HERNANDEZ RESIDENCE-FRAMING

S22202

PROJECT INFORMATION

CLIENT
TRIGEN HOMES

PROJECT ADDRESS
216 SHELF ROCK ROAD
GEORGETOWN, TX

ARCHITECT
RUSSEL MORAN
3225 PORT ROYAL COURT
PLANO, TX
PHONE: 214-770-9662

STRUCTURAL ENGINEER
L120 ENGINEERING & DESIGN
9607 LAKEMONT DR
DALLAS, TX 75220
PHONE: (214) 625-2819
CONTACT: ALIAKSEI PATSEVICH, PE

CODES

ENGINEERED PER:
2015 (IRC) INTERNATIONAL RESIDENTIAL CODE
2015 (IBC) INTERNATIONAL BUILDING CODE

SHEET INDEX

ALIAKSEI PATSEVICH
130521
LICENSED
PROFESSIONAL ENGINEER

LONGITUDE ONE TWENTY° ENGINEERING & DESIGN

REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME
216 SHELF ROCK ROAD
GEORGETOWN, TX

PROJECT NUMBER
S22202

CHECKED BY - AP

SHEET DATE - 08/31/2022

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
COVER SHEET

SHEET
S-0

GENERAL STRUCTURAL NOTES

DESIGN CRITERIA

CODE: 2015 IBC/IRC & AMENDMENTS AS ADOPTED BY THE REVIEWING AGENCY/COUNTY.

ROOF LIVE LOAD 20PSF

FLOOR LIVE LOAD

RESIDENTIAL.....40 PSF

BALCONY/DECK.....60 PSF

BASIC WIND SPEED .....115 MPH, EXPOSURE B

GENERAL CONDITIONS

1. THE CONTRACTOR SHALL EXAMINE THE STRUCTURAL DRAWINGS AND SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES HE MAY FIND BEFORE PROCEEDING WITH THE WORK.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ARCHITECT/ENGINEER SHALL IMMEDIATELY BE NOTIFIED IN WRITING OF ANY DISCREPANCIES.
3. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
4. IN CASE OF CONFLICT, NOTES AND DETAILS OF THESE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE "GENERAL NOTES" AND/OR "STANDARD DETAILS".
5. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.
6. WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THESE DRAWINGS.
7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER OF ANY CONDITION WHICH IN HIS OPINION MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS TO THE STRUCTURE.
8. THE CONTRACTOR SHALL SUPERVISE AND DIRECT HIS WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. PROVIDE ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS DURING CONSTRUCTION.
9. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE, AND ALL OTHER REGULATING AGENCIES EXERCISING AUTHORITY OVER ANY PORTION OF THE WORK.
10. SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE THE NOTES, DRAWINGS, AND/OR SPECIFICATIONS DIFFER, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
11. REFER TO THE ARCHITECTURAL DRAWINGS FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE STRUCTURAL DRAWINGS.
12. NOTIFY ENGINEER OF ALL FIELD CHANGES PRIOR TO INSTALLATION.
13. DISCREPANCIES FOUND BETWEEN STRUCTURAL DRAWINGS AND OTHER DOCUMENTS ARE TO BE NOTED IN WRITING TO THE ENGINEER PRIOR TO CONSTRUCTION.
14. ALL CONSTRUCTION SHALL BE DONE WITH MATERIALS, METHODS, AND WORKMANSHIP ACCEPTED AS GOOD PRACTICE BY THE CONSTRUCTION INDUSTRY IN CONFORMANCE TO THE PROVISIONS OF THE "INTERNATIONAL BUILDING CODE" (IBC), AND STANDARDS REFERENCED THEREIN.

FOUNDATION

1. FOUNDATION DESIGN PARAMETERS ASSUMED PER GEOTECHNICAL INVESTIGATION REPORT PROVIDED BY HENLEY JOHNSTON AND ASSOCIATES, REPORT # 20569G DATED DEC 30, 2019.
2. SUBGRADE PREPARATION, DRAINAGE PROVISIONS, AND OTHER RELEVANT SOIL CONSIDERATIONS ARE TO BE IN ACCORDANCE WITH THE JURISDICTIONAL REQUIREMENTS.
3. ALL FOUNDATIONS ARE TO BEAR ON COMPETENT NATIVE SOILS OR STRUCTURAL FILL. STRUCTURAL FILL IS TO BE COMPACTED TO 95% DENSITY PER ASTM D-1557.

CONCRETE

1. REFERENCE STANDARDS: ACI-301, ACI-318, IBC.
   MINIMUM CONCRETE STRENGTH (28 DAYS):
   FOOTINGS AND STEM WALLS.....3,000 PSI - 5 SACK MIX
   POST-TENSIONED SLAB.....PER PT-FOUNDATION NOTES
   BASEMENT FOUNDATION RETAINING WALLS.....3,000 PSI - 5 SACK MIX
   SLAB-ON-GRADE.....2,500 PSI - 5 SACK MIX
   SLAB-ON-GRADE EXPOSED TO WEATHERING.....3,000 PSI
   AIR-ENTRAINMENT 2.5% TO 5.5% FOR EXPOSED CONCRETE.
2. MIXING: COMPLY WITH ACI-301. DO NOT EXCEED THE AMOUNT OF WATER SPECIFIED IN THE APPROVED MIX. PROPORTIONS OF AGGREGATE TO CEMENT SHALL BE SUCH AS TO PRODUCE A DENSE WORKABLE MIX WHICH CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER
3. PLACING: COMPLY WITH ACI-301. PROVIDE A 3/4 INCH CHAMFER ALL EXPOSED CONCRETE EDGES, UNLESS INDICATED OTHERWISE ON ARCHITECTURAL DRAWINGS.
4. SLUMP: 4" PLUS OR MINUS ONE INCH. DO NOT ADD WATER TO MIX TO INCREASE SLUMP. GREATER SLUMP, ACCELERATED SET, OR HIGH EARLY STRENGTH MAY BE ACHIEVED BY USING APPROVED ADMIXTURES.
5. CURING: COMPLY WITH ACI-301. KEEP CONCRETE MOIST FOR SEVEN DAYS MINIMUM.
6. JOINTING: PROVIDE ADEQUATE JOINTING TO MINIMIZE EFFECTS OF VOLUME CHANGE. JOINTS SHOWN MAY BE ADJUSTED AT CONTRACTOR'S OPTION, WITH PRIOR APPROVAL FROM ENGINEER.
7. WEATHER EXTREMES: COMPLY WITH ACI 305R FOR HOT WEATHER. COMPLY WITH ACI 306R FOR COLD WEATHER.
8. WATER/CEMENT RATIO SHALL NOT EXCEED 0.50 (BY WEIGHT), TYPICAL.

REINFORCING STEEL

1. REFERENCE STANDARDS: ACI "DETAILING MANUAL" (SP-66); CRSI MANUAL OF STANDARD PRACTICE (MSP-1)
2. MATERIALS:
   REINFORCING STEEL: ASTM A615, GRADE 60
3. SPLICES:
   LAP CONTINUOUS REINFORCING BARS 48 BAR DIAMETERS, UNLESS OTHERWISE NOTED. PROVIDE CORNER BARS FOR ALL HORIZONTAL REINFORCEMENT.
4. COVER:
   FOOTINGS .....3 INCHES
   SLABS.....2 INCHES
5. FORMED SURFACES:
   WEATHER FACE ...1-1/2 INCHES, #5 BARS AND SMALLER 2 INCHES, # 6 BARS AND LARGER
   INTERIOR FACE ...3/4 INCH FOR SLABS AND WALLS 1-1/2 INCHES FOR BEAMS AND COLUMNS

STRUCTURAL AND MISC. STEEL

1. REFERENCE STANDARDS: DESIGN, FABRICATION AND ERECTION ARE TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
2. MATERIALS:
   BOLTS - ASTM A307, UNLESS OTHERWISE NOTED
   WF BEAMS - ASTM A572-50 (Fy = 50,000 PSI)
   HSS ROUND COLUMNS - ASTM A500 Gr. B (Fy = 42,000 PSI)
   HSS RECTANGULAR COLUMNS - ASTM A500 Gr. B (Fy = 46,000 PSI)
   ALL OTHER STEEL - ASTM A36 (Fy = 36,000 PSI)

STRUCTURAL STEEL WELDING

1. CONFORM TO THE AWS CODES D1.1 AND D1.3., AND USE ONLY CERTIFIED WELDERS. WELDS NOT SPECIFIED ARE TO BE 1/4" CONTINUOUS FILLET MINIMUM. USE DRY E70 ELECTRODES.

