MAGNOLIA ELEVATION A



PRINCE PLACE LOT 68



INCLUDED OPTIONS:

1st FLOOR
COVERED REAR PORCH
GOURMET KITCHEN
FIREPLACE W/ BUILT-INS
FIXED WINDOWS @ FAMILY ROOM
TRAY @ DINING
GUEST SUITE ILO STUDY
GUEST SHOWER ILO TUB
OWNERS SPA SHOWER
DOOR TO PORCH @ OWNERS
4' GARAGE EXTENSION







MAGNOLIA

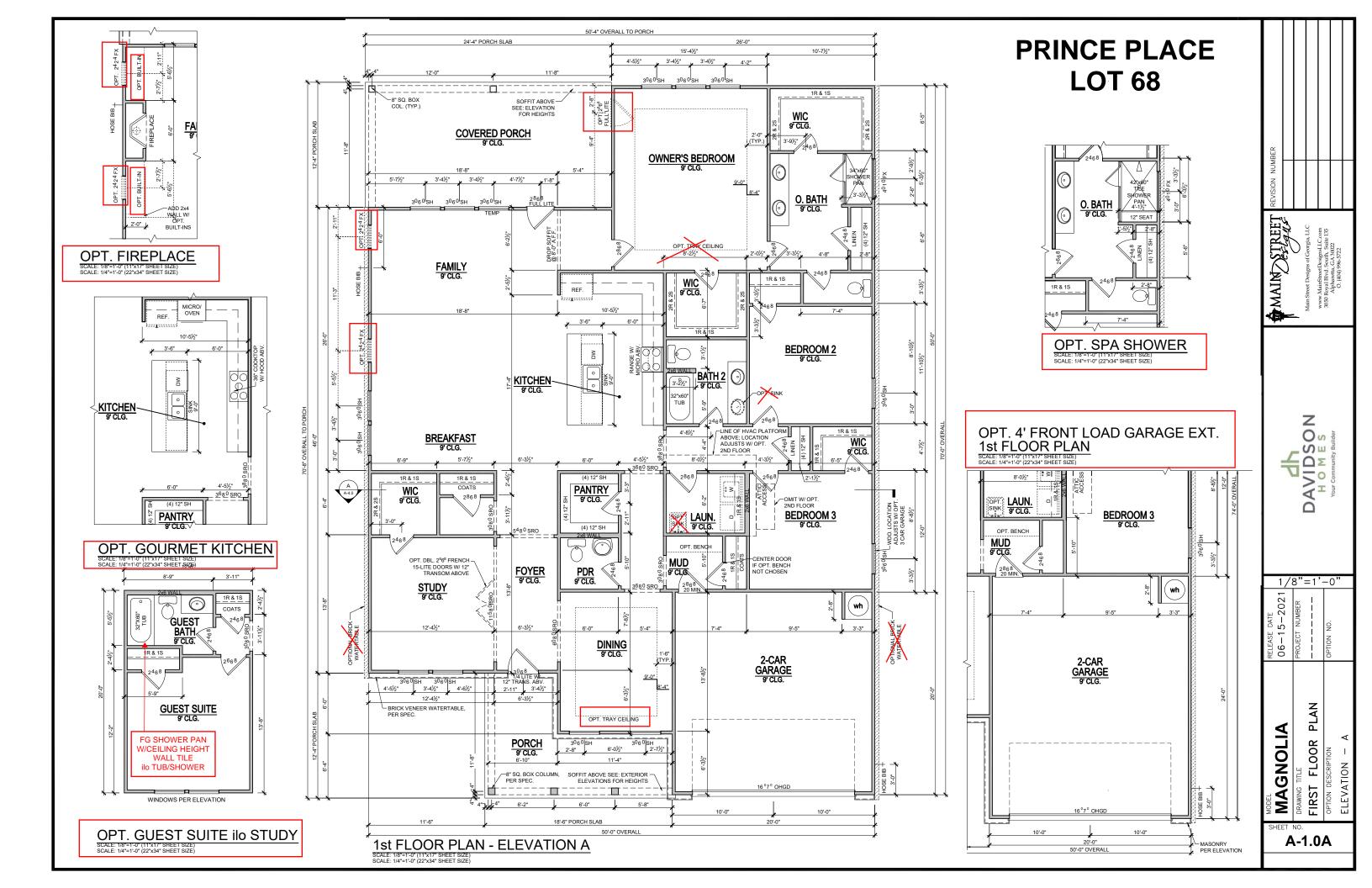
DRAWING TITLE

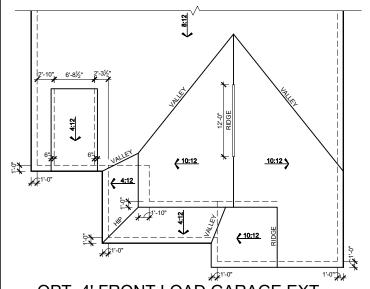
COVER SHEET

OPTION DESCRIPTION

CS-1.0

BASE HOUSE SQUARE FOOTAGE CALCULATIONS						
ELEVATIONS	1st FLOOR	TOTAL FIN.	FRONT PORCH	REAR PORCH	GARAGE	ROOF
ELEV. A	2,524 s.f.	2,524 s.f.	_ 160 s.f.	300 s.f.	396 s.f.	3,380 s.f.
OPTIONS:						
GARAGE EXTENSION			+ 80 s.f.			





OPT. 4' FRONT LOAD GARAGE EXT. **ELEVATION A - ROOF PLAN**

SCALE: 1/16"=1'-0" (11"X17" SHEET SIZE SCALE: 1/8"=1'-0" (22"X34" SHEET SIZE)

ATTIC VENT CALCULATIONS

MAIN ROOF

11.46 SQ FT x 50% 5.730 SQ FT OF RIDGE 11.46 SQ FT x 50% 5.730 SQ FT OF SOFFIT

RIDGE VENT

5.730 SQ FT

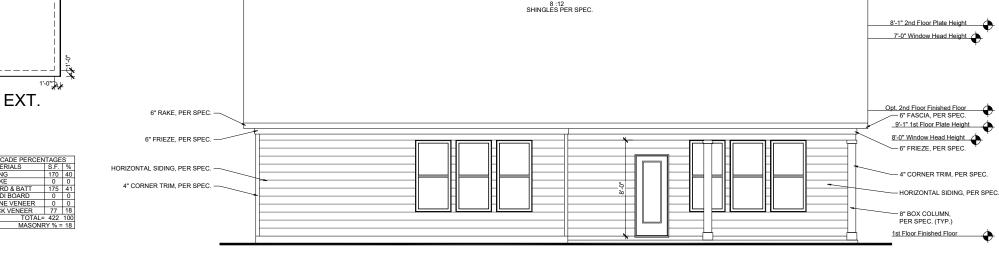
0.125 SQ FT

45.8 FEET OF RIDGE VENT

0.125 SQTT SOFFIT VENT 5.730 SQ FT 0.0625 SQ FT = 91.7 FEET OF SOFFIT VENT

ACTUAL RIDGE VENT PROVIDED ACTUAL SOFFIT VENT PROVIDED NUMBER OF BOX VENTS NEEDED (REQ - ACTUAL x .347) 48 FEET 83 FEET -0.7 COUNT (NEGATIVE = 0)





