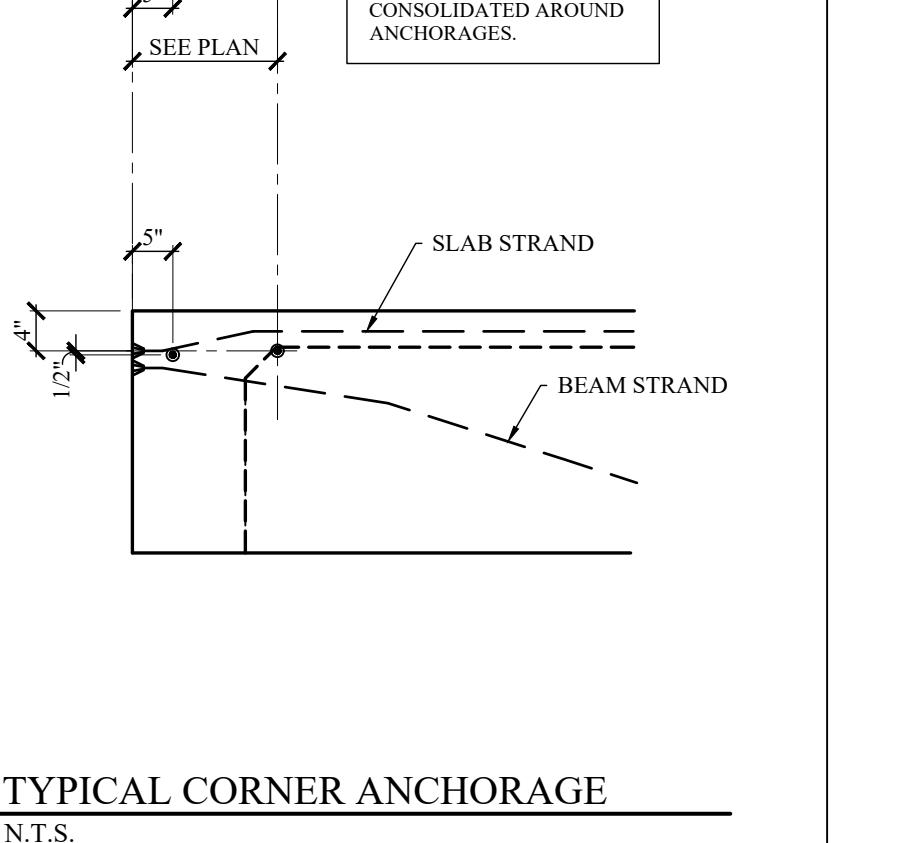
12 SECTION  
N.T.S.



13 SECTION AT WIDE BEAM  
N.T.S.



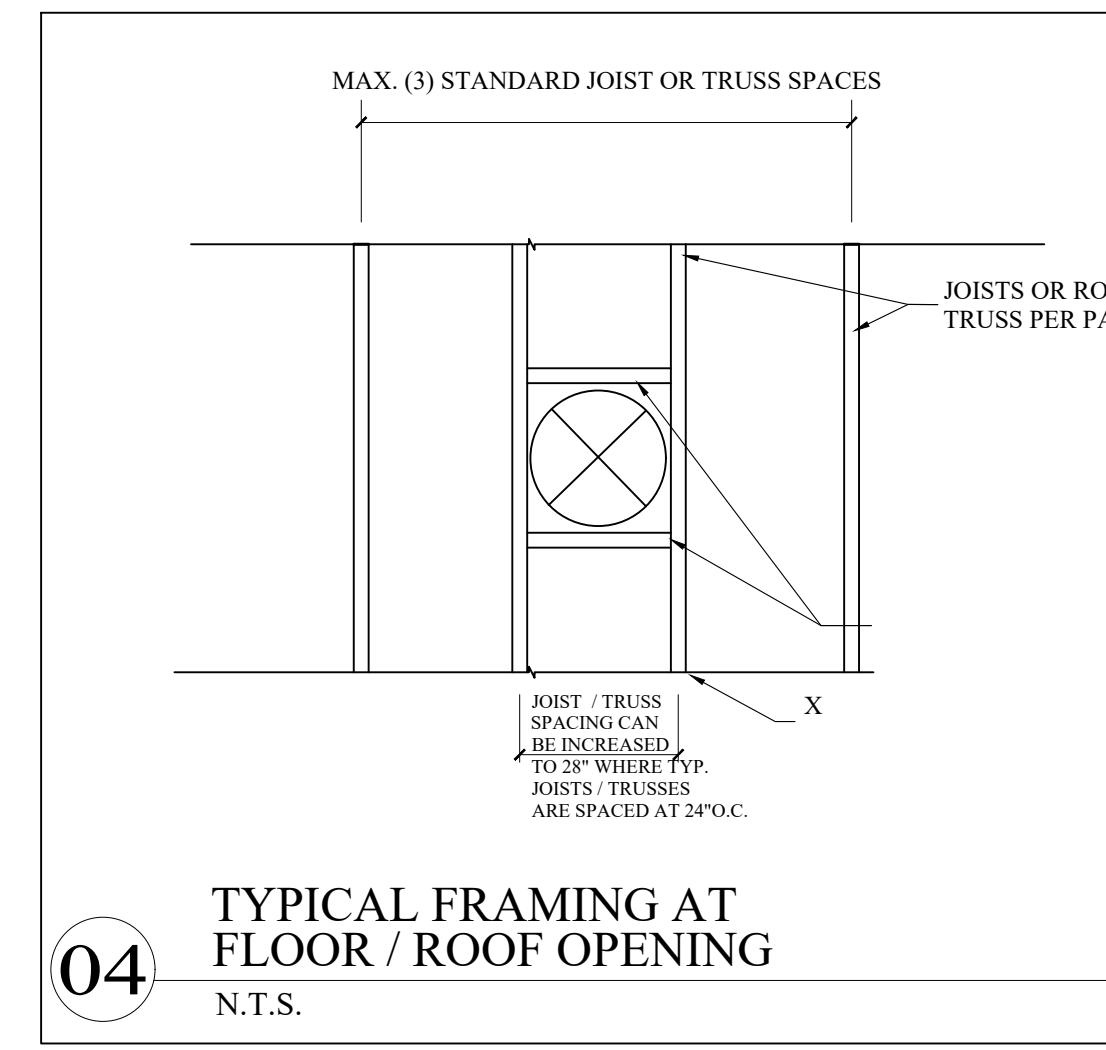
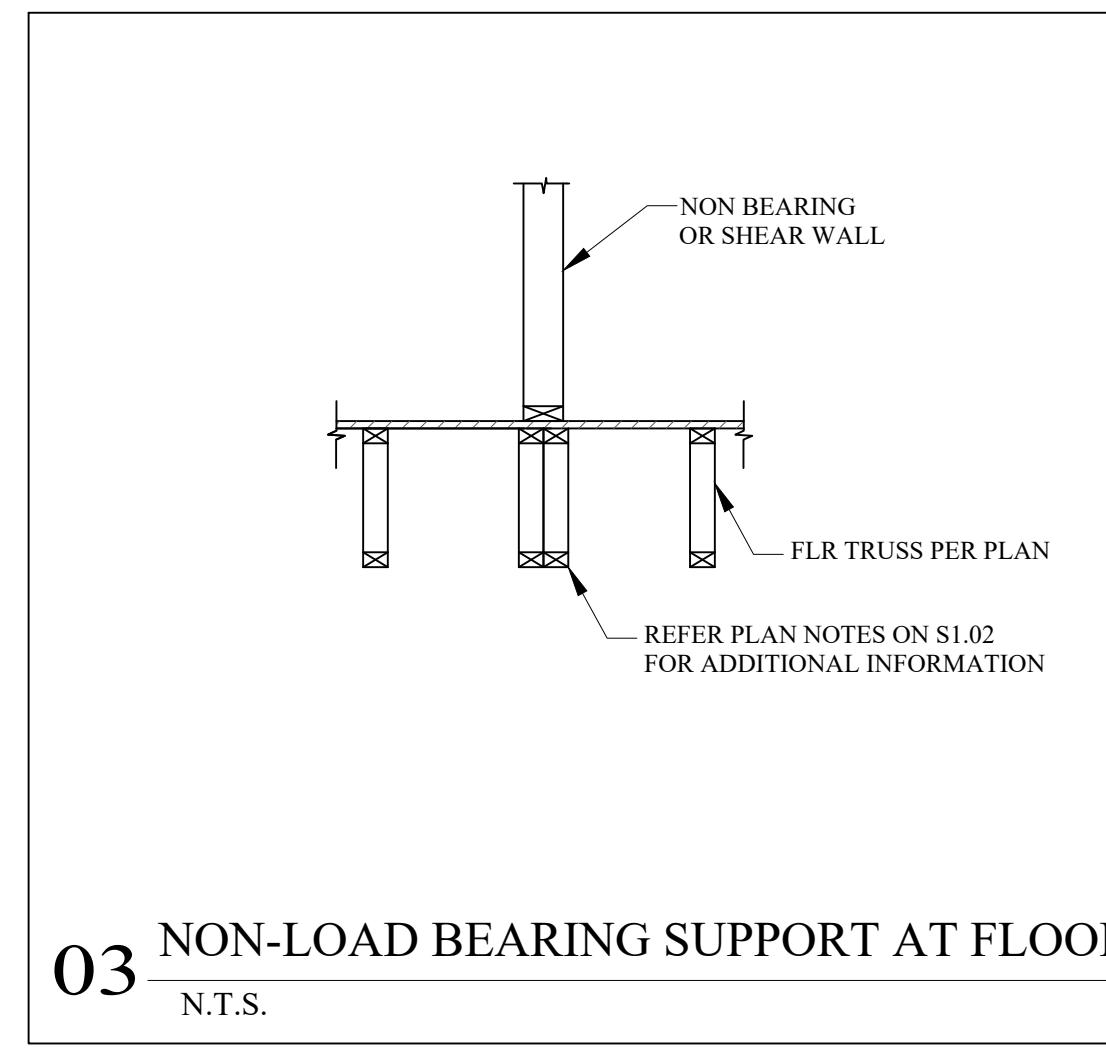
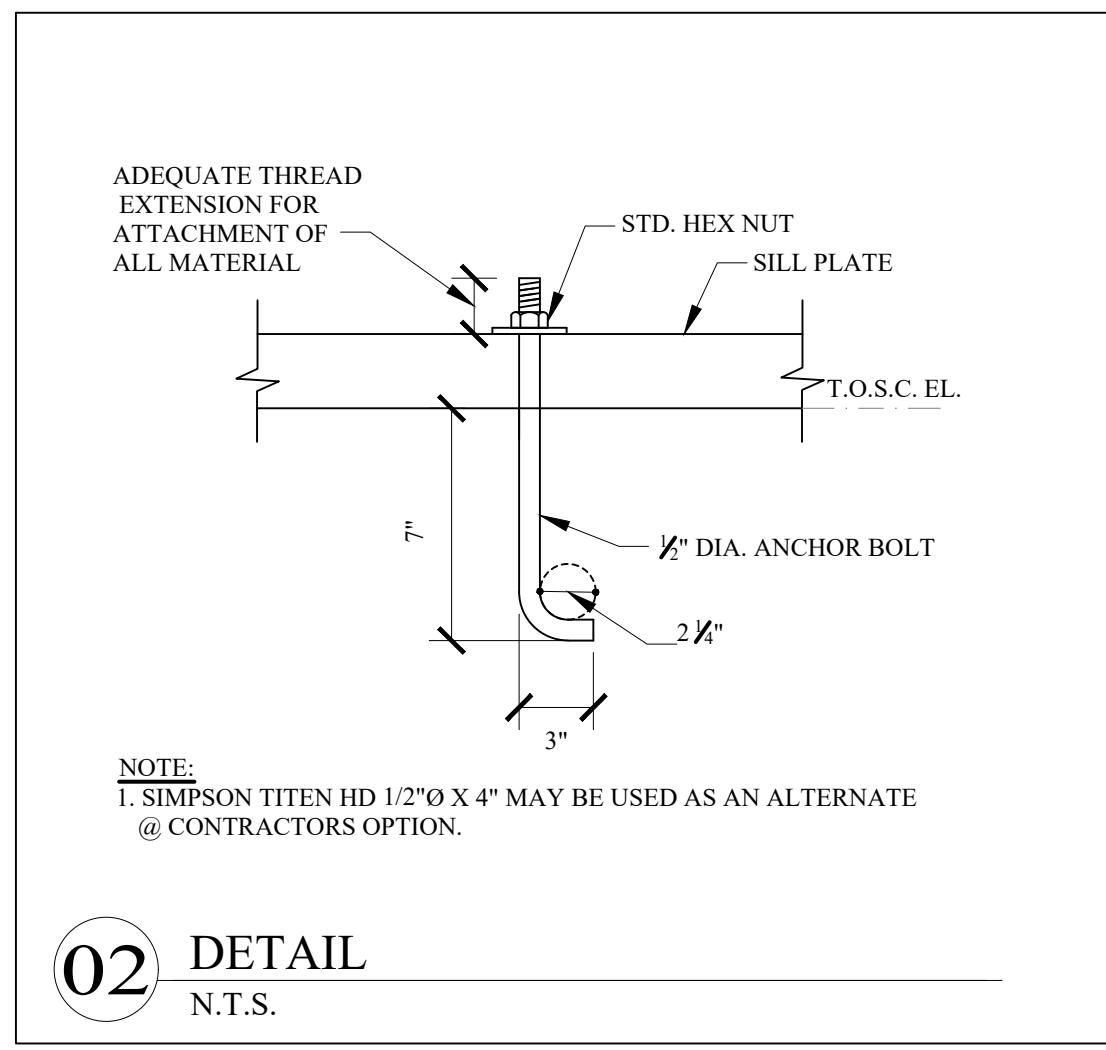
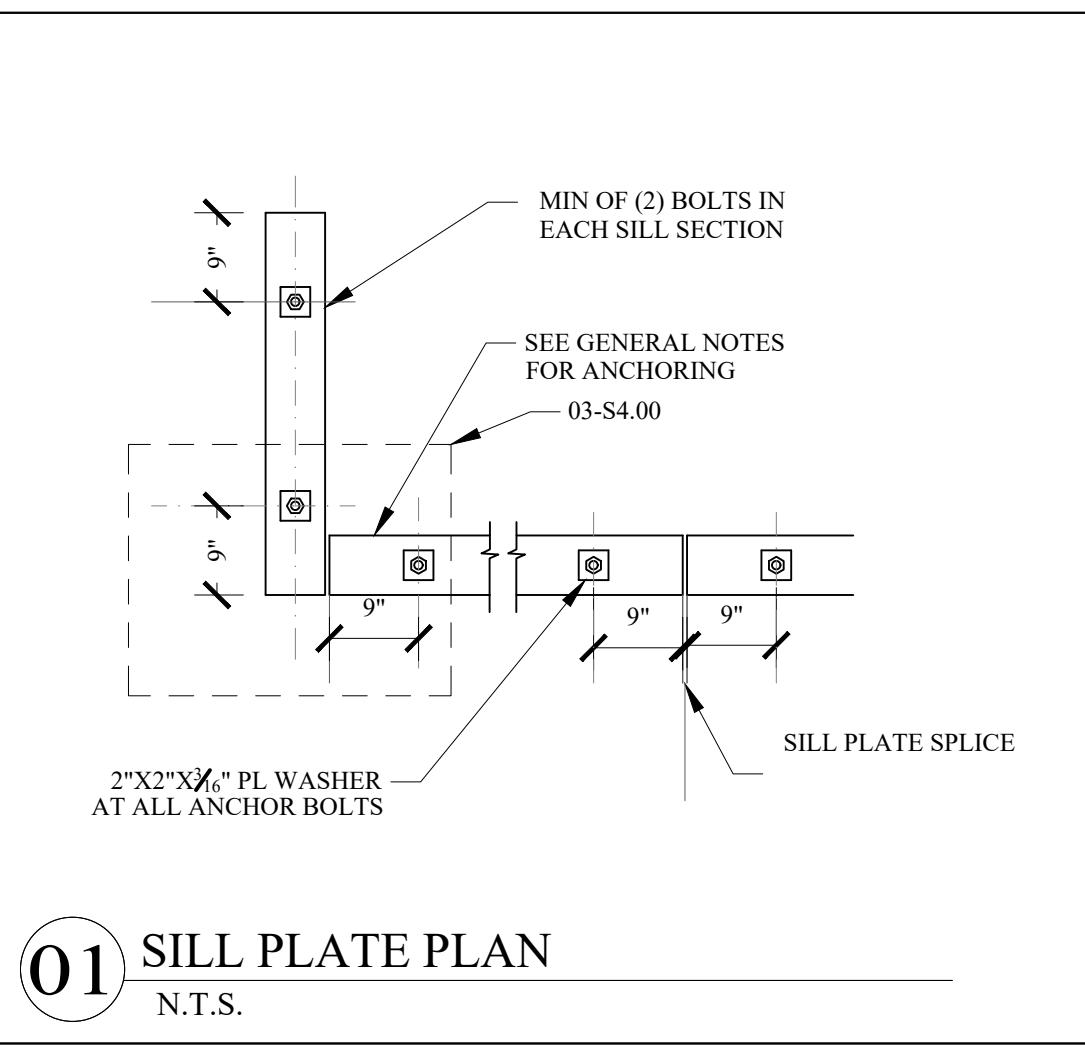
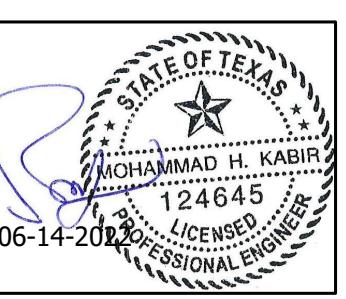
14 TYP. GRADE BEAM REINF. DETAIL  
N.T.S.



