### **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 LINDER 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 2009-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

#### DOORS & WINDOW

- 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 3: R-13 BATTS MINIMUM. VERIFY

CEILING WITH ATTIC ABOVE COMPRESSED INSULATION:

R-38 BATTS MINIMUM. VERIFY

CEILING WITH ATTIC ABOVE UNCOMPRESSED INSULATION (HEELS IN TRUSSES) R-30 BATTS MINIMUM. VERIFY

FLOOR OVER GARAGE

R-19 BATTS MINIMUM. VERIFY

ATTIC KNEEWALL: R-19 BATTS MINIMUM. VERIFY

### **BUILDING CODE ANALYSIS**

USER GROUP: CONSTRUCTION CLASS:

HEIGHT LIMITATION:

EMERGENCY ESCAPE:

GARAGE / HOUSE CEILING/ HOUSE ASSEMBLY:

DESIGN LOAD:

SINGLE FAMILY UNPROTECTED 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"

GYPSUM BD. CEILING W/ 20 MINUTE GARAGE/HOUSE DOOR

SLEEPING = 30 PSF NON-SLEEPING = 40 PSF

DECKS = 40 PSF DEAD LOAD = 10 PSF

BASIC WIND SPEED = 115 MPH EXPOSURE B (CHARLOTTE) STAIR LOAD = 40 PSF ROOF LIVE LOAD = 20 PSF

LATERAL SOIL PRESSURE = 30 PCF

(ASSUMED)

NOTE: 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.
- 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 IMPLEMENT DESIGN IMPROVEMENTS
- 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. FIELD VERIFY 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
- 6) 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 INDEX OF NOT GREATER THAN 450

#### INSULATION

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, OF

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 UNEXPOSED 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.

# **Tobacco Road Lot 127**

# BIRCH II

## **ELEVATION - B**



4' GARAGE **EXTENSION OPTION** 3-CAR FRONT LOAD **OPTION** 

**DOOR STYLE PER PURCHASE ORDER** SIZE 3/0 x 8/0

#### **INCLUDED OPTIONS:**

1st FLOOR **SCREENED PORCH (in footprint) GOURMET KITCHEN** FIREPLACE W/ BUILT-INS **FIXED WINDOWS @ FAMILY ROOM** FLOOR RECEPTACLE @ FAMILY ROOM **BOX OAK STAIRS** TRAY CEILING @ OWNERS **OWNERS SPA SHOWER** STUDY ILO DINING **FIXED WINDOWS @ STUDY** TILE SHOWER ILO FG TUB @ BATH 2 LAUNDRY SINK **BENCH @ MUD ROOM** GARAGE SERVICE DOOR THIRD CAR GARAGE 4' GARAGE EXTENSION

#### 2nd FLOOR PLUMBING ROUGH-IN FOR WET BAR **OPEN RAIL**

BAS	BASE HOUSE SQUARE FOOTAGE CALCULATIONS							OPTIONS SQUARE FOOTAGE CAL	CULATIONS
ELEVATION	1st FL.	2nd FL.	TOTAL FIN.	PORCH	COV'D. PORCH	GARAGE	ROOF	OPTIONS:	1st FLOOR
ELEV. B	1,984 s.f.	752 s.f.	2,736 s.f.	118 s.f.	224 s.f.	415 s.f.	3,368 s.f.	3 CAR GARAGE	+264 s.f.
								4' GARAGE EXTENSION	+80 s.f.

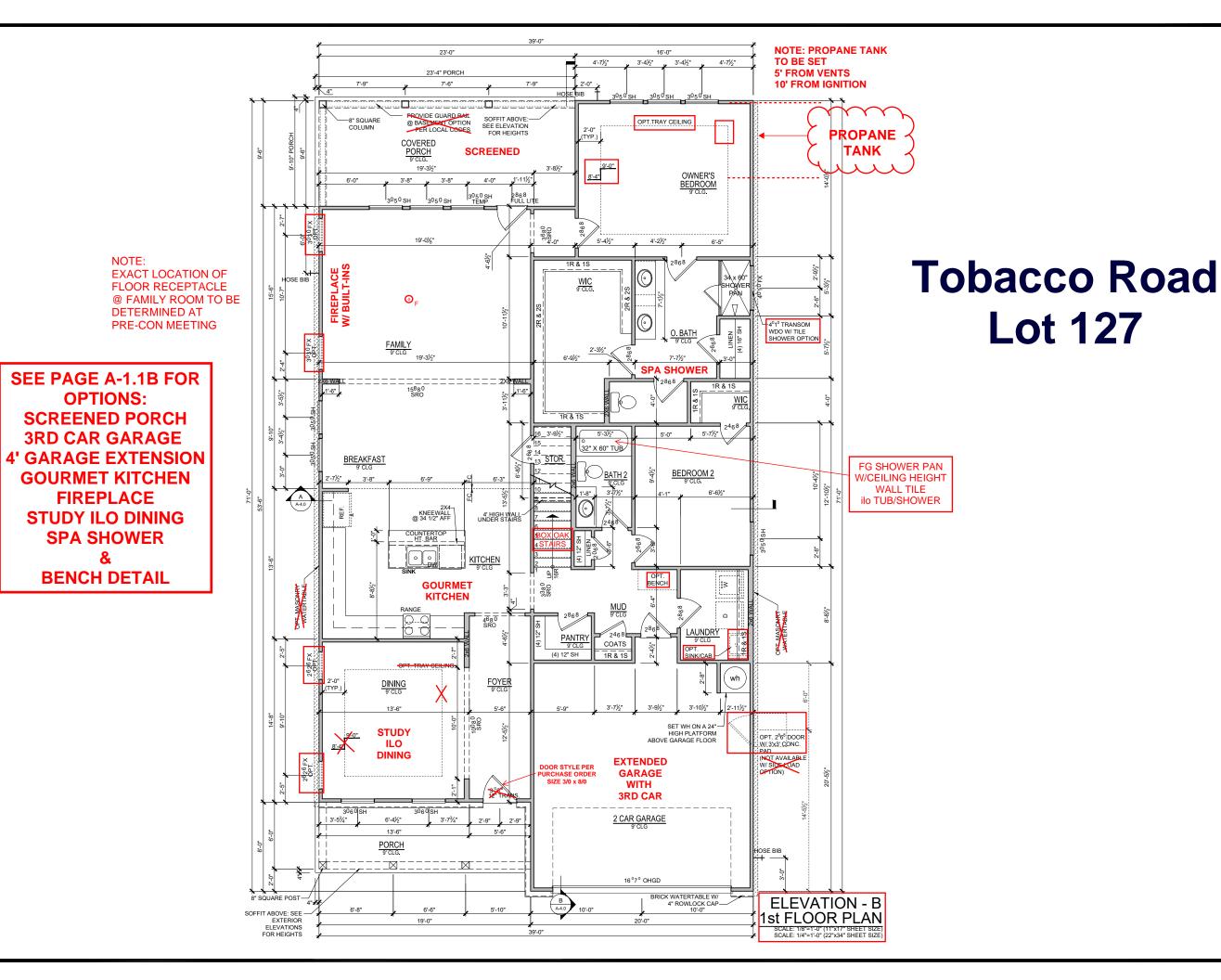
MAINZETREET



1/8"=1'-0" 12-1-

SHE BIRCH COVER

**CS-1.0** 



NOTE:

**OPTIONS: SCREENED PORCH 3RD CAR GARAGE** 

**GOURMET KITCHEN** 

**FIREPLACE** 

STUDY ILO DINING **SPA SHOWER** 

**BENCH DETAIL** 

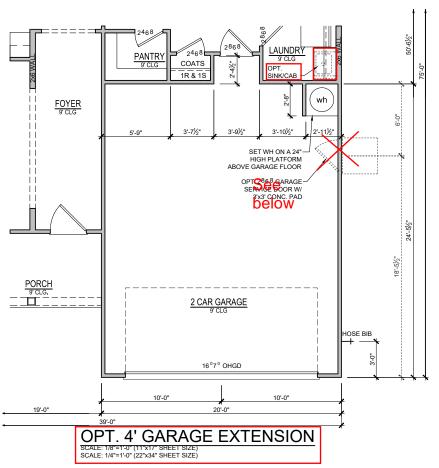
MAINZSTREET

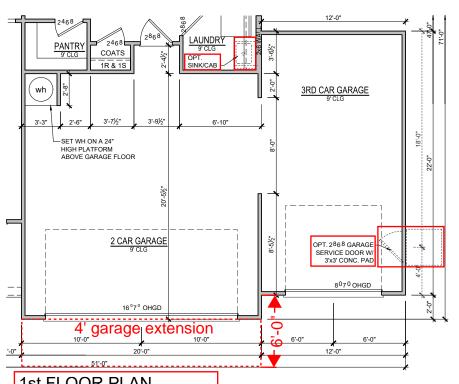
1/8"=1'-0"

FIRST

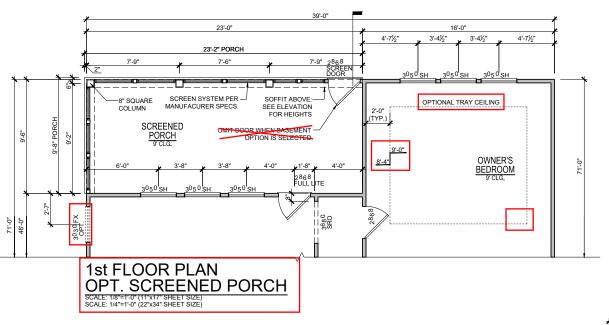
A-1.0B

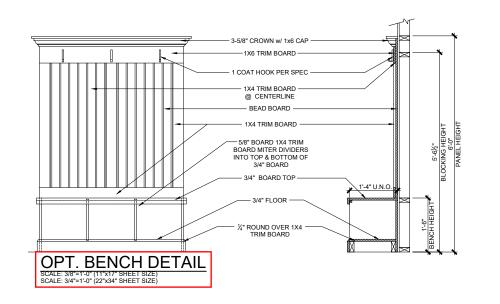
BIRCH

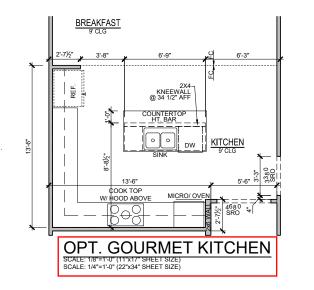


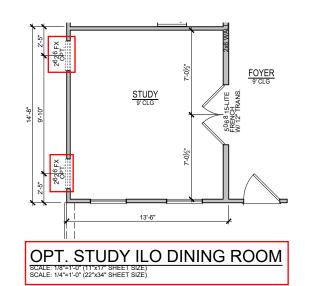


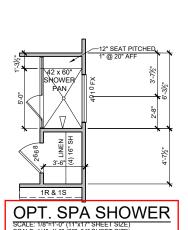
1st FLOOR PLAN OPT. 3RD CAR GARAGE SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

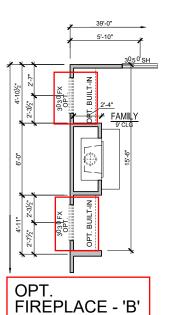












SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

MAIN STREET

1/8"=1'-0"

PLAN

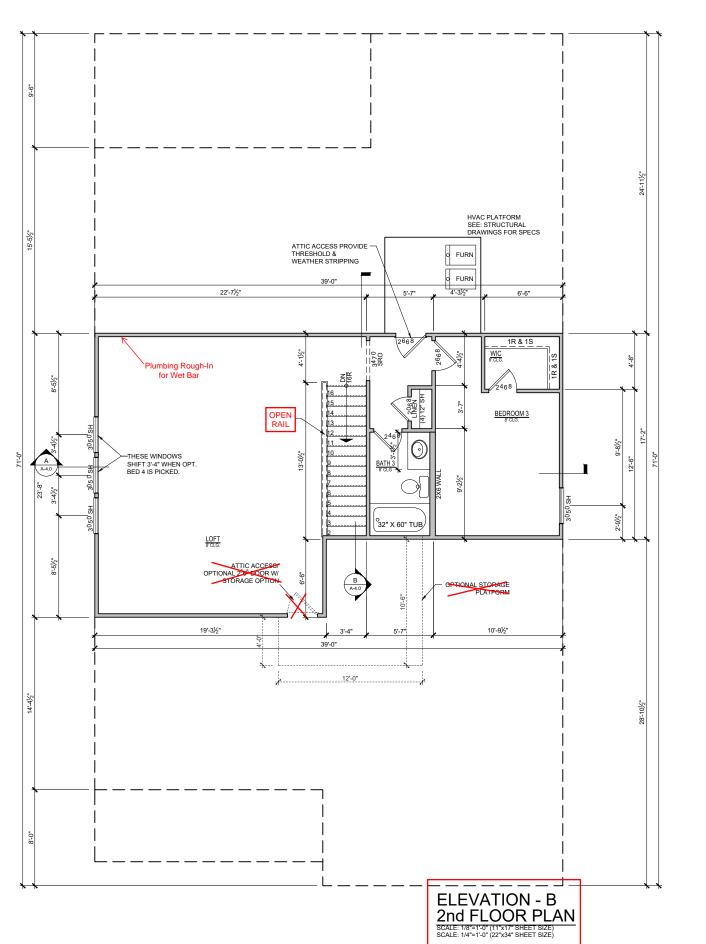
FIRST

A-1.1B

RELEASE DATE 12-1-2023 PROJECT NUMBER

BIRCH II

_	
42 × 60"	12" SEAT PITCHED, 1" @ 20" AFF
SHOWER PAN	31-7½"
	2-8"
266.8 3;-e, LINEN (4) 16" SH	4.7%"
1R & 1S	
OPT. SPA SCALE: 1/8"=1"-0" (11"x1 SCALE: 1/4"=1"-0" (22"x3	A SHOWER



02/21/2020 PROTOTYPE REVISIONS
3/6/2020 ADDED BASEMENT FOUNDATIONS
12/02/2021 ADDED STUDY OPTION, CHANGED BATI
com FILE PLUMBING WALL TO 2X6 REMOVED
FIREPLACE OPTION A
07/11/2022 REMOVED 2 LEDS FROM OPT. STUDY
11/16/2023 ADDED 12" TRANS. ON ELENS DEF

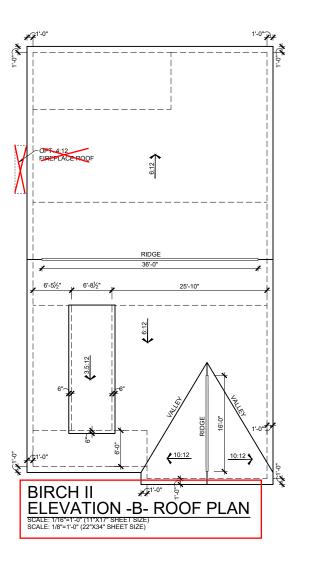


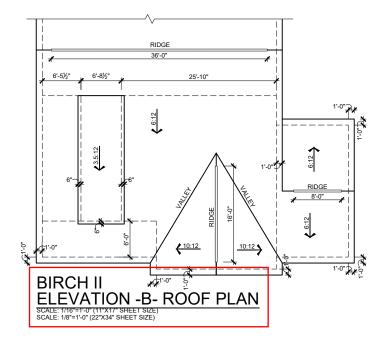


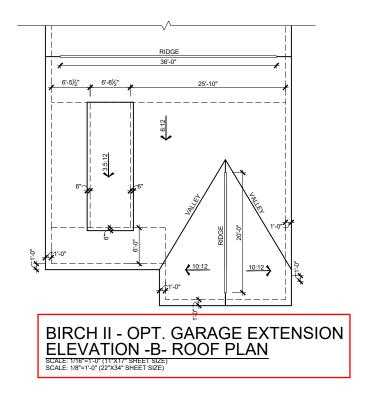
ZCH =	12-1-2023	1/
NG TITLE	PROJECT NUMBER	8"
OND FLOOR PLAN	         	=1'
N DESCRIPTION	OPTION NO.	-0
VATION – B		"

SECOND FILE
SECOND FILE
OPTION DESCRIPTIO

A-2.0B







#### ATTIC VENT CALCULATIONS

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 BY THE BUILDING OFFICIAL

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

2731 SQ FT UNDER ROOF ATTIC
300 SQ FT / 1 SQ FT = 9.10 SQ FT VENTILATION

RIDGE VENTS 18 SQ IN = (.125 SQ FT) VENTED SOFFIT 9 SQ IN = (.0625 SQ FT) BOX VENTS 50 SQ IN = (.347 SQ FT) INTAKE VENTS 36 SQ IN = (.25 SQ FT)

RIDGE VENT

4.552 SQ FT = 36.4 FEET OF RIDGE VENT

0.125 SQ FT

SOFFIT VENT

4.552 SQ FT = 72.8 FEET OF VENTED SOFI

0.0625 SQ FT

= 72.8 FEET OF VENTED SOFFIT

RIDGE VENT PROVIDED VENTED SOFFIT PROVIDED # BOX VENTS @ RIDGE # INTAKE VENTS @ SOFFIT

#### ATTIC VENT CALCULATIONS

#### 3RD CAR GARAGE

2995 SQ FT UNDER ROOF ATTIC 300 SQ FT / 1 SQ FT = 9.98 SQ FT VENTILATION

RIDGE VENTS 18 SQ IN = (.125 SQ FT) VENTED SOFFIT 9 SQ IN = (.0625 SQ FT) BOX VENTS 50 SQ IN = (.347 SQ FT) INTAKE VENTS 36 SQ IN = (.25 SQ FT)

RIDGE VENT

 $\begin{array}{c|cccc} \textbf{3.0FFI} & \textbf{VENI} \\ \hline \textbf{4.992} & \textbf{SQ FT} \\ \hline \textbf{0.0625} & \textbf{SQ FT} \end{array} = & 79.9 & \textbf{FEET OF VENTED SOFFIT} \\ \end{array}$ 

RIDGE VENT PROVIDED VENTED SOFFIT PROVIDED # BOX VENTS @ RIDGE # INTAKE VENTS @ SOFFIT

88 FEET
-7.0 COUNT
-2.0 COUNT
(NEGATIVE = 0)

#### ATTIC VENT CALCULATIONS

#### 4' GARAGE EXTENSION

2811 SQ FT UNDER ROOF ATTIC

300 SQ FT / 1 SQ FT = 9.37 SQ FT VENTILATION

RIDGE VENTS 18 SQ IN = (.125 SQ FT) VENTED SOFFIT 9 SQ IN = (.0625 SQ FT) BOX VENTS 50 SQ IN = (.347 SQ FT) INTAKE VENTS 36 SQ IN = (.25 SQ FT)

