### **GENERAL NOTES:**

- SOIL BEARING CALCULATIONS BASED ON 2000 PSF MIN. REFER TO THE FOUNDATION/FOOTING SCHEDULE
- BACK FILL SHALL BE FREE FROM VEGETATION AND CONSTRUCTION DEBRIS
- BACK FILL SHALL BE PLACED IN LIFTS AND COMPACTED IN SUCH A MANNER AS TO NOT DAMAGE THE FOUNDATION WALLS OR ANY WATERPROOFING/ DAMP PROOFING

- ALL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD. ALL STUDS ARE 3 1/2" UNLESS NOTED. ALL DIMENSIONS PRESENTED HERE ARE FRAME DIMENSIONS ONLY PROVIDE 1x BLOCKING UNDER ALL EXTERIOR SLIDING DOORS.
- JOIST HANGERS, WHERE REQUIRED, SHALL BE USED WITHOUT ANGLES. INSTALL FIRE STOPPING AND/ OR DRAFT STOPPING AS REQUIRED.
- PROVIDE CUTTING, NOTCHING, NAILING REQUIREMENTS PER 2018-IRC SECTIONS

#### THERMAL & MOISTURE PROTECTION

- INSTALL FIRE STOPPING AND/ OR DRAFT STOPPING AS REQUIRED.
  ATTIC VENTILATION SHALL BE PROVIDED AT 1/150th OF THE AREA OF THE SPACE
- VENTILATED. CROSS VENTILATION WITH HALF OF THE VENTILATED AREA SHALL BE PROVIDED BY RIDGE OR GABLE VENTS AND THE OTHER HALF BY EAVE OR CORNICE VENTS. VENTS SHALL BE PLACED SO AS TO NOT ALLOW INFILTRATION OF RAIN OR
- PROVIDE APPROVED TILE BACKER BOARD FOR ALL SHOWER AND BATH SPACE.
- PROVIDE ICE-SHIELD PER CODE.
- ROOF VENTING TO BE PROVIDED AS SHOWN. SOFFIT RIDGE AND OTHER ROOF VENTS TO BE INSTALLED AS NOTED ON THE DRAWINGS & AS PER MANUFACTURERS

- WINDOW CALL OUT PER PLAN. VERIFY WINDOW MANUFACTURER WITH PROJECT
- REVIEW ALL WINDOW HEADER HEIGHTS PER PLATE HT. AND VERIFY W/ ELEVATIONS AND CORNICE DETAILS.
  TEMPERED GLASS SHALL BE USED IN ALL HAZARDOUS AREAS.
- FRONT DOOR WIDTH AS REQUIRED BY CODE.
- GARAGE DOOR AS REQUIRED BY CODE
- EMERGENCY SLEEPING ROOMS SHALL HAVE AT LEAST ONE EGRESS OPENING OF NOT LESS THAN 5.7 SF AND A CLEAR OPENING OF NOT LESS THAN 20" WIDE X 24" HIGH AND SHALL NOT BE MORE THAN 44" ABOVE THE FLOOR.

EXTERIOR WALLS ZONE 4: R-15 BATTS MINIMUM. VERIFY

CEILING WITH ATTIC ABOVE COMPRESSED INSULATION: R-38 BATTS MINIMUM, VERIFY

CEILING WITH ATTIC ABOVE UNCOMPRESSED INSULATION (HEELS IN TRUSSES): R-38 BATTS MINIMUM, VERIFY

FLOOR OVER GARAGE

R-19 BATTS MINIMUM. VERIFY

ATTIC KNEEWALL:

R-19 BATTS MINIMUM. VERIFY

### **BUILDING CODE ANALYSIS**

#### APPLICABLE CODES

**USER GROUP** CONSTRUCTION CLASS: HEIGHT LIMITATION: EMERGENCY ESCAPE:

EGRESS OR RESCUE WINDOWS FROM SLEEPING ROOM SHALL HAVE A MINIMUM OF 5.7 SQ. FT  $\frac{1}{2}$ " GYPSUM BD. WALL &  $\frac{5}{8}$ "TYPE "X"

2018 NCRC/ 2018 IBC

SINGLE FAMILY

GARAGE / HOUSE CEILING/ HOUSE ASSEMBLY:

#### **DESIGN LOAD:**

GARAGE/HOUSE DOOR SLEEPING = 30 PSF NON-SLEEPING = 40 PSF DECKS = 40 PSF DEAD LOAD = 10 PSE

BASIC WIND SPEED = 115 MPH EXPOSURE B (CHARLOTTE) STAIR LOAD = 40 PSF ROOF LIVE LOAD = 20 PSF LATERAL SOIL PRESSURE = 30 PCF

GYPSUM BD CFILING W/ 20 MINUTE

(ASSUMED)

VERIFY ALL APPLICABLE BUILDING CODES WITH STATE AND LOCAL JURISDICTION PRIOR TO CONSTRUCTION

- THE ATTACHED PLANS & SPECIFICATIONS ARE THE SOLE PROPERTY OF DAVIDSON HOMES. ANY UNAUTHORIZED USE OF THESE PLANS WITHOUT PRIOR WRITTEN CONSENT OF DAVIDSON HOMES IS STRICTLY PROHIBITED
- MAIN STREET DESIGNS OF GEORGIA, LLC DESIGNS HOUSING AS SET FORTH BY THE FORMAT AND PROVISIONS OF THE INTERNATIONAL RESIDENTIAL CODE (IRC), AND THE NATIONAL ELECTRIC CODE (NEC).
- THESE PLANS ARE SUBJECT TO MODIFICATIONS TO MEET CODE REQUIREMENTS AND/OR TO FACILITATE MECHANICAL/ ELECTRICAL/ PLUMBING INSTALLATION AND/ OR TO
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AFFECTING CONTRACTOR'S PRODUCTS, INSTALLATIONS, OR FABRICATIONS IN THE FIELD PRIOR TO EXPEDITING THE CONSTRUCTION OF SUCH WORK. FIFL D. VERIEY ALL. DIMENSIONS - DO NOT SCALE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR SURVEYING THE PROJECT AND BECOMING FAMILIAR WITH THE EXISTING CONDITIONS AND SCOPE OF WORK INCLUDING BUT NOT LIMITED TO SITE AND SOIL BEARING CONDITIONS
- ERRORS AND OMISSIONS WHICH MAY OCCUR IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF MAIN STREET DESIGNS OF GEORGIA, LLC IN WRITING AND WRITTEN INSTRUCTION SHALL BE OBTAINED PRIOR TO PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ERRORS, DISCREPANCIES, OR OMISSIONS FOR WHICH THE CONTRACTOR FAILED TO NOTIFY MAIN STREET DESIGNS OF GEORGIA, LLC PRIOR TO CONSTRUCTION AND/ OR FABRICATION OF
- FLAME SPREAD AND SMOKE DENSITY NOTES

#### WALLS AND CEILING

WALL AND CEILING FINISHES SHALL HAVE A FLAME - SPREAD CLASSIFICATION OF NOT GREATER THAN 200. WALL AND CEILING FINISHES SHALL HAVE A SMOKE-DEVELOPED

IF BATT OR BLANKET INSULATION, INCLUDING FACINGS SUCH AS VAPOR RETARDERS OR OTHER VAPOR PERMEABLE MEMBRANES ARE LEFT EXPOSED (IN AREAS LIKE UNFINISHED BASEMENTS), THE MATERIAL SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPMENT RATING OF 450 OR LESS. FLAME-SPREAD AND SMOKE-DEVELOPMENT LIMITATIONS DO NOT APPLY TO FACINGS THAT IS INSTALLED IN SUBSTANTIAL CONTACT WITH THE UNEXPOSED SURFACE OF THE CEILING, FLOOR, OR

EXCEPT WHERE OTHERWISE NOTED IN SECTION R314.2 ALL FOAM PLASTIC OR FOAM PLASTIC CORES IN MANUFACTURED ASSEMBLIES USED IN BUILDING CONSTRUCTION SHALL HAVE A FLAME-SPREAD RATING OF NOT MORE THAN 75 AND SHALL HAVE A SMOKE-DEVELOPMENT RATING OF NOT MORE THAN 450 WHEN TESTED IN THE MAXIMUM THICKNESS INTENDED FOR USE IN ACCORDANCE WITH ASTM E 84.

R314.1.2 THERMAL BARRIER. FOAM PLASTIC, EXCEPT WHERE OTHERWISE NOTED, SHALL BE SEPARATED FROM THE INTERIOR OF A BUILDING BY MINIMUM1/2-INCH (12.7 MM) GYPSUM BOARD OR AN APPROVED FINISH MATERIAL EQUIVALENT TO A THERMAL BARRIER TO LIMIT THE AVERAGE TEMPERATURE RISE OF THE LUNEXPOSED SURFACE TO NO MORE THAN 250°F(121°C) AFTER 15MINUTES OF FIRE EXPOSURE TO THE ASTM E 119 STANDARD TIME TEMPERATURE CURVE. THE GYPSUM BOARD SHALL BE INSTALLED USING A MECHANICAL FASTENING SYSTEM IN ACCORDANCE WITH SECTIOR702.3.5. RELIANCE ON ADHESIVES TO ENSURE THAT THE GYPSUM BOARD WILL REMAIN IN PLACE WHEN EXPOSED TO FIRE SHALL BE PROHIBITED.

