

NOTICE TO CONTRACTOR
 All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
 Limited building only review.
 Permit holder responsible for full compliance with the code.
 01/27/2021




Elevation A -Sheet List	
Sheet Number	Sheet Name
ElevA-Pg1	Front & Rear Elevations
ElevA-Pg2	Side Elevations
ElevA-Pg3	1st Floor Plan
ElevA-Pg4	2nd Floor Plan
ElevA-Pg5	Roof Plan
Pg6	Stair Section
Pg7	Details
Structural Pages by Engineer	



① Front Elevation
 1/8" = 1'-0"



② Rear Elevation
 1/8" = 1'-0"

Area Schedule (Elevation A)	
Name	Area
Heated	
1st Floor	2059 SF
2nd Floor	1131 SF
	3190 SF
Unheated	
Front Porch	107 SF
Garage	461 SF
	568 SF
Under Roof	3758 SF

ARLINGTON - Elevation A

Front & Rear Elevations

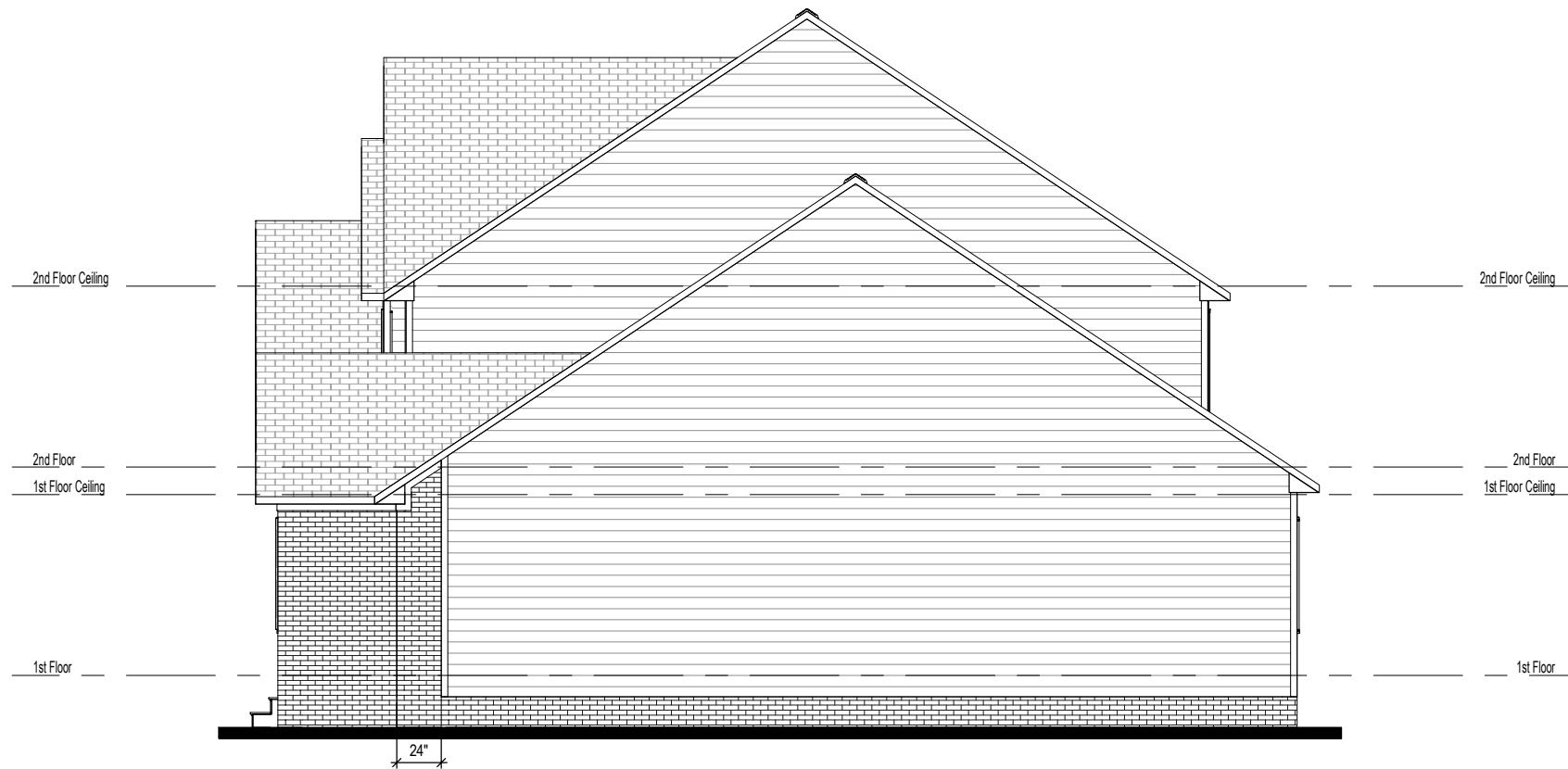


Job #: 2020-103
 Address: Fred Burns Rd
 Holly Springs, NC 27540
 County: Harnett County

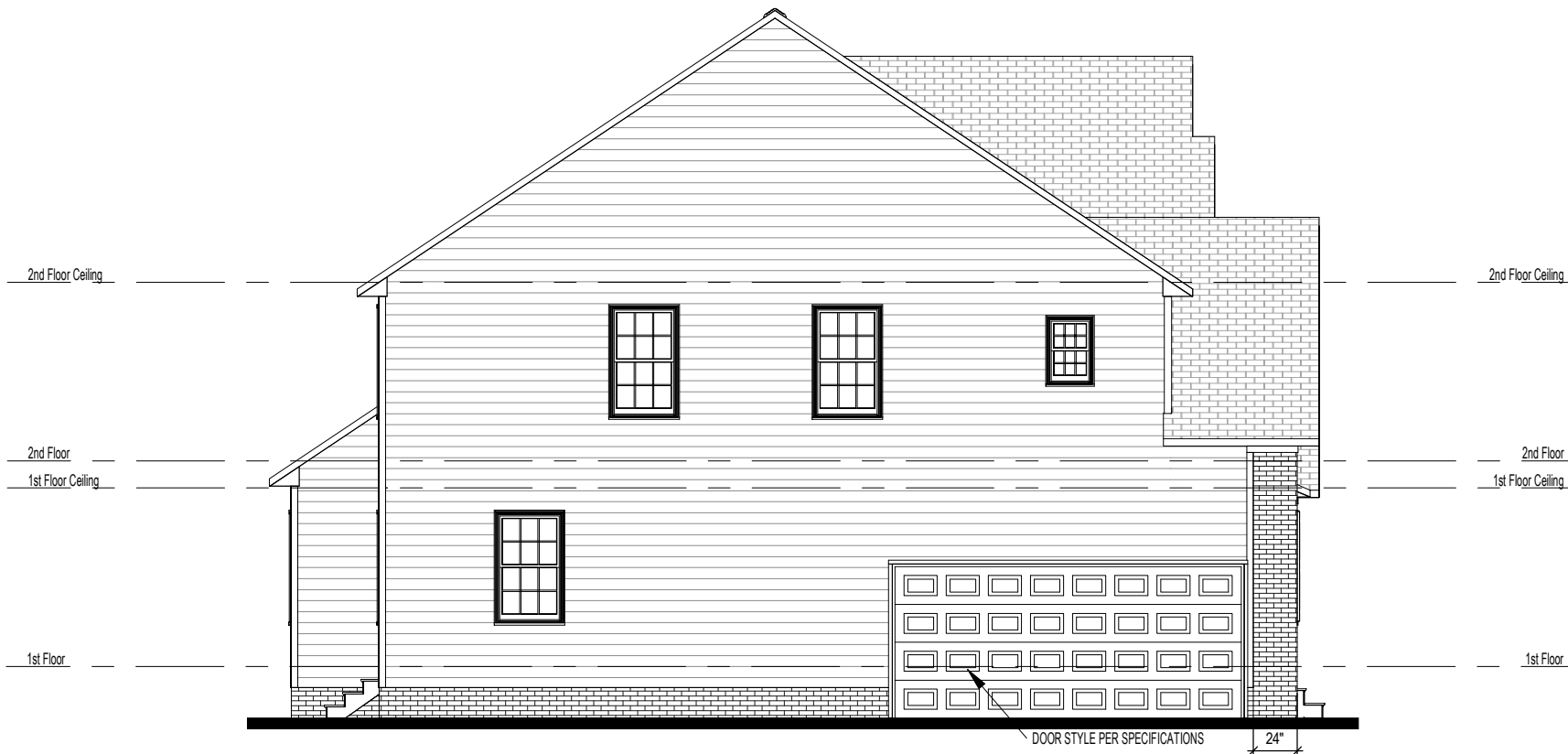
Plan Version Date:
 7-30-19

Job Version Date:
 12-14-20

Sheet #:
 ElevA-Pg1

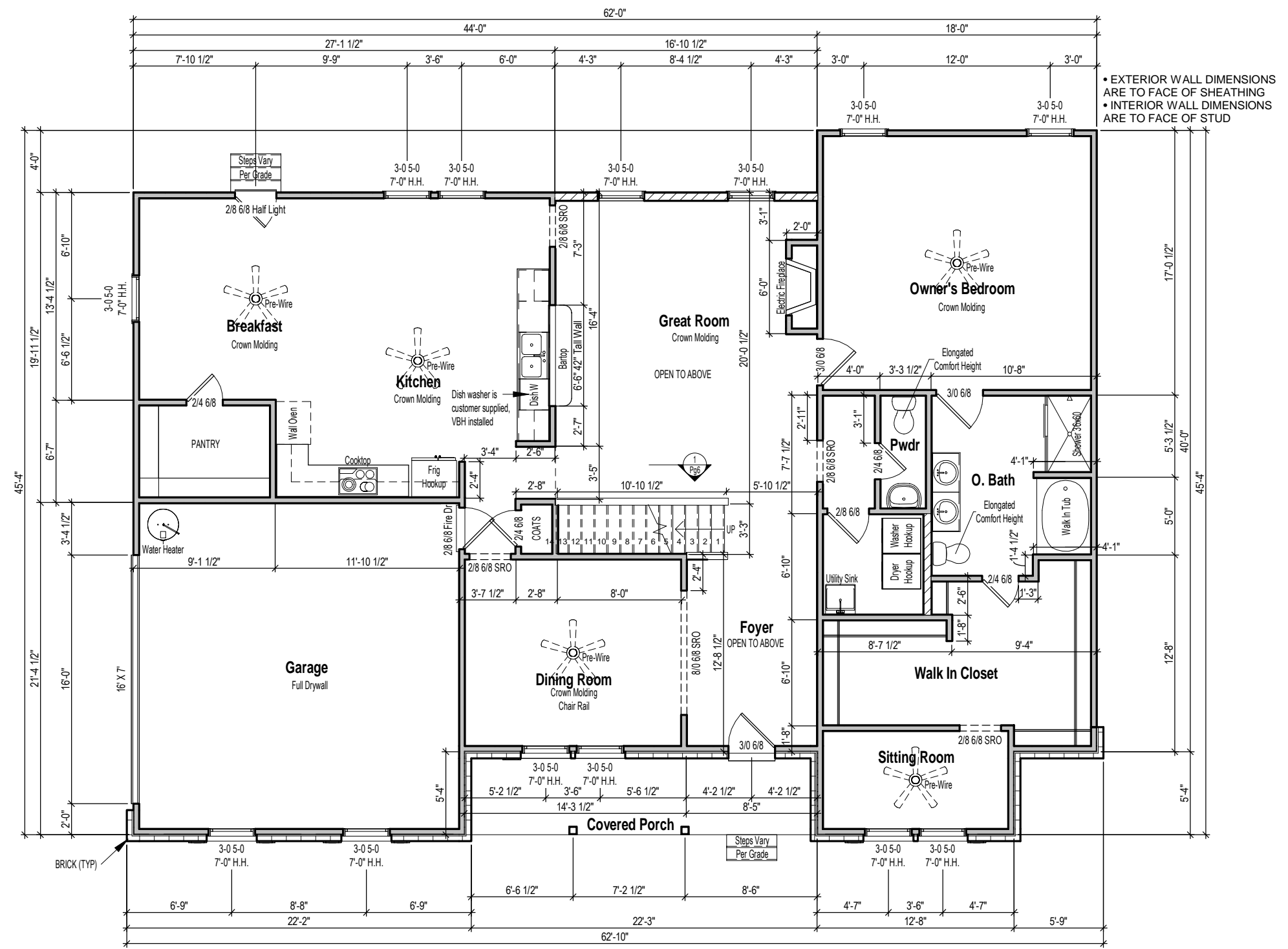


① Right Elevation
1/8" = 1'-0"