15 TYPICAL CORNER ANCHORAGE  
N.T.S.

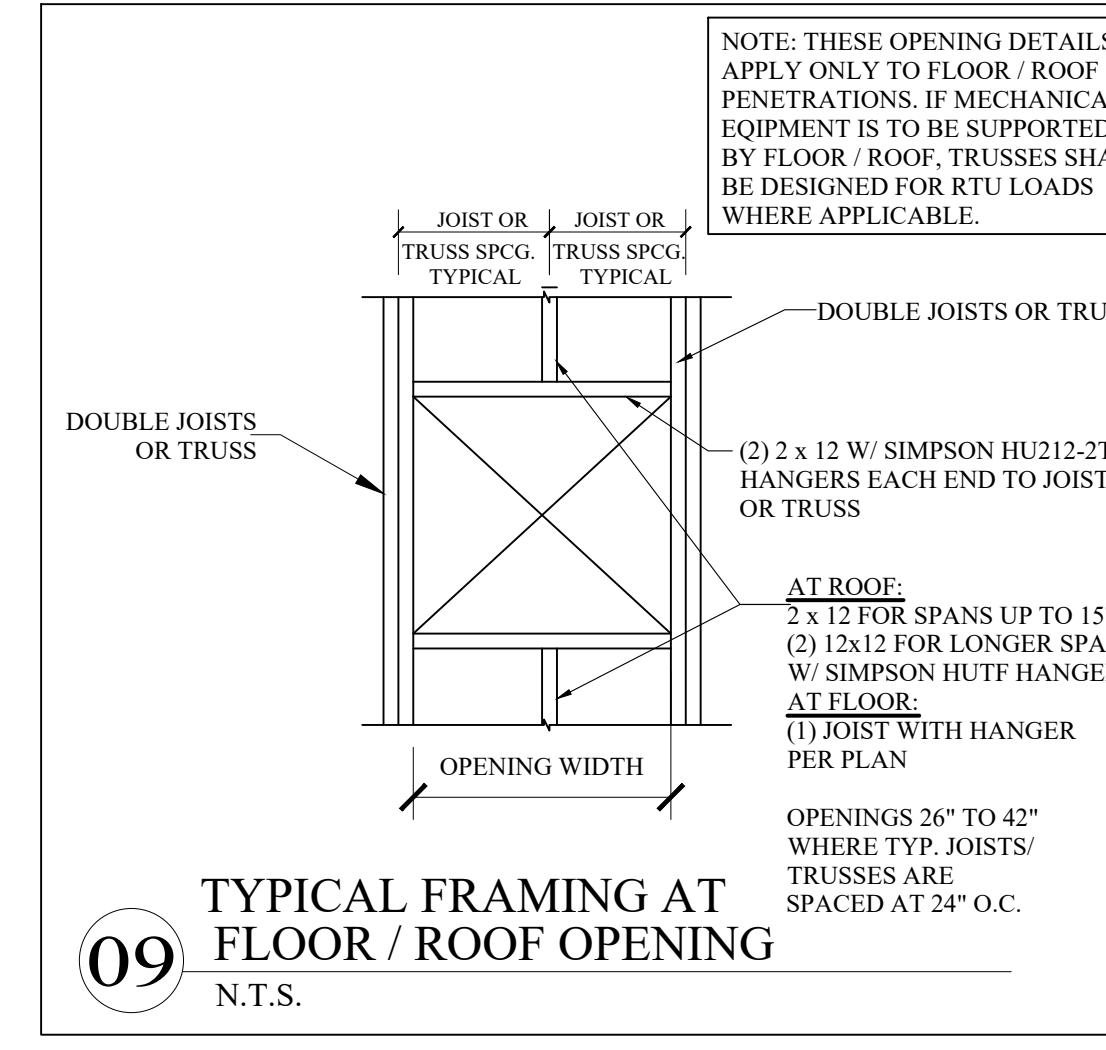
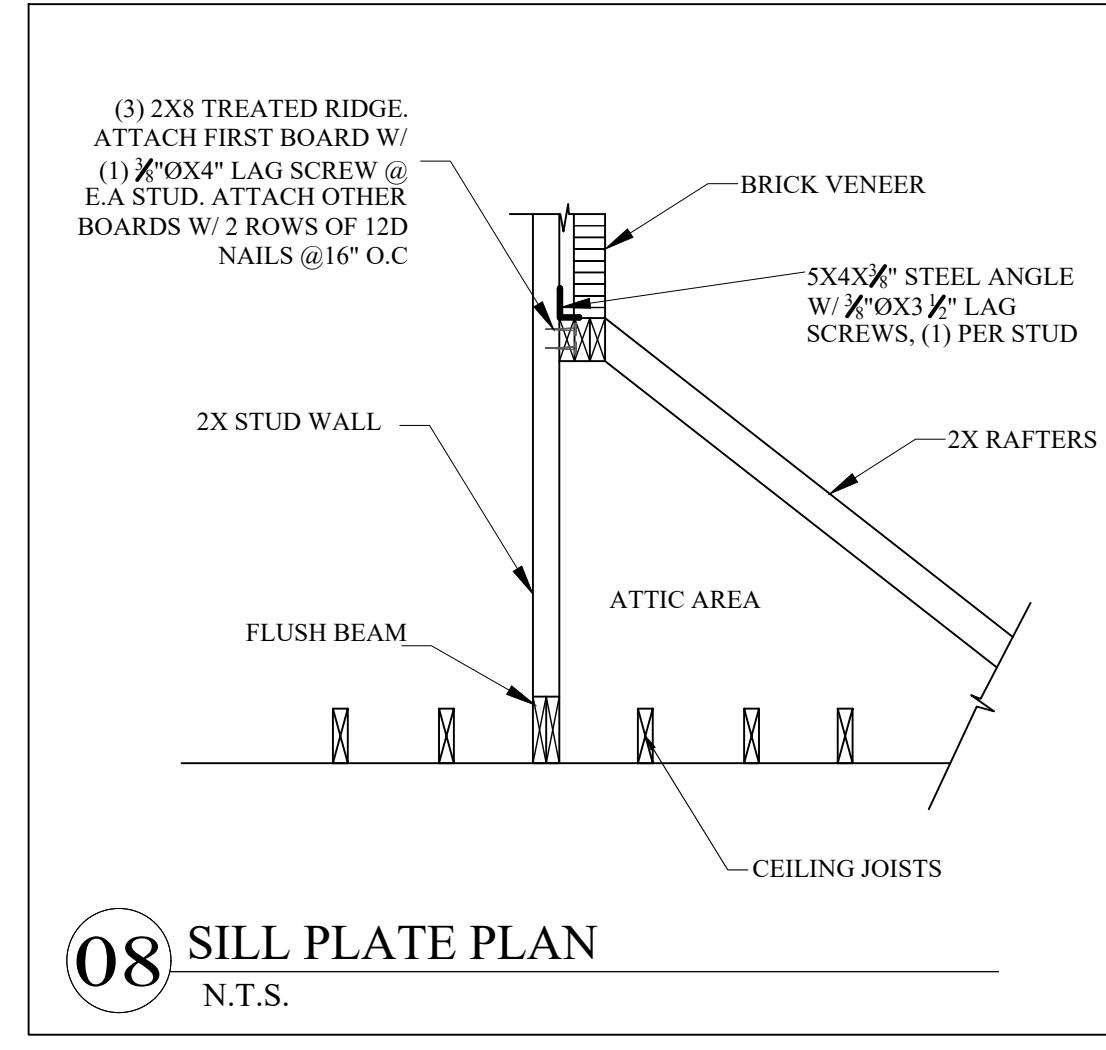
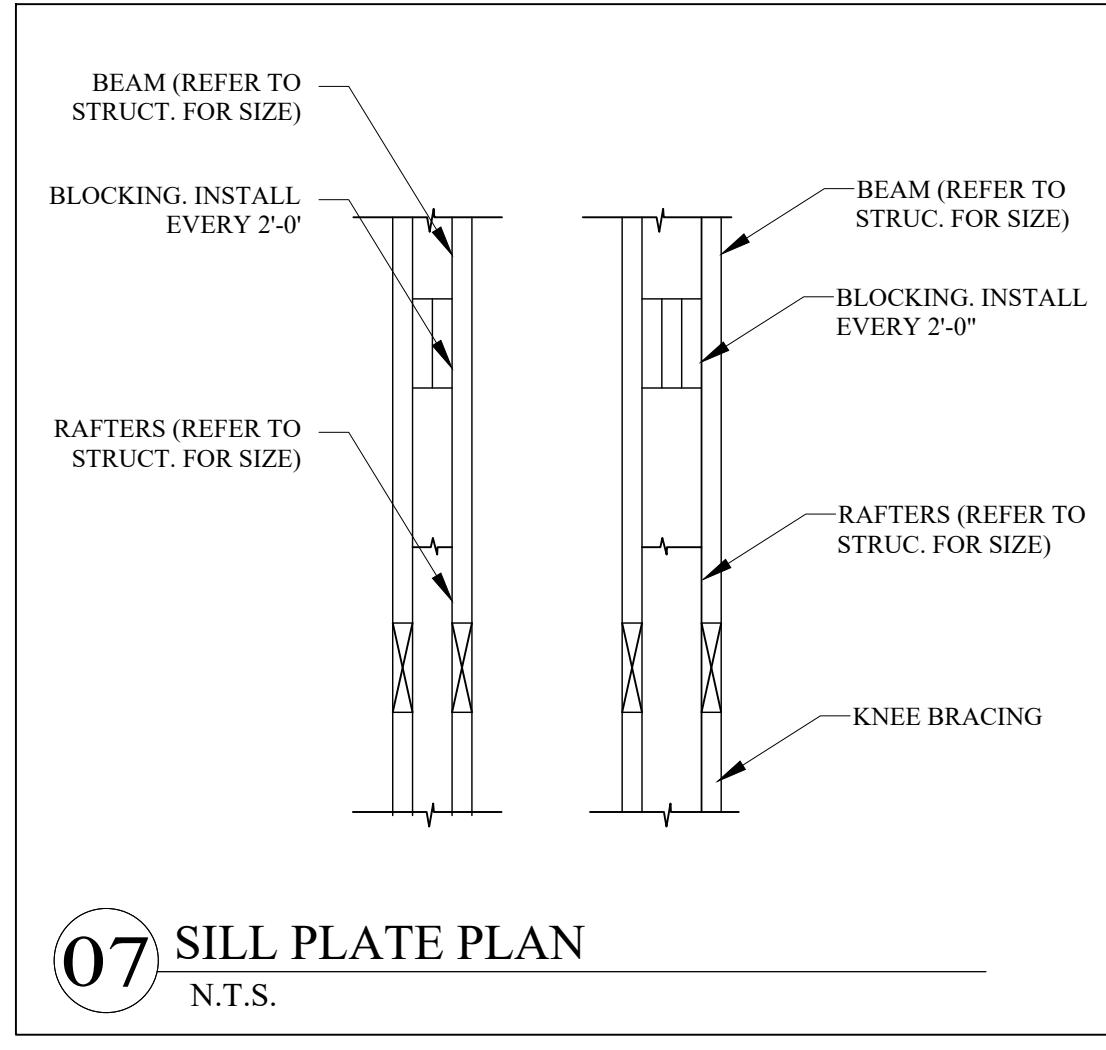
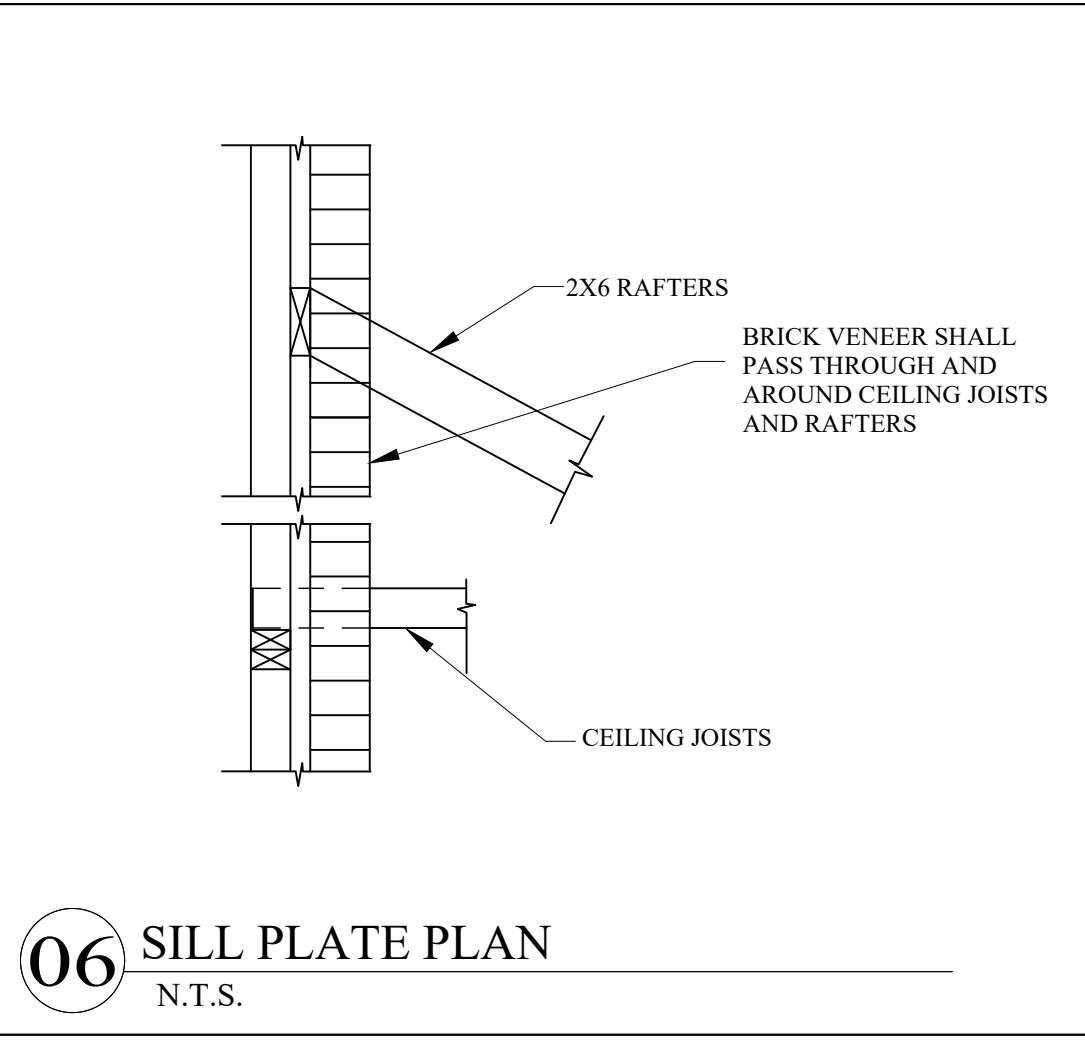


Seal:



HANGER SCHEDULE				
SIZE/TYPE	1-PLY	2-PLY	3-PLY	
4-PLY				
2X6	LUS26	LUS26-2	LUS26-3	-
2X8	LUS26	LUS26-2	LUS26-3	-
2X10	LUS210	LUS210-2	LUS210-3	-
2X12	LUS210	LUS210-2	LUS210-3	-
9 1/2" LVL	HUS1.81/10	HUS410	HU610	HHUS7.25/10
11 7/8" LVL	HUS1.81/10	HHUS410	HHUS5.50/10	HHUS7.25/10
14" LVL	HUS1.81/10	HUS410	HHUS5.50/10	HHUS7.25/14
16" LVL	-	HHUS410	HHUS5.50/14	HHUS7.25/14

NOTE:  
1) ALL CONNECTORS SHALL BE BY SIMPSON OR EQ.  
2) ALL CONNECTORS SHALL BE INSTALLED PER MNFR'S SPECIFICATIONS.