9.37 SQ FT x 50% 4.685 SQ FT OF RIDGE 9.37 SQ FT x 50% 4.685 SQ FT OF SOFFIT

RIDGE VENT

4.685 SQ FT = 37.5 FEET OF RIDGE VENT

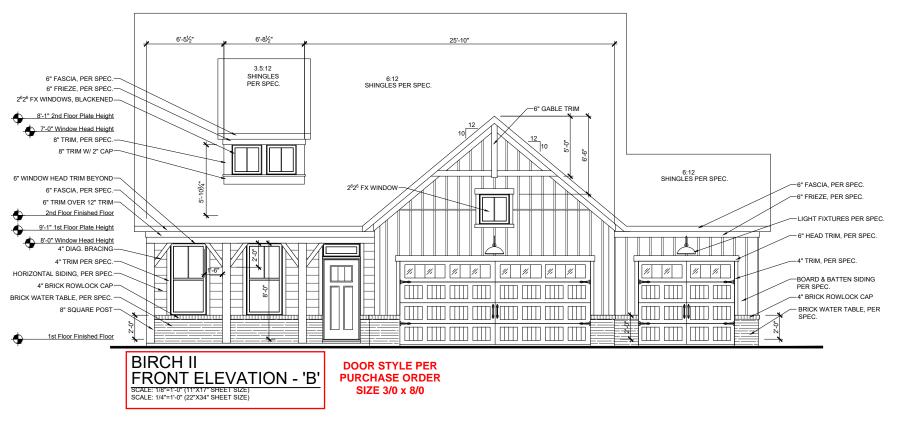
0.125 SQ FT

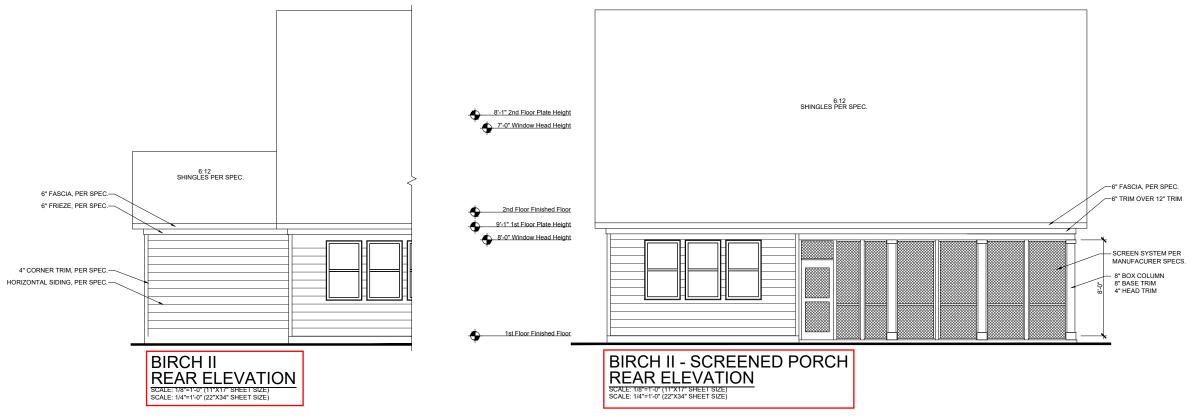
| 0.125 | 3Q FT | SOFFIT VENT | 4.685 | SQ FT | = 75.0 | FEET OF VENTED SOFFIT | 0.0625 | SQ FT |

RIDGE VENT PROVIDED VENTED SOFFIT PROVIDED # BOX VENTS @ RIDGE # INTAKE VENTS @ SOFFIT 56 FEET 72 FEET -6.4 COUNT

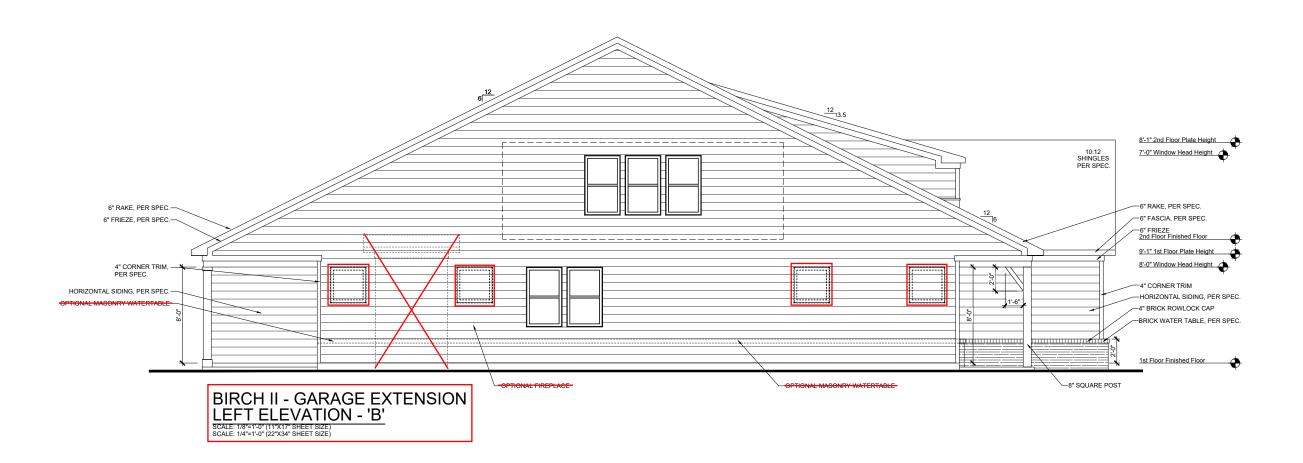
1/8"=1'-0' RELEASE PLAN Š ELEV/ BIRCH

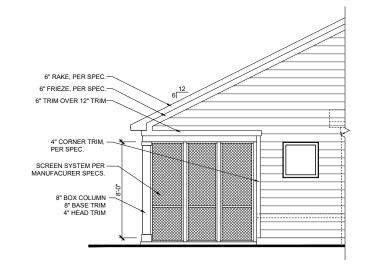
A-3.0B





1/8"=1'-0" RELEASE PLAN ROOF ELEV/ BIRCH A-3.1B





BIRCH II - SCREENED PORCH LEFT ELEVATION SCALE: 178°=1-0" (1173/17 SHEET SIZE) SCALE: 174°=1-0" (22°23/4" SHEET SIZE) PROTOTYPE REVISIONS
ADDED BASEMENT FOUNDATIONS
ADDED STUDY OPTION, CHANGED BATHPLUMBING WALL TO 2X6 REMOVED
REREPACE OPTION A
REMOVED 2 LEDS FROM OPT. STUDY

90.21/2020 PRO
02/21/2020 PRO
50.LIC 3/6/2020 ADDI
12/02/2021 ADDI
16.135 FIRE

MAIN STREET
Main Street Designs of Georgia, LLC
www.MainStreet Designs of Georgia
Olymphoreta, Georgia
Ol

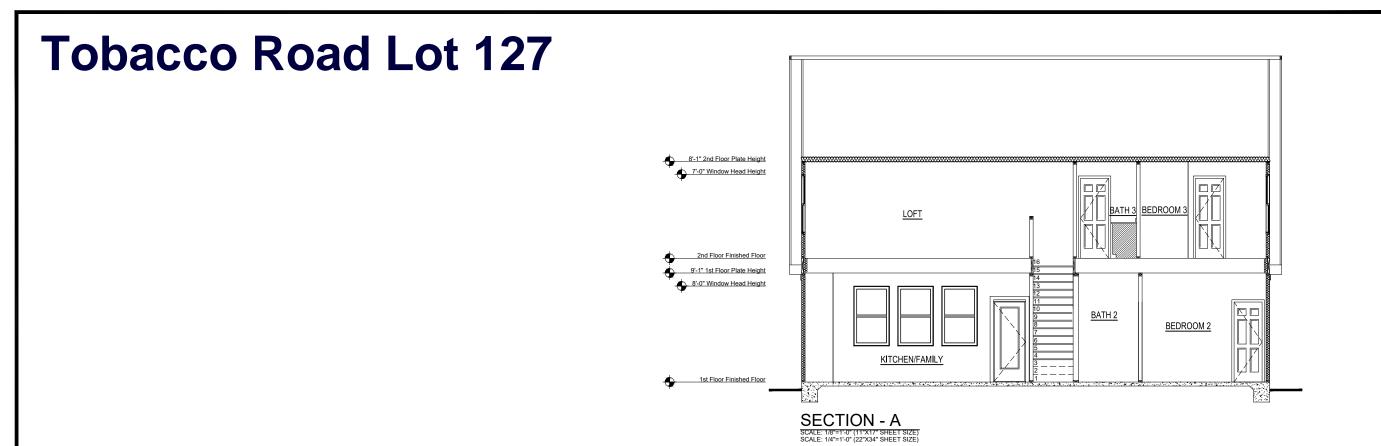
JAVIDSON HOMES

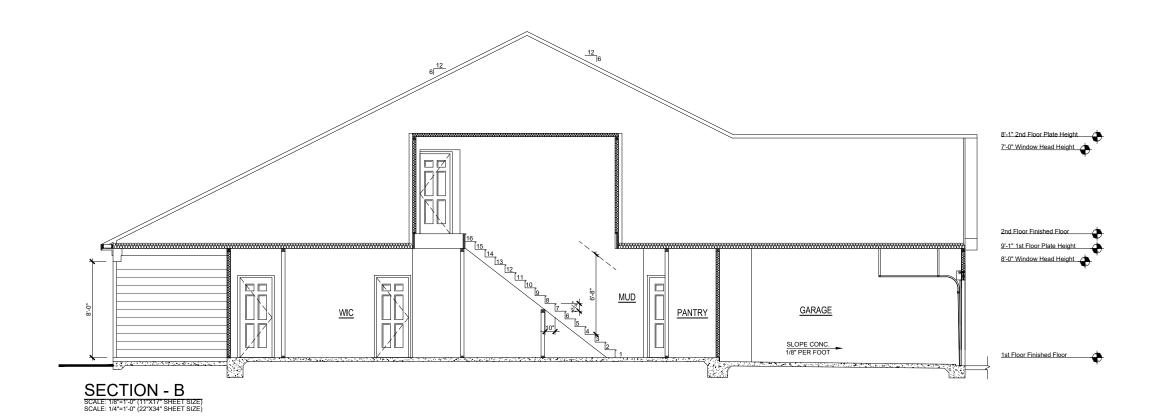
BIRCH II

DRAWING TITE
SIDE ELEVATIONS
OPTION DESCRIPTION

A-3.2B

## **Tobacco Road Lot 127** 8'-1" 2nd Floor Plate Height MAINZSTREET 7'-0" Window Head Height 6" RAKE, PER SPEC .-6" FASCIA, PER SPEC.— 6" FRIEZE, PER SPEC.— 2nd Floor Finished Floor 8'-0" Window Head Height BOARD & BATTEN SIDING -PER SPEC. 4" CORNER TRIM. PER SPEC.-HORIZONTAL SIDING, PER SPEC. 4" BRICK ROWLOCK CAP BRICK WATER TABLE, PER SPEC. └\_OPT. 868**b**OOR **BIRCH II RIGHT ELEVATION - 'B'** SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE) 1/8"=1'-0" 8'-1" 2nd Floor Plate Height 7'-0" Window Head Height 6" RAKE, PER SPEC.-6" FRIEZE, PER SPEC.-2nd Floor Finished Floor 9'-1" 1st Floor Plate Height 8'-0" Window Head Height ELEVATIONS 4" CORNER TRIM, PER SPEC.-HORIZONTAL SIDING, PER SPEC. 4" BRICK ROWLOCK CAP BIRCH II BRICK WATER TABLE, PER SPEC. 1st Floor Finished Floor SIDE OPT. 2<sup>8</sup>6<sup>8</sup> DOOR BIRCH II - GARAGE EXTENSION RIGHT ELEVATION - 'B' A-3.3B





REVISION NUMBER
02/21/2020 PROTOTYPE REVISIONS
3/6/2020 ADDED BASEMENT FOUNDATIONS
12/02/2021 ADDED STUDY OPTION, CHANGED BATH 3
PLUMBING WALL TO 2X6 REMOVED
FIREPLACE OPTION A
07/11/2022 REMOVED 2 LEDS FROM OPT. STUDY
11/16/2023 ADDED 12" TRANS. ON ELEVS. D-F

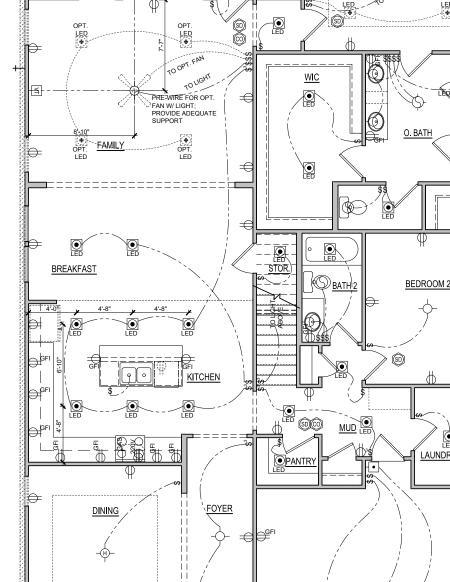




12-1-2023		KELEASE DAIE
ECTIONS	=	12-1-2023
ECTIONS     =		PROJECT NUMBER
OPTION NO.		         
	IPTION	OPTION NO.

BUILDING
OPTION DESCRIP

A-4.0B



SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

**SEE PAGE E-1.1B FOR** 

**OPTIONS:** 

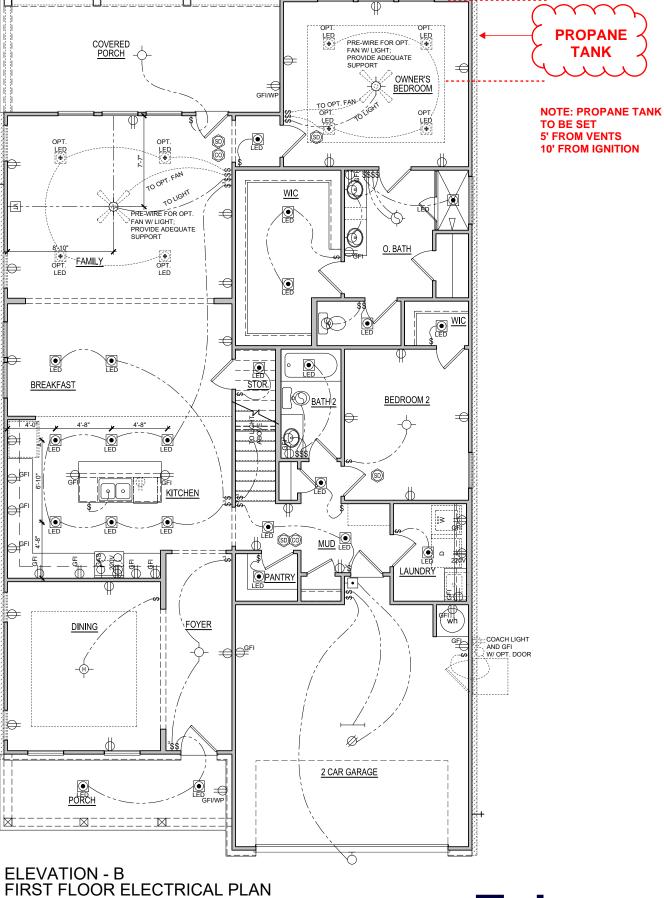
**SCREENED PORCH 3RD CAR GARAGE** 

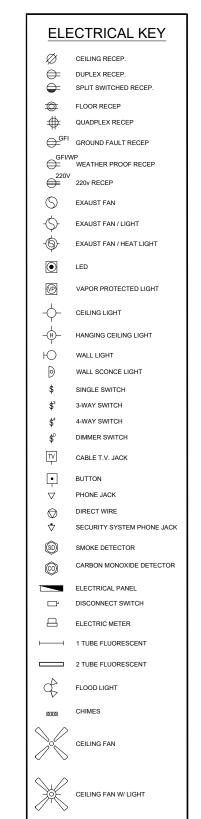
4' GARAGE EXTENSION

**GOURMET KITCHEN** 

**FIREPLACE STUDY ILO DINING** 

**SPA SHOWER** 



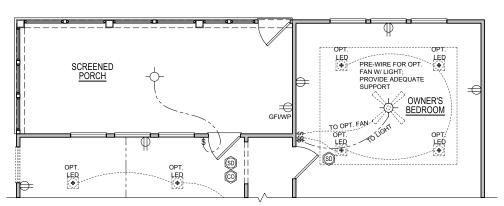


**Tobacco Road Lot 127** 

MAINZETREET 1/8"=1'-0" RELEASE 12-1-BIRCH

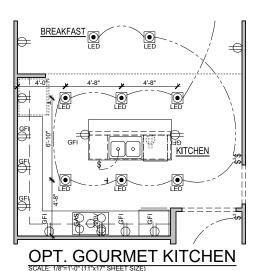
1ST

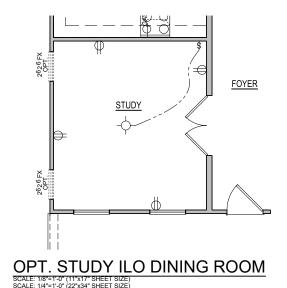
E-1.0B

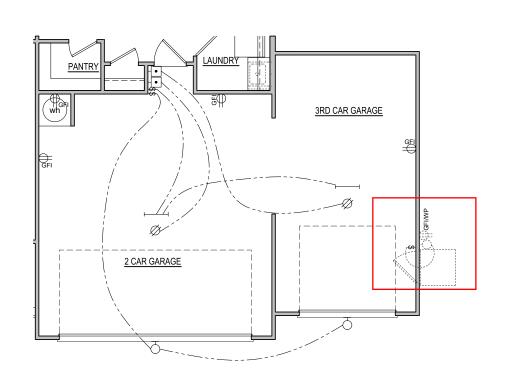


ELECTRICAL PLAN

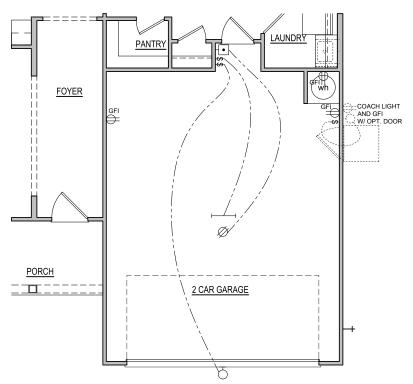
1st OPT. SCREENED PORCH
SCALE: 188\*=109\*(1974)\*\* SHEET SIZE)
SCALE: 188\*=109\*(1974)\*\* SHEET SIZE)





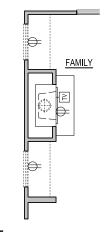


OPT. THREE CAR GARAGE
1st FLOOR ELECTRICAL PLAN
SCALE: 178°=1'0" (11"x11" SHEET SIZE)
SCALE: 178°=1'0" (22"x34" SHEET SIZE)



OPT. 4' GARAGE EXTENSION 1st FLOOR ELECTRICAL PLAN SCALE: 1/8"=1-0" (12"x34" SHEET SIZE) SCALE: 1/4"=1-0" (22"x34" SHEET SIZE)





OP1.
FIREPLACE - 'B'
SCALE: 1/8"=1"-0" (11"x1/" SHEET SIZE)
SCALE: 1/4"=1"-0" (22"x34" SHEET SIZE)

ELI	ECTRICAL KEY
Ø	CEILING RECEP.

DUPLEX RECEP.

SPLIT SWITCHED RECEP.