② Left Elevation
1/8" = 1'-0"

Wall Stud Size
 — = 2x4
 // = 2x6



• EXTERIOR WALL DIMENSIONS ARE TO FACE OF SHEATHING
 • INTERIOR WALL DIMENSIONS ARE TO FACE OF STUD

1 1st Floor Plan
 1/8" = 1'-0"



3015 Jefferson Davis Hwy, Sanford, NC 27332

ARLINGTON - Elevation A

1st Floor Plan

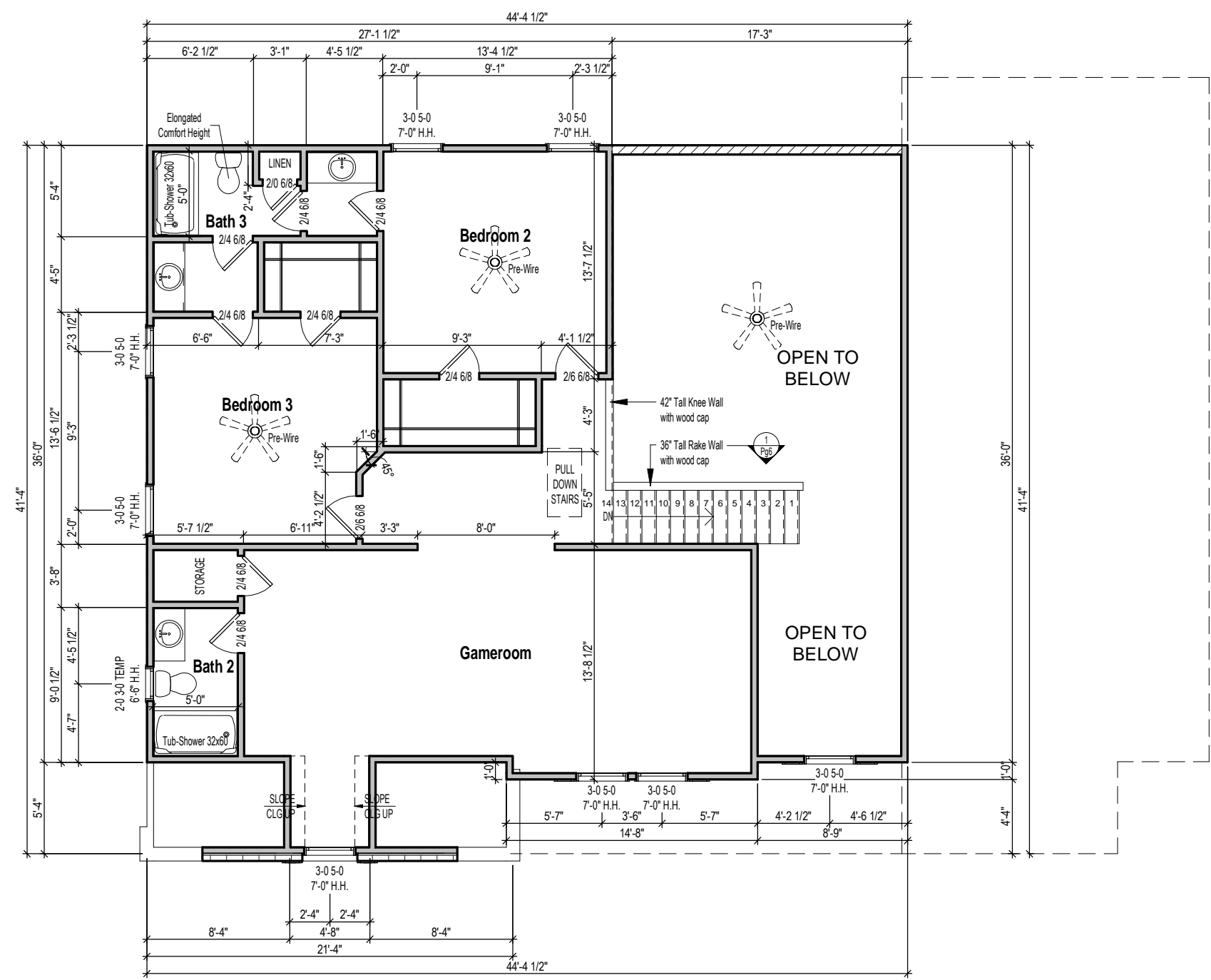
Job #: 2020-103
 Address: Fred Burns Rd
 Holly Springs, NC 27540
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Plan Version Date:
 7-30-19

Job Version Date:
 12-14-20

Sheet #:
 ElevA-Pg3

Wall Stud Size
 — = 2x4
 // = 2x6



• EXTERIOR WALL DIMENSIONS ARE TO FACE OF SHEATHING
 • INTERIOR WALL DIMENSIONS ARE TO FACE OF STUD

1 2nd Floor Plan
 1/8" = 1'-0"



ARLINGTON - Elevation A

2nd Floor Plan

Job #: 2020-103
 Address: Fred Burns Rd
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 County: Harnett County

Plan Version Date:
 7-30-19

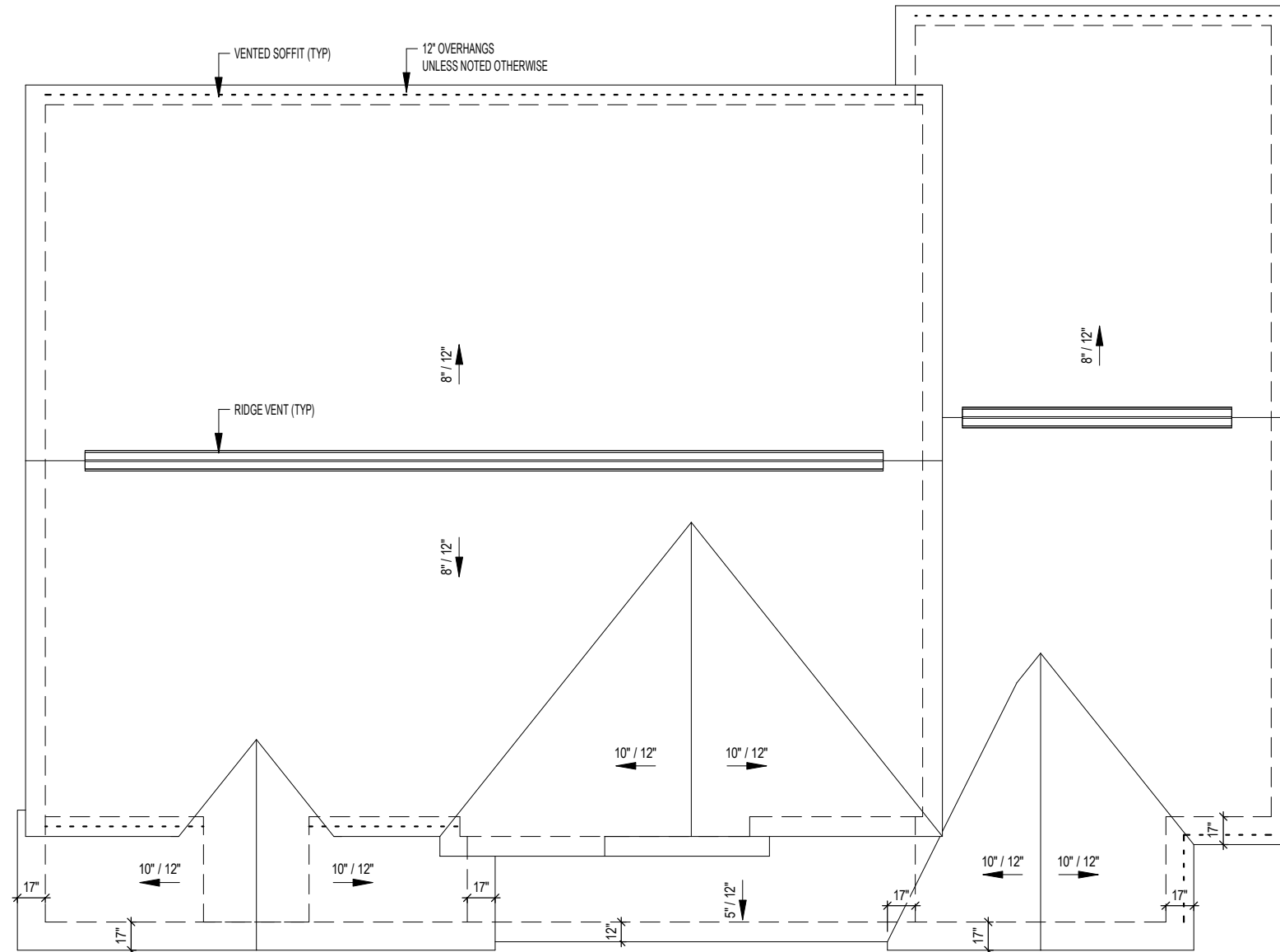
Job Version Date:
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Sheet #:
 ElevA-Pg4

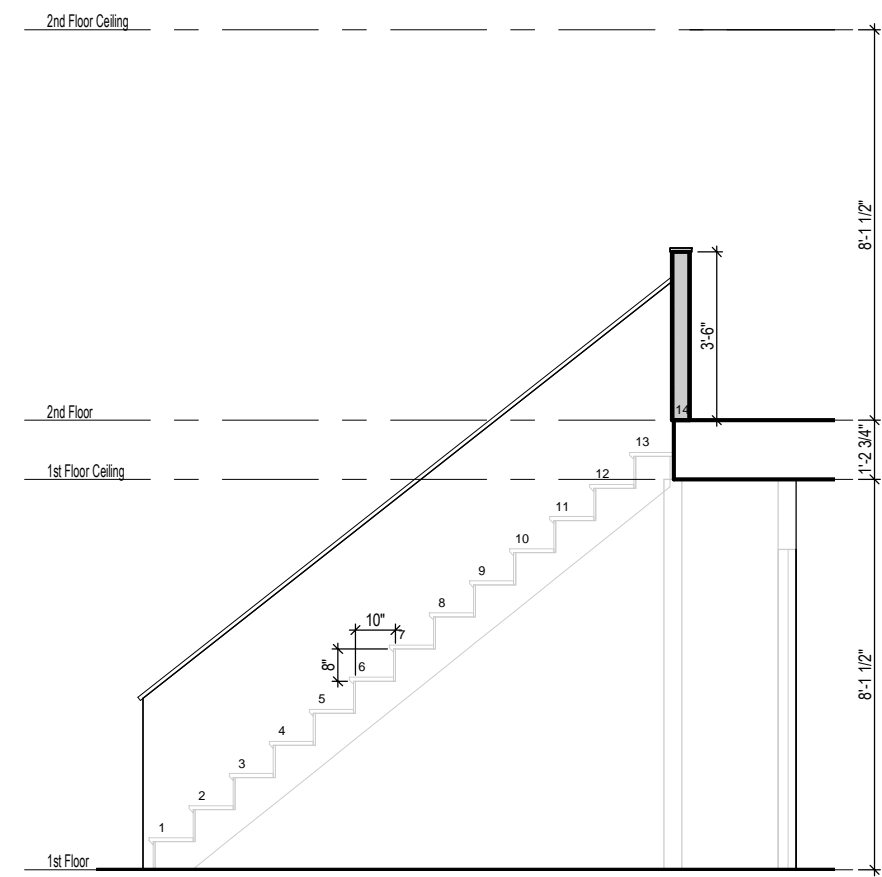
Attic Ventilation Calcs 1/300 (sq.in.)