DIMENSIONAL LUMBER

1. MEET REQUIREMENTS OF PS 20-70 AND NATIONAL GRADING RULES FOR SOFTWOOD DIMENSIONAL LUMBER. BEAR STAMP OF WWPA.
2. MINIMUM DIMENSIONAL LUMBER GRADES TO BE:

WALL STUDS:	2x, HF/SYP STUD GRADE, 3x HF #2
WALL PLATES:	2x HF/SYP STANDARD GRADE PRESSURE TREATED IN CONTACT WITH CONCRETE
JOISTS	2x6 HF/SYP #2 2x8 AND UP HF/SYP #2
BEAMS, HEADERS:	6x HF/SYP#2; 4x HF/SYP#2, WWPA GRADING.
POSTS;	4x, 6x, HF/DF #2

3. PROVIDE STANDARD CUT WASHERS FOR NUTS BEARING AGAINST WOOD.
4. ALL SILLS OR PLATES RESTING ON CONCRETE OR MASONRY, WHICH IS IN CONTACT WITH OR RESTING ON FOUNDATIONS, SHALL BE PRESSURE TREATED HEM FIR OR BETTER. ALL BEARING WALL PLATES SHALL HAVE 5/8"Ø ANCHOR BOLTS PLACED A MAXIMUM 9" FROM THE END OF A PLATE AND SPACED AT INTERVALS SHOWN ON THE SHEARWALL SCHEDULE (MAXIMUM 6'-0" O.C. SPACING). ALL PRESSURE TREATED WOOD MEMBERS SHALL COMPLY WITH AWP4 U1 AND AWP4 M4 STANDARDS.
5. CAST-IN-PLACE ANCHOR BOLTS SHALL HAVE A MINIMUM 7" EMBEDMENT. ALTERNATE 5/8"Ø EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT II ANCHORS EMBED 7", OR APPROVED ALTERNATE.
6. BOLTS IN WOOD BEAMS SHALL NOT BE LESS THAN 7 DIAMETERS FROM THE END AND 4 DIAMETERS FROM THE EDGE OF THE MEMBER.
7. NAILS: NAILING IN ACCORDANCE WITH IBC TABLE 2304.10.1. 16D NAILS MAY BE 16D SINKERS (0.148 x 3-1/4") UNLESS NOTED OTHERWISE.
8. PRESURE TREATED WOOD: ALL NAILS INTO PT WOOD SHALL BE HOT DIPPED GALVANIZED PER ASTM A153 OR STAINLESS STEEL. ALL METAL CONNECTORS IN CONTACT WITH PT WOOD SHALL BE HOT DIPPED GALVANIZED AND MEET ASTM A653 CLASS G185 (1.85 oz OF ZINC PER SQ FT MINIMUM) OR TYPE 304 / 316 STAINLESS STEEL. SIMPSON Z-MAX CONNECTORS MEET THIS REQUIREMENT. FASTENERS AND CONNECTORS USED TOGETHER SHALL BE OF THE SAME TYPE (E.G. HOT DIPPED NAILS WITH HOT DIPPED HANGERS)

MANUFACTURED TIMBER

WHEN SHOWN PER PLAN, ENGINEERED LUMBER SHOULD BE SELECTED BASED ON THE FOLLOWING:

LSL RIMBOARD (1.3E)	RIMBOARD OR STAIR
TIMBERSTRAND LSL (1.3E)	HEADER, BEAM, OR COLUMN < 9" DEPTH
TIMBERSTRAND LSL (1.55E)	RIMBOARD, HEADER, OR < 9" DEPTH
TIMBERSTRAND LSL (1.3E)	WALL STUD 2X4 & 2X6
TIMBERSTRAND LSL (1.5E)	WALL STUD > 2X6
MICROLLAM LVL (1.9E)	HEADER, BEAM
PARALLAM PSL (2.0E)	HEADER, BEAM
PARALLAM PSL (1.8E)	COLUMN

WOOD STRUCTURAL CONNECTIONS

1. ALL FRAMING ANCHORS, POST CAPS, BASES, HANGERS, STRAPS, ETC., SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY OR ENGINEER APPROVED EQUAL.

BRICK VENEER ANCHORAGE

1. D/A 2135 SEISMIC VENEER ANCHORS BY DUR-O-WAL OR APPROVED EQUAL AT WOOD STUD WALL.
2. D/A 5213 SEISMIC VENEER ANCHORS BY DUR-O-WAL OR APPROVED EQUAL AT CONCRETE WALL.
3. PLACE ANCHORS AT 16" O.C. VERTICAL AND 16" O.C. HORIZONTAL SPACING. PROVIDE #9 GA HORIZONTAL JOINT REINFORCING WIRE . ATTACH TO WOOD STUDS WITH #8 CORROSION RESISTANT SCREWS AND TO CONCRETE WITH 1/4"Ø EXPANSION ANCHORS.
4. AT ALL OPENINGS LARGER THAN 16" IN EITHER DIRECTION, ANCHORS TO BE SPACED WITHIN 12" OF THE OPENING AT ALL SIDES.
5. USE TYPE N MORTAR COMPLYING WITH ASTM C270

GLU-LAMINATED TIMBER

1. GLU-LAMINATED WOOD BEAMS TO BE KILN DRIED, AITC SPECIFICATION 24F-V4 FOR SINGLE SPANS (TYPICAL), AND 24F-V8 FOR CANTILEVER BEAM OR CONTINUOUS MULTI-SPAN BEAMS (WHERE SPECIFIED PER PLAN). PROVIDE AITC STAMP ON TIMBER AND SUBMIT CERTIFICATE TO ARCHITECT AND ENGINEER. MATERIALS MUST BE OBTAINED FROM AN AITC APPROVED FABRICATOR. ALL GLU-LAM BEAMS SHALL FIT SNUG AND TIGHT IN THEIR CONNECTIONS AND DEVELOP FULL BEARING AS INDICATED. NO SUBSTITUTION OF OTHER SPECIES. GLU-LAM ADHESIVE TO BE "WET- USE" TYPE. PROVIDE 2000 FT RADIUS CAMBER, U.N.O.
2. MANUFACTURER'S CERTIFICATE SHALL BE PRESENTED TO THE BUILDING INSPECTOR PRIOR TO INSTALLATION.

WOOD SHEATHING

1. ROOF SHEATHING: 7/16" MINIMUM THICKNESS APA RATED PRP-108 PERFORMANCE STANDARD, EDGE SEALED PANELS DESIGNED TO SPAN 24 INCHES EITHER PARALLEL OR PERPENDICULAR TO LONG AXIS OF PANEL WITH 35 PSF LIVE LOAD. LAY UP WITH MINIMUM 1/8" CLEAR BETWEEN PANELS TO ALLOW FOR EXPANSION. NAIL 6 INCHES ON CENTER ALONG EDGES, AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS. USE 10D COMMON NAILS, U.N.O. PROVIDE EXP-1 RATING.
2. FLOOR SHEATHING: 3/4" NOMINAL APA RATED PANELS, PRP-108 PERFORMANCE STANDARD, NAILED AND GLUED. CONFORM TO IBC IDENTIFICATION INDEX 40/20 FOR SUPPORTS TO 20 INCHES ON CENTER. ADHESIVES ARE TO CONFORM TO APA SPECIFICATION AFG-01. PROVIDE T&G EDGES AT LONG PANEL EDGES. LAY UP WITH MINIMUM 1/8" CLEAR BETWEEN PANELS TO ALLOW FOR EXPANSION. NAIL 6 INCHES ON CENTER AT END SUPPORTS AND 10 INCHES ON CENTER AT INTERMEDIATE SUPPORTS. USE 10D COMMON NAILS. PROVIDE EXP-1 RATING.
3. WOOD SHEARWALL SHEATHING: PLYWOOD OR OSB APA RATED PRP-108 PERFORMANCE STANDARD PER IBC STD 23-2 OR 23-3 TYPE C-C OR C-D. USE EXTERIOR ADHESIVES. USE 8d COMMON NAILS. PROVIDE EXP-1 RATING. ALL VERTICAL JOINTS OF PANEL SHEATHING SHALL OCCUR OVER STUDS. HORIZONTAL JOINTS SHALL OCCUR OVER BLOCKING EQUAL IN SIZE TO THE STUDDING. REFER TO SHEAR WALL SCHEDULE FOR PANEL THICKNESS.
4. NAILING SPECIFICATIONS: CONFORM TO IBC SECTION 2304.10 "CONNECTIONS AND FASTENERS." UNO ON PLANS, NAILING PER TABLE 2304.10.1, AND FOR ROOF/FLOOR DIAPHRAGMS AND SHEARWALLS SHALL BE PER DRAWINGS. NAILS SHALL BE DRIVEN FLUSH AND SHALL NOT FRACTURE THE SURFACE OF SHEATHING. ALTERNATE NAILS MAY BE USED BUT ARE SUBJECT TO REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER. SUBSTITUTION OF STAPLES FOR THE NAILING OF RATED SHEATHING IS SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.