FLOOR RECEP

GFI GROUND FAULT RECEP

WEATHER PROOF REC

S EXAUST FAN

EXAUST FAN / LIGHT

EXAUST FAN / HEAT LIGHT

**●** LED

VAPOR PROTECTED LIGHT

↑ ↓ HANGING CEILING LIGHT

WALL LIGHT

WALL SCONCE LIGHT

\$ SINGLE SWITCH

\$<sup>3</sup> 3-WAY SWITCH

\$" 4-WAY SWITCH

CABLE T.V. JACK

PHONE JACK

DIRECT WIRE

SECURITY SYSTEM PHONE JACK

SD SMOKE DETECTOR

CARBON MONOXIDE DETECTOR

ELECTRICAL PANEL

DISCONNECT SWITCH

ELECTRIC METER

⊢ 1 TUBE FLUORESCENT

FLOOD LIGHT

CHIMES

CEILING FAN W/ LIGHT

**Tobacco Road Lot 127** 

MAINZETREET 1/8"=1'-0"

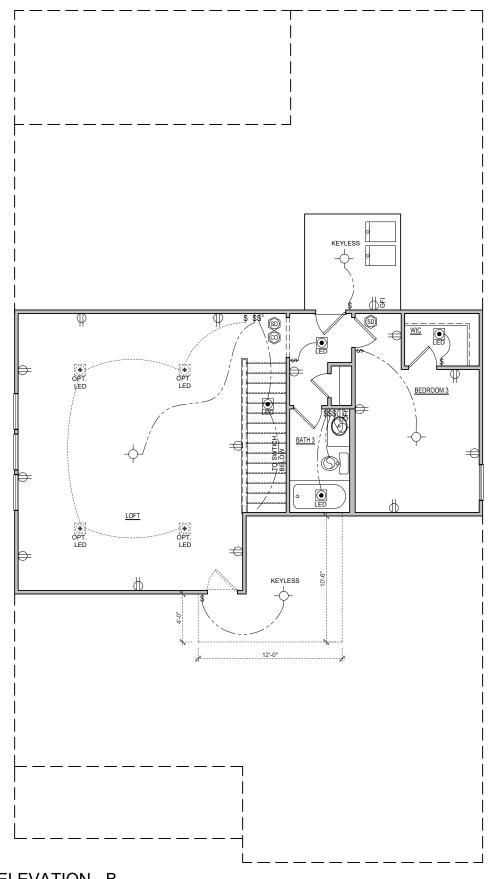
EC. PLAN ------ LOPTION NO. 0

BIRCH II

DRAWING TITLE

1ST FLOOR ELEC.
OPTION DESCRIPTION

E-1.1B



ELEVATION - B
SECOND FLOOR ELECTRICAL PLAN
SCALE: 1/8"=1"-0" (22"x34" SHEET SIZE)
SCALE: 1/4"=1"-0" (22"x34" SHEET SIZE)

**Tobacco Road Lot 127** 

MODEL

BIRCH II

DRAWING TITLE

SECOND FLO

OPTION DESCRIPTION

ELEVATION —

SHEET NO. **E-2.0B** 



1900 AM DRIVE, SUITE 201, QUAKERTOWN, PA 18951 www.kse-eng.com (215) 804-4449

# THE BIRCH II ABC

# RALEIGH, NORTH CAROLINA

THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. THIS COORDINATION IS NOT THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SER). SHOULD ANY DISCREPANCIES BECOME APPARENT, THE CONTRACTOR SHALL NOTIFY KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS. IT IS THE INTENT OF THE ENGINEER LISTED ON THESE DOCUMENTS THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE BUILDER AND ALL SUBCONTRACTORS ARE REQUIRED TO REVIEW ALL OF THE INFORMATION CONTAINED IN THESE DOCUMENTS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ANY PLAN ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNDETECTED AND NOT REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. ALL CONSTRUCTION MUST BE IN ACCORDANCE TO THE INFORMATION FOUND IN THESE DOCUMENTS.

## DESIGN SPECIFICATIONS:

DESIGN BUILDING CODE (REFERRED TO HEREIN AS 'THE BUILDING CODE'):

• 2018 NORTH CAROLINA RESIDENTIAL CODE. WALL BRACING PER INTERNATIONAL RESIDENTIAL CODE 2015 EDITION.

#### DESIGN LIVE LOADS:

■ ROOF = 20 PSF (LOAD DURATION FACTOR=1.25)

- UNINHABITABLE ATTICS WITH LIMITED STORAGE = 20 PSF (WHERE SPECIFIED ON PLANS)
- HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS = 30 PSF
- FLOOR = 40 PSF
- FLOOR (SLEEPING AREAS) = 30 PSF
- DECK/BALCONY = 40 PSF
- STAIRS = 40 PSF

#### DESIGN DEAD LOADS:

- ROOF TRUSS = 17 PSF (TC=7, BC=10)
- FLOOR TRUSS = 15 PSF (TC=10, BC=5)
- FLOOR JOIST = 10 PSF
- STANDARD BRICK = 40 PSF
- QUEEN ANNE BRICK = 25 PSF

\*NOTE: STRUCTURAL FRAMING HAS NOT BEEN DESIGNED FOR TILE, GRANITE, MARBLE OR OTHER MATERIALS HEAVIER THAN THE ABOVE LOADING UNLESS SPECIFICALLY NOTED ON PLANS.\*.

#### DESIGN WIND LOADS:

- ULTIMATE WIND SPEED = 120 MPH
- EXPOSURE CATEGORY = B

ASSUMED SOIL BEARING CAPACITY = 2000 PSF

ASSUMED LATERAL SOIL PRESSURE = 45 PCF

FROST DEPTH = 12" MINIMUM

SEISMIC DESIGN CATEGORY = B

ENGINEERED LUMBER SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:

- TJI 210 SERIES (SERIES AND SPACING PER PLANS)
- LSL: E=1,550,000 PSI,  $F_B$ =2,325 PSI,  $F_V$ =310 PSI,  $F_C$ =900 PSI • LVL: E=2,000,000 PSI,  $F_B$ =2,600 PSI,  $F_V$ =285 PSI,  $F_C$ =750 PSI
- PSL: E=2,000,000 PSI, F<sub>B</sub>=2,900 PSI, F<sub>V</sub>=290 PSI, F<sub>C</sub>=625 PSI

THIS PLAN HAS BEEN DESIGNED PER THE 2018 EDITION OF THE NC RESIDENTIAL CODE. WHERE FRAMING, FOUNDATION, OR OTHER STRUCTURAL ITEMS DO NOT COMPLY WITH TH PRESCRIPTIVE METHODS OF THE CODE, THOSE ITEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE PER NCRC R301.1.3.





Birch II Model – RH tions 'A', 'B' & 'C' o 120 M.P.H.

Project #: 214-23005

Designed By: AAM
Checked By: KRK

Issue Date: 12/6/23

Re-Issue: 9/27/24

Scale: 1/8"=1"-0" @ 11x17
1/4"=1"-0" @ 22x34

S-0

#### GENERAL STRUCTURAL NOTES:

- 1. THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE STRUCTURAL ENGINEER OF RECORD (SER) FOR THIS PROJECT. THE SER BEARS THE RESPONSIBILITY OF THE PRIMARY STRUCTURAL ELEMENTS AND THE PERFORMANCE OF THIS STRUCTURE NO OTHER PARTY MAY REVISE, ALTER, OR DELETE ANY STRUCTURAL ASPECTS OF THESE CONSTRUCTION DOCUMENTS WITHOUT WRITTEN CONSENT OF KSE ENGINEERING, P.C. OR THE SER. FOR THE PURPOSES OF THESE CONSTRUCTION DOCUMENTS, THE SER AND KSE ENGINEERING SHALL BE CONSIDERED THE SAME ENTITY.
- THE STRUCTURE IS ONLY STABLE IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION TO STABILIZE THE STRUCTURE.
- 3. THE SER IS NOT RESPONSIBLE FOR CONSTRUCTION SEQUENCES, METHODS, OR TECHNIQUES IN CONNECTION WITH THE CONSTRUCTION OF THIS STRUCTURE. THE SER WILL NOT BE HELD RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CONFORM TO THE CONTRACT DOCUMENTS, SHOULD ANY NON-CONFORMITIES OCCUR.
- 4. THE SER DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF GEOMETRY. THE SER ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. THE SER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
- 5. ANY STRUCTURAL ELEMENTS OR DETAILS NOT FULLY DEVELOPED ON THE CONSTRUCTION DRAWINGS SHALL BE COMPLETED UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THESE SHOP DRAWINGS SHALL BE SUBMITTED TO KSE ENGINEERING FOR REVIEW BEFORE ANY CONSTRUCTION BEGINS. THE SHOP DRAWINGS WILL BE REVIEWED FOR OVERALL COMPLIANCE AS IT RELATES TO THE STRUCTURAL DESIGN OF THIS PROJECT. VERIFICATION OF THE SHOP DRAWINGS FOR DIMENSIONS, OR FOR ACTUAL FIELD CONDITIONS, IS NOT THE RESPONSIBILITY OF THE SER OR KSE ENGINEERING, P.C.
- 6. VERIFICATION OF ASSUMED FIELD CONDITIONS IS NOT THE RESPONSIBILITY OF THE SER. THE CONTRACTOR SHALL VERIFY THE FIELD CONDITIONS FOR ACCURACY AND REPORT ANY DISCREPANCIES TO KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS.
- 7. THE SER IS NOT RESPONSIBLE FOR ANY SECONDARY STRUCTURAL ELEMENTS OR NON-STRUCTURAL ELEMENTS, EXCEPT FOR THE ELEMENTS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS.
- 8. THIS STRUCTURE AND ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE BUILDING CODE AND ANY LOCAL CODES OR RESTRICTIONS.
- 9. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. ALL DIMENSIONS ARE TO FACE OF STUD OR TO FACE OF FRAMING UNLESS OTHERWISE NOTED.
- 10. PROVIDE MOISTURE PROTECTION AND FLASHING PER ARCHITECTURAL DETAILS.

- 1. FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE BUILDING CODE
- 2. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION. THE BUILDER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM THE GEOTECHNICAL ENGINEER ON THE STUDY OF THE PROPOSED SITE TO THE DESIGNER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
- . MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN THE BUILDING CODE.
- 4. THE SER HAS NOT PERFORMED A SUBSURFACE INVESTIGATION. VERIFICATION OF THE ASSUMED VALUE IS THE RESPONSIBILITY OF THE OWNER OR THE CONTRACTOR. SHOULD ANY ADVERSE SOIL CONDITION BE ENCOUNTERED, THE SER MUST BE CONTACTED BEFORE PROCEEDING.
- 5. THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION IN WHICH THE STRUCTURE IS TO BE CONSTRUCTED, BUT NOT LESS THAN A MINIMUM OF 12" BELOW GRADE. ALL FOOTINGS TO HAVE A MINIMUM PROJECTION OF 2" ON EACH SIDE OF FOUNDATION WALLS. MAXIMUM FOOTING PROJECTION SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.
- 6. WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM of 6'-0" o.c. install minimum 2 anchor bolts per section, 12" MASONRY MAXIMUM FROM CORNERS. 1/2" DIAMETER x 8" LONG SIMPSON TITEN HD OR USP SCREW-BOLT+ SCREWS MAY BE SUBSTITUTED ON A 1 FOR 1 BASIS.
- 7. ANY FILL SHALL BE PLACED UNDER THE DIRECTION OR RECOMMENDATION OF A LICENSED PROFESSIONAL ENGINEER. THE RESULTING SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY.
- 8. EXCAVATIONS OF FOOTINGS SHALL BE LINED TEMPORARILY WITH A 6 MIL POLYETHYLENE MEMBRANE IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HOURS OF EXCAVATION.
- 9. NO CONCRETE SHALL BE PLACED AGAINST ANY SUBGRADE CONTAINING WATER, ICE, FROST, OR LOOSE MATERIAL. 10. PROVIDE FOUNDATION WATERPROOFING AND DRAIN WITH POSITIVE
- SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS (SEE ARCHITECTURAL PLANS AND DETAILS). 11. NONE OF THE FOUNDATION DESIGNS IN THESE DOCUMENTS ARE SUITABLE
- FOR INSTALLATION IN SHRINK/SWELL CONDITIONS. REFER TO GEOTECHNICAL ENGINEER FOR APPROPRIATE DESIGN.
- 12. LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. THE GRADE SHALL FALL A MINIMUM OF 6 INCHES WITHIN THE FIRST TEN FEET.
- 13. CRAWL SPACE TO BE GRADED LEVEL AND CLEAR OF ALL DEBRIS. 14. PROVIDE MINIMUM 6 MIL APPROVED VAPOR BARRIER. ALL JOINTS TO BE LAPPED MINIMUM 12" AND SEALED.

#### CONCRETE & REINFORCING

- 1. CONCRETE DESIGN BASED ON ACI 318 AND ACI 318.1 OR ACI 332. CONCRETE SHALL HAVE A NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (f'c) = 3,000 PSI MINIMUM AT 28 DAYS PER CODE (VARIES W/ WEATHER), UNLESS OTHERWISE NOTED ON THE PLAN.
- CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 318: "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 301: "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
- AIR ENTRAINED CONCRETE MUST BE USED FOR ALL STRUCTURAL ELEMENTS EXPOSED TO FREEZE/THAW CYCLES AND DEICING CHEMICALS. AIR ENTRAINMENT AMOUNTS (IN PERCENT) SHALL BE WITHIN -1% TO +2% OF 5% FOR FOOTINGS AND EXTERIOR SLABS.
- NO ADMIXTURES SHALL BE ADDED TO ANY STRUCTURAL CONCRETE WITHOUT WRITTEN PERMISSION OF THE SER. WATER ADDED TO CONCRETE ON SITE SHALL NOT EXCEED THAT ALLOWED BY THE MIX
- 5. CONCRETE SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 302.1R: "GUIDE FOR CONCRETE SLAB AND SLAB CONSTRUCTION"
- 6. CONTROL OR SAW CUT JOINTS (CUT OR TOOLED) SHALL BE SPACED IN INTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 15'-0" O.C. AND IN EXTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 10'-0" UNLESS OTHERWISE NOTED. CARE SHALL BE TAKEN TO AVOID RE-ENTRANT CORNERS.
- CONTROL OR SAW CUT JOINTS SHALL BE PRODUCED USING CONVENTIONAL CUT OR TOOLED PROCESSES WITHIN 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED.
- 8. ALL WELDED WIRE FABRIC (W.W.F.) FOR CONCRETE SLABS—ON—GRADE SHALL BE PLACED AT MID-DEPTH OF SLAB. THE W.W.F. SHALL BE SECURELY SUPPORTED DURING THE CONCRETE POUR. FIBROUS CONCRETE REINFORCEMENT, OR POLYPROPYLENE FIBERS MAY BE USED IN LIEU OF W.W.F. APPLICATION OF POLYPROPYLENE FIBERS PER CUBIC YARD OF CONCRETE SHALL BE PER MANUFACTURER AND COMPLY WITH ASTM C1116, ANY LOCAL BUILDING CODE REQUIREMENTS AND SHALL MEET OR EXCEED CURRENT INDUSTRY STANDARD
- POLYPROPYLENE REINFORCING TO BE 100% VIRGIN, CONTAINING NO REPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENT
- 10. STEEL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.
- 11. DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315: "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES".
- 12. HORIZONTAL FOOTING AND WALL REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90° BENDS, OR CORNER BARS WITH
- THE SAME SIZE/SPACING AS THE HORIZONTAL REINFORCEMENT. 13. PROVIDE REINFORCEMENT LAP AS NOTED BELOW, UNLESS NOTED
- OTHERWISE: #4 BARS - 30" LENGTH
- #5 BARS 38" LENGTH
- #6 BARS 45" LENGTH
- 14. WHERE REINFORCING DOWELS ARE REQUIRED, THEY SHALL BE EQUIVALENT IN SIZE AND SPACING TO THE VERTICAL REINFORCEMENT. THE DOWEL SHALL EXTEND 48 BAR DIAMETERS VERTICALLY AND 20 BAR DIAMETERS INTO THE FOOTING. SEE KSE FOUNDATION DETAILS.
- 15. WHERE FOOTING BOTTOMS ARE TO BE STEPPED AT SLOPING GRADE CONDITIONS, PROVIDE CONTINUOUS REINFORCING WITH Z BARS (TO MATCH FOOTING REINFORCING) AS REQUIRED.
- 16. BAR SUPPORT ACCESSORIES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, EXCEPT THAT REINFORCING SHALL BE CHAIRED ON THE BOTTOM AND/OR THE SIDES ON BOLSTERS SPACED NOT MORE THAN 4 FEET ON CENTER. NO ROCKS, CMU, CLAY TILE. OR BRICK SHALL BE USED TO SUPPORT REINFORCING.
- 17. FOR GRADE SUPPORTED SLABS, SLAB REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS AND ACCESSORIES AS DESCRIBED IN THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED A MAXIMUM OF 4'-0" O.C. BOTH WAYS IN STRAIGHT LINES ON THE MESH GRID.

- 1. ALL MASONRY SHALL CONFORM TO ASTM C-90, F'm=1500 PSI. ALL BRICK SHALL CONFORM TO ASTM C-216, F'm=1500 PSI. ALL MORTAR SHALL BE TYPE 'S' (TYPE 'M' BELOW GRADE) AND CONFORM TO ASTM C-270. COARSE GROUT SHALL CONFORM TO ASTM C-476 WITH A MAXIMUM AGGREGATE SIZE OF 3/2" AND A MINIMUM COMPRESSIVE STRENGTH OF 2,000
- 2. ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACI 530/ASCE 5/TMS 402 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI 530.1/ ASCE 6/TMS 602.
- THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION. UNFILLED HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.
- 4. EACH CRAWL SPACE PIER SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING AND EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS. PILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
- TOP COURSE OF MASONRY SHALL BE GROUTED SOLID. 6. HORIZONTAL WALL JOINT REINFORCEMENT SHALL BE STANDARD 9 GAGE GALVANIZED LADDER OR TRUSS TYPE SPACED AT 16" O.C., UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- SPLICED WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE 6". LAP WITH STANDARD 'T' AND 'L' SHAPED PIECES AT INTERSECTIONS AND CORNERS.

#### WOOD FRAMING

- 1. SOLID SAWN WOOD FRAMING MEMBERS SHALL CONFORM TO THE SPECIFICATIONS LISTED IN THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION": (NDS). UNLESS OTHERWISE NOTED, ALL WOOD FRAMING MEMBERS ARE DESIGNED TO
- SPRUCE-PINE-FIR (SPF) WITH THE FOLLOWING MINIMUM DESIGN  $E=1,400,000 \text{ PSI}, F_b=875 \text{ PSI}, F_v=135 \text{ PSI}$
- 1.1. FRAMING: SPF #2. 1.2. PLATES: SPF #2.
- 1.3. STUDS: SPF STUD GRADE.
- 2. WALL STUD SPACING, (MAXIMUM 10' NOMINAL PLATE HEIGHT): 1 & 2 STORY EXTERIOR AND INTERIOR BEARING:
- 2x4 @ 16" O.C. OR 2x6 @ 24" O.C., U.N.O. BOTTOM OF 3 STORIES EXTERIOR AND INTERIOR BEARING: 2x6 @ 16" O.C., U.N.O.

#### INTERIOR NON-BEARING: 2x @ 24" O.C., U.N.O.

- 3. ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE TREATED SOUTHERN YELLOW PINE #2 OR
- 4. ANCHOR SILL PLATES IN ACCORDANCE W/ GENERAL STRUCTURAL NOTES. 5. ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY
- BE SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION. 6. NAILS SHALL BE COMMON WIRE NAILS UNLESS OTHERWISE NOTED.
- 7. BOLT HOLES AND LEAD HOLES FOR LAG SCREWS SHALL BE IN ACCORDANCE WITH NDS SPECIFICATIONS.
- 8. INDIVIDUAL STUDS FORMING A COLUMN SHALL BE ATTACHED WITH (2) ROWS 10d NAILS @ 6" O.C. STAGGERED. THE STUD COLUMN SHALL BE FULLY BLOCKED AT ALL FLOOR LEVELS TO ENSURE PROPER LOAD TRANSFER. WALL SHEATHING SHALL BE NAILED TO EDGE OF EACH STUD.
- 9. FACE NAIL ALL MULTI-PLY BEAMS AND HEADERS WITH (2) ROWS 16d COMMON NAILS @ 16" O.C., STAGGERED, OR PER MANUFACTURER'S SPECIFICATIONS FOR ENGINEERED LUMBER. APPLY NAILING FROM BOTH FACES FOR (3) OR MORE PLIES.
- 10. FASTEN 4-PLY BEAMS WITH (1)  $\frac{1}{2}$ " DIAMETER THROUGH BOLT W/ NUTS AND WASHERS AT 12" O.C. STAGGERED TOP AND BOTTOM, 1½" MINIMUM EDGE DISTANCE. (UNLESS OTHERWISE NOTED)
- 11. ALL BEAMS AND HEADERS SHALL HAVE (1)2x JACK STUD & (1)2x KING STUD UNLESS OTHERWISE NOTED. THE NUMBER OF STUDS INDICATED ON PLANS ARE THE TOTAL NUMBER OF JACK STUDS REQUIRED, UNLESS OTHERWISE NOTED.
- 12. PROVIDE KING STUDS AT EACH END OF HEADERS AS NOTED BELOW. (1) STUD UP TO 6' OPENING (2) STUDS UP TO 8' OPENING (3) STUDS UP TO 9' OPENING
- 13. ALL BEAMS TO BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED WITH A MINIMUM OF TWO STUDS, UNLESS OTHERWISE NOTED. ALL BEAM SPLICES SHALL OCCUR OVER SUPPORTS.
- 14. SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.
- 15. ALL LUMBER SPECIFIED ON DRAWINGS IS INTENDED FOR DRY USE ONLY (MOISTURE CONTENT <19%) UNLESS OTHERWISE NOTED
- 16. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS.
- 17. ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIAMETER SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIAMETER FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HSS2 OR USP STS1 STUD SHOES, TYPICAL, UNLESS OTHERWISE NOTED.
- 18. BEARING WALLS SHALL BE SHEATHED ON NOT LESS THAN ONE SIDE WITH OSB OR GYPSUM BOARD. BRIDGING SHALL BE INSTALLED NOT GREATER THAN 4 FEET APART MEASURED VERTICALLY FROM EITHER END OF THE STUD IN LIEU OF SHEATHING.
- 19. DIAGONAL BRACING SHALL BE INSTALLED AT EACH END OF BASEMENT BEARING WALLS AND NOT MORE THAN 20' ON CENTER.