Area	Ventilation Required (sq.in.)	Max Upper (sq.in.)	Min Upper (sq.in.)	Upper Ventilation (sq.in.)	Lower Ventilation (sq.in.)	Total Ventilation (sq.in.)	Ridge Vent (In.ft.)	Roof Vents (ea)	Soffit Vents (sq.ft.)
1726 SF	828	663	414	600	360	960	40	0	60
774 SF	372	297	186	210	168	378	14	0	28

- CALCS BASED ON THE FOLLOWING VALUES**
- Ridge Vents = 15 in² of net free area per linear foot
 - Roof Vents = 50 in² of net free area per unit
 - Soffit Vents = 6 in² of net free area per square foot



1 Roof Plan
1/8" = 1'-0"



1 Stair Section
 1/4" = 1'-0"

ARLINGTON - Elevation A

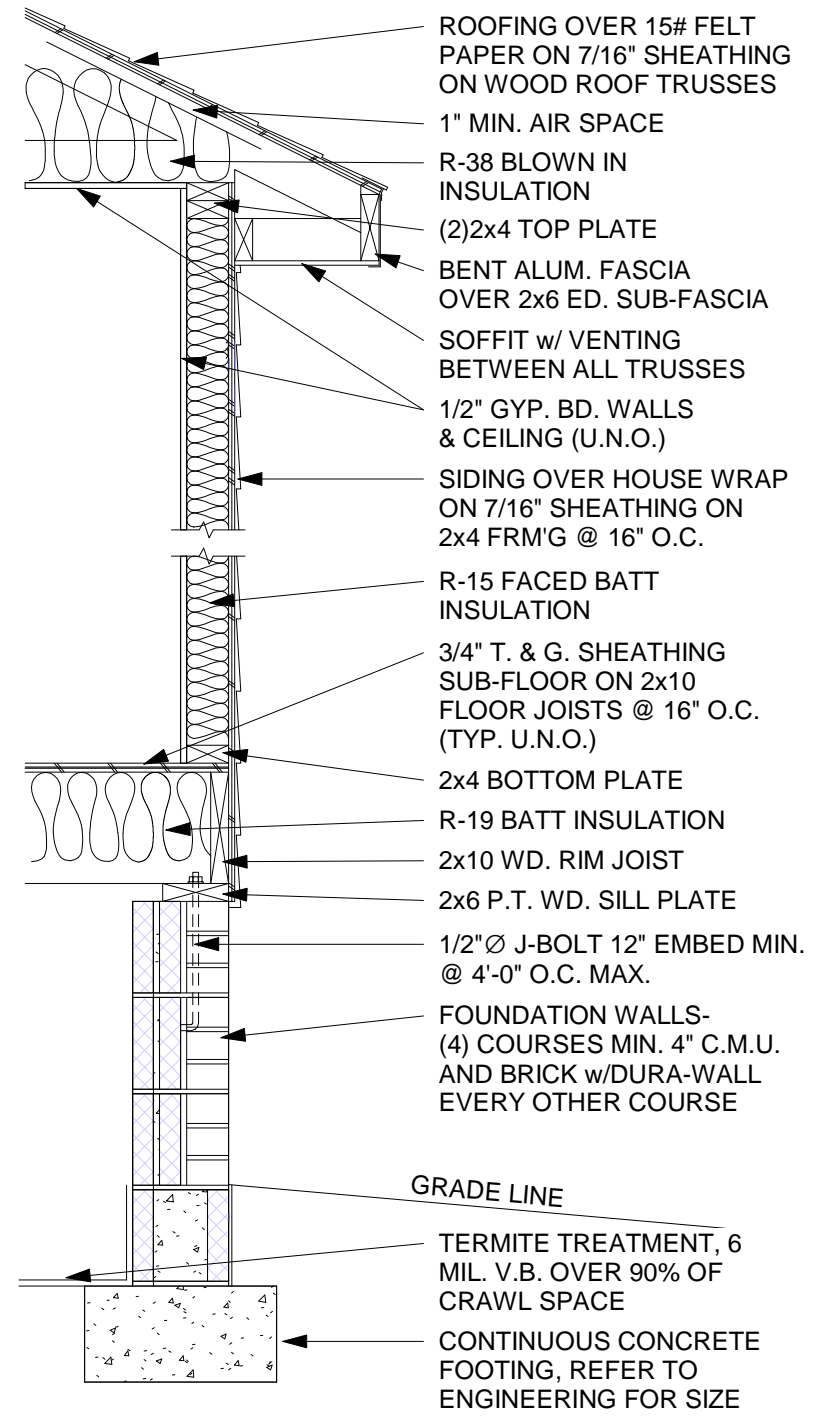
Stair Section

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 Address: Fred Burns Rd
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Plan Version Date:
 7-30-19

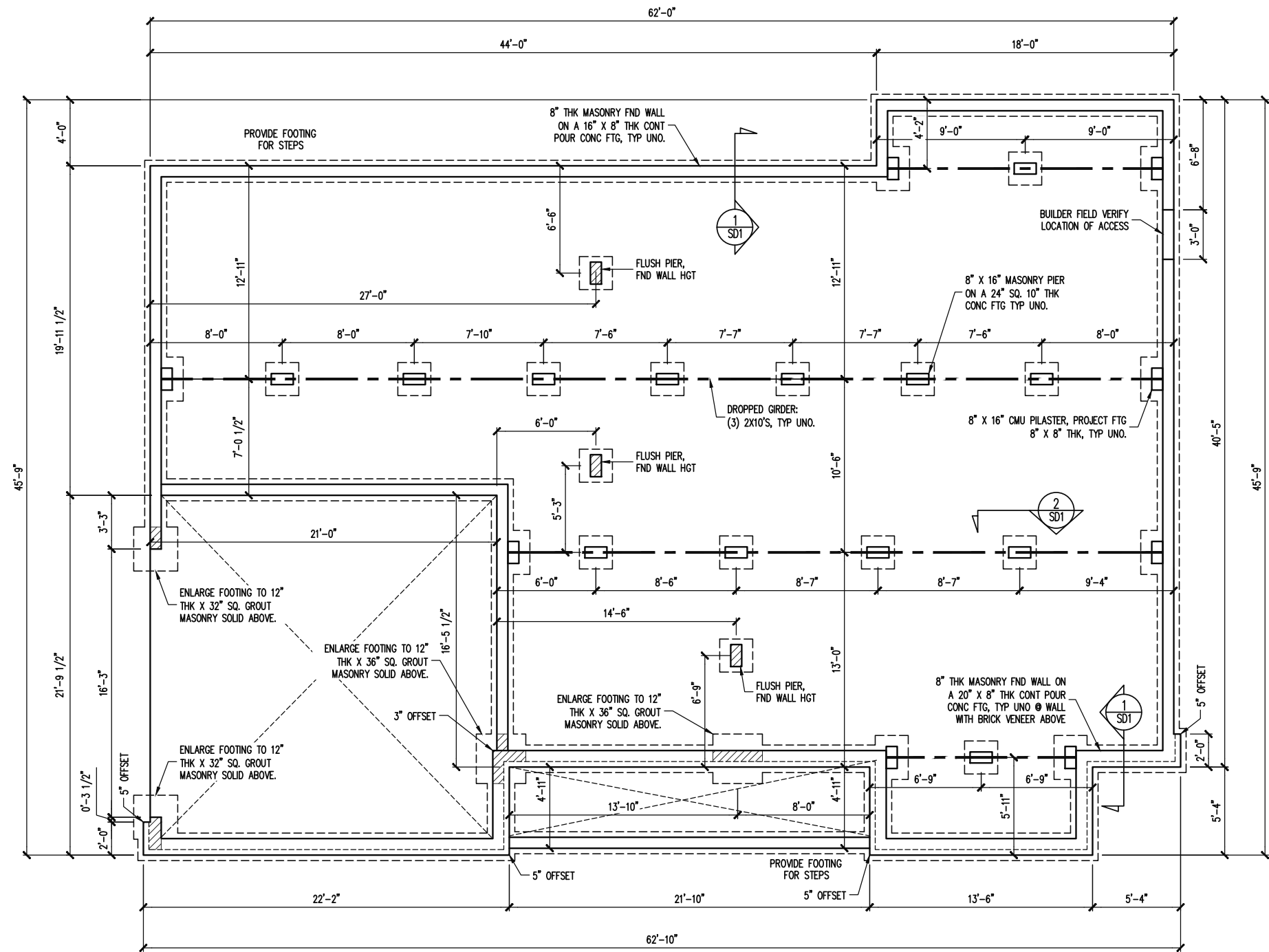
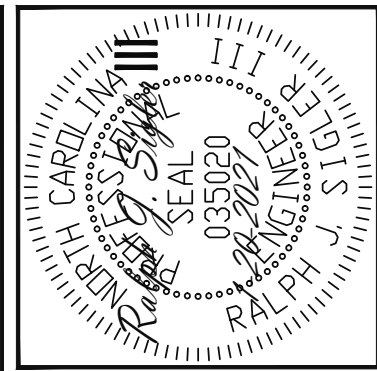
Job Version Date:
 12-14-20

Sheet #:
 Pg6



1 Typical Wall Section - Brick Fnd
1/64" = 1'-0"

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NOTES:
 -HEIGHT AND BACKFILL LIMITATIONS FOR FOUNDATION WALLS ARE TO BE GOVERNED BY THE NCSBC, LATEST EDITION. REINFORCEMENT AND GROUTING SHALL BE DETERMINED BY FINAL SITE CONDITIONS.
 -BUILDER TO FIELD LOCATE CRAWLSPACE ACCESS OPENING WITH MINIMUM DIMENSIONS OF 18X24. DO NOT LOCATE ACCESS OPENING BELOW POINT LOADS FROM ABOVE WITHOUT ENGINEER APPROVAL.