### CRAWL VENTING

2524 SQ FT OF FOUNDATION TO BE VENTED

150 SO FT / 1 SO FT = 16.83 SO FT VENTIL ATION

VENTS 128 SQ IN = (0.8889 SQ FT)

16.827 SQ FT = 60.6 VENTS REQUIRED

NOTE: WHERE AN APPROVED VAPER BARRIER IS INSTALLED OVER GROUND SURFACE THE REQUIRED

## **Tobacco Road Lot 32**

# MAGNOLIA

### **ELEVATION C**



3-CAR FRONT LOAD **OPTION** 

STYLE PER **INCLUDED OPTIONS: PURCHASE** 

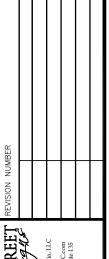
1st FLOOR **SCREENED PORCH (in footprint) GOURMET KITCHEN FIREPLACE** FIREPLACE W/ BUILT-INS FIXED WINDOWS @ FAMILY ROOM 2 FLOOR RECEPTACLES **BOX OAK STAIRS** 

**OPEN RAIL** FRENCH DOORS @ STUDY TRAY CEILING @ DINING TRAY CEILING @ OWNERS **OWNERS DELUXE BATH** 2ND SINK @ BATH 2

TUB W/TILE ILO FG TUB @ BATH 2 **BENCH @ MUD ROOM** THIRD CAR GARAGE **GARAGE SERVICE DOOR** 

2nd FLOOR **BONUS ROOM & BEDROOM W/BATH** TUB W/TILE ILO FG TUB @ BATH 3 **WET BAR UNFINISHED STORAGE** 

DOOK							1
BASE HOUSE SQUARE FOOTAGE CALCULATIONS TOTAL UN					TOTAL UNDER	E E	
ELEVATIONS	1st FLOOR	TOTAL FIN.	FRONT PORCH	REAR PORCH	GARAGE	ROOF	ž
ELEV. C	2,524 s.f.	2,524 s.f.	161 s.f.	300 s.f.	396 s.f.	3,381 s.f.	H
OPTIONS SQUARE FOOTAGE CALCULATIONS						•	
OPTIONS:							1
3RD CAR GARAGE			+264 s.f.	BONUS ROOM	W/ BEDROOM	+927 s.f.	⊩
				BONUS ROOM	STORAGE	±124 c f	