## EXTERIOR WOOD FRAMED DECKS:

- DECKS ARE TO BE FRAMED IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND AS REFERENCED ON THE STRUCTURAL PLANS, EITHER THROUGH CODE REFERENCES OR CONSTRUCTION DETAILS. 2. PRESERVATIVE TREATED WOOD FRAMING TO BE SOUTHERN YELLOW PINE #2 OR BETTER.
- 3. GUARD RAILS REQUIRED AT DECKS. DESIGN BY OTHERS TO MEET MINIMUM CODE REQUIREMENTS.
- 4. PROVIDE DECK LATERAL LOAD AND BRACING CONNECTIONS PER BUILDING

## RAFTER FRAMED ROOF CONSTRUCTION:

- PROVIDE 2x4x4'-0" RAFTER TIES AT 48" O.C. 2. RAFTERS SHALL BE SUPPORTED BY PURLINS AND PURLIN BRACES AS SHOWN ON THE PLAN. PURLIN BRACES SHALL NOT BEAR ON ANY CEILING JOIST, STRONGBACK OR HEADER UNLESS SPECIFICALLY SHOWN ON PLAN. RAFTERS MAY BE SPLICED AT PURLIN LOCATIONS.
- 3. CEILING JOISTS SHALL HAVE LATERAL SUPPORT W/ 1x4 FLAT BRACING ON TOP EDGE OF JOIST AT LOOSE JOIST ENDS (WHERE JOISTS NOT FASTENED TO RAFTERS) OR FULL DEPTH BLOCKING. FASTEN END OF BRACING TO RAFTER OR GABLE END FRAMING.

4. FASTEN RAFTER AND CEILING JOIST WITH (6) 12d NAILS UNLESS

OTHERWISE NOTED. 5. PROVIDE VERTICAL 2x6 STRONGBACKS AT CEILING JOISTS @ 8'-0" O.C. TIE STRONGBACK ENDS TO GABLE STUDS OR RAFTERS WHERE POSSIBLE. PROVIDE BLOCKING BETWEEN TOP PLATES AND STRONGBACKS. PROVIDE 2x4 FLAT FASTENED TO EACH JOIST WITH (2) 12d NAILS. FASTEN STRONGBACK TO 2x4 FLAT WITH 12d NAILS @ 12" O.C. AND FASTENED TO EACH JOIST WITH (1) 12d TOENAIL.

## WOOD TRUSSES (FLOOR & ROOF)

- 1. THE WOOD TRUSS MANUFACTURER/FABRICATOR IS RESPONSIBLE FOR THE DESIGN OF THE WOOD TRUSSES. SUBMIT SEALED SHOP DRAWINGS AND SUPPORTING CALCULATIONS TO THE SER FOR REVIEW PRIOR TO FABRICATION. THE SER SHALL HAVE A MINIMUM OF (5) DAYS FOR REVIEW. THE REVIEW BY THE SER SHALL BE FOR OVERALL COMPLIANCE OF THE DESIGN DOCUMENTS. THE SER SHALL ASSUME NO RESPONSIBILITY FOR THE CORRECTNESS OF THE STRUCTURAL DESIGN FOR THE WOOD TRUSSES.
- 2. THE WOOD TRUSSES SHALL BE DESIGNED FOR ALL REQUIRED LOADINGS AS SPECIFIED IN THE LOCAL BUILDING CODE, THE ASCE STANDARD "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES." (ASCE 7), AND THE LOADING REQUIREMENTS SHOWN ON THESE SPECIFICATIONS. THE TRUSS DRAWINGS SHALL BE COORDINATED WITH ALL OTHER CONSTRUCTION DOCUMENTS AND PROVISIONS PROVIDED FOR LOADS SHOWN ON THESE DRAWINGS INCLUDING BUT NOT LIMITED TO HVAC EQUIPMENT, PIPING, AND ARCHITECTURAL FIXTURES ATTACHED TO THE TRUSSES.
- 3. THE TRUSSES SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/TPI 1: "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION"
- 4. THE TRUSS MANUFACTURER SHALL PROVIDE ADEQUATE BRACING INFORMATION IN ACCORDANCE WITH "BUILDING COMPONENT SAFETY INFORMATION GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" (BCSI). THIS BRACING, BOTH TEMPORARY AND PERMANENT, SHALL BE SHOWN ON THE SHOP DRAWINGS. ALSO, THE SHOP DRAWINGS SHALL SHOW THE REQUIRED ATTACHMENTS FOR THE TRUSSES.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING TEMPORARY BRACING AND SHORING FOR THE FLOOR AND ROOF TRUSSES AS REQUIRED DURING CONSTRUCTION. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE LATEST BCSI. THE CONTRACTOR SHALL KEEP A
- COPY OF THE BCSI SUMMARY SHEETS ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL PERMANENT TRUSS BRACING SHOWN IN THE STRUCTURAL DRAWINGS AND IN THE TRUSS DESIGNS. ALL CONTINUOUS LATERAL BRACING OF WEBS REQUIRES BRACES. REFER TO BCSI SUMMARY SHEET B3 FOR TYPES OF DIAGONAL BRACES TO PROVIDE AT EACH CONTINUOUS LATERAL BRACE LINE. SUCH DIAGONAL BRACES SHALL NOT BE SPACED MORE THAN 20 FEET O.C. DIAGONAL BRACES SHALL BE FASTENED TO EACH TRUSS WEB WITH A MINIMUM OF TWO 10d FACE NAILS. WHERE CONTINUOUS LATERAL BRACING CANNOT BE INSTALLED, DUE TO A MINIMUM OF THREE ADJACENT TRUSSES NOT BEING IDENTICAL, THE CONTRACTOR SHALL COORDINATE WITH THE TRUSS SPECIALTY ENGINEER/MANUFACTURER TO DETERMINE WHAT TYPE OF ALTERNATE BRACE (I.E., T OR L BRACE, ETC.) IS REQUIRED.
- 7. ANY CHORDS OR TRUSS WEBS SHOWN ON THESE DRAWINGS HAVE BEEN SHOWN AS A REFERENCE ONLY. THE FINAL DESIGN OF THE TRUSSES
- SHALL BE PER THE MANUFACTURER. 8. TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN ON THE SEALED STRUCTURAL DRAWINGS. TRUSS PROFILES TO BE SEALED BY THE TRUSS MANUFACTURER. TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS.
- 9. TRUSS MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTORS FOR ALL TRUSSES
- 10. PROVIDE SIMPSON H2.5A, USP RT7 OR EQUIVALENT AT EACH TRUSS TO TOP PLATE CONNECTION, UNLESS OTHERWISE NOTED.

## WOOD STRUCTURAL PANELS:

- 1. FABRICATION AND PLACEMENT OF STRUCTURAL WOOD SHEATHING SHALL BE IN ACCORDANCE WITH THE APA DESIGN/CONSTRUCTION GUIDE "RESIDENTIAL AND COMMERCIAL," AND ALL OTHER APPLICABLE APA STANDARDS.
- 2. ALL REQUIRED WOOD SHEATHING SHALL BEAR THE MARK OF THE APA.
- 3. WOOD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL BUILDING CODES FOR THE APPROPRIATE STATE AS INDICATED ON THESE DRAWINGS. REFER TO WALL BRACING NOTES IN PLAN SET FOR MORE INFORMATION. EXTERIOR WALLS TO BE FULLY SHEATHED USING  $\frac{7}{6}$ " OSB OR PLYWOOD MINIMUM. AT BRACED WALL PANELS, PROVIDE BLOCKING AT ALL SHEET EDGES NOT FALLING ON STUDS OR PLATES.
- ROOF SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ROOF SHEATHING SHALL BE CONTINUOUS OVER TWO SUPPORTS MINIMUM AND ATTACHED TO ITS SUPPORTING ROOF FRAMING WITH 8d NAILS AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS. SHEATHING SHALL BE APPLIED WITH THE LONG DIRECTION PERPENDICULAR TO FRAMING. SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING. PROVIDE SUITABLE EDGE SUPPORT BY USE OF PLYWOOD CLIPS OR LUMBER BLOCKING UNLESS OTHERWISE NOTED. PANEL END JOINTS SHALL OCCUR OVER FRAMING. ROOF SHEATHING TO BE  $\frac{7}{6}$ " OSB MINIMUM.
- WOOD FLOOR SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ATTACH SHEATHING TO ITS SUPPORTING FRAMING WITH (1) 10d NAIL AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS. SHEATHING SHALL BE APPLIED PERPENDICULAR TO FRAMING. SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING. PROVIDE SUITABLE EDGE SUPPORT BY USE OF T&G PLYWOOD OR LUMBER BLOCKING UNLESS OTHERWISE NOTED. PANEL END JOINTS SHALL OCCUR OVER FRAMING.
- 6. SHEATHING SHALL HAVE A 1/8" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE APA.

## STRUCTURAL FIBERBOARD PANELS:

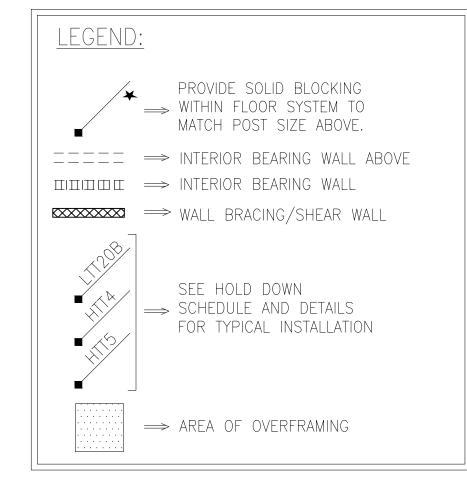
- STRUCTURAL FIBERBOARD SHEATHING SHALL ONLY BE USED WHERE
- SPECIFICALLY NOTED ON THE STRUCTURAL PLANS. 2. FABRICATION AND PLACEMENT OF STRUCTURAL FIBERBOARD SHEATHING SHALL BE IN ACCORDANCE WITH THE APPLICABLE AFA
- FIBERBOARD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL BUILDING CODES FOR THE APPROPRIATE STATE AS INDICATED ON THESE DRAWINGS. REFER TO WALL BRACING NOTES IN PLAN SET FOR MORE INFORMATION.
- 4. SHEATHING SHALL HAVE A 1/8" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE AFA.

## STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND OF THE MANUAL OF STEEL
- CONSTRUCTION "LOAD RESISTANCE FACTOR DESIGN" LATEST EDITIONS. 2. ALL STEEL SHALL HAVE A MINIMUM YIELD STRESS (F,) OF 50 KSI UNLESS OTHERWISE NOTED.
- 3. WELDING SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE AWA D1.1. ELECTRODES FOR SHOP AND FIELDING WELDING SHALL BE CLASS E70XX. ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER PER THE ABOVE STANDARDS.
- 4. ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3½" AND FULL FLANGE WIDTH UNLESS OTHERWISE NOTED. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR (2)  $\frac{1}{2}$ " x 4" LAG SCREWS UNLESS OTHERWISE NOTED.
- INSTALL 2x WOOD PLATE ON TOP OF STEEL BEAMS, RIPPED TO MATCH BEAM WIDTH. FASTEN PLATE TO BEAM W/ HILTI X-DNI 52 P8 PINS AT 12" O.C. STAGGERED OR ½" DIAMETER BOLTS AT 24"

## MFCHANICAL FASTENERS:

- 1. ALL METAL HARDWARE AND FASTENERS TO BE SIMPSON STRONG-TIE
- OR APPROVED EQUIVALENT. 2. ALL HARDWARE AND FASTENERS IN CONTACT WITH PRESERVATIVE PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A 153, G-185
- 3. MANY OF THE NEW PRESSURE TREATED WOODS USE CHEMICALS THAT ARE CORROSIVE TO STEEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE TYPE OF WOOD TREATMENT AND SELECT APPROPRIATE CONNECTORS THAT WILL RESIST THE APPLICABLE CORROSIVE CHEMICALS.



BRICK	VENEER LINTEL SC	HEDULE					
SPAN	LINTEL SIZE	END BEARING					
UP TO 3'-0"	3½"×3½"×¼"	4"					
UP TO 6'-3"	5"x3½"x5⁄ <sub>16</sub> " L.L.V.	8"					
UP TO 9'-6"	6"x <i>3</i> ½"x <sup>5</sup> ⁄ <sub>16</sub> " L.L.V.	12"					
LINTELS ARE NOT DESIGNED TO BE BOLTED TO HEADERS UNLESS SPECIFIED ON UNIT PLANS.							
SPANS OVER	R 4'-0" SHALL BE SHORED UP	UNTIL CURED.					



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 $\supset \simeq$ Project #: 214-22000

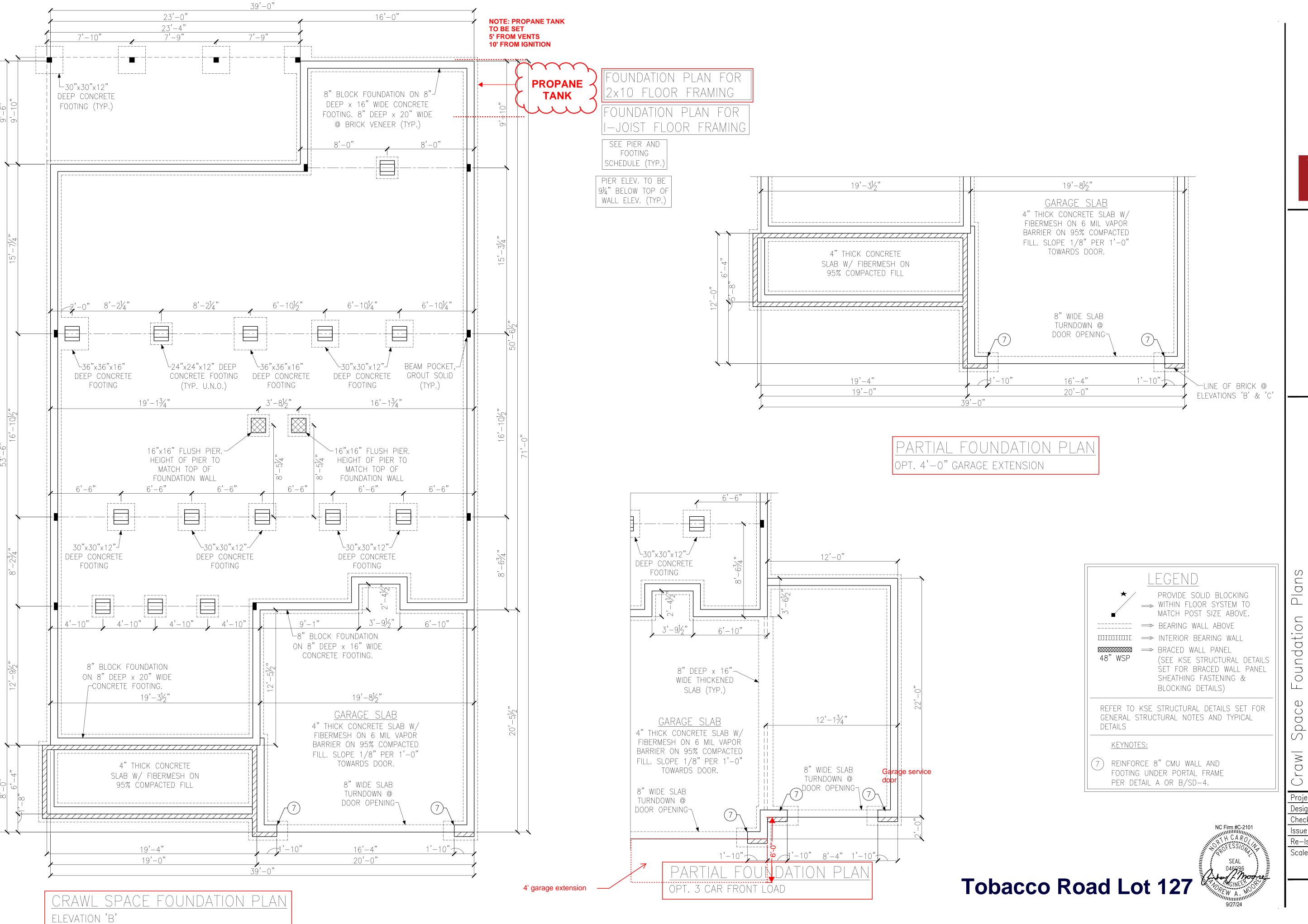
Designed By: KRK Checked By: Issue Date: 3/6/23

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Re-Issue: Scale: 1/8"=1'-0" @ 11x171/4"=1'-0" @ 22x34