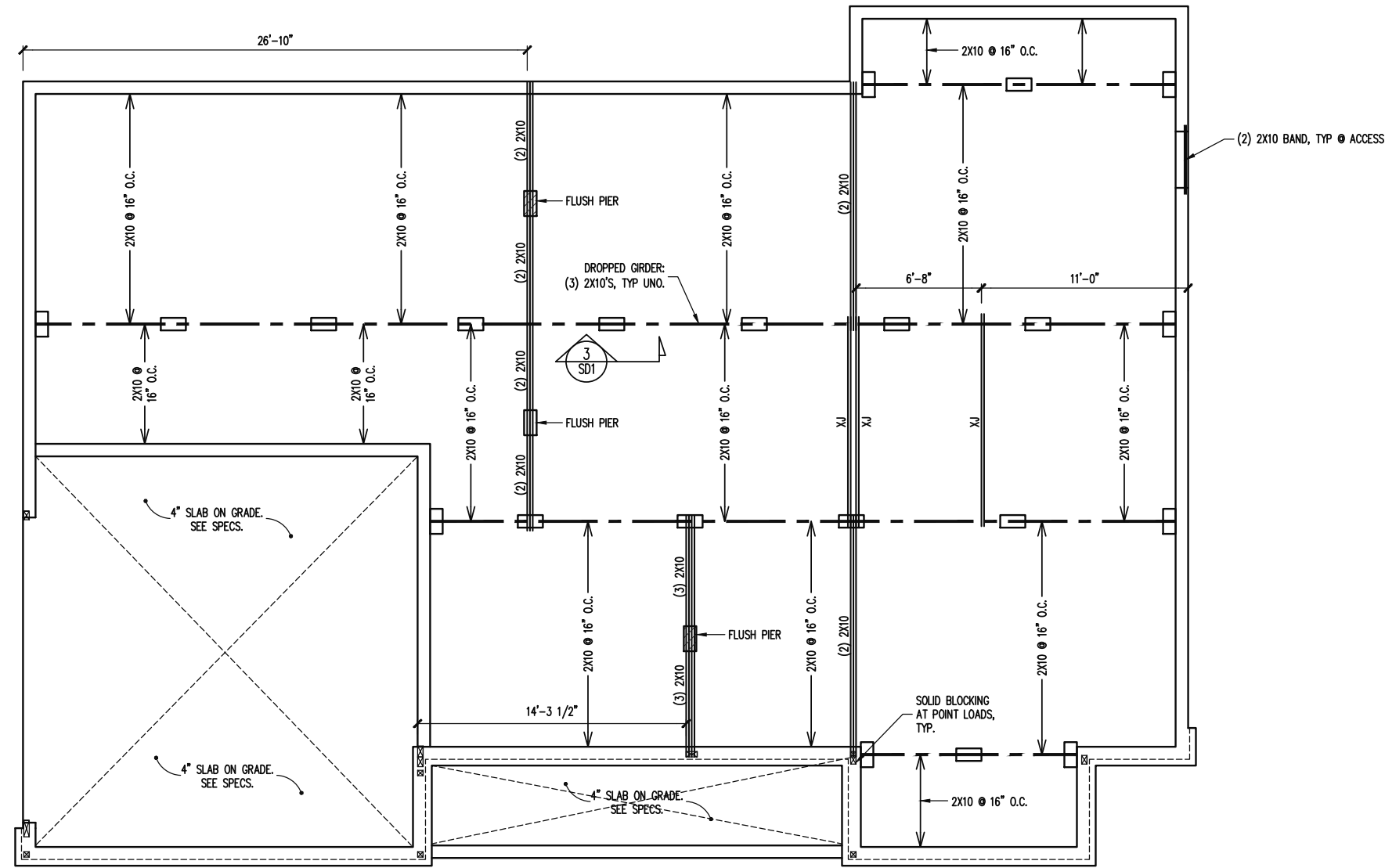
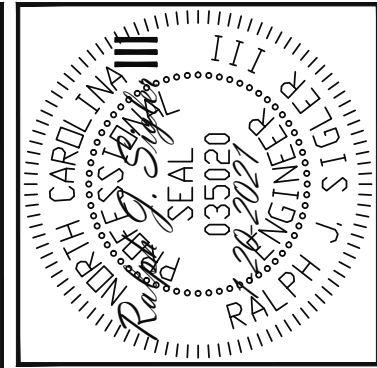
FOUNDATION PLAN
 1/8" = 1'-0"

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Engineering Tech ASSOCIATES, P.A.
 VALUE BUILD HOMES
 STRUCTURAL ADDENDUM
 SCOPE: FRED BURNS RD
 LOC: HOLLY SPRINGS, NC
 JOB# 2020-103 MCCORD

ENG: RJS
 DATE: 1-20-2021
 PLAN: ARLINGTON A
 PROJECT NO.: 21-26-013
 SHEET NO.: S1
 1 of 9

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SCOPE	VALUE BUILD HOMES
LOC	STRUCTURAL ADDENDUM
	FRED BURNS RD
	HOLLY SPRINGS, NC
	JOB# 2020-103 MCCORD

ENG: RJS
 DATE: 1-20-2021

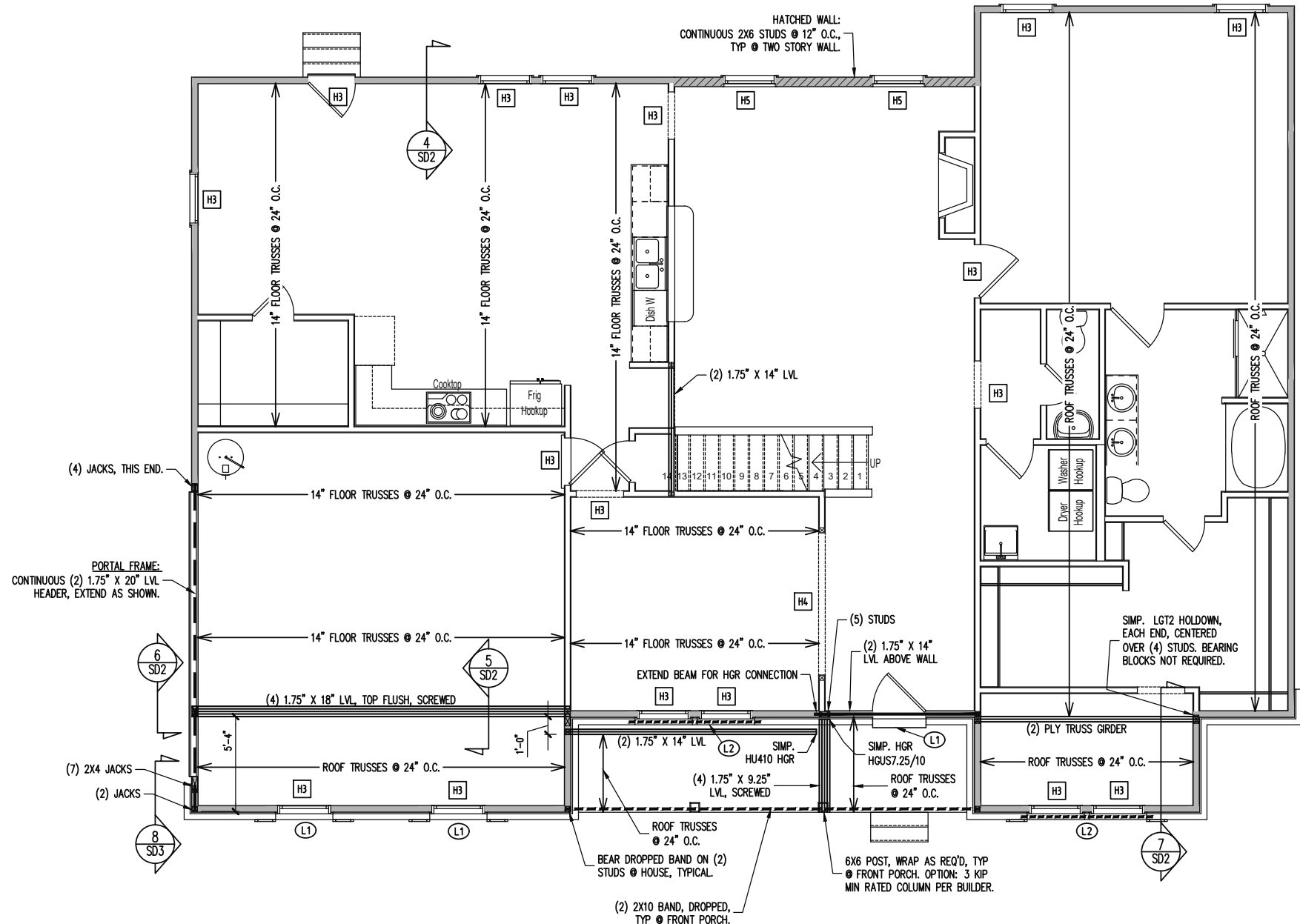
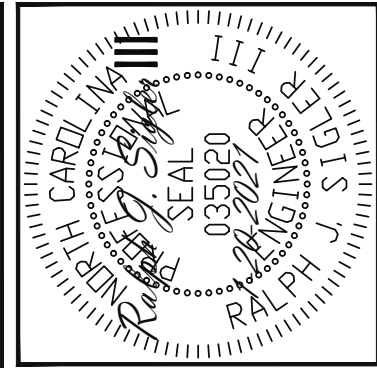
PLAN
 ARLINGTON A

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 21-26-013

SHEET NO.
 S2
 2 of 9

CRAWL SPACE FRAMING PLAN
 1/8" = 1'-0"

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CONSTRUCTION SPECIFICATIONS
INSTANT REFERENCES
 REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION:
 PART 1.01: CURRENT GOVERNING CODE
 PART 14: STUD SUPPORT FOR BEAMS
 PART 17: KING STUDS FOR EXTERIOR WALLS
 SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR I-JOISTS ALLOWABLE SUBSTITUTIONS

WALL BRACING
 SHADED WALLS:
 ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.
 NOTES:
 PROVIDED CONTINUOUS SHEATHING = 224' MIN.
 REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

LINTEL SCHEDULE

L1	L 3 1/2 X 3 1/2 X 1/4
L2	L 5 X 3 1/2 X 5/16

HEADER SCHEDULE

H1	SINGLE 2X4 TURNED FLAT (A)
H2	(2) 2X4'S ON SINGLE JACKS (B)
H3	(2) 2X8'S ON SINGLE JACKS (C)
H4	(2) 1.75" X 9.25" LVL'S ON DBL JACKS
H5	(3) 2X8 HEADER ON SINGLE 2X6 JACKS

(A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
 (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
 (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.
 NOTES:
 -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

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VALUE BUILD HOMES
 STRUCTURAL ADDENDUM
 SCOPE: FRED BURNS RD
 LOC: HOLLY SPRINGS, NC
 JOB# 2020-103 MCCORD