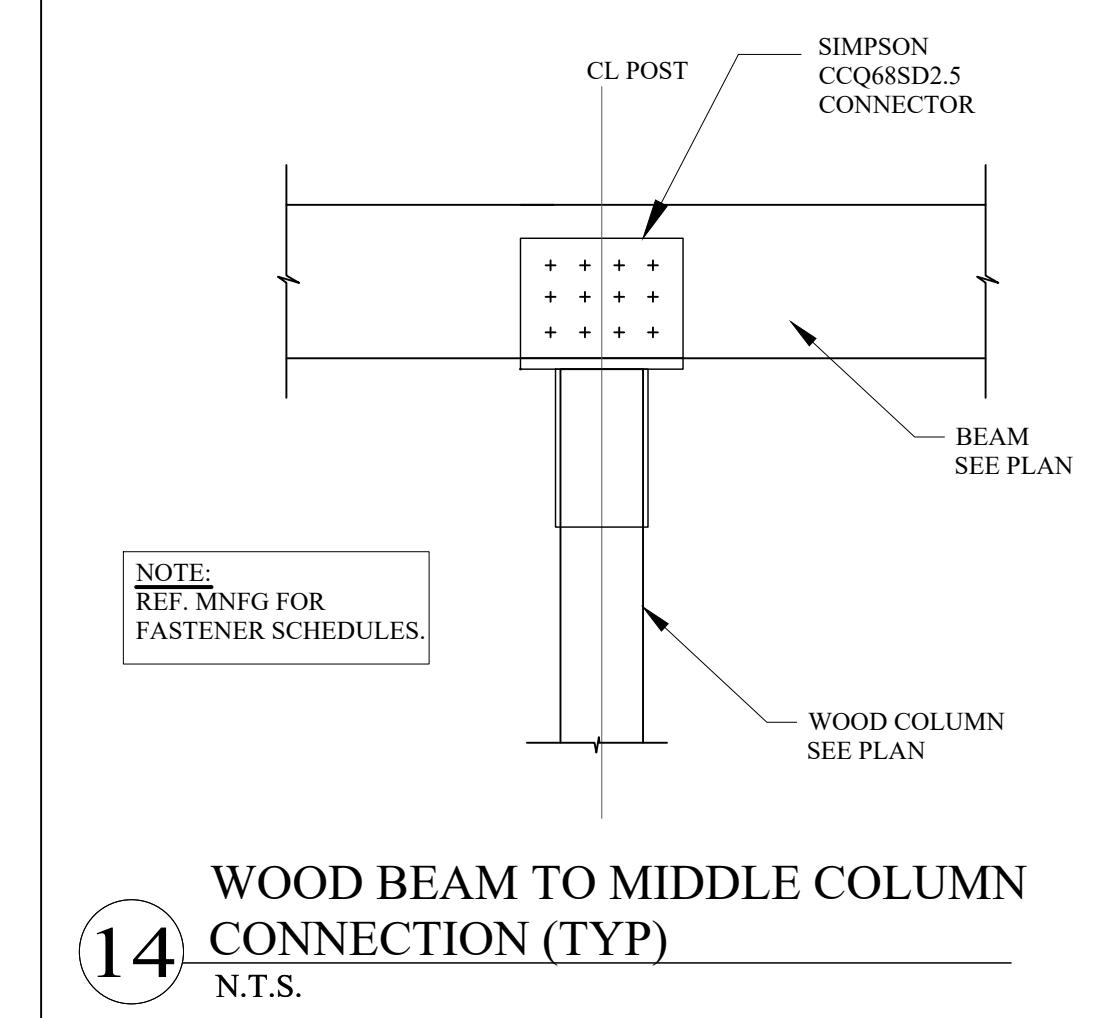
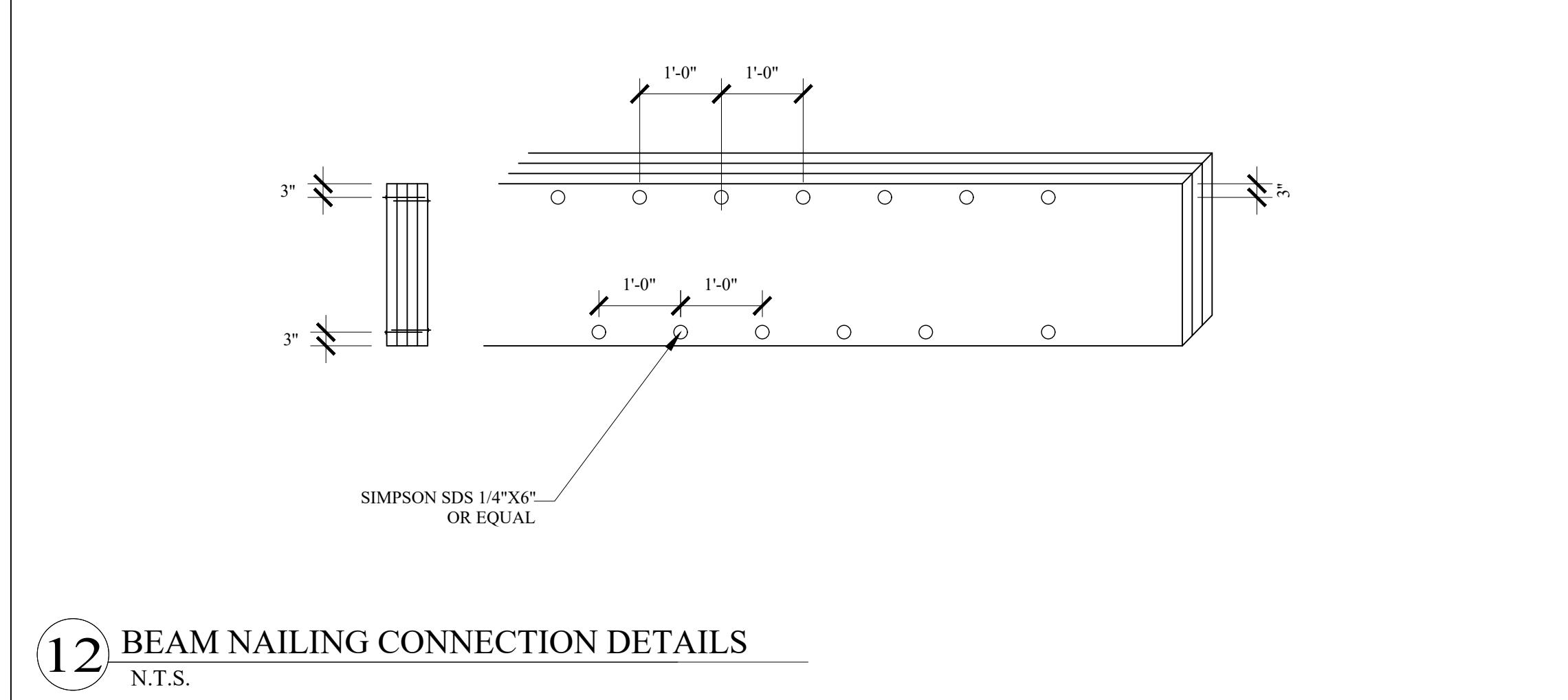
BRICK LINTEL SCHEDULE		
CLEAR SPAN	SUPPORT ON EACH END	STEEL ANGLE
5'-0" OR LESS	3"	L3-1/2x3-1/2x1/4"
7'-0"	6"	L4x3-1/2x5/16"
8'-0"	6"	L5x3-1/2x5/16"
9'-0"	8"	L5x3-1/2x3/8"
10'-0"	8"	L6x3-1/2x3/8"
16'-0"	12"	*L8x4-1/2"

\* INDICATES REQUIREMENT FOR HOLES IN VERTICAL LEG @ 16" O.C. FOR 3-1/2" LAG BOLTS (LOOSELY SECURED TO HEADER BEAM TO PREVENT ROTATION).

ROOF BRACING SCHEDULE		
TYPICAL ROOF BRACING	HT.	REQUIREMENTS
	1 - 8FT.	2X4 "T" BRACING 2X4
	9 - 16 FT.	2X6/2X6 "T" BRACING 2X6
	17 - 25 FT.	2X8/2X8 "T" BRACING 2X8

**11 ROOF BRACING**  
VERTICAL STUD: RUN PAST HEADER  
16d @12" O.C. STAGGERED, BOTH SIDES  
WOOD HEADER  
(2) 16d NAILS AT HEADER  
16d NAILS @12" O.C.  
DOUBLE STUDS UNDER HEADER NAILED TO OPENING WIDTHS GREATER THAN 5'-0" AND UNDER ALL LVL

**12 BEAM NAILING CONNECTION DETAILS**  
N.T.S.



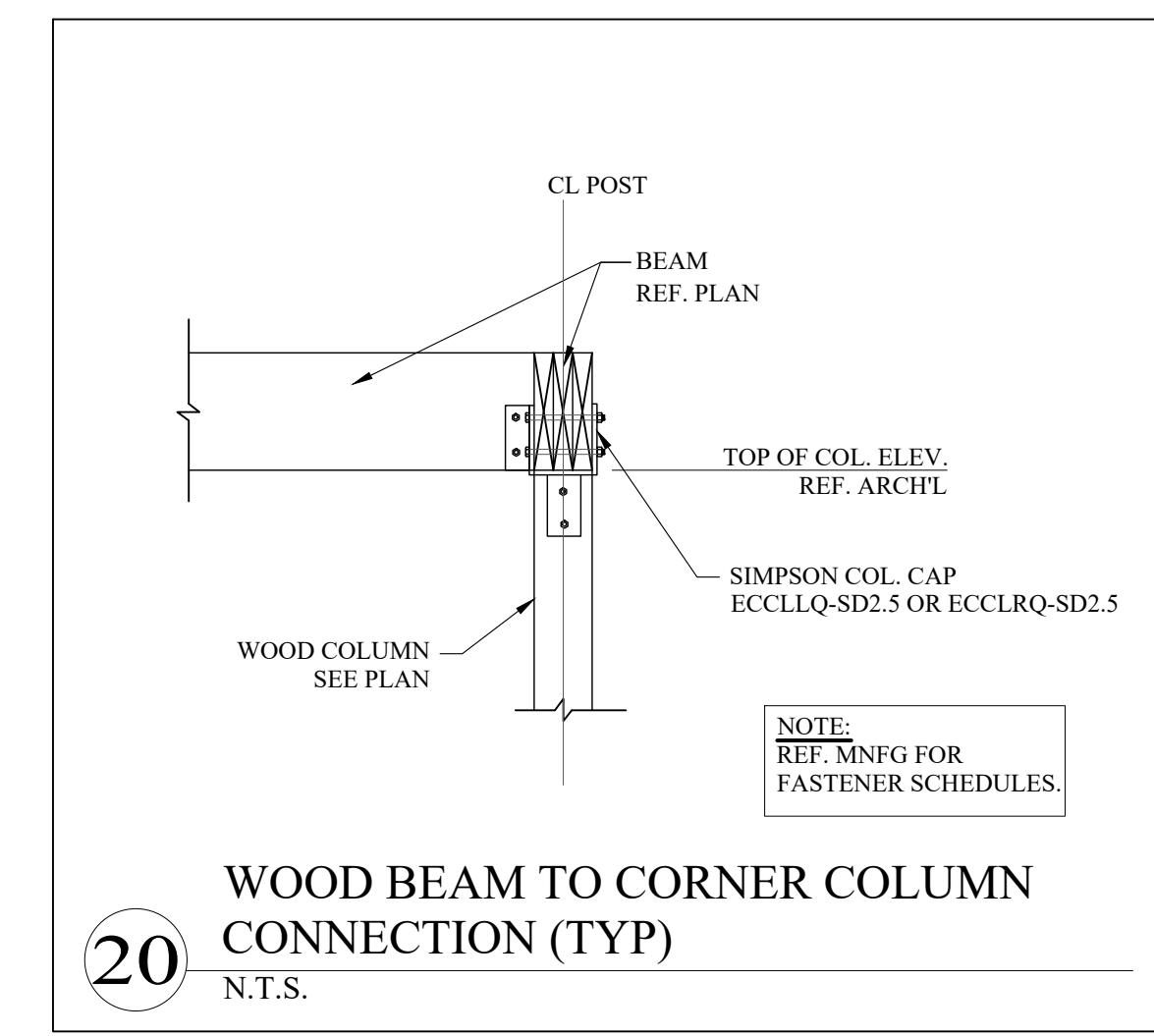
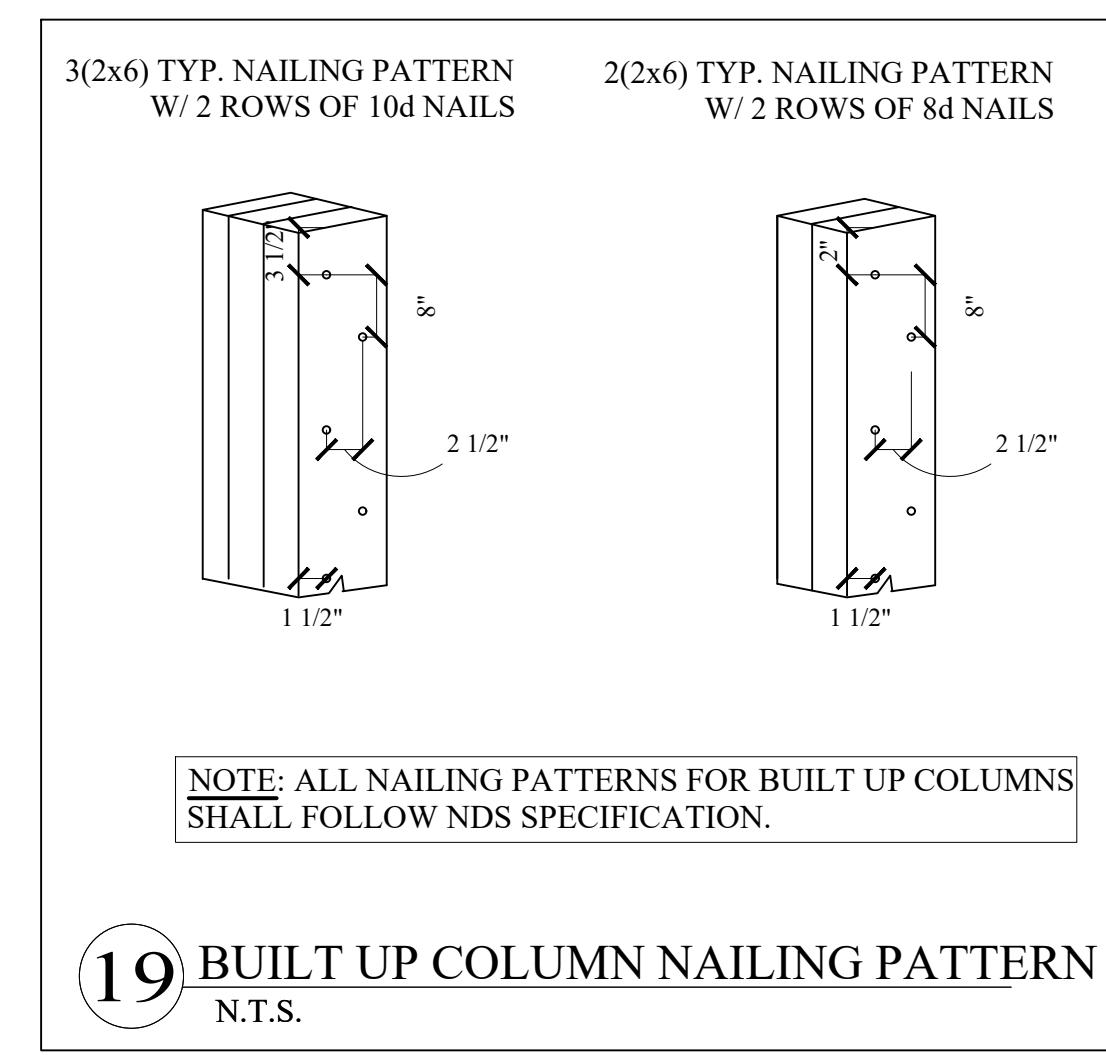
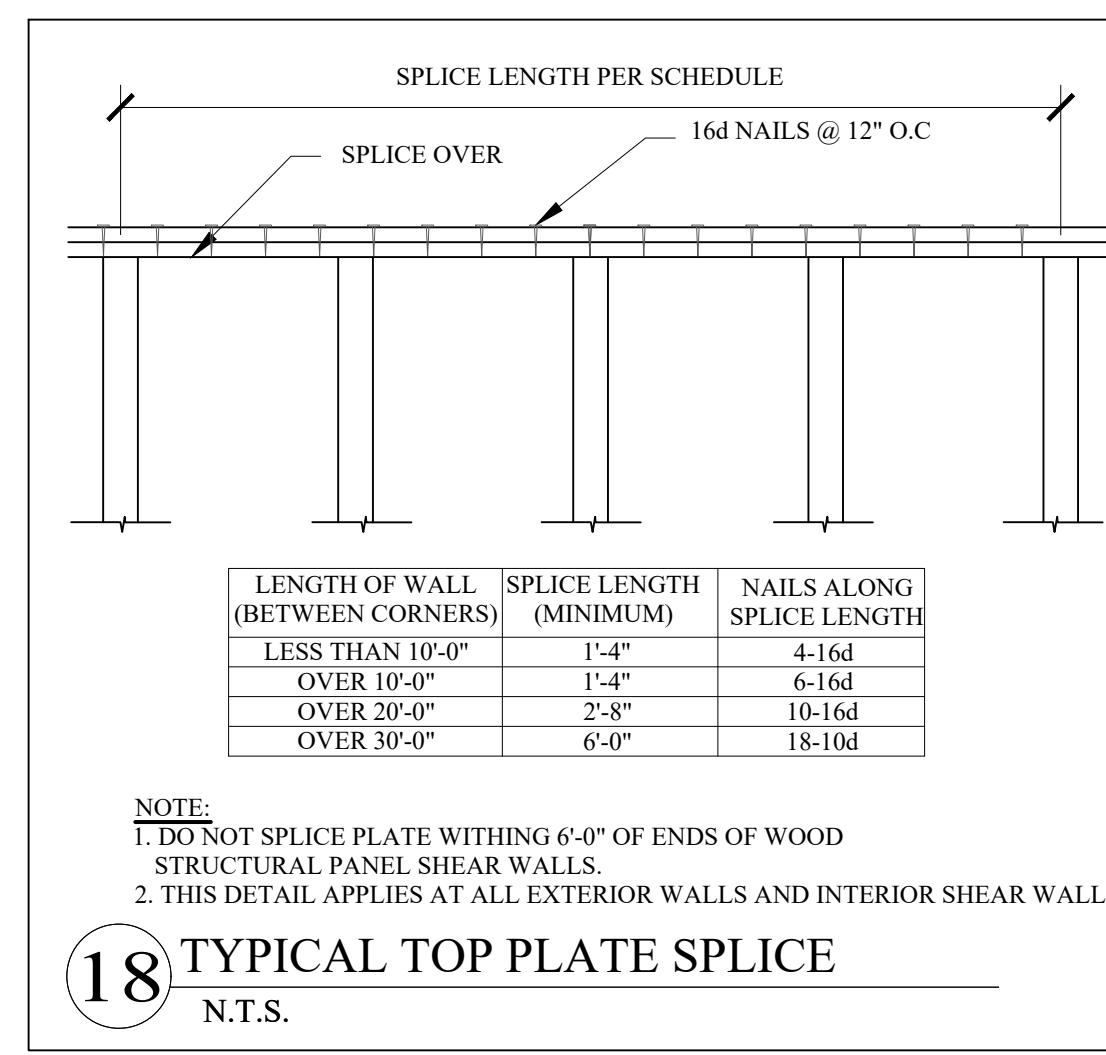
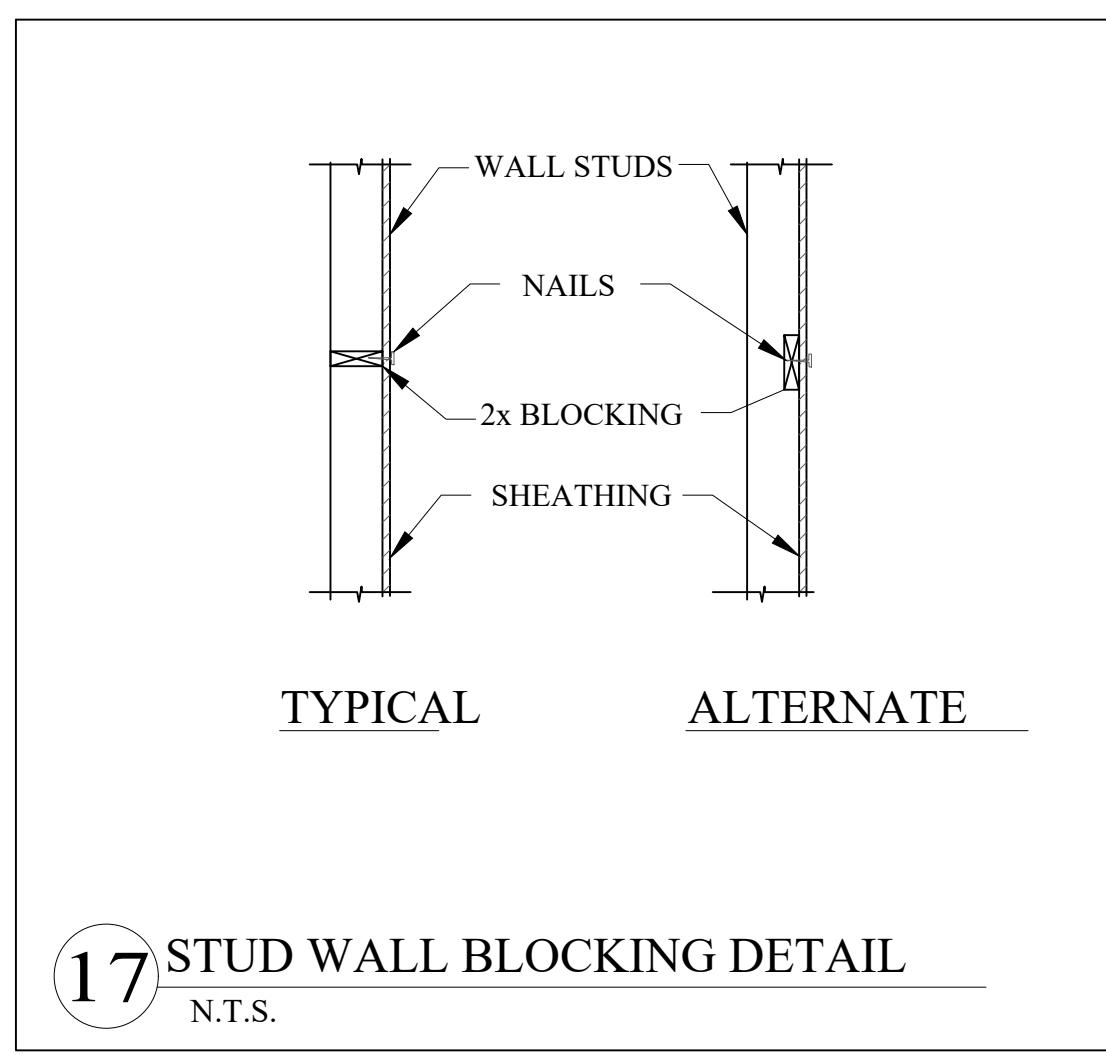
NAILING REQUIREMENTS FOR MULTIPLE PLY BEAMS		
6" DEPTH	2 ROWS OF 12D NAILS @ 12" O.C.	(EACH LAM. LAYER)
8" DEPTH	2 ROWS OF 12D NAILS @ 12" O.C.	(EACH LAM. LAYER)
10" DEPTH	3 ROWS OF 12D NAILS @ 12" O.C.	(EACH LAM. LAYER)
12" DEPTH	3 ROWS OF 12D NAILS @ 12" O.C.	(EACH LAM. LAYER)
14" DEPTH	4 ROWS OF 12D NAILS @ 12" O.C.	(EACH LAM. LAYER)
16" DEPTH	4 ROWS OF 12D NAILS @ 12" O.C.	(EACH LAM. LAYER)
18" DEPTH	5 ROWS OF 12D NAILS @ 12" O.C.	(EACH LAM. LAYER)