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AVIDSON HOMES

Space Foundation Plarion 'B' & Option irch II Model — RH

Project #: 214-23005

Project #: 214-23005

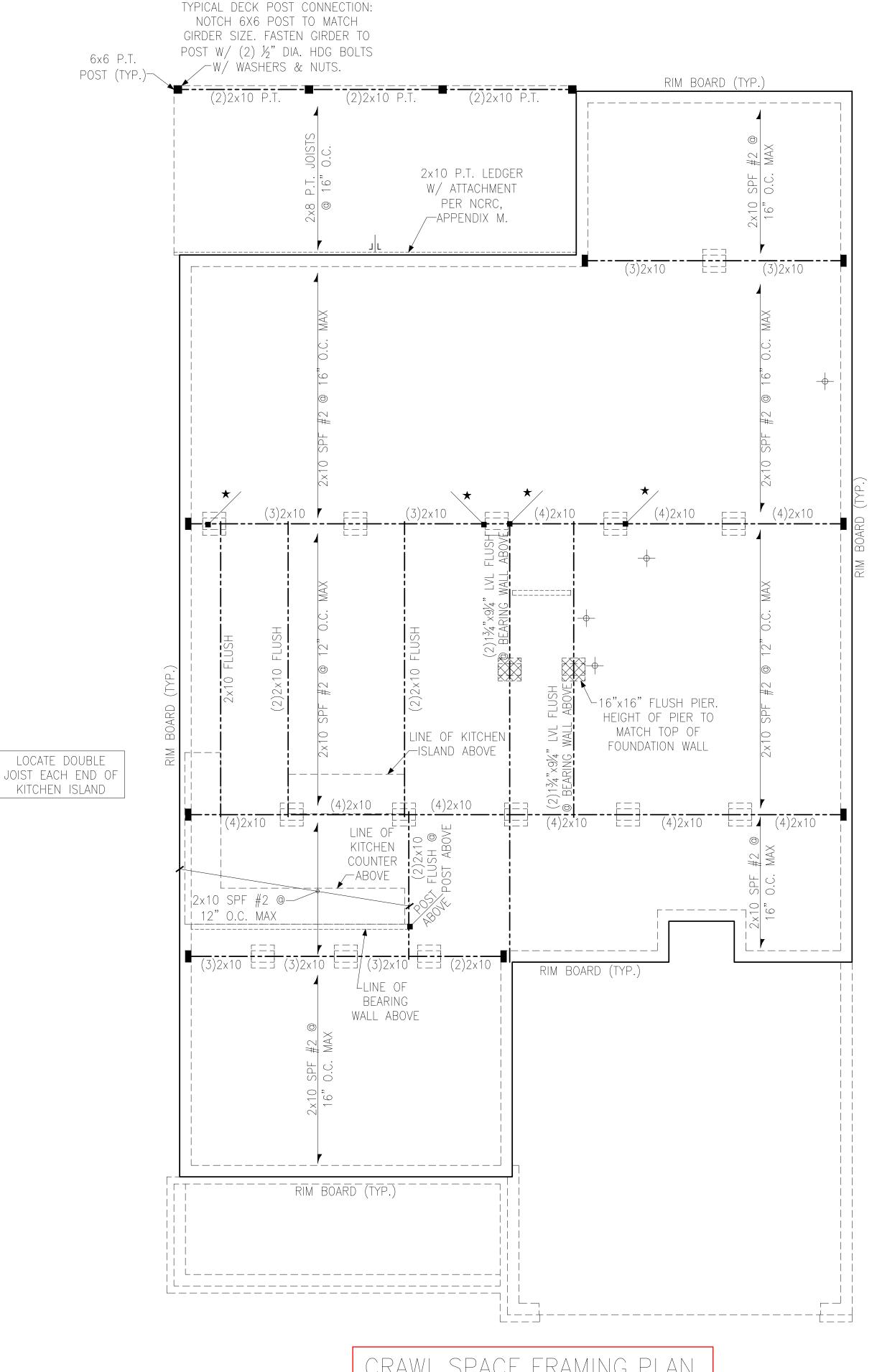
Designed By: AAM

Checked By: KRK
Issue Date: 12/6/23
Re-Issue: 9/27/24

Re-Issue: 9/2//24
Scale: 1/8"=1'-0" @ 11x17
1/4"=1'-0" @ 22x34

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DECK FRAMING NOTES: -DECK CONSTRUCTION PER NCRC, APPENDIX M, U.N.O. -GUARD RAIL REQUIRED, DESIGN BY OTHERS (TYP.) -PROVIDE LATERAL BRACING PER NCRC, APPENDIX M. -4'-0" MAXIMUM HEIGHT FROM GRADE TO DECKING. -EMBED POST 12" MINIMUM INTO COMPACTED FILL. -ALL DECKS OVER 4'-0" HEIGHT FROM GRADE MUST MEET OR EXCEED REQUIREMENTS OF APPENDIX M OF NCRC 2018.



CRAWL SPACE FRAMING PLAN ELEVATION 'B'

NOTE: 2x BEAMS, HEADERS AND FLOOR JOISTS MAY BE SYP #2 GRADE LUMBER.

# LEGEND

PROVIDE SOLID BLOCKING ⇒ WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE ⇒ INTERIOR BEARING WALL

> ⇒ BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)

REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

FLOOR FRAMING TO BE 2x10 SPF #2 @ 16" O.C. MAX OR EQUAL (U.N.O.).

NC Firm #C-2101 Tobacco Road Lot 127

48" WSP

2×10 Pan Framing Space Crawl S Elevation

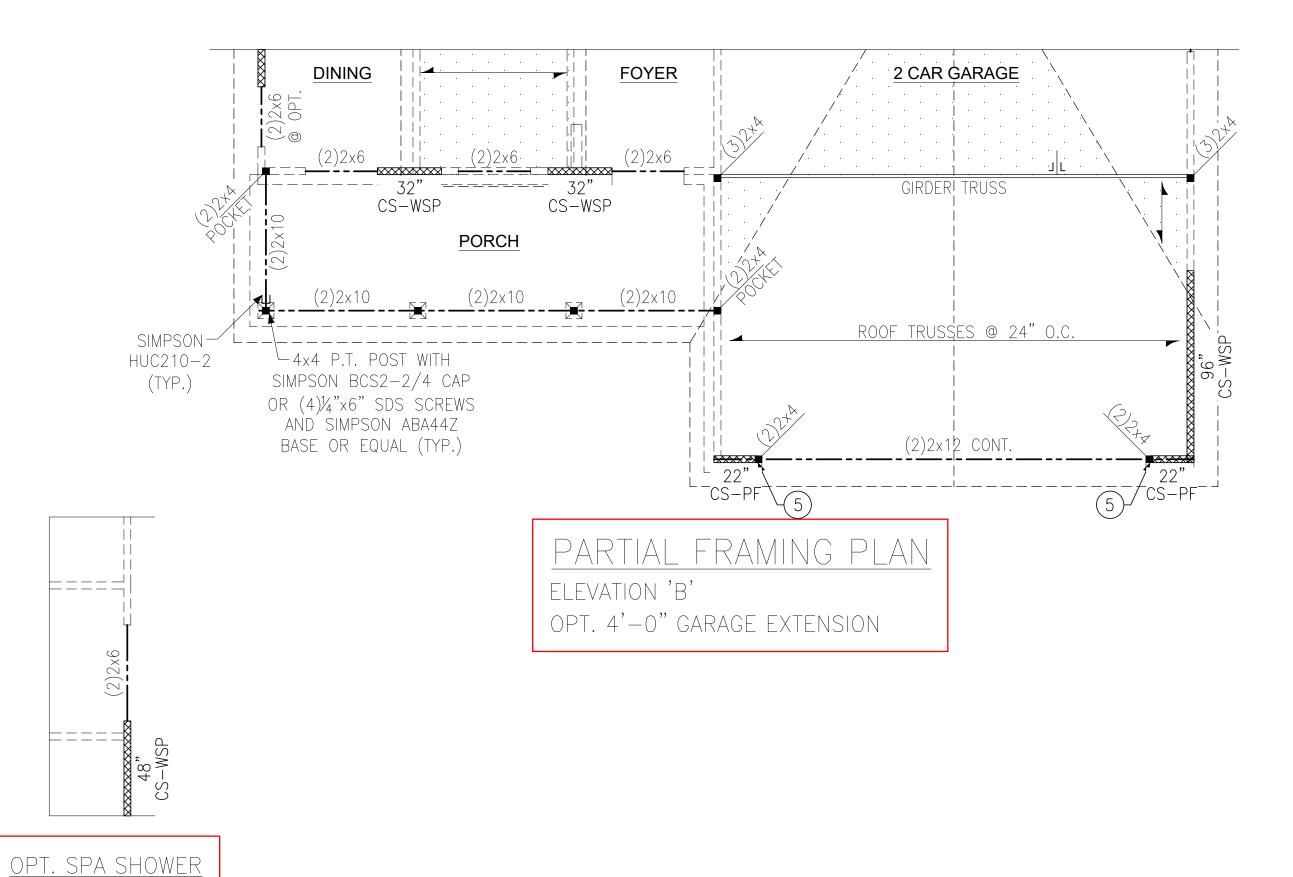
Project #: 214-23005

Designed By: AAM Checked By: KRK

Issue Date: 12/6/23 Re-Issue: 9/27/24 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

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(2)2x12 CONT.

3RD CAR

GARAGE

MUD

2 CAR GARAGE

GIRDER TRUSS

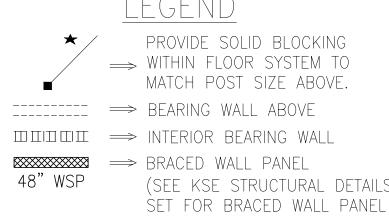
(2)2x12 CONT

LAUNDRY

73" GB(2)

OPT. 3 CAR FRONT LOAD

2x BEAMS, HEADERS AND FLOOR TRUSSES MAY BE SYP #2 GRADE LUMBER.



BLOCKING DETAILS) ⇒ NO HEADER REQUIRED REFER TO KSE STRUCTURAL DETAILS SET

PLAN DESIGNED WITH 9' WALL PLATES

## KEYNOTES:

- (4) INSTALL ONE PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.
- FRAME PER DETAIL A OR B/SD-4.



Second Elevatio Project #: 214-23005 Designed By: AAM

Checked By: KRK Issue Date: 12/6/23 Re-Issue: 9/27/24 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

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LEGEND

⇒ WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

SHEATHING FASTENING &

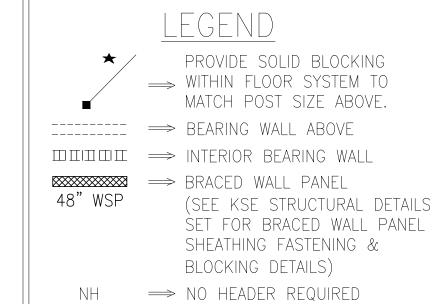
FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

FLOOR FRAMING TO BE 14" DEEP OPEN WEB TRUSSES @ 24" O.C. MAXIMUM OR EQUAL (U.N.O.).

- (5) INSTALL TWO PANEL CS-PF PORTAL



FLOOR JOISTS MAY BE SYP #2 GRADE LUMBER.



REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

PLAN DESIGNED WITH 8' WALL PLATES

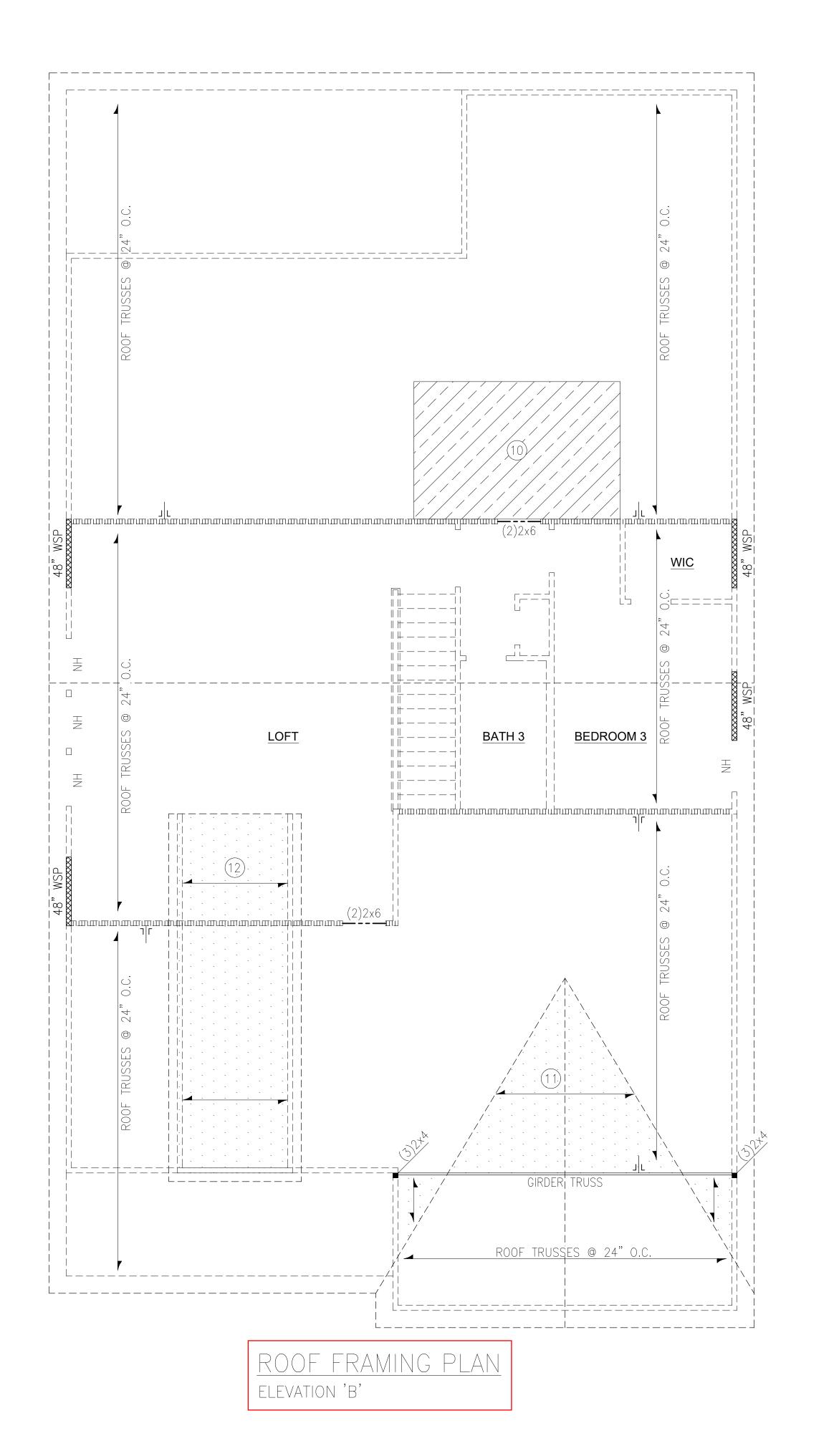
## <u>KEYNOTES:</u>

- (10) 8'x12' HVAC PLATFORM TRUSSES DESIGNED TO SUPPORT HVAC UNITS.
- (11) VALLEY SET TRUSSES @ 24" O.C. OR 2x6 OVERFRAMING @ 24" O.C. W/ 2x8 RIDGE & VALLEY PLATES
- 12) 2x6 RAFTERS @ 24" O.C. ON 2x4 RAKED KNEE WALLS. PROVIDE 2x4 BLOCKING BETWEEN TRUSSES UNDER KNEE WALLS. (TYP.)

Roof Fr Elevatio The Bira Up to Raleigh, Project #: 214-23005 Designed By: AAM Checked By: KRK Issue Date: 12/6/23 Re-Issue: 9/27/24 Scale: 1/8"=1'-0" @ 11x17

1/4"=1'-0" @ 22x34

Tobacco Road Lot 127

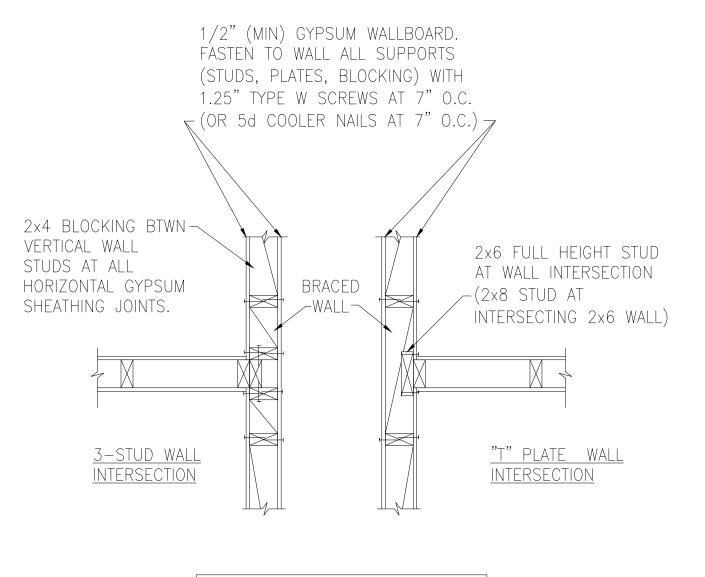






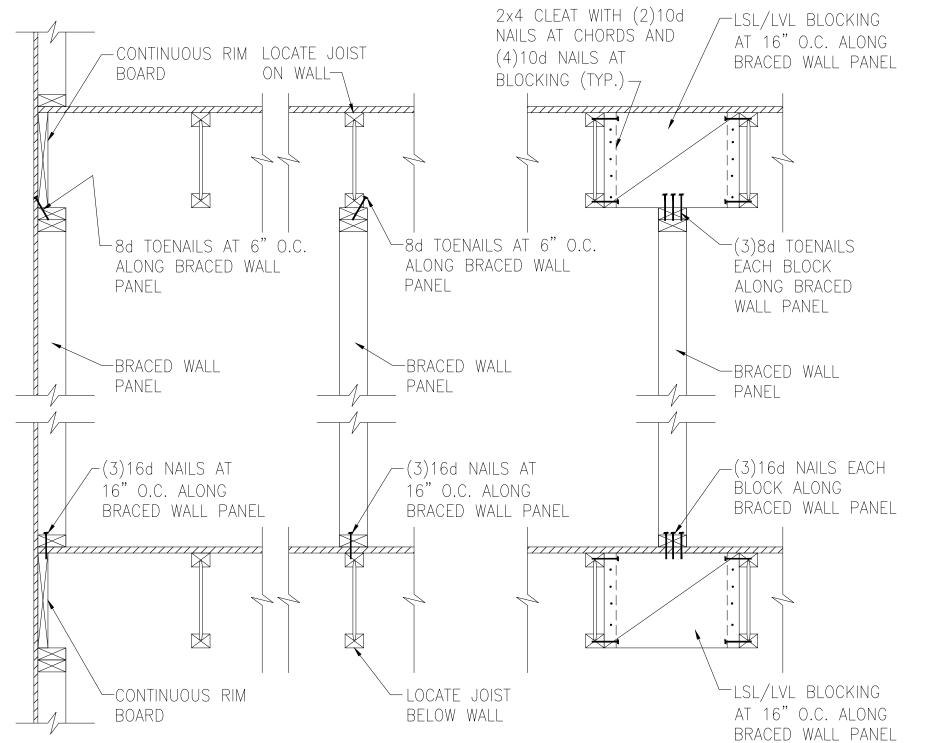






BRACED WALL INTERSECTIONS MAY BE FRAMED USING EITHER THE 3-STUD OR THE T-PLATE METHOD.

 $\METHOD GB(1) AND GB(2) INTERSECTION DETAILS$ 



TYPICAL BRACED WALL PANEL TO FLOOR/CEILING CONNECTION BRACED WALL PARALLEL TO I-JOISTS

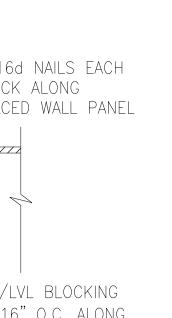
\_ 8d NAIL @ 6" O.C. AT ALL EDGES AND 12" O.C. TYPICAL

AT ALL OTHER

MEMBERS

@ 12" O.C.

-GYPSUM BOARD



WALL PANEL BYPICAL BRACED WALL PANEL TO FLOOR/CEILING CONNECTION BRACED WALL PANELS PERPENDICULAR TO I-JOISTS

CONTINUOUS RIM

8d TOENAILS AT 6" O.C.