ENG: RJS
 DATE: 1-20-2021

PLAN
 ARLINGTON A

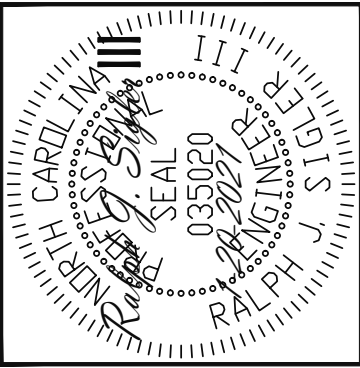
PROJECT NO.
 21-26-013

SHEET NO.
 S3

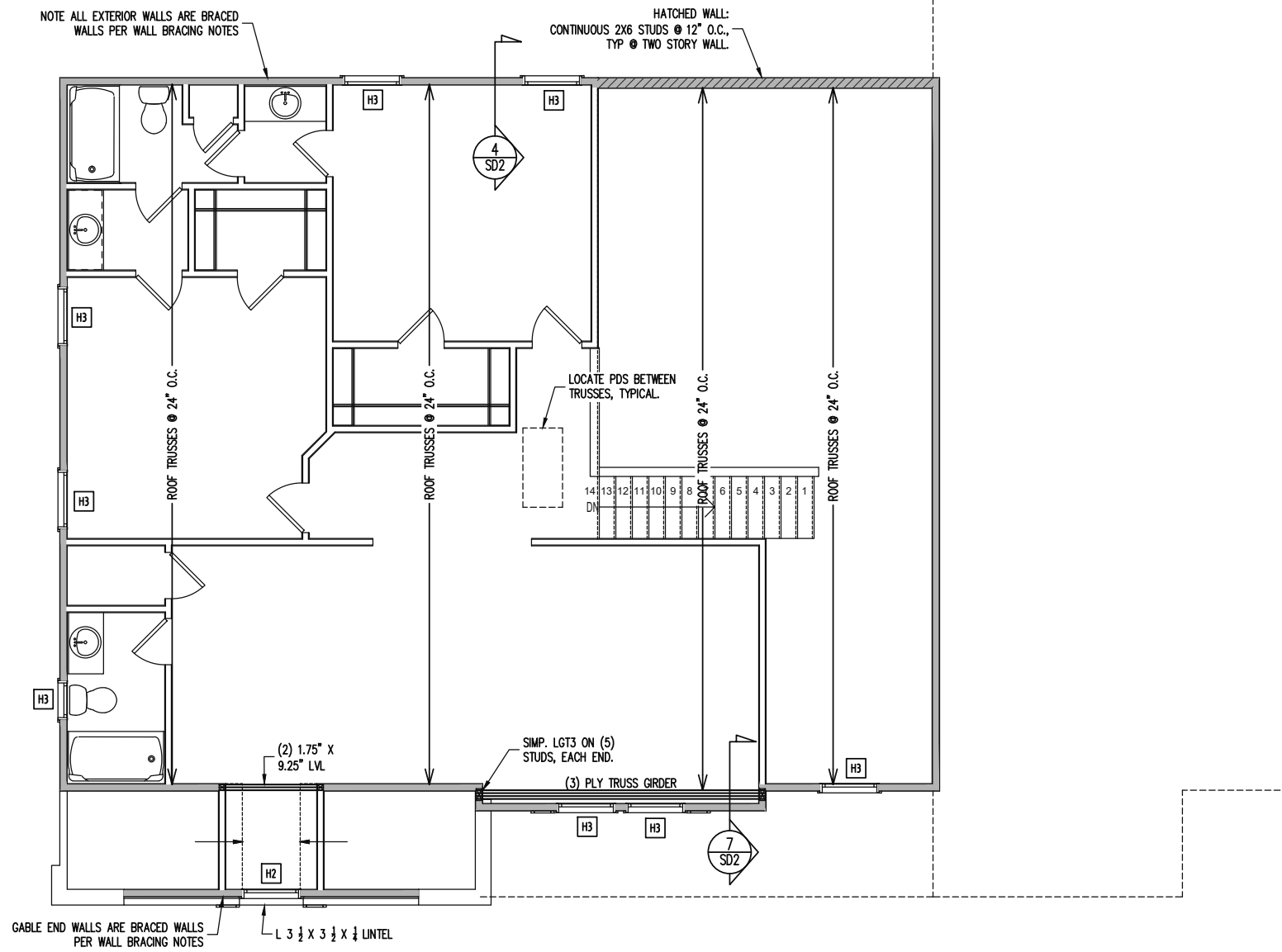
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1ST FLOOR FRAMING PLAN
 WALLS AND CEILING
 1/8" = 1'-0"

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INSTANT REFERENCES

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PART 1.01: CURRENT GOVERNING CODE

PART 14: STUD SUPPORT FOR BEAMS

PART 17: KING STUDS FOR EXTERIOR WALLS

SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR I-JOISTS ALLOWABLE SUBSTITUTIONS

WALL BRACING

SHADED WALLS:

ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

NOTES:
PROVIDED CONTINUOUS SHEATHING = 170' MIN.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

HEADER SCHEDULE

H1 SINGLE 2X4 TURNED FLAT (A)

H2 (2) 2X4'S ON SINGLE JACKS (B)

H3 (2) 2X8'S ON SINGLE JACKS (C)

H4 (2) 1.75" X 9.25" LVL'S ON DBL JACKS

(A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.

(B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.

(C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

VALUE BUILD HOMES
STRUCTURAL ADDENDUM
SCOPE
LOC
FRED BURNS RD
HOLLY SPRINGS, NC
JOB# 2020-103 MCCORD

ENG: RJS
DATE: 1-20-2021

PLAN
ARLINGTON A

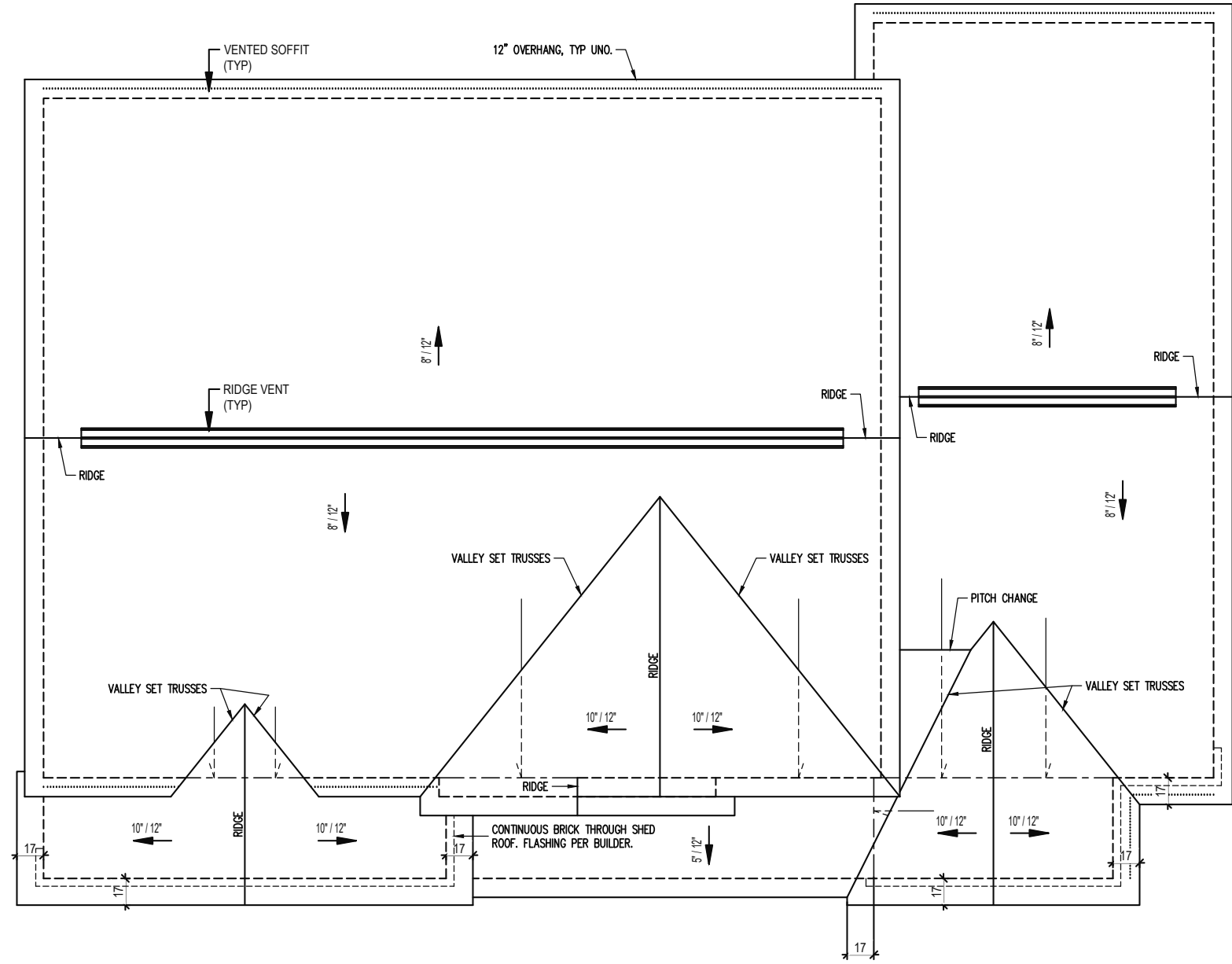
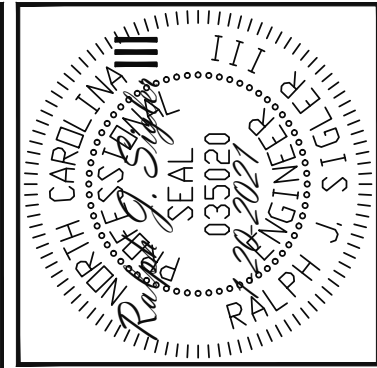
PROJECT NO.
21-26-013

SHEET NO.
S4

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2ND FLOOR FRAMING PLAN
WALLS AND CEILING
1/8" = 1'-0"

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TRUSS UPLIFT CONNECTORS
 EXPOSURE B, 115 MPH, ANY PITCH
 24" O.C. MAX ROOF TRUSS SPACING
 TRUSSES SHALL BE ATTACHED TO SUPPORT WALL FOR UPLIFT RESISTANCE. CONTINUOUS OSB WALL SHEATHING BELOW PROVIDES CONTINUOUS UPLIFT RESISTANCE TO FOUNDATION. ALL TRUSSES SUPPORTED BY INTERMEDIATE SUPPORT WALLS, KNEEWALLS OR BEAMS SHALL BE ATTACHED TO SUPPORTING MEMBER PER SCHEDULE BELOW.
 ROOF SPAN IS MEASURED HORIZONTALLY BETWEEN FURTHEST SUPPORT POINTS.
 ROOF SPAN UP TO 28' CONNECTOR NAILING PER TABLE 602.3(1) NCRBC 2018 EDITION
 OVER 28' (1) SIMPSON H2.5A HURRICANE CLIP TO DBL TOP PLATE OR BEAM

FRAMING NOTES
 ROOF ONLY
 -ROOF TRUSSES PER MANUFACTURER, TYP U.N.O.
 -ROOF PITCHES 8:12 TYP U.N.O.
 -VERIFY ROOF PITCHES, OVERHANG LENGTHS, AND KNEEWALL FRAMING HGTS WITH ARCHITECTURAL DRAWINGS, TYPICAL.

ROOF FRAMING PLAN
 1/8" = 1'-0"