NOTE: IF OSB IS BETWEEN LAMINATIONS, THEN 16D NAILS MUST BE USED

ROUGH OPENING WIDTH	HEADER SIZE	
	LOAD BEARING	NON BEARING
H UP TO 4'-0"	(2) 2x6	(2) 2x6
H 3'-7" TO 6'-0"	(2) 2x8	(2) 2x8
H 6'-1" TO 8'-0"	(2) 2x10	(2) 2x8
H 8'-1" TO 9'-0"	(2) 2x12	(2) 2x10

NOTES:  
• PROVIDE PLYWOOD SPACER NAILED TO HEADERS TO FLUSH WITH THE WALL AS REQD.  
• FOR THE LOAD BEARING HEADERS OVER 9'-0" SPAN, SEE FRAMING PLAN.

**16 HEADER SCHEDULE**  
N.T.S.



Revision: 1-06-30-22 STAIR LANDING  
JOB No: 220035  
Issue: 06-14-2022  
Sheet Name: TYP. WOOD DETAILS  
Sheet No.: S4.00



# Indrasena - New Residence

817 Brett Drive, Allen TX 75013

Revision:  
1 06-30-22 STAIR LANDING

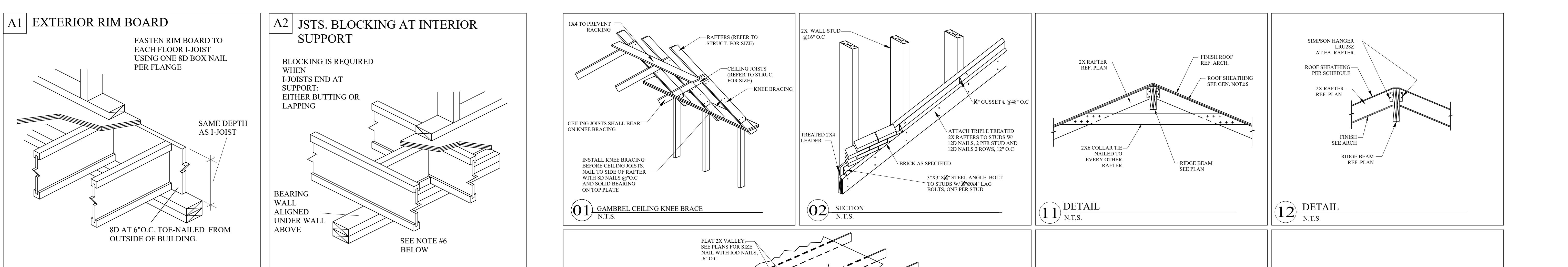
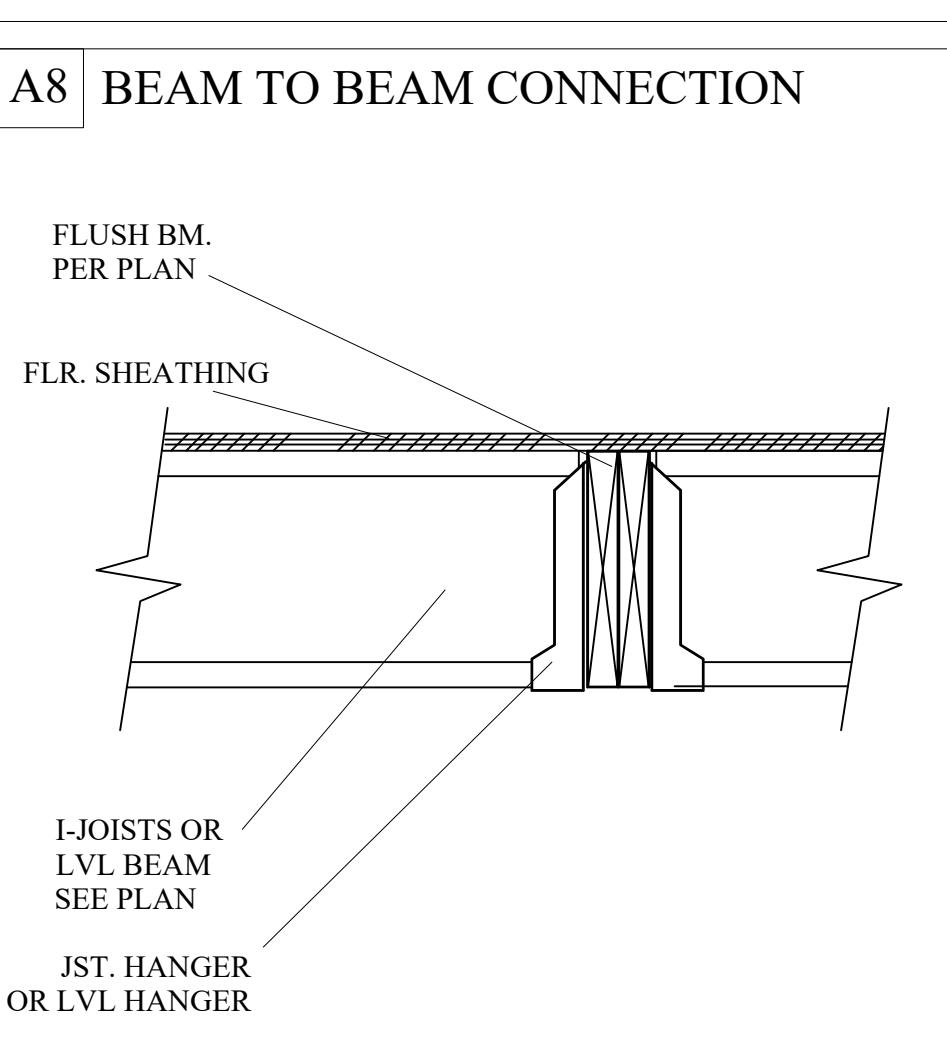
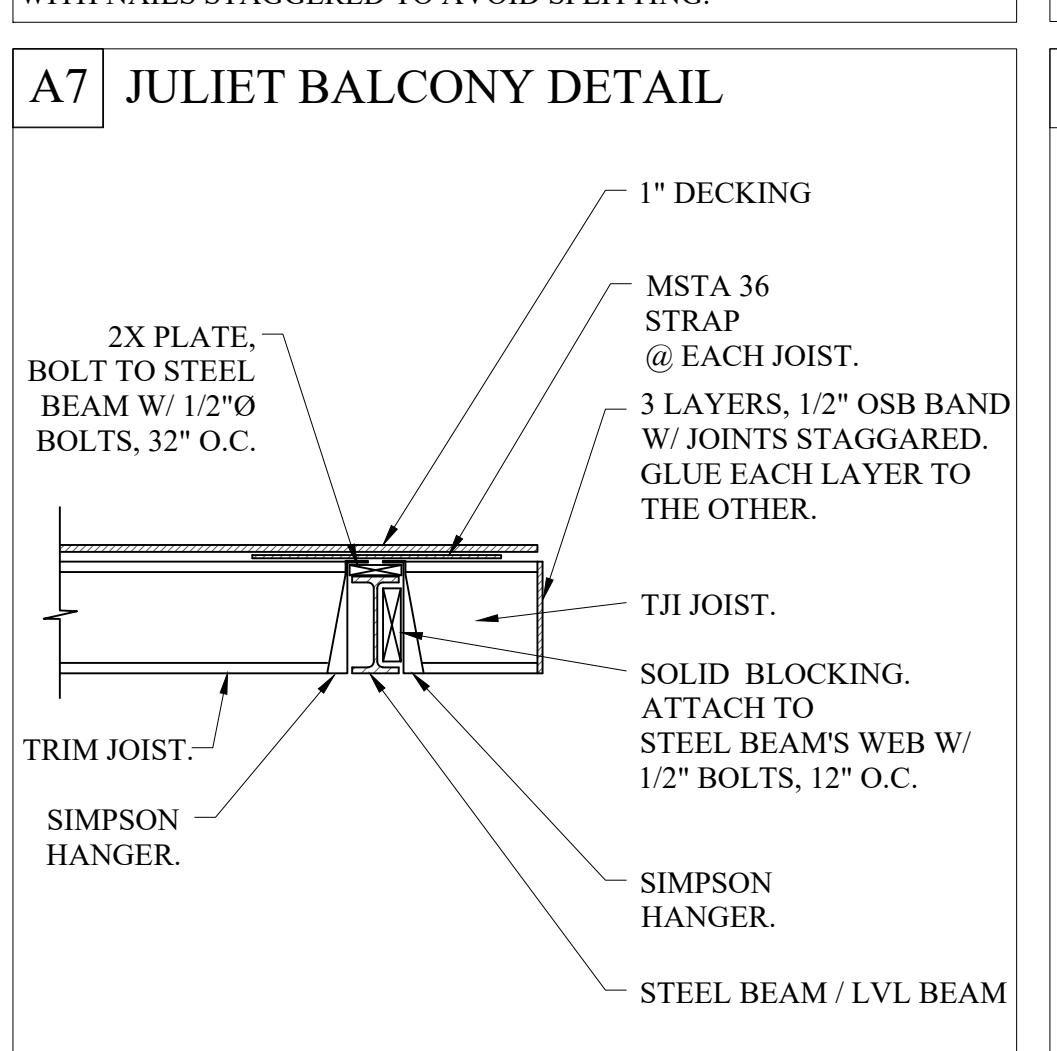
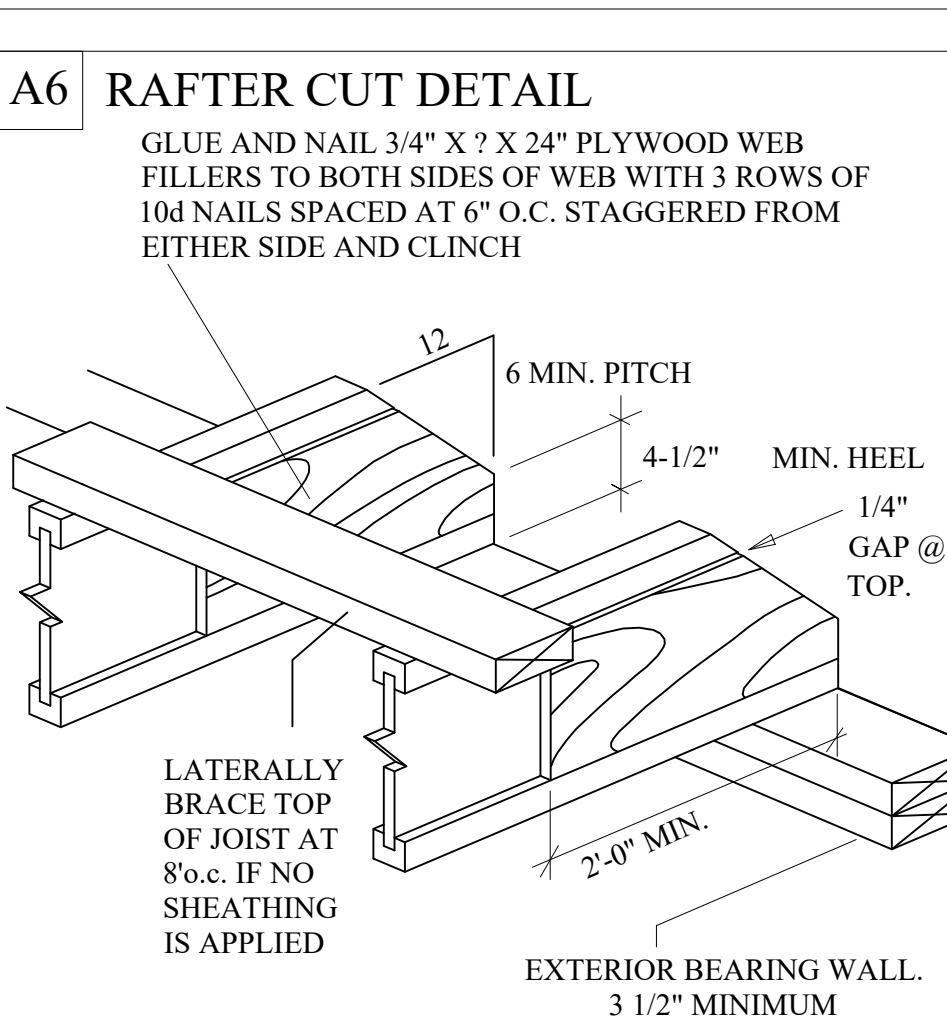
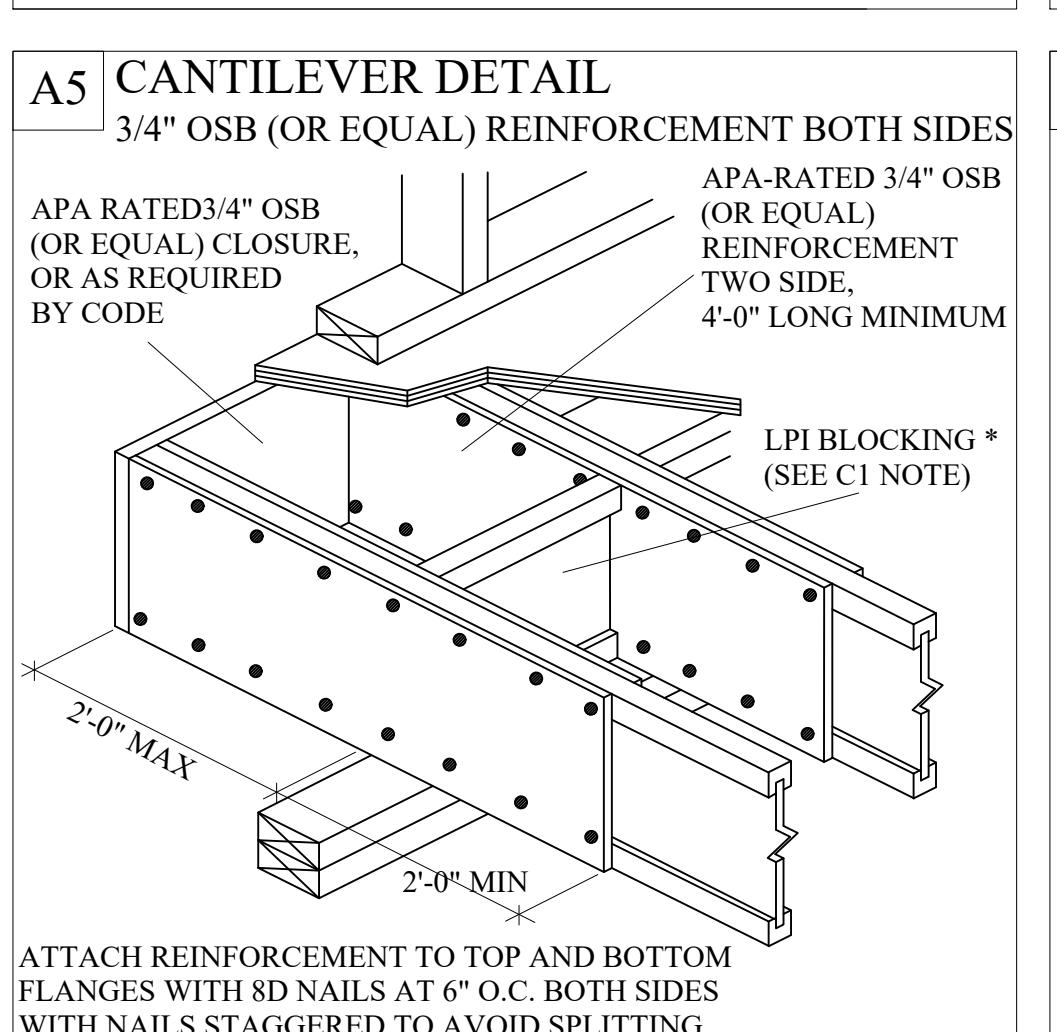
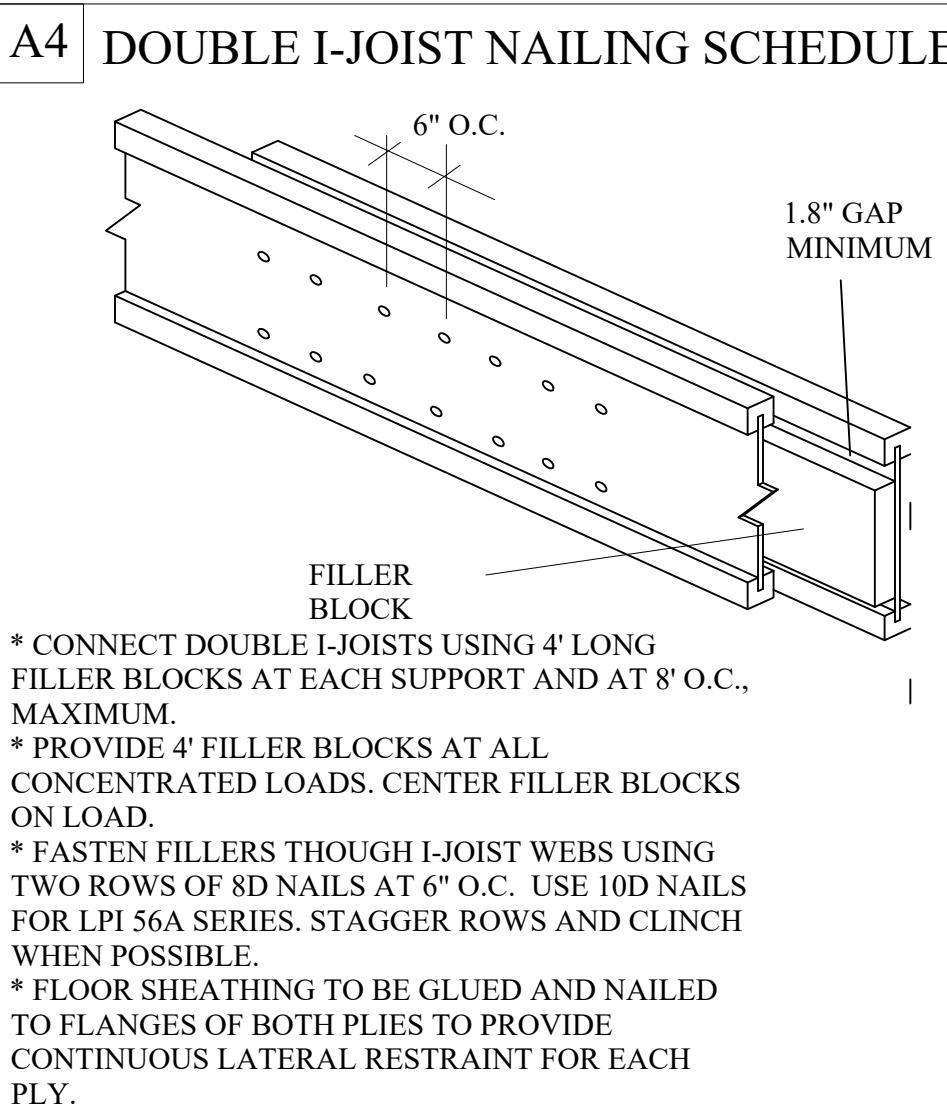
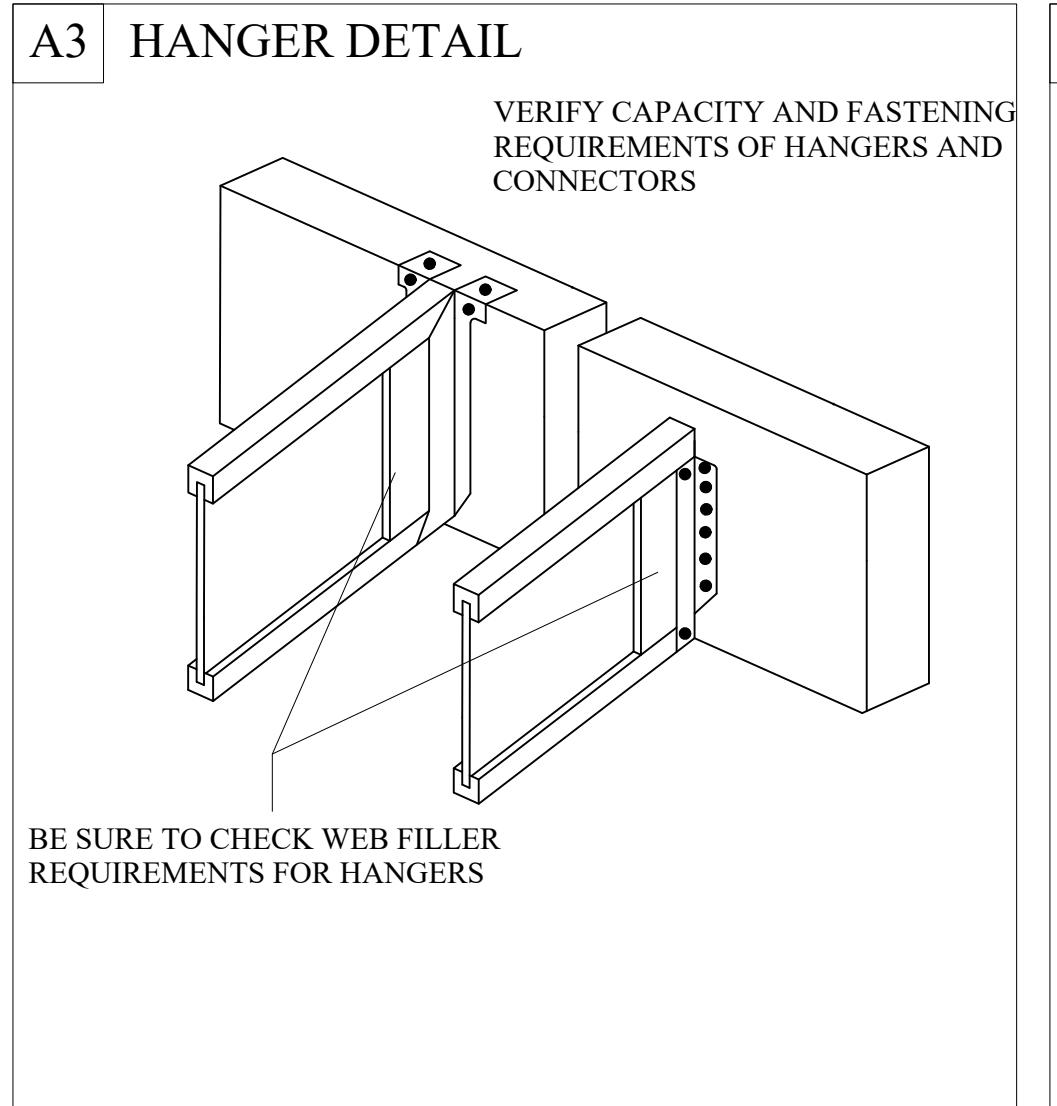
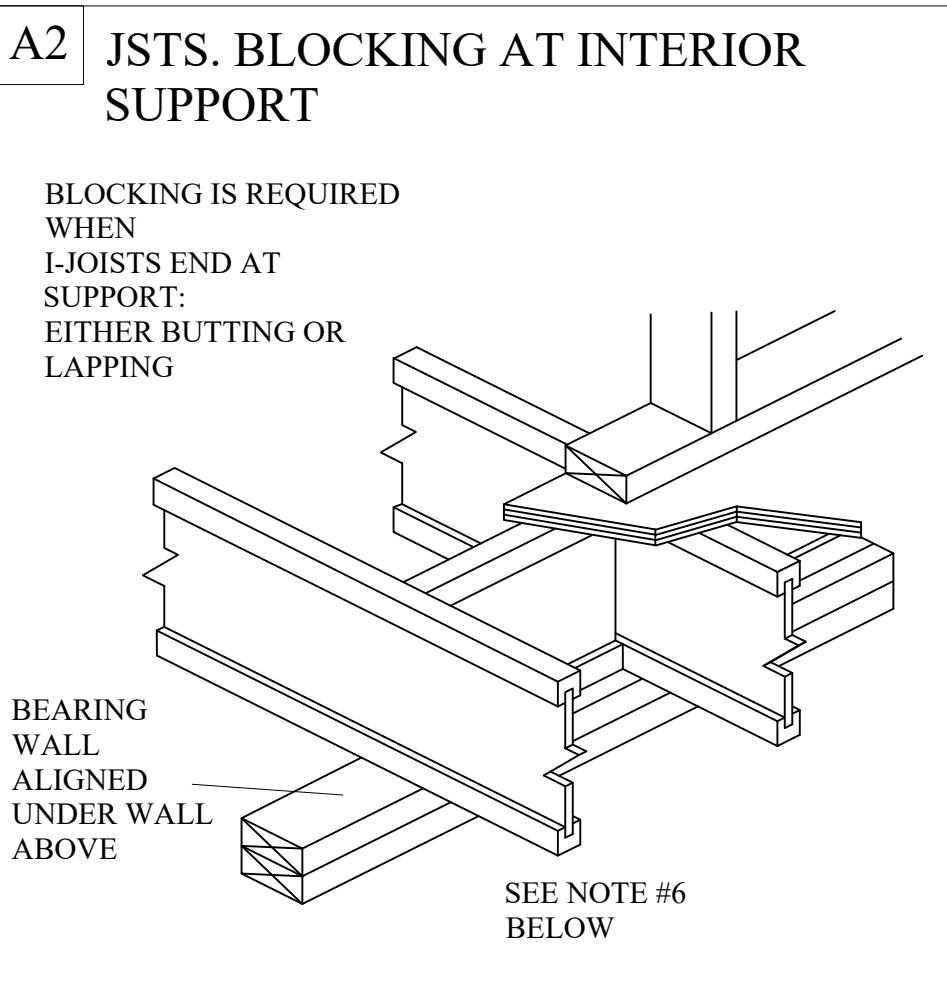
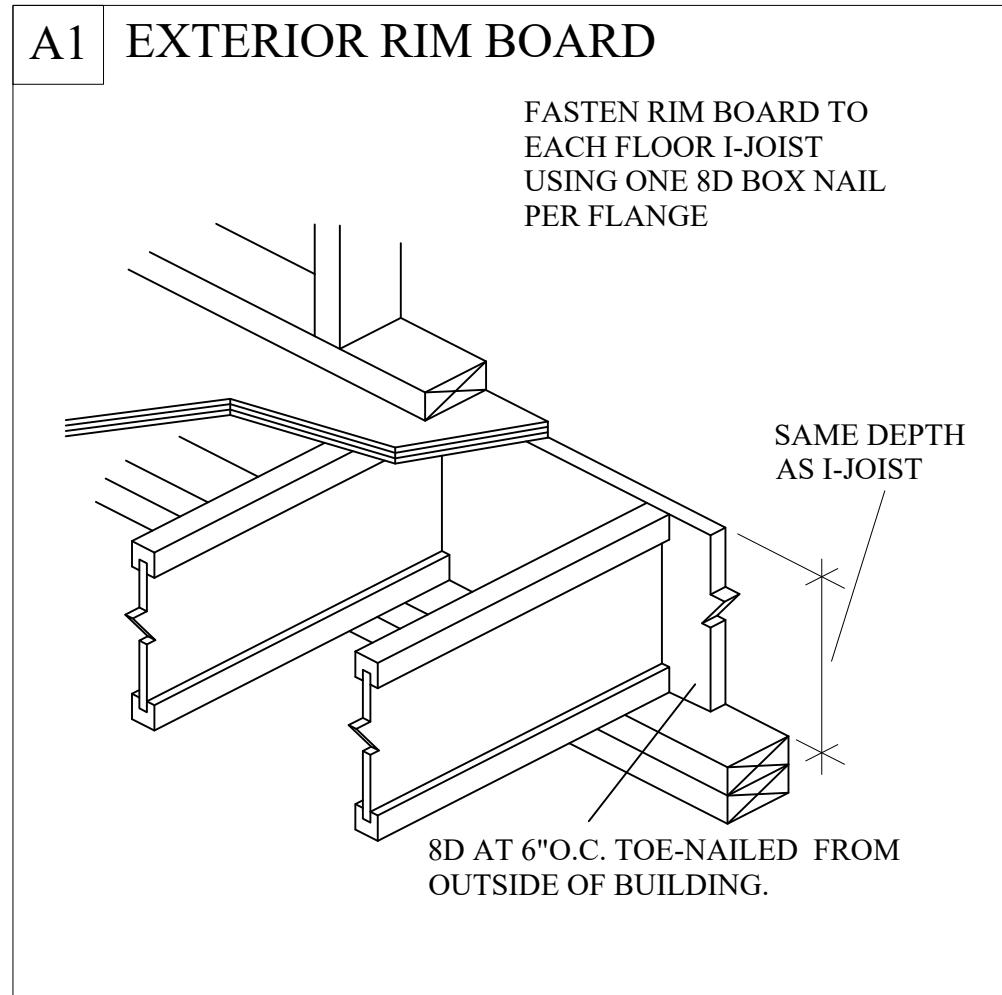
JOB No:  
220035