PRINCE PLACE

LOT 68

MAINDSTREET

Z

DAVIDSO HOMES

1/8"=1'-0'

RELEASE DATE 06-15-2021

MAGNOLIA

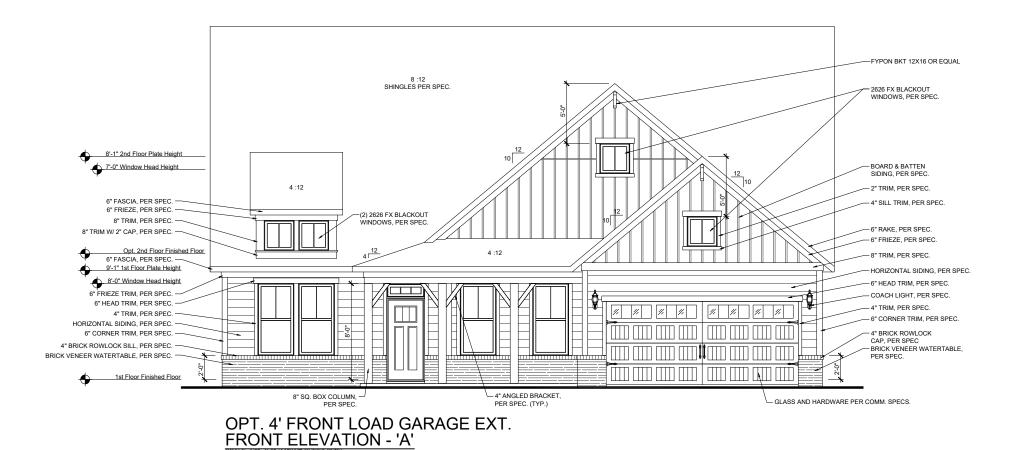