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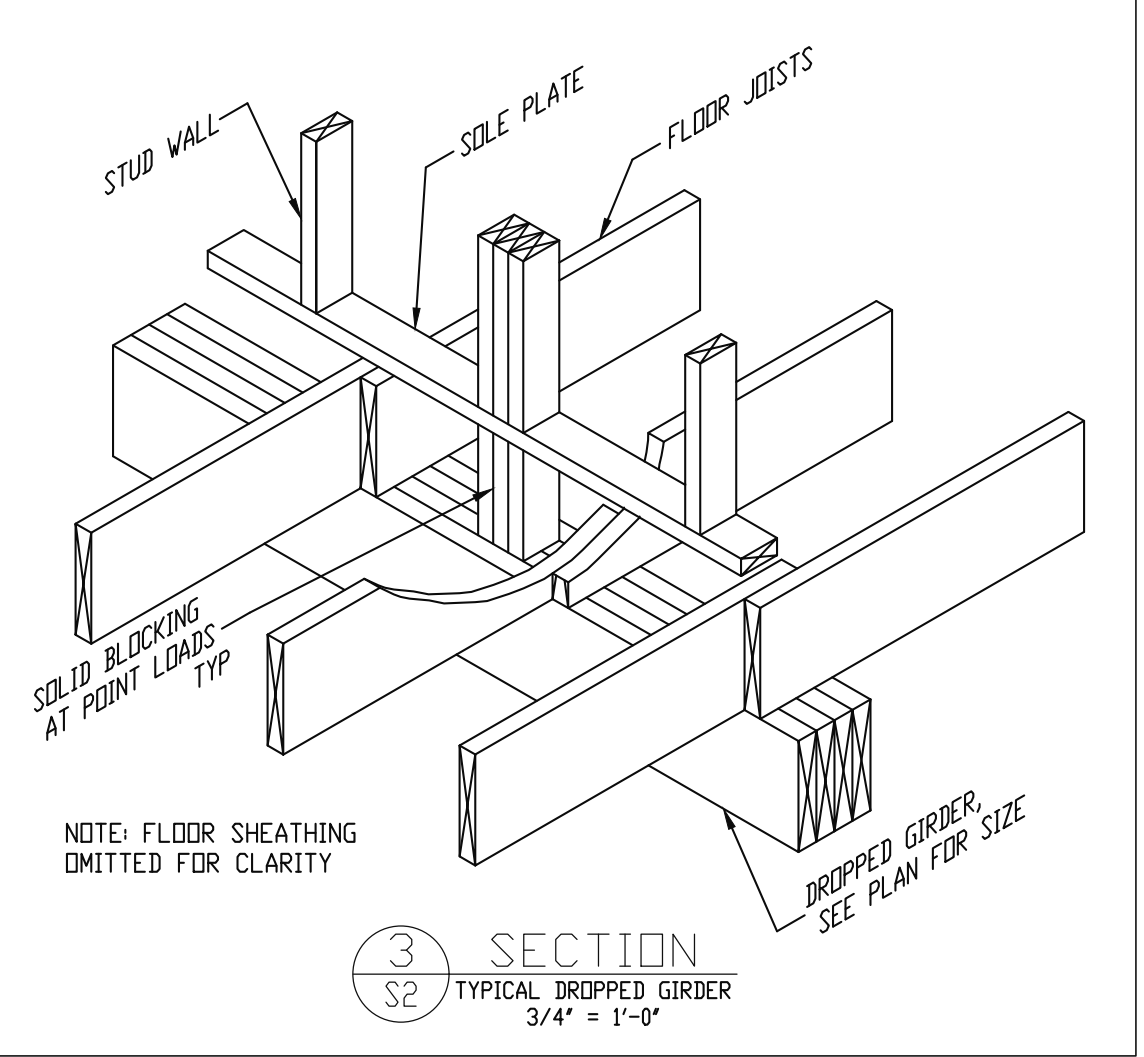
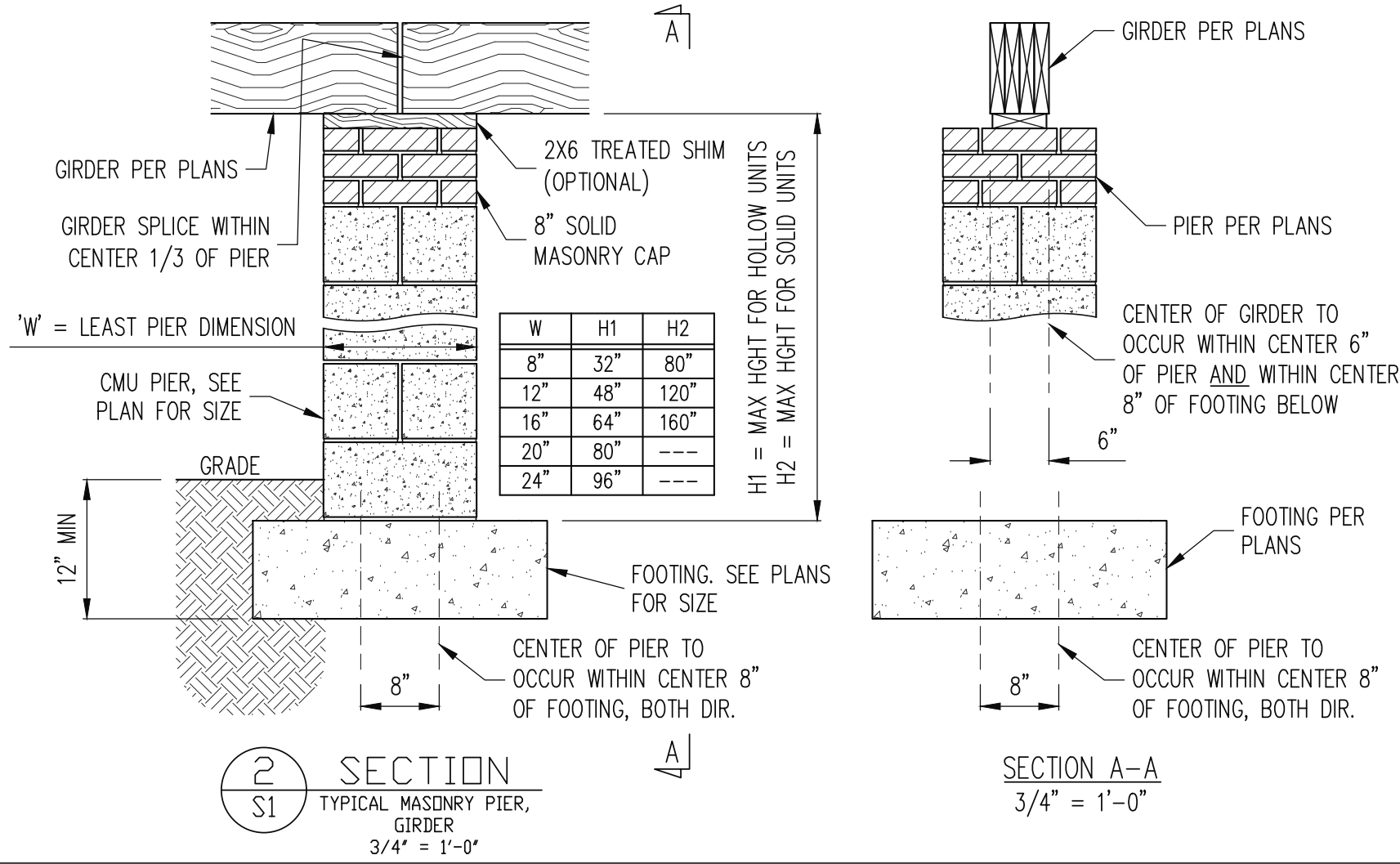
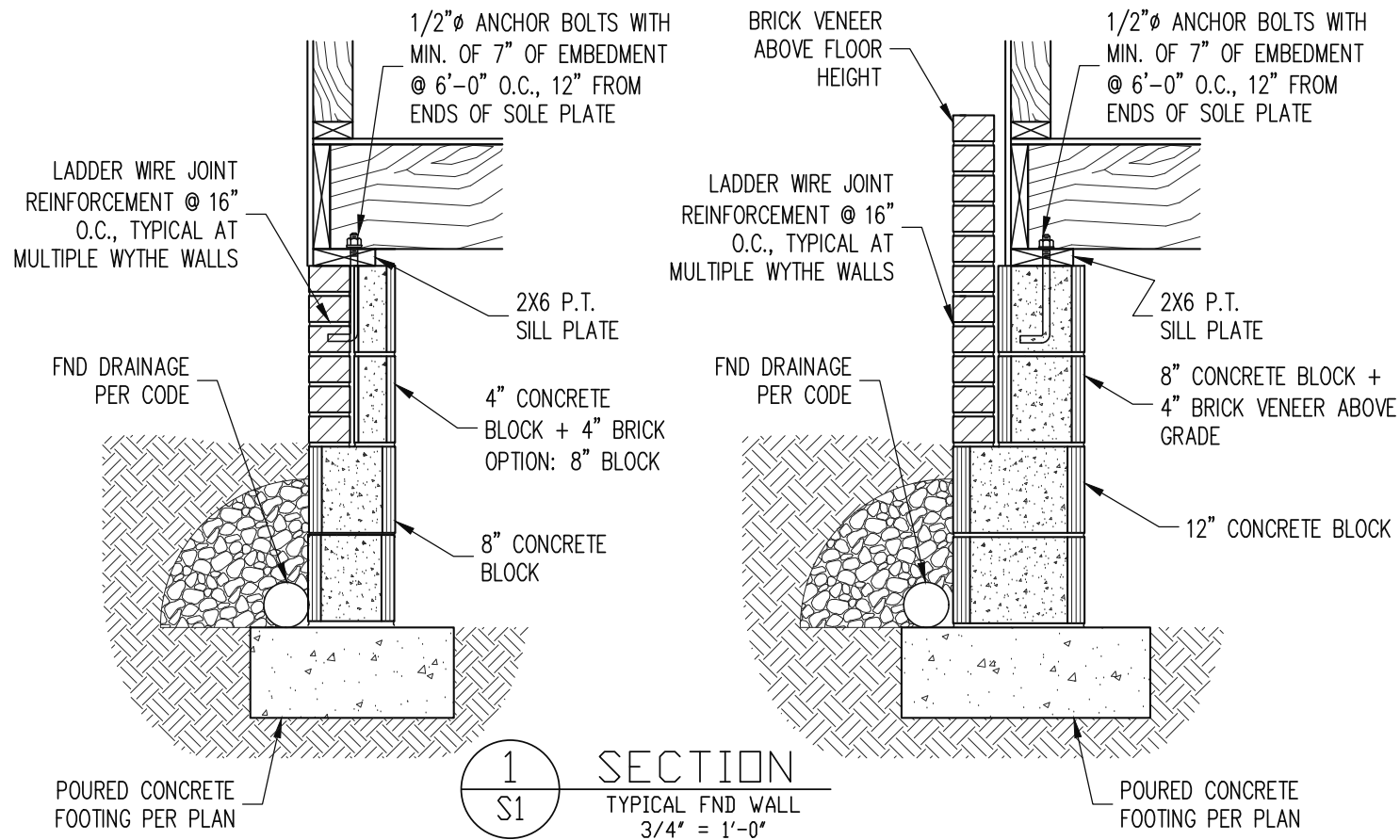
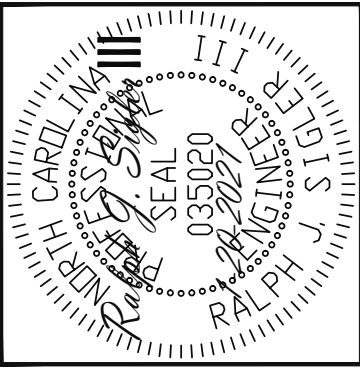
SCOPE	VALUE BUILD HOMES
LOC	STRUCTURAL ADDENDUM
	FRED BURNS RD
	HOLLY SPRINGS, NC
	JOB# 2020-103 MCCORD

ENG: RJS
 DATE: 1-20-2021

PLAN
 ARLINGTON A

PROJECT NO.
 21-26-013

SHEET NO.
 S5
 5 of 9



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VALUE BUILD HOMES
STRUCTURAL ADDENDUM
SCOPE: FRED BURNS RD
LOC: HOLLY SPRINGS, NC
JOB#: 2020-103 MCCORD

ENG: RJS
DATE: 1-20-2021
PLAN: ARLINGTON A
PROJECT NO.: 21-26-013
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CONTINUOUS ROOF SHEATHING

BLOCKING AS REQUIRED PER TABLE R602.10.4.5 OF THE NORTH CAROLINA RESIDENTIAL BUILDING CODE, 2018 EDITION.

ENGINEERED ROOF TRUSS. SEE ARCHITECTURAL PLANS FOR OVERHANG DETAILS.

CONTINUOUS SHEATHING ATTACHED PER WALL BRACING NOTES.