SHOP DRAWINGS AND SUBMITTALS

1. SUBMIT 2 SETS OF PRINTS AND 1 SET OF REPRODUCIBLES FOR REVIEW FOR:
   A) REINFORCING STEEL
   B) GLU-LAMINATED BEAMS
   C) MISCELLANEOUS STEEL
   D) PRE-MANUFACTURED WOOD TRUSSES
2. SUBMIT 3 COPIES FOR REVIEW PRIOR TO FABRICATION FOR:
   A) CONCRETE DESIGN MIX
   B) CONCRETE INSERTS
   C) EPOXY ADHESIVES

INSPECTIONS

1. REFERENCE STANDARDS: IBC 110.
   INSPECTIONS ARE TO BE PERFORMED BY THE BUILDING OFFICIAL. INSPECTIONS REQUIRED
   ARE AS FOLLOWS:
   1.1. SOIL: VERIFY SUBGRADE IS DRY DENSE AND DOES NOT HAVE STANDING WATER PRIOR TO POURING FOOTINGS.
   1.2. CONCRETE: INSPECTIONS REQUIRED ONLY FOR DESIGN MIXES SPECIFIED GREATER THAN 2500 PSI. TAKE CONCRETE CYLINDERS AS REQUIRED. VERIFY SLUMP AND STRENGTH.
   1.3. REINFORCING: VERIFY ALL REINFORCING IS PLACED IN ACCORDANCE WITH APPROVED PLANS. CHECK FOR REQUIRED COVER, SIZE AND GRADE.
   1.4. WOOD: DIAPHRAGM NAILING, BLOCKING AND HOLD-DOWN CONNECTIONS.

ALTERNATES:

1. ALTERNATE ASSEMBLIES AND MATERIALS WILL BE CONSIDERED FOR REVIEW. ENGINEER MAY REQUEST PAYMENT FOR REVIEW; CONTRACTOR WILL BEAR BURDEN FOR ADDITIONAL PAYMENT AT NO ADDITIONAL COST TO OWNER.

SETTLEMENT SHRINKAGE:

1. DUE TO CROSS GRAIN WOOD SHRINKAGE, THIS BUILDING IS EXPECTED TO SETTLE APPROXIMATELY 3/8 INCH PER STORY. ALL PLUMBING AND MECHANICAL DUCTS SHALL BE DESIGNED WITH FLEXIBLE JOINTS OR OTHERS MEANS TO APPROPRIATELY ACCOMMODATE THIS NORMAL SETTLEMENT. ALL INTERIOR AND EXTERIOR SHEATHING AND FINISHES SHALL BE INSTALLED SUCH THAT NO DAMAGE WILL OCCUR. SHRINKAGE IS EXPECTED IN THE DEPTH OF THE FLOOR PLATES AND NOT IN THE LENGTH OF THE WALL STUDS.

JOBSITE SAFETY:

1. THE ENGINEER AND/OR ARCHITECT HAVE NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATED TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR THE CONTRACTOR TO PERFORM HIS WORK. THE UNDERTAKING OF PERIODIC SITE VISITS BY THE ENGINEER AND/OR ARCHITECT SHALL NOT BE CONSTRUED AS SUPERVISION OF ACTUAL CONSTRUCTION NOR MAKE HIM RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF WORK BY THE CONTRACTOR, SUBCONTRACTORS, SUPPLIERS OR THEIR EMPLOYEES, OR FOR ACCESS, VISITS, USE, WORK, TRAVEL, OR OCCUPANCY BY ANY PERSON.

ABBREVIATIONS

AB	ANCHOR BOLT
ABV	ABOVE
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE
AYC	ALASKAN YELLOW CEDAR
BB	BOX BEAM
BF	BOTTOM FLUSH
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BP	BOTTOM PLATE
BRG	BEARING
BTWN	BETWEEN
BSMT	BASEMENT
B/W	BOTTOM OF WALL
CANT	CANTILEVER
CJ	CONTROL JOINT
CLG.	CEILING
CLJ	CEILING JOIST
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CTR	CENTER
DET	DETAIL
DF	DOUGLAS FIR (SOUTH)
DFL	DOUGLAS FIR LARCH
DIM	DIMENSION
DJ	DOUBLE JOIST
DIA	DIAMETER
DN	DOWN
DS	DOWN SPOUT
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
ELEV	ELEVATION
EN	EDGE NAILING (PANEL)
EOR	ENGINEER OF RECORD
EQ	EQUAL
ES	EACH SIDE
EW	EACH WAY
FB	FLUSH BEAM
FIN	FINISH
FL	FLOOR
FLSHG	FLASHING
FND	FOUNDATION
FP	FIREPLACE
FT	FOOT
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GLB	GLULAM BEAM
GR	GRADE
GYP	GYPSUM WALL BOARD
HDG	HOT-DIPPED GALVANIZED
HDR	HEADER
HF	HEM FIR
HGT	HEIGHT
HT	HEIGHT
IN	INCH
JT	JOINT
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
NB	NON-BEARING
NO	NUMBER
OC	ON CENTER
PL	PLATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
RAF	RAFTER
REF	REFERENCE
REINF	REINFORCEMENT
REQD	REQUIRED
REQS	REQUIREMENTS
SF	SQUARE FOOT
SHTG	SHEATHING
SIM	SIMILAR
SPF	SPRUCE PINE FIR
STD	STANDARD
SYP	SOUTHERN YELLOW PINE
T/	TOP OF
T/BM	TOP OF BEAM
T/CONC	TOP OF CONCRETE
T/PL	TOP OF PLATE
T/SLAB	TOP OF SLAB
T/ST	TOP OF STEEL
T/W	TOP OF WALL
TF	TOP FLUSH
TJ	TRIPLE JOIST
TP	TOP PLATE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UPA	UNDER POST ABOVE
UWA	UNDER WALL ABOVE
VCB (V.C.B.)	VERTICAL CRUSH BLOCKING
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
WC	WESTERN CEDAR
WP	WATERPROOF
WSP	WOOD STRUCTURAL PANEL
WWF	WELDED WIRE FABRIC