OPTIONS

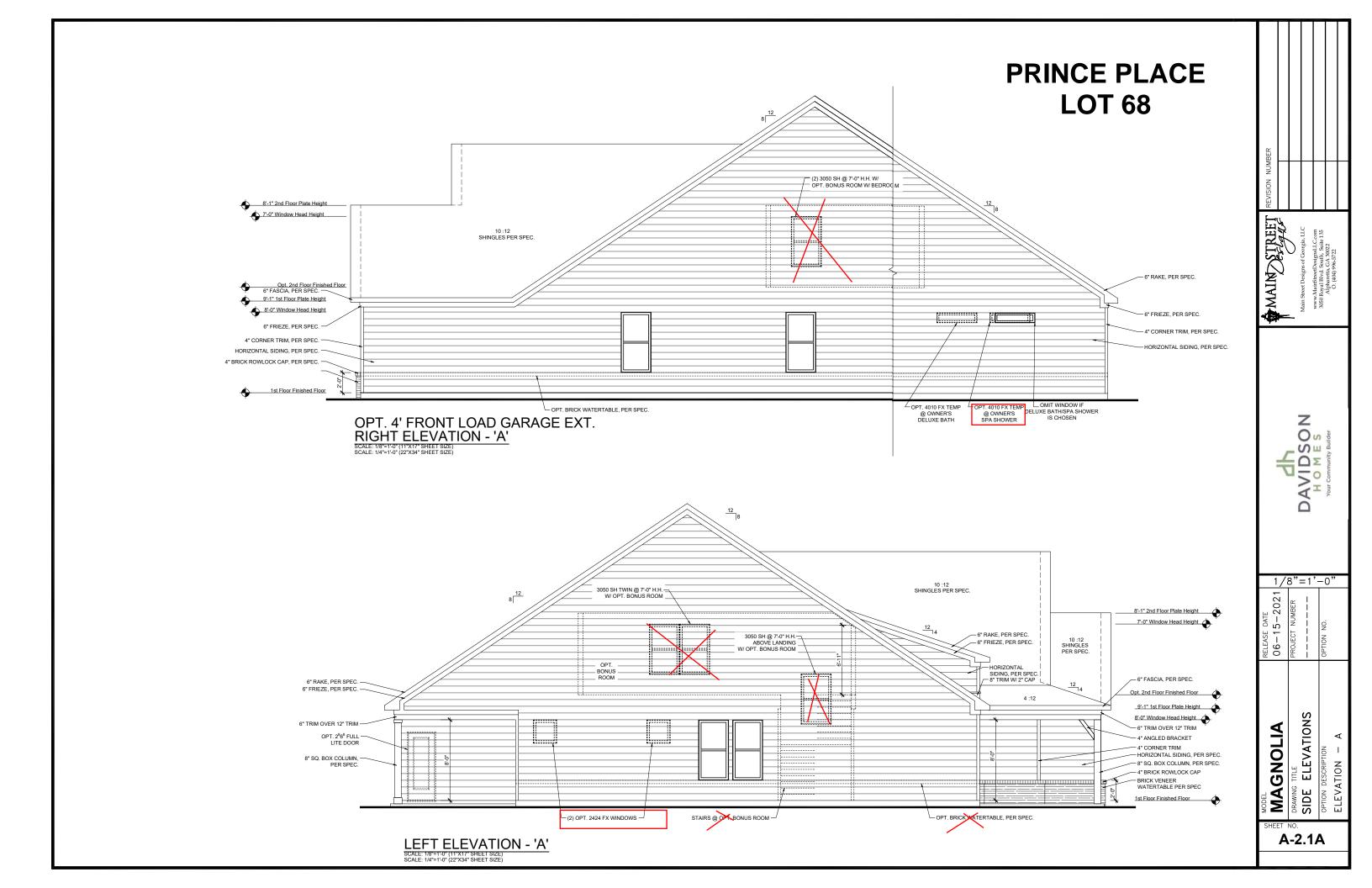
PLAN

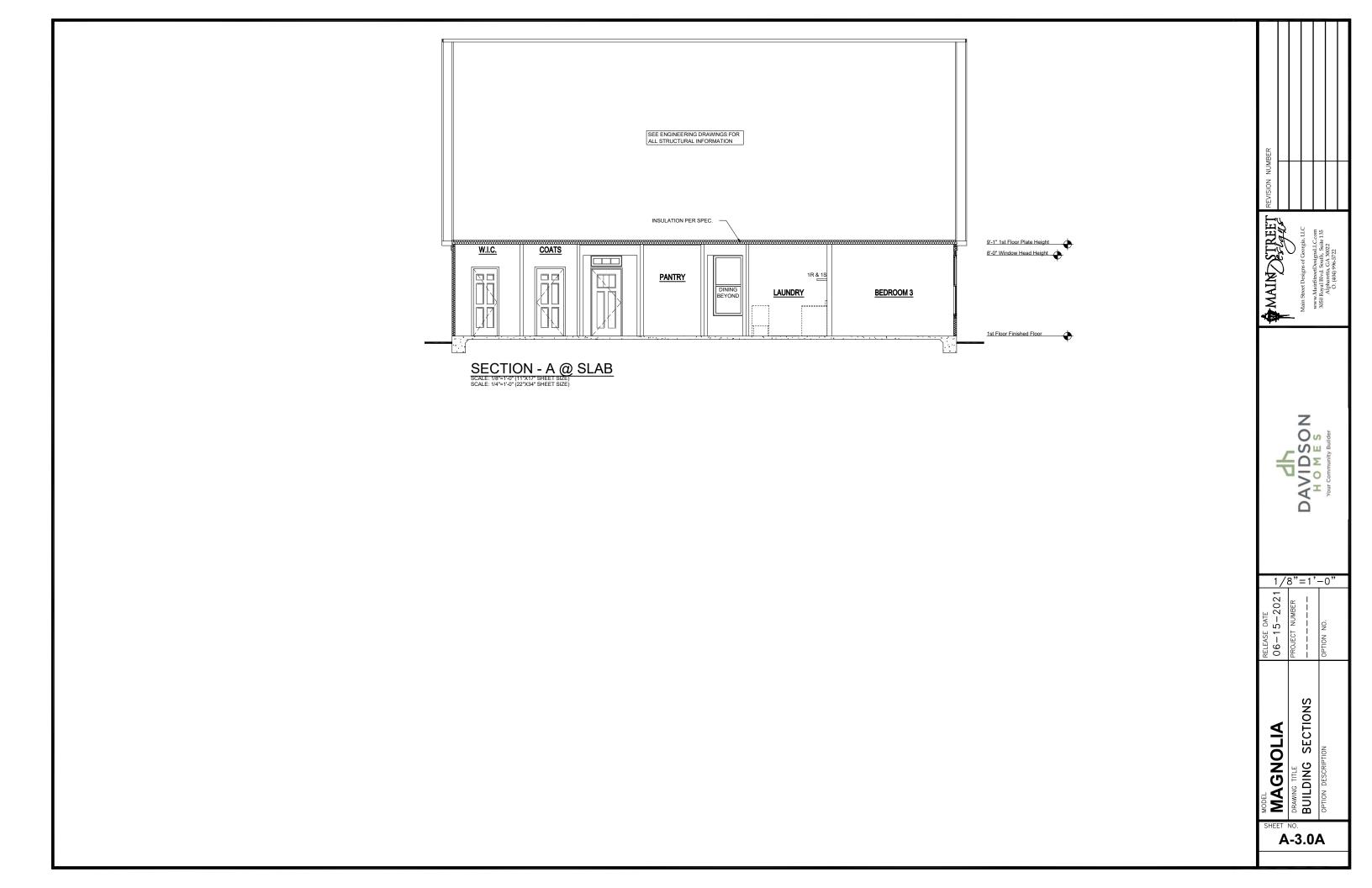
O-3.1A

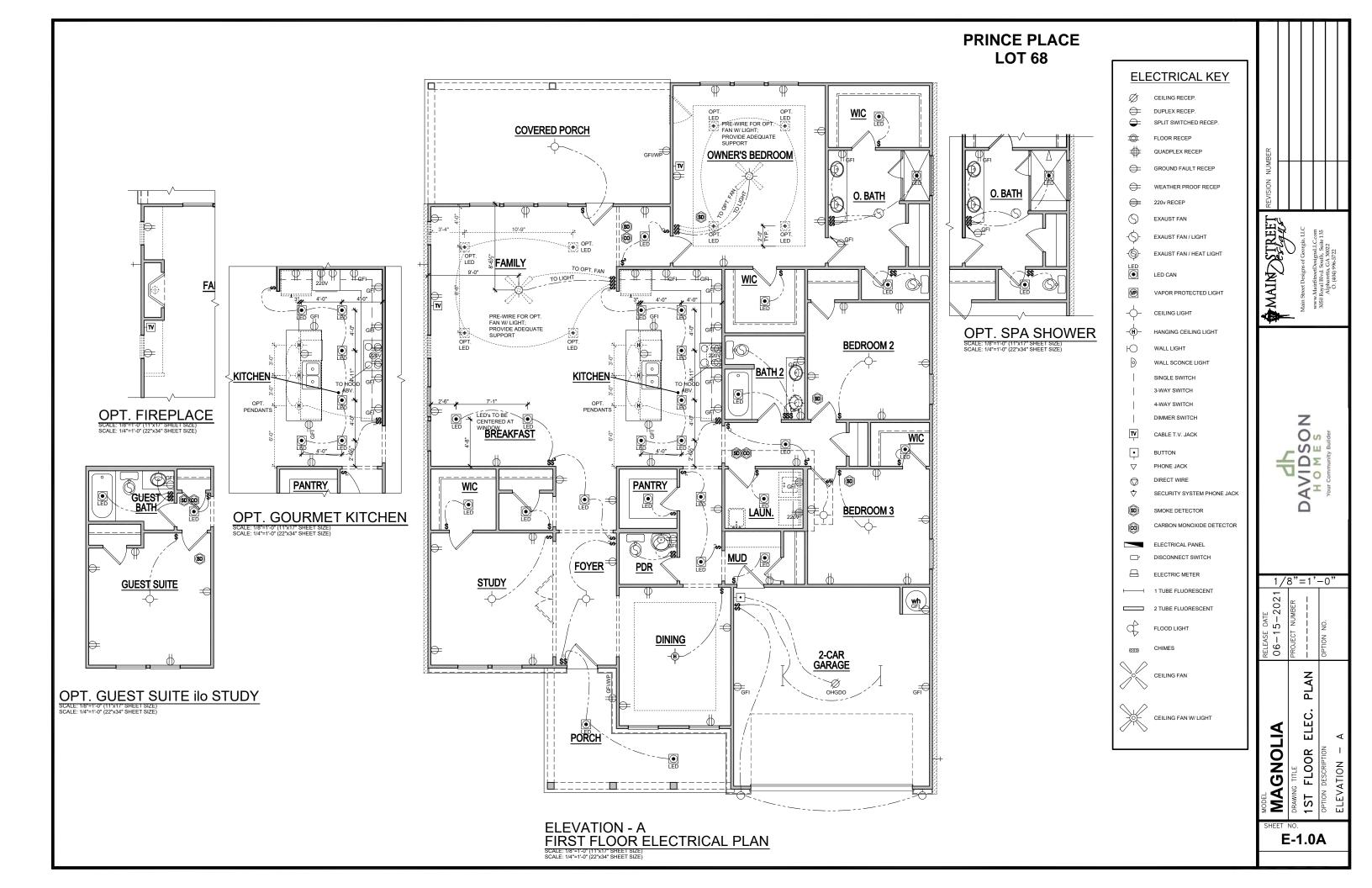
