

# THE MARIE

## NORTH CAROLINA

## SQUARE FOOTAGES

FIRST FLOOR (HTD.) = 1988 sf

GARAGE = 454 sf
FRONT PORCH = 106 sf

TOTAL = 2548 sf

REAR DECK / PATIO \*OPTION\* + 100 sf

## INDEX OF SHEETS

A1.0 COVER SHEET
A1.1 GENERAL NOTES
A2.0 FIRST FLOOR PLAN
A3.0 ELEVATION
A3.1 ELEVATIONS

E1.0 FIRST FLOOR ELECTRICAL PLAN

## INDEX OF SHEETS (CONT.)

CS COVER SHEET, SPECIFICATIONS, ETC.

F-1.1s STEM WALL FOUNDATION PLAN F-1.1c CRAWL FOUNDATION PLAN

S-1.1 FIRST FL. FRAMING & BRACING PLAN

D- 1-3s DETAILS - STEM FNDN. D- 1-5c DETAILS - CRAWL FNDN.

D- 1-2f DETAILS - FRAMING

## GENERAL CONTRACTOR

## LGI HOMES

SCOTT STERLING V.P. OF CONSTRUCTION FOR NC / SC 704-953-3824

## ARCHITECT

## COX ARCHITECTURE & DESIGN, PLLC

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WWW.COXARCHITECTURE.COM CRAIG@COXARCHITECTURE.COM

## **ENGINEER**

# QUEEN CITY CONSULTING & DESIGN, PLLC

2459 WILKINSON BLVD. SUITE 300 CHARLOTTE, NC 28208 828-381-3091 WWW.QC-DESIGNS.COM THE MARIE

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● 31 DECEMBER 2024

COVER SHEET

A1.0

## **COLUMN NOTES**

COLUMNS TO BE: AFCO OR COLUMN OF EQUAL BEARING CAPACITY. (6000 # MINIMUM)

TOP CONNECTION: (2) #8 - ½" x 3" STAINLESS STEEL SCREWS PER SIDE INSERTED INTO BEAM.

BOTTOM CONNECTION: (3) UBS - #18043

BRACKETS FASTENED WITH (2) ½" x 1 ½"

SCREWS INTO COLUMN & (2) ½" x 3 ¾"

CONCRETE SCREWS THROUGH FASTENER

INTO CONCRETE

## ELECTRICAL PANEL/METER

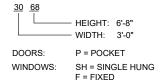
MAXIMUM DISTANCE BETWEEN ELECTRICAL PANEL & ELECTRICAL METER (NEC 230.70) TO BE DETERMINED BY LOCAL AUTHORITY.

## STAIR NOTES

-STAIR FABRICATOR / INSTALLER TO VERIFY THAT STAIRS MEET ALL REQUIRED CODES

-ADJUSTMENTS TO STAIR TO BE CONFIRMED W/ ARCHITECT & CONTRACTOR PRIOR TO STAIR CONSTRUCTION

## DOOR & WINDOW LEGEND



## DOOR NOTES

-ATTIC ACCESS DOORS TO INCLUDE WEATHER STRIPPING & INSULATION

-TOP OF INTERIOR CASING @ ADJACENT DOORS & WINDOWS TO ALIGN WHEN HEADER CALL OUTS ARE EQUAL

-DOOR SUPPLIER TO SPECIFY & ORDER TEMPERED GLASS IN DOORS AS REQUIRED BY LOCAL CODE.

## WINDOW NOTES

-ALL WINDOW DIMENSIONS ARE BASED ON M.I. WINDOW ROUGH OPENING CALL OUTS, UNO. FINAL SELECTION OF WINDOW SIZES ARE TO BE VERIFIED IN FIELD.

-WINDOWS TO BE INSTALLED BY CERTIFIED WINDOW INSTALLER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

-WINDOW SUPPLIER TO SPECIFY & ORDER TEMPERED GLASS IN WINDOWS AS REQUIRED BY LOCAL CODE.

-G.C. AND WINDOW SUPPLIER TO VERIFY THAT EACH BEDROOM TO HAVE A MINIMUM OF ONE WINDOW WHICH MEETS EMERGENCY EGRESS AS REQUIRED BY PER LOCAL AUTHORITIES. WINDOW SUPPLIER TO ADD EGRESS HARDWARE TO CASEMENT WINDOWS IF NECESSARY.

-TOP OF INTERIOR CASING @ ADJACENT DOORS & WINDOWS TO ALIGN WHEN HEADER CALL OUTS ARE EQUAL

## **FLOOR PLAN NOTES**

-CONTRACTORS TO FIELD VERIFY ALL DIMENSIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES, ERRORS OR OMISSIONS PRIOR TO EXECUTION OF WORK.

-CLEANUP TO OCCUR DAILY.

-G.C. TO VERIFY FINISH GRADE @ HOUSE TO DETERMINE NUMBER OF STEPS.

-MECHANICAL CONTRACTOR TO COORDINATE W/
ARCHITECT LOCATION OF MAIN TRUNK & DISTRIBUTION
LINES, REGISTERS (CENTER ALL REGISTERS ON
WINDOWS). THERMOSTATS. AIR HANDLER & CONDENSERS

-CEILING HEIGHTS LISTED ARE DIMENSIONED TO FRAMING (TOP OF SUBFLOOR TO UNDERSIDE OF FRAMING ABOVE)

-CONCRETE SLABS & SETTING BEDS TO ACCOMMODATE FOR ADEQUATE WATER DRAINAGE AT GARAGES AND PORCHES

-ATTIC ACCESS DROP-DOWN STAIRS TO CONFORM WITH LOCAL AUTHORITIES BASED ON R807.1. MINIMUM NET CLEAR OPENING OF 20" x 30". ALL ATTIC ACCESS STAIRS TO BE WEATHER STRIPPED & SEALED WITH R-VALUES THAT CONFORM WITH LOCAL AUTHORITIES BASED ON N1102.2.4. G.C. TO PROVIDE & INSTALL INSULATION DAMS TO RESTRICT TYPICAL ATTIC INSULATION FROM FALLING THROUGH ATTIC ACCESS OPENING. RIGID FOAM BOX COVER TO BE INSTALLED & SEALED AROUND FRAMING OF OPENING, NOT TO IMPEDE OR OBSTRUCT PERFORMANCE OF ADJACENT TYPICAL ATTIC

-HOSE BIBB(S) TO BE LOCATED 24" ABOVE FIRST FLOOR FINISHED FLOOR

## GENERAL NOTES

-DO NOT SCALE DRAWINGS; DESIGNATED DIMENSIONS SHALL BE USED IN PREFERENCE TO MEASUREMENTS BY SCALE.

-GENERAL CONTRACTOR SHALL VERIFY AND COMPLY TO ALL LOCAL & NATIONAL BUILDING CODES. CONTACT ARCHITECT IF INSPECTORS REQUIRE REVISIONS OR ALTERATIONS TO DRAWINGS.

-ALL SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR DAMAGE TO OTHER TRADES.

## DESIGN SPECIFICATIONS

USE GROUP: (IBC 310)

"R-3" ONE & TWO FAMILY DWELLING

CONSTRUCTION CLASS: (IBC 601)

"TYPE V-B" UNPROTECTED

HEIGHT & AREA LIMIT: (LOCAL ZONING)

35' MAXIMUM 2 STORY HEIGHT

EMERGENCY ESCAPE: (IRC 310-311)

EGRESS OR RESCUE WINDOWS FROM SLEEPING ROOMS

SHALL HAVE MINIMUM OF 5.7 SQ. FT. NET CLEAR OPENING (5.0 SQ. FT. NET OPENING @ GRADE FLOOR)

MINIMUM 20" WIDTH.

MINIMUM 24" HEIGHT.

MAXIMUM 44" SILL HEIGHT

GARAGE / HOUSE CEILING / ASSEMBLY: (IRC 702)

½" GYPSUM WALL BOARD

20 MINUTE RATED GARAGE / HOUSE DOOR

ATTIC VENTILATION: (IRC 806)

[TOTAL ATTIC SQ. FT.] / [300] = SQ. FT. AREA REQUIRED

IDGE VENT.

[LINEAR FEET OF VENT] X [18 SQUARE INCHES IN FREE AREA] / 12 = SQ. FT. PROVIDED SOFFIT VENT:

[LINEAR FEET OF VENT] X [7 SQUARE INCHES IN FREE AREA] / 12 = SQ. FT. PROVIDED EDGE SHINGLE OVER VENT:

[LINEAR FEET OF VENT] X [9 SQUARE INCHES IN FREE AREA] / 12 = SQ. FT. PROVIDED ROOF LOUVER VENTS:

[NUMBER OF VENTS] X [70 SQUARE INCHES IN FREE AREA] / 12 = SQ. FT. PROVIDED

CRAWL SPACE VENTILATION: (IRC 408)

[TOTAL CRAWL SPACE SQ. FT.] / [300] = SQ. FT. AREA REQUIRED

FOUNDATION VENT:

FREE SPACE PROVIDED BY VENT = F

[FREE AREA REQUIRED] / F = NUMBER OF VENTS REQUIRED

## FLOOR PLAN LEGEND

5S	5 SHELVES
1R 2S	1 ROD, 2 SHELVES
2R 2S	2 ROD, 2 SHELVES
HR	HANGING ROD
CO	CASED OPENING
W D	WASHER, DRYER
D/W	DISH WASHER
FRIG	REFRIGERATOR
LS	LAZY SUSAN
M	MIRROR
-	SHOWER HEAD

## INSULATION NOTES

INSULATION VALUES PER NCRC ECC 2018 CH. 11 ENERGY CONSERVATION CODE (2024 ECC STILL UNDER LEGISLATIVE REVIEW)

CLIMATE ZONE 3A		CLIMATE 2	ZONE 4/	
	TABLE N1102.1.2		TABLE N1	102.1.2
	CEILING:	R-38	CEILING:	R-38
	FLOOR:	R-19	FLOOR:	R-19
	WALL:	R-15	WALL:	R-15
	SI VB:	DΛ	SI AR:	D 10

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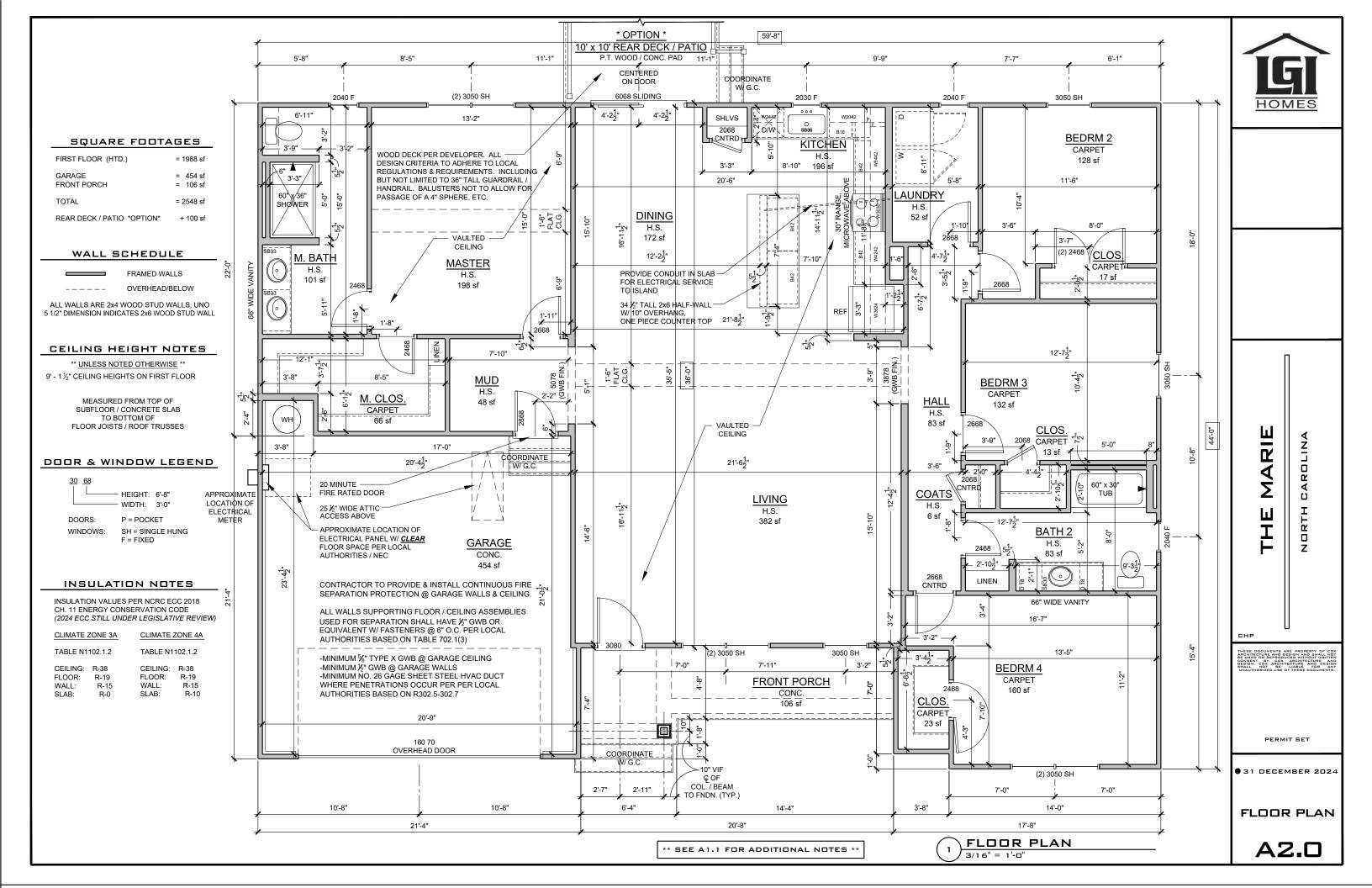
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GENERAL NOTES

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## **ROOF NOTES**

-CONTRACTORS TO FIELD VERIFY ALL DIMENSIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES, ERRORS OR OMISSIONS PRIOR TO EXECUTION OF WORK.

-ALL ROOF PENETRATIONS TO BE PLACED ON REAR SIDE OF MAIN RIDGE OR AS SPECIFIED BY ARCHITECT. PAINT TO MATCH SHINGLE COLOR.

-ATTIC INSULATION TO BE BATT. INSUL. PER CODE, PROVIDE BAFFLES @ PERIMETER TO ALLOW 2" FOR AIRFLOW FROM EAVE VENTS TO RIDGE VENTS.

-ROOF SHEATHING TO BE  $\frac{1}{2}$ " T&G PLYWOOD W/ METAL CLIPS @ ENDS.

-ALL BATHROOM & DRYER VENT PENETRATIONS TO RUN TOWARD REAR OF HOUSE & VENT IN REAR OUTSIDE WALL OR ROOF BEHIND MAIN RIDGE.

-GUTTER & DOWNSPOUT INSTALLER TO PROVIDE ADEQUATE UNITS PER MANUFACTURER SPECIFICATIONS BASED ON ROOF COVERAGE. SUB-CONTACTOR TO VERIFY NUMBER & LOCATION OF DOWNSPOUTS

-ALL SHINGLED ROOFS WITH A PITCH OF 4:12 OR LESS REQUIRE (2) LAYERS OF 30# FELT PAPER PER LOCAL AUTHORITIES

## **ELEVATION NOTES**

-ALL REPRESENTATIONS OF GRADE LEVELS ARE FOR DRAWING PURPOSES ONLY. AND TO BE VERIFIED IN FIELD.

-ALL EXTERIOR ELEVATION DIMENSIONS ARE FRAMING DIMENSIONS, UNO. G.C. TO FIELD VERIFY DIMENSIONS LOCATED AT SLOPED FRAMING AND / OR CONCRETE SLABS & PADS

-ALL TRUSS PROFILE DIMENSIONS TO BE VERIFIED BY TRUSS MANUFACTURER. TRUSS MANUFACTURER TO NOTIFY ARCHITECT IF TRUSS PROFILES / DIMENSIONS CHANGE.

-ALL BUILDINGS CONSTRUCTED WITH LESS THAN A 10' FIRE SEPARATION DISTANCE BETWEEN SHALL COMPLY WITH LOCAL AUTHORITIES BASED ON R302.1.1:

IN CONSTRUCTION USING VINYL OR ALUMINUM SOFFIT MATERIAL, THE FOLLOWING APPLICATION SHALL APPLY. SOFFIT ASSEMBLIES MUST BE SECURELY ATTACHED TO FRAMING MEMBERS AND APPLIED OVER FIRE-RETARDANT-TREATED WOOD, 23/32-INCH WOOD SHEATHING OR 5/8-INCH EXTERIOR GRADE OR MOISTURE RESISTANT GYPSUM BOARD. VENTING REQUIREMENTS SHALL BE PROVIDED IN BOTH SOFFIT AND UNDERLAYMENT. VENTS SHALL BE EITHER NOMINAL 2-INCH CONTINUOUS OR EQUIVALENT INTERMITTENT AND SHALL NOT EXCEED THE MINIMUM NET FREE AIR REQUIREMENTS ESTABLISHED IN SECTION R806.2 BY MORE THAN 50 PERCENT. TOWNHOME CONSTRUCTION SHALL MEET ADDITIONAL REQUIREMENTS OF SECTIONS R302.2.5 AND R302.2.6.

## CEILING HEIGHT NOTES

\*\* UNLESS NOTED OTHERWISE \*\* 9' - 1  $\frac{1}{2}$ " CEILING HEIGHTS ON FIRST FLOOR

MEASURED FROM TOP OF SUBFLOOR / CONCRETE SLAB TO BOTTOM OF FLOOR JOISTS / ROOF TRUSSES

## COLUMN NOTES

COLUMNS TO BE: AFCO OR COLUMN OF EQUAL BEARING CAPACITY. (6000 # MINIMUM)
TOP CONNECTION: (2) #8 - ½" x 3" STAINLESS STEEL SCREWS PER SIDE INSERTED INTO BEAM.
BOTTOM CONNECTION: (3) UBS - #18043
BRACKETS FASTENED WITH (2) ½" x 1 ½"
SCREWS INTO COLUMN & (2) ½" x 3 ¾"
CONCRETE SCREWS THROUGH FASTENER
INTO CONCRETE

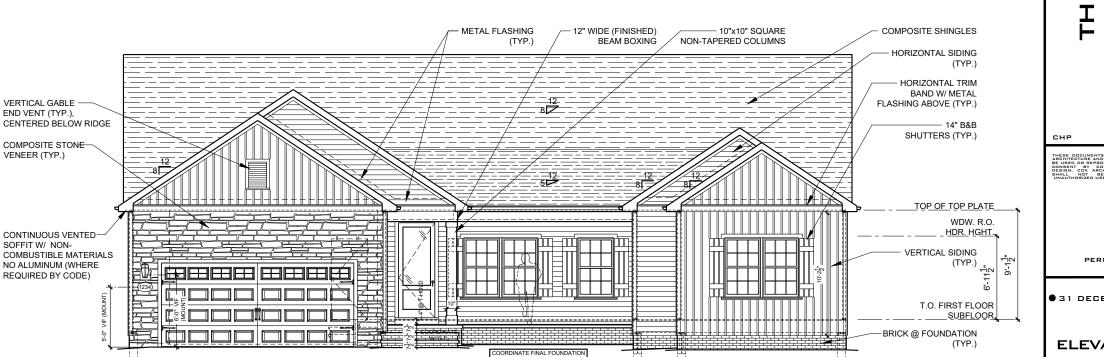
## **INSULATION NOTES**

INSULATION VALUES PER NCRC ECC 2018 CH. 11 ENERGY CONSERVATION CODE (2024 ECC STILL UNDER LEGISLATIVE REVIEW)

CLIMATE ZONE 4A

TABLE N1102.1.2		TABLE N1	102.1.2
CEILING:	R-38	CEILING:	R-38
FLOOR:	R-19	FLOOR:	R-19
WALL:	R-15	WALL:	R-15
SLAB:	R-0	SLAB:	R-10

CLIMATE ZONE 3A



FRONT ELEVATION

1/8" = 1'-0"



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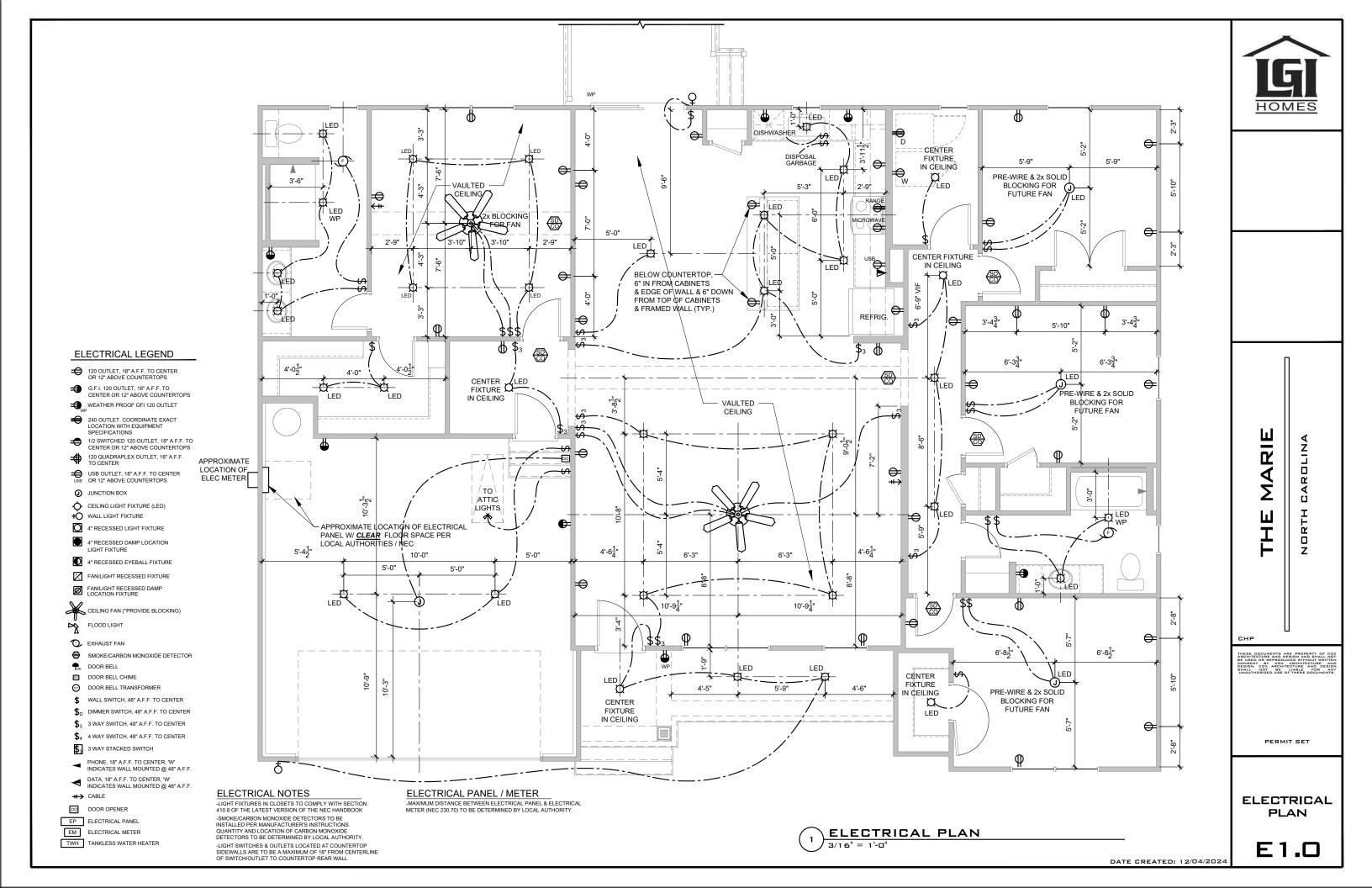
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ELEVATIONS

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- THESE DRAWINGS AND ITS CONTENTS ARE THE PROPERTY OF QUEEN CITY CONSULTING AND DESIGN, PLLC, (QC) AND THE CLIENT AS NOTED ON THIS PAGE. DISTRIBUTION TO ANY OTHER PARTIES FOR PURPOSES OTHER THAN THOSE DIRECTLY CONCERNED WITH THE TITLED PROJECT WITHOUT PRIOR WRITTEN CONSENT FROM QC IS STRICTLY PROHIBITED.
- THE ENGINEER'S NAME PRESENT ON THE SEAL OF THESE DRAWINGS IS THE ENGINEER OF RECORD (EOR)
- DETAILS NOTED AS "TYPICAL" SHALL BE USED WHENEVER APPLICABLE. REFER TO SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE NOTES OR
- 4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. FURTHERMORE, QC WILL NOT BE HELD RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CONFORM TO THE CONSTRUCTION DOCUMENTS, INCLUDING THIS STRUCTURAL SET, SHOULD ANY NON-CONFORMITIES
- THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS
- PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY.

  6. ANY OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF, AND RESOLVED WITH, THE ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL
- 8. SEISMIC DESIGN SHALL BE PER SECTION R301.2.2 OF THE 2018 NCRC AND IS BASED OFF OF LOCAL SEISMIC DESIGN CATEGORIES.

- FOOTING AND FOUNDATION NOTES:

  1. FOUNDATION DESIGN IS BASED ON A MINIMUM ALLOWING BEARING CAPACITY OF 2.000 PSF. CONTACT THE EOR IF BEARING CAPACITY IS NOT ACHIEVED. NO EXCAVATION SHALL OCCUR WITHIN A 45 DEGREE LINE PROJECTED FROM THE BOTTOM OF THE BUILDING FOUNDATION IS PERMITTED, UNLESS IT IS SPECIFICALLY APPROVED BY THE EOR.
- THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION, AS SPECIFIED BY THE LOCAL MUNICIPALITY. HOWEVER, THE BOTTOM OF ALL FOOTINGS SHALL BE A MINIMUM OF 12" BELOW GRADE.
- 4. CONTRACTOR TO FNSURF THAT ALL DRAINAGE IS DIRECTED AWAY FROM THE EXTERIOR FOOTINGS (MIN. 2% SLOPE).
- EXCAVATIONS OF FOOTINGS SHALL BE TEMPORARILY PROTECTED WITH A 10 MIL POLYETHYLENE MEMBRANE IF CONCRETE IS NOT PLACED WITHIN 24 HOURS OF EXCAVATION
- 6. DO NOT PLACE CONCRETE OR OTHER CEMENTITIOUS MATERIALS AGAINST SUBGRADE WITH ANY DELETERIOUS MATERIALS PRESENT, INCLUDING BUT NOT LIMITED TO: WATER, ICE, FROST, OR LOOSE MATERIAL.
- ALL FOOTINGS ARE TO HAVE MINIMUM 2" PROJECTION ON EACH SIDE OF FOUNDATION WALLS (EXCEPT FOR MONOLITHIC SLAB FOUNDATIONS).

- POURED CONCRETE IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
- AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33.
- ALL MATERIALS USED FOR CONCRETE SHALL CONFORM TO ACI 318, ACI 301, OR ASTM C1157.
  THE PLACING OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318 AND ASTM C94 REQUIREMENTS.
- ADMIXTURES MAY BE USED WITH PRIOR APPROVAL OF THE FOR, ADMIXTURES SHALL COMPLY WITH ASTM C494 AND C1017.
- CONCRETE SLABS-ON-GRADE SHALL BE CONSTRUCTED IN A MANNER THAT COMPUES WITH ACI 302.1R-96.
  CONTROL OR SAW CUT JOINTS SHALL BE CUT TO A MINIMUM OF 1/4 OF THE THICKNESS OF THE RESPECTIVE CONCRETE ELEMENT. CONTROL JOINTS LOCATED WITHIN INTERIOR AND EXTERIOR SLABS-ON-GRADE SHALL BE SPACED AT A MAXIMUM OF 12' O.C. CONTROL JOINTS SHALL COMPLY WITH ACI 301

- CONCRETE REINFORCEMENT:

  1. BAR REINFORCEMENT SHALL BE CONFORM TO ASTM A615, GRADE 60 STEEL
- THE FOLLOWING MINIMUM CLEAR COVER SHALL BE PROVIDED OVER REINFORCING BARS:
  - CONCRETE EXPOSED TO EARTH = 3"
  - CONCRETE EXPOSED TO WEATHER = 1-1/2
  - SLABS NOT EXPOSED TO WEATHER = 3/4'
  - CONCRETE BEAMS & COLUMNS = 1-1/2
- BRICK AND/OR POROUS MATERIAL SHALL NOT BE USED TO SUPPORT FOOTING STEEL OFF THE GROUND. PLASTIC REBAR CHAIRS OR PRECAST CONCRETE DOBIES MAY BE USED.
- SPLICES IN REINFORCING STEEL SHALL BE A MINIMUM OF 45X THE DIAMETER, UP TO A #6 REBAR. REBAR LARGER THAN #6 REQUIRES A MINIMUM LAP
- ALL CONCRETE WALLS SHALL BE DOWELED TO THEIR SUPPORTING FOOTINGS, BEAMS, PADS, ETC. WITH BARS OF THE SAME SIZE AND SPACING AS THE VERTICAL BARS LOCATED WITHIN THE WALL, UNLESS OTHERWISE NOTED. ANCHORAGE OF DOWELS SHALL BE THE EQUIVALENT OF A BAR SPLICE.

- GENERAL WOOD FRAMING:

  1. ALL WOOD FRAMING MEMBERS ARE DESIGNED TO BE SPRUCE-PINE-FIR (SPF) #2, UNLESS OTHERWISE NOTED ON THE PLAN. GRADE MARKS SHALL BE
- MADE BY A RECOGNIZED GRADING AGENCY.
  FRAMING MEMBERS EXPOSED TO WEATHER OR IN DIRECT CONTACT WITH SOIL, CONCRETE, OR MASONRY SHALL BE PRESSURE TREATED SPRUCE-PINE-FIR #2 AND SHALL COMPLY WITH THE AWPA STANDARD C-15
- ALL FASTENERS SUCH AS NAILS, BOLTS, SCREWS, ANCHOR BOLTS, ETC. ATTACHING PRESSURE TREATED OR FIRE—RETARDANT TREATED WOOD SHALL BE HOT-DIPPED ZINC COATED GALVANIZED OR STAINLESS STEEL (ASTM A153).
- 4. LVL ENGINEERED WOOD SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:

  - E = 1,900,000 PSI FB = 2600 PSI FV = 285 PSI FT = 1555 PSI
- 5. PSL ENGINEERED WOOD SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
  5.1. E = 2,000,000 PSI
  5.2. FB = 2900 PSI

  - = 1755 PSI
- 6. LSL ENGINEERED WOOD SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
  6.1. E = 1,550,000 PSI
  6.2. FB = 2250 PSI

  - FV = 400 PSI FT = 1075 PSI
  - ALL BEARING HEADERS TO BE 2-2X6 SUPPORTED WITH MINIMUM (1) 2X4 JACK STUD AND (1) 2X4 KING STUD AT EACH END, UNLESS NOTED OTHERWISE ON THE PLANS, NON-LOAD BEARING HEADERS SHALL BE MINIMUM 2-2X4.
    SOLID BLOCKING IS TO BE INSTALLED AT ALL POINT LOAD THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO THE NEAREST STRUCTURAL ELEMENT.
- ALL WOOD STRUCTURAL MEMBERS THAT ARE SPECIFIED ARE MINIMUM SIZES. CONTRACTOR MAY INSTALL LARGER SIZES FOR EASE OF CONSTRUCTION, IF
- 10. ALL MAILS SHALL BE COMMON NAILS, UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.

  11. ALL LAG SCREWS ARE TO BE PREDRILLED. DRILL DIAMETER IS TO BE 60 PERCENT OF THE SHANK DIAMETER. IN ADDITION, LAG SCREWS SHALL COMPLY WITH ANSI/ASME STANDARD B18.2.1-1981.
- 12. ALL BOLT HEADS AND NUTS BEARING ON WOOD SHALL HAVE STANDARD CUT WASHERS. HOLES FOR BOLTS SHALL BE BORED 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER.
- PROVIDE FULL BEARING WHERE ALL BEAMS MEET SUPPORTING FRAMING MEMBERS.
- 14. UNLESS OTHERWISE NOTED ON PLANS, SIZE, HEIGHT, AND SPACING OF WOOD STUDS SHALL BE IN ACCORDANCE WITH SECTION R602.3.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL CODE. WOOD FRAMED WALLS SHALL CONSIST OF SPRUCE—PINE—FIR NO.2 GRADED MATERIAL.

  15. UNLESS OTHERWISE NOTED, FOUR—PLY LYL BEAMS SHALL HAVE PLIES FASTENED TOGETHER WITH TWO ROWS OF 1/2" DIAMETER BOLTS SPACED AT 16"
- O.C. THE BOLTS SHALL BE LOCATED A MINIMUM OF 2-1/2" AND A MAXIMUM OF 3-1/2" FROM THE TOP OF BOTTOM OF THE BEAM.

- 1.1. ALL ROOF TRUSSES MUST BE BUILT IN ACCORDANCE WITH THE TRUSS MANUFACTURER'S REQUIREMENTS. TIF-DOWN CONNECTIONS TO RESIST UPLIFT SHALL BE INSTALLED WHERE REQUIRED. WHEN ROOF TRUSS MANUFACTURERS DO NOT PROVIDE THE REQUIRED CONNECTIORS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ROOF TRUSS ENGINEER OR THE EOR TO PROVIDE AN ADEQUATE CONNECTION.
- 1.2. ROOF TRUSS LAYOUTS ARE TO BE IN COMPLANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE EOR PRIOR TO INSTALLATION. 1.3. ROOF TRUSSES SHALL BE BRACED PER THE MANUFACTURER'S INSTRUCTIONS AND PER THE SBCA BUILDING COMPONENT SAFETY
  INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED ROOF TRUSSES.
- 1.4. PROVIDE 2X4 LADDER FRAMING SPACED AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES WHERE FALSE DORMERS ARE LOCATED. 1.5. INSTALL MINIMUM 7/16" OSB ROOF SHEATHING. 1.6. INSTALL ROOF TRUSSES PER SECTION R802.10 IN THE 2018 NCRC. WHERE TRUSS HEELS EXCEED 9-1/4" AND ARE LOCATED OVER
- BRACED WALL PANELS, BLOCKING IS TO BE INSTALLED PER SECTION R602.10.5 OF THE 2018 NCRC. 2. STICK FRAMED ROOFS COLLAR TIES SHALL BE 2X6 SPACED AT 48" O.C. AT ALL RIDGES UNLESS NOTED OTHERWISE AND CONNECTED IN THE UPPER THIRD OF
- - 2.1. COLLAR TIES SHALL BE 2X6 SPACED AT 445
    THE ATTIC SPACE USING (3) 10D COMMON NAILS.

  - FUR DOWN ALL RIDGES AS NEEDED SO THAT RAFTERS HAVE FULL CONTACT.

    CEILING JOISTS WHEN ERECTED PARALLEL TO RAFTERS MUST BE SISTERED TO RAFTERS AND SECURED AS PER TABLE R802.5.1(A) OF THE
  - 2018 NORTH CARCIUNA RESIDENTIAL CODE.

    4. IN ADDITION TO THE NCRC FASTENER SCHEDULE, UNLESS NOTED OTHERWISE ON THE PLAN, ROOF MEMBERS SHALL BE TIED DOWN WITH ADDITIONAL METAL CONNECTORS. INSTALL A SIMPSON H2.5A CONNECTOR AT EVERY RAFTER TO FASTEN THE LOWER END OF THE RAFTER TO THE
  - TOP PLATE OR BEAM BELOW.
    2.5. INSTALL MINIMUM 7/16" OSB ROOF SHEATHING.



# **QUEEN CITY** CONSULTING AND DESIGN, PLLC

STRUCTURAL PLANS PREPARED FOR:

MARIE - LH VERSION

PROJECT ADDRESS

LGI HOMES 5511 CAPITAL CENTER DRIVE, SUITE 560 RALEIGH, NC 27603

DESIGNER: QUEEN CITY CONSULTING AND DESIGN, PLLC. 2459 WILKINSON BLVD, SUITE 300 CHARLOTTE, NC 28208

Revision No.	Date	Description
0	06.01.24	ORIGINAL ENGINEERING
1	09.02.24	CHANGED 11.875" FLOOR JOIST TO 14" FLOOR JOIST
2	12.26.24	ADDED STEMWALL FOUNDATION AND REAR PATIO OPTION, ALSO ADDED REAR STEMWALL PATIO OPTION FOR CRAWLSPACE.

## DESIGN SPECIFICATIONS:

CONSTRUCTION TYPE: RESIDENTIAL

## APPLICABLE BUILDING CODES:

- 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS
- ASCE 7-10: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES

ULTIMATE DESIGN WIND SPEED: 130MPH, EXPOSURE B

ASSUMED SOIL BEARING CAPACITY: 2000PSF

COMPONENT AND CLADDING LOADS SHALL BE DERIVED PER TABLES R301.2(2) AND R301.2(3)

## ENGINEERING SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY

QC ASSUMES NO LIABILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, OR DEVIATIONS/DISCREPANCIES THAT MAY OCCUR IN THE PLAN ANY DEVIATIONS OR DISCREPANCIES ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF QUEEN CITY CONSULTING AND DESIGN PLLC

THE ARCHITECTURAL PLANS USED FOR STRUCTURAL DRAWINGS AND ANALYSIS HAVE BEEN PROVIDED BY COX ARCHITECTURE AND DESIGN, PLLC AND HAVE BEEN COMPLETED/REVISED ON 05/22/24 NOTIFY OC OF ANY ALTERATIONS MADE TO THE PLANS AFTER THE DATE SHOWN HEREIN.

	LIVE LOADS
CONVENTIONAL 2X ROOF	20 PSF
ROOF TRUSS	20 PSF
ATTIC ROOF TRUSS	60 PSF
FLOOR LIVE TYP. DWELLING	40 PSF
SLEEPING AREAS	30 PSF
DECKS	40 PSF
PASSENGER VEHICLE GARAGE	50 PSF
BALCONIES	40 PSF
ATTICS WITH STORAGE	20 PSF
ATTICS WITHOUT STORAGE	10 PSF
GROUND SNOW LOAD	15 PSF

	DEAD LOADS
CONVENTIONAL 2X ROOF	15 PSF
ROOF TRUSS	20 PSF
CONVENTIONAL 2X FLOOR	10 PSF
I-J0IST	15 PSF
FLOOR TRUSS	15 PSF
· ·	

PAGE LIST:	
Page Symbol	DESCRIPTION
CS	COVER SHEET, SPECIFICATIONS, REVISIONS
F-1m	MONOLITHIC SLAB FOUNDATION
F-1s	STEMWALL FOUNDATION
F-1c	CRAWLSPACE FOUNDATION
S-1	FIRST FLOOR FRAMING PLAN
D-1m	MONOLITHIC SLAB DETAILS
D-1s	STEMWALL DETAILS
D-1c	CRAWLSPACE DETAILS
D-1f	FRAMING DETAILS







SHE NAME: /ER COVI SKET

CLIENT: LIGH HOMES

PLAN NAME: MARIE-LH VERSION

NEIGHBORHOOD: LOT AND ADDRESS:

PROJECT NUMBER:

LGI240014 DRAWN BY: EO & MSB

LOT #

DATE: 12.26.2024

SCALE: 1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17"

PAGE:

## STEMWALL FOUNDATION NOTES:

- DISCLAIMER: ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION, PLUS ALL LOCAL
- CODES AND REGULATIONS.
  THE FOUNDATION HAS BEEN DESIGNED WITH AN ASSUMED 2000 PSF MINIMUM ALLOWABLE SOIL BEARING CAPACITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOIL BEARING CAPACITY PRIOR TO CONCRETE PLACEMENT. CONTACT QC IF DESIRED BEARING CAPACITY IS NOT ACHIEVED.
- ALL POURED CONCRETE IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS. PLACE CONCRETE IN ACCORDANCE WITH ACI STANDARD 318.
- THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION, AS SPECIFIED BY THE LOCAL MUNICIPALITY, HOWEVER, THE BOTTOM OF ALL FOOTINGS SHALL BE A MINIMUM OF 12" BELOW GRADE.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS IS 4'. FOR GREATER THAN 4', REFER TO SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE, OR CONTACT QC FOR ADDITIONAL ENGINEERING.
- PERIMETER INSULATION IS TO BE INSTALLED PER THE 2018 NCRC AND PER LOCAL MUNICIPALITY.
  WOOD SILL PLATES AT LOAD BEARING AND BRACED WALLS SHALL BE ANCHORED
- TO THE FOUNDATION WITH 1/2" DIAMETER BOLTS SPACED AT A MAXIMUM OF 6' O.C. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PLATE SECTION. BOLTS SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE AND SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE PLATE. BOLTS TO BE LOCATED NOT MORE THAN 12"
- FROM ANY CORNERS OR BREAKS WITHIN THE SILL PLATE.
  ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL,
- DIMENSIONS SHOWN ON FOUNDATION DRAWINGS ARE TO EDGE OF FRAMING AND NOT TO EDGE OF BRICK VENEER.
- WITH CLASS 1 SOILS (TABLE R405.1), A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED.
- NUT REQUIRED.

  ALL GRADING AND FOUNDATION WORK MUST BE OBSERVED AND APPROVED PRIOR TO PLACEMENT OF CONCRETE.

  CONCRETE SLABS SHALL BE 4" THICK AND CONSTRUCTED OUT OF 3000 PSI MIN. COMPRESSIVE STRENGTH WITH 6"x6" W1.4xW1.4 WELDED WIRE FABRIC OR FIBERMESI CONCRETE OVER 10 MIL. THICK VAPOR BARRIER ON 95% COMPACTED FILL, VERIFIED BY EITHER ENGINEER OR CODE OFFICIAL.

  CONCRETE CURBS THAT ARE USED TO SUPPORT PORTAL FRAME WALLS SHALL BE
- MAXIMUM UNBALANCED FILL FOR UNGROUTED CMU WALLS SHALL NOT EXCEED 4'-0". REFER TO SECTION R404 IN THE 2018 NCRC.
- ARREVIATIONS:
  - DJ = DOUBLE JOIST FT = FLOOR TRUSS
  - GIRDER TRUSS SC = STUD COLUMN
  - DR = DOUBLE RAFTER
    TR = TRIPLE RAFTER
    OC = ON CENTER EE = EACH END TJ = TRIPLE JOIST
  - CI = CENTERLINE
  - PLFA = POINT LOAD FROM ABOVE COL = COLUMN
  - PT = PRESSURE TREATED
- UNO = UNLESS NOTED OTHERWISE
  - J = JACK STUD CONT = CONTINUOUS
- K = KING STUD MANUF = MANUFACTURER

TERMITE TREATMENT NOTE: CONTRACTOR IS TO INSTALL
PROTECTION AGAINST SUBTERRANEAN TERMITES PER SECTION R318 OF THE 2018 NCRC.

ANCHORAGE	SCHEDULE	
ANCHOR	MIN. SPACING	MIN. CONC. EMBEDMENT
1/2" DIA. A307 BOLTS W/ 90 DEGREE BEND	6'-0"	7"
SIMPSON MASA MUDSILL ANCHOR	6'-0"	4"
1/2" DIAMETER THREADED ROD W/ SET-3G EPOXY	6'-0"	7"
1/2" DIAMETER SIMPSON TITEN CONCRETE SCREWS	6'-0"	4-1/4"

FOOTING SCHEDULE

SIZE

24"x24"x10"

30"X30"X10"

36"X36"X12"

42"X42"X12"

48"X48"X12"

REBAR

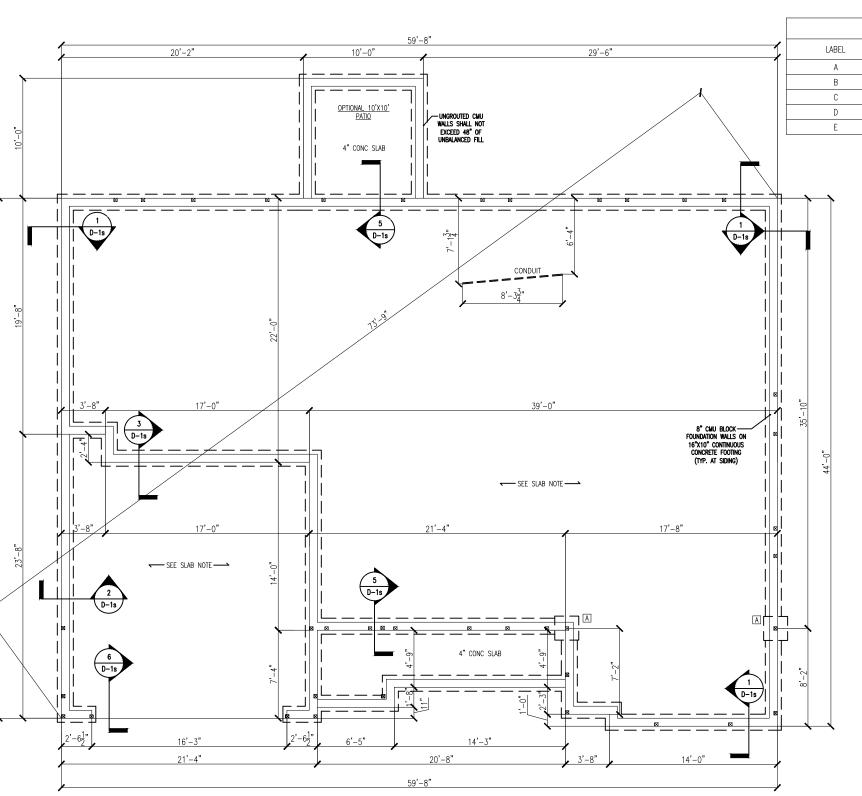
N/A

N/A

#4 @ 8" O.C. EA WAY

#4 @ 8" O.C. EA WAY

#5 @ 8" O.C. EA WAY









CLIENT: LGI HOMES

SHEET NAME: STEMWALL FOUNDATION

CLIENT: LGL HOMES

PLAN NAME: MARIE-LH VERSION

NEIGHBORHOOD: LOT AND ADDRESS:

PROJECT NUMBER: LGI240014

DRAWN BY: EO & MSB

LOT # TBD

DATE: 12.26.2024

SCALE: 1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17"

PAGE:

F-1.1s

## CRAWLSPACE FOUNDATION NOTES:

- DISCLAIMER: ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION, PLUS ALL LOCAL
- CODES AND REGULATIONS.

  THE FOUNDATION HAS BEEN DESIGNED WITH AN ASSUMED 2000 PSF MINIMUM ALLOWABLE SOIL BEARING CAPACITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOIL BEARING CAPACITY PRIOR TO CONCRETE PLACEMENT. CONTACT QC IF DESIRED BEARING CAPACITY IS NOT ACHIEVED.
- ALL POURED CONCRETE IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS. PLACE CONCRETE IN ACCORDANCE WITH ACI STANDARD 318.
- THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION, AS SPECIFIED BY THE LOCAL MUNICIPALITY, HOWEVER, THE BOTTOM OF ALL FOOTINGS SHALL BE A MINIUM OF 12" BELOW GRADE.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS IS 4'. FOR GREATER THAN 4', REFER TO SECTION RAO4.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE, OR CONTACT OC FOR ADDITIONAL ENGINEERING. PERIMETER INSULATION IS TO BE INSTALLED PER THE 2018 NCRC AND PER LOCAL
- MUONICIPALITY.
  WOOD SILL PLATES AT LOAD BEARING AND BRACED WALLS SHALL BE ANCHORED
  TO THE FOUNDATION WITH 1/2" DIAMETER BOLTS SPACED AT A MAXIMUM OF 6'
  O.C. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PLATE SECTION. BOLTS SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE AND SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE PLATE. BOLTS TO BE LOCATED NOT MORE THAN 12" FROM ANY CORNERS OR BREAKS WITHIN THE SILL PLATE.
  ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95%
- COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.
  DIMENSIONS SHOWN ON FOUNDATION DRAWINGS ARE TO EDGE OF FRAMING AND NOT TO EDGE OF BRICK VENEER.
- WITH CLASS 1 SOILS (TABLE R405.1), A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED.
- ALL GRADING AND FOUNDATION WORK MUST BE OBSERVED AND APPROVED PRIOR TO PLACEMENT OF CONCRETE.

  PILASTERS SHALL BE BONDED WITH THE EXTERIOR FOUNDATION WALL.

- FILASIERS SHALL BE BUNDED WITH THE EXTERIOR FOUNDATION WALL.
  THE CENTER OF EACH PIECR SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE
  FOOTING, EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF EACH PIER.
  CRAWLSPACE VENTS SHALL BE INSTALLED PER SECTION R408 OF THE 2018 NCRC.
  THE MINIMUM NET AREA OF VENTILATION SHALL BE NOT LESS THAN I SQUARE
  FOOT FOR EACH 150 SQUARE FEET OF CRAWLSPACE GROUND AREA. LOCATE A
- CRAWLSPACE VENT WITHIN 3' FROM EACH CORNER OF THE BUILDING.
  ALL PIERS TO BE 16"x16" MASONRY AND ALL PILASTERS TO BE 8"x16" MASONRY BEARING ON 24"X24"X10" CONCRETE FOOTINGS, TYPICAL. (UNO)
- CONCRETE SLABS SHALL BE 4" THICK AND CONSTRUCTED OUT OF 3000 PSI MIN. COMPRESSIVE STRENGTH WITH 6"x6" W1.4xW1.4 WELDED WIRE FABRIC OR COMPACTS OF STREAM OF WILLIAM I. WELLED MINE PABRIC OF FIBERMESH CONCRETE OVER 10 MIL. THICK VAPOR BARRIER ON 95% COMPACTED FILL, VERIFIED BY EITHER ENGINEER OR CODE OFFICIAL.

  CONCRETE CURBS THAT ARE USED TO SUPPORT PORTAL FRAME WALLS SHALL BE
- A MINIMUM OF 8" WIDE

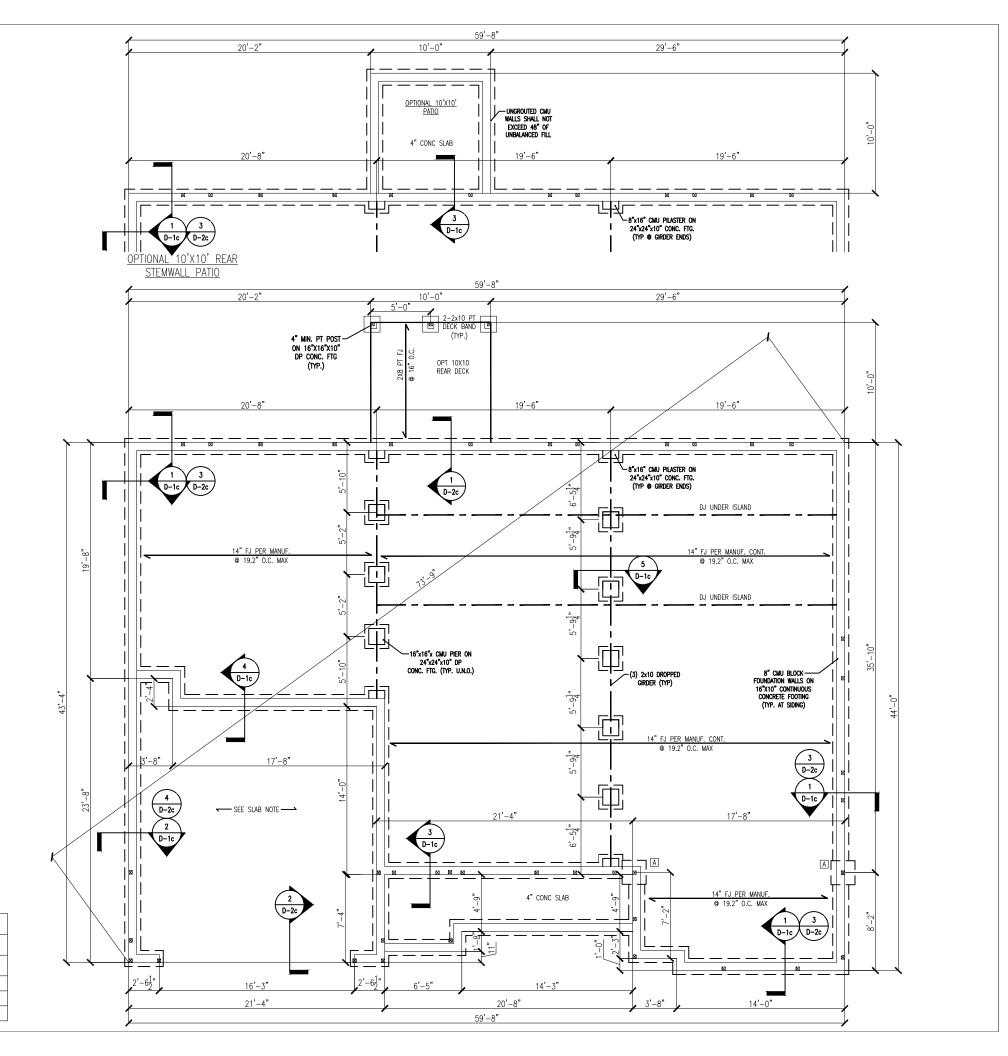
  MAXIMUM UNBALANCED FILL FOR UNGROUTED CMU WALLS SHALL NOT EXCEED 4'-0". REFER TO SECTION R404 IN THE 2018 NCRC.
- PROVIDE A MINIMUM 18"X24" OPENING FOR CRAWL SPACE.
  THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED 10 TIMES THEIR LEAST DIMENSION PER R404.1.5.4 IN THE 2018 NCRC.
- - DJ = DOUBLE JOIST SJ = SINGLE JOIST GT = GIRDER TRUSS SC = STUD COLUMN FT = FLOOR TRUSS DR = DOUBLE RAFTER
  - FF = FACH FND TR = TRIPLE RAFTER
  - TJ = TRIPLE JOIST CL = CENTERLINE OC = ON CENTER
    PLFA = POINT LOAD FROM ABOVE COL = COLUMN
  - NTS = NOT TO SCALE
  - UNO = UNLESS NOTED OTHERWISE PT = PRESSURE TREATED K = KING STUD J = JACK STUD
  - MANUF = MANUFACTURER CONT = CONTINUOUS

TERMITE TREATMENT NOTE: CONTRACTOR IS TO INSTALL PROTECTION AGAINST SUBTERRANEAN TERMITES PER SECTION



FOOTING SCHEDULE		
LABEL SIZE		REBAR
A	24"x24"x10"	N/A
В	30"X30"X10"	N/A
С	36"X36"X12"	#4 @ 8" O.C. EA WAY
D	42"X42"X12"	#4 @ 8" O.C. EA WAY
E	48"X48"X12"	#5 @ 8" O.C. EA WAY

ANCHORAGE SCHEDULE		
ANCHOR	MIN. SPACING	MIN. CONC. EMBEDMENT
1/2" DIA. A307 BOLTS W/ 90 DEGREE BEND	6'-0"	7"
SIMPSON MASA MUDSILL ANCHOR	6'-0"	4"
1/2" DIAMETER THREADED ROD W/ SET-3G EPOXY	6'-0"	7"
1/2" DIAMETER SIMPSON TITEN CONCRETE SCREWS	6'-0"	4-1/4"









SHEET NAME:
CRAWL SPACE
FOUNDATION

CLIENT: LGL HOMES

PLAN NAME: MARIE-LH VERSION

NEIGHBORHOOD:

LOT AND ADDRESS: LOT # TBD

PROJECT NUMBER: LGI240014

DRAWN BY: EO & MSB

DATE: 12.26.2024

SCALE: 1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17"

PAGE: F-1.1c

- REFER TO COVER PAGE FOR ADDITIONAL NOTES
  ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL CODES AND
- CAROUNA RESIDENTAL CODE (NCRC), 2018 EDITION, PLOS ALL LOCAL CODES AND REGULATIONS.

  THE EOR SHALL REVIEW EWP AND TRUSS LAYOUTS FOR ACCURACY PRIOR TO CONSTRUCTION. SOLID BLOCKING IS TO BE INSTALLED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO THE REAREST STRUCTURAL ELEMENT. BLOCKING SHALL BE EQUAL TO OR GREATER THAN THE SUPPORT ABOVE.
- BUILT-UP WOOD COLUMNS CONSISTING OF MULTIPLE STUDS SHALL HAVE EACH LAMINATION NAILED WITH 16D NAILS SPACED AT 9" O.C. FOR BUILT-UP COLUMNS CONSISTING OF (4) PLIES OR MORE, SECURE PLIES TOGETHER WITH HORIZONTAL SIMPSON CS-16 COIL STRAPS LOCATED AT QUARTER POINTS.
  CONTRACTOR SHALL ENSURE THAT ALL BEAMS, HEADERS, AND STRUCTURAL COMPONENTS
- CONIRACION SHALL ENSURE IMAI ALL BEAMS, HEADLES, AND STRUCTURAL COMPONENTS ARE FULLY BERNING ON THE SUPPORTING MEMBERS. ANY GAPS IN THE FRANMING SHALL BE SHIMMED APPROPRIATELY WITH EITHER METAL SHIMS OF WOOD SHIMS AS NECESSARY, HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. ANY HEADERS INSTALLED THAT ARE REPORTED IN SIZE ARE AN ADEQUATE REPLACEMENTS PROVIDED THE MATERIAL IS OF THE SAME OR GREATER SIRUCTURAL PROPERTIES.
- WHERE TOP PLATE HAS BEEN CUT TO ACCOMMODATE FLUSH HEADERS/BEAMS, INSTALL A MINIMUM 16" LONG HORIZONTAL CS-16 STRAP EXTENDING 12" PAST THE BREAK ON EACH
- UNLESS OTHERWISE NOTED, FOUR-PLY LVL BEAMS SHALL HAVE PLIES FASTENED TOGETHER WITH TWO (2) ROWS OF 1/2" DIAMETER BOLTS SPACED AT 16" O.C. THE BOLTS SHALL BE LOCATED A MINIMUM OF 2-1/2" AND A MAXIMUM OF 3-1/2" FROM THE TOP AND BOTTOM
- OF THE BEAM.
  ALL LOAD BEARING WALLS TO BE 2X4 U.N.O.
- ABBREVIATIONS:
- DJ = DOUBLE JOIST GT = GIRDER TRUSS SJ = SINGLE JOIST FT = FLOOR TRUSS SC = STUD COLUMN
- FT = FLOOR TRUSS
  DR = DOUBLE RAFTER
  TR = TRIPLE RAFTER
  OC = ON CENTER
  PLFA = POINT LOAD FROM ABOVE
  NTS = NOT TO SCALE
  UNO = UNLESS NOTED OTHERWISE
  V = VINCE STID EE = EACH END
  TJ = TRIPLE JOIST
  CL = CENTERLINE COL = COLUMN PT = PRESSURE TREATED
- J = JACK STUD CONT = CONTINUOUS MANUE = MANUEACTURER

## LEGEND

- #J # OF JACK STUDS STUD COLUMN ■ POINT LOAD FROM ABOVE
- LOAD BEARING WALL NON LOAD BEARING WALL

HEADER SCHEDULE:		
LABEL	SIZE	
A	2x6 W/ (1) JACK STUD E.E.*	
В	2x8 W/ (2) JACK STUDS E.E.*	
С	2x10 W/ (2) JACK STUDS E.E.*	
D	2x12 W/ (2) JACK STUDS E.E.*	
E	9-1/4" LVL W/ (3) JACK STUDS E.E.*	
F	11-7/8" LVL W/ (3) JACK STUDS E.E. *	

\*THE AMOUNT OF PLYS FOR THE HEADER IS DETERMINED BY THE WIDTH OF THE WALL (2X4 WALL=2 PLYS, 2X6 WALL=3 PLYS, ETC.).

AMOUNT OF JACK STUDS SHOWN ON PLAN TAKE PRECEDENCE OVER TABLE.

HEADER SPAN	MINIMUM KING STUDS E.E.
3'-0" OR LESS	(1)
3'-0" TO 6'-0"	(2)
6'-0" TO 9'-0"	(3)
9'-0" TO 12'-0"	(4)
12'-0" TO 16'-0"	(6)

## WALL STUD NOTES:

- ALL STRUCTURAL LOAD BEARING WALLS SHALL BE CONSTRUCTED OUT OF 2X4 OR 2X6 STUDS AT 16" O.C. U.N.O. FOR UP TO 10' WALLS
  ALL NON LOAD BEARING WALLS SHALL BE CONSTRUCTED OUT OF 2X4 OR 2X6
- STUDS AT 24" O.C. U.N.O. FOR UP TO 10' WALLS
- BALLOON FRAMED WALLS SHALL BE CONSTRUCTED WITH 2X4 STUDS AT 12" O.C. OR 2X6 STUDS AT 16" O.C. WITH CROSS BRACING AT 6'-0" O.C. VERTICALLY OR ACCORDING TO THE CHART BELOW:

HEIGHT (PLATE TO PLATE)	STUD SIZE	SPACING
12'-0"	2X4	12" O.C.
15'-0"	2X6	16" O.C.
17'-0"	(2) 2X4/2X6	12" O.C./12" O.C.
21'-0"	(2) 2X6/2X8	16" O.C./12" O.C.
25'-0"	(2) 2X6	12" O.C.

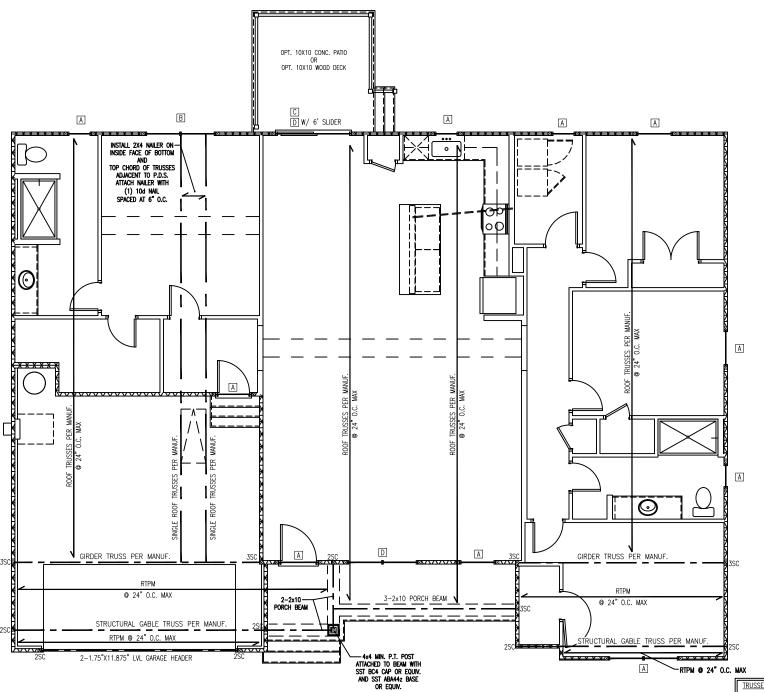
## BRICK LINTEL SCHEDULE:

SPAN	HEIGHT OF BRICK	LINTEL
3'-0" OR LESS	20' MAX	L3"x3"x1/4"
3'-0" TO 6'-0"	6' MAX 12' MAX 20' MAX	L3"x3"x1/4" L4"x3"x1/4" L5"x3-1/2"x5/16"
6'-0" TO 12'-0"	6' MAX 12' MAX	L5"x3-1/2"x5/16" L6x3-1/2"x5/16"
40' 0" TO 40' 0"	401 4444	10" 4" 1 /0"

- ATTACH ALL LINTELS TO THE SUPPORTING HEADER WITH (2) ROWS OF MINIMUM 3.5" LONG 1/2" DIAMETER LAG SCREWS AT 16" O.C.
- ENDS OF LINTEL SHALL BEAR AT LEAST 3.5" IN THE ADJACENT BRICK

NOTE: WALL BRACING HAS BEEN ANALYZED USING CS-WSP PER SECTION R602.10 OF THE 2018 NCRC, MIXED METHODS PER TABLE R602.10.1 ARE DESIGNATED ON THE PLAN.

NOTE: FLOOR JOISTS MAY INCLUDE FLOOR TRUSSES OR I-JOISTS, AS CONTRACTOR DESIRES.



TYPICAL HANGERS FOR JOIST & BEAMS			
	-SIMPSON-	-USP-	
MEMBERS	HANGER	HANGER	
2x8	LUS28	JUS28	
2x10	LUS210	JUS210	
2x12	LUS210	JUS210	
2-2x8 2-2x10	HUS28-2 HUS210-2	JUS28-2 JUS210-2	
2-2x10 2-2x12	HUS210-2 HUS212-2	JUS210-2 JUS212-2	
3-2x8	LUS28-3	JUS28-3	
3-2x10	LUS210-3	JUS210-3	
3-2x12	HU212-3 MIN.	JUS212-3 MIN.	
2-1¾"x9¼" LVL	HGUS410	THDH410	
2-134"x935" LVL	HGUS410	THDH410	
2-13/4"x111/4" LVL	HGUS412	THDH412	
2-1¾"x11¾" LVL	HGUS412	THDH412	
2-134"x14" LVL	HGUS414	THDH414	
2-134"x16" LVL	HGUS414	THDH414	
2-134"x18" LVL	HGUS414	THDH414	
2-1¾"x24" LVL	HGUS414	THDH414	
3-1¾"x9¼" LVL	HGUS5.50/10	THDH610	
3-1¾"x9½" LVL	HGUS5.50/10	THDH610	
3-1¾"x11¼" LVL	HGUS5.50/12	THDH612	
3-1¾"x11%" LVL	HGUS5.50/12	THDH612	
3-1¾"x14" LVL	HGUS5.50/14	THDH614	
3-1¾"x16" LVL	HGUS5.50/14	THDH614	
3-1¾"x18" LVL	HGUS5.50/14	THDH614	
3-1¾"x24" LVL	HGUS5.50/14	THDH614	
4-1¾"x9¼" LVL	HGUS7.25/10	THDH7210	
4-1¾"x9½" LVL	HGUS7.25/10	THDH7210	
4-1¾"x11¼" LVL	HGUS7.25/12	THDH7212	
4-1¾"x11¾" LVL	HGUS7.25/12	THDH7212	
4-1¾"x14" LVL	HGUS7.25/14	THDH7214	
4-1¾"x16" LVL	HGUS7.25/14	THDH7214	
4-1¾"x18" LVL	HGUS7.25/14	THDH7214	

NOTE: ALL HANGERS BY SIMPSON STRONG TIE CO., INC. (BRAND - NAME EQUIVALENTS ACCEPTABLE)

## TRUSS UPLIFT CONNECTOR SCHEDULE

MAX. UPLIFT	ROOF TO WALL	FLOOR TO FLOOR	FLOOR TO FND
600 LBS	H2.5A	PER WALL SHEATHING	& FASTENERS
1200 LBS	(2) H2.5A	CS16 (END = 11")	DTT2Z
1450 LBS	HTS20	CS16 (END = 11")	DTT2Z
2000 LBS	(2) MTS20	(2) CS16 (END = 11")	DTT2Z
2900 LBS	(2) HTS20	(2) CS16 (END = 11")	HTT4
3685 LBS	LGT3-SDS2.5	MSTC52	HTT4
4 411 00001	IOTO LICTED ADE CILA	DOON CEDONO TIE FOUR	CHT DOODHOTC

ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.

MAN DE SOLD FILE MANORACIONES 3 S'ECHICATION DE 2. UPLIET VALUES LISTED ARE FOR SPF #2 CRADE MEMBERS.

3. REFER TO TRUSS LAYOUT PER MANUF, FOR UPLIET VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS MANUFACTURER OVERRIDE. THOSE LISTED ABOVE. 4. CONTACT QC FOR REQUIRED CONNECTORS WHEN LOADS EXCEED THOSE

LISTED ABOVE.

WALL BRACING LEGEND:

ATTACH (2) 2X4 STUD COLUMN TO FOUNDATION WITH SST LTTP2 HOLD DOWN, OR EQUIVALENT HARDWARE.

BRACED WALL

## WALL BRACING NOTES:

- REFER TO COVER PAGE FOR ADDITIONAL NOTES
- BRACING DESIGN CONFORMS TO THE 2018 NCRC AND ALL LOCAL AMENDMENTS FOR A MAXIMUM WIND SPEED OF 130 MPH AND SEISMIC ZONES A-C
- WALL BRACING HAS BEEN AWALYZED PER SECTION R602.10 OF THE 2018 NCRC. CS-WSP IS THE COMMON BRACING METHOD USED, WHERE APPLICABLE. MIXED METHODS, OTHER THAN CS-WSP, SHOWN WITHIN TABLE R602.10.1 ARE
- ALL BRACING COMPONENTS SHALL COMPLY TO SECTION R602.10.1 OF THE 2018
- MINIMUM PANEL LENGTH SHALL BE 24" OR THE MINIMUM AS STATED IN R602.10.1 OF THE 2018 NCRC.
- BRACED WALL PANELS SHALL BE WITHIN 12'-0" FROM THE ENDS OF A BRACED WALL LINE AND SPACED NO GREATER THAN 21'.
  INTERIOR OF EXTERIOR BRACED WALLS SHALL BE SHEATHED CONTINUOUSLY WITH
- 1/2" THICK GYPSUM, U.N.O.
- HOLD DOWNS SHALL BE INSTALLED FOR BRACED WALL END CONDITIONS PER
- SECTION R602.10.4 AND FIGURE R602.10.3(3) OF THE 2018 NCRC.
  REFER TO THE CHART BELOW FOR BRACED WALL METHODS AND CONNECTIONS.

METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION
CONTINUOUS SHEATHING WOOD STRUCTURAL PANEL (CS-WSP)	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS AT 6" O.C. ON EDGE AND 12" O.C. ON FIELD
GYPSUM BOARD (GB)	GYPSUM BOARD	1/2**	5d COOLER NAILS AT 7" O.C. ON EDGE AND FIELD
WOOD STRUCTURAL PANEL (WSP)	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS AT 6" O.C. ON EDGE AND 12" O.C. ON FIELD
PORTAL FRAME (PF)	WOOD STRUCTURAL PANEL	7/16"	SEE DETAIL 1/D-1f

- REFER TO COVER PAGE FOR ADDITIONAL WOOD FRAMING NOTES
- ALL ROOF TRUSSES SHALL BE ATTACHED TO WALL PLATES WITH MINIMUM (1) SIMPSON H2.5A OR PER MANUFACTURER'S INSTRUCTIONS OR PER SECTION R802.11 OF THE 2018 NCRC, WHICHEVER
- ROOF TRUSSES ARE TO BE INSTALLED PER SECTION R802.10 IN THE 2018 NCRC
- ROOF TRUSSES SHALL BE BRACED PER THE MANUFACTURER'S INSTRUCTIONS AND PER THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES.
- DO NOT CUT OR ALTER ROOF TRUSSES ROOF TRUSS MANUFACTURER SHALL VERIFY AND DESIGN FOR POSITION OF PULL DOWN STAIRS
- WHERE TRUSS HEELS EXCEED 9-1/4" AND ARE LOCATED OVER BRACED WALL PANELS AS SHOWN ON THE PLANS, BLOCKING SHALL BE INSTALLED PER SECTION R602.10.5 OF THE 2018 NCRC.







CLIENT: LGI HOM

OOR PLAN SHEET NAME: FIRST FLC FRAMING

CLIENT: LGL HOMES

PLAN NAME: MARIE-LH VERSION

NEIGHBORHOOD: TRN

LOT AND ADDRESS: LOT # l tbd

PROJECT NUMBER: LGI240014

DRAWN BY: FO & MSB

DATE: 12.26.2024

SCALE: 1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17"

PAGE:

## GENERAL STRUCTURAL NOTES:

- These drawings and its contents are the property of Queen City Consulting and Design, PLLC, (QC) and the client as noted on this page. Distribution to any other parties for purposes other than those directly concerned with the titled project without prior written consent from QC is strictly prohibited.
- The engineer's name present on the seal of these drawings is the engineer of record (EOR).
- Details noted as "Typical" shall be used whenever applicable. Refer to specifications for information not covered by these notes or drawings.
- 4. It is the responsibility of the contractor to verify all dimensions prior to construction. Furthermore, QC will not be held responsible for the contractor's failure to conform to the construction documents, including this structural set, should any non-conformities occur.
- The contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including
- 6. Any omissions and conflicts between the various elements of the structural drawings and/or specifications shall be brought to the attention of, and resolved with, the engineer before proceeding with any work so involved.
- 7. All construction shall conform to the latest requirements of the North Carolina Residential Code (NCRC), 2018 Edition, plus all local codes and regulations.
- 8. Seismic design shall be per section R301.2.2 of the 2018 NCRC and is based off of local seismic design categories.

### FOOTING AND FOUNDATION NOTES:

- Foundation Design is based on a minimum allowing bearing capacity of 2,000 PSF. Contact the EOR if bearing capacity is not achieved.

  No excavation shall occur within a 45 degree line projected from the bottom of the building foundation is permitted, unless it is specifically
- 3. The bottom of all footings shall extend below the frost line for the region, as specified by the local municipality. However, the bottom of all footings shall be a minimum of 12" below grade.
- 4. Contractor to ensure that all drainage is directed away from the exterior footings (Min. 2% slope).
- 5. Excavations of footings shall be temporarily protected with a 10 mil polyethylene membrane if concrete is not placed within 24 hours of
- 6. Do not place concrete or other cementitious materials against subgrade with any deleterious materials present, including but not limited to: water, ice, frost, or loose material.
- 7. All footings are to have minimum 2" projection on each side of foundation walls (except for monolithic slab foundations).

- Poured concrete is to have a minimum compressive strength of 3000 psi at 28 days. Aggregates for normal weight concrete shall conform to ASTM C33.
- All materials used for concrete shall conform to ACI 318, ACI 301, or ASTM C1157.
- The placing of all concrete shall be in accordance with ACI 318 and ASTM C94 requirements
- Admixtures may be used with prior approval of the EOR. Admixtures shall comply with ASTM C494 and C1017. Concrete slabs-on-grade shall be constructed in a manner that complies with ACI 302.1R-96.
- Control or saw cut joints shall be cut to a minimum of 1/4 of the thickness of the respective concrete element. Control joints located within interior and exterior slabs-on-grade shall be spaced at a maximum of 12' 0.C. Control joints shall comply with ACI 301.

- Bar reinforcement shall be conform to ASTM A615, grade 60 steel.
- The following minimum clear cover shall be provided over reinforcing bars:
  - Concrete exposed to earth
  - Concrete exposed to weather = 1-1/2
  - Slabs not exposed to weather = 3/4"
  - Concrete Beams & Columns = 1-1/2"
- 3. Brick and/or porous material shall not be used to support footing steel off the ground. Plastic rebar chairs or precast concrete dobies may be
- 4. Splices in reinforcing steel shall be a minimum of 45x the diameter, up to a #6 rebar. Rebar larger than #6 requires a minimum lap splice of 56x the diameter.
- 5. All concrete walls shall be doweled to their supporting footings, beams, pads, etc. with bars of the same size and spacing as the vertical bars located within the wall, unless otherwise noted. Anchorage of dowels shall be the equivalent of a bar splice.

## GENERAL WOOD FRAMING:

- All wood framing members are designed to be Spruce-Pine-Fir (SPF) #2, unless otherwise noted on the plan. Grade marks shall be made by a recognized grading agency.

  2. Framing members exposed to weather or in direct contact with soil, concrete, or masonry shall be pressure treated Spruce—Pine—Fir #2 and shall
- comply with the AWPA standard C-15.
- 3. All fasteners such as nails, bolts, screws, anchor bolts, etc. attaching pressure treated or fire-retardant treated wood shall be hot-dipped zinc coated galvanized or stainless steel (ASTM A153).
- 4. LVL engineered wood shall have the following minimum design values:
  - E = 1,900,000 psi
    - Fb = 2600 psi
  - Fv = 285 psi Ft = 1555 psi = 1555 psi
- 5. PSL engineered wood shall have the following minimum design values:
- = 2,000,000 psi
  - Fb = 2900 psi
  - Fv = 290 psi
- = 1755 psi 6. LSL engineered wood shall have the following minimum design values:
  - E = 1,550,000 psi Fb = 2250 psi 6.2.
  - Fv = 400 psi Ft = 1075 psi
- All bearing headers to be 2-2x6 supported with minimum (1) 2x4 jack stud and (1) 2x4 king stud at each end, unless noted otherwise on the plans. Non-load bearing headers shall be minimum 2-2x4.
- Solid blocking is to be installed at all point load through floor levels to the foundation or to the nearest structural element.
- All wood structural members that are specified are minimum sizes. Contractor may install larger sizes for ease of construction, if desired.
- 10. All nails shall be common nails, unless noted otherwise on plans and details.
- 11. All lag screws are to be predrilled. Drill diameter is to be 60 percent of the shank diameter. In addition, lag screws shall comply with ANSI/ASME standard B18.2.1-1981.
- 12. All bolt heads and nuts bearing on wood shall have standard cut washers. Holes for bolts shall be bored 1/16" larger than the nominal bolt
- Provide full bearing where all beams meet supporting framing members.
- 14. Unless otherwise noted on plans, size, height, and spacing of wood studs shall be in accordance with section R602.3.1 of the 2018 North Carolina Residential Code. Wood framed walls shall consist of Spruce—Pine—Fir No.2 graded material.
- 15. Unless otherwise noted, four-ply LVL beams shall have plies fastened together with two rows of 1/2" diameter bolts spaced at 16" o.c. The bolts shall be located a minimum of 2-1/2" and a maximum of 3-1/2" from the top of bottom of the beam.

# ROOF FRAMING NOTES: 1. Truss Built Roofs

- 1.1. All roof trusses must be built in accordance with the truss manufacturer's requirements. Tie-down connections to resist uplift shall be installed where required. When roof truss manufacturers do not provide the required connectors, it is the responsibility of the contracto o notify the roof truss engineer or the EOR to provide an adequate connection.
- 1.2. Roof 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 EOR prior to installation.
- 1.3. Roof trusses shall be braced per the manufacturer's instructions and per the SBCA Building Component Safety Information (BCSI) Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Roof Trusses.
- 1.4. Provide 2x4 ladder framing spaced at 24" o.c. between adjacent roof trusses where false dormers are located
- 1.5. Install minimum 7/16" OSB roof sheathing.

using (3) 10d common nails.

- 1.6. Install roof trusses per section R802.10 in the 2018 NCRC. Where truss heels exceed 9-1/4" and are located over braced wall panels, blocking is to be installed per section R602.10.5 of the 2018 NCRC.
- 2. Stick Framed Roofs Collar ties shall be 2x6 spaced at 48" o.c. at all ridges unless noted otherwise and connected in the upper third of the attic space
  - Fur down all ridges as needed so that rafters have full contact. Ceiling joists when erected parallel to rafters must be sistered to rafters and secured as per table R802.5.1(a) of the 2018 North Carolina Residential Code
  - In addition to the NCRC fastener schedule, unless noted otherwise on the plan, roof members shall be tied down with additional metal connectors. Install a Simpson H2.5A connector at every rafter to fasten the lower end of the rafter to the top plate or beam below 2.5. Install minimum 7/16" OSB roof sheathing.



# **QUEEN CITY** CONSULTING AND DESIGN, PLLC

STRUCTURAL PLANS PREPARED FOR:

STANDARD DETAILS

PROJECT ADDRESS:

OWNER:

QUEEN CITY CONSULTING AND DESIGN. PLLC. 2459 WILKINSON BLVD SUITE 300 CHARLOTTE NC 28208

## DESIGN SPECIFICATIONS

Construction Type: Residential

## Applicable Building Codes:

 2018 North Carolina Residential Building Code with All Local Amendments ASCE 7-10: Minimum Design Loads for Buildings and Other Structures

Ultimate Design Wind Speed: 130MPH, EXPOSURE B

Assumed Soil Bearing Capacity: 2000psf

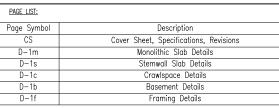
Component and Cladding loads shall be derived per Tables R301.2(2) and R301.2(3)

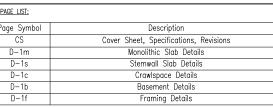
## SEAL APPLIES TO STRUCTURAL ONLY

ENGINEERING SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY. QC ASSUMES NO LIABILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, OR DEVIATIONS/DISCREPANCIES THAT MAY OCCUR IN THE PLAN. ANY DEVIATIONS OR DISCREPANCIES ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF QUEEN CITY CONSULTING AND DESIGN PLLC.

	LIVE LOADS
Roof 2x Conventional	20 PSF
Roof Truss	20 PSF
Attic Roof Truss	60 PSF
Floor Live Typ. Dwelling	40 PSF
Sleeping Areas	30 PSF
Decks	40 PSF
Passenger Vehicle Garage	50 PSF
Balconies	40 PSF
Attics with Storage	20 PSF
Attics without Storage	10 PSF
Ground Snow Load	15 PSF

	DEAD LOADS
Roof 2x Conventional	15 PSF
Roof Truss	20 PSF
Conventional 2x Floor	10 PSF
I-Joist	15 PSF
Floor Truss	15 PSF





Revision No.	Date	Description
0	12.26.23	ORIGINAL ENGINEERING
1	05.05.24	Added Stem Wall Details
2	05.16.24	ADDED BRICK CRAWL SPACE DETAILS
3	08.30.24	ADDED STAIR DETAIL AND TURNDOWN DETAIL
4	12.11.24	ADDED BASEMENT DETAILS



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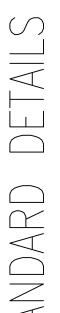
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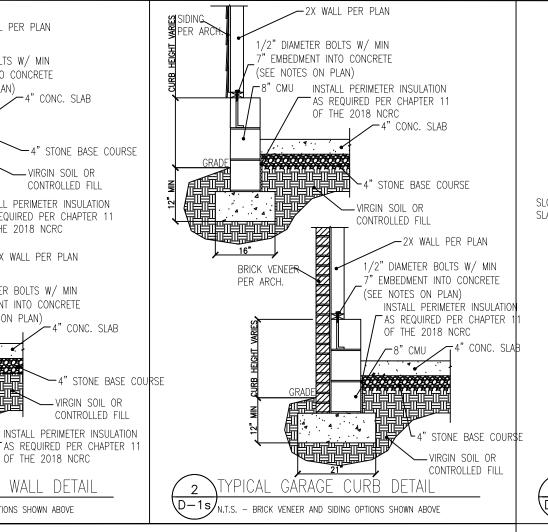
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**PAT** 

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QUEEN CITY



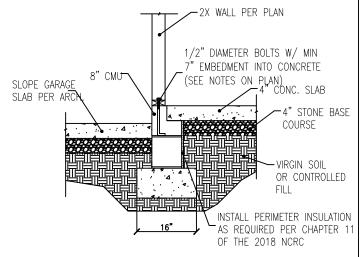
-VIRGIN SOIL OR

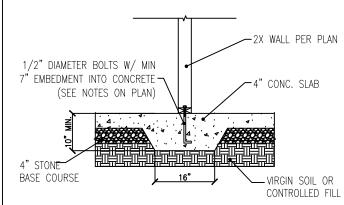
CONTROLLED FILL

INSTALL PERIMETER INSULATION

AS REQUIRED PER CHAPTER 11

OF THE 2018 NCRC







**GENERAL FOUNDATION NOTES:** 

2018 NORTH CAROLINA BUILDING CODE. SEE STRUCTURAL PAGES FOR ADDITIONAL

/PICAL GARAGE STEP DETAIL  $\overline{D-1s}$ <sub>N.T.S.</sub>

## −2X WALL PER PLAN P.T. POST. SEE SIZE SIDING-ON STRUCTURAL PLANS PER ARCH 1/2" DIAMETER BOLTS W/ MIN 7" EMBEDMENT INTO CONCRETE (SEE NOTES ON PLAN) SIMPSON POST -4" CONC. SLAB BASE (SEE PLAN -4" STONE BASE COURSE

12" OR PER PLAN

−2X WALL PER PLAN

-4" CONC. SLAB

-VIRGIN SOIL OR

INSTALL PERIMETER INSULATION

AS REQUIRED PER CHAPTER 11

OF THE 2018 NCRC

-2X WALL PER PLAN

OF THE 2018 NCRC

1/2" DIAMETER BOLTS W/ MIN

7" EMBEDMENT INTO CONCRETE

(SEE NOTES ON PLAN)

**┌**8"CMU

YPICAL FOUNDATION WALL DETAIL

N.T.S. - BRICK VENEER AND SIDING OPTIONS SHOWN ABOVE

VIRGIN SOIL

FILL

OR CONTROLLED

CONTROLLED FILL

-4" CONC. SLAB

-VIRGIN SOIL OR CONTROLLED FILL

1/2" DIAMETER BOLTS W/ MIN

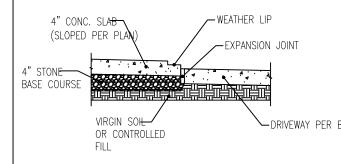
7" EMBEDMENT INTO CONCRETE (SEE NOTES ON PLAN)

-8" CMU

SIDING-

PER ARCH

SIDING PER ARCH



ALL BRICK VENEER IS TO HAVE WEEP HOLES INSTALLED AT 33" O.C. TO PREVENT

NOTES.

MOISTURE BUILDUP. 4. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF

2000PSF. CONCRETE FINISHES MAY BE PARGED AS

NEEDED FOR COSMETIC PURPOSES. STICK-ON STONE VENEER MAY BE APPLIED TO DETAILS THAT REFERENCE SIDING

FXTFRIOR.

CLIENT: LGL HOMES

DRAWN BY:

SCALE: DETAILS ARE N.T.S.

D-1s

YPICAL PATIO SLAB DETAII N.T.S. - BRICK VENEER AND SIDING OPTIONS SHOWN ABOVE -DRIVEWAY PER BUILDER

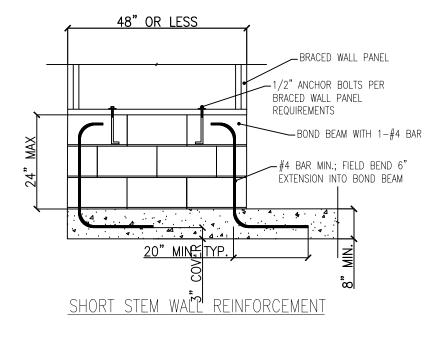
SLAB AT GARAGE DOOR

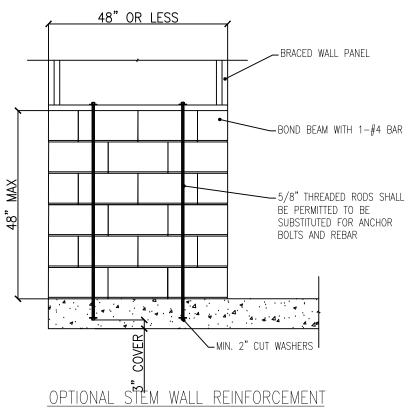


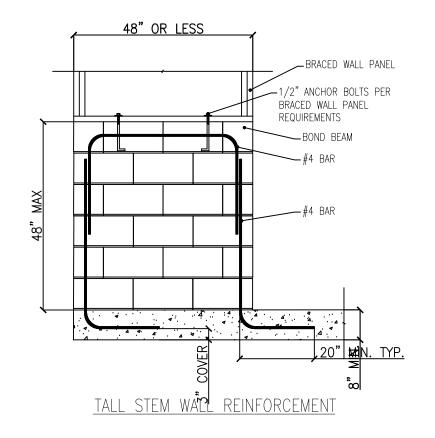