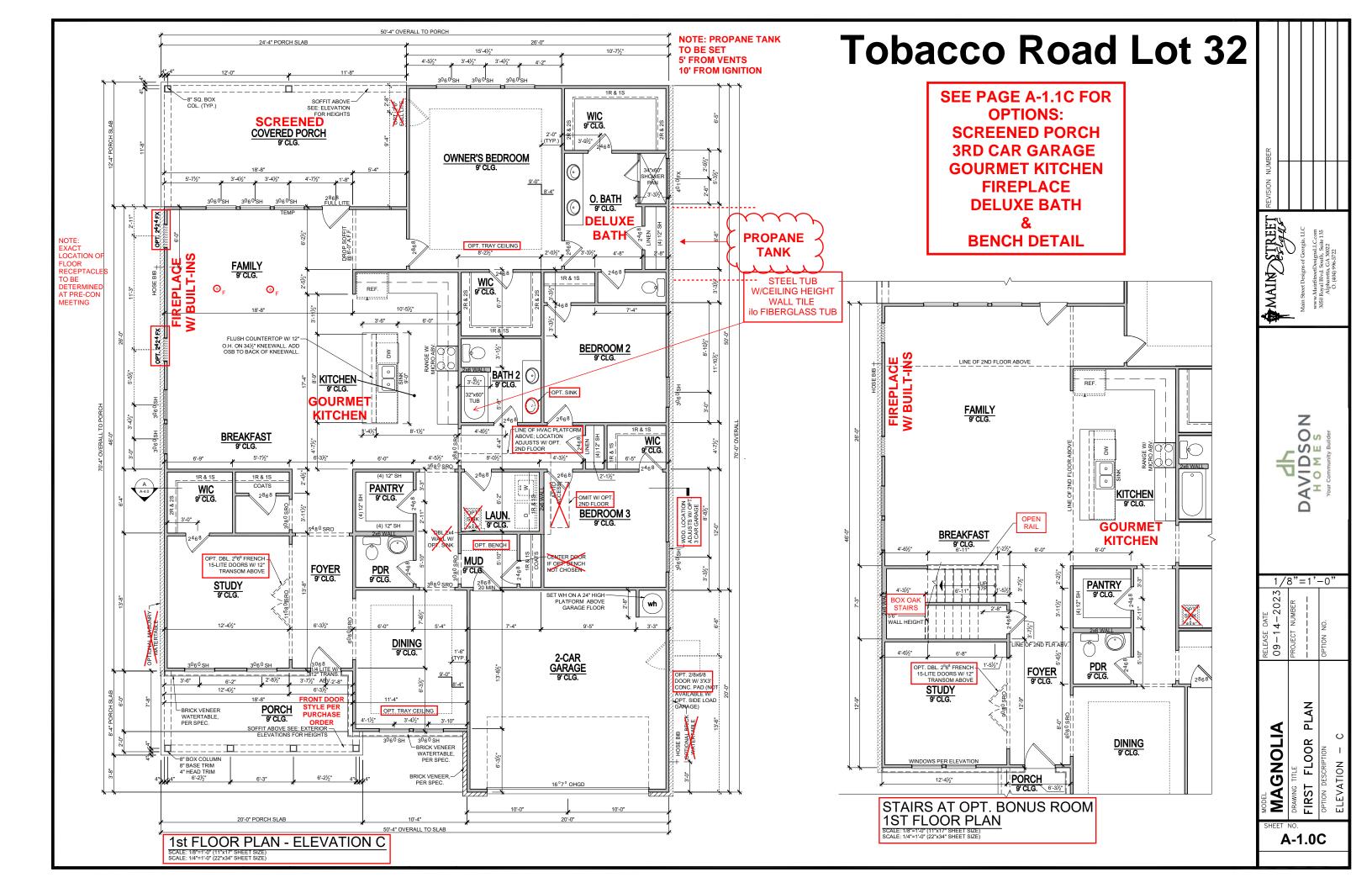


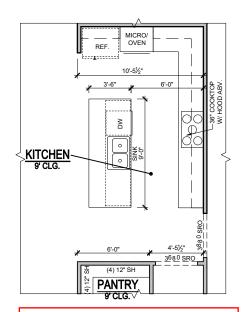
1/8"=1'-0' 60

MAGNOLIA

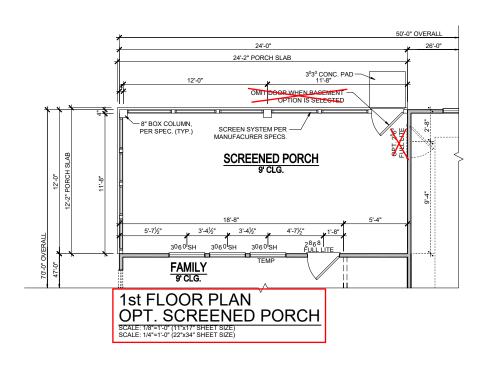
COVER

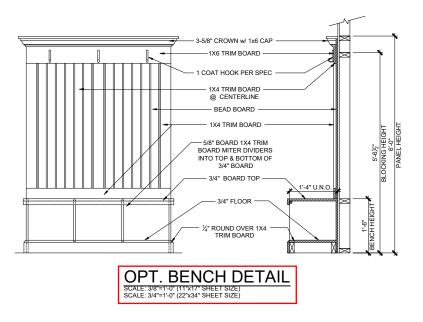
**CS-1.0** 

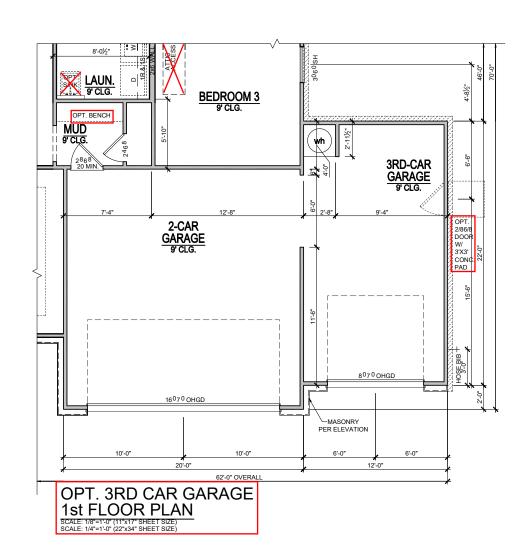




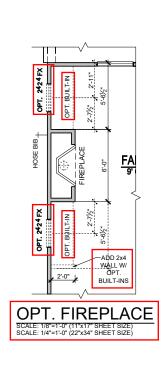


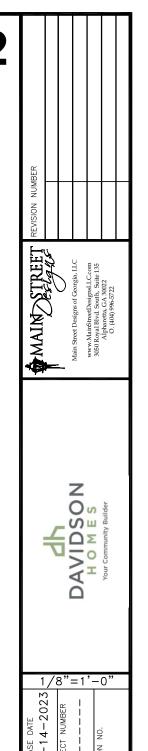






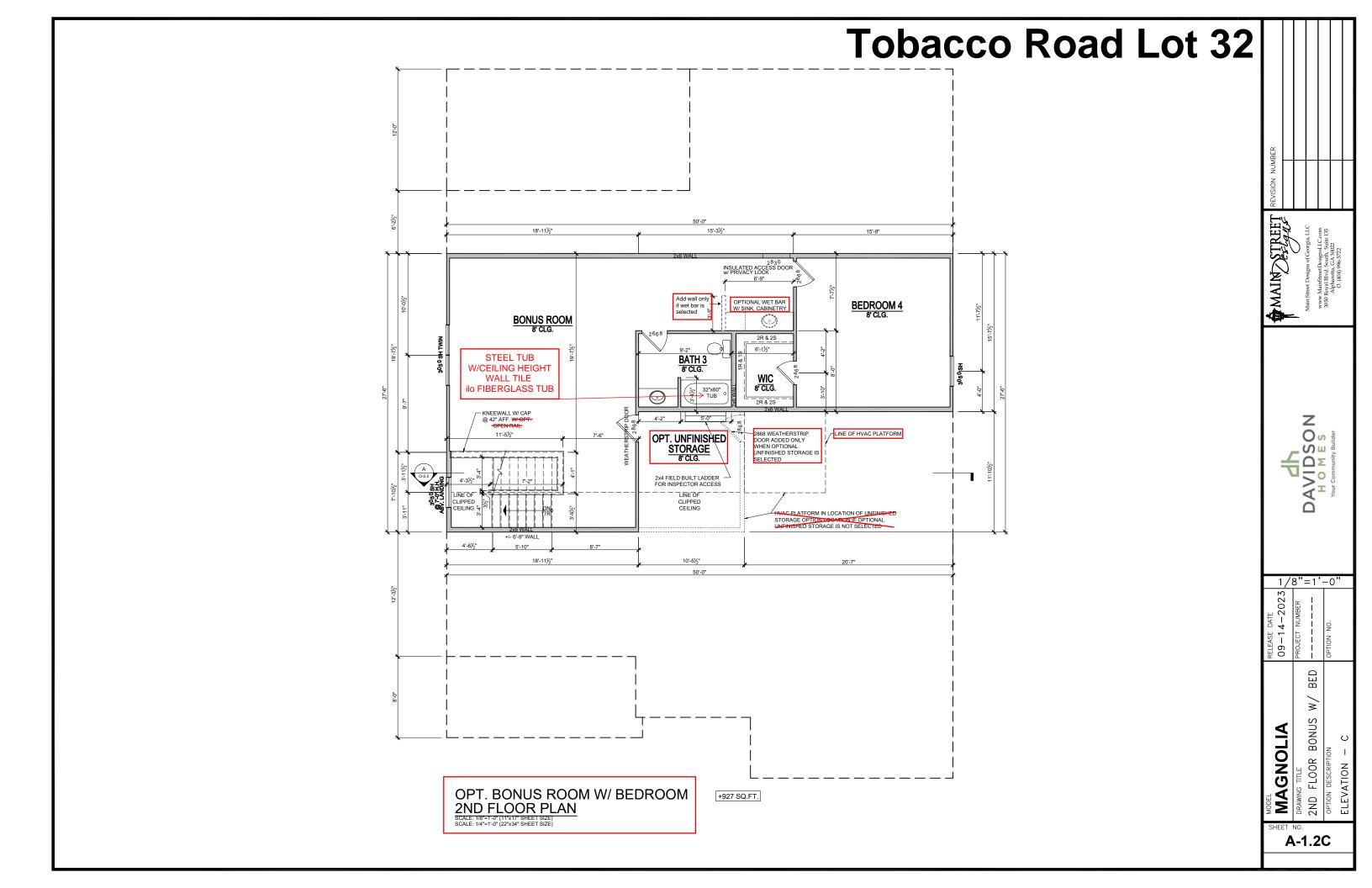






SNOLIA	RELEASE DATE 09-14-2023	1/8
ITLE	PROJECT NUMBER	8"
FLOOR PLAN		=1'
SCRIPTION	OPTION NO.	-0
10N - C		,,

A-1.1C



# 10:12 10:12 10:12 10:12 **ELEVATION -C- ROOF PLAN** SCALE: 1/16"=1'-0" (11"X17" SHEET SIZE SCALE: 1/8"=1'-0" (22"X34" SHEET SIZE)

#### ATTIC VENT CALCULATIONS

GENERAL CONTRACTOR SHALL VERIFY THE NET FREE GENERAL CONTRACTOR SHALL VERIFY THE NET FREE
VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER.
VERIFY WITH MANUFACTURER OF HIGH AND LOW VENTS
TO BE USED FOR MINIMUM CALCULATED VENTS REQUIRED.
THE REQUIRED VENTILATION SHALL BE MAINTAINED.
PROVIDE INSULATION STOP SUCH THAT INSULATION
DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REQUIRED.

ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE

- OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (AS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS.
- PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.
- ALL ROOF DRAINAGE SHALL BE PIPED TO STREET OR APPROVED DRAINAGE FACILITY.
- DASHED LINES INDICATE WALL BELOW.
- LOCATE GUTTER AND DOWNSPOUTS PER BUILDER.
- PITCHED ROOFS AS NOTED.
- TRUSS MANUFACTURER SHALL SUBMIT STRUCTURAL CALCS AND SHOP DRAWINGS TO THE BUILDER'S GENERAL CONTRACTOR AND BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATIONS
- ALL PLUMBING VENTS SHALL BE COMBINED INTO A MINIMUM AMOUNT OF ROOF PENETRATIONS. ALL ROOF PENETRATIONS SHALL OCCUR TO THE REAR OF THE MAIN RIDGE

#### MAIN ROOF

3359 SQ FT UNDER ROOF ATTIC
300 SQ FT / 1 SQ FT = 11.20 SQ FT VENTILATION

RIDGE VENTS 18 SQ IN = (.125 SQ FT) SOFFIT VENTS 9 SQ IN = (.0625 SQ FT) BOX VENTS 50 SQ IN = (.347 SQ FT)

11.20 SQ FT x 50% 5.598 SQ FT OF RIDGE 11.20 SQ FT x 50% 5.598 SQ FT OF SOFFIT

RIDGE VENT

5.598 SQ FT

0.125 SQ FT

SOFFIT VENT

5.598 SQ FT

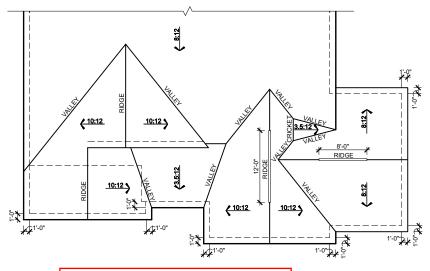
0.0625 SQ FT

89.6 FEET OF SOFFIT VENT

ACTUAL RIDGE VENT PROVIDED ACTUAL SOFFIT VENT PROVIDED NUMBER OF BOX VENTS NEEDED (REQ - ACTUAL x .347)

ACADE PERCEN	DE PERCENTAGES			
TERIALS	S.F.	%		
DING	70	16		
AKE	0	0		
ARD & BATT	143	32		
RDI BOARD	0	0		
ONE VENEER	0	0		
ICK VENEER	237	53		
TOTAL= 450 100				
MASONRY % = 53				

## **Tobacco Road Lot 32**



OPT. 3RD CAR GARAGE **ELEVATION C-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

3623 SQ FT UNDER ROOF ATTIC 300 SQ FT / 1 SQ FT = 12.08 SQ FT VENTILATION RIDGE VENTS 18 SQ IN = (.125 SQ FT)

SOFFIT VENTS 9 SQ IN = (.0625 SQ FT) BOX VENTS 50 SQ IN = (.347 SQ FT)

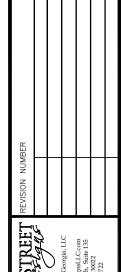
12.08 SQ FT x 50% 6.038 SQ FT OF RIDGE 12.08 SQ FT x 50% 6.038 SQ FT OF SOFFIT

RIDGE VENT

ACTUAL RIDGE VENT PROVIDED ACTUAL SOFFIT VENT PROVIDED NUMBER OF BOX VENTS NEEDED (REQ - ACTUAL x .347)