Issue:  
06-14-2022

Sheet Name:  
TYP. WOOD DETAILS

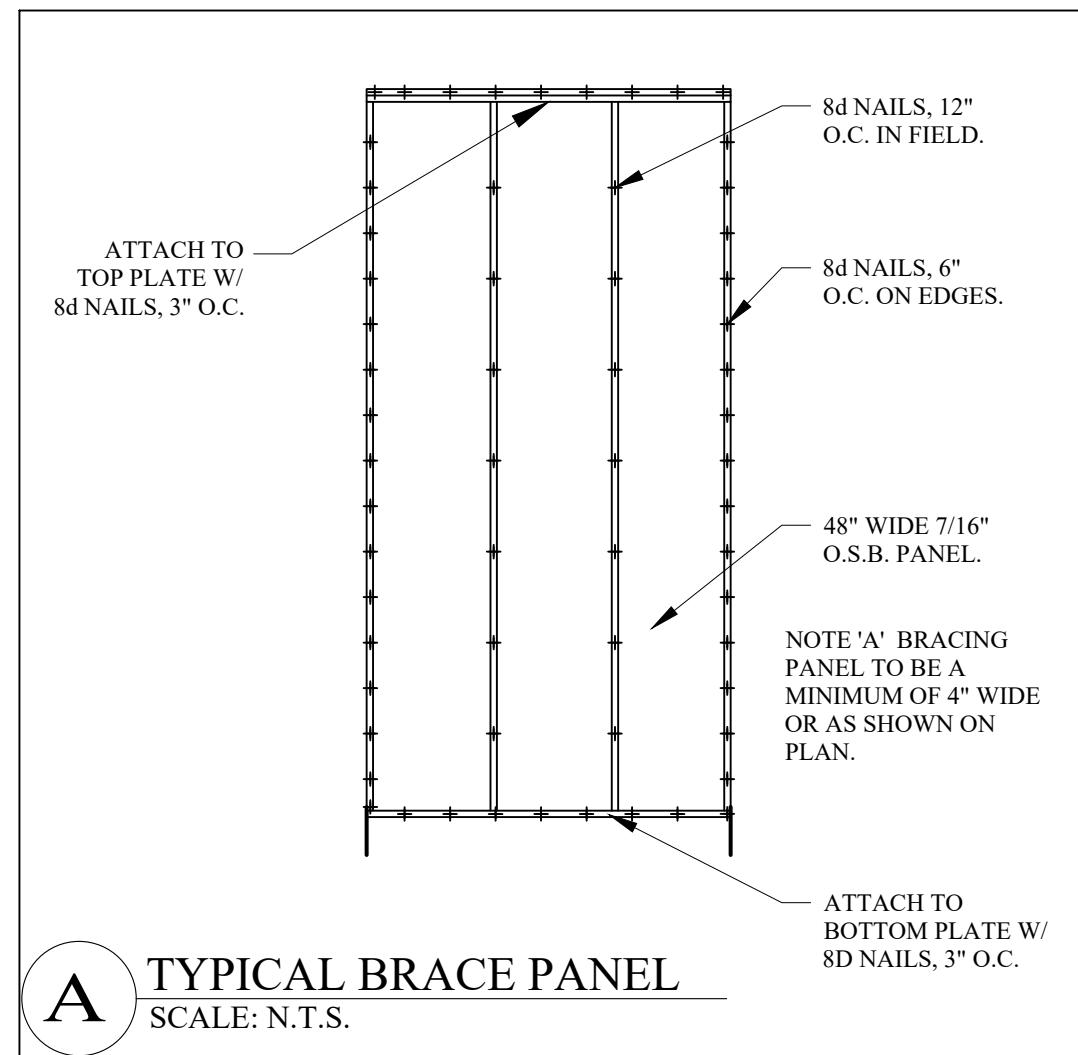
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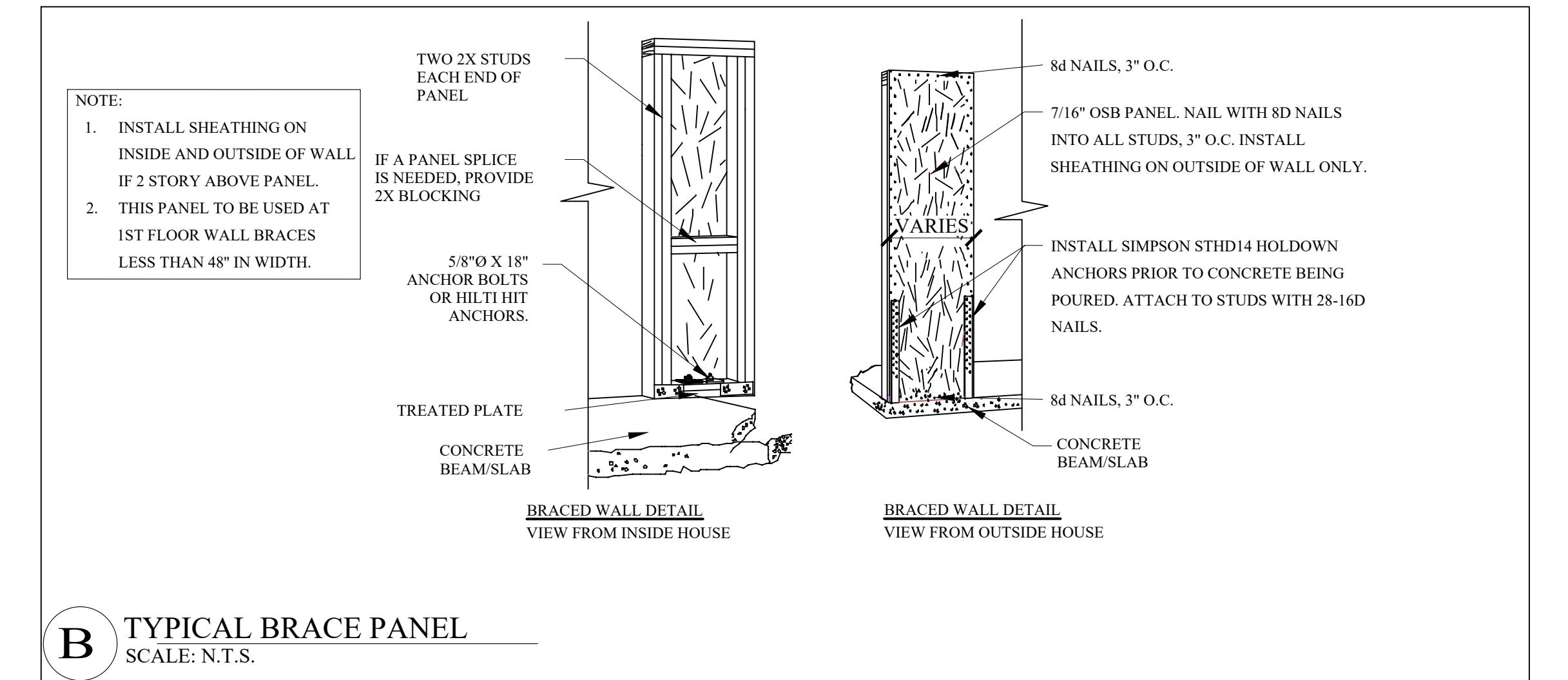