ALONG BRACED WALL

BRACED WALL

 $\sim$  (3)16d NAILS AT

16" O.C. ALONG

BRACED WALL PANEL

CONTINUOUS RIM

└8d TOENAILS AT 6"

--- WALL PANEL

O.C. ALONG BRACED

PANEL

-LSL/LVL BLOCKING ALONG

BRACED WALL PANEL

-8d TOENAILS AT 6"

WALL PANEL

─BRACED WALL

 $\sim$  (3)16d NAILS EACH

BRACED WALL PANEL

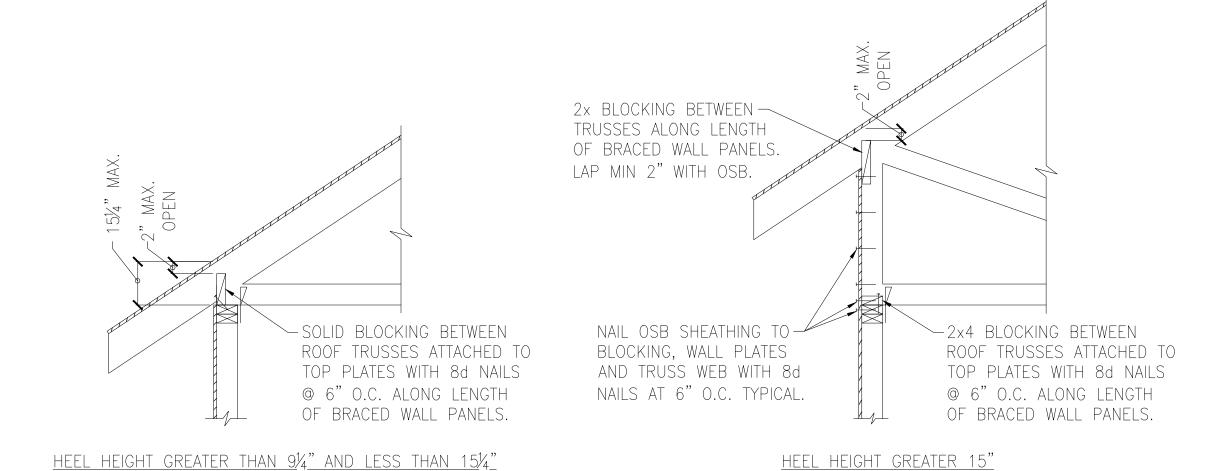
-LSL/LVL BLOCKING

ALONG BRACED

BLOCK ALONG

— PANEL

O.C. ALONG BRACED



TYPICAL EXTERIOR CORNER WALL FRAMING

EXTERIOR

GYPSUM BOARD-

16d NAIL

EXTERIOR SHEATHING

@ 12° O.C.

INSIDE CORNER PLAN VIEW

SHEATHING -

ROOF TRUSS BEARING/BLOCKING AT BRACED WALL PANELS ONLY REQUIRED AT BRACED WALL PANELS

> NC Firm #C-2101 Tobacco Road Lot 127

Project #: 214-22000 Designed By: KRK Checked By: Issue Date: 3/6/23 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

Details

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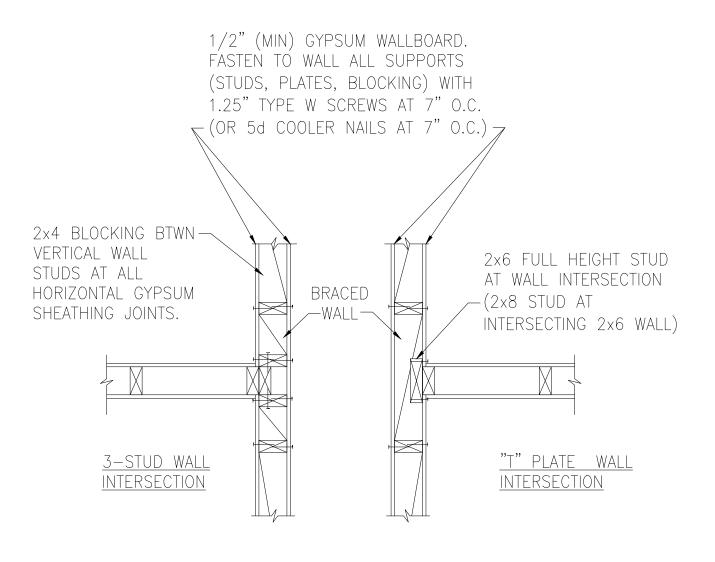
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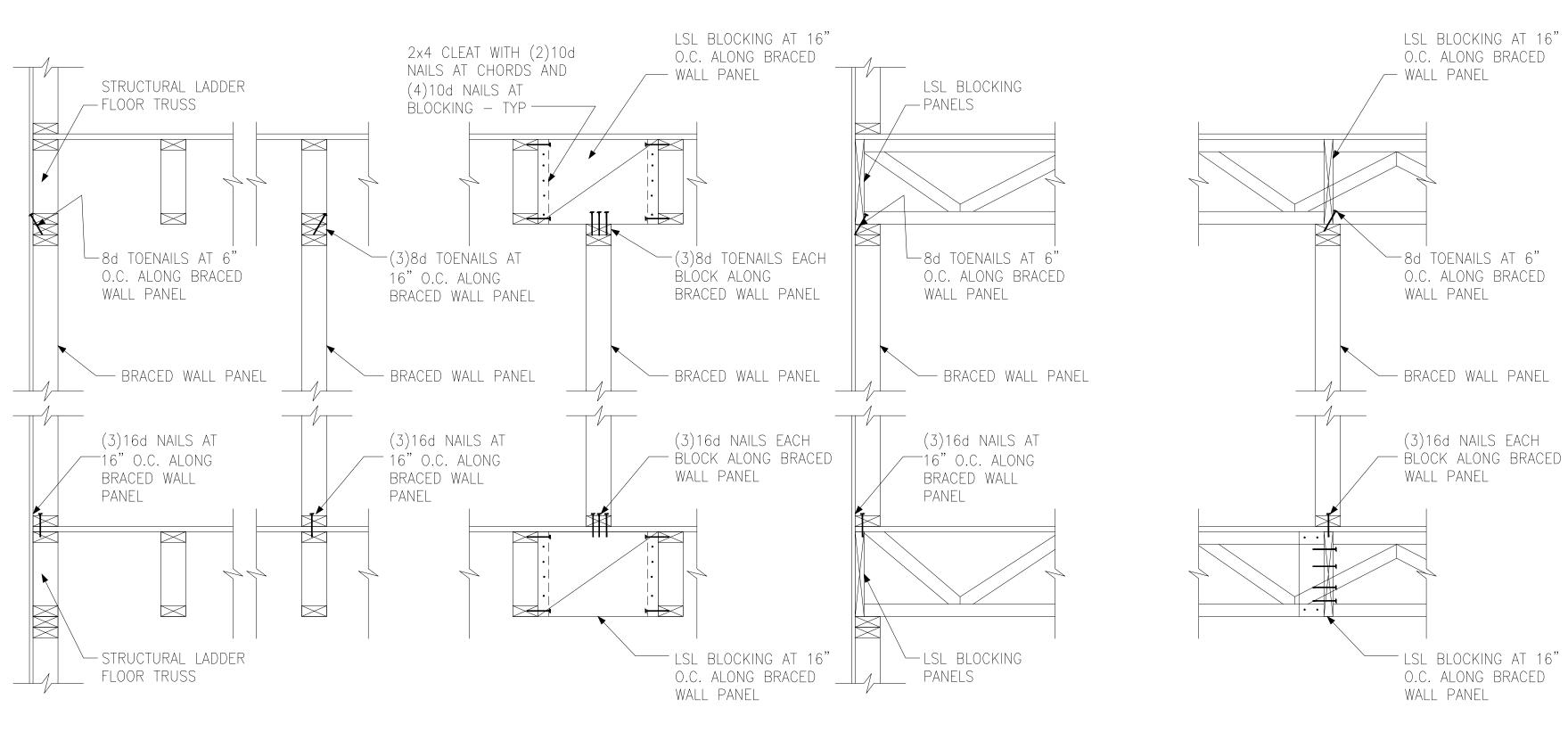






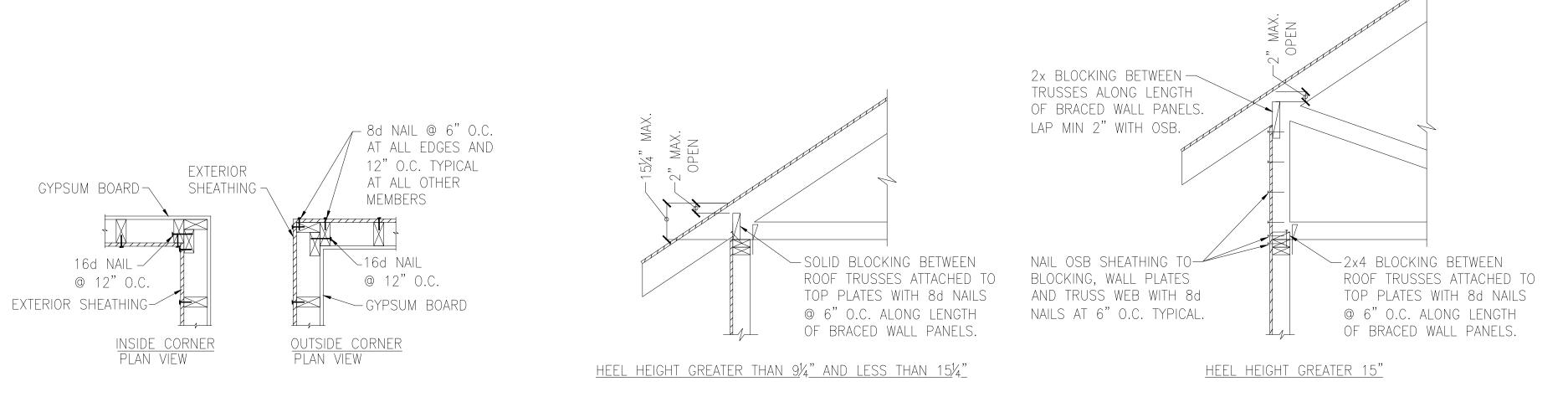
BRACED WALL INTERSECTIONS MAY BE FRAMED USING EITHER THE 3-STUD OR THE T-PLATE METHOD.

 $\bigcirc$  METHOD GB(1) AND GB(2) INTERSECTION DETAILS



TYPICAL BRACED WALL PANEL TO FLOOR / CEILING CONNECTION BRACED WALL PANELS PARALLEL TO TRUSSES

TYPICAL BRACED WALL PANEL TO FLOOR / CEILING CONNECTION BRACED WALL PANELS PERPENDICULAR TO TRUSSES



TYPICAL EXTERIOR CORNER WALL FRAMING

ROOF TRUSS BEARING/BLOCKING AT BRACED WALL PANELS ONLY REQUIRED AT BRACED WALL PANELS

> NC Firm #C-2101 Tobacco Road Lot 127

Designed By: KRK Checked By: Issue Date: 3/6/23 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

Project #: 214-22000

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-HOLD DOWN INSTALLED PER HOLD

DOWN SCHEDULE THIS SHEET, SEE

\_ A36 ALL THREAD ROD DRILLED AND

DHOLD DOWN AT MONOLITHIC SLAB FOUNDATION

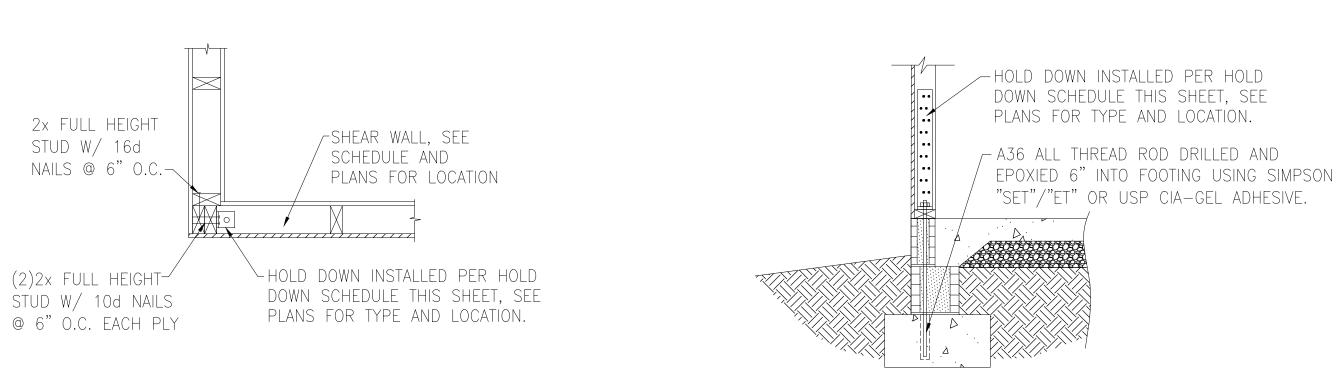
EPOXIED 6" INTO FOOTING USING SIMPSON "SET"/"ET" OR USP CIA-GEL ADHESIVE.

PLANS FOR TYPE AND LOCATION.

Details  $\square$   $\vee$   $\vee$ 

<u>P</u>0H Project #: 214-22000 Designed By: KRK

Checked By: Issue Date: 3/6/23 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34



# TYPICAL HOLD DOWN DETAIL

SHEAR WALL, SEE SCHEDULE AND

PLANS FOR LOCATION ~

HOLD DOWN INSTALLED PER

HOLD DOWN SCHEDULE THIS

AND LOCATION.

A36 ALL

THREAD ROD \_\_

COUPLER NUT

SIMPSON CNW1/2 OR USP CNW12-ZP

GROUT CMU SOLID

AT ALL THREAD ROD

SHEET, SEE PLANS FOR TYPE

/(2) 2x FULL HEIGHT

STUD W/ 10d NAILS

@ 6" O.C. EACH PLY

2x FULL HEIGHT STUDS

W/ 16d NAILS @ 6" O.C.

HOLD DOWN INSTALLED PER HOLD DOWN SCHEDULE THIS SHEET, SEE PLANS FOR TYPE AND LOCATION.

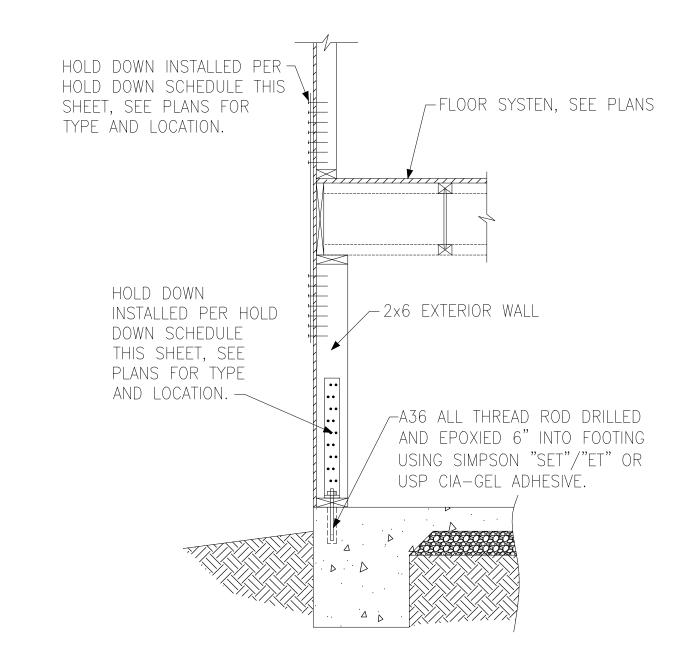
- A36 ALL THREAD ROD DRILLED

AND EPOXIED 6" INTO FOOTING

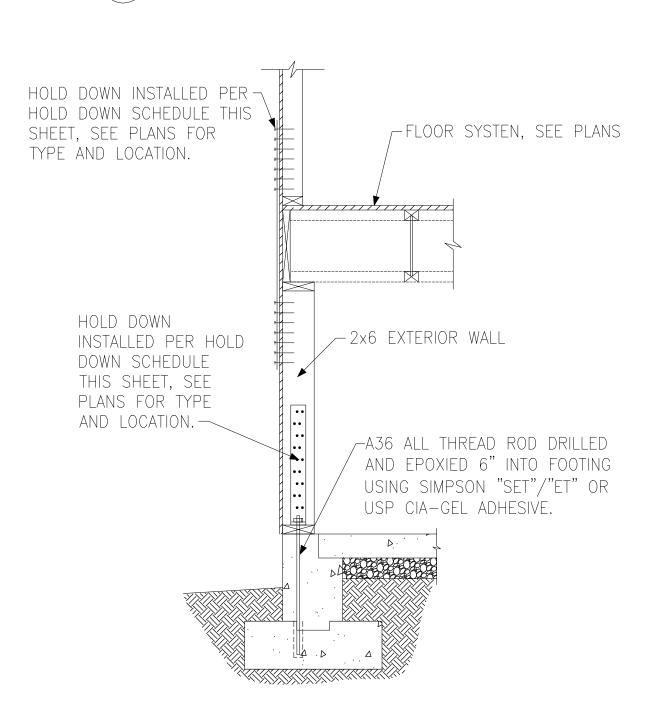
USING SIMPSON "SET"/"ET" OR

USP CIA-GEL ADHESIVE.

(E) HOLD DOWN AT CRAWL SPACE FOUNDATION



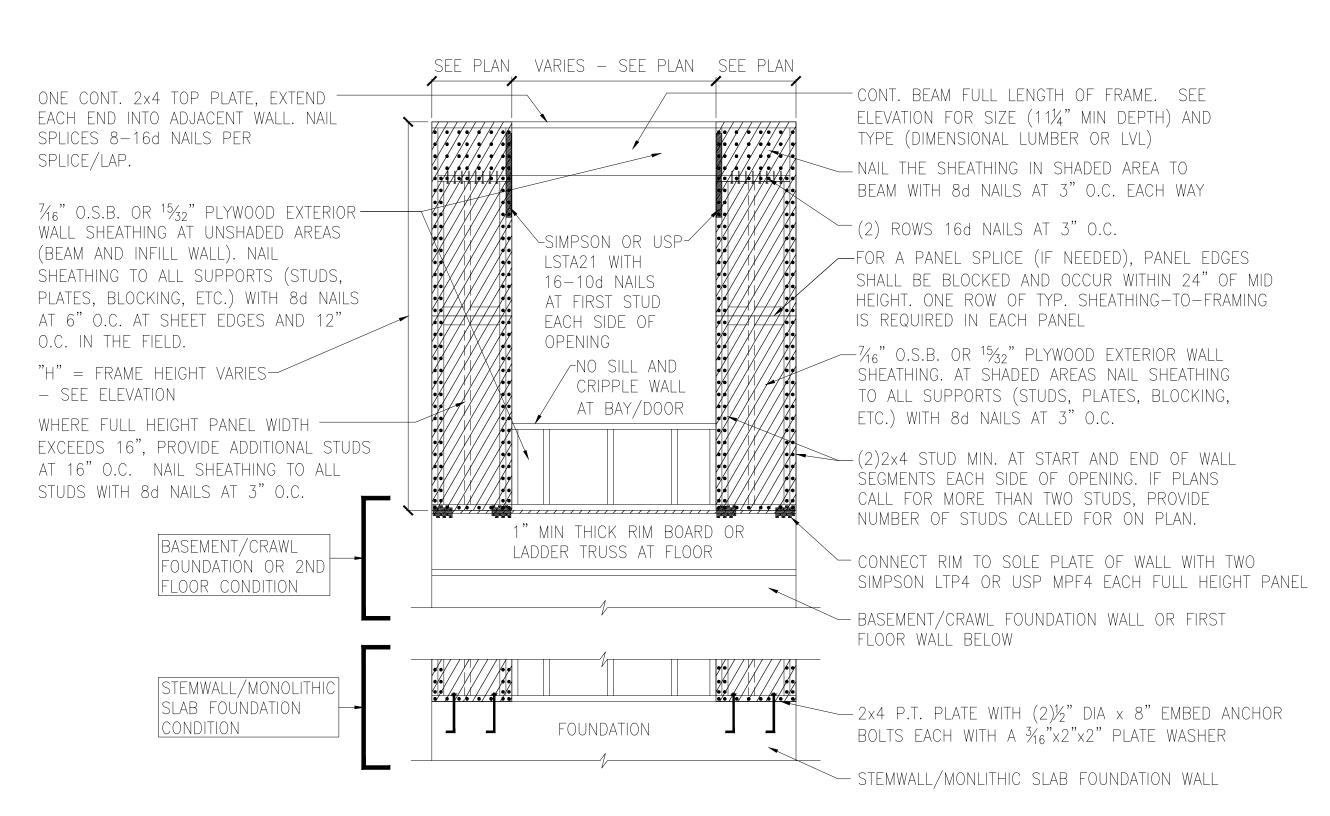
F HOLD DOWN AT BASEMENT FOUNDATION MONOLITHIC TURN-DOWN