00

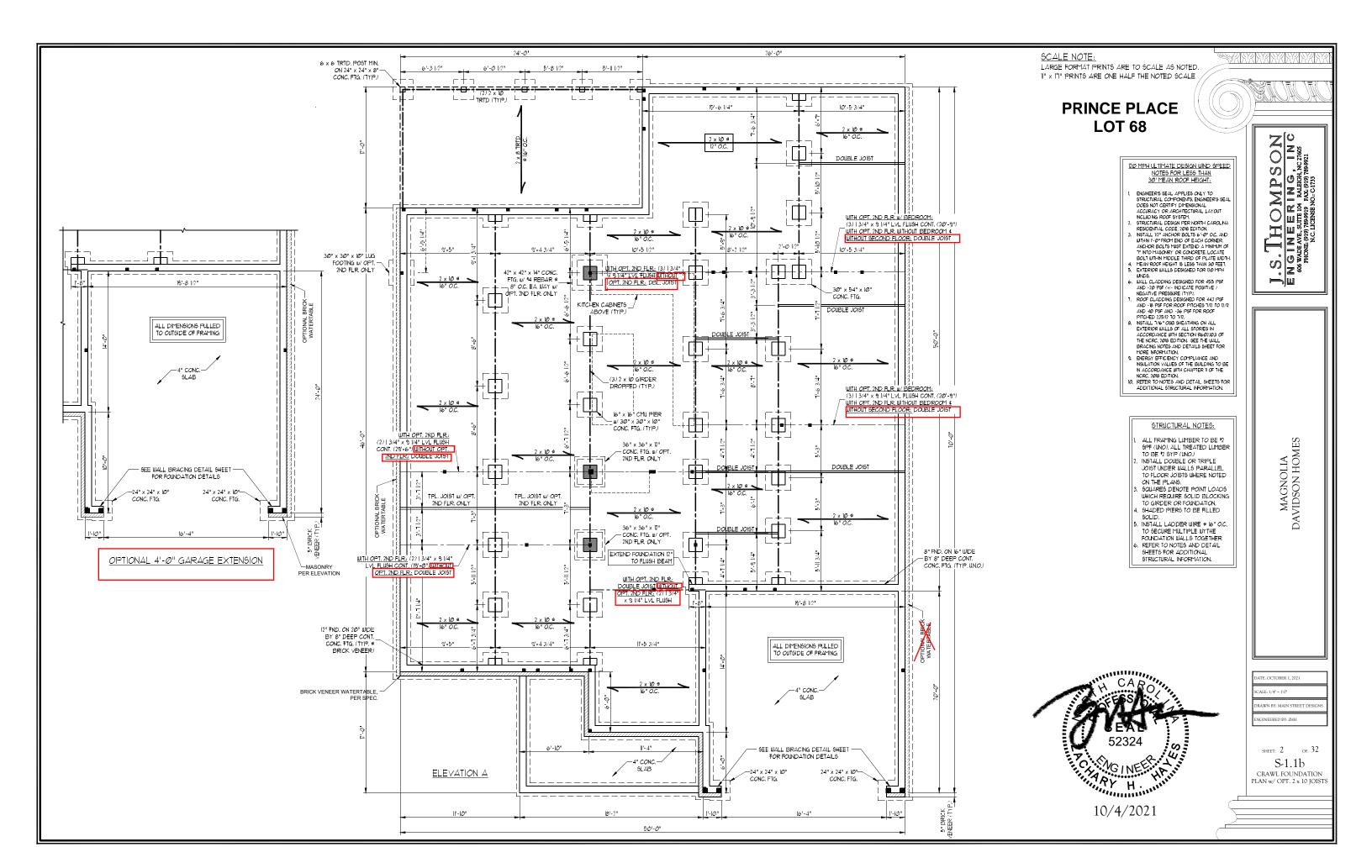
REAR ELEVATION SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)

