ABBREVIATIONS

ADD'L	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
AR	ANCHOR RODS
ARCH	ARCHITECTURAL
B PL	BASE PLATE
BF	BOTTOM OF FOOTING
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BP	BOTTOM OF PIER
BRG	BEARING
BTW	BETWEEN
C	CHANNEL SHAPE (i.e. C8x11.5)
C	COLD FORMED C SHAPE
C.G.	CENTER OF GRAVITY
CJ	(KEYED) CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
DBL	DOUBLE
DEG	DEGREES
DIA	DIAMETER
DIM	DIMENSION
DLH	DEEP LONGSPAN JOIST (i.e. 60DLH12)
DTL	DETAIL
DWLS	DOWELS
EA	EACH
EBC	EXTENDED BOTTOM CHORD
EJ	EXPANSION JOINT
EL.	ELEVATION
ELEV	ELEVATION
EMBED	EMBEDMENT LENGTH
EOS	EDGE OF SLAB
ERECT	ERECTION
EWEF	EACH WAY, EACH FACE
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FAS	FROM ADJACENT SPAN
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FFE	FINISHED FLOOR ELEVATION
FIN FLR EL	FINISHED FLOOR ELEVATION
FS	FAR SIDE
FTG	FOOTING
FV	FIELD VERIFY
Fy	STEEL YIELD STRENGTH
G	JOIST GIRDER (i.e. 24G8N7K)
GA	GAUGE
GB	GRADE BEAM
HORIZ	HORIZONTAL
HP	H-PILE SHAPE (i.e. HP8x36)
HS	HEADED STUD
HSS	HOLLOW STRUCTURAL SECTION (STEEL)
I/S	INSIDE
INFO	INFORMATION
INT	INTERIOR
JBE	JOIST BEARING ELEVATION
JT	JOINT
K	K-JOIST (i.e. 12K1 S.J.)
K	KIPS (KILO-POUNDS)
K/ft	KIPS PER FOOT
KCS	CONSTANT SHEAR JOIST (i.e. 12KCS2 S.J.)
KD	KILN-DRIED
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LW	LONG WAY
LWB	LAM. WOOD BEAM (i.e. LWB3x11)
M.B.	METAL BUILDING
MATL	MATERIAL
MAX	MAXIMUM
MC	MISC. CHANNEL SHAPE (i.e. MC12x10.6)
MC	MOMENT CONNECTION
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC.	MISCELLANEOUS
MPH	MILES PER HOUR
MTL	METAL
N	JOIST SPACES ON GIRDER
N.S.	NON-SHRINK
NO.	NUMBER
NS	NEAR SIDE
NTS	NOT TO SCALE
o.c.	ON CENTER
O/S	OUTSIDE
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
OSB	ORIENTED STRAN BOARD
P##	DRILLED PIER (##-DIA IN INCHES)
P/T	POST-TENSIONED
PF###	PAD FOOTING (###-SIZE IN FEET)
PL	PLATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
R	RADIUS
RE:	REFERENCE
REINF	REINFORCING
REQ'D	REQUIRED
RTU	ROOF TOP UNIT
S	STANDARD STEEL SHAPE (i.e. S10x35)
S.J.	STEEL JOIST (i.e. 12K1 S.J.)
SCHED.	SCHEDULE
SECT	SECTION
SH	COLD-FORMED HAT SHAPE
SIM	SIMILAR
SJ	(SAWN) CONTROL JOINT
SQ	SQUARE
STIFF	STIFFENER
SW	SHORT WAY
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEMP	TEMPERATURE
TF	TOP OF FOOTING
TOC	TOP OF COLUMN
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TP	TOP OF PIER
TS	TUBE STEEL SHAPE (i.e. TS4x4x1/4)
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VER	VERIFY
VERT	VERTICAL
VS	VS JOIST (i.e. 2.5VS1)
W	WIDE FLANGE SHAPE (i.e. W8x10)
w/	WITH
w/o	WITHOUT
WP	WORK POINT
WT	T SHAPE (i.e. WT8x13)
WWF	WELDED WIRE FABRIC
Z	COLD FORMED Z SHAPE

STRUCTURAL NOTES

GENERAL NOTES

1. THE CONTRACTOR SHALL THOROUGHLY REVIEW ALL CONTRACT DOCUMENTS AND INFORM THE ARCHITECT OF CONFLICTS OR DISCREPANCIES PRIOR TO BIDDING, FABRICATION, AND CONSTRUCTION.

2. IN CASES OF DISCREPANCIES IN DIMENSIONS AND ELEVATIONS BETWEEN STRUCTURAL AND ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.

3. THE CONTRACTOR SHALL COORDINATE THE FIELD VERIFICATION OF ALL EXISTING SITE CONDITIONS SUCH AS EXISTING FLOOR ELEVATIONS, EXISTING FOOTING ELEVATIONS, EXISTING UTILITIES, ETC. WHETHER NOTED OR NOT IN THE CONTRACT DOCUMENTS AND SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS, DISCREPANCIES OR UNKNOWN CONDITIONS PRIOR TO FABRICATION AND CONSTRUCTION.

4. REPRODUCTION OF CONTRACT DRAWINGS, IN ANY FORM, WILL NOT BE ACCEPTED AS SHOP DRAWINGS.

5. REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER-OF-RECORD DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL FOR REVIEW. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR ALSO SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES, AND PROCEDURES OF CONSTRUCTION.

6. CONTRACTOR SHALL PROVIDE TEMPORARY GUYS AND BRACING AS REQUIRED DURING CONSTRUCTION. STRUCTURE IS NOT STABLE UNTIL ALL STRUCTURAL MEMBERS, CONNECTIONS, AND DECKING IS IN PLACE.

7. ACI, AISC, AITC AND AWS SPECIFICATIONS SHALL GOVERN ALL PHASES OF FABRICATION AND CONSTRUCTION.

CONCRETE NOTES

CONCRETE REINFORCEMENT

1. CONCRETE REINFORCEMENT SUPPLIER SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW PRIOR TO CONSTRUCTION.

2. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.

3. PROVIDE THE FOLLOWING PROTECTIVE COVERING FOR ALL REINFORCING BARS UNLESS DETAILED OR NOTED OTHERWISE:

SLAB-ON-GRADE BARS (BOTTOM)	3" CLEAR
BELOW GRADE (CAST AGAINST EARTH)	3" CLEAR
BELOW GRADE (FORMED EDGE)	2" CLEAR
WALLS	2" CLEAR
COLUMNS	1.5" CLEAR TO TIES
ELEVATED BEAMS	1.5" CLEAR TO STIRRUPS
ELEVATED SLABS & JOISTS	0.75" CLEAR

4. DO NOT CUT TIES OR CONTINUOUS BARS TO PROVIDE CLEARANCE FOR EMBEDDED ITEMS OR OTHER OBSTRUCTIONS. INDIVIDUAL BARS AND TIES MAY BE MOVED VERTICALLY UP TO 1.5" AS REQUIRED TO PROVIDE CLEARANCE FOR EMBEDS, HOOKS, ETC. DO NOT HEAT REINFORCING TO BEND IT.

5. IF DOWELS OR VERTICAL REINFORCING ARE CUT OR SEVERELY BENT, CONTRACTOR MAY BE REQUIRED TO REMOVE THE CONCRETE BACK TO THE PREVIOUS POUR JOINT AND REPLACE THE DAMAGED BARS AND CONCRETE AT THE CONTRACTOR'S EXPENSE.

6. REINFORCEMENT SHALL BE SPLICED ONLY AS SHOWN OR NOTED IN THE CONTRACT DOCUMENTS. SPLICES AT OTHER LOCATIONS SHALL BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER-OF-RECORD PRIOR TO FABRICATION.

7. REINFORCING BARS MARKED AS CONTINUOUS SHALL BE SPLICED WITH CLASS "B" TENSION LAP SPLICES ONLY.

8. ALL TENSION LAP SPLICES SHALL BE CLASS "B" UNLESS NOTED OTHERWISE.

9. WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A185. LAP REINFORCEMENT 8 INCHES ON SIDES AND ENDS. MAINTAIN WIRE 1 TO 2 INCHES BELOW TOP SURFACE OF SLAB-ON-GRADE, UNLESS NOTED OTHERWISE. WELDED WIRE REINFORCEMENT MUST BE PLACED ON CHAIRS OR BOLSTERS AS REQUIRED TO MAINTAIN POSITION IN THE SLAB.

10. ONCE SHOP DRAWINGS HAVE BEEN REVIEWED, DO NOT ADD REINFORCING OR INFORMATION TO PREVIOUSLY SUBMITTED SHEETS FOR SUBSEQUENT SUBMITTALS UNLESS SHOP DRAWINGS ARE BEING RESUBMITTED AFTER BEING RETURNED "NOT REVIEWED".

11. WHERE ANCHOR RODS ARE CAST INTO CONCRETE, PROVIDE SUPPLEMENTAL REINFORCING EACH WAY, TIED NEAR THE TOP AND BOTTOM OF ALL ANCHOR RODS TO THE ADJACENT REBAR TO SECURE RODS DURING CONCRETE PLACEMENT. (MINIMUM SIZE #4)

CAST-IN-PLACE CONCRETE

1. CONCRETE SUPPLIER SHALL SUBMIT CONCRETE MIX DESIGN DATA TO THE ARCHITECT FOR REVIEW PRIOR TO CONSTRUCTION.

2. CONCRETE SHALL HAVE AT LEAST THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:

A. FOOTINGS	3000 PSI
B. STAIR LANDINGS & STAIR TREADS	4000 PSI
C. REINFORCED CMU & BOND BEAM FILL	(SEE MASONRY NOTES)
D. SLABS-ON-GRADE, WALLS, PILASTERS, & PEDESTALS	4000 PSI

3. SEE CONCRETE MIX DESIGN TABLE

4. PROPORTIONS OF CONCRETE MIX DESIGNS SHALL BE DETERMINED BY THE PROCEDURES ESTABLISHED IN SECTION 5.3 OF ACI 318-19.

5. MIX DESIGN MAY INCLUDE (TYPE C) FLYASH AS A REPLACEMENT FOR PORTLAND CEMENT UP TO A MAXIMUM OF 20% OF THE TOTAL CEMENTITIOUS MATERIAL. DO NOT USE A FLYASH-CONTAINING CONCRETE MIX WHEN THE TEMPERATURE DURING PLACEMENT OR CURING IS PROJECTED TO FALL BELOW 60 DEGREES FAHRENHEIT.

6. MIX DESIGN MAY INCLUDE WATER REDUCING ADMIXTURES CONFORMING TO ASTM C494, TYPE A, TO PROVIDE WORKABILITY AND SPECIFIED SLUMP WITHOUT EXCEEDING SPECIFIED WATER/CEMENT RATIOS. **WATER SHALL NOT BE ADDED ON SITE WITHOUT PRIOR APPROVAL.** ANY APPROVED WATER AMOUNTS ADDED ON SITE MUST BE RECORDED & REPORTED BY THE TESTING AGENCY.

7. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 5.5% AIR ENTRAINMENT (±1.5%). DO NOT EXCEED 3% AIR CONTENT IN CONCRETE RECEIVING A STEEL TROWEL FINISH.