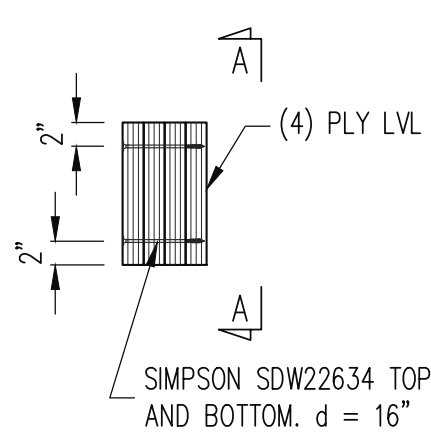
BRACED WALL PANEL

(3) 16d NAILS @ 16" O.C. ALONG BRACED WALL PANEL

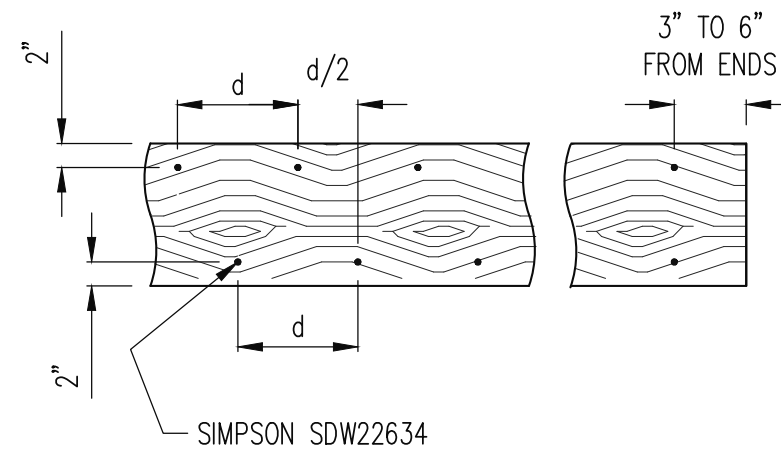
CONTINUOUS SHEATHING ATTACHED PER WALL BRACING NOTES.

(3) 16d NAILS @ 16" O.C. ALONG BRACED WALL PANEL

4 SECTION
TYPICAL BRACED WALL PANEL CONNECTION
3/4" = 1'-0"

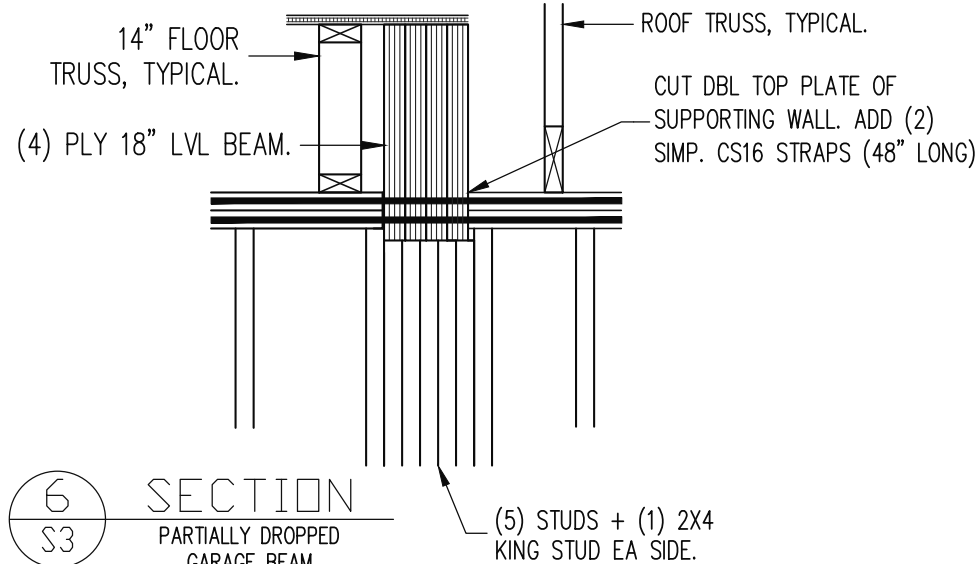


5 SECTION
TYPICAL FASTENING (4) PLY LVL
3/4" = 1'-0"

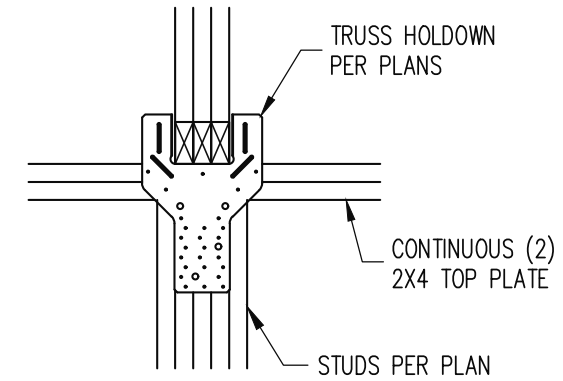


SECTION A-A
3/4" = 1'-0"

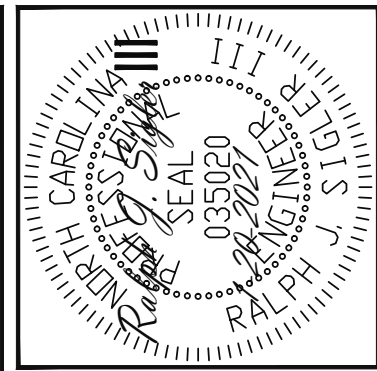
*BUILDER PERMITTED TO SUBSTITUTE 1/2" Ø THROUGH BOLTS FOR SIMP. SDW SCREWS @ EQUAL SPACING.



6 SECTION
PARTIALLY DROPPED GARAGE BEAM
3/4" = 1'-0"



7 SECTION
TRUSS GIRDER BEARING ENHANCER, TYPICAL
3/4" = 1'-0"



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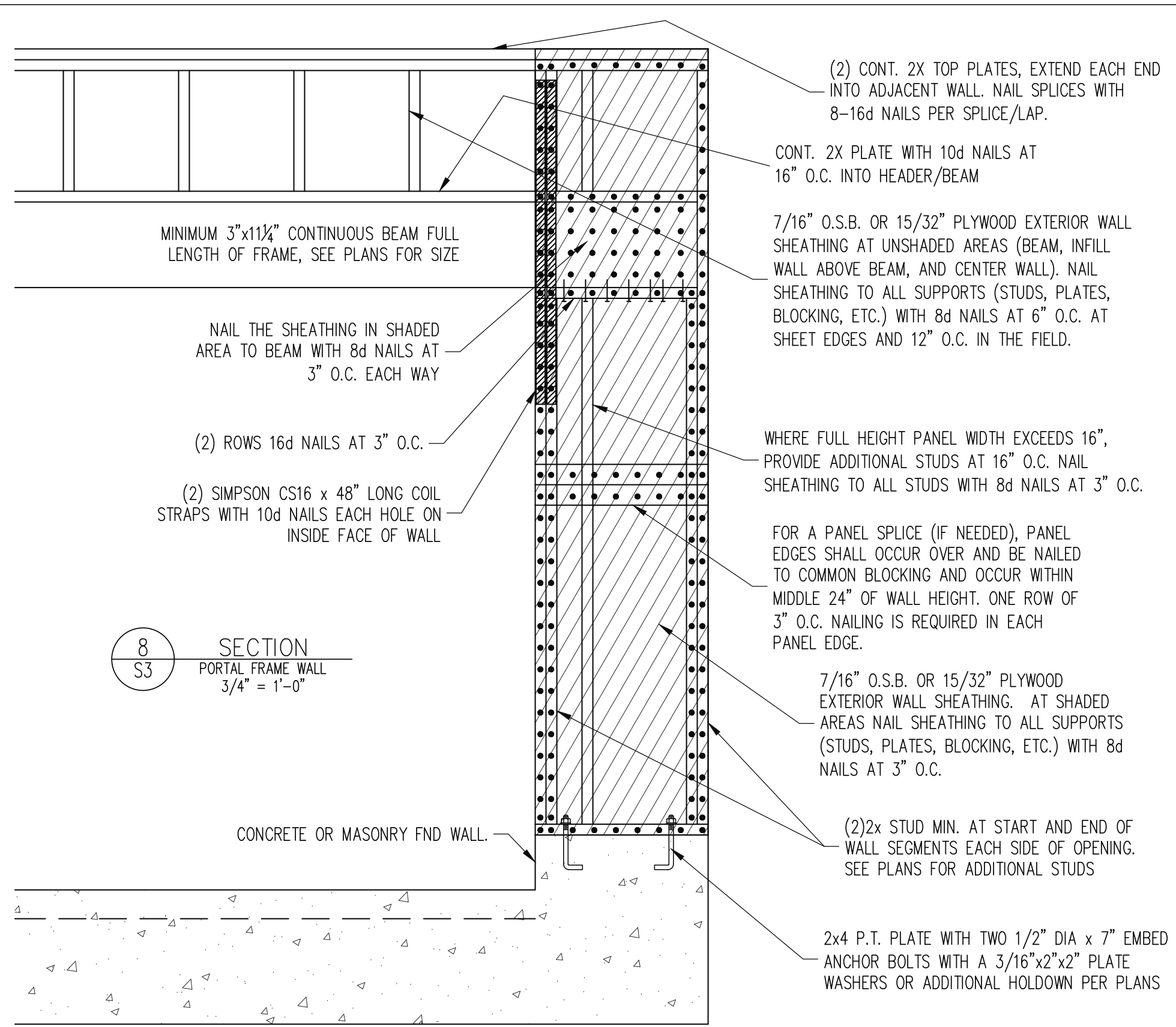
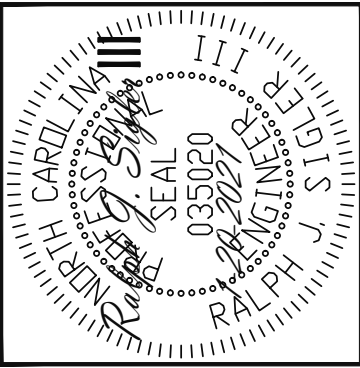
SCOPE	VALUE BUILD HOMES
LOC	STRUCTURAL ADDENDUM
	FRED BURNS RD
	HOLLY SPRINGS, NC
	JOB# 2020-103 MCCORD

ENG: RJS
DATE: 1-20-2021

PLAN
ARLINGTON A

PROJECT NO.
21-26-013

SHEET NO.
SD2
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8 SECTION
S3 PORTAL FRAME WALL
3/4" = 1'-0"

(2) CONT. 2X TOP PLATES, EXTEND EACH END INTO ADJACENT WALL. NAIL SPLICES WITH 8-16d NAILS PER SPLICE/LAP.

CONT. 2X PLATE WITH 10d NAILS AT 16" O.C. INTO HEADER/BEAM

MINIMUM 3"x11 1/4" CONTINUOUS BEAM FULL LENGTH OF FRAME, SEE PLANS FOR SIZE

NAIL THE SHEATHING IN SHADED AREA TO BEAM WITH 8d NAILS AT 3" O.C. EACH WAY

(2) ROWS 16d NAILS AT 3" O.C.

(2) SIMPSON CS16 x 48" LONG COIL STRAPS WITH 10d NAILS EACH HOLE ON INSIDE FACE OF WALL

7/16" O.S.B. OR 15/32" PLYWOOD EXTERIOR WALL SHEATHING AT UNSHADED AREAS (BEAM, INFILL WALL ABOVE BEAM, AND CENTER WALL). NAIL SHEATHING TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC.) WITH 8d NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. IN THE FIELD.

WHERE FULL HEIGHT PANEL WIDTH EXCEEDS 16", PROVIDE ADDITIONAL STUDS AT 16" O.C. NAIL SHEATHING TO ALL STUDS WITH 8d NAILS AT 3" O.C.