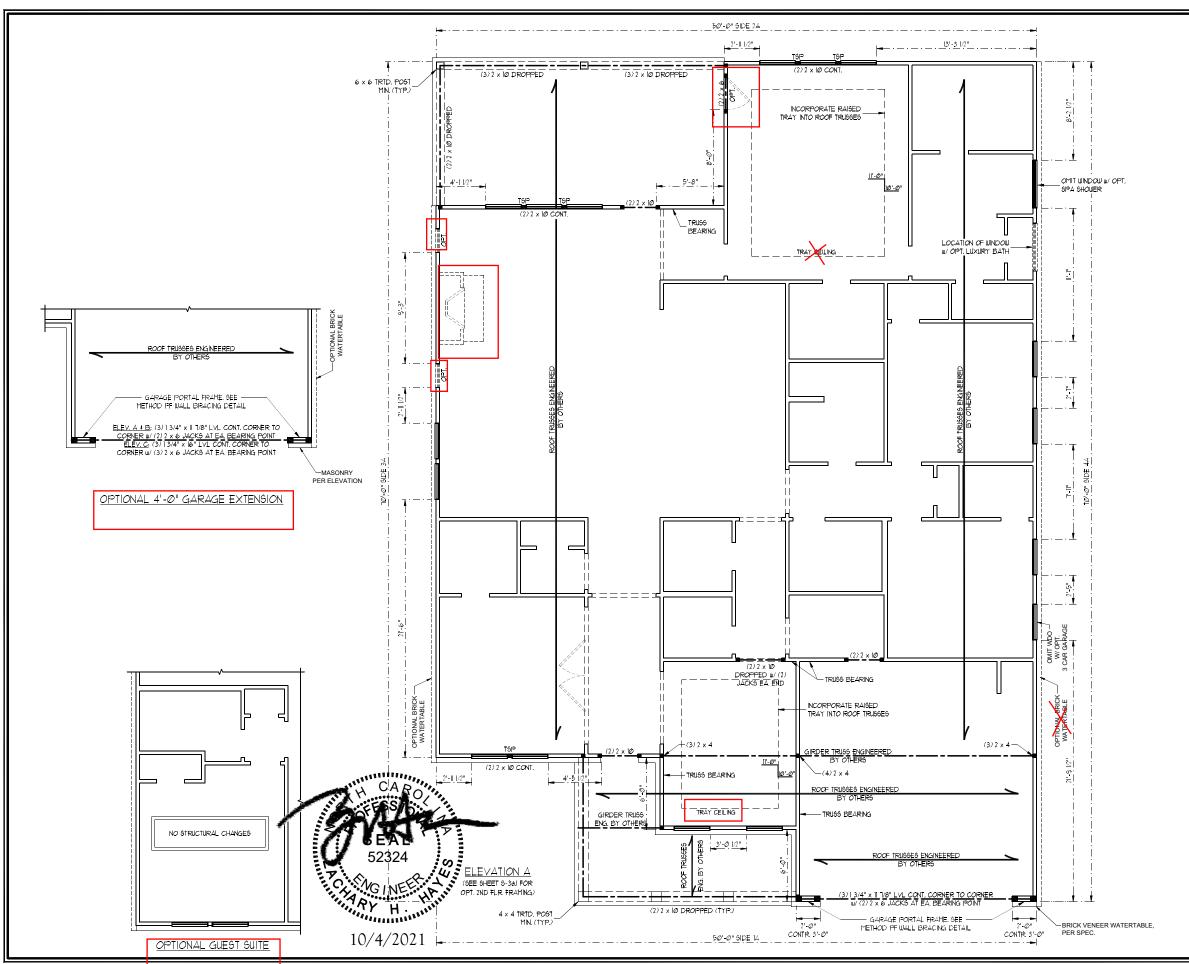












SCALE NOTE:

LARGE FORMAT PRINTS ARE TO SCALE AS NOTED. 11" × 17" PRINTS ARE ONE HALF THE NOTED SCALE

> **PRINCE PLACE LOT 68**

BRACED WALL DESIGN NOTES:

- BRACED WALL DESIGN PER SECTION R602.10 OF THE NORC 2018 EDITION.
 CS-WSP REFERS TO "CONTINUOUS SHEATHING - WOOD
- CS-USP REPERS TO "CONTINUES SHEATHING WOOD" STRUCTURED, PANELS" CONTRACTOR IS TO INSTALL THE" OSB ON ALL EXTERIOR WALLS ATTACHED W 8d NAILS SPACED 6" OC. ALONG PANEL EDGES AND 12" OC. IN THE FIELD.

 "GB REFERS TO "GYPSUM BOARD" CONTRACTOR IS TO INSTALL 1/2" (MIN) GYPSUM WALL BOARD WHERE NOTED ON THE PLANS. FASTEN GB WITH I VI" SCREWS OR I 5/8" NAILS SPACED TO OC.
- FASTEN GB WITH I IVA" SCREWS OR I 5/8" NAILS SPACED 1" OC.
 LLONG PARLE EDGES AND IN THE FIELD INCLUDING TOP AND
 BOTTOM PLATES.
 BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH.
 FOR HIGH WIND ZONES BRACE WALLS ARE TO BE CONSTRUCTED
 IN ACCORDANCE WITH CHAPTER 45 OF THE NORC 2018 EDITION.
- SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

BRACED WALL DESIGN

RECTANGLE A RECTANGLE B SIDE IA (FRONT LOAD)

METHOD: CS-WSP/PF

SIDE 2B METHOD: CS-WSP TOTAL REQUIRED LENGTH: 1151

TOTAL REQUIRED LENGTH: 11.5' TOTAL REQUIRED LENGTH: 2.7' TOTAL PROVIDED LENGTH: 26.04' TOTAL PROVIDED LENGTH: 12.0' SIDE 3B/4A COMBINED

<u>SIDE 34</u> METHOD: CS-WSP TOTAL REQUIRED LENGTH: 8.5" TOTAL REQUIRED LENGTH: 10.5"

TOTAL PROVIDED LENGTH: 4621' TOTAL PROVIDED LENGTH: 41.0' SIDE 4B SIDE 44 (SIDE LOAD)

STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED
- LUMBER TO BE SYP *2 (UNO.) ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 SPF *2 OR SYP *2 (KILN DRIED) (UNO).

 3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK
- STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO.)
- ALL 4 x 4 POSTS SHALL BE ANCHORED TO SLABS W/ SIMPSON ABU44 POST BASES (OR EQUAL) AND 6 x 6 POSTS W ABU66 POST BASES (OR EQUAL) (UNO). ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFIT CONNECTORS AT
- TOP (UNO.)

 6. FOR FIBERGLASS, ALUMINUM, OR COLUMN ENG. BY OTHERS, SECURE TO SLAB W/ (2) METAL ANGLES USING 2" CONC. SCREWS. FASTEN ANGLES TO COLUMNS W/ 1/4" THROUGH BOLTS W/ NUTS AND WASHERS, LOCATE ANGLES ON OPPOSITE SIDES OF COLUMN, THROUGH BOLTS MUST BE INSTALLED PRIOR TO SETTING COLUMN.
- STRUCTURAL INFORMATION.

REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL

"TSP" INDICATES TRIPLE STUD POCKET BETWEEN WINDOW UNITS.