HOLD DOWN AT STEMWALL SLAB FOUNDATION

HOLD	DOWN AT	BASEMENT	FOUNDATION
STEM W	ALL		

HOLD DOWN SCHEDULE									
HOLD	DOWN	ALL THREAD ROD	FASTENERS						
SIMPSON USP		ALL THINLAD NOD	TASTENENS						
LTTP2	LTS20B	½" DIA.	(12)0.148"x2.5" LONG NAILS						
HTT4	HTT16	%" DIA.	(18)0.162"x2.5" LONG NAILS						
HTT5	HTT45	5⁄8" DIA.	(26)0.162"x2.5" LONG NAILS						

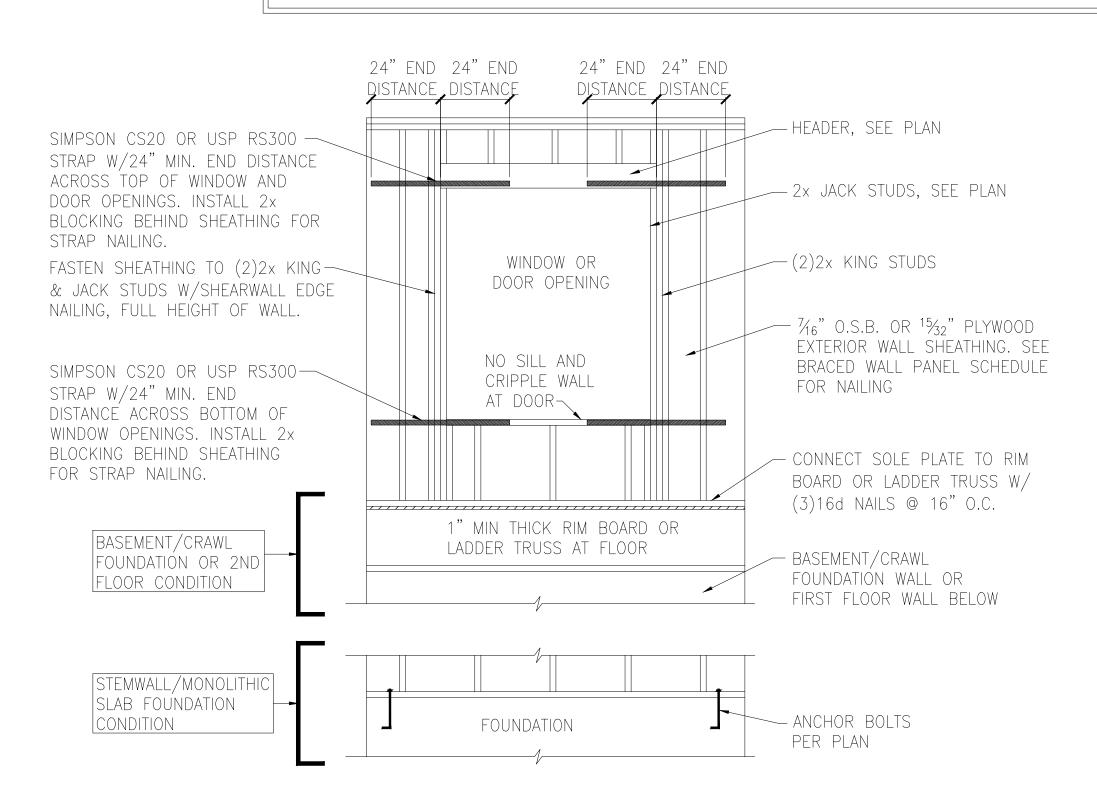


B METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION TWO BRACED WALL SEGMENTS

#### BRACED WALL PANEL AND ENGINEERED SHEAR WALL SCHEDULE PANEL TYPES PANEL TYPE MATERIAL FASTENERS 6D OR 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT INTERMITTENT WOOD WSP 7/16" OSB INTERMEDIATE SUPPORTS. ENGINEERED ALTERNATIVE: 16 GAGE BY 1.75" LONG STRUCTURAL PANEL STAPLES AT 3" O.C. AT SHEET EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W BOARD (SHEATHING ONE 1/2" GYPSUM GB(1) DRYWALL SCREWS AT 7" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACE OF WALL) INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W BOARD (SHEATHING ONE | 1/2" GYPSUM GB(1)-4DRYWALL SCREWS AT 4" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACE OF WALL) INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W BOARD (SHEATHING BOTH 1/2" GYPSUM GB(2) DRYWALL SCREWS AT 7" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACES OF WALL) 6D OR 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT CONTINUOUS SHEATHED CS-WSP 7/16" OSB INTERMEDIATE SUPPORTS. ENGINEERED ALTERNATIVE: 16 GAGE BY 1.75" LONG WOOD STRUCTURAL STAPLES AT 3" O.C. AT SHEET EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS PANEL CONTINUOUS SHEATHED | 7/16" OSB NAILING PER DETAIL CS-PF PORTAL FRAME PORTAL FRAME WITH 7/16" OSB NAILING PER DETAIL PFH HOLD DOWNS 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT 7/16" OSB ENGINEERED SHEAR CS-ESW(1)WALL, TYPE 1 INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS 7/16" OSB 8D COMMON NAILS AT 4" O.C. AT SHEET EDGES AND 12" O.C. AT ENGINEERED SHEAR CS-ESW(2)WALL, TYPE 2 INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS 8D COMMON NAILS AT 3" O.C. AT SHEET EDGES AND 12" O.C. AT 7/16" OSB ENGINEERED SHEAR CS-ESW(3)WALL, TYPE 3 INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS

#### BRACED WALL PANEL NOTES:

- 1. ALL BRACED WALL PANELS, EXCEPT GB(1) & GB(2), SHALL HAVE 2x BLOCKING BETWEEN WALL STUDS AT ALL HORIZONTAL SHEET EDGES.
- 2. PROVIDE NAILING/BLOCKING ABOVE AND BELOW ALL BRACED WALL PANELS PER KSE BRACED WALL DETAILS.
- 3. SHEATH ALL EXTERIOR WALLS OF THE HOUSE WITH 7/6" O.S.B., OR 15/32" PLYWOOD, FASTENED PER IRC. AT EXTERIOR CORNERS, SHEATHING SHALL BE FASTENED PER KSE BRACED WALL DETAILS. AT INTERIOR WALL INTERSECTIONS, FASTEN STUDS & WALL BRACING PER KSE BRACED WALL DETAILS.
- 4. BRACED WALL PANELS AND ENGINEERED SHEAR WALLS ARE PROVIDED PER IRC. PANEL LENGTHS SHOWN ON PLANS ARE THE MINIMUM LENGTH REQUIRED.



WINDOW OR DOOR REINFORCEMENT IN ENGINEERED SHEAR WALL ONLY REQUIRED WHERE SPECIFED ON PLANS







all Notes & Details

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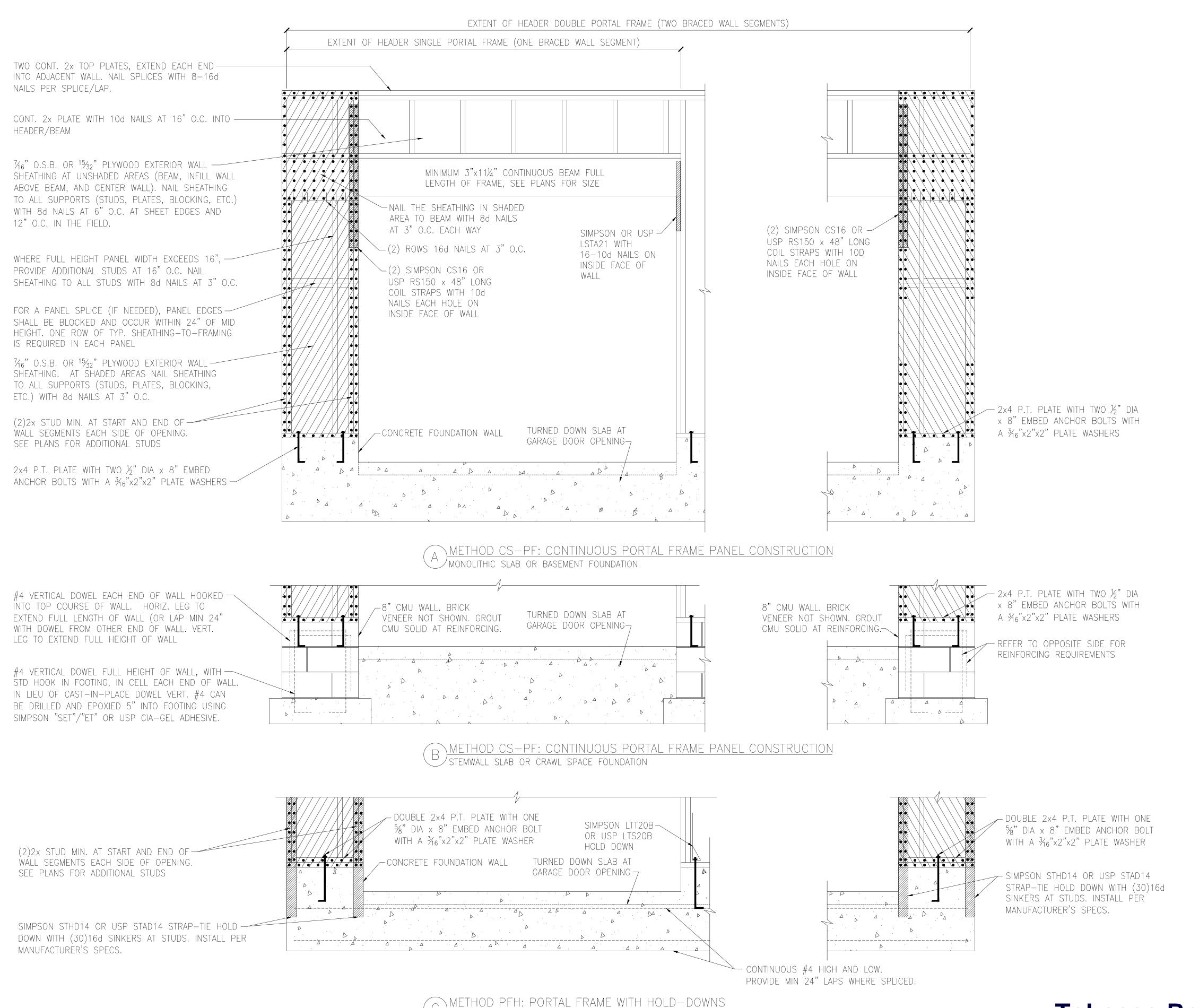
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Project #: 214-22000
Designed By: KRK

Checked By:
Issue Date: 3/6/23

Re-Issue:
Scale: 1/8"=1'-0" @ 11x17
1/4"=1'-0" @ 22x34

SD-3



MONOLITHIC SLAB OR BASEMENT FOUNDATION



Details

20  $\bigcirc$ 

arolina

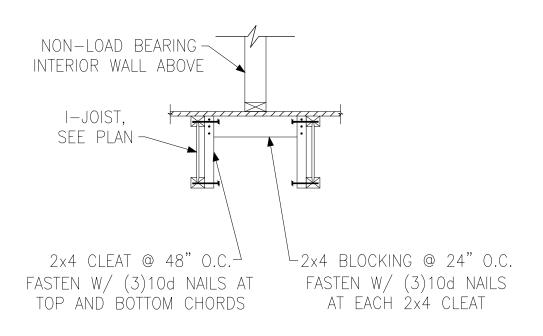
Project #: 214-22000

Designed By:KRK

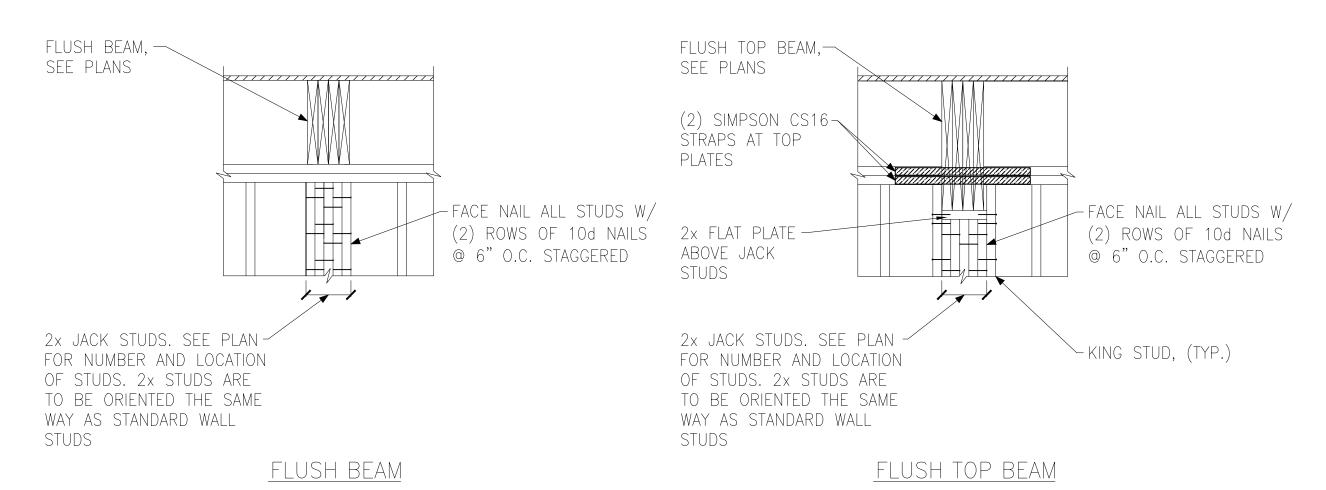
Checked By: Issue Date: 3/6/23

NC Firm #C-2101

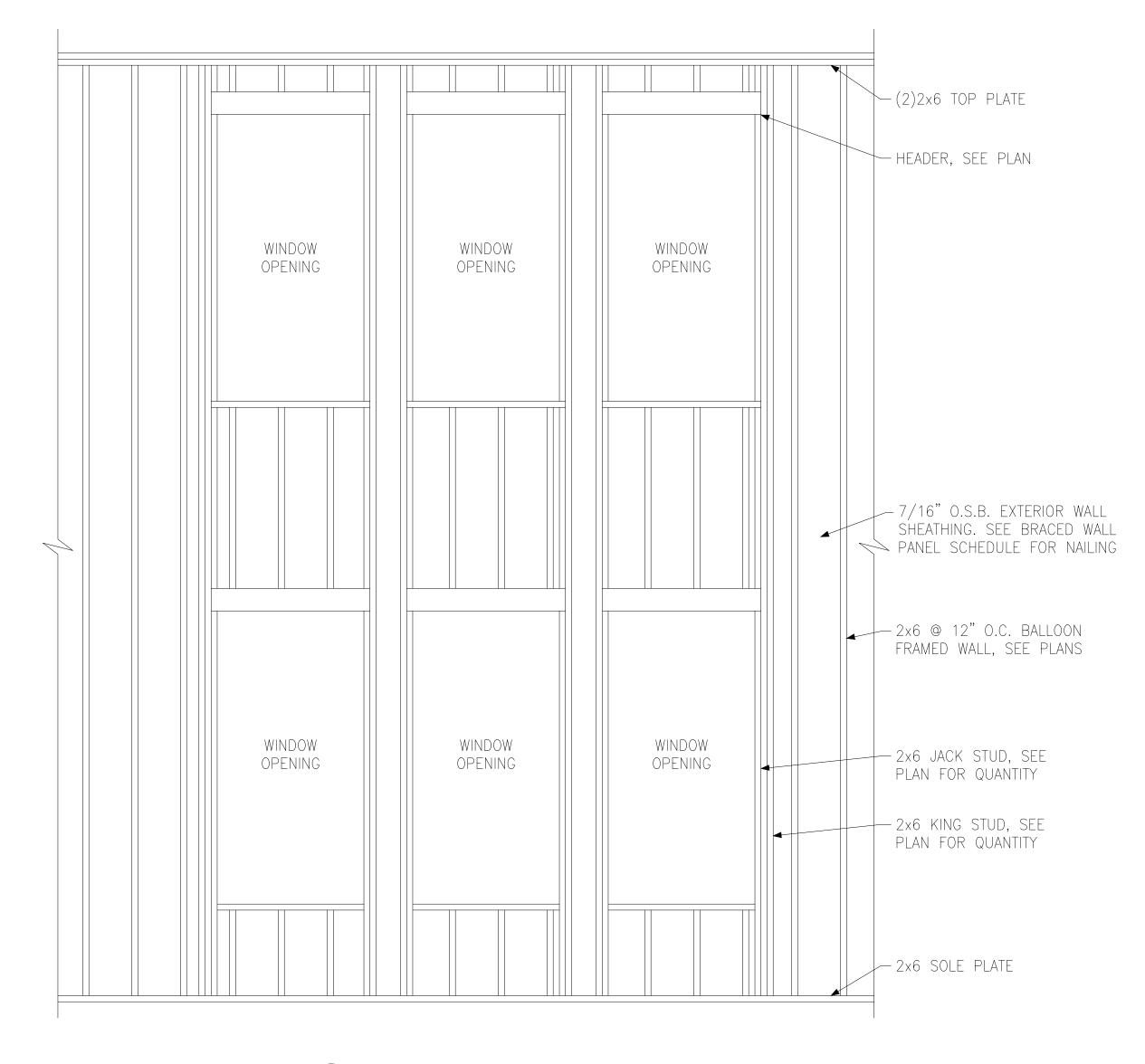
Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34



I-JOIST LADDER BLOCKING
AS REQUIRED @ PARALLEL WALLS



BUILT-UP STUD DETAIL SUPPORTING BEAM



BALLOON FRAMED WALL DETAIL N.T.S.