Revision: 1\_06-30-22 STAIR LANDING  
JOB No: 220035  
Issue: 06-14-2022  
Sheet Name: TYP. WALL BRACE DETAILS  
Sheet No.: 16



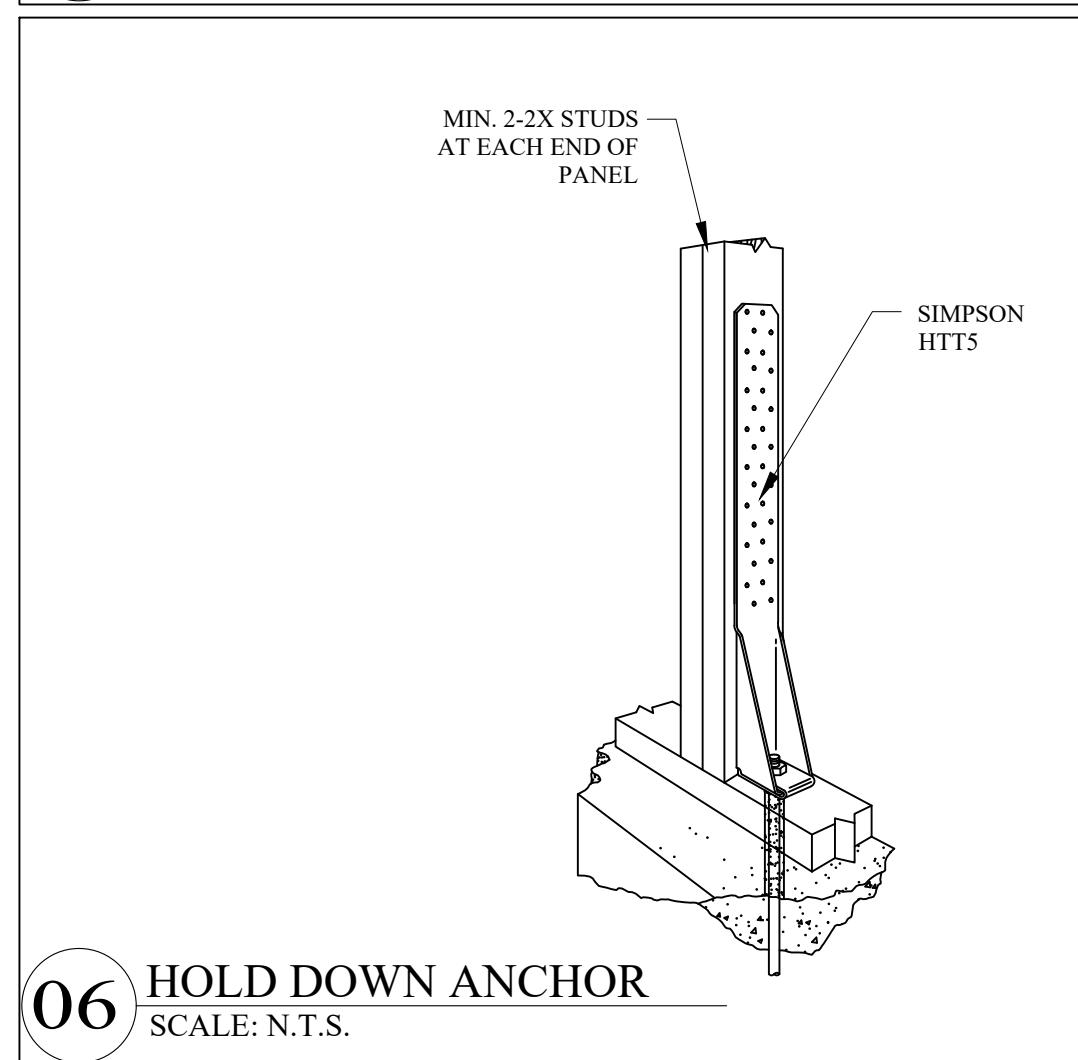
**A** TYPICAL BRACE PANEL

SCALE: N.T.S.



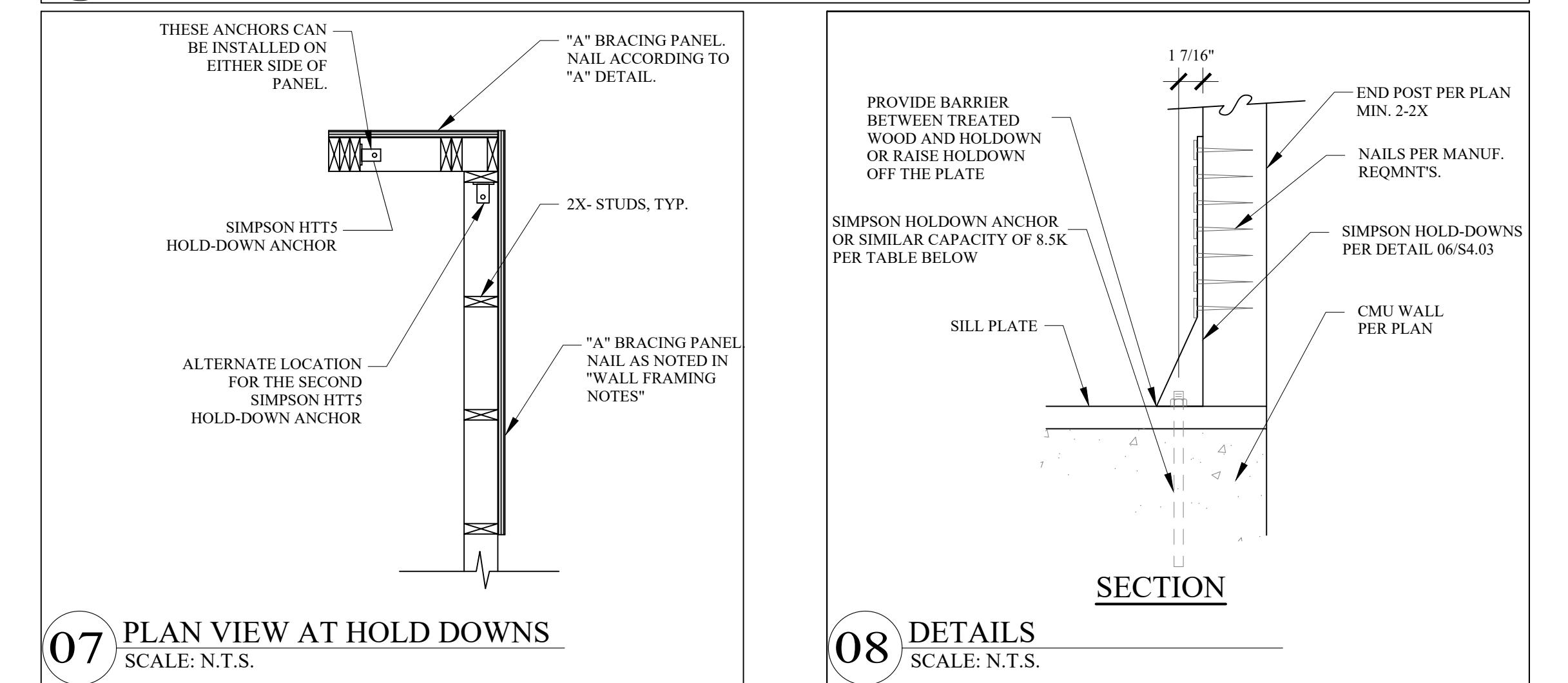
**B** TYPICAL BRACE PANEL

SCALE: N.T.S.



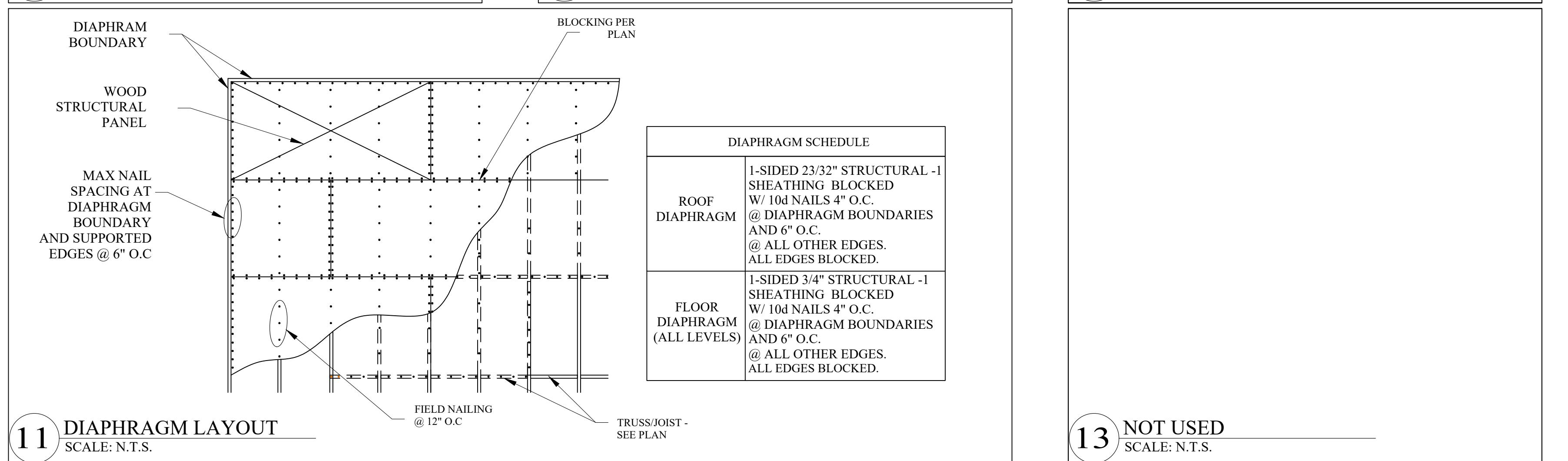
**06** HOLD DOWN ANCHOR

SCALE: N.T.S.



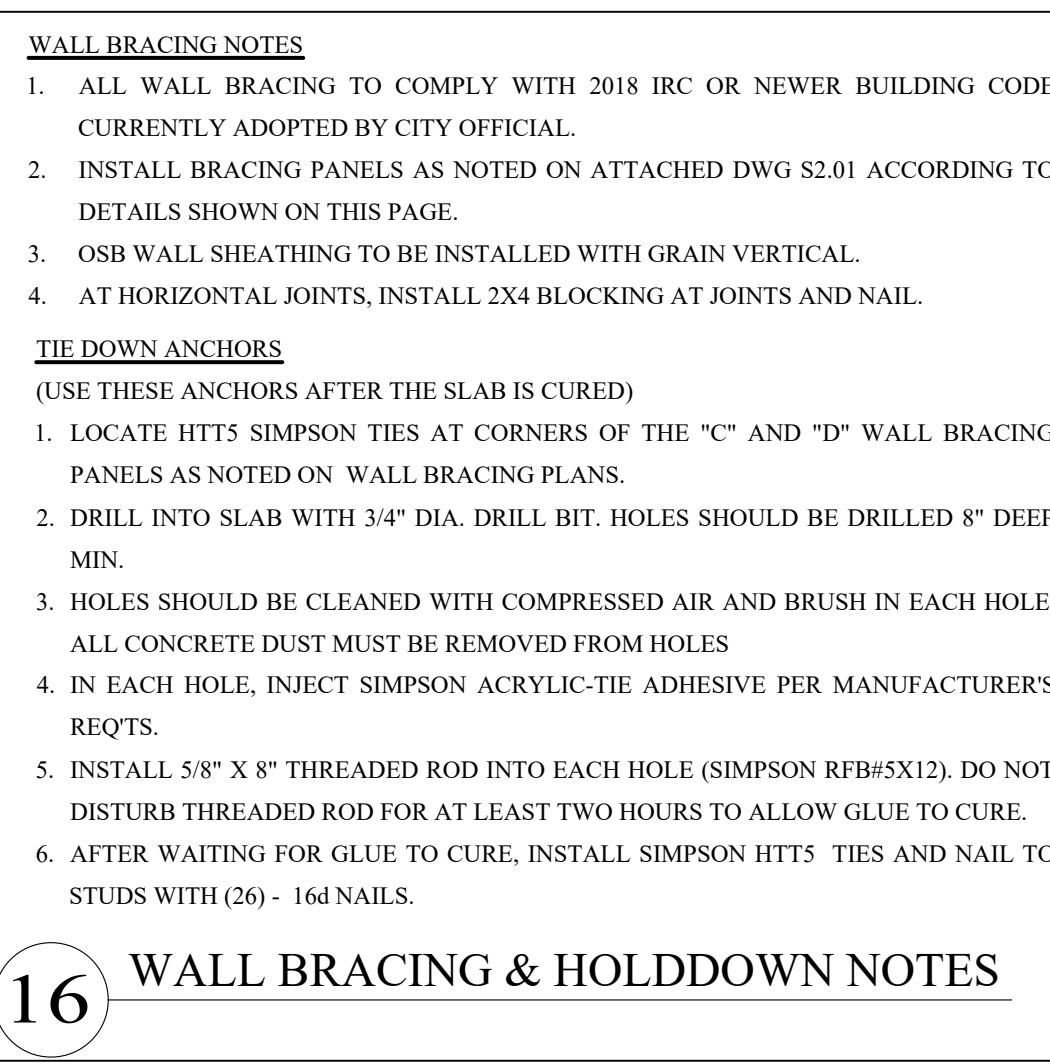
**07** PLAN VIEW AT HOLD DOWNS

SCALE: N.T.S.



**11** DIAPHRAGM LAYOUT

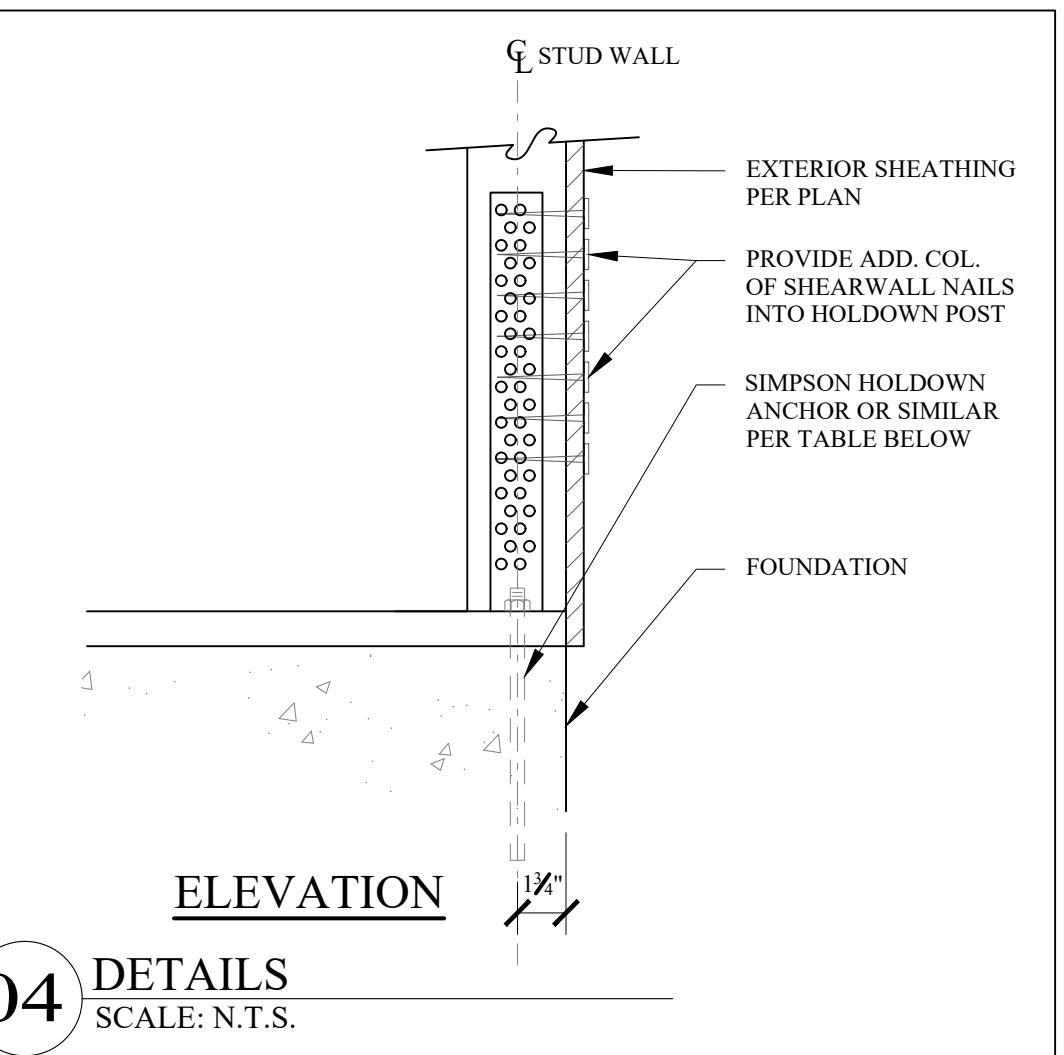
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**17** NOT USED