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GEORGETOWN, TX

PROJECT NUMBER

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CHECKED BY - AP

SHEET DATE - 08/31/2022

SCALE

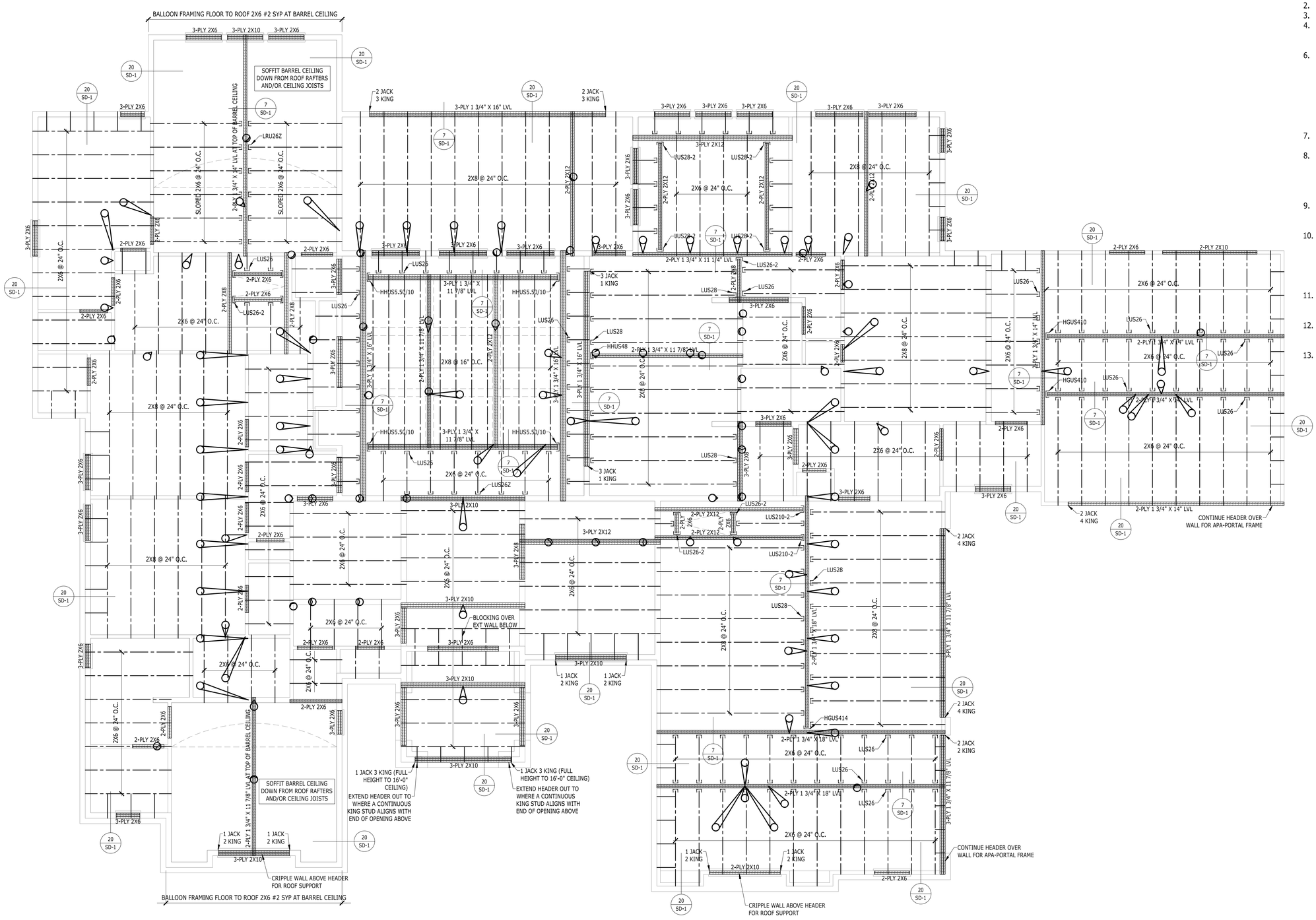
24X36 SHEET:1/4"=1'-0"

DESCRIPTION

STRUCTURAL GENERAL NOTES

SHEET

S-1



CEILING FRAMING NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. CEILING JOISTS SHOULD BE 2X6@24"O.C. UNO.
4. CEILING JOISTS 2X10 AND LARGER SHOULD HAVE 1X4 CONTINUOUS WOOD STRIP NAILED ACROSS THE JOISTS @ 8'-0" O.C. MAX.
6. ALL BEAMS SHALL BE SUPPORTED BY MIN TWO STUDS BELOW EACH END, UNLESS NOTED OTHERWISE ON PLAN. ALL BEAMS SHALL BE FRAMED FLUSH WITH JOISTS UNO. "DROPPED BEAM" OR "DB" INDICATES T/BEAM EQUAL B/JOISTS. "TOP FLUSH" OR "TF" INDICATES T/BEAM EQUAL T/JOISTS AND B/BEAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/BEAM EQUAL B/JOISTS AND T/BEAM EXTENDING ABOVE T/JOISTS.
7. STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER WALL FRAMING AND SHEARWALL PLAN.
8. ALL POSTS ABOVE THE FLOOR FRAMING SHALL BE BLOCKED WITHIN THE FLOOR DEPTH ("VERTICAL GRAIN BLKG", "VERTICAL CRUSH BLKG", OR "VCB"). BLOCKING WIDTH SHALL MATCH WIDTH OF POST OR BUNDLED STUDS ABOVE AND EXTEND FULL FLOOR DEPTH.
9. HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE SPLICE, BEAM, OR BLOCKING, UNO. STRAP LENGTH PER PLAN.
10. ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS.
11. EACH PLY OF ALL 2X MULTI-PLY BEAMS TO BE CONNECTED WITH MINIMUM (2) ROWS OF 16d NAILS AT 6" O.C. STAGGERED. FOR ENGINEERED LUMBER NAILING REF APPROPRIATE DETAIL.
12. ENGINEERED JOISTS AND TRUSSES TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION, AND DESIGN CRITERIA.
13. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.

FRAMING LEGEND

- W10X15 - STEEL BEAM (EXAMPLE)
- GT - GIRDER TRUSS
- 2X12 - WOOD BEAM
- CS16 - SIMPSON STRAP
- LOW ROOF
- WOOD JOIST
- HANGER AS REQ'D
- 1 / SD-1 - DETAIL CALLOUT PER PLAN (EX: DETAIL "1" ON SHEET SD-1")
- ROOF BRACE
- HIGH END
- LOW END

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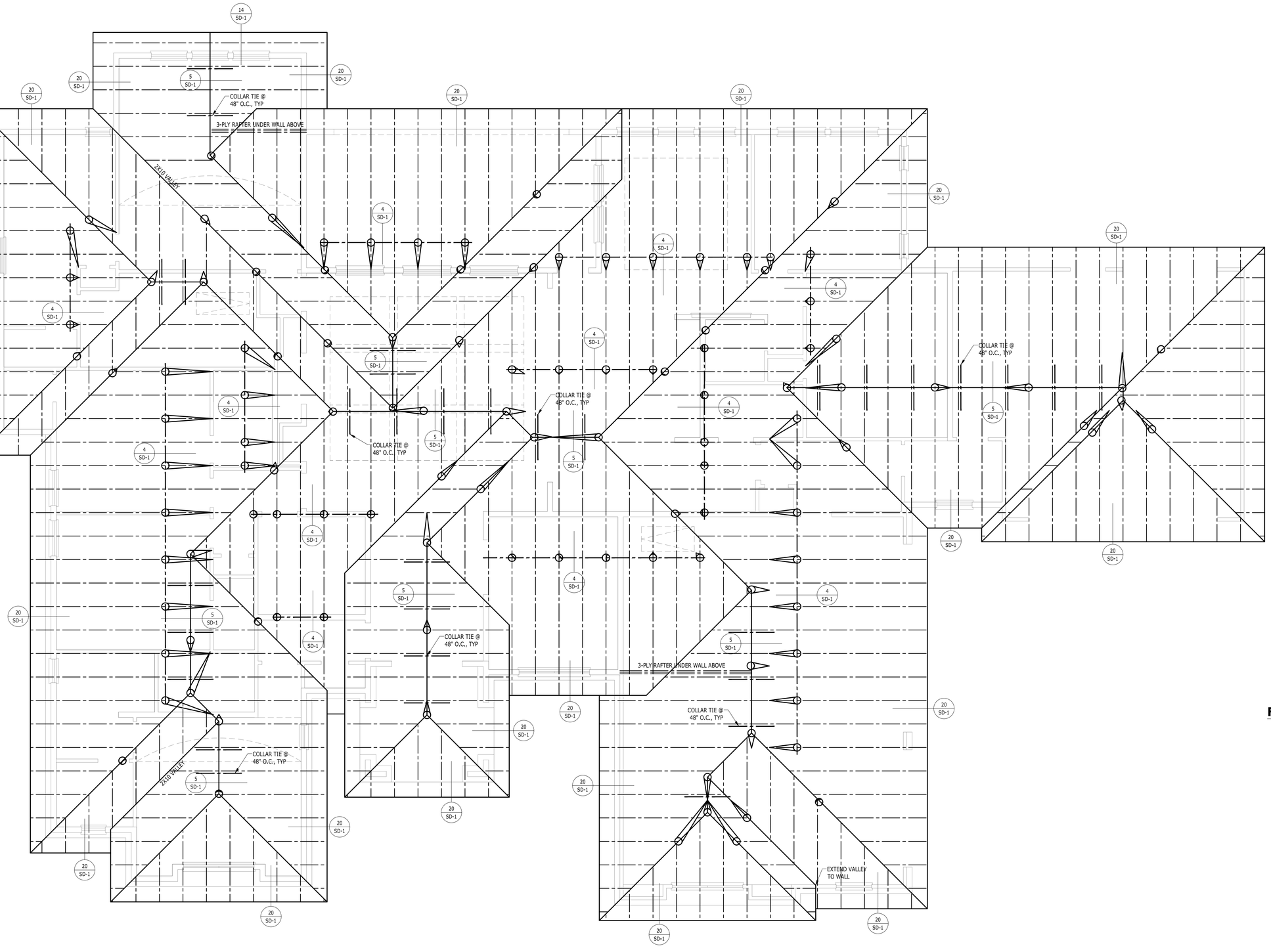
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
CEILING FRAMING PLAN