TABLE R602.15 MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR IIIALLS

AT LACTICIAD OF TICADERO IN EXTERIOR WALL					
HEADER SPAN (FEET)	MAXIMUM STUD SPACING (INCHES. (PER TABLE R602.3(5)				
(LL17	16	24			
UP TO 3'	1	1			
4'	2	1			
8'	3	2			
12'	5	3			
16'	6	4			

ATE: OCTOBER 1, 2021 RAWN BY: MAIN STRE EERED BY: ZHH

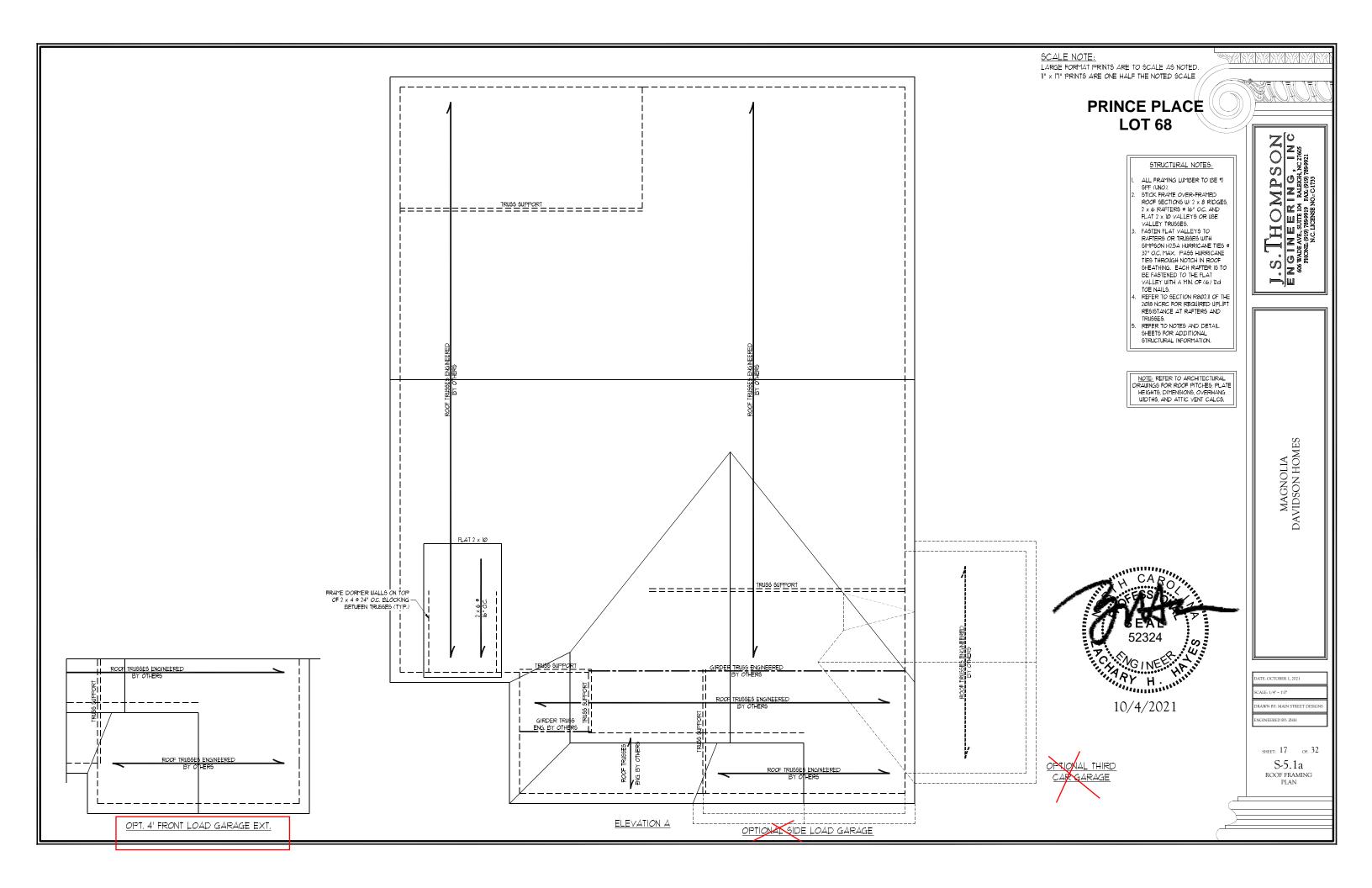
SON 1. INC 1789921

THOMPS, INEERING, BACK, SUTTE OR ALLEICH, NC. LICENSENO. C.1737

S

S-3a CEILING

SHEET: 11 OF: 32 FRAMING PLAN



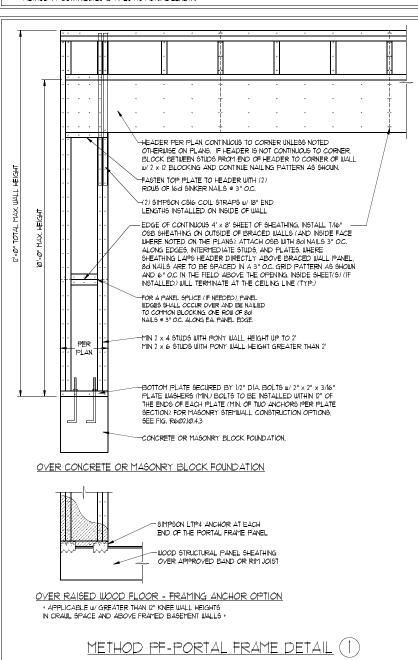


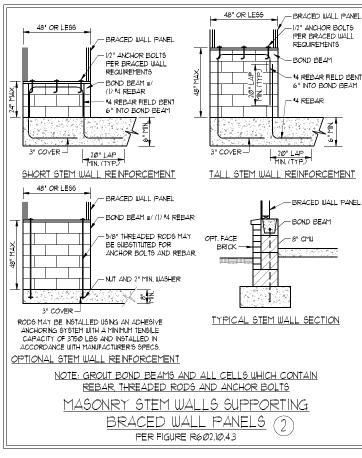
- WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NCRC.
- 2. SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NORC FOR ADDITIONAL INFORMATION AS NEEDED.
 3. BRACED EXTERIOR WALLS SUPPORTING ROOF TRUSSES AND RAFTERS, INCLUDING STORIES BELOW THE TOP FLOOR, HAVE BEEN DESIGNED PER R60/3.5 (3), WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST COMBINED UPLIFT AND SHEAR FORCES IN ACCORDANCE WITH ACCEPTED ENGINEERED PRACTICE.