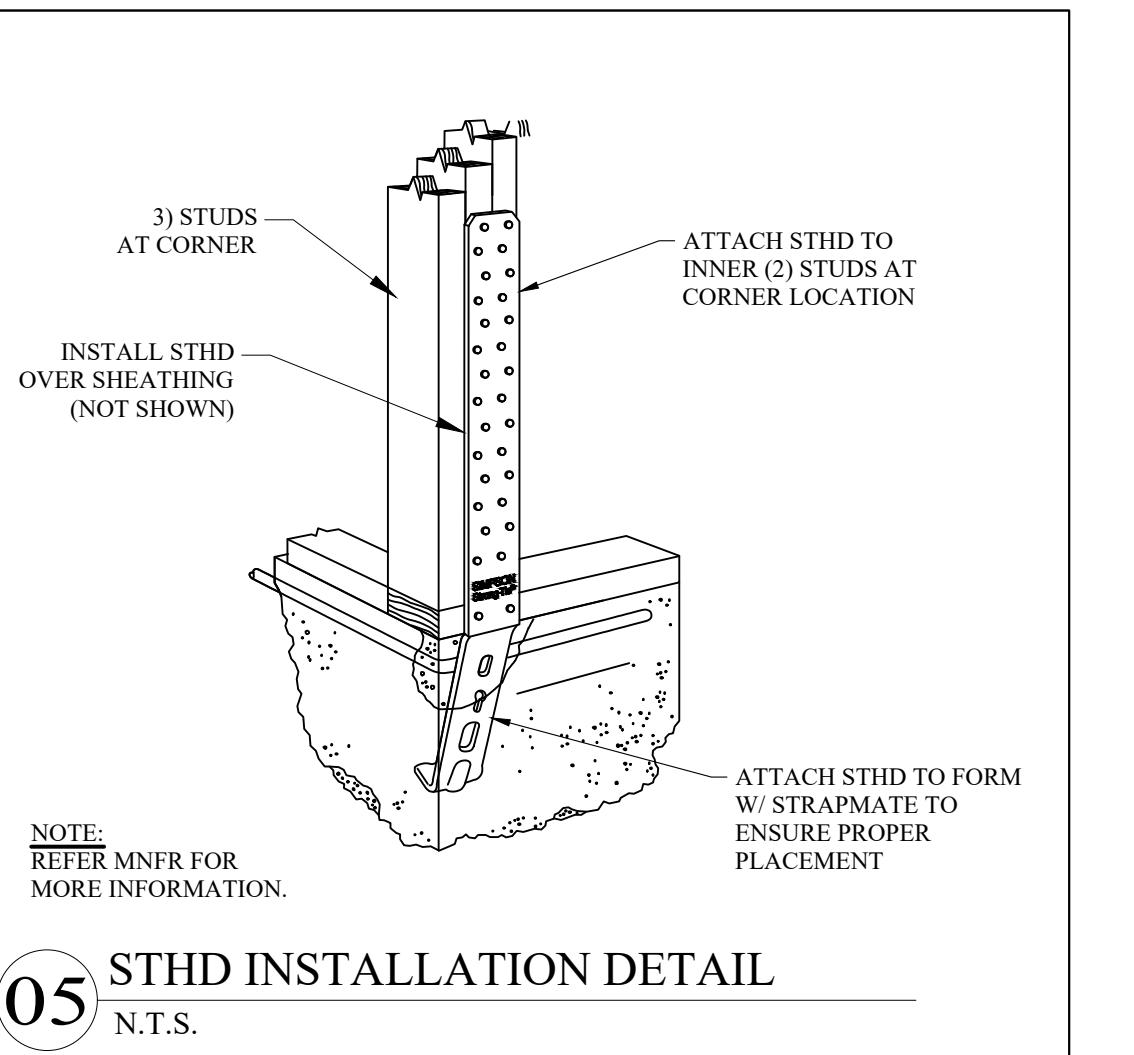


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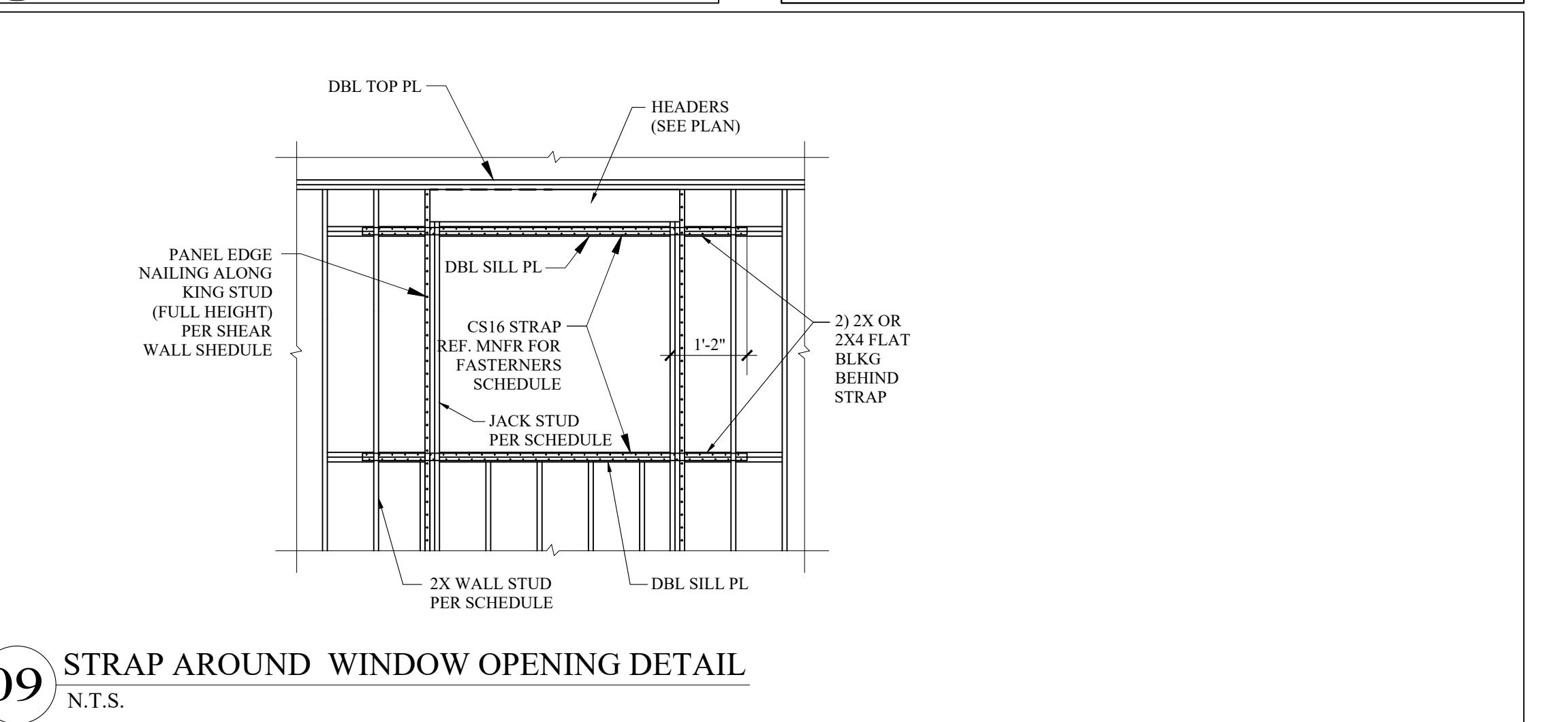
**04** DETAILS

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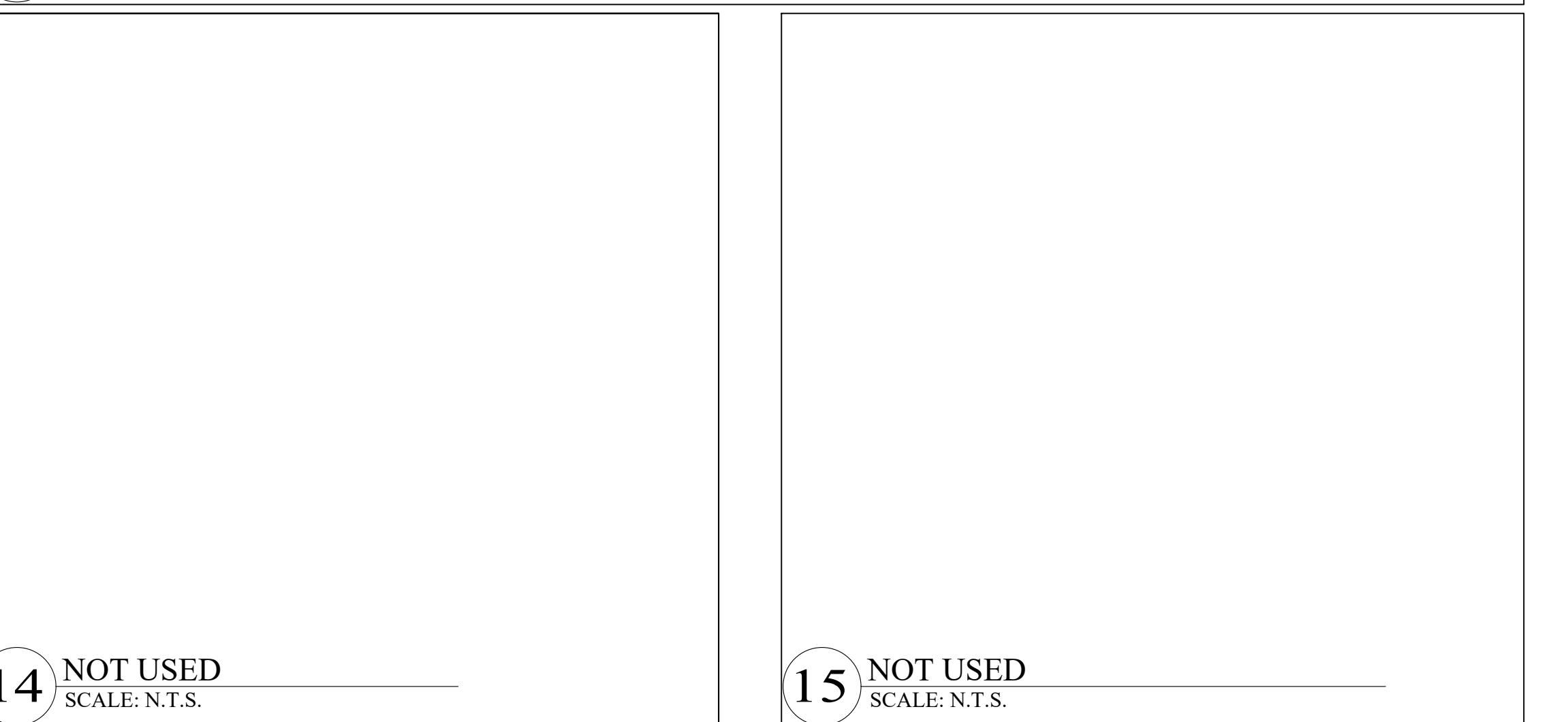
**05** STHD INSTALLATION DETAIL

SCALE: N.T.S.



**09** STRAP AROUND WINDOW OPENING DETAIL

SCALE: N.T.S.



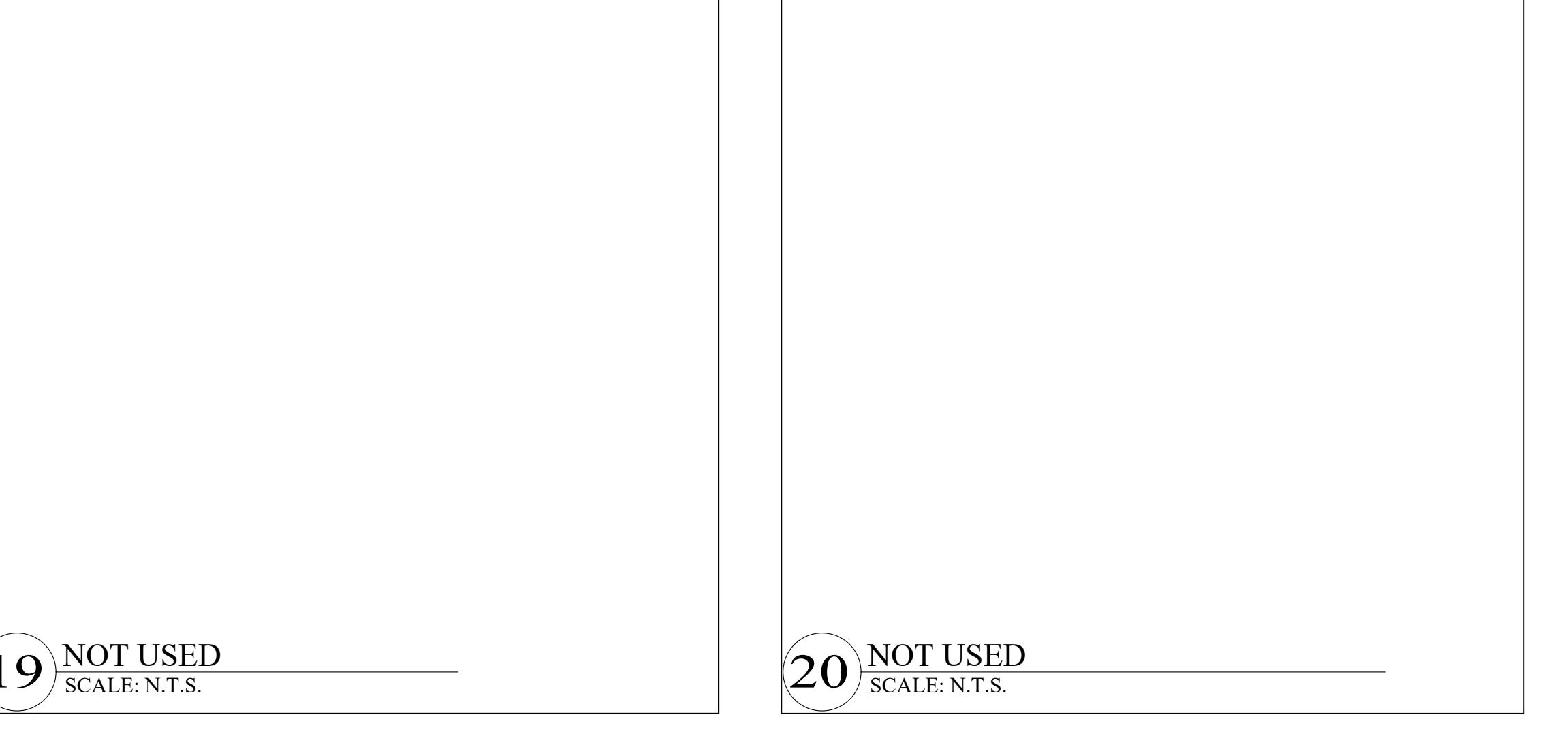
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SCALE: N.T.S.



SCALE: N.T.S.



SCALE: N.T.S.



SCALE: N.T.S.

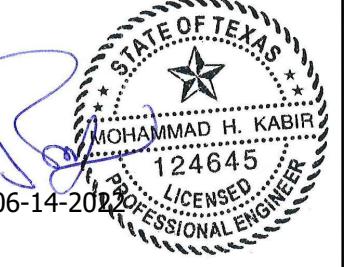


MOHAMMED H. KABIR  
12465  
LICENSED PROFESSIONAL ENGINEER  
06-14-2018

Seal:

400 Cristol Place, Suite 106  
Plano, TX 75075  
D (214) 253-2906 : Email: info@mkkaanc.com  
Firm Registration: F10656  
STRUCTURAL : CONST. ADMINISTRATION : PRJCT. MANAGEMENT

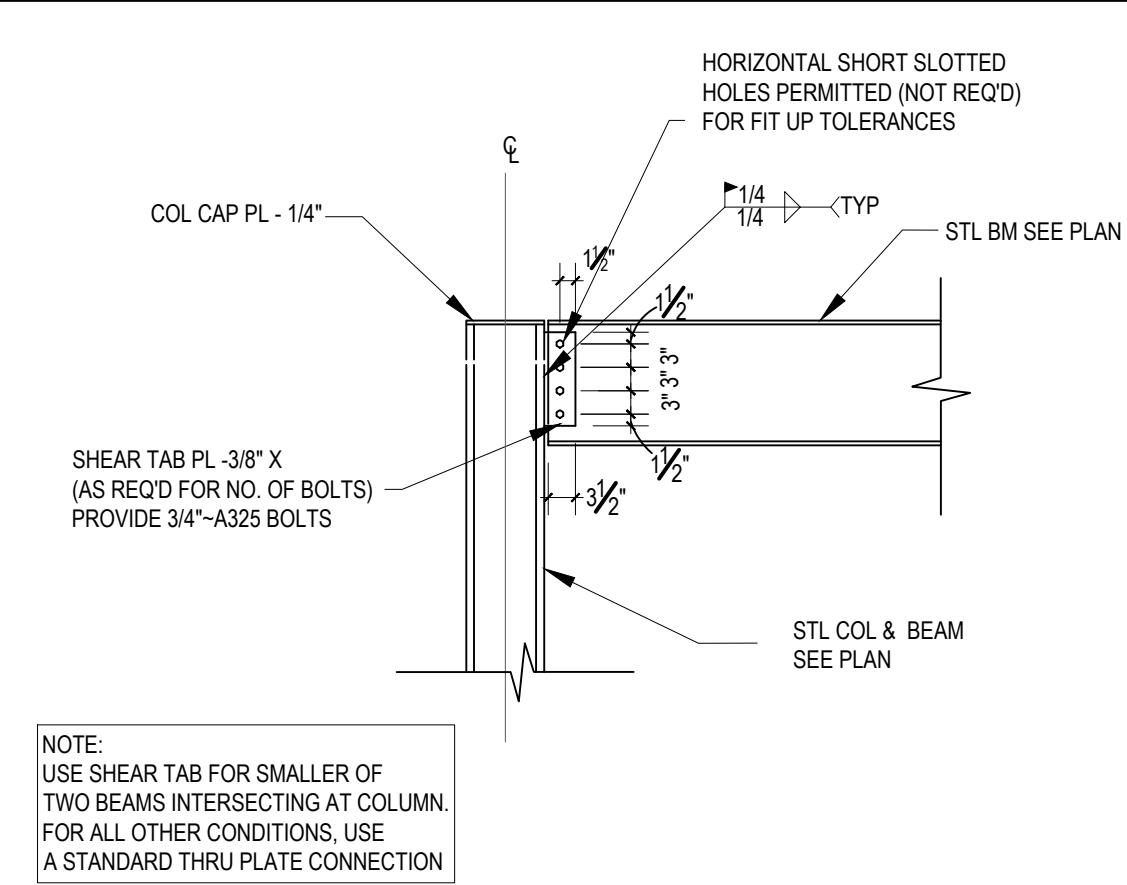
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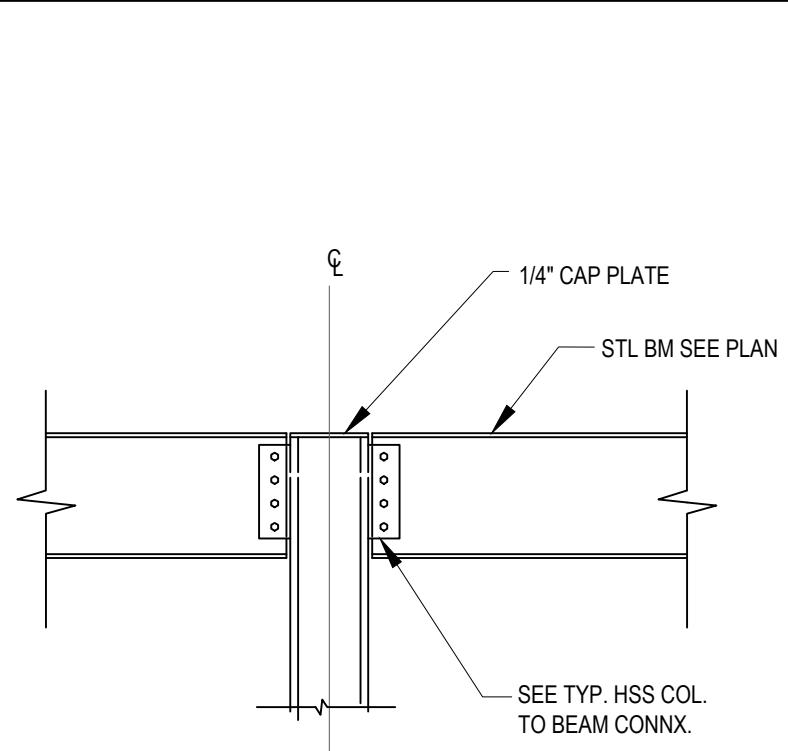
## Indrasena - New Residence