FOR A PANEL SPLICE (IF NEEDED), PANEL EDGES SHALL OCCUR OVER AND BE NAILED TO COMMON BLOCKING AND OCCUR WITHIN MIDDLE 24" OF WALL HEIGHT. ONE ROW OF 3" O.C. NAILING IS REQUIRED IN EACH PANEL EDGE.

7/16" O.S.B. OR 15/32" PLYWOOD EXTERIOR WALL SHEATHING. AT SHADED AREAS NAIL SHEATHING TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC.) WITH 8d NAILS AT 3" O.C.

(2) 2x STUD MIN. AT START AND END OF WALL SEGMENTS EACH SIDE OF OPENING. SEE PLANS FOR ADDITIONAL STUDS

2x4 P.T. PLATE WITH TWO 1/2" DIA x 7" EMBED ANCHOR BOLTS WITH A 3/16"x2"x2" PLATE WASHERS OR ADDITIONAL HOLDOWN PER PLANS

CONCRETE OR MASONRY FND WALL.

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Engineering
Lech
ASSOCIATES, P.A.

VALUE BUILD HOMES	STRUCTURAL ADDENDUM
SCOPE	FRED BURNS RD
LOC	HOLLY SPRINGS, NC
	JOB# 2020-103 MCCORD

ENG: RJS
DATE: 1-20-2021

PLAN
ARLINGTON A

PROJECT NO.
21-26-013

SHEET NO.
SD3

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CONSTRUCTION SPECIFICATIONS

PART 1: GENERAL

- 1.01 CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.
- 1.05 METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

PART 2: DESIGN LOADS

2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:

USE	LIVE LOAD (PSF)	DEAD LOAD (PSF)
BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES	40	10
GARAGES (PASSENGER CARS ONLY)	50	--
ATTICS (NO STORAGE, LESS THAN 5' HEADROOM)	10	10
ATTICS (WITH STORAGE)	20	10
ROOF	20	10 (15 FOR VAULTS)

NOTES: - INDIVIDUAL STAIR TREADS ARE TO BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED LIVE LOAD OF 40 PSF OR A 300 LB. CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQ. WHICHEVER PRODUCES THE GREATER STRESS.
- BUILDER TO VERIFY DEAD LOAD DOES NOT EXCEED 10 PSF WHEN HEAVY FLOOR OR ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER THESE CONDITIONS

- 2.02 INTERIOR WALLS: 5 PSF LATERAL.
- 2.03 BASIC WIND DESIGN VELOCITY OF 120 MPH.
- 2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

PART 3: STRUCTURAL STEEL

- 3.01 WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A992 MINIMUM GRADE
- 3.02 SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE B MINIMUM GRADE.
- 3.03 STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B, TYPE S, MINIMUM GRADE
- 3.04 ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 MINIMUM GRADE
- 3.05 STRUCTURAL STEEL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

PART 4: WELDING

- 4.01 WELDING ELECTRODES SHALL BE E70XX AND ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER

PART 5: CONCRETE AND SLABS ON GRADE

- 5.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 6% AIR ENTRAINMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNO.
- 5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.
- 5.03 SLABS ON GRADE, IF ANY, SHALL CONTAIN SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/2 LBS/CU YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER ON 2" MIN GRANULAR FILL ON SOIL WITH 90% MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT IN ENCLOSED AREAS

PART 6: REBAR AND WIRE REINFORCEMENT

- 6.01 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO
- 6.02 LAP SPLICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO
- 6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064.

PART 7: MASONRY

- 7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT, f'm = 1,500 PSI MIN
- 7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW
- 7.03 MORTAR SHALL BE TYPE S. MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI.
- 7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530
- 7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS

PART 8: BOLTS AND LAG SCREWS

- 8.01 BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO. INSTALL STANDARD STEEL WASHERS (ASTM F844-07a) FOR THE NUT / BOLT HEAD WHEN BOLTING WOOD MEMBERS
- 8.02 LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1-1981. PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS. INSTALL STANDARD STEEL WASHERS (ASTM F844-07a) FOR SCREW HEAD
- 8.03 ANCHOR RODS AND BOLTS SHALL CONFORM TO ASTM F1554-15 GRADE 36 UNO. BENT ANCHOR BOLTS SHALL HAVE A 2" MIN HOOK UNO

PART 9: DRIVEN FASTENERS

- 9.01 NAILS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667-05. NAILS ARE TO BE COMMON WIRE OR BOX

PART 10: DIMENSIONAL LUMBER

- 10.01 SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR OR SYP #2 FOR JOISTS, RAFTERS, GIRDERS, BEAMS, STUDS, ETC.

PART 11: ENGINEERED LUMBER

- 11.01 LVL OR PSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:
E= 1.9 X 10E6 PSI, Fb = 2600 PSI, Fv = 285 PSI, Fc = 750 PSI
LSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:
E= 1.3 X 10E6 PSI, Fb = 1700 PSI, Fv = 400 PSI, Fc = 680 PSI
- 11.02 LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS

PART 12: PRESSURE TREATED LUMBER

- 12.01 LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6(A)

PART 13: STEEL FLITCH PLATE BEAMS

- 13.01 FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER AS SIZED ON THE PLANS. BOLT PIECES TOGETHER USING 1/2" Ø BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF THE BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" ± 2" FROM EACH END OF THE BEAM.

PART 14: STUD SUPPORTS FOR BEAMS

- 14.01 STEEL, ENGINEERED LUMBER, AND FLITCH PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:
- 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED BY A MINIMUM OF THREE GANGED STUDS, OR A GANGED STUD COLUMN WITH A NUMBER OF STUDS SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE TRUE WIDTH OF THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UNO. FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM
- 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TRPL STUD GANGED COLUMN TYP UNO.
- 14.02 DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:
- 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM

SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED (LESS 1 1/2" TO ALLOW FOR A CONTINUOUS RIM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A GANGED STUD COLUMN THE SAME WIDTH AS THE BEAM TYP UNO. (E.G. A TRIPLE 2X10 IS TO BE SUPPORTED BY (3) STUDS). FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM

2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 3" ONTO THE WALL AND BE SUPPORTED BY A DBL STUD GANGED COLUMN TYP UNO.

- 14.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD.

- 14.04 STUDS THAT ARE GANGED TO FORM A COLUMN SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH ONE ROW OF 10d NAILS AT 8" O.C. (TWO ROWS OF 10d NAILS @ 8" O.C., 3" APART, FOR 2X8 OR 2X10 STUDS) ALL COLUMNS SHALL BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED STRUCTURAL ELEMENT SUCH AS A BEAM. COLUMNS TRANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED FOR THE FULL WIDTH OF THE STUD COLUMN WITHIN THE CAVITY FORMED BY THE FLOOR JOISTS.

PART 15: NAILING OF MULTI PLY WOOD BEAMS

- 15.01 SOLID SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS OF 10d NAILS @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN.

- 15.02 LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP UNO

PART 16: WALL FRAMING AND BRACING

- 16.01 STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. STUDS SHALL BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CEILING OR ROOF. NO INTERMEDIATE BANDS OR PLATES SHALL CAUSE DISCONTINUITIES IN A STUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP UNO

- 16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY:
-BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO.
-WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION 602.10 OF THE 2018 NCR. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NCR HAS BEEN MET AND EXCEEDED.
-BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE WITH NCRBC R602.3.5 AND R802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS.
-MAY SUBSTITUTE WSP FOR GB
-SINGLE JOIST, CONTINUOUS RIM JOIST, OR BLOCKING OF EQUAL DEPTH IS REQUIRED ABOVE AND BELOW ALL BRACED WALLS. NAIL BLOCKING ABOVE WALL TO TOP PLATE WITH 16d TOE NAILS @ 6" O.C. NAIL SOLE PLATE OF BRACED WALL TO BLOCKING BELOW WITH (3) 16d NAILS @ 16" O.C. BLOCKING AT HORIZONTAL JOINTS IN BRACED WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO.

PART 17: KING STUDS

- 17.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:

MAX OPENING WIDTH	NUMBER OF KING STUDS				
	5'-0"	9'-0"	13'-0"	17'-0"	21'-0"
2X4	1	2	3	4	5
2X6	1	1	2	2	2
2X8	1	1	1	1	2

PART 18: SUBSTITUTIONS

- 18.01 MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNERS. UNAUTHORIZED DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

PART 19: OWNERSHIP OF STRUCTURAL DESIGN

- 19.01 THE STRUCTURAL DESIGN OF THIS PLAN IS THE PROPERTY OF ENGINEERING TECH ASSOCIATES (ETA). THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION INDICATED AND FOR THE CLIENT LISTED. ETA ASSUMES NO LIABILITY FOR THESE PLANS IF THEY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT WRITTEN PERMISSION FROM ETA

ABBREVIATIONS

TU	TRIPLE JOIST	FND	FOUNDATION	ABV	ABOVE	CS	CONTINUOUS SHEATHING
TYP	TYPICAL	FTG	FOOTING	B.	BOTH ENDS	DIA	DIAMETER
TRPL	TRIPLE	HOT DIPPED	HOT DIPPED	B.TWN	BETWEEN	DBL	DOUBLE
TSP	TRIPLE STUD POCKET	GALVANIZED	GALVANIZED	CIP	CAST IN PLACE	DJ	DOUBLE JOIST
UNO	UNLESS NOTED OTHERWISE	HGR	HANGER	CONC	CONCRETE	DSP	DBL STUD POCKET
XJ	EXTRA JOIST	LVL	LAMINATED VENEER LUMBER	CONT	CONTINUOUS	EQ	EQUAL
		NTS	NOT TO SCALE	CS	CONTINUOUS SHEATHING	EA	EACH
		ON CENTER	ON CENTER	DIA	DIAMETER	FLG	FLANGE
		PARALLEL STRAND LUMBER	PARALLEL STRAND LUMBER	DJ	DOUBLE JOIST	FL PL	FLITCH PLATE
		PRESSURE TREATED LUMBER	PRESSURE TREATED LUMBER	DSP	DBL STUD POCKET	FLR	FLOOR
		QUAD JOIST	QUAD JOIST	EQ	EQUAL		
		STUD POCKET	STUD POCKET	EA	EACH		
		SQUARE	SQUARE	FLG	FLANGE		

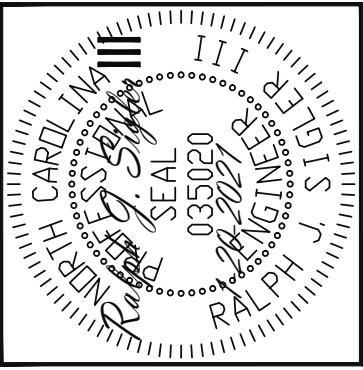
NOTES

THE BUILDER IS RESPONSIBLE FOR REVIEWING PLANS PRIOR TO CONSTRUCTION. THE BUILDER SHALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE FOLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION:
1) THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR
2) THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION

ANY ERRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE RESPONSIBILITY OF THE EOR. FURTHERMORE, IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAT ANY REVISIONS ISSUED BY THE EOR ARE PROMPTLY DISTRIBUTED TO THE SUBCONTRACTORS

THE EOR DOES NOT PERFORM FENESTRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO STRUCTURAL ENGINEERING.

ROOF AND FLOOR TRUSSES TO BE DESIGNED BY AN ENGINEER REGISTERED BY THE STATE. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW



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VALUE BUILD HOMES	STRUCTURAL ADDENDUM		
SCOPE	FRED BURNS RD		
LOC	HOLLY SPRINGS, NC		
	JOB# 2020-103 MCCORD		

ENG: RJS
DATE: 1-20-2021

PLAN
ARLINGTON A

PROJECT NO.
21-26-013

SHEET NO.
SPECS
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