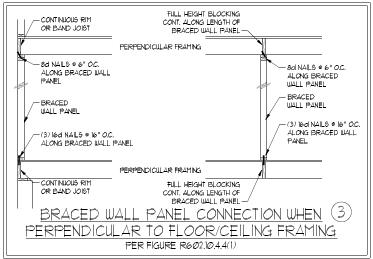
 4. SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS, BRACED WALL
- LINE KEY WITH WALL DESIGN SUMMARY OF REQUIRED/PROVIDED TOTALS FOR EACH WALL LINE AND ANY SPECIAL NOTES OR REQUIREMENTS.
- 5. ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH CS-WSP IN ACCORDANCE WITH SECTION R602.10.3 UNLESS NOTED
- 6. ALL EXTERIOR AND INTERIOR WALLS TO HAVE 1/2" GYPSUM INSTALLED, WHEN NOT USING METHOD "GB", GYPSUM TO BE
- FASTENED PER TABLE R10235. METHOD GB TO BE FASTENED PER TABLE R602101 CS-USP REFERS TO THE "CONTINUOUS SHEATHING WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 1/16" OSB SHEATHING IS TO BE INSTALLED ON ALL EXTERIOR WALLS ATTACHED W/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.113"
- DIAMETER: NAILS SPACED 6" OC. ALONG PANEL EDGES AND (2" OC. IN THE FIELD (UNO.).

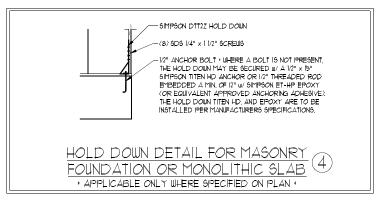
 8. GB REFERS TO THE "GYPSUM BOARD" WALL BRACING METHOD. 1/2" (MIN.) GYPSUM WALL BOARD IS TO BE INSTALLED ON BOTH SIDES OF THE BRACED WALL FASTENED WITH 1 1/4" SCREUS OR 15/8" NAILS SPACED 1" OC. ALONG PANEL EDGES INCLUDING TOP AND BOTTOM PLATES AND INTERMEDIATE SUPPORTS (UN.O.). VERIFY ALL FASTENER OPTIONS FOR 1/2" AND 5/8" GYPAIM PRIOR TO CONSTRUCTION FOR INTERIOR FASTENER OPTIONS SEE TABLE R10235. FOR EXTERIOR FASTENER OPTIONS SEE TABLE REQUISID. EXTERIOR GB TO BE NOTALLED VERTICALLY.

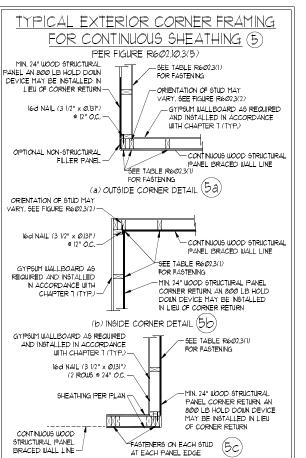
 REQUIRED BRACED WALL LENGTH FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE
- R602. 10.3, METHOD C5-WSP CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES 5 ITS ACTUAL LENGTH, AND METHOD PF CONTRIBUTES 15 TIMES ITS ACTUAL LENGTH.











(c) GARAGE DOOR CORNER DETAIL (SEE PLAN FOR ADDITIONAL

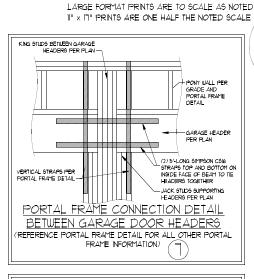
STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS)

This sealed page is to be used in conjunction with a full

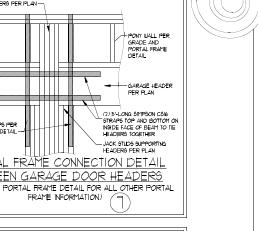
plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within

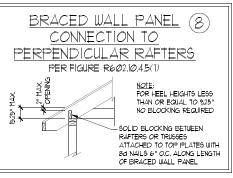
architectural pages or shop drawings by others is a

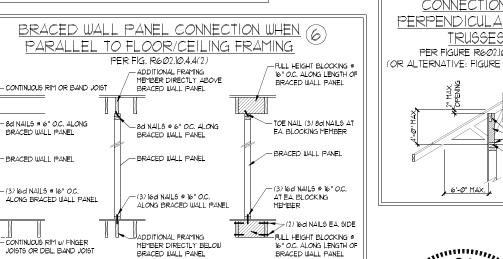
punishable offense under N.C. Statute § 89C-23



SCALE NOTE:







BRACED WALL PANEL CONNECTION TO PERPENDICULAR ROOF TRUSSES (9)PER FIGURE R602.10.4.5(3) OR ALTERNATIVE: FIGURE R602,10,4,5(2), 2 x BLOCKING TABLE

WALL BRACING NOTES AND DETAILS

TE: OCTOBER 1, 202 RAWN BY: MAIN STREET

SHEET: 31 OF: 32 D-4

EERIN SUITE 104 RALE 789,919 FAX. (6 LICENSE NO., C1 S Zŝ

MAGNOLIA DAVIDSON HOMES

2.27605 9921

S

2

Z S

10/4/2021

GENERAL NOTES

- I. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS, HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIERS, GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OF ARCHITECTURAL LAYOUT INCLUDING ROOF. ENGINEER'S SEAL DOES NOT APPLY TO 1-JOIST OR FLOOR/ROOF TRUSS I AYOUT DESIGN AND ACCURACY.
- 2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCRC.), 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOOL MENTS.
- 3. STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NCRC, 2018 EDITION (R301.4 R301.1)

DESIGN CRITERIA:	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)	
ATTIC WITH LIMITED STORAGE	2Ø	10	L/240 (L/360 w/ BRITTLE FINISHES)	
ATTIC WITHOUT STORAGE	10	10	L/36Ø	
DECKS	40	10	L/36Ø	
EXTERIOR BALCONIES	40	10	L/36Ø	
FIRE ESCAPES	40	10	L/36Ø	
HANDRAILS/GUARDRAILS	200 LB OR 50 (PLF)	10	L/36Ø	
PASSENGER VEHICLE GARAGE	5∅	10	L/36Ø	
ROOMS OTHER THAN SLEEPING ROOM	40	100	L/36Ø	
SLEEPING ROOMS	30	10	L/36Ø	
STAIRS	40	100	L/36Ø	
WIND LOAD	(BASED ON TABLE R3012(4) WIND ZONE AND EXPOSURE)			
GROUND SNOW LOAD: Pg	2Ø (PSF)			

- I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480
- FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD
- 4. FOR 115 AND 120 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.16 OF THE NCRC, 2018 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NCRC, 2018 EDITION.
- 5. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER II OF THE NCRC, 2018 EDITION.