56 FEET 94 FEET -2.7 COUNT (NEGATIVE = 0)





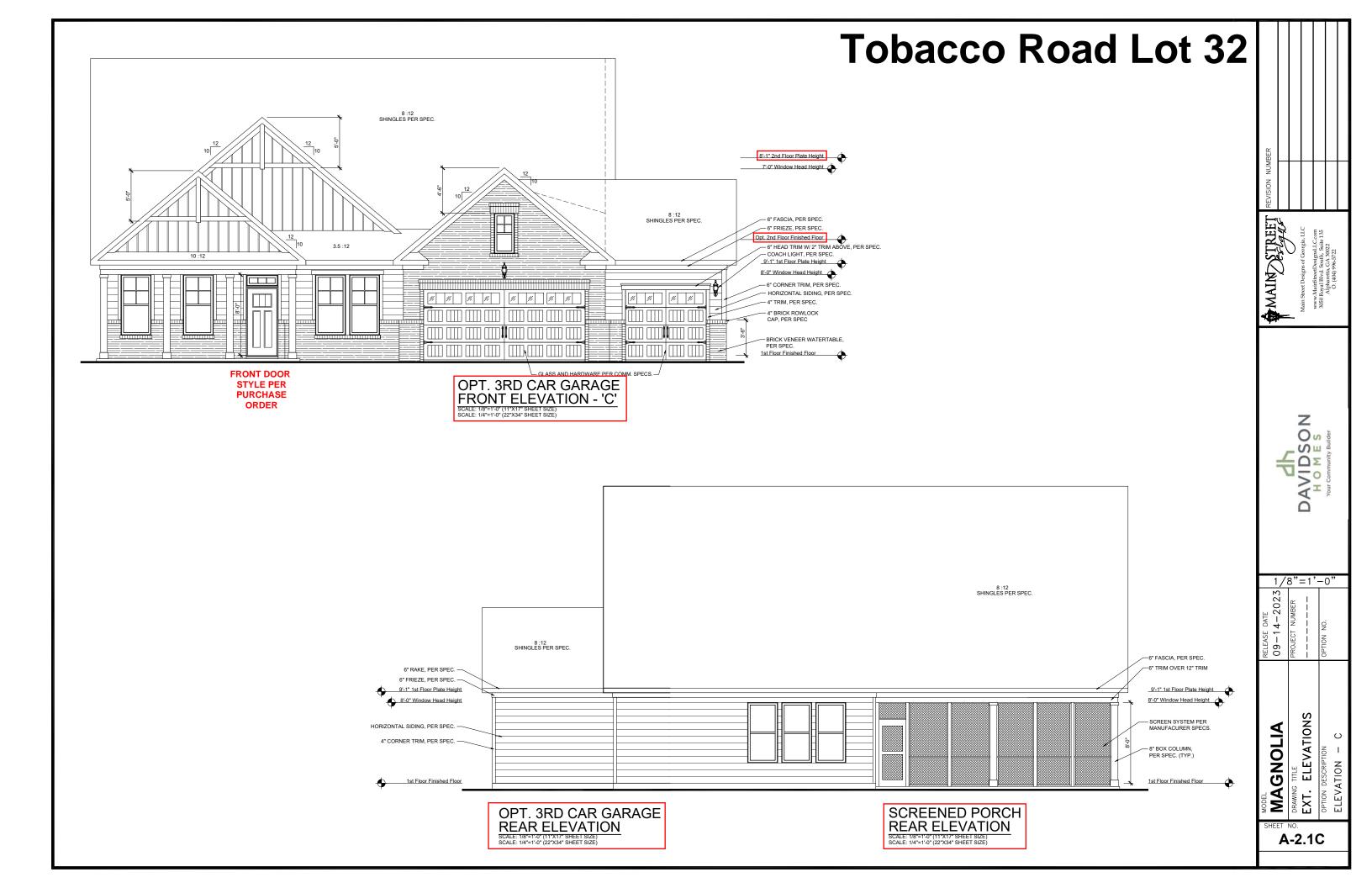


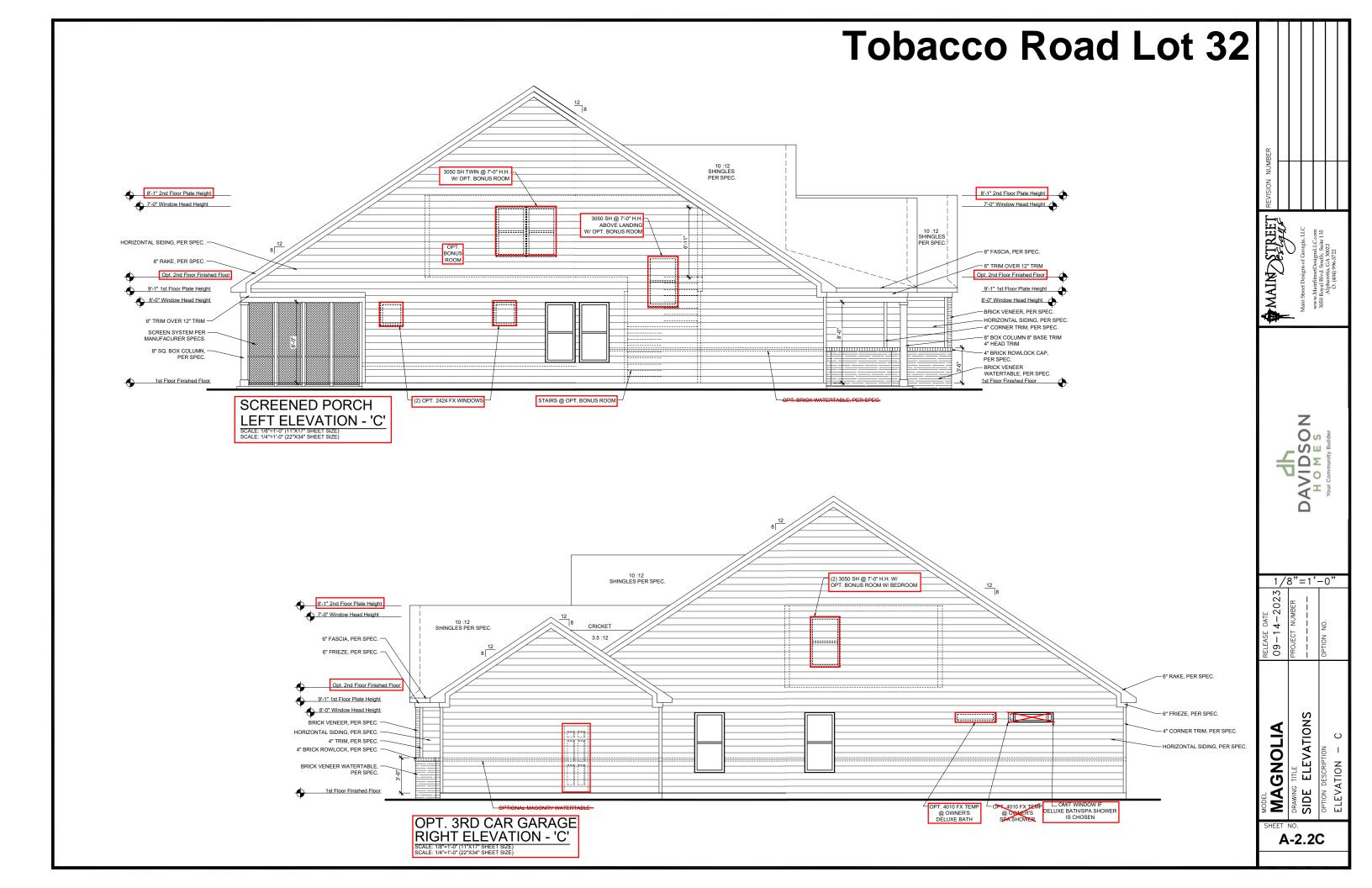


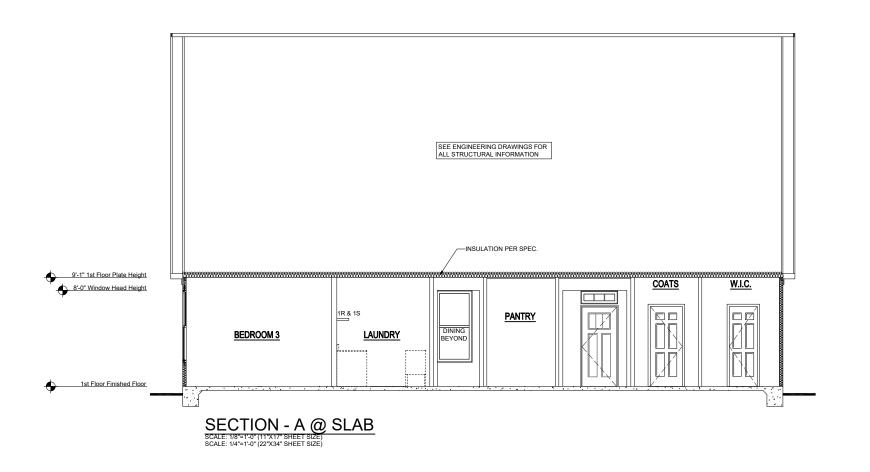
	1 /	8"	= 1 '-	-0"
RELEASE DATE	09-14-2023	PROJECT NUMBER	           	OPTION NO.