SHEET
S-3



ROOF FRAMING NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. ROOF RAFTERS SHALL BE 2X6@24"O.C. UNO.
4. ROOF SHEATHING PER GENERAL NOTES. ALL SHEATHING TO BE GLUED AND NAILED TO FRAMING PER MANUFACTURER RECOMMENDATIONS. USE 8d COMMON NAILS (0.131" X 2 1/2") @ 6" O.C. AT PANEL EDGES AND AT ALL FRAMING DESIGNATED "WITH EDGE NAILING" OR "W/EN", AND 12" O.C. IN THE FIELD, UNO. PANEL EDGE JOINTS TO BE STAGGERED BETWEEN ADJACENT PANELS OF SHEATHING. PROVIDE GAP BETWEEN PANELS TO ALLOW FOR NATURAL EXPANSION/CONTRACTION (1/8" GAP TYP).
5. ALL ROOF RAFTERS OR TRUSSES SHALL BE SPACED NO FURTHER APART THAN 24" O.C. AND SHALL BE CONNECTED TO TOP PLATE WITH H2.5 TIE UNO.
6. LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH ROOF FRAMING. MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS BY OTHERS.
7. ALL BEAMS AND GIRDER TRUSSES SHALL BE SUPPORTED BY MIN TWO STUDS BELOW EACH END, UNLESS NOTED OTHERWISE ON PLAN. ALL BEAMS SHALL BE FRAMED FLUSH WITH JOISTS UNO. "DROPPED BEAM" OR "DB" INDICATES T/BEAM EQUAL B/JOISTS. "TOP FLUSH" OR "TF" INDICATES T/BEAM EQUAL T/JOISTS AND B/BEAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/BEAM EQUAL B/JOISTS AND T/BEAM EXTENDING ABOVE T/JOISTS.
8. ALL NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
9. STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER WALL FRAMING AND SHEARWALL PLAN BELOW.
10. HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN.
11. ALL HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS. HANGERS FOR ROOF TRUSSES BY OTHERS.
12. ENGINEERED ROOF JOISTS AND ROOF TRUSSES TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION, AND DESIGN CRITERIA.
    - 12.1. STANDARD DEAD AND LIVE LOADS SHALL BE USED FOR TRUSS DESIGN. REFERENCE STRUCTURAL GENERAL NOTES FOR MORE INFORMATION.
    - 12.2. CHANGES TO LAYOUT MUST BE SUBMITTED TO THE ARCHITECT AND EOR FOR REVIEW AND APPROVAL.
    - 12.3. TRUSS SUBMITTAL PACKAGE TO BE PROVIDED TO EOR FOR REVIEW. REFERENCE STRUCTURAL GENERAL NOTES FOR SUBMITTAL REQUIREMENTS.
    - 12.4. (XXX LBS SHEAR/DRAG) INDICATES SHEAR TRANSFER LOAD. SHEAR TRUSS SHALL BE DESIGNED TO BE ABLE TO TRANSFER SPECIFIED LATERAL LOAD APPLIED AT THE TOP CHORD TO THE BOTTOM CHORD AND INTO SHEARWALL BELOW.
    - 12.5. ROOF TRUSSES SHOULD BE DESIGNED FOR ADDITIONAL LOADS WHERE APPLICABLE AS SPECIFIED BY THE ARCHITECT (I.E. MECHANICAL UNITS, ROOF DECKS AND PATIOS, GREEN ROOFS, SOLAR UNITS AND ETC).
    - 12.6. TRUSS DESIGN FOR BEARING AT TOP PLATES TO BE DESIGNED FOR COMPRESSION PERPENDICULAR TO GRAIN.
13. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
14. ROOF COVERINGS AND ROOFING MATERIAL BY OTHERS.
15. ROOF DRAINAGE BY OTHERS.
16. ATTIC VENTILATION BY OTHERS.

FRAMING LEGEND

- ROOF OVERFRAMING
- WOOD JOIST
- HANGER AS REQ'D
- 2X12 - WOOD BEAM
- CS16 - SIMPSON STRAP
- 1 SD-1 - DETAIL CALLOUT PER PLAN (EX: DETAIL "1" ON SHEET SD-1")
- ROOF BRACE
  - HIGH END
  - LOW END
- W10X15 - STEEL BEAM (EXAMPLE)

ALIAKSEI PATSEVICH
130521
LICENSED
PROFESSIONAL ENGINEER

LONGITUDE ONE TWENTY°
ENGINEERING & DESIGN

REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME
216 SHELF ROCK ROAD
GEORGETOWN, TX