FOOTING AND FOUNDATION NOTES

- FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
- 2. FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL, REMOVED. FILL MATERIAL, SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP I, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE RAPS. OF THE NCRC, 2018 EDITION.
- 3. PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE \$LAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" I" DEEP CONTROL JOINTS ARE TO BE SAWED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
- 4. CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NCRC, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60. WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1/2" FOR "B BARS OR SMALLER, AND NOT LESS THAN 2" FOR "B BARS OR SMALLER, AND NOT LESS THAN 2" FOR "B BARS OR SMALLER, AND NOT LESS THAN 2" FOR "B BARS OR LARGER.
- 5. MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.
- 6. THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS, PERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR, PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
- THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING, EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.
- 8. ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NCRC, 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCMA TR68-A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.II(1), R404.II(2), R404.II(3), OR R404.II(4) OF THE NCRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.II(5) OF THE NCRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT IS. OCC. WHERE GRADE PERMITS (UNO).

FRAMING NOTES

- 1. ALL FRAMING LUMBER SHALL BE 1º SPF MINIMUM (Fb = 875 PS), FV = 375 PS), E = 1600000 PS)) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE 1º SYP MINIMUM (Fb = 975 PS), FV = 175 PS), E = 1600000 PS)) UNLESS NOTED OTHERWISE (UNO).
- 2. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb =2600 PSI, Fv = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 15500000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E = 18000000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 20000000 PSI, INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
- 3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING, ASTM SPECIFICATIONS

A. W AND WT SHAPES: ASTM ASSO.

B. CHANNELS AND ANGLES: ASTM A36

C. PLATES AND BARS: ASTM A36

D. HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B

F. STEFL PIPE: ASTM A53 GRADE B. TYPE F. OR S.

4. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH (UNO). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (UNO).

 A, WOOD FRAMING
 (2) 1/2" DIA. x 4" LONG LAG SCREWS

 B, CONCRETE
 (2) 1/2" DIA. x 4" WEDGE ANCHORS

 C, MASONRY (FULLY GROUTED)
 (2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS

LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TOE NAILED TO THE 2x NAILER ON TOP OF THE STEEL BEAM, AND THE 2x NAILER IS SECURED TO THE TOP OF THE STEEL BEAM w/ (2) ROWS OF SELF TAPPING SCREWS (6) IS "OC. OR (2) ROWS OF 1/2" DIAMETER BOLTS (6) IS "OC. IF 1/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED W/ (2) ROWS OF 9/16" DIAMETER HOLES (6) IS "O.C.

- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.
- 6. ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.7(1) AND R602.7(2) OF THE NORC, 2018 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO), WHICHEVER IS GREATER ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO). INSTALL KING STUDS PER SECTION R602.75 OF THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION.
- 1. ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).
- 8. FLITCH BEAMS SHALL BE BOLTED TOGETHER LISING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT.
 BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).
- 9. ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
- 10. BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION WALL BRACING CRITERIA. THE AMOUNT LENGTH AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R60210.
- PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I-JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
- 12. FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT (UNO). FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING INSTALLED w/ (4) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R103821 OF THE NORC, 2018 EDITION.
- 13. FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOULD (UND)
- 14. FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 × 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 × 8 RIDGES, 2 × 6 RAFTERS AT 16" O.C. AND FLAT 2 × 10 VALLEYS (UNO).
- IS. ALL 4 × 4 AND 6 × 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO.) POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LTSIZ UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON CSI6 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TWIST STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.

SCALE NOTE:

LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.

11" × 17" PRINTS ARE ONE HALF THE NOTED SCALE

.5 NOTED.

S.THOMPSON
NGINEERING, IN
608 WADE AVELEGIA NG 7889921
NG. LICENSE NO. C. C. LICENSE NO

MAGNOLIA DAVIDSON HOMES

EAL 52324 COMMERCIAL PARTIES AND THE PARTIES A

10/4/2021

This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23

ATE: OCTOBER 1, 2021

PRAWN BY: MAIN STREET I

SHEET: 32 OF: 32

D-5

STANDARD
STRUCTURAL NOTES

J.S. THOMPSON ENGINEERING, INC

structural and geotechnical custom residential design

March 19, 2021

Joshua Clowes Davidson Homes, LLC 4208 Six Forks Road Suite 1000 Raleigh, NC 27609

Re:

"Magnolia" plan

All elevations under construction

Dear Mr. Clowes:

Per your request, the plan noted above was reviewed to address an alternative for the LVL beam above the family room.

Analysis revealed a W 12 x 16 steel beam may be installed in lieu of the plan specified (3) 1 3/4" x 20" LVL beam. Secure a ripped 2x nailer and 1/2" OSB filler to the top flange with construction adhesive and set the top of the nailer flush with the top of the joists. Pack out the web on each side with 2x material secured with 1/2" through bolts with nuts and washers at 24" o.c. The beam is to be supported by (6) jacks at each end fastened with Simpson CS16 straps at 24" o.c. This configuration will provide the required support for all applied loads.

Please call me if you have any questions.

Sincerely,

J.S. Thompson Engineering, Inc. N.C. License No. C-1733

Joshua Grantham

Matthew G. Strother, P.E.

SEAL 33736 WGINEER 3/19/2021

606 Wade Avenue Raleigh, NC 27605 (919) 789-9919 OFFICE (919) 789-9921 FAX

J.S. THOMPSON

structural and geotechnical custom residential design

May 3, 2021

Garrison Safriet Davidson Homes, LLC 4208 Six Forks Road Suite 1000 Raleigh, NC 27609

Re: "Magnolia" plan

Dear Mr. Safriet:

The above noted plan was reviewed to address using Thermo-Ply Blue sheathing in lieu of 7/16" OSB sheathing at exterior walls.

Review revealed that Thermo-Ply Blue may be used in place of 7/16" OSB for all exterior walls with the exception of portal framed garage walls. Thermo-Ply Blue may also be used in place of gypsum board at all interior braced walls designated by the plan as "GB" wall bracing method. To install Thermo-Ply Blue sheathing, block all horizontal joints and fasten the sheathing with min. 15/16" crown, 16 ga. staples or .012" min. diameter 3/8" head diameter, 11 ga. 1 1/4" length nails. Space fasteners at 3" o.c. along panel edges and in the field with minimum 1" embedment into framing. Do not countersink fasteners. Install per manufacturer's specifications. This configuration will provide the required support for all applied loads.

Please call me if you have any questions.

Sincerely,

J.S. Thompson Engineering, Inc. N.C. License No. C-1733

Joshua A. Grantham

Matthew G. Strother, P.E.

5/3/2021

606 Wade Avenue Raleigh, NC 27605 (919) 789-9919 OFFICE (919) 789-9921 FAX