MAGNOLIA PLAN ROOF

A-2.0C









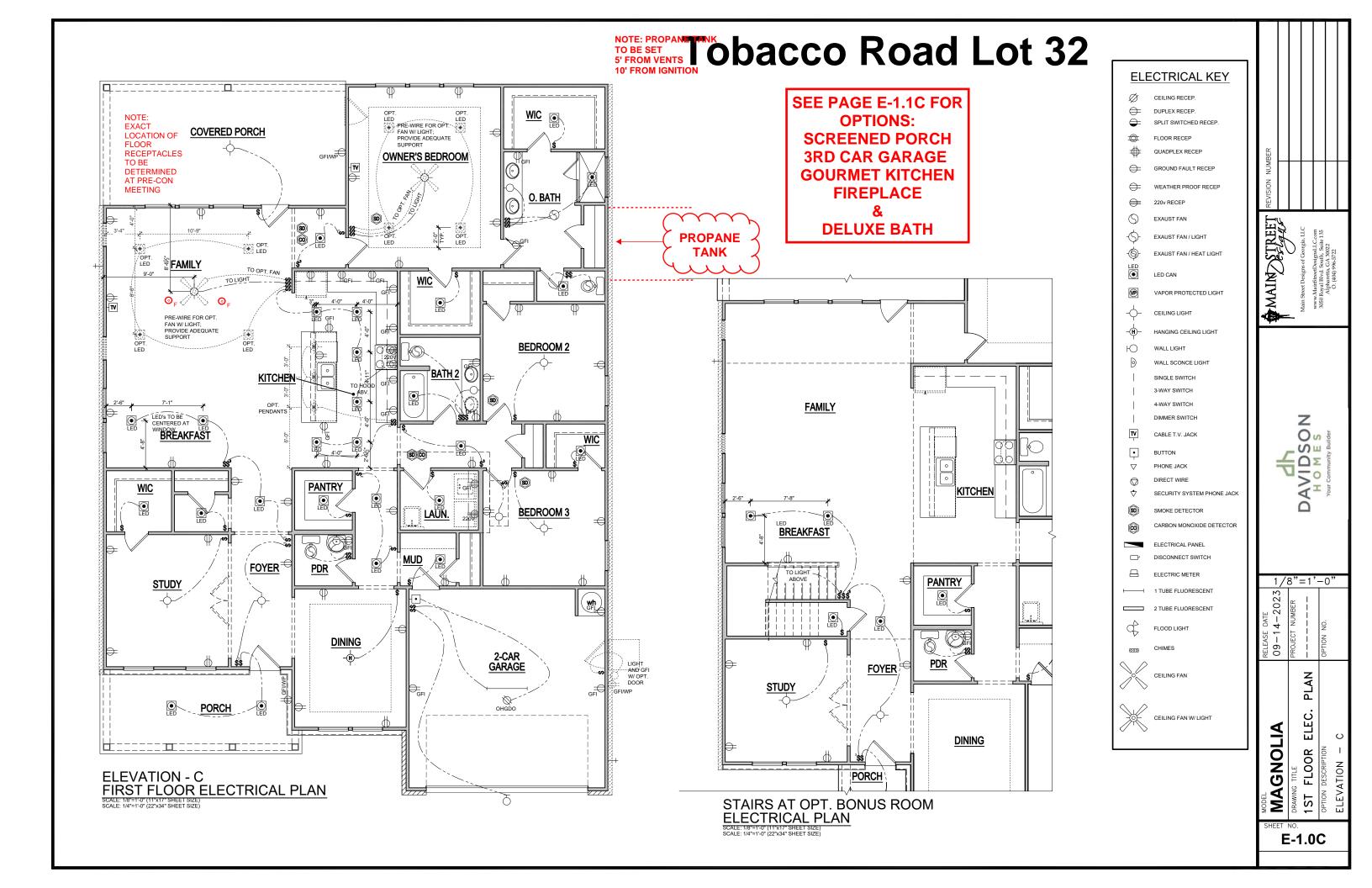


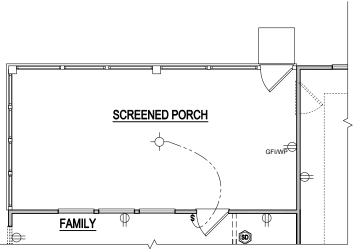


1/8"=1'-0" RELEASE DATE 09-14-2023

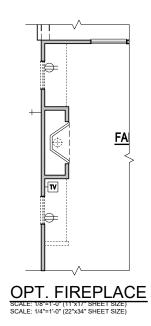
BUILDING SECTIONS MAGNOLIA

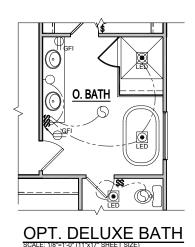
A-3.0C

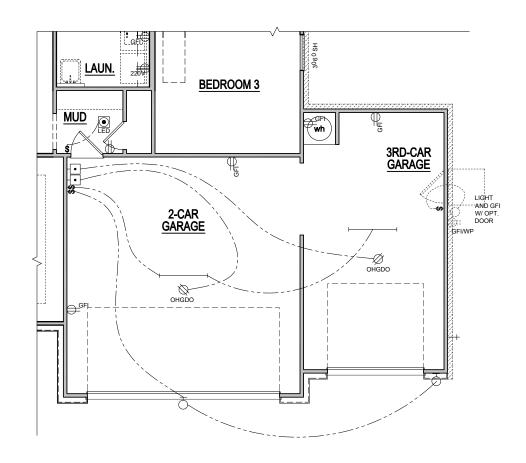




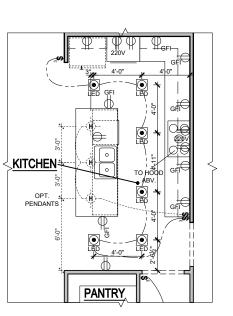
### **ELECTRICAL PLAN** OPT. SCREENED PORCH SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



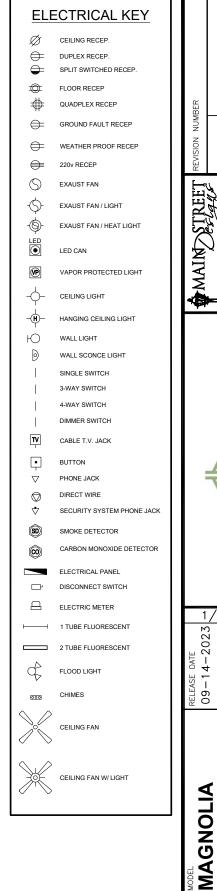




OPT. 3RD CAR GARAGE 1st FLOOR ELECTRICAL PLAN SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



OPT. GOURMET KITCHEN



00

/IDS

1/8"=1'-0"

PLAN

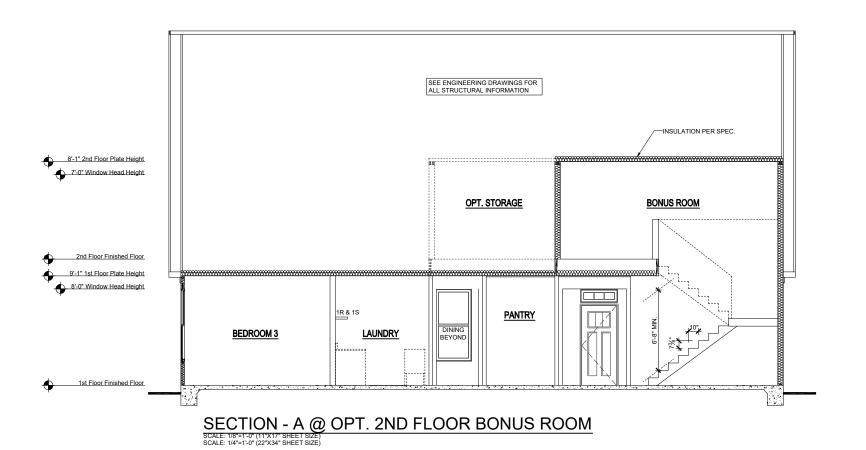
ELEC.

1ST

E-1.1C

09-14-2023

# **Tobacco Road Lot 32** MAINDSTREET BEDROOM 4 **BONUS ROOM** DAVIDSON HOMES OPT. UNFINISHED STORAGE <u>\</u> MAGNOLIA OPT. BONUS ROOM W/ BEDROOM 2ND FLOOR ELECTRICAL E-1.2C