PROJECT NUMBER
S22202

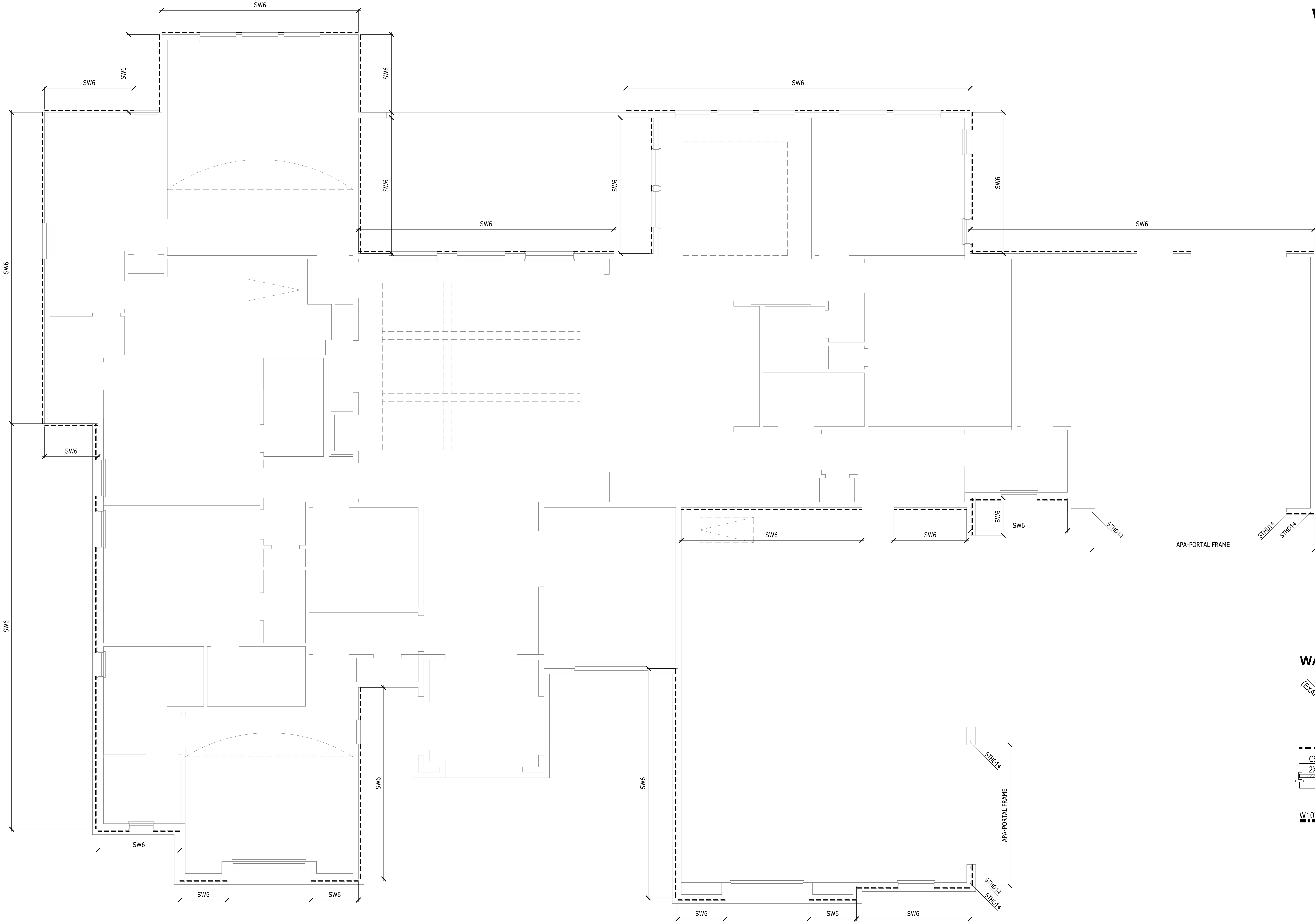
CHECKED BY - AP

SHEET DATE - 08/31/2022

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
ROOF FRAMING PLAN

SHEET
S-4



WALL FRAMING AND SHEAR WALL NOTES

1. GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
3. LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
4. ALL BUNDLED STUDS SPECIFIED PER PLAN SHALL BE CONNECTED TOGETHER WITH 16d @ 6"O.C. STAGGERED.
5. EXTERIOR WALL STUDS SHALL BE 2X6 @ 16"O.C. (≤10'), 2X6 @ 12"O.C. (>10') UNO. INTERIOR BEARING WALL STUDS SHALL BE 2X4 @ 16"O.C. UNO. ALL INTERIOR NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
6. PROVIDE ONE KING STUD AND ONE JACK STUD MINIMUM AT EVERY HEADER UNO. JACK STUDS SHOULD BE CONTINUOUS TO THE FOUNDATION AND SHALL HAVE VERTICAL CRUSH BLOCKING WIHTIN THE FLOOR FRAMING DEPTH MATCHING THE WIDTH OF JACK STUDS.
7. SHEARWALL SHEATHING AND NAILING REQUIREMENTS PER SHEARWALL SCHEDULE. ALL EXTERIOR WALLS SHALL BE TYPE SW6 UNO.
8. ALL SHEATHING PANEL EDGES TO OCCUR OVER STUDS, PLATES, RIMS OR HORIZONTAL BLOCKING. PANEL EDGE NAILING PER SHEARWALL SCHEDULE (6"O.C. MAX), FIELD NAILING AT 12" O.C. UNO.
9. PROVIDE MIN TWO 2X STUDS AT EACH END OF SHEARWALL UNO. PROVIDE PANEL EDGE NAILING INTO EACH STUD AT END OF WALL. AT 6X POSTS SHOWN AT END OF SHEARWALL PROVIDE 3 ROWS OF PANEL EDGE NAILING.
10. SHEARWALL PANEL EDGE STUDS INDICATE THE MINIMUM STUD WIDTH AT ABUTTING PANEL EDGES. TWO 2X STUDS ARE AN ACCEPTABLE ALTERNATE FOR 3X STUDS. TWO 2X STUDS ARE TO BE NAILED TOGETHER WITH TWO ROWS 10d NAILS AT 6" O.C (4" O.C. @ SW2 AND 2W2). AT DOUBLE SIDED SHEARWALLS VERTICAL PANEL EDGES TO BE STAGGERED ON OPPOSITE SIDES OF THE WALL EXCEPT END OF SHEARWALL.
11. LTP4 INSTALLED OVER PLYWOOD SHALL USE 8d COMMON NAILS (.131Ø X 2.5") LTP4 INSTALLED DIRECTLY AGAINST FRAMING MAY USE 8d SHORT (.131X 1.5") RBC INSTALLED DIRECTLY AGAINST FRAMING USE 10d SHORT (.148X 1.5").
12. WINDOW STRAP INDICATES THAT A WINDOW IS INCORPORATED WITHIN THE SHEAR WALL. REFER TO FORCE-TRANSFER AROUND OPENING DETAIL FOR FRAMING REQUIREMENTS.
13. STHD HOLDOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD HOLDOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
14. SILL ANCHOR BOLTS (J-BOLTS) SHALL BE ASTM F1554 (36KSI) HDG, ASTM A307 (36KSI) HDG OR SIM. ANCHOR BOLTS TO BE 5/8"Ø X 7" MIN EMBEDMENT. SPACING PER SHEARWALL SCHEDULE (72" O.C. MAX).
15. ALL HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS.
16. FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.

WALL FRAMING AND SHEATHING LEGEND

STHD14 (EXAMPLE) - HOLDOWN BY SIMPSON (STHD/MST/HDU/HD, TYP)

#K / #J - INDICATES THE NUMBER OF KING AND JACK STUDS

- - - - INDICATES SHEARWALL LOCATION (SW# - SHEAR WALL MARK)

CS16 - SIMPSON STRAP (EXAMPLE)

2X12 - WOOD HEADER

- HANGER AS REQ'D

SW6 - SHEAR WALL CALLOUT. REFER TO SHEARWALL SCHEDULE

W10X15 - STEEL BEAM (EXAMPLE)

STATE OF TEXAS
ALIAKSEI PATSEVICH
130521
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LONGITUDE
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REVISIONS

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PROJECT NAME
216 SHELF ROCK ROAD
GEORGETOWN, TX

PROJECT NUMBER
S22202

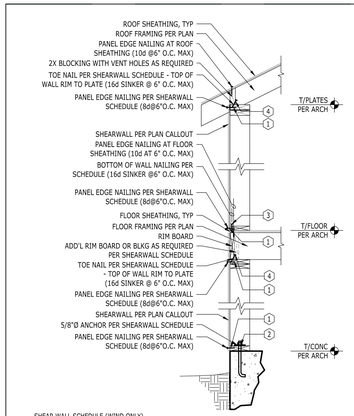
CHECKED BY - AP

SHEET DATE - 08/31/2022

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
FIRST FLOOR WALL BRACING PLAN

SHEET
S-5



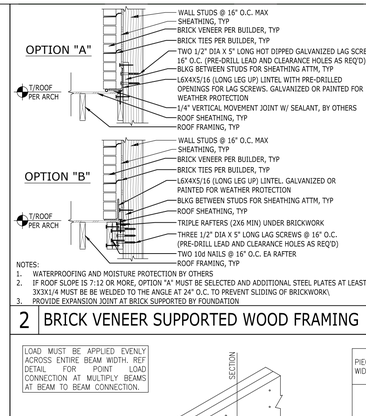
SHEAR WALL SCHEDULE (WIND ONLY)

WALL	SHEATHING (7/16" APA)	CONNECTIONS ① PANEL EDGE NAILING 8d COMMON NAILS (0.131"Ø X 2-1/2"	② ANCHOR BOLTS (5/8"Ø)	③ AT SILL PLATE 16d SINKER NAILS (0.148" Ø X 3-1/4")	④ TOE NAIL AT RIM/BLKG 16d SINKER NAILS (0.148" Ø X 3-1/4")
SW6	ONE SIDE	8d AT 6" O.C.	48" O.C.	16d AT 6" O.C.	16d AT 4" O.C.
SW4	ONE SIDE	8d AT 4" O.C.	32" O.C.	16d AT 4" O.C.[4]	16d AT 3" O.C.
SW3	ONE SIDE	8d AT 3" O.C.	24" O.C.	16d AT 3" O.C.[4]	16d AT 2" O.C.
SW2	ONE SIDE	8d AT 2" O.C.	16" O.C.	(2) ROWS 16d AT 4" O.C.[4,5]	16d AT 2" O.C.
2W4	TWO SIDES[3]	8d AT 4" O.C. EA SIDE	16" O.C.	(2) ROWS 16d AT 4" O.C.[4,5]	(2) ROWS 16d AT 3" O.C.
2W3	TWO SIDES[3]	8d AT 3" O.C. EA SIDE	12" O.C.	(2) ROWS 16d AT 3" O.C.[4,5]	(2) ROWS 16d AT 2" O.C.
2W2	TWO SIDES[3]	8d AT 2" O.C. EA SIDE	9" O.C.	(3) ROWS 16d AT 3" O.C.[4,5]	(2) ROWS 16d AT 2" O.C.