Tobacco Road Lot 127

NC Firm #C-2101

NC Firm #C-2101

SEAL

046996

O46996

MO FESSION

O46996

O469





Miscellaneous Framing Details

Project #: 214–22000

Designed By: KRK

Carolina

20

Designed By: KRK
Checked By:

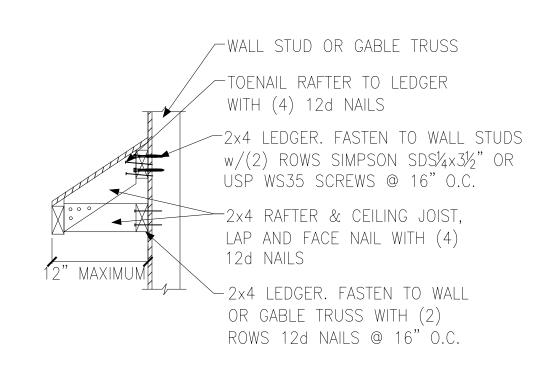
Issue Date: 3/6/23

Re-Issue:

Scale: 1/8"=1'-0" @ 11x17
1/4"=1'-0" @ 22x34

SD-5

2x4 BLOCKING BETWEEN



EYEBROW ROOF DETAIL STRAIGHT ROOF

**LEERING**AKERTOWN, PA 18951
(215) 804-4449

Details

Framing

20

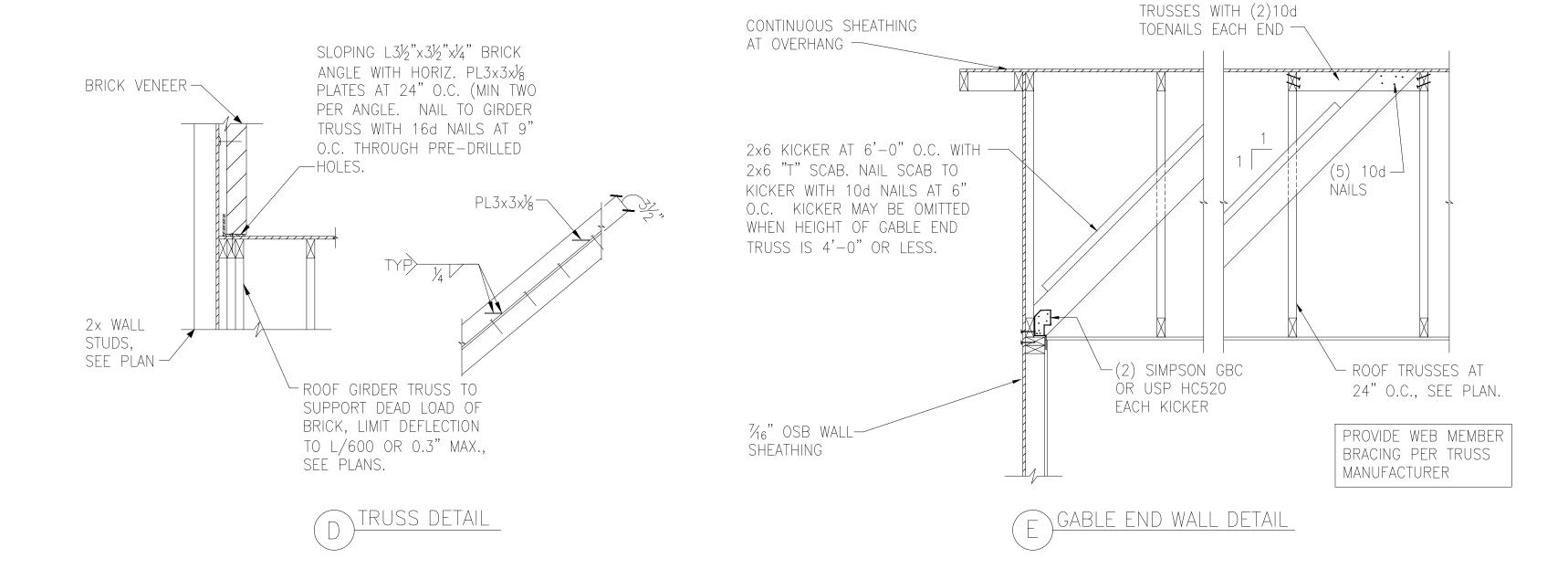
Carolina

Miscellaneous 214-22000

Designed By: KRK Checked By:

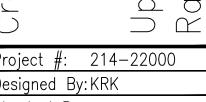
NC Firm #C-2101

Issue Date: 3/6/23Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34









arolina

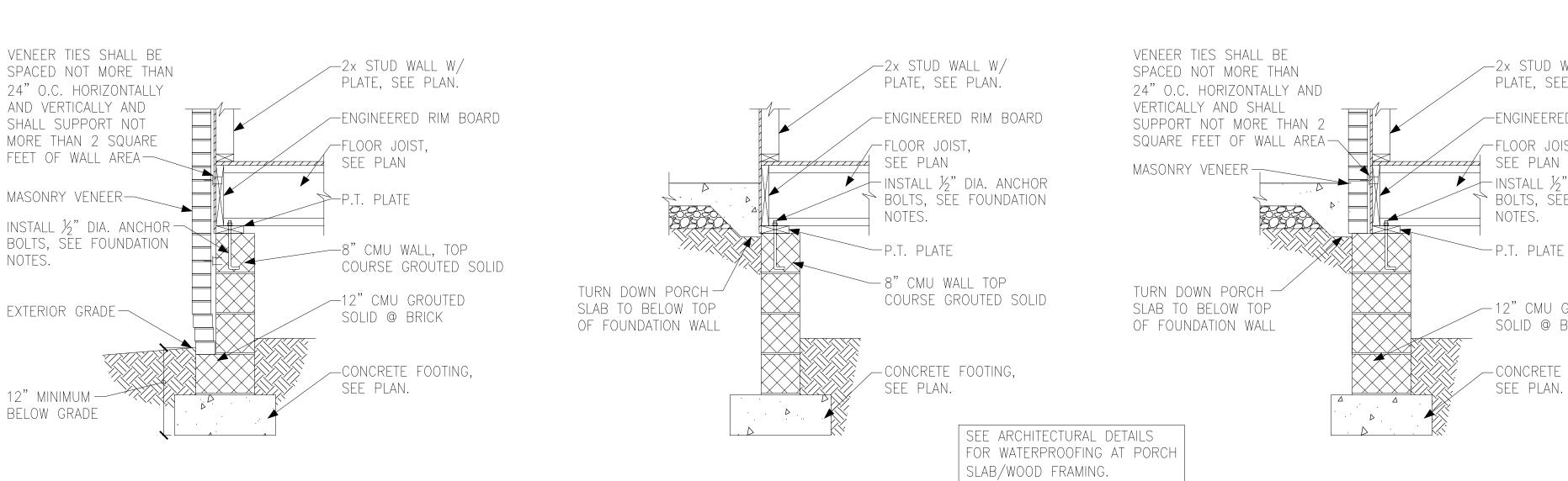
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Project #: 214-22000 Designed By: KRK

Checked By:

NC Firm #C-2101

Issue Date: 3/6/23 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34



FOUNDATION SECTION JEXTERIOR WALL

P.T. PLATE —

NOTES.

INSTALL  $\frac{1}{2}$ " dia. anchor -

BOLTS, SEE FOUNDATION

INSTALL ½" DIA. ANCHOR -

BOLTS, SEE FOUNDATION

EXTERIOR GRADE —

12" MINIMUM -

BELOW GRADE

NOTES.

EXTERIOR GRADE —

12" MINIMUM -

BELOW GRADE

∠2× STUD WALL W/

-FLOOR JOIST,

SEE PLAN

PLATE, SEE PLAN.

-8" CMU WALL TOP

— CONCRETE FOOTING,

SEE PLAN.

COURSE GROUTED SOLID

—2x STUD WALL W/ P.T.

COURSE GROUTED SOLID

GROUP 1 CLASSIFIED SOIL

PLATE, SEE PLAN.

-8" CMU WALL TOP

-4" GRAVEL FILL OR

-COMPACTED SOIL

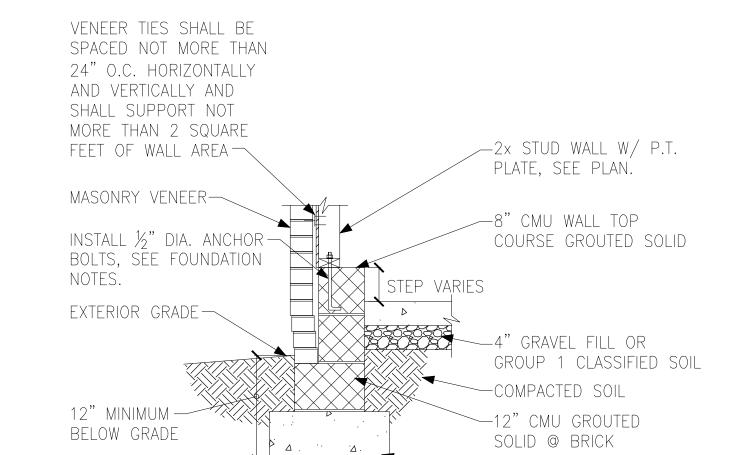
-CONCRETE FOOTING, SEE PLAN.

STEP VARIES

- ENGINEERED RIM BOARD



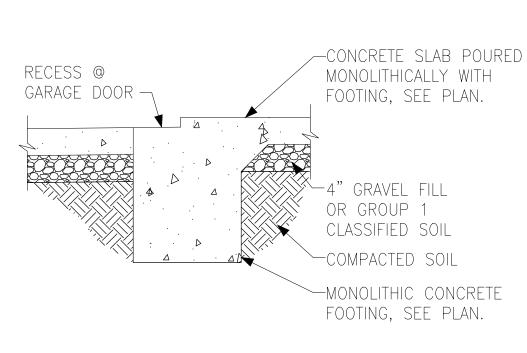




-CONCRETE FOOTING,

SEE PLAN.

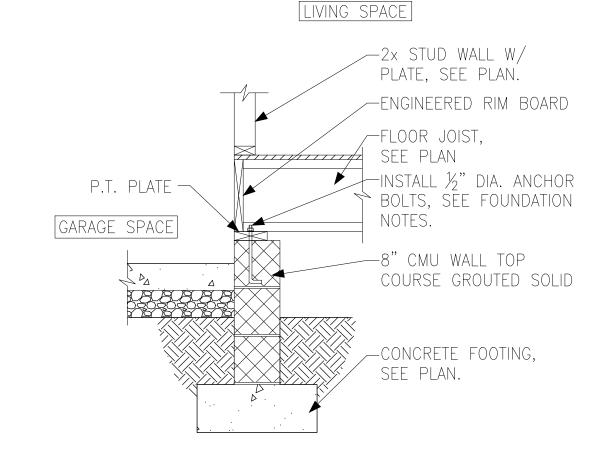






TOUNDATION SECTION

EXTERIOR WALL AT PORCH



PIER AND FOOTING SCHEDULE

PIER HEIGHT PIER SIZE | MIN. FOOTING SIZE

UP TO 2'-8" 8" x 16" 24" x 24" x 12" U.N.O.

UP TO 5'-4" 16" x 16" 24" x 24" x 12" U.N.O.

UP TO 8'-0" 16" x 16" 30" x 30" x 12" U.N.O.

MASONRY OR CONCRETE OR TOP COURSE FILLED

PIERS OVER 5'-4" SHALL BE BE FILLED SOLIDLY

PIERS SHALL BE CAPPED WITH 8" OF SOLID

WITH CONCRETE OR TYPE M OR S MORTAR.

ENGINEERING FOR PIER AND FOOTING DESIGN.

FOR PIERS OVER 8'-0" CONTACT KSE

SOLID WITH CONCRETE/MORTAR.

FOUNDATION SECTION

VENEER

/exterior wall at porch w/ masonry

FLOOR JOIST,

NOTES.

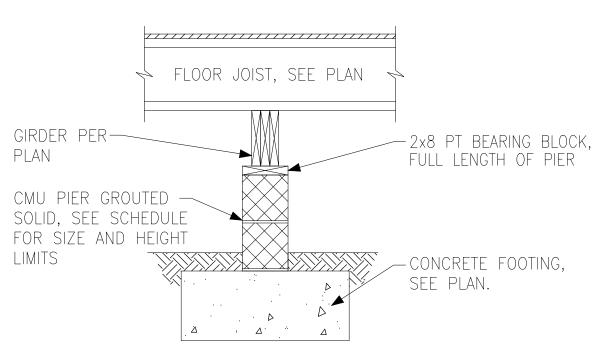
- P.T. PLATE

SOLID @ BRICK

SEE PLAN.

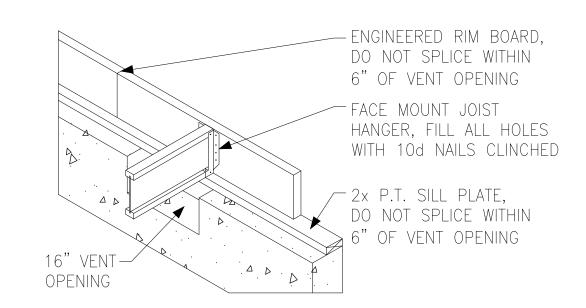
- CONCRETE FOOTING,

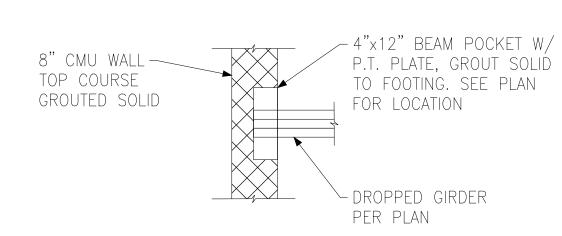
FOUNDATION SECTION INTERIOR GARAGE WALL

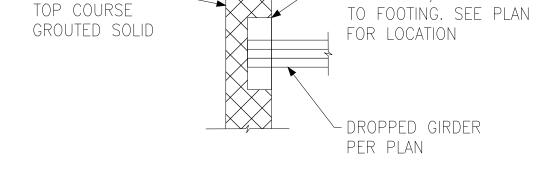


FOUNDATION SECTION

L JEXTERIOR GARAGE WALL







CRAWL SPACE VENT DETAIL

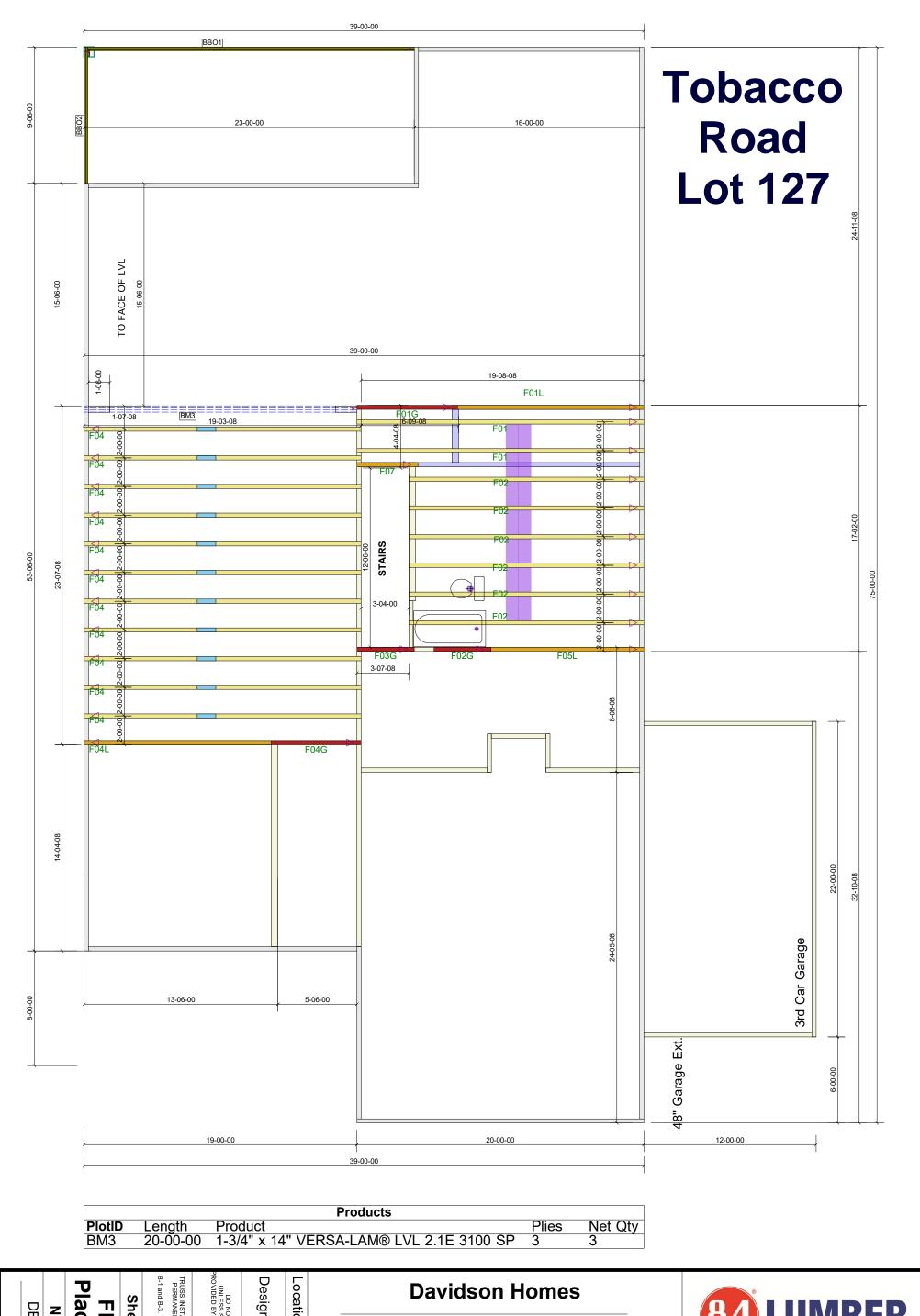
CRAWL SPACE BEAM POCKET DETAIL

Tobacco Road Lot 127

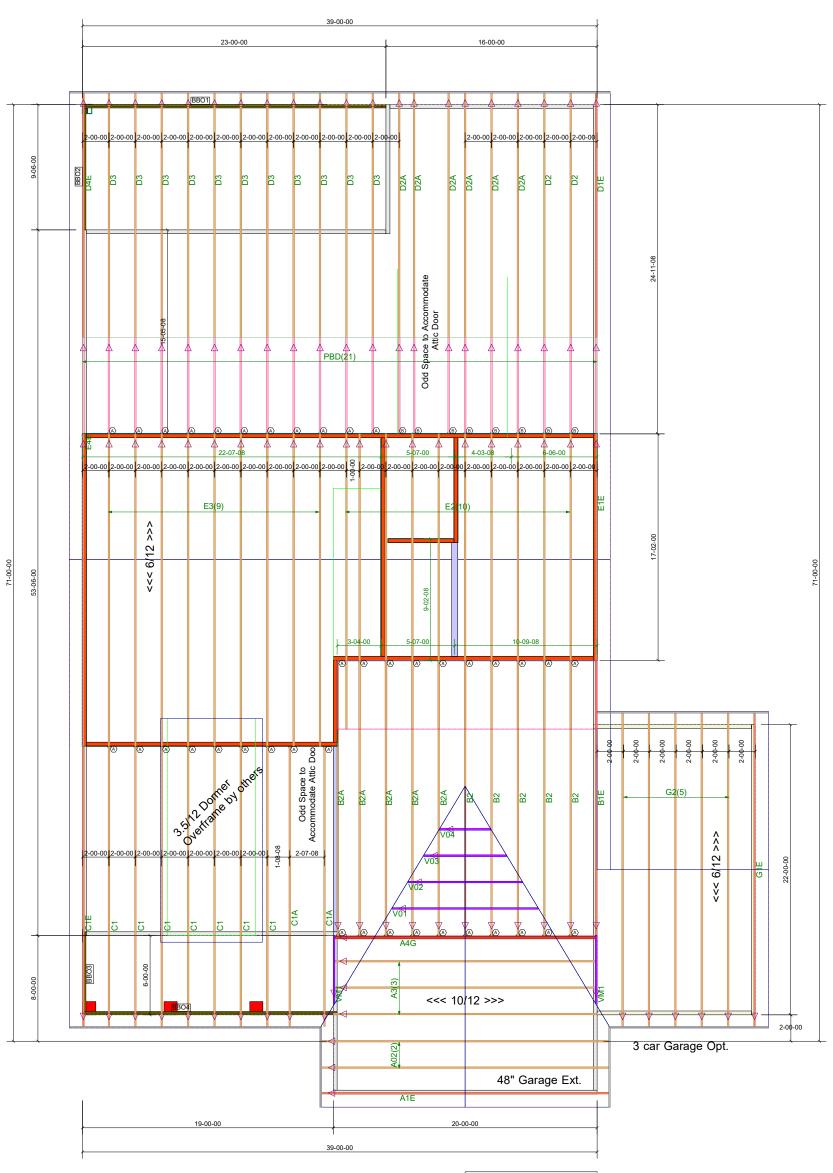


FOUNDATION SECTION

INTERIOR PIER



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Truss Connector Total List								
Symbol	Name	Qty						
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В	HUS26	8						
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	2 <b>z</b>	Pla	ا ا	TRUSS INST PERMANE B-1 and B-3.	DO NOT CU UNLESS SPEC PROVIDED BY AN A	Designer	Location	Davidson Homes	
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