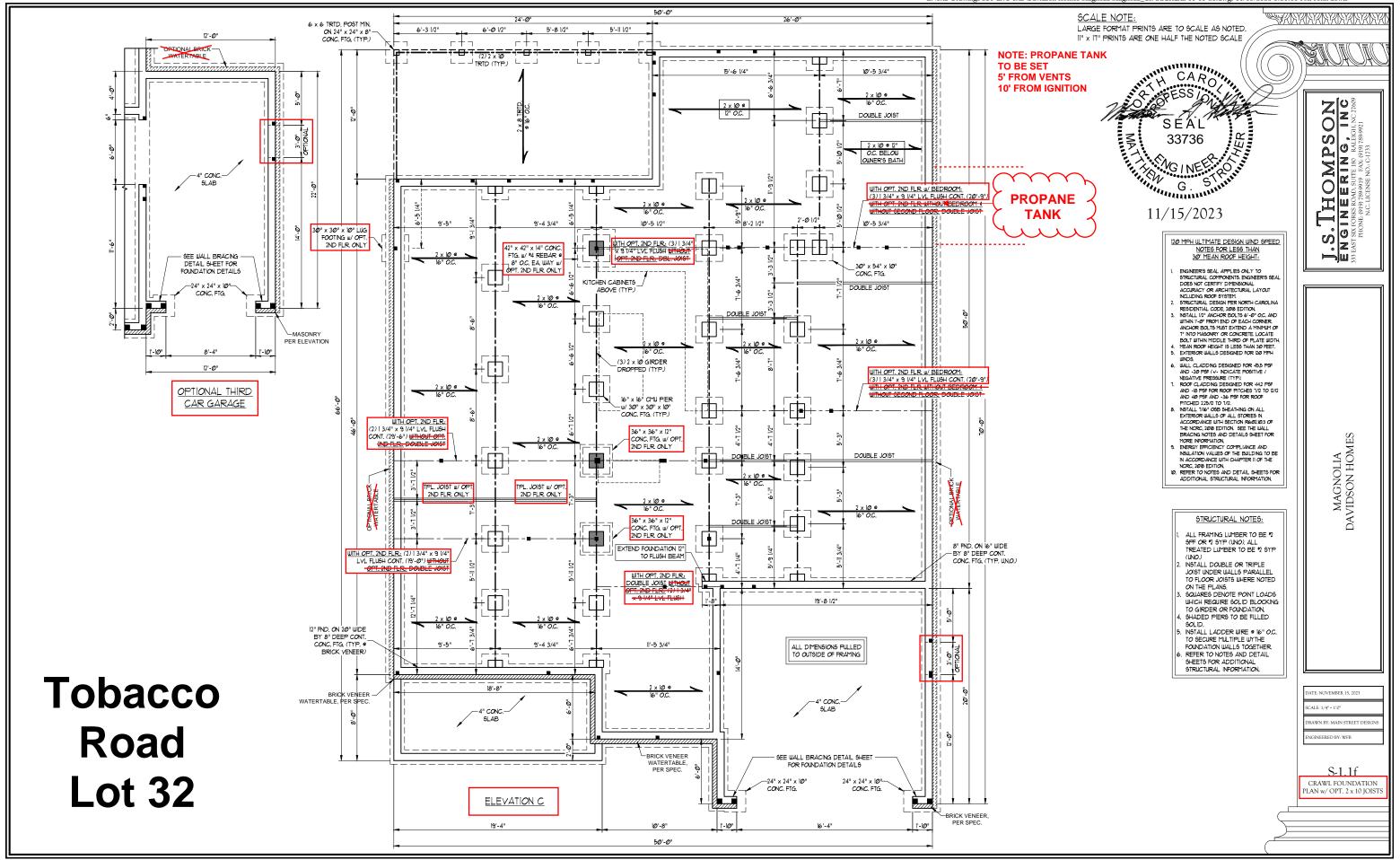


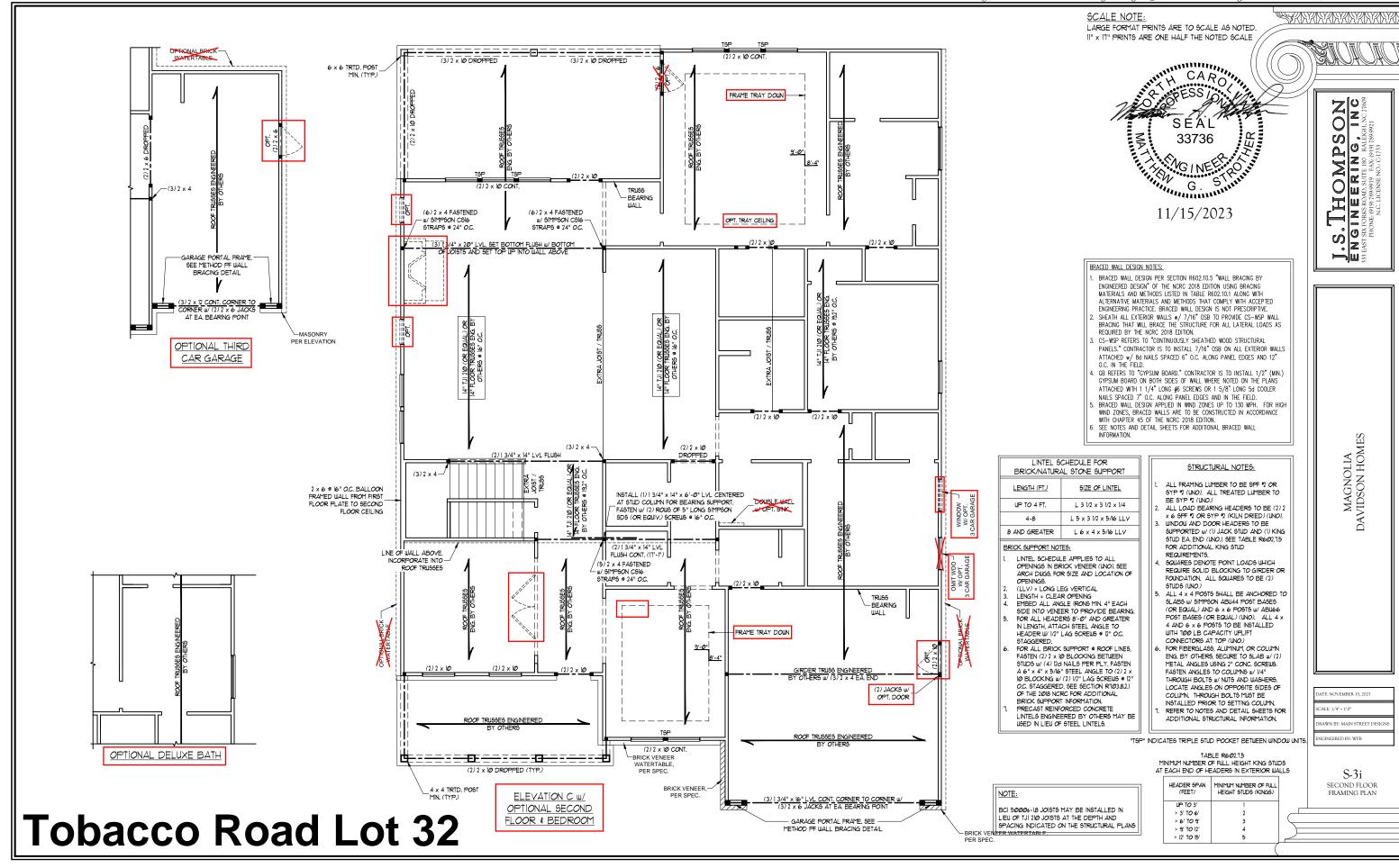
DAVIDSON HOMES

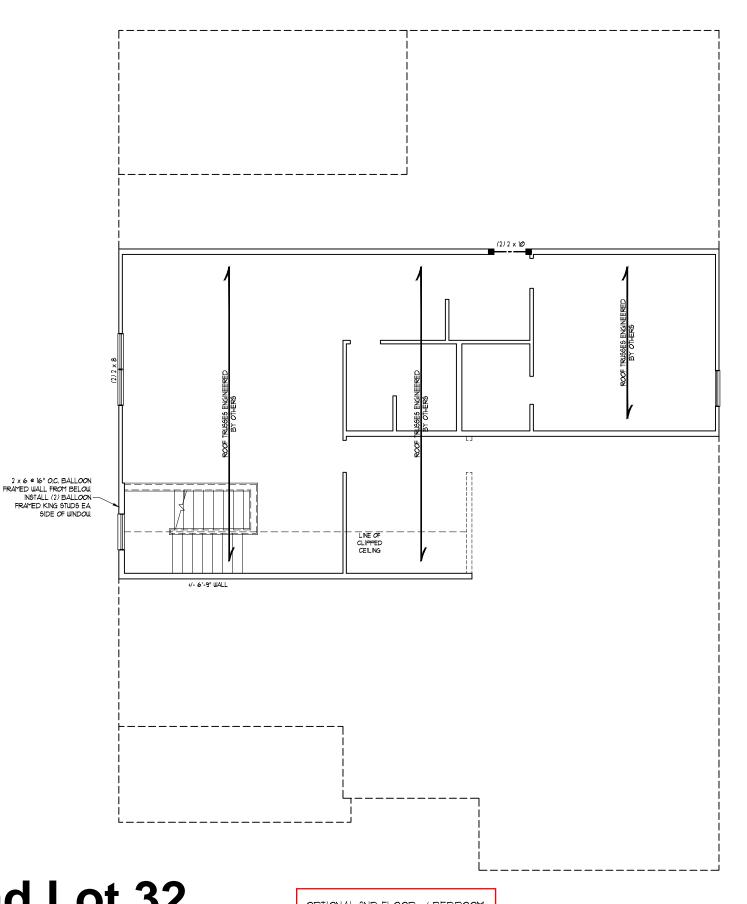
MAGNOLIA

SECTION

O-6.5







SCALE NOTE:

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

11/15/2023

THOMPSON
SINEERING, INC 

BRACED WALL DESIGN NOTES:

- . BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.
- SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS-WSP WALL BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION.
- CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
- GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.) GYPSUM BOARD ON BOTH SIDES OF WALL WHERE NOTED ON THE PLANS ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD.
- BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NCRC 2018 EDITION.
- SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

#### STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE 12 SPF OR \*2 SYP (UNO).

  ALL LOAD BEARING HEADERS TO BE
- (2) 2 x 6 (UNO).