NOTES:
1) FOR EXTERIOR WALLS NOT DESIGNATED AS SHEARWALLS, PROVIDE ANCHOR BOLTS @ 72" O.C.
2) ADJOINING PANEL EDGES STAGGERED ON EACH SIDE OF WALL SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS
3) MIN 1-1/4" RIM THICKNESS
4) MIN 1-1/2" RIM THICKNESS
5) PROVIDE ADDITIONAL BLOCKING FOR EACH ADDITIONAL ROW OF NAILS

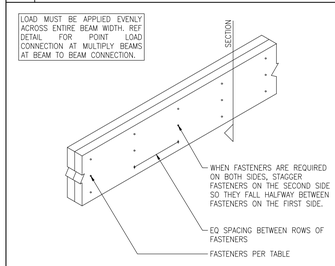
6 SHEAR TRANSFER ELEVATION AND SCHEDULE

11 KNEE BRACE AT CEILING BEAM

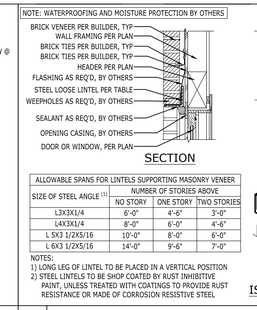


NOTES:
1. WATERPROOFING AND MOISTURE PROTECTION BY OTHERS
2. IF ROOF SLOPE IS 7:12 OR MORE, OPTION "A" MUST BE SELECTED AND ADDITIONAL STEEL PLATES AT LEAST 3X3X1/4 MUST BE BE WELDED TO THE ANGLE AT 24" O.C. TO PREVENT SLIDING OF BRICKWORK\
3. PROVIDE EXPANSION JOINT AT BRICK SUPPORTED BY FOUNDATION

2 BRICK VENEER SUPPORTED WOOD FRAMING



3 LOOSE LINTEL AT BRICK VENEER

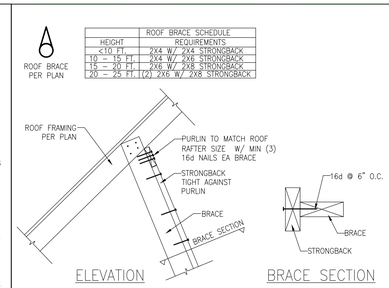


ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENEER

SIZE OF STEEL ANGLE [1]	NUMBER OF STORIES ABOVE: NO STORY	ONE STORY	TWO STORIES
L3X3X1/4	6'-0"	4'-6"	3'-0"
L4X3X1/4	8'-0"	6'-0"	4'-6"
L 5X3 1/2X5/16	10'-0"	8'-0"	6'-0"
L 6X3 1/2X5/16	14'-0"	9'-6"	7'-0"

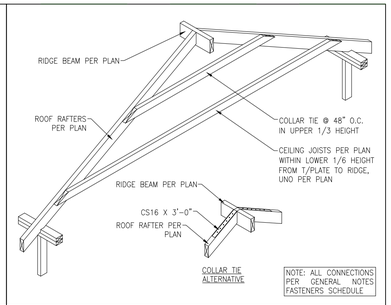
NOTES:
1) LONG LEG OF LINTEL TO BE PLACED IN A VERTICAL POSITION
2) STEEL LINTELS TO BE SHOP COATED BY RUST INHIBITIVE PAINT, UNLESS TREATED WITH COATINGS TO PROVIDE RUST RESISTANCE OR MADE OF CORROSION RESISTIVE STEEL

4 ROOF BRACE

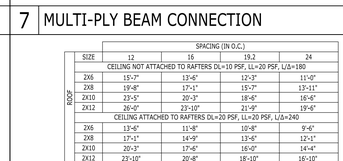


ROOF BRACE SCHEDULE	
HEIGHT	REQUIREMENTS
<10 FT.	2X4 W/ 2X4 STRONGBACK
10 – 15 FT.	2X4 W/ 2X6 STRONGBACK
15 – 20 FT.	2X6 W/ 2X8 STRONGBACK
20 – 25 FT.	(2) 2X6 W/ 2X8 STRONGBACK

5 TYPICAL ROOF-CEILING FRAMING



7 MULTI-PLY BEAM CONNECTION

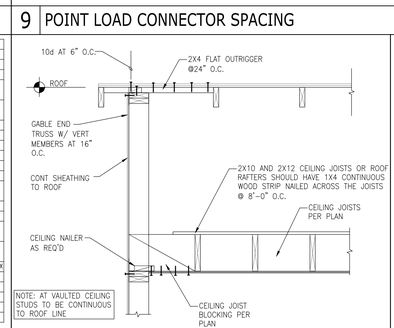


FASTENER INSTALLATION REQUIREMENTS FOR MULTIPLY BEAMS

PIECE WIDTH	# OF PLIES	ASSEMBLY SECTION	FASTENER TYPE[1]	MIN. LENGTH	# ROWS	O.C. SPACING	LOCATION
1¾"	2	1 3/4"	10D NAILS	3"	3[2]	12"	ONE SIDE
			12D–16D NAILS	3 ¼"	2[2]		
			SCREWS	3⅛" OR 3½"	2	24"	
	3	1 3/4"	10D NAILS	3"	3[2]	12"	BOTH SIDES
			12D–16D NAILS	3 ¼"	2[2]		
			SCREWS	3⅛" OR 3½"	2	24"	BOTH SIDES
				5"			ONE SIDE
	4	1 3/4"	10D NAILS[(3)]	3"	3[2]	12"	ONE SIDE (PER PLY)
			12D–16D NAILS[(3)]	3 ¼"	2[2]		
			SCREWS	5" OR 6"	2	24"	BOTH SIDES
				6 ¾"			ONE SIDE

(1) 10D NAILS ARE 0.128" DIAMETER; 12D–16D NAILS ARE 0.148" – 0.162" DIAMETER; SCREWS ARE SDS, SDW, WS, OR TRUSS–LOK®.
(2) AN ADDITIONAL ROW OF NAILS IS REQUIRED WITH DEPTHS OF 14" OR GREATER.
(3) WHEN CONNECTING 4–PLY MEMBERS, NAIL EACH PLY TO THE OTHER AND OFFSET NAIL ROWS BY 2" FROM THE ROWS IN THE PLY BELOW.

9 POINT LOAD CONNECTOR SPACING



12 TYP SPAN TABLE

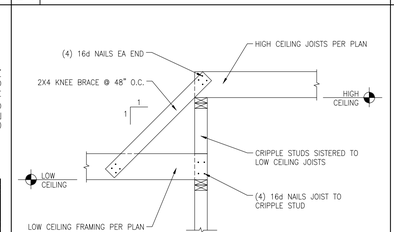
	SIZE	SPACING (IN O.C.) 12	16	19.2	24
ROOF	CEILING NOT ATTACHED TO RAFTERS DL=10 PSF, LL=20 PSF, L/Δ=180				
	2X6	15'-7"	13'-6"	12'-3"	11'-0"
	2X8	19'-8"	17'-1"	15'-7"	13'-11"
	2X10	23'-5"	20'-3"	18'-6"	16'-5"
	2X12	26'-0"	23'-10"	21'-9"	19'-6"
	CEILING ATTACHED TO RAFTERS DL=20 PSF, LL=20 PSF, L/Δ=240				
	2X6	13'-6"	11'-8"	10'-8"	9'-6"
	2X8	17'-1"	14'-9"	13'-6"	12'-1"
	2X10	20'-3"	17'-6"	16'-0"	14'-4"
	2X12	23'-10"	20'-8"	18'-10"	16'-10"
TILE ROOF	CEILING NOT ATTACHED TO RAFTERS DL=20 PSF, LL=20 PSF, L/Δ=180				
	2X6	13'-6"	11'-8"	10'-8"	9'-6"
	2X8	17'-1"	14'-9"	13'-6"	12'-1"
	2X10	20'-3"	17'-6"	16'-0"	14'-4"
	2X12	23'-10"	20'-8"	18'-10"	16'-10"
CEILING	UNINHABITABLE ATTIC WITH LIMITED STORAGE DL=10 PSF, LL=20 PSF, L/Δ=240				
	2X6	13'-11"	12'-0"	11'-0"	9'-10"
	2X8	17'-7"	15'-3"	13'-11"	12'-6"
	2X10	20'-11"	18'-1"	16'-6"	14'-9"
	2X12	24'-8"	21'-4"	19'-3"	17'-5"
	UNINHABITABLE ATTIC WITHOUT STORAGE DL=5 PSF, LL=10 PSF, L/Δ=240				
	2X6	18'-8"	16'-11"	15'-7"	13'-1"
	2X8	24'-7"	21'-7"	19'-8"	17'-7"
	2X10	26'-0"	25'-7"	23'-5"	20'-11"
	2X12	26'-0"	26'-0"	26'-0"	24'-8"

NOTES: SPANS ARE SHOWN FOR SOUTHER PINE #2 LUMBER

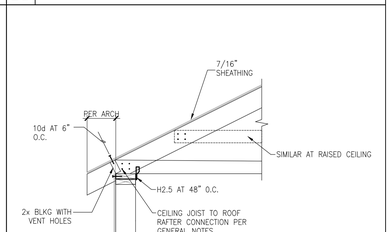
13 FASTENER SCHEDULE (BASED ON R602.3(1))