8. FLOWABLE FILL SHALL MEET THE FOLLOWING REQUIREMENTS:

A. MINIMUM 28 DAY COMPRESSIVE STRENGTH	1000 PSI
B. MINIMUM PORTLAND CEMENT CONTENT	188 LBS PER CUBIC YARD
C. MINIMUM FLYASH CONTENT	376 LBS PER CUBIC YARD
D. MAXIMUM PERMISSIBLE W/C RATIO	0.95

CAST-IN-PLACE CONCRETE MIX DESIGN TABLE

MIX DESIGN SHALL INCLUDE AT LEAST THE FOLLOWING AMOUNTS OF PORTLAND CEMENT MEETING ASTM C150 OR D595 PER CUBIC YARD OF CONCRETE

	NON-AIR ENTRAINED		AIR ENTRAINED		
28 DAY MIN. COMPRESSIVE STRENGTH (PSI)	MIN. CEMENT CONTENT (LBS/YARD^3)	MAXIMUM PERMISSIBLE W/C RATIO	MIN. CEMENT CONTENT (LBS/YARD^3)	MAXIMUM PERMISSIBLE W/C RATIO	MAX. SLUMP w/ WRA
3000	470	0.53	-	-	4"
4000	564	0.44	-	-	6"

MASONRY NOTES

1. ALL CONCRETE MASONRY UNITS (CMU) SHALL COMPLY WITH ASTM C90, AND HAVE A MINIMUM NET COMPRESSIVE STRENGTH OF 1900 PSI. SIZES SHALL BE AS INDICATED ON THE CONTRACT DRAWINGS.

2. TYPE S MORTAR SHALL BE USED ABOVE AND BELOW GRADE. MIX MORTAR IN ACCORDANCE WITH ASTM C270. USE TYPE 1 PORTLAND CEMENT (TYPE III MAY BE USED FOR COLD WEATHER CONSTRUCTION) MEETING ASTM C1329, HYDRATED LIME MEETING ASTM C207 AND AGGREGATE MEETING ASTM C144. **(VERIFY STANDARD MORTAR NOTE WITH ARCHITECTS SPECIFICATIONS)**

3. FILL ALL SPACES BETWEEN BRICK WYTHES AND ALL CMU CELLS BELOW THE SLAB OR FNIHSED GRADE WITH 3000 PSI GROUT MEETING THE FOLLOWING REQUIREMENTS:

A. USE A MINIMUM OF 5.5 BAGS OF PORTLAND CEMENT PER CUBIC YARD.
B. MAXIMUM WATER/CEMENT RATIO BY WEIGHT SHALL BE 0.54.
C. WATER-REDUCING ADMIXTURE MEETING ASTM C494 SHALL BE USED TO PROVIDE SUFFICIENT FLOWABILITY TO READILY FILL CELLS WITH A REASONABLE AMOUNT OF RODDING. ADDITIONAL WATER WILL NOT BE ALLOWED AFTER INITIAL MIXING.
D. AGGREGATE SHALL BE WELL GRADED WITH A MAXIMUM SIZE OF 3/8".
E. ALTERNATE MIX DESIGNS WILL BE CONSIDERED IF SUBMITTED TO THE ARCHITECT FOR APPROVAL AFTER CONTRACT IS AWARDED. ALTERNATE DESIGNS MUST SHOW SUFFICIENT FLOWABILITY CHARACTERISTICS AND A 28-DAY COMPRESSIVE STRENGTH OF AT LEAST 3000 PSI

4. MAXIMUM HEIGHT OF ALL GROUT FILL SHALL NOT EXCEED 4'-0" UNLESS CLEANOUT AND INSPECTION HOLE IS PROVIDED AT THE BOTTOM OF THE POUR.

5. WHERE VERTICAL REINFORCING AND HORIZONTAL REINFORCING INTERSECT, ALL REINFORCING SHALL RUN CONTINUOUS.

6. HORIZONTAL REINFORCING SHALL BE CONTINUOUS AT CORNERS WITH 90-DEGREE BENDS OR CORNER BARS WITH EACH LEG EQUAL TO THE REQUIRED LAP LENGTH. (SEE TYPICAL CORNER BAR DETAIL)

7. ALL CMU SHALL HAVE 9 GAUGE TRUSS TYPE JOINT REINFORCEMENT AT 16" ON CENTER VERTICALLY ABOVE GRADE AND 8" ON CENTER VERTICALLY BELOW GRADE UNLESS NOTED OTHERWISE.

METALS NOTES

STRUCTURAL STEEL

1. STRUCTURAL STEEL SUPPLIER SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION.

2. ALL STRUCTURAL STEEL SHAPES SHALL BE AS FOLLOWS:

A. ALL WIDE FLANGE STRUCTURAL STEEL SHAPES SHALL BE ASTM A992.
B. SQUARE OR RECTANGULAR HOLLOW STRUCTURAL SECTIONS SHALL BE ASTM A500, GRADE B, Fy = 46 KSI
C. ROUND HOLLOW STRUCTURAL SECTIONS SHALL BE ASTM A500, GRADE B, Fy = 42 KSI
D. ROUND STEEL PIPES SHALL BE ASTM A53, GRADE B, Fy = 35 KSI
E. ALL OTHER STRUCTURAL STEEL (CHANNELS, ANGLES, PLATES, ETC.) SHALL BE ASTM A36.

3. ALL ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 (OR GRADE 55 WITH SUPPLEMENT S1 - WELDABILITY) UNLESS NOTED OTHERWISE.

4. STRUCTURAL BOLTS SHALL BE ASTM A325-N, UNLESS OTHERWISE NOTED.

5. BOLTS THRU WOOD BLOCKING SHALL BE ASTM A307. ALL BOLTS IN CONTACT WITH TREATED WOOD SHALL BE STAINLESS STEEL (TYPE 316L), OR HOT DIPPED GALVANIZED WITH A MINIMUM COATING THICKNESS OF 0.2 OUNCES PER SQUARE FEET (ASTM A153). USE STAINLESS BOLTS WITH STAINLESS STEEL CONNECTORS AND GALVANIZED BOLTS WITH GALVANIZED CONNECTORS IF ONLY ONE IS SPECIFIED.

6. POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE SHALL BE STANDARD ASTM A36 THREADED RODS (OR APPROVED EQUAL) WITH A MINIMUM STEEL YIELD STRENGTH OF Fy=36 KSI, OR ASTM F593 STAINLESS STEEL ANCHORS WITH A MINIMUM YIELD STRENGTH OF Fy=45 KSI, UNLESS SHOWN OTHERWISE ON THE DRAWINGS. ADHESIVE SHALL BE HILTI "HIT-RE 500-SD" SYSTEM (REF: ICC-ES ESR-2322), SIMPSON STRONG-TIE "SET-3G" SYSTEM (REF: ICC-ES ESR-4057), (OR APPROVED EQUAL).

7. ALL WELDS SHALL BE E70XX, MINIMUM AND SHALL BE PERFORMED BY AWS CERTIFIED WELDERS, CERTIFIED WITHIN THE PREVIOUS TWELVE (12) MONTHS. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THE BUILDING AND COMPONENTS DUE TO FIRE HAZARDS FROM WELDING.

8. ALL STEEL LINTELS AND SHELF ANGLES SHALL BE COATED WITH A ZINC RICH PRIMER.

WOOD NOTES

LUMBER

1. ALL WOOD MEMBERS THAT ARE IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED WITH WATER BORNE TREATMENT TO A NET RETENTION OF 0.3 POUNDS PER CUBIC FOOT. (SEE STRUCTURAL STEEL FRAMING NOTE #5 FOR BOLTS IN CONTACT WITH PRESERVATIVE TREATED WOOD).

2. ALL STRUCTURAL LUMBER EXCEPT LOAD BEARING STUDS SHALL BE #2 KD SOUTHERN PINE.

3. LUMBER USED FOR LOAD BEARING STUDS MAY BE #2 KD SOUTHERN PINE, #1 HEM-FIR OR #1 SPRUCE-PINE-FIR.

4. PROVIDE COLUMNS BUILT-UP OF MULTIPLE STUDS AT ENDS OF ALL HEADERS AND BEAMS (2 STUDS MINIMUM).

5. PROVIDE 2x4 OR 2x6 SOLID WOOD BLOCKING AT ALL RIDGES, VALLEYS & HIPS. PROVIDE 2x8 RAFTERS AT 24" ON CENTER AT ALL ROOF OVERBUILDS. PROVIDE 2x4 OR 2x6 OUTRIGGERS AT ALL OVERHANGS AND PROVIDE SOLID BLOCKING BETWEEN OUTRIGGERS AT SUPPORT.

STRUCTURAL PANELS

1. ROOF SHEATHING SHALL BE 5/8" APA RATED PLYWOOD, OSB OR ZIP SYSTEM PANELS (SPAN INDEX 40/20). ATTACHMENT SHALL BE WITH 10d COMMON NAILS AT 6" ON CENTER AT SUPPORTED EDGES AND AT 12" ON CENTER ALONG ALL INTERMEDIATE SUPPORTS. PLYCLIPS SHALL BE USED AT ALL FREE EDGES, ONE AT MID-POINT BETWEEN ALL SUPPORTS.

2. WALL SHEATHING SHALL BE 1/2" APA RATED PLYWOOD, OSB OR ZIP SYSTEM PANELS (SPAN INDEX 32/16). ATTACHMENT SHALL BE WITH 8d COMMON NAILS AT 4" ON CENTER AT SUPPORTED EDGES AND AT 12" ON CENTER ALONG ALL INTERMEDIATE SUPPORTS. ⚠1

3. FLOOR DECKING SHALL BE 3/4", STURD-I-FLOOR, C-D INT-APA RATED PLYWOOD WITH EXTERIOR GLUE (SPAN INDEX 24"o.c.). ATTACHMENT SHALL BE WITH 10d COMMON NAILS AT 6" ON CENTER AT SUPPORTED EDGES AND AT 12" ON CENTER ALONG ALL INTERMEDIATE SUPPORTS.

4. PNEUMATIC NAILING MAY BE SUBSTITUTED FOR COMMON NAILS UNDER THE FOLLOWING CONDITIONS:

A. PNEUMATIC NAIL SUBSTITUTE FOR 8d COMMON NAILS SHALL HAVE A MINIMUM DIAMETER OF 0.131 INCHES AND LENGTH OF 2 1/2 INCHES.
B. PNEUMATIC NAIL SUBSTITUTE FOR 10d COMMON NAILS SHALL HAVE A MINIMUM DIAMETER OF 0.148 INCHES AND LENGTH OF 3 INCHES.

T-HEAD NAILS OR STAPLES ARE NOT ACCEPTABLE.

PRE-FABRICATED STRUCTURAL WOOD

1. LVL BEAMS SHALL BE 2.0E MICROLLAM LVL OR AN APPROVED EQUAL WITH THE FOLLOWING MINIMUM PROPERTIES:

MODULUS OF ELASTICITY	(E)	=	2,000,000 PSI
ALLOWABLE BENDING STRESS	(Fb)	=	2600 PSI
ALLOWABLE COMPRESSION PERPENDICULAR TO GRAIN	(Fc⊥)	=	750 PSI
ALLOWABLE COMPRESSION PARALLEL TO GRAIN	(Fc II)	=	2510 PSI
ALLOWABLE HORIZONTAL SHEAR	(Fv)	=	285 PSI

2. RIMBOARD SHALL BE 1 1/4" TIMBERSTRAND LSL OR AN APPROVED EQUAL WITH THE FOLLOWING MINIMUM PROPERTIES:

MODULUS OF ELASTICITY	(E)	=	1,300,000 PSI
ALLOWABLE BENDING STRESS	(Fb)	=	1700 PSI
ALLOWABLE COMPRESSION PERPENDICULAR TO GRAIN	(Fc⊥)	=	680 PSI
ALLOWABLE COMPRESSION PARALLEL TO GRAIN	(Fc II)	=	1400 PSI
ALLOWABLE HORIZONTAL SHEAR	(Fv)	=	400 PSI

PRE-FABRICATED WOOD TRUSSES

1. WOOD TRUSS FABRICATOR SHALL SUBMIT CALCULATIONS AND SHOP DRAWINGS SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION.