  3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA, END (UNO.), SEE TABLE R602.15 FOR ADDITIONAL KING STUD REQUIREMENTS.
- A SQUARES DENOTE POINT LOADS
  UHICH REQUIRE SOLID BLOCKING TO
  GIRDER OR FOUNDATION. SQUARES
  TO BE (2) STUDS (UNO.) REFER TO NOTES AND DETAIL SHEETS

FOR ADDITIONAL STRUCTURAL INFORMATION. TABLE R602.7.5 MINIMUM NUMBER OF FULL HEIGHT KING \$TUD\$ AT EACH END OF HEADERS IN EXTERIOR WALLS

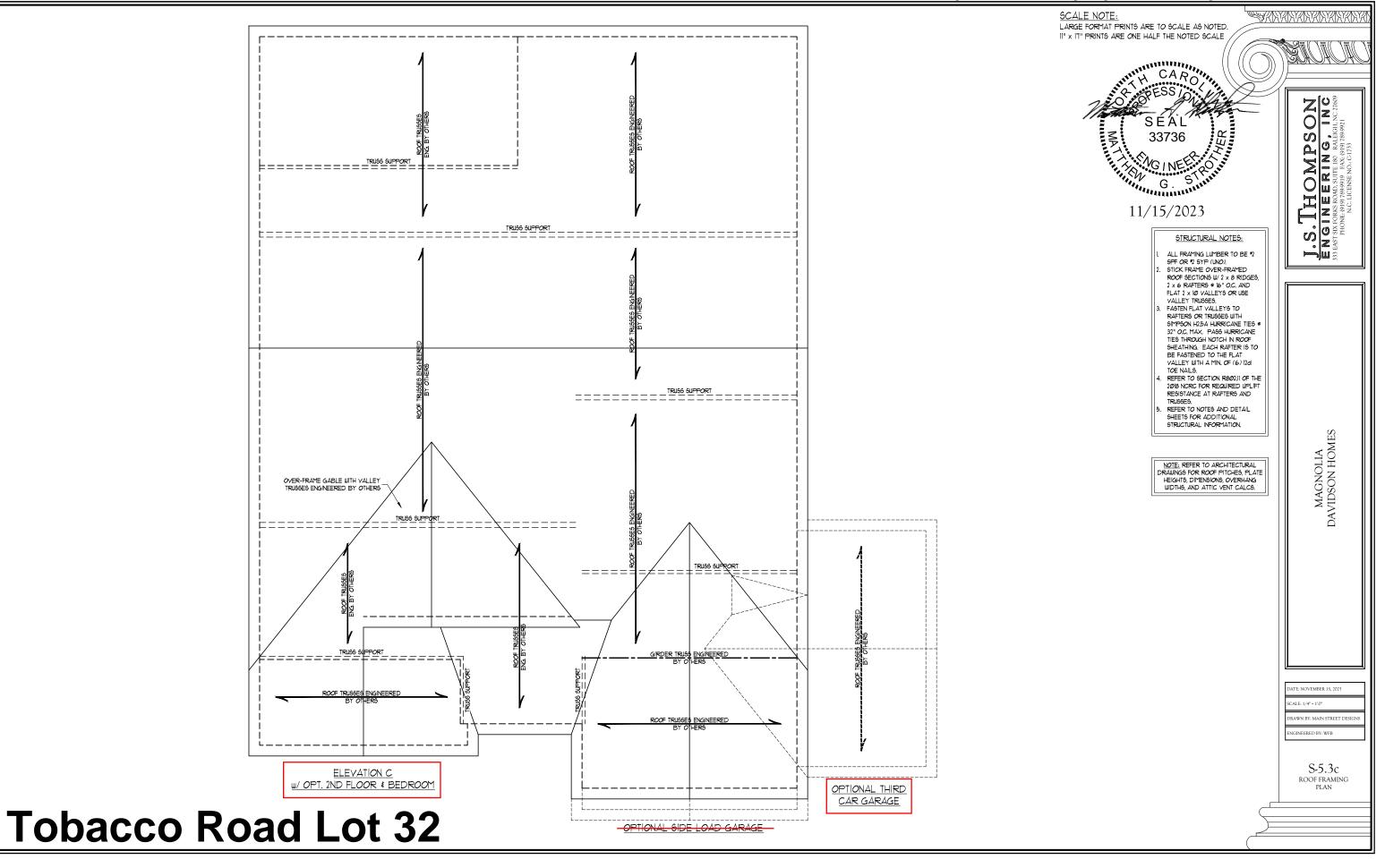
MINIMUM NUMBER OF PUI HEIGHT STUDS (KINGS)
1
2
3
4
5

DRAWN BY: MAIN STREET D

S-4b CEILING FRAMING PLAN

**Tobacco Road Lot 32** 

OPTIONAL 2ND FLOOR W/ BEDROOM



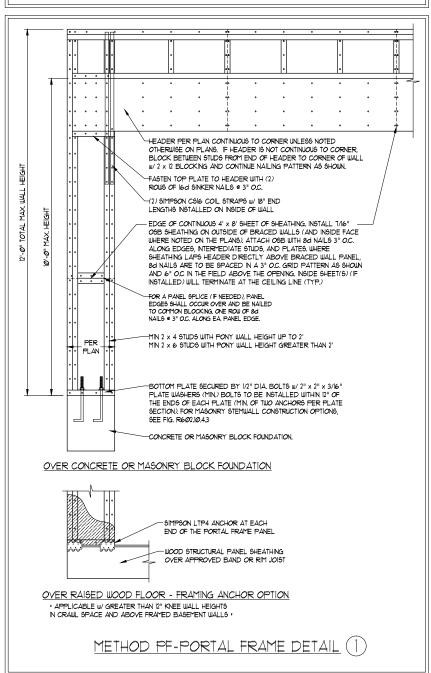
SCALE NOTE:

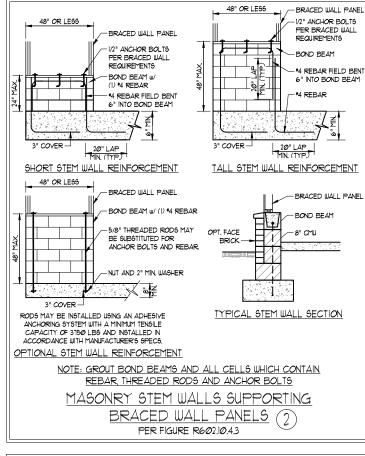
#### GENERAL WALL BRACING NOTES:

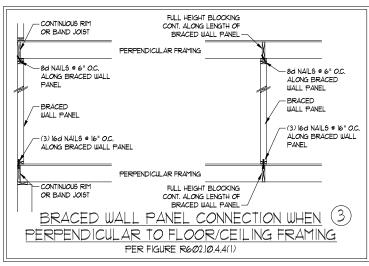
WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NCRC. SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NCRC FOR ADDITIONAL INFORMATION AS NEEDED.

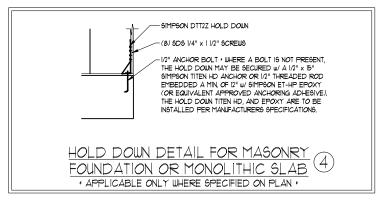
AND SHEAR FORCES IN ACCORDANCE WITH ACCEPTED ENGINEERED PRACTICE.

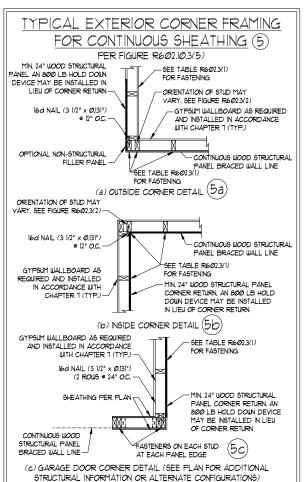
- BRACED EXTERIOR WALLS SUPPORTING ROOF TRUSSES AND RAFTERS, INCLUDING STORIES BELOW THE TOP FLOOR, HAVE BEEN DESIGNED PER R602.3.5 (3), WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST COMBINED UPLIFT
- 4. SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS DIMENSIONS HOLD DOWN TYPE AND LOCATIONS BRACED WALL LINE KEY WITH WALL DESIGN SUMMARY OF REQUIRED/PROVIDED TOTALS FOR EACH WALL LINE AND ANY SPECIAL NOTES OR REQUIREMENTS.
- ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH CS-WSP IN ACCORDANCE WITH SECTION R602.10.3 UNLESS NOTED OTHERWISE.
- 6. ALL EXTERIOR AND INTERIOR WALLS TO HAVE 1/2" GYPSUM INSTALLED, WHEN NOT USING METHOD "GB", GYPSUM TO BE FASTENED PER TABLE R1023.5. METHOD GB TO BE FASTENED PER TABLE R602.10.1
- 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 Ø/13" DIAMETER) NAILS SPACED 6" OC. ALONG PANEL EDGES AND 12" OC. IN THE FIELD (UNO.).
- 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 1/4" SCREWS OR 15/8" NAILS SPACED TO OC. ALONG PANEL EDGES INCLUDING TOP AND BOTTOM PLATES AND INTERMEDIATE SUPPORTS (UN.O.). YERRY ALL FASTENER OPTIONS FOR 1/2" AND 5/8' GYPSUM PRIOR TO CONSTRUCTION. FOR INTERIOR FASTENER OPTIONS SEE TABLE RT02.35. FOR EXTERIOR FASTENER OPTIONS SEE TABLE R602.3(I). EXTERIOR GB TO BE INSTALLED VERTICALLY.
- REQUIRED BRACED WALL LENGTH FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE R&OZ. 03, METHOD CS-MSP CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES 5 ITS ACTUAL LENGTH, AND METHOD PF CONTRIBUTES IS ITMES ITS ACTUAL LENGTH.