ROOF	1.1. BLOCKING BETWEEN RAFTERS TO TOP PLATE	TOE NAIL (3) 8d (2-1/2"X0.131")
	1.2. CEILING JOISTS TO TOP PLATE	TOE NAIL (3) 8d (2-1/2"X0.131")
	1.3. CEILING JOISTS TO RAFTER OR LAPS OVER PARTITION	FACE NAIL (6) 16d (3 1/2"X0.162")
	1.4. COLLAR TIE TO RAFTER	FACE NAIL (3) 10d (3"X0.148")
	1.5. RAFTER OR ROOF TRUSS TO TOP PLATE	TOE NAIL (3) 16d BOX (3½"X0.135"), TWO TOE NAILS ONE SIDE AND ONE TOE NAIL ON THE OPPOSITE SIDE
	1.6. ROOF RAFTERS TO RIDGE, VALLEY OR HIP	TOE NAIL (4) 16d BOX (3-1/2"X0.135") OR FACE NAIL (3) 16d BOX (3 1/2"X0.135")
	1.7. ROOF SHEATHING TO RAFTER OR TRUSS	8d (2 1/2"X0.131") @ 6" O.C. EDGE, @ 12" O.C. FIELD
WALL	2.1. BUILT-UP STUDS	FACE NAIL 16d BOX (3"X0.128") @ 24"O.C.
	2.2. ABUTTING STUDS AT INTERSECTING WALL CORNERS	FACE NAIL 16d BOX (3 1/2"X0.135") @ 12"O.C.
	2.3. BUILT-UP HEADER, TWO 2X PIECES WITH 1/2" SPACER	FACE NAIL 16d BOX (3 1/2"X0.135") @ 12"O.C. ALONG EA EDGE
	2.4. CONTINUED HEADER, TWO 2X PIECES	FACE NAIL 16d (3 1/2"X0.135") @ 16"O.C. ALONG EA EDGE
	2.5. CONTINUOUS HEADER TO STUD	TOE NAIL (4) 8d (2 1/2"X0.131")
	2.6. DOUBLE TOP PLATES	FACE NAIL 10d BOX (3"X0.128") @ 12" O.C. AND MINIMUM (12) 10d BOX (3"X0.128") IN LAPPED AREA
	2.7. TOP PLATES LAP AT CORNERS AND INTERSECTIONS	FACE NAIL (3) 10d BOX (3"X0.128")
	2.8. SOLE PLATE TO JOIST OR BLOCKING AT NON-SHEARWALL	FACE NAIL 16d BOX (3 1/2"X0.135") @ 12" O.C.
	2.9. SOLE PLATE TO JOIST OR BLOCKING AT SHEARWALL	FACE NAIL PER SHEARWALL SCHEDULE 16d BOX (3 1/2"X0.135") @ 6" O.C. MAX
	2.10. TOP OR SOLE PLATE TO STUD	TOE NAIL (3) 16d BOX (3 1/2"X0.135") OR END NAIL (3) 16d BOX (3 1/2"X0.135")
	2.11. WALL SHEATHING TO WALL STUDS	PER SHEARWALL SCHEDULE, 8d (2 1/2"X0.131") @ 6"/12" O.C. MAX
FLOOR	3.1. JOISTS TO TOP OF SILL PLATE OR TOP OF BEAM/GIRDER	TOE NAIL (3) 8d (2 1/2"X0.113")
	3.2. RIM JOIST TO TOP PLATE OR RIM JOIST TO SILL PLATE	TOE NAIL 8d (2 1/2"X0.113") @ 6" O.C.
	3.3. FLOOR SHEATHING (1" MAX THICKNESS) TO FLOOR JOISTS	8d (2 1/2"X0.131") @ 6" O.C. EDGE, @ 12" O.C. FIELD
	3.4. FLOOR SHEATHING (1 1/4" MAX) TO FLOOR JOISTS	10d (3"X0.148") @ 6" O.C. EDGE, @ 12" O.C. FIELD
	3.5. BLOCKING BETWEEN JOISTS TO TOP PLATE	TOE NAIL (3) 8D (2-1/2"X0.131")

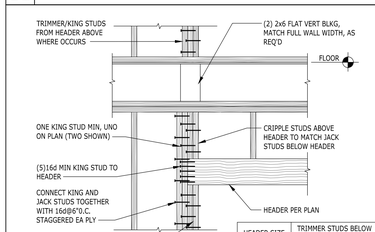
NOTES: ALL NAILS TO BE COMMON NAILS UNLESS SPECIFICALLY NOTED OTHERWISE



14 GABLE END ROOF FRAMING

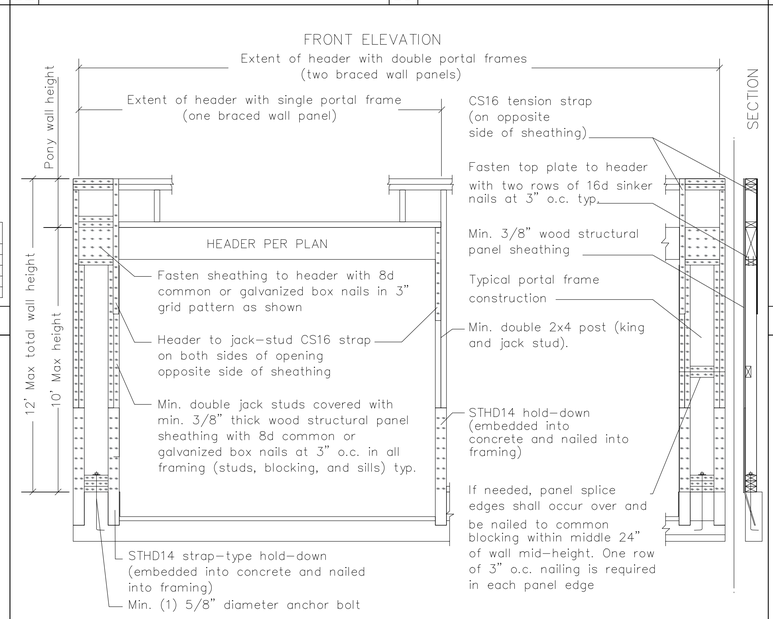


15 KNEE BRACE CONNECTION DETAIL

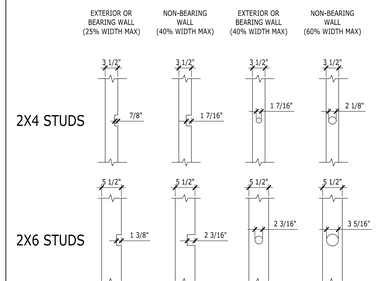


HEADER SIZE	TRIMMER STUDS BELOW MIN UNO ON PLAN
4x6	(1)2x4 OR (1)2x6
4x8	(2)2x4 OR (1)2x6
4x10	(3)2x4 OR (2)2x6
3 1/8 GLB	(3)2x4 OR (2)2x6
5 1/8 GLB	(3)2x6

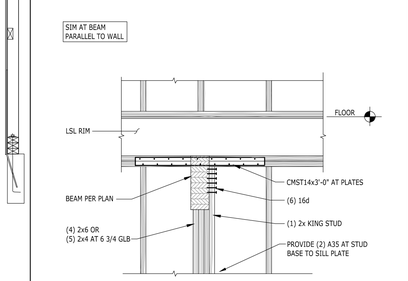
16 TYPICAL HEADER FRAMING



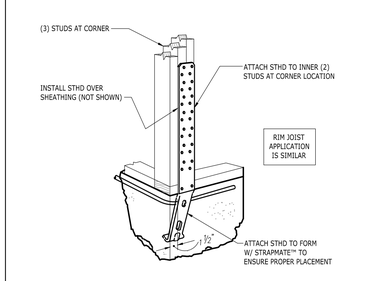
22 APA PORTAL FRAME



21 ALLOWABLE STUD NOTCHING AND BORING



24 BEAM AT DISCONTINUOUS TOP PLATES



25 STHD HOLDOWN INSTALLATION

STATE OF FLORIDA
ALIAKSEI PATSEVICH
130521
LICENSED
PROFESSIONAL ENGINEER

LONGITUDE ONE TWENTY°
ENGINEERING & DESIGN

REVISIONS

△	DESCRIPTION	DATE	BY
-			

PROJECT NAME
216 SHELF ROCK ROAD
GEORGETOWN, TX

PROJECT NUMBER
S22202

CHECKED BY - AP

SHEET DATE - 08/31/2022

SCALE
24X36 SHEET:1/4"=1'-0"

DESCRIPTION
STRUCTURAL DETAILS

SHEET
SD-1