2. TRUSS DIMENSIONS AND LAYOUT, IF SHOWN, IS FOR ESTIMATING PURPOSES ONLY AND IS NOT NECESSARILY TO BE USED FOR FABRICATION. FABRICATOR SHALL BE RESPONSIBLE FOR ACTUAL DIMENSIONS OF TRUSSES. TRUSSES SHALL UTILIZE ONLY THE BEARING WALLS AND SUPPORTS SHOWN ON THE PLANS.

3. CONTRACTOR SHALL PROVIDE BRACING FOR TRUSS CHORDS AND WEB MEMBERS AS REQUIRED BY THE TRUSS FABRICATOR. SYSTEM IS NOT STABLE UNTIL SHEATHING AND PERMANENT BRACING ARE INSTALLED.

4. ALL LUMBER USED FOR TRUSSES SHALL BE #2 GRADE, KILN-DRIED SOUTHERN PINE, #2 SPRUCE-PINE-FIR, #2 HEM-FIR, OR BETTER. NUMBER 3 GRADE LUMBER WILL NOT BE ALLOWED FOR CHORDS OR WEB MEMBERS. MINIMUM TRUSS MEMBER SIZE SHALL BE 2x4.

5. MINIMUM TRUSS PLATE SIZE SHALL BE (3"x5") OR (4"x4") EACH SIDE OF TRUSS AT ALL JOINTS.

6. MINIMUM CONTACT AREAS FOR TRUSS PLATES SHALL BE 3.75 SQUARE INCHES ON EACH MEMBER AT ALL JOINTS, EACH SIDE OF TRUSS.

7. TRUSS MANUFACTURER SHALL DESIGN AND PROVIDE TRUSS HANGERS WHERE TRUSSES ARE SUPPORTED BY OTHER TRUSSES.

8. PROVIDE SIMPSON "H2.5A" ANCHORS PLUS CODE REQUIRED NAILING TO ATTACH EACH END OF ALL TRUSSES TO SUPPORTS WHERE TRUSSES ARE SUPPORTED BY BEARING WALLS, STEEL BEAMS, OR LAMINATED WOOD BEAMS.

9. INCORPORATE WEIGHT OF ROOFTOP UNITS IN THE TRUSS DESIGN AS SHOWN ON THE PLANS.

EARTHWORK & FOUNDATION NOTES

EXCAVATION & FILL

1. ALL UNDERCUTTING, SITE PREPARATION, FILL SELECTION, BACKFILLING AND COMPACTION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND SOILS ENGINEER'S RECOMMENDATIONS.

2. SELECT FILL BENEATH THE BUILDING SHALL BE PLACED IN LIFTS NOT EXCEEDING 8" LOOSE THICKNESS AND COMPACTED TO AT LEAST 95" OF MAXIMUM MODIFIED PROCTOR DRY DENSITY (ASTM D1557). THE IN-PLACE DENSITY AND MOISTURE CONTENT SHALL BE ESTABLISHED AND APPROVED FOR EACH LIFT PRIOR TO PLACEMENT OF SUBSEQUENT LIFTS.

SPREAD FOOTINGS

1. BOTTOM OF FOOTING ELEVATIONS (BF) SHOWN ON THE PLANS ARE FOR ESTIMATING PURPOSES ONLY AND ARE NOT NECESSARILY TO BE USED FOR CONSTRUCTION. THE SOILS ENGINEER OR HIS REPRESENTATIVE SHALL BE ENGAGED TO INSPECT ALL FOOTING EXCAVATIONS TO VERIFY THAT THE REQUIRED ALLOWABLE BEARING CAPACITY IS ATTAINABLE. BOTTOM OF FOOTING ELEVATIONS SHALL BE ADJUSTED PER THE ON-SITE RECOMMENDATIONS OF THE SOILS ENGINEER OR HIS REPRESENTATIVE.

2. ALL SPREAD FOOTING EXCAVATIONS SHALL BE FOUNDED IN PROPERLY COMPACTED SELECT FILL OR IN THE NATURAL SOILS (STRATUM II) WITH AN ALLOWABLE NET BEARING CAPACITY OF AT LEAST 2000 PSF.

3. CONTRACTOR SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS TO PROVIDE GEOTECHNICAL ENGINEERING SERVICES AS REQUIRED.

4. MAINTAIN FINISHED GRADE (AND/OR BOTTOM OF FOOTING ELEVATIONS) TO PROVIDE AT LEAST 1'-6" COVER ABOVE THE BOTTOM OF ALL EXTERIOR FOOTINGS FOR FROST PROTECTION.

RETAINING WALLS

1. ALL RETAINING WALLS SHALL HAVE A PROPERLY INSTALLED DRAINAGE SYSTEM TO RELIEVE HYDROSTATIC PRESSURE.

2. BACKFILL BOTH SIDES OF WALLS EQUALLY UNTIL LOW SIDE IS UP TO GRADE.

3. PROVIDE ADDITIONAL SHORING FOR ALL FOUNDATION WALLS AS REQUIRED DURING CONSTRUCTION BACKFILLING AND COMPACTION OPERATIONS.

4. ALL FOUNDATION WALLS WITH AN ELEVATED CONCRETE SLAB FRAMING INTO THE TOP OF THE WALL MAY BE BACKFILLED ONLY AFTER THE ELEVATED SLAB ABOVE IS IN PLACE AND CURED.

5. IF RETAINING WALLS ARE REQUIRED BY THE BUILDING OFFICIALS TO BE INSPECTED (AS-BUILT CERTIFICATION FORM), THE CONTRACTOR SHALL RETAIN THE SERVICES OF AN INDEPENDENT REGISTERED ENGINEER OR NOTIFY THE ENGINEER-OF-RECORD AT LEAST 3 DAYS PRIOR TO COVERING UP THE REBAR WITH WALL FACING MATERIAL (WHETHER CONCRETE OR MASONRY), SO THAT IN-PLACE REBAR MAY BE PROPERLY INSPECTED.

SPECIAL INSPECTION NOTES

1. SPECIAL INSPECTIONS SHALL BE REQUIRED IN ACCORDANCE WITH CHAPTER 17 OF THE BUILDING CODE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS WITH THE INSPECTION AGENCY.

2. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE TO PERFORM THE REQUIRED INSPECTION TO THE SATISFACTION OF THE BUILDING OFFICIAL.

3. THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF INSPECTIONS. INSPECTION REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

4. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.

5. A FINAL REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES SHALL BE SUBMITTED TO THE OWNER, BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AT THE COMPLETION OF THE STRUCTURAL PORTION OF THE WORK.

SOIL TESTING AND INSPECTIONS

1. A QUALIFIED TESTING LABORATORY SHALL TEST ALL CONTROLLED STRUCTURAL FILL. A MINIMUM OF TWO SOIL COMPACTION TESTS SHALL BE MADE FOR EACH LIFT.

2. AFTER FOOTING EXCAVATIONS HAVE BEEN MADE TO DESIGN ELEVATIONS, THE INDEPENDENT TESTING AGENCY SHALL INSPECT AND TEST THE BEARING SOIL TO VERIFY THAT IT MEETS THE REQUIRED DESIGN CAPACITY.

CONCRETE CONSTRUCTION INSPECTIONS

1. INSPECT REINFORCING STEEL PRIOR TO PLACING CONCRETE. CHECK REINFORCING SIZE, SPACING AND LOCATION.

2. VERIFY SIZE, TYPE, EMBEDMENT DEPTH, PROJECTION AND QUANTITY OF ANCHOR BOLTS.

3. CYLINDERS SHALL BE MADE FOR DETERMINING THE CONCRETE STRENGTH FROM EACH CLASS OF CONCRETE TO BE PLACED. SAMPLES SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE, NOR LESS THAN ONCE FOR EACH 5,000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS. (EACH SAMPLE SHALL CONSIST OF 4 CYLINDERS MADE, HANDLED AND TESTED PER THE SPECIFICATIONS.)

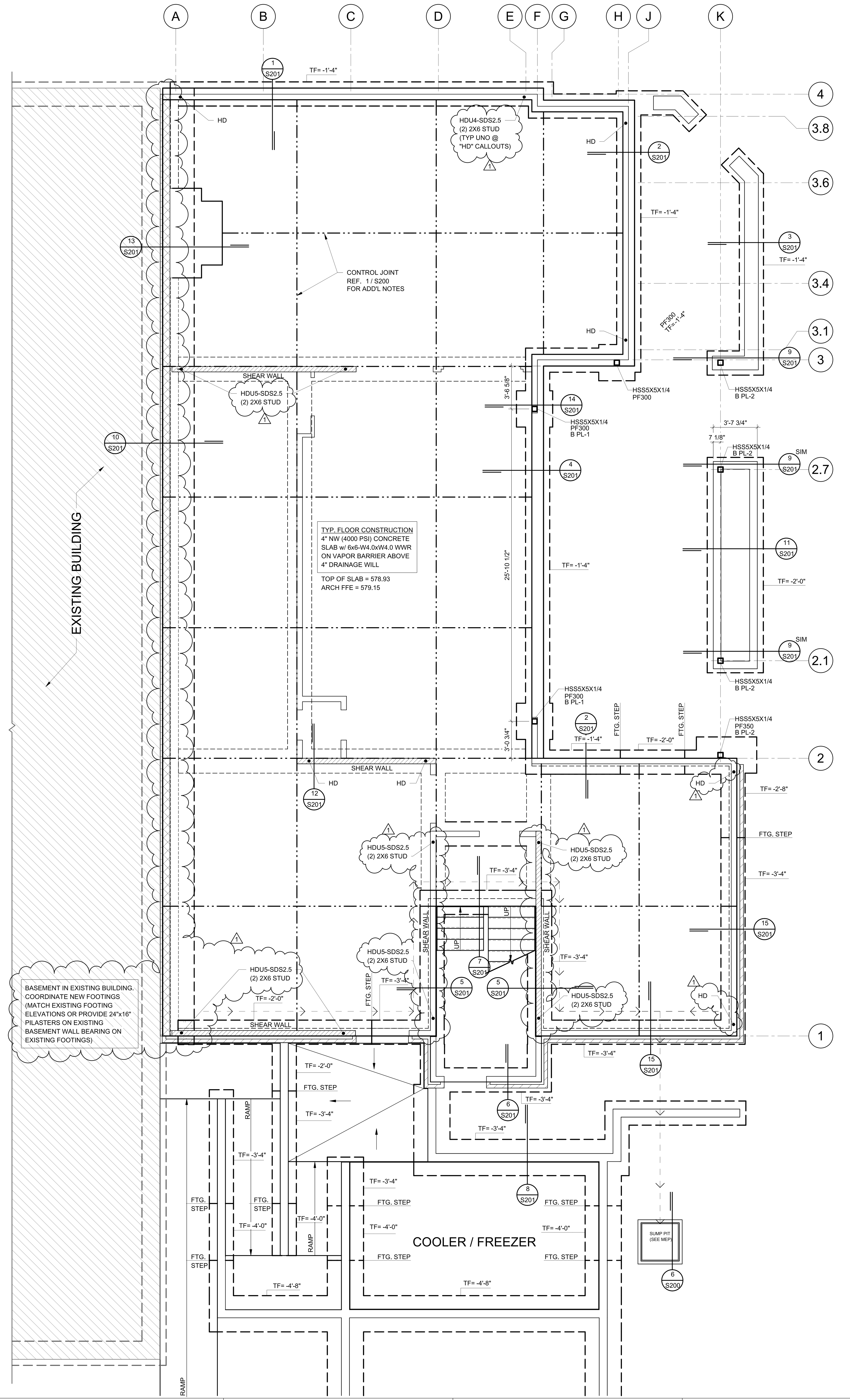
4. EACH TIME THE CYLINDERS ARE MADE THE SLUMP, AIR CONTENT AND TEMPERATURE OF THE CONCRETE SHALL ALSO BE CHECKED.

5. THE CONTRACTOR'S METHOD OF MAINTAINING THE MINIMUM CURING TEMPERATURE AND CURING TECHNIQUE SHALL BE REVIEWED.

6. PROVIDE CONTINUOUS INSPECTION OF POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE ELEMENTS TO VERIFY THE INSTALLATION IS IN ACCORDANCE WITH STRUCTURAL DRAWINGS, EVALUATION SERVICE REPORT, AND MANUFACTURER'S INSTRUCTIONS. VERIFY LOCATION, EDGE DISTANCES, SPACING, DRILL BIT SIZE, HOLE DEPTH, HOLE CLEANING PROCEDURES, ANCHOR MATERIAL, EMBEDMENT, AND INSTALLATION PROCEDURES INCLUDING CHECKING EXPIRATION DATE AND PROPER MIXING OF ADHESIVE.

MASONRY CONSTRUCTION INSPECTIONS

1. ALL MASONRY CONSTRUCTION FOR LOAD BEARING WALLS SHALL BE INSPECTED AND EVALUATED IN ACCORDANCE WITH THE REQUIREMENTS FOR LEVEL B QUALITY ASSURANCE AS OUTLINED IN TABLE 1.19.2 OF THE MASONRY CODE (



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

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PH: 704.301.4961

PSW Job Number:
1001B

ENGLISH PUB

Little Rock, Arkansas

Issue Date:

01-31-25

REVISIONS

NUMBER	DATE	DESCRIPTION
1	3-14-25	ADD 2

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FOUNDATION PLAN

CERTIFICATE OF AUTHORIZATION
ENGINEERING CONSULTANTS, INC.
No. 26
ARKANSAS ENGINEER

Engineering Consultants, Inc.
Structural Engineers
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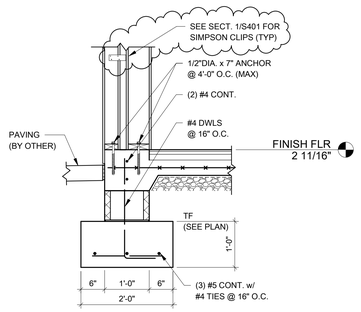
Phone No: (501) 376-3752
JOB# 23-485

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8953

3/14/2025

S101



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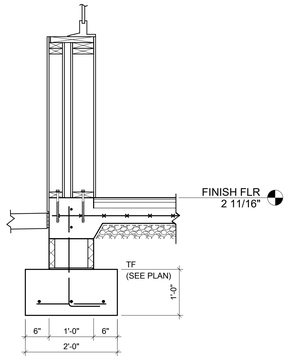

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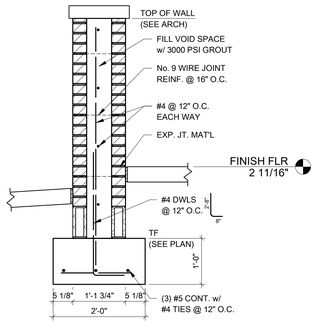

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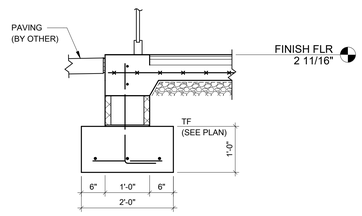

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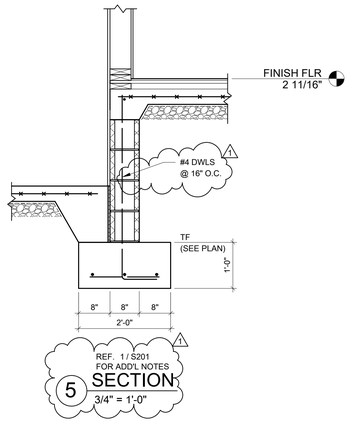

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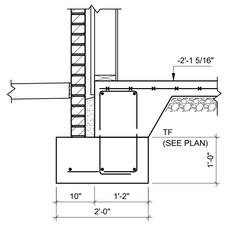

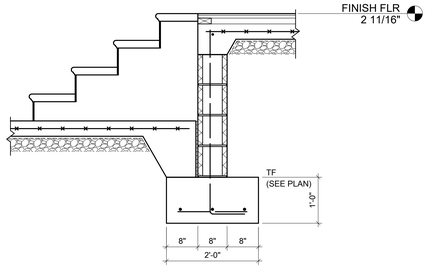

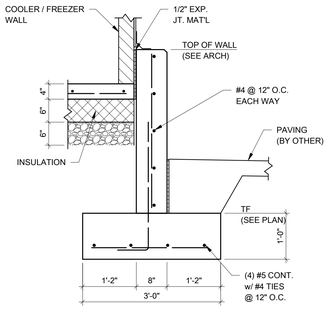

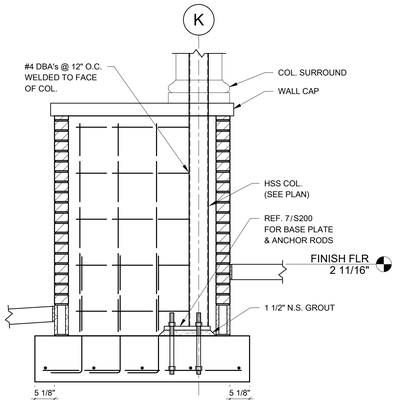

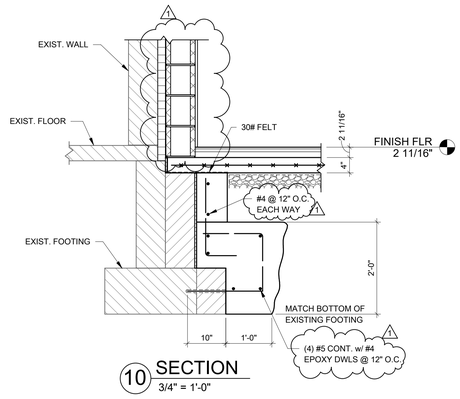

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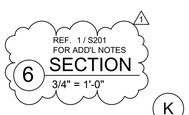

8 SECTION
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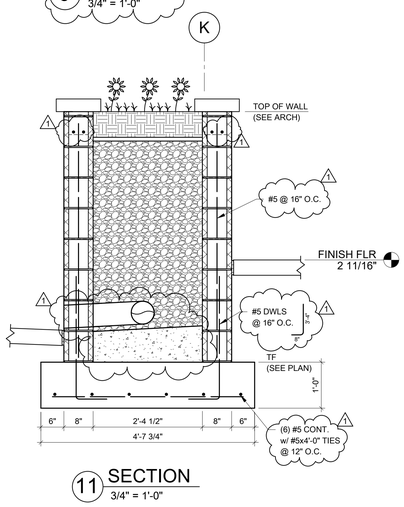
9 SECTION
3/4" = 1'-0"



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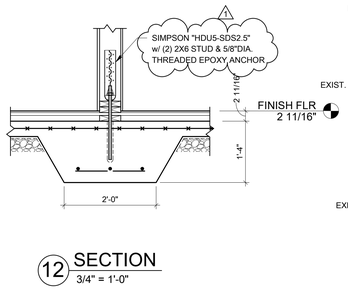

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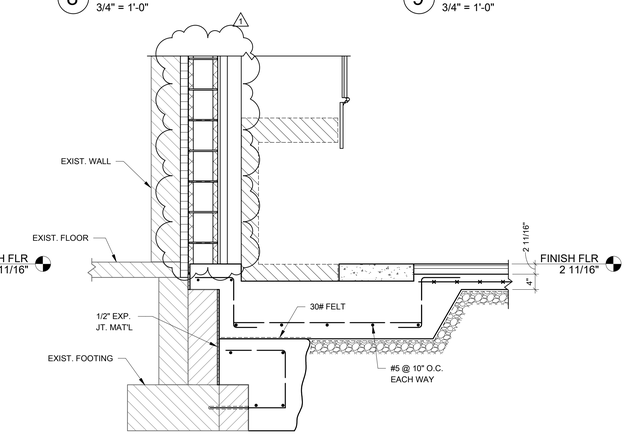

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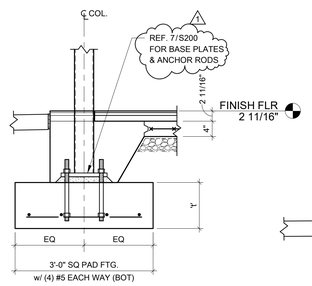

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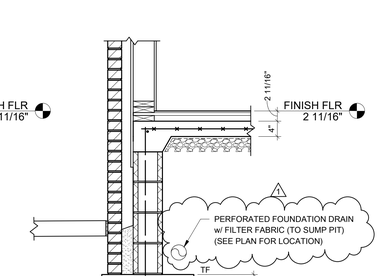

REF. 5 / S201 FOR ADD'L NOTES
15 SECTION
3/4" = 1'-0"

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PH: 704.301.4961

PSW Job Number:
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ENGLISH PUB

Little Rock, Arkansas

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Contents:
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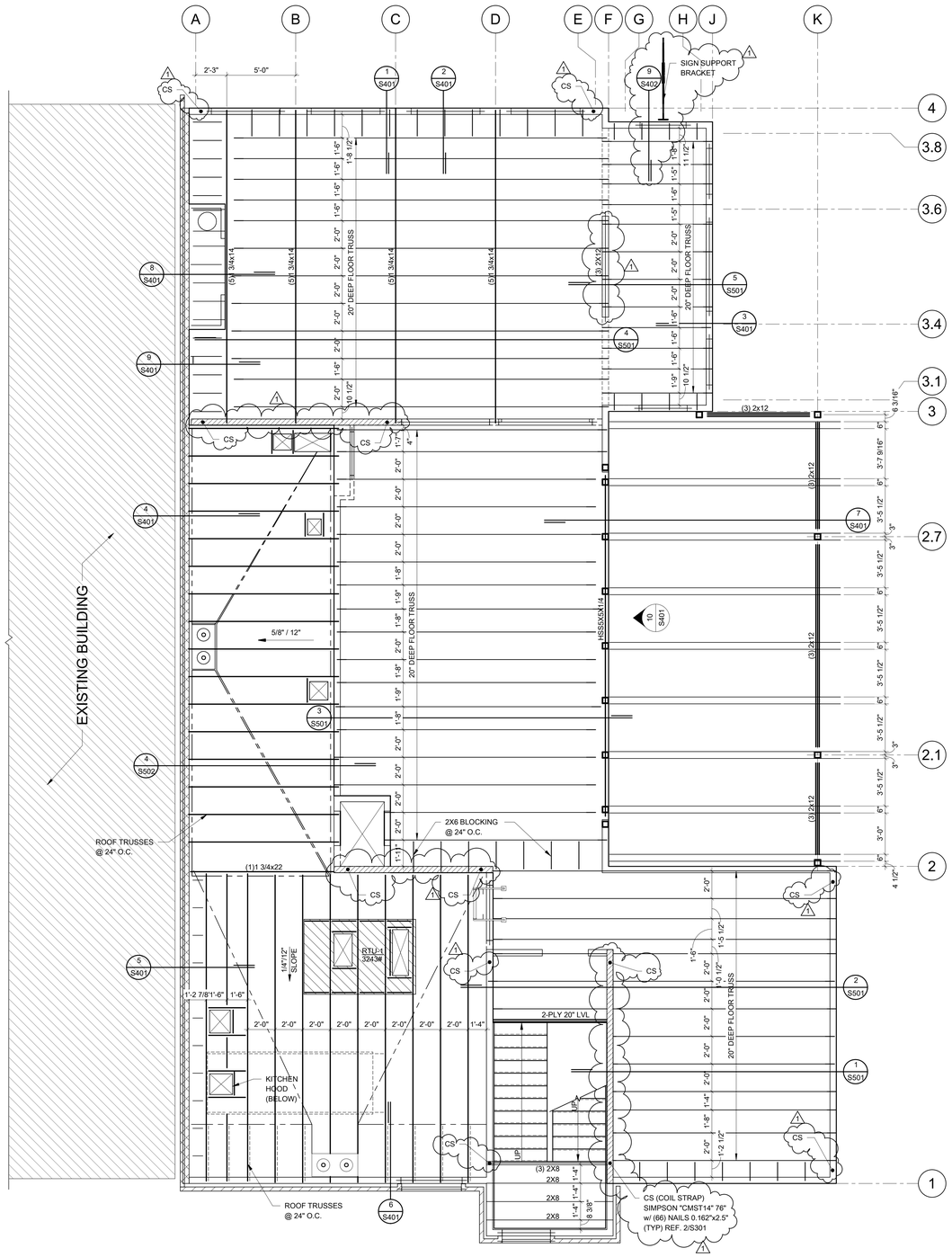
Phone No: (501) 376-3752

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8953 J. GRANT JORDAN

JOB# 23-485 3/14/2025

S201



1 2ND FLOOR FRAMING PLAN
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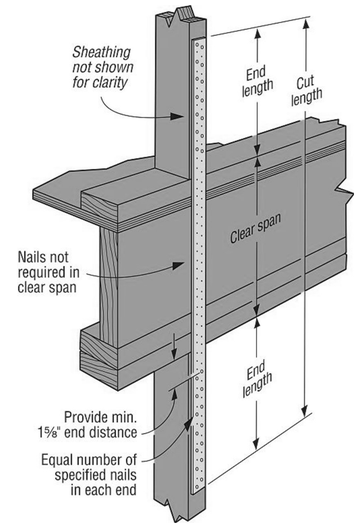

2 COIL STRAP INSTALLATION VIEW
N.T.S.

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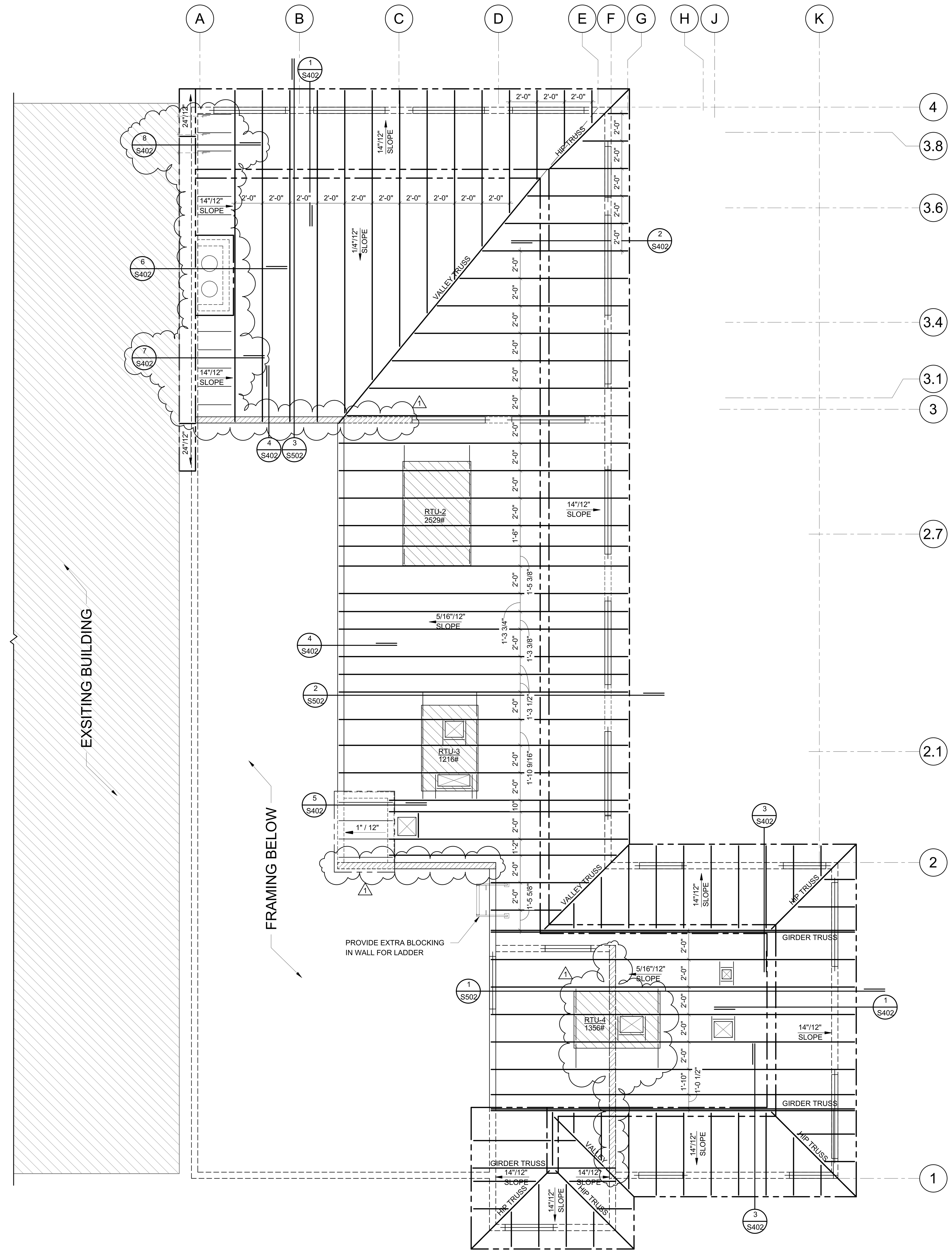
JOB# 23-485 3/14/2025

S301



1 ROOF FRAMING PLAN
1/4" = 1'-0"

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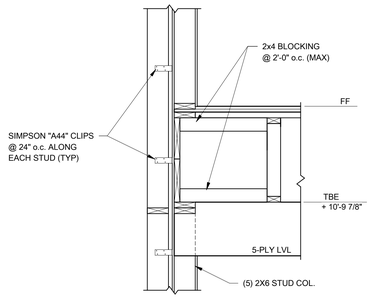
Phone No: (501) 376-3752
JOB# 23-485
3/14/2025

S302



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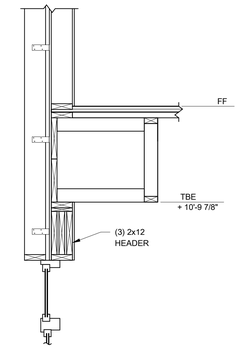

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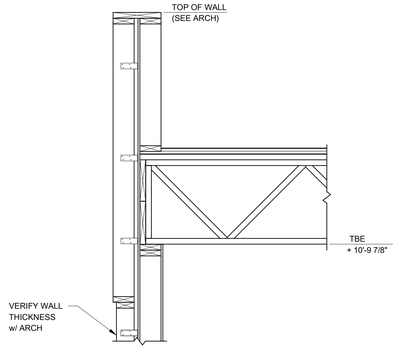

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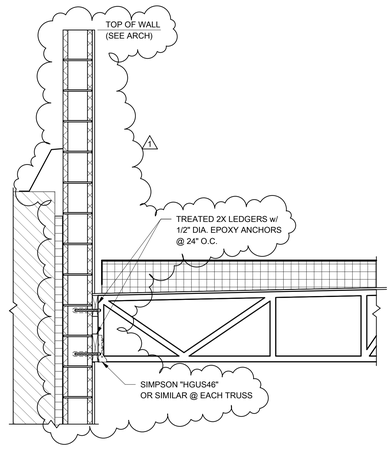

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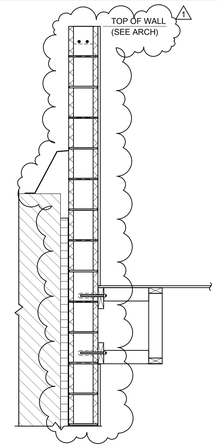

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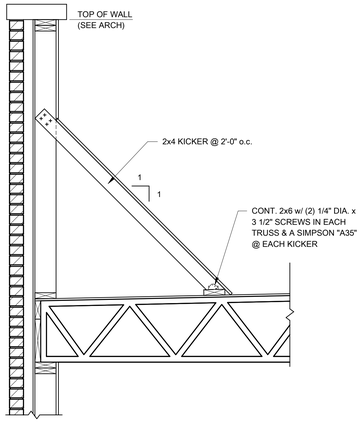

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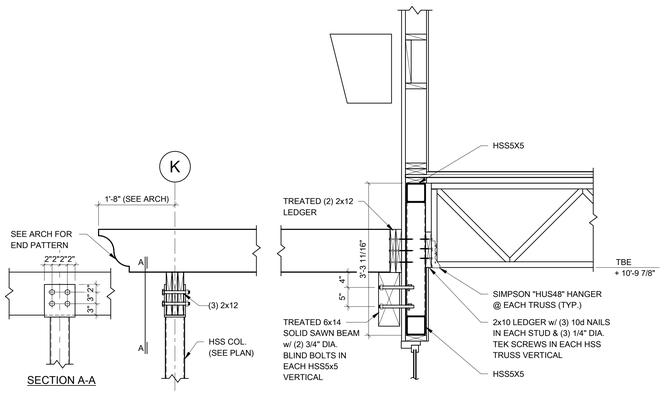

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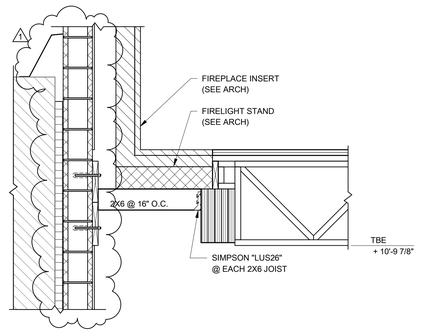

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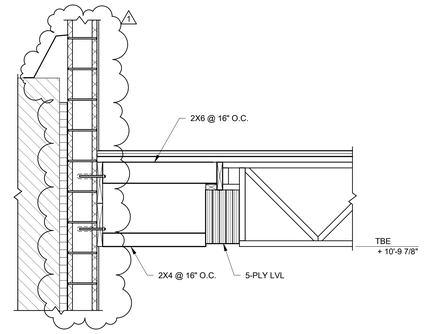

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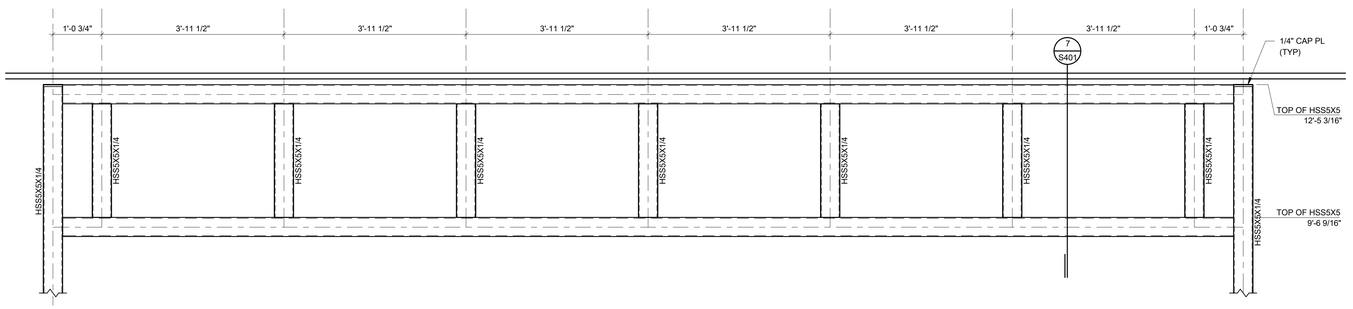

10 FRAME ELEVATION
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STATE OF ARKANSAS
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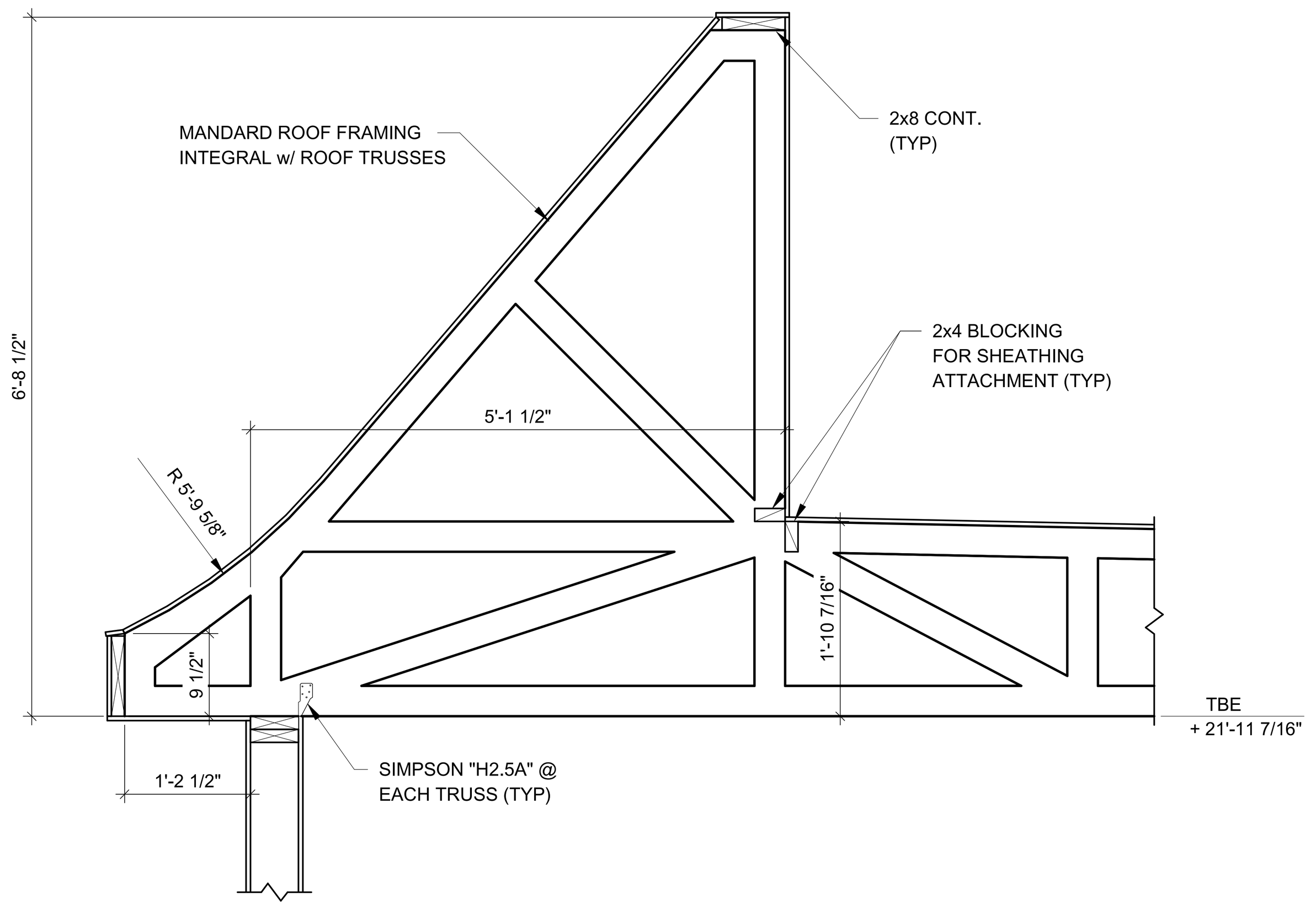
No. 8953

JOB# 23-485

3/14/2025

S401



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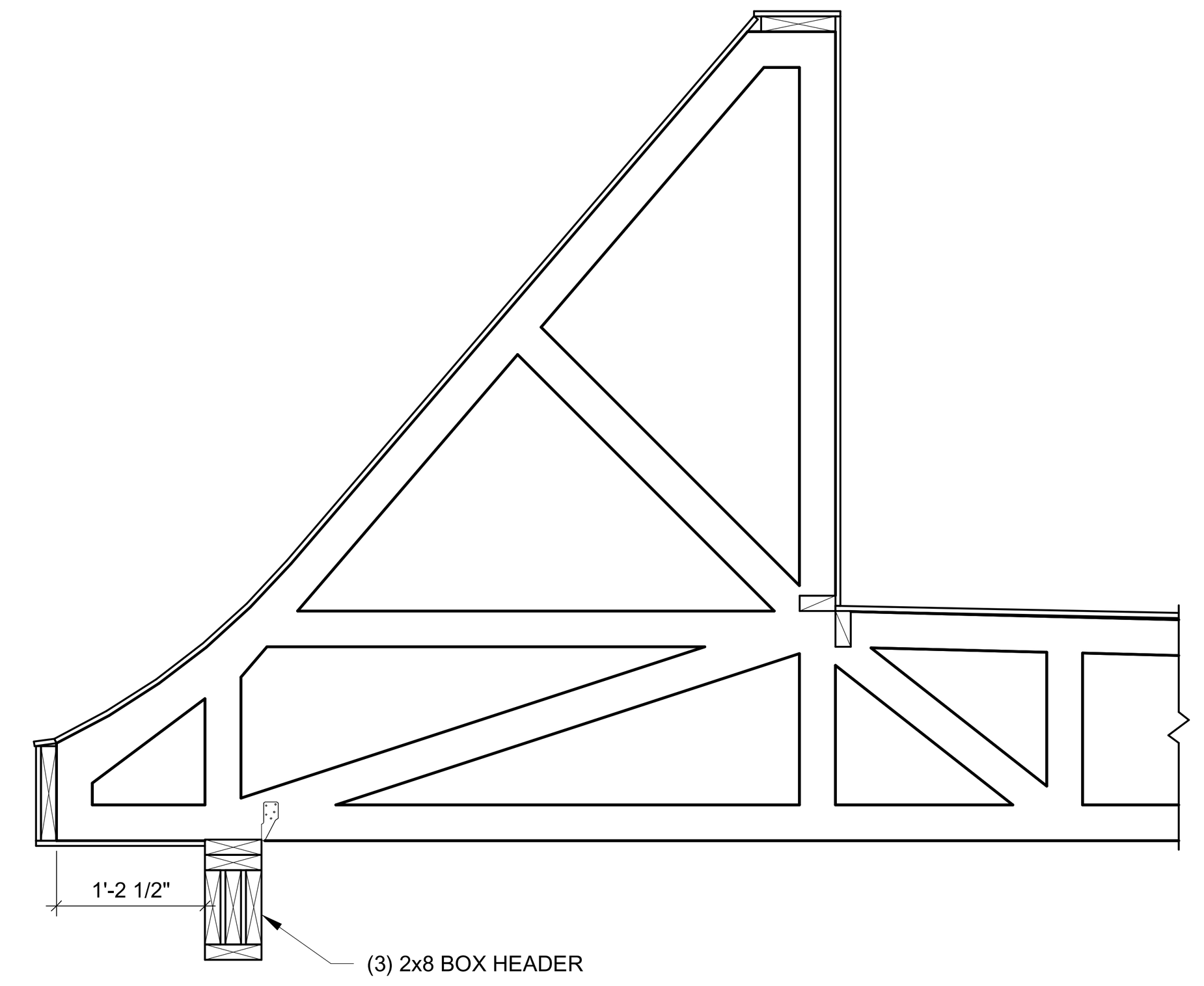

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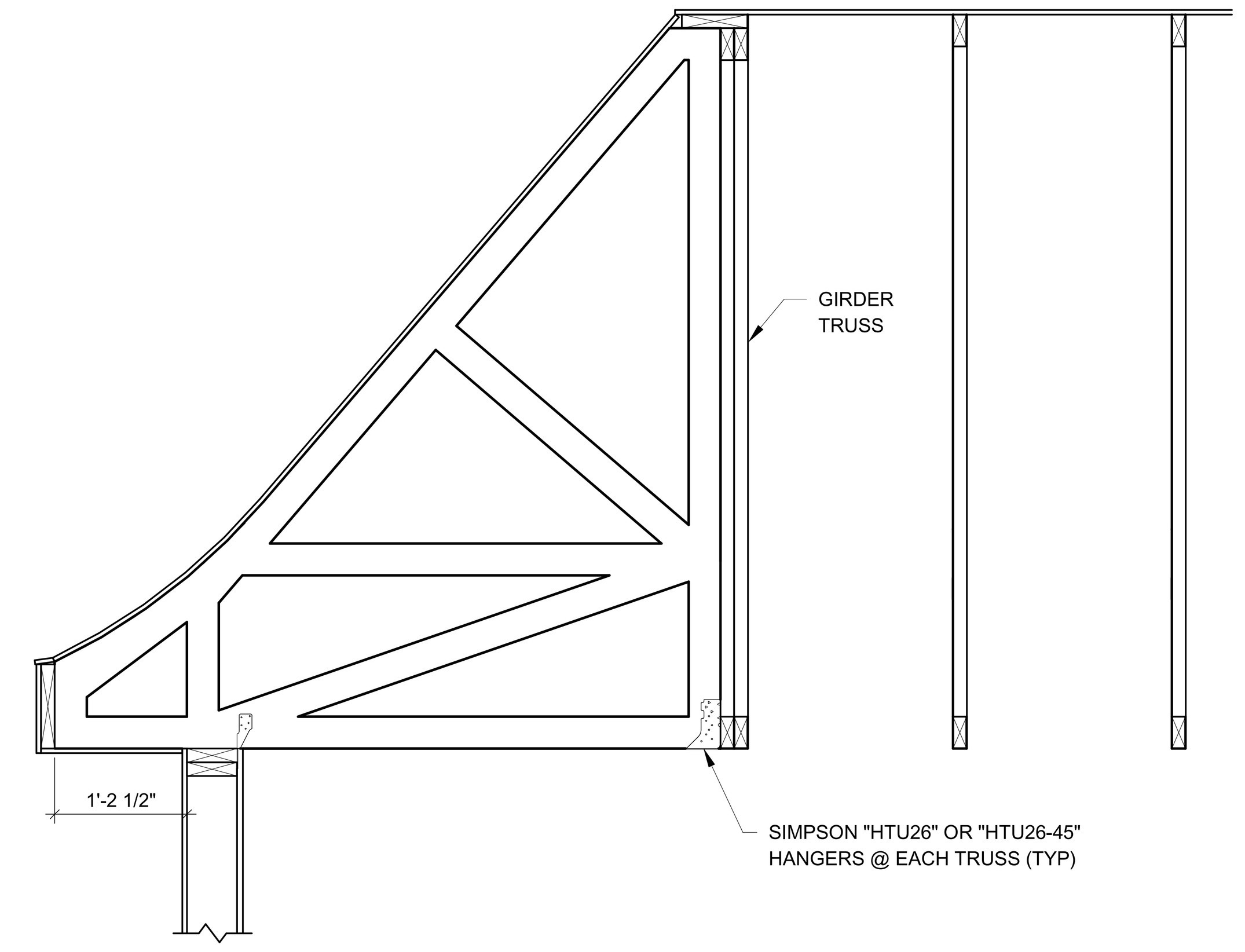

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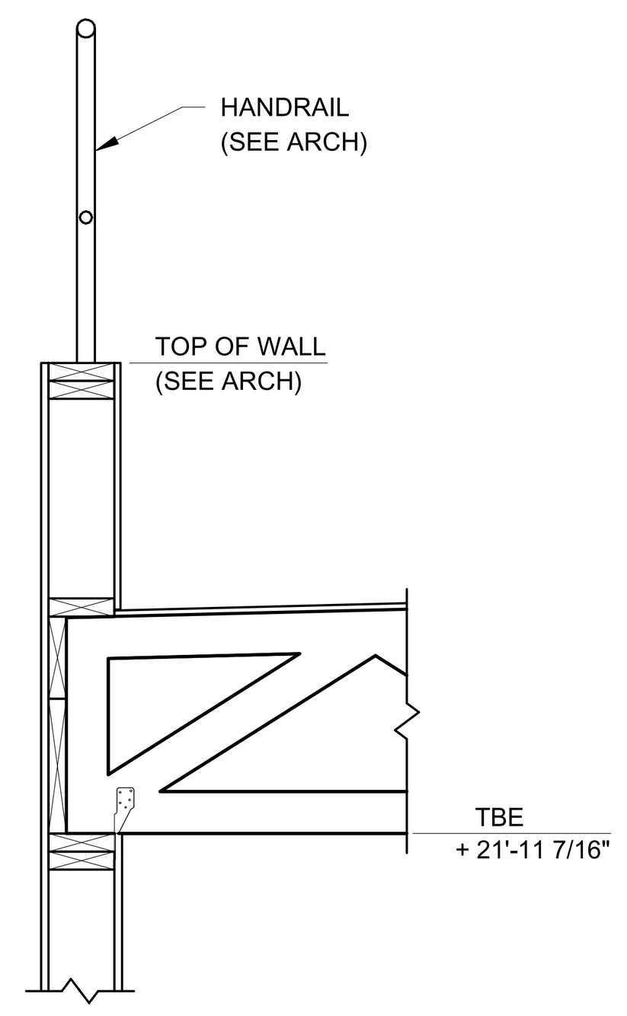

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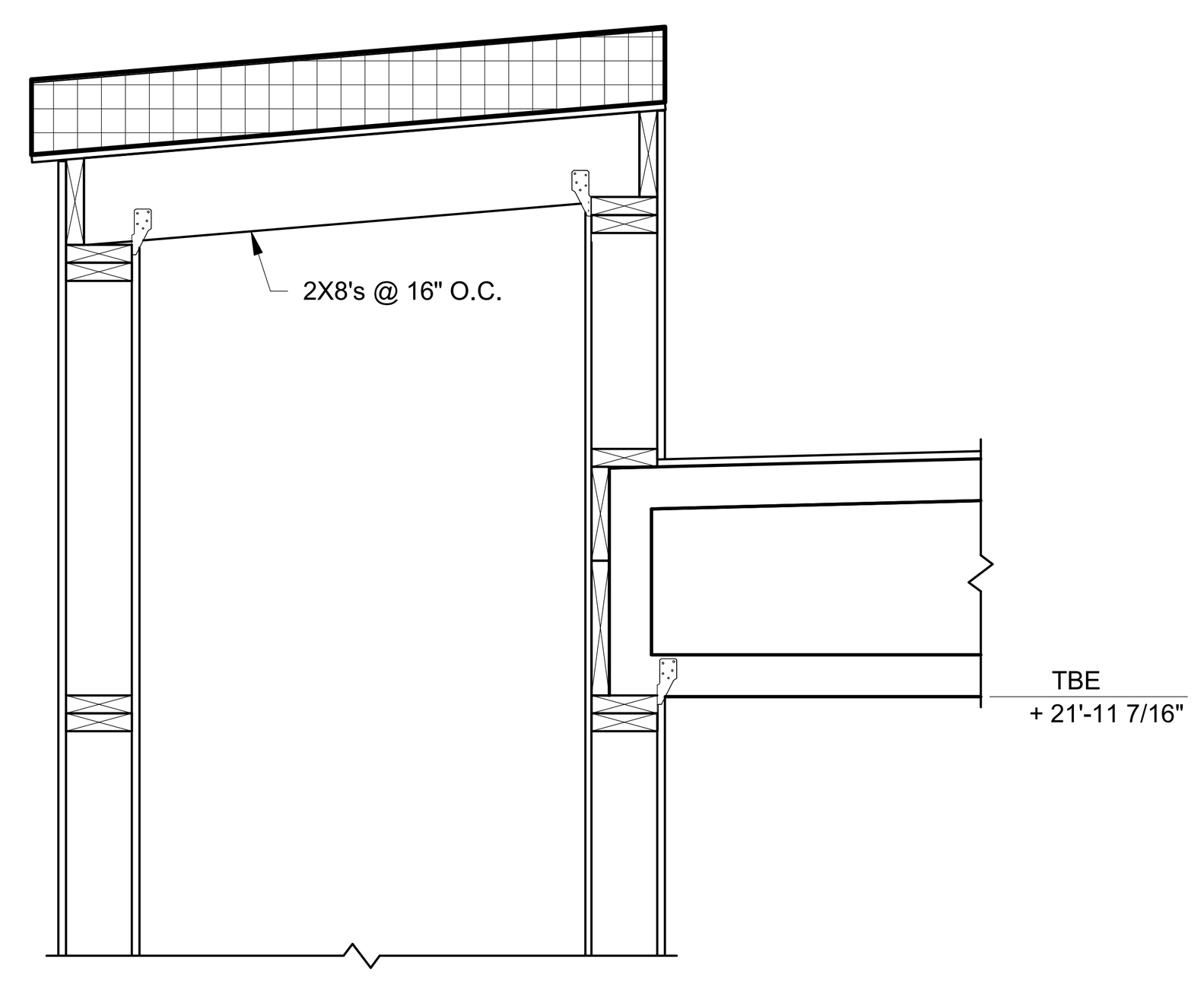

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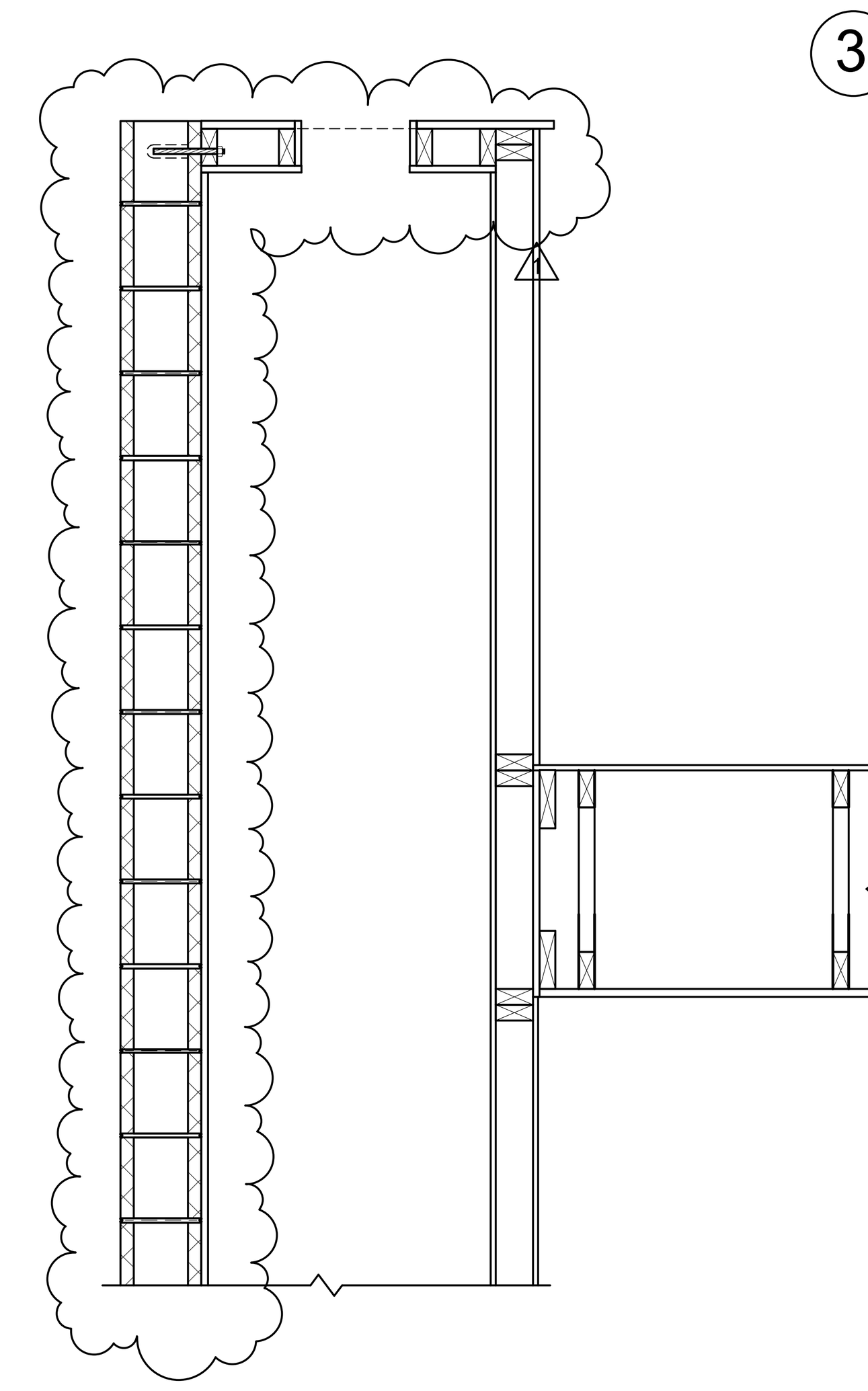

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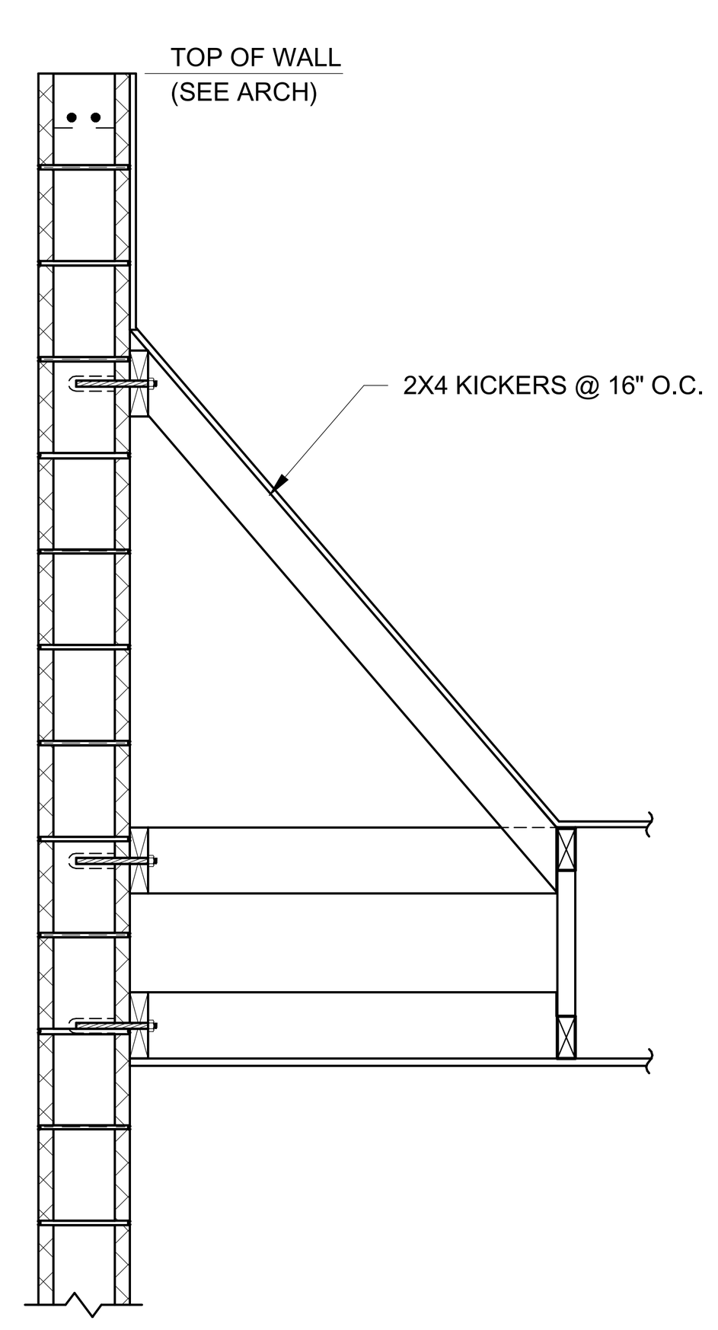

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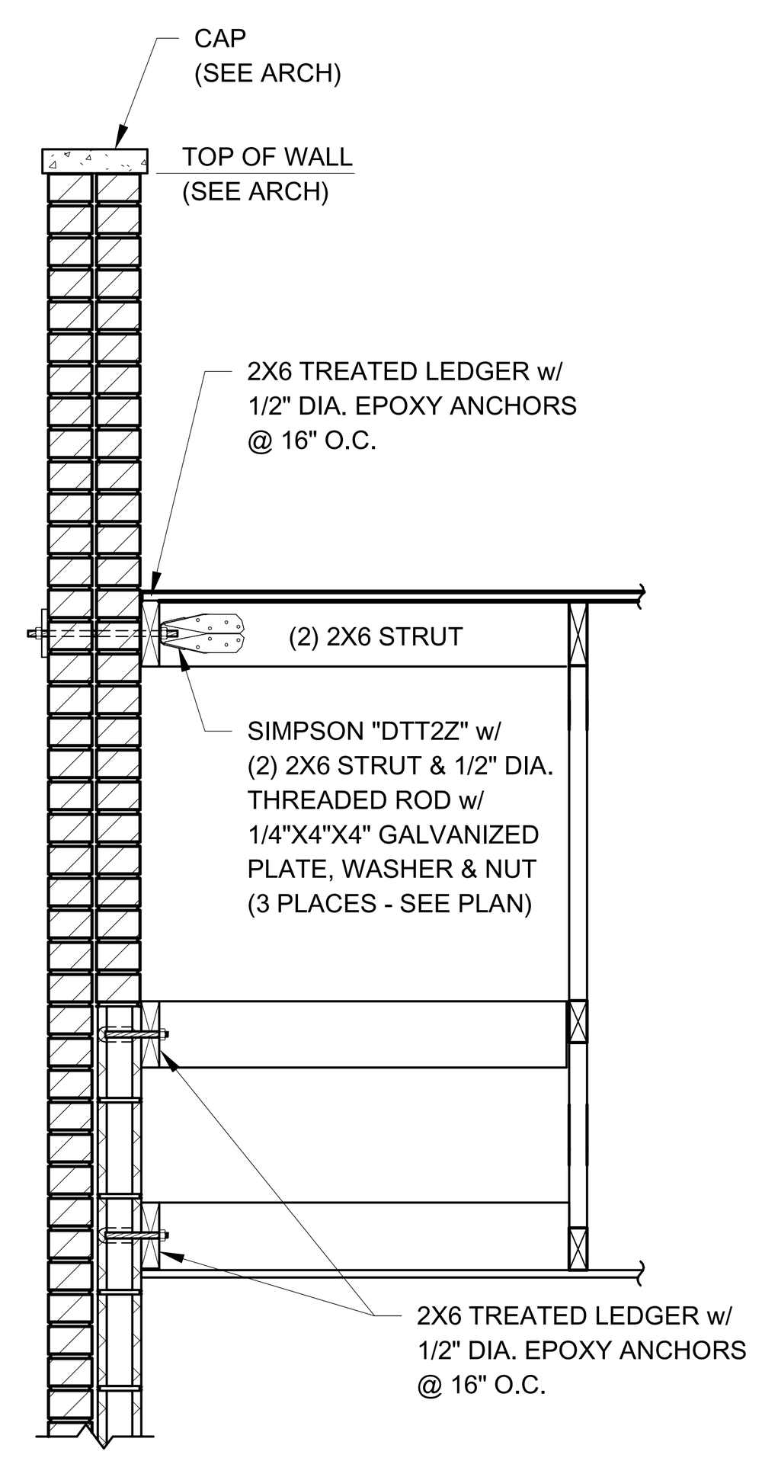

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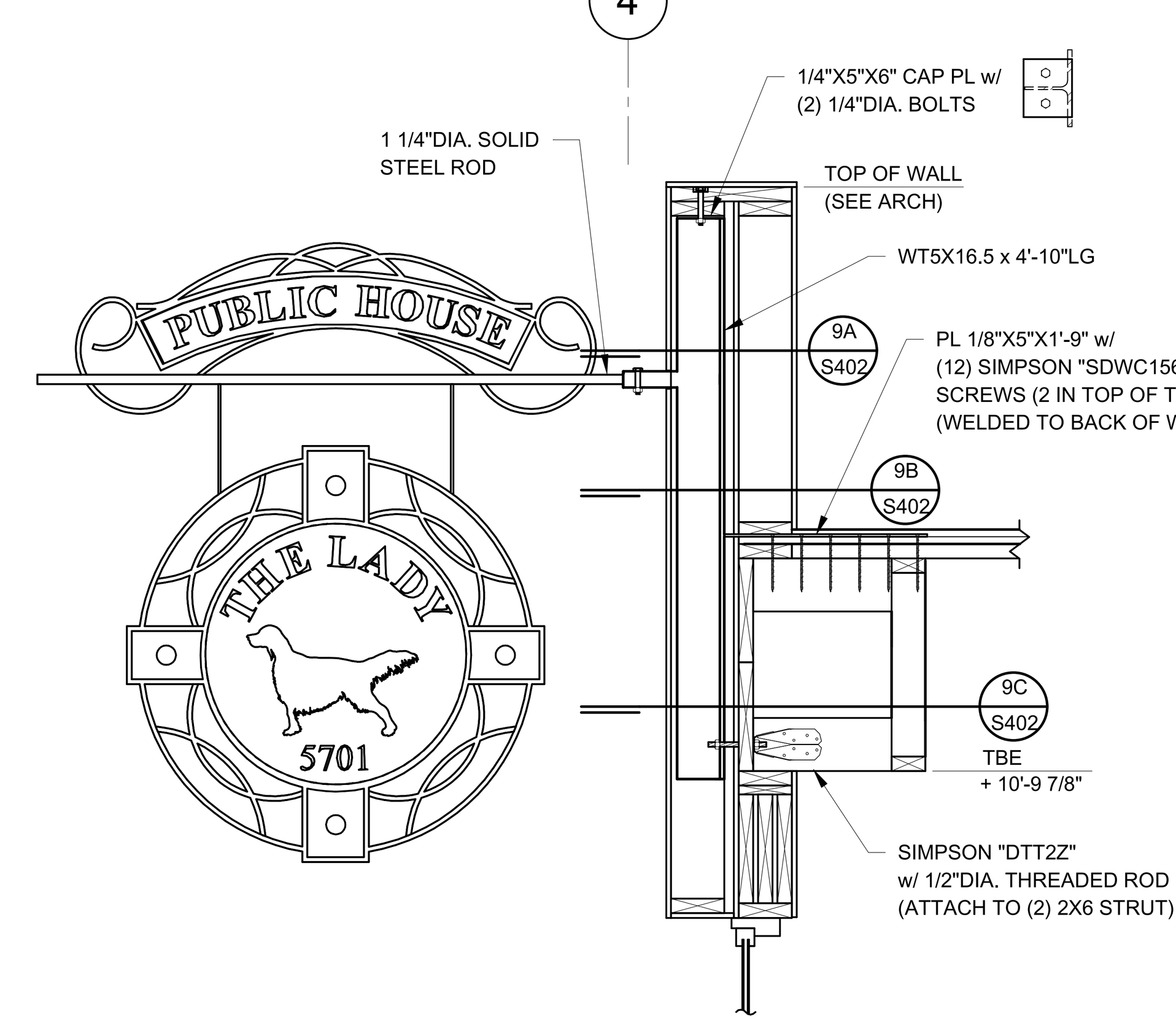
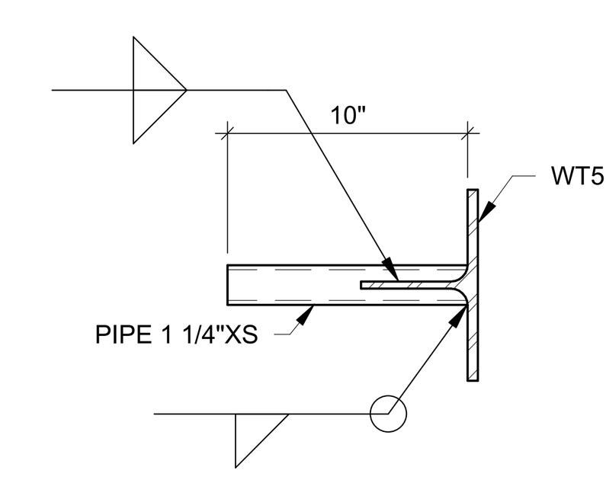
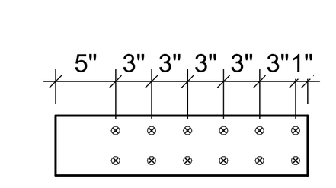


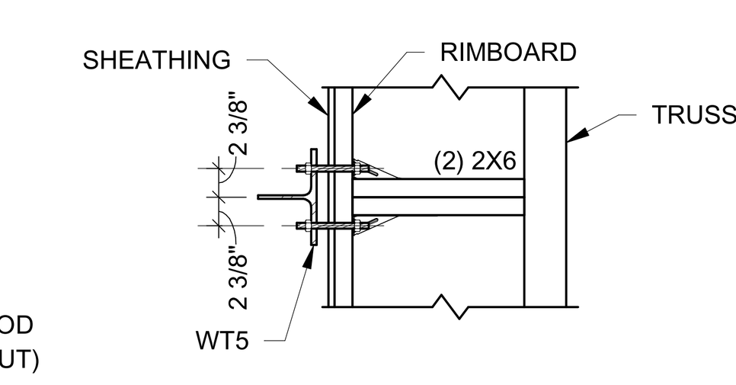
9 SECTION
3/4" = 1'-0"



9A PLAN DETAIL
1 1/2" = 1'-0"



9B PLAN DETAIL
3/4" = 1'-0"



9C PLAN DETAIL
3/4" = 1'-0"

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Structural Engineers
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Phone No: (501) 376-3752
JOB# 23-485
3/14/2025

CERTIFICATE OF AUTHORIZATION
ENGINEERING CONSULTANTS, INC.
No. 26
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 8953

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PSW Job Number:
1001B

ENGLISH PUB

Little Rock, Arkansas

Issue Date:

01-31-25

REVISIONS

NUMBER	DATE	DESCRIPTION
1	3-14-25	ADD 2

Contents:
FRAMING
DETAILS

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