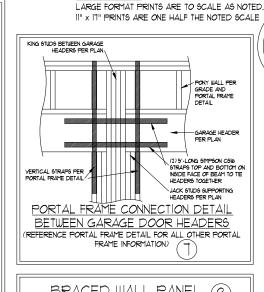


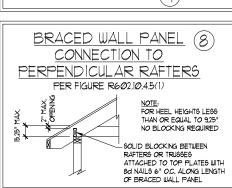


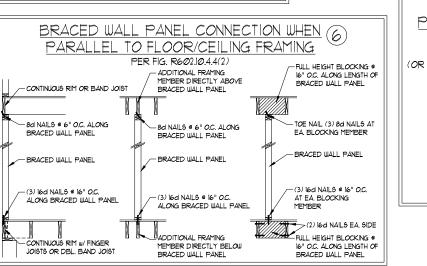


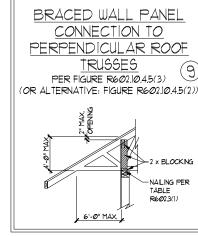














11/15/2023



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

OM N S  $\rightarrow$ 

0 

ശ

MAGNOLIA DAVIDSON HOMES

ATE: NOVEMBER 15, 2023 RAWN BY: MAIN STREET DES SINEERED BY: WFB

> D-4 WALL BRACING

NOTES AND DETAILS

#### 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 LAYOUT 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 DOCUMENTS.
- 3. STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NCRC, 2018 EDITION (R301.4 R301.1)

LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)	
20	10	L/240 (L/360 w/ BRITTLE FINISHES)	
10	10	L/360	
40	10	L/36Ø	
40	10	L/36Ø	
40	10	L/360	
200 LB OR 50 (PLF)	10	L/36Ø	
5Ø	10	L/360	
40	10	L/36Ø	
3 <i>Ø</i>	10	L/36Ø	
40	10	L/36Ø	
(BASED ON TABLE R3Ø12(4) WIND ZONE AND EXPOSURE)			
2Ø (PSF)			
	20 10 40 40 200 LB OR 50 (PLF) 50 40 30 40 (BASED ON TABLE R3012(	20  0  0  0  0  0  0  0  0  0  0  0  0  0	

- 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 15 TO COMPLY WITH SECTION R403.16 OF THE NCRC, 2018 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE 15 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

- I. 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 UNIFORM 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 CLASSIFICD AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NCRC, 2018 EDITION.
- 3. PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE 6LAB 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 1/2" FOR 55 BARS OR SMALLER, AND NOT LESS THAN 2" FOR 65 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 TR66-A OR ACE 530/A5CE 5/TM5 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 10 0 CO. WHERE GRADE PERMITS (UNC).

### **Tobacco Road Lot 32**

#### FRAMING NOTES

- I. ALL FRAMING LUMBER SHALL BE 12 SPF (Fb = 815 P6), Fv = 315 P6), E = 1600000 P6) OR 12 SYP (Fb = 915 P6), Fv = 115 P6), E = 16000000 P6) MINIMUM UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE 12 SYP MINIMUM 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 = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E = 1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 2000000 PSI. PSI INSTALL ALL CONNECTIONS PER MANIFACTURER'S SPECIFICATIONS.
- 3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

A. W AND WT SHAPES: ASTM A992

B. CHANNELS AND ANGLES: ASTM A36

C. PLATES AND BARS: ASTM A36

D. HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B

E. STEEL PIPE: ASTM A53, GRADE B, TYPE E 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

B. CONCRETE

C. MASONRY (FULLY GROUTED)

(2) 1/2" DIA. x 4" LONG LAG SCREWS

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

(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 @ I6" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS @ I6" O.C. IF I/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 9/16" DIAMETER HOLES @ I6" 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 NCRC, 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 R602.7.5 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 I 1/2" MINIMUM BEARING (NO.). 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 USING 1/2" DIAMETER BOLTS (ASTM A3Ø1) 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 1-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.
- IØ. 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 R602.10.
- II. 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 RT03.82.1 OF THE NCRC, 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 ROUS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).
- 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).
- 15. ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 1000 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO.) POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LTS12 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON CS16 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.

II" x IT" PRINTS ARE ONE HALF THE NOTED SCALE

CARO

SESS

SEAL

33736

11/15/2023

AGNOLIA OSON HOMES

والم

ശ

S

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 urchitectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23

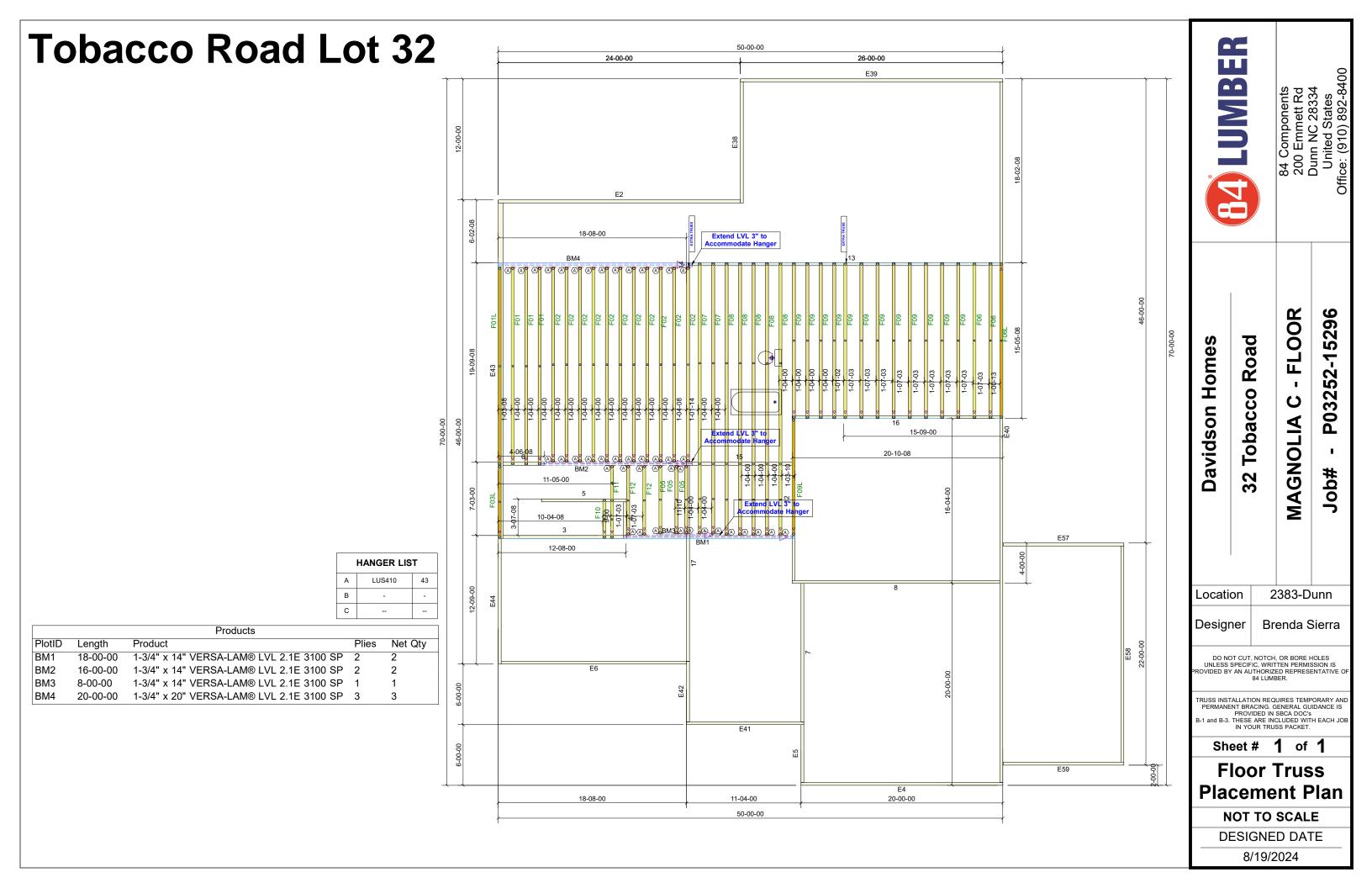
DATE: NOVEMBER 15, 2023

SCALE: 1/4" = 1'.0"

DRAWN BY: MAIN STREET DES

INEERED BY: WFB

D-5 STANDARD STRUCTURAL NOTES



**HANGER LIST** 



LUMBER I

**Davidson Homes** 

84 Components 200 Emmett Rd Dunn NC 28334 United States Office: (910) 892-8400

95

MAGNOLIA C - ROOF Job# - P03252-15295

Location 2383-Dunn

Designer Brenda Sierra

DO NOT CUT, NOTCH, OR BORE HOLES UNLESS SPECIFIC, WRITTEN PERMISSION IS PROVIDED BY AN AUTHORIZED REPRESENTATIVE OI 84 LUMBER.

TRUSS INSTALLATION REQUIRES TEMPORARY AND PERMANENT BRACING. GENERAL GUIDANCE IS PROVIDED IN SBCA DOC'S B-1 and B-3. THESE ARE INCLUDED WITH EACH JOB IN YOUR TRUSS PACKET.

Sheet # 1 of 1

Roof Truss
Placement Plan

**NOT TO SCALE** 

DESIGNED DATE

8/20/2024