817 Brett Drive, Allen TX 75013

Revision: 1-06-30-22 STAIR LANDING  
 JOB No: 220035  
 Issue: 06-14-2022  
 Sheet Name: STEEL DETAILS  
 Sheet No.: S5.00

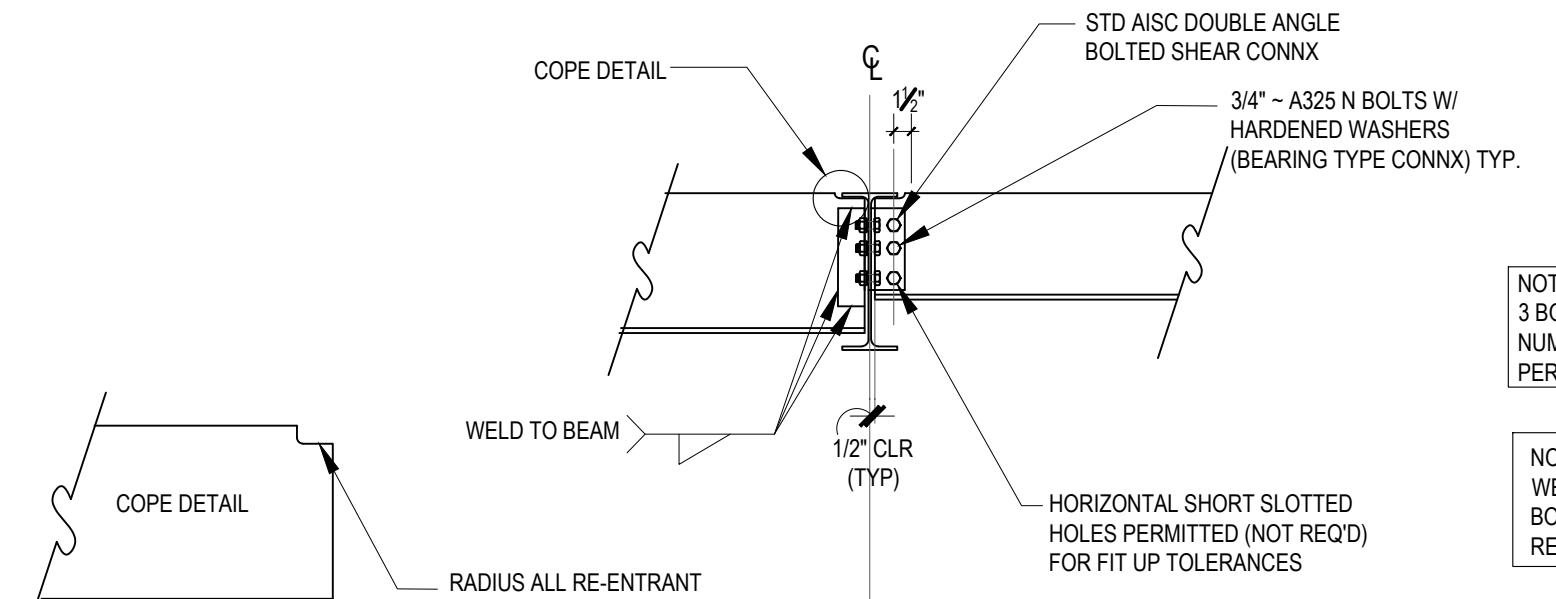


**01** TYPICAL BM - COLUMN SHEAR TAB CONN  
N.T.S.

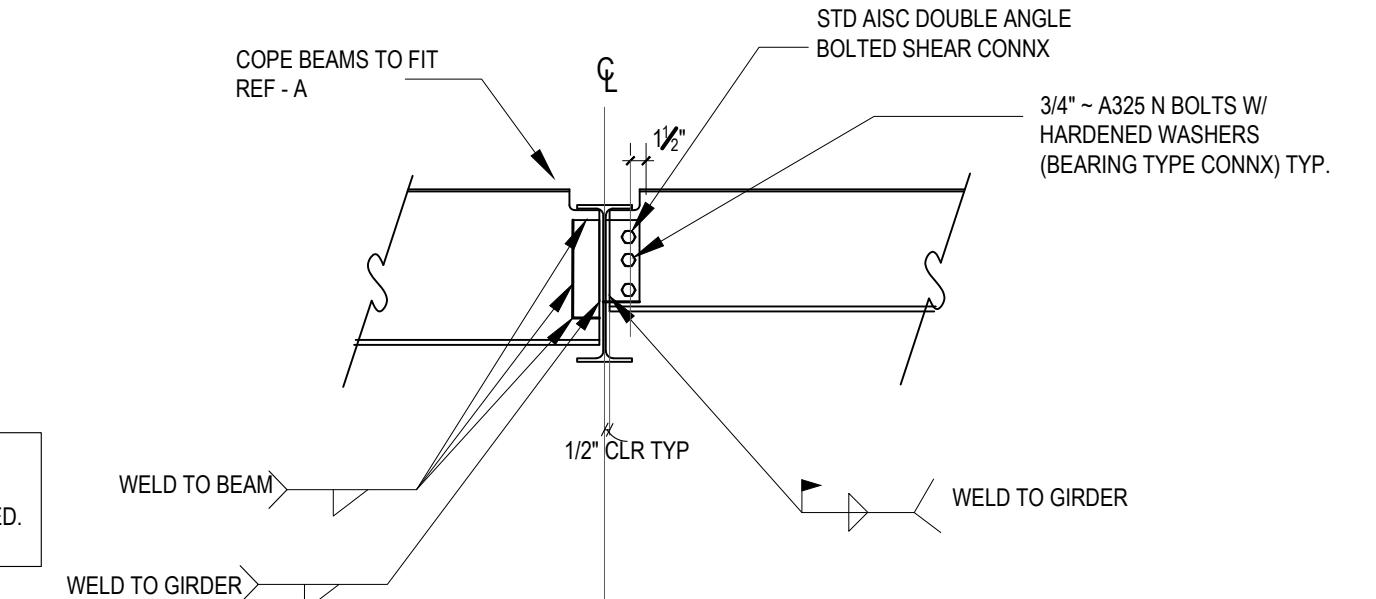


**02** TYP BM TO COLUMN CONNX.  
N.T.S.

### A. COMBINATION BOLTED-WELDED CONNECTION



### B. BOLTED CONNECTION

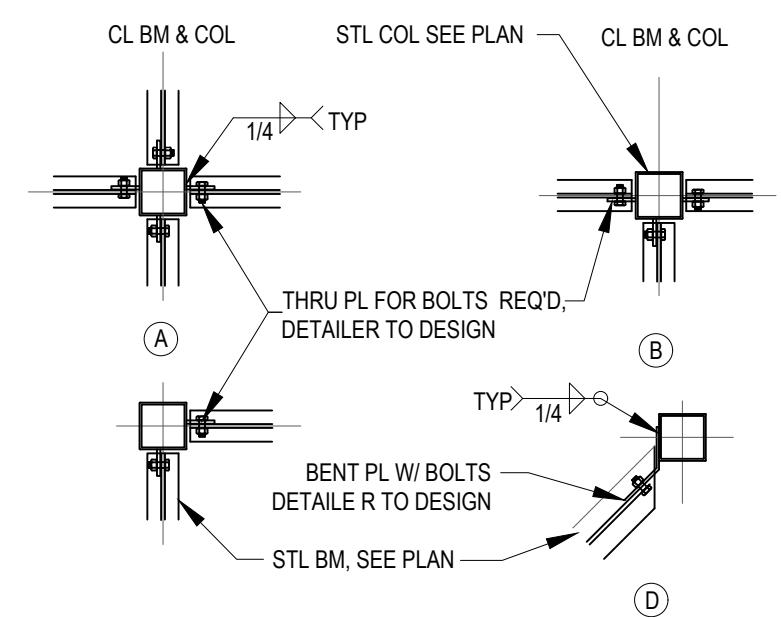


NOTE:  
3 BOLTS SHOWN AS EXAMPLE ONLY  
NUMBER OF BOLTS TO BE DETERMINED  
PER PART IV, AISC MANUAL

NOTE:  
WELD TO BEAM, BOLTS TO GIRDERS SHOWN,  
BOLTS TO BEAM, WELD TO GIRDERS PERMITTED.  
REFER TO PART IV, AISC MANUAL

NOTE:  
WELDED AND COMBINATION BOLTED WELDED CONNECTIONS SHOWN.  
FULLY BOLTED CONNECTIONS PERMITTED. REFER TO PART IV, AISC MANUAL.  
ALL CONNECTIONS TO PROVIDE MINIMUM SHEAR CAPACITY INDICATED IN TABLE OR ON PLANS

**03** TYP BEAM TO BEAM CONNX.  
N.T.S.



**04** TYP BEAM TO COLUMN CONNX  
PLAN VIEW  
N.T.S.

BOLT SCHEDULE		
BEAM SIZE	ROWS OF $\frac{1}{2}$ Ø BOLTS	
WEB PL CONNX	DBL < CONNX	
W8,W10	2	2
W12	3	2
W14	3	3
W16	4	3
W18	5	4
W21	6	5

NOTES:  
1. ALL BOLTS SHALL MEET ASTM A325.  
2. AT ALL MOMENT CONNECTIONS USE A325 BOLTS TORQUED TO PROOF.  
3. AT ALL OTHER CONNECTIONS, BOLTS SHALL BE INSTALLED SNUG TIGHT.

**05** BOLT SCHEDULE  
N.T.S.

**06** NOT USED  
N.T.S.

**07** NOT USED  
N.T.S.

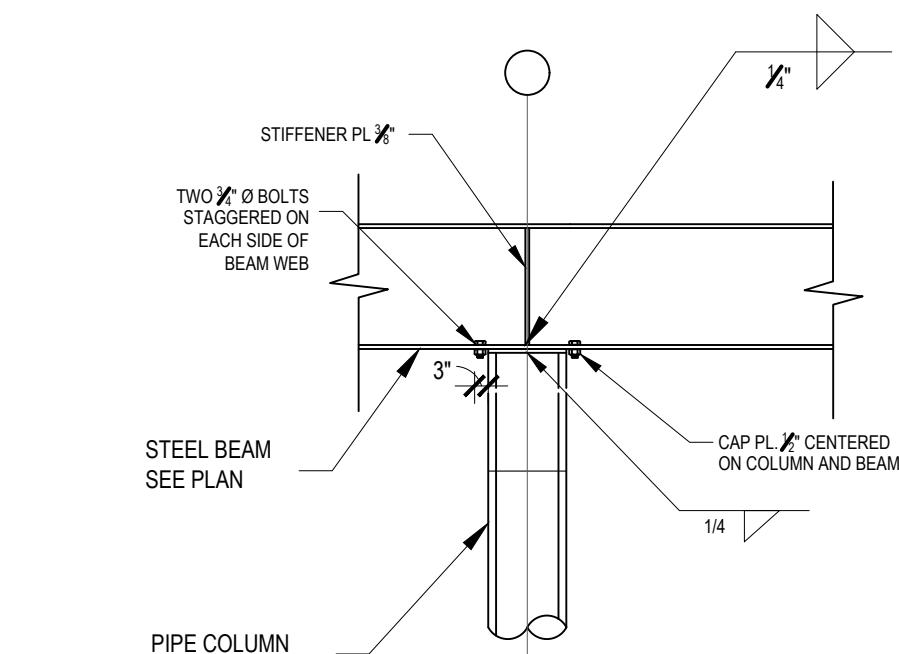
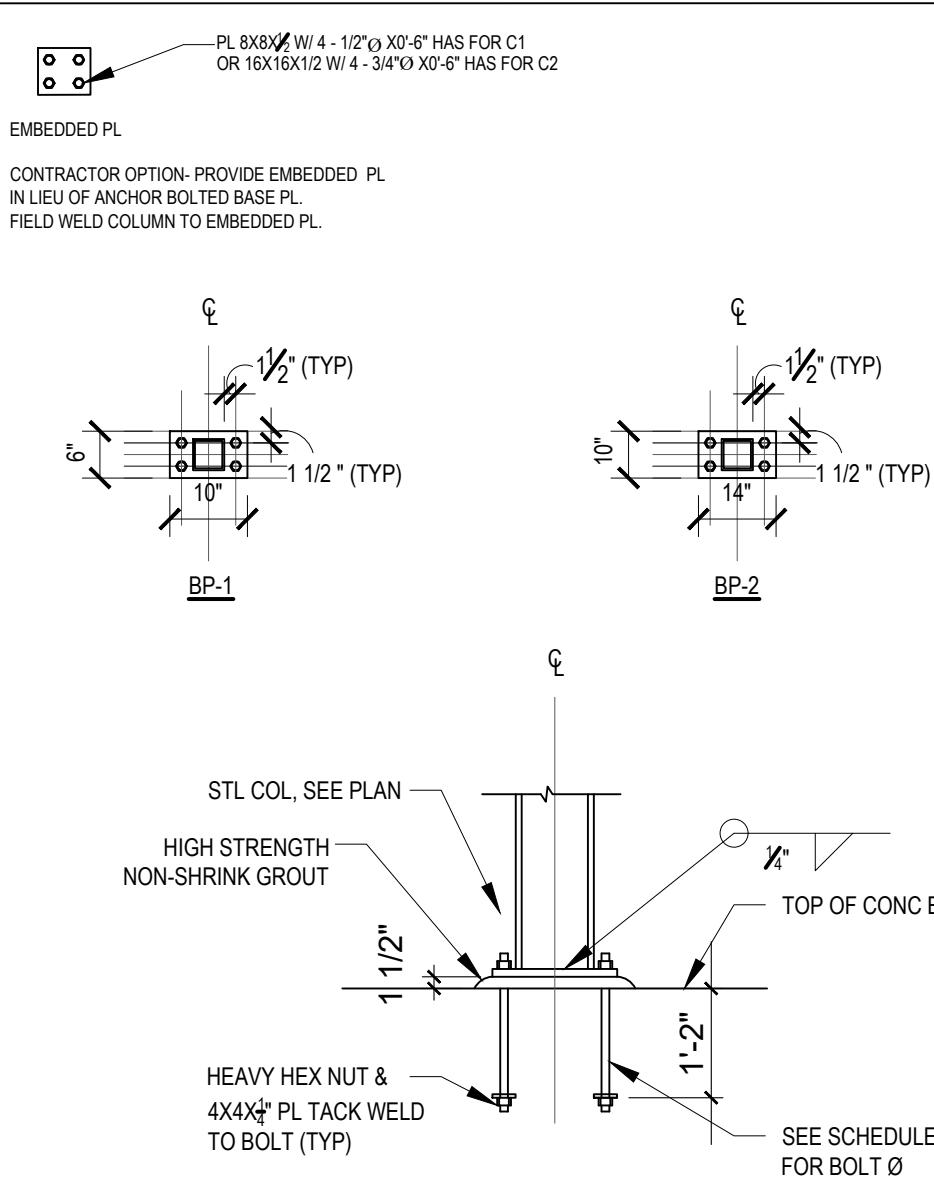
**08** NOT USED  
N.T.S.

**09** NOT USED  
N.T.S.

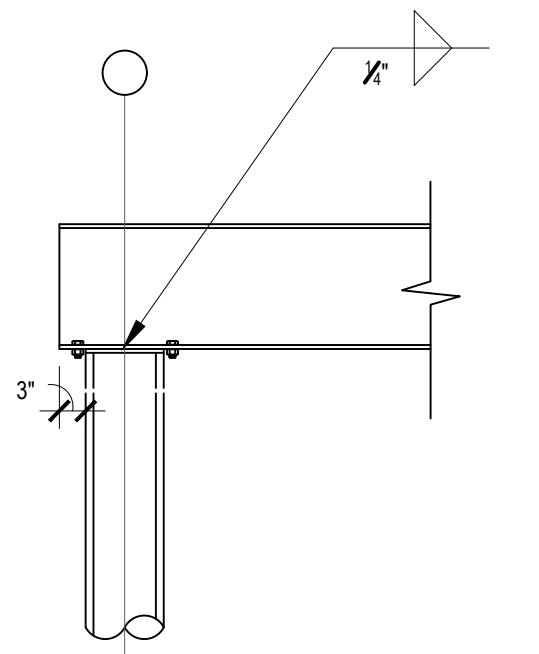
**10** NOT USED  
N.T.S.

**11** NOT USED  
N.T.S.

**12** NOT USED  
N.T.S.



**13** OPTIONAL BM - COLUMN CONNECTION  
N.T.S.



**14** NOT USED  
N.T.S.

**15** NOT USED  
N.T.S.

COLUMN SCHEDULE		BASE PLATE SCHEDULE		
TYPE	SIZE	TYPE	SIZE (IN)	BOLTS (IN)
C-1	HSS4X4X5/16 4" STD PIPE	BP1	6"X10"X3/4"	4-3/4"Ø

**16** COLUMN SCHEDULE  
N.T.S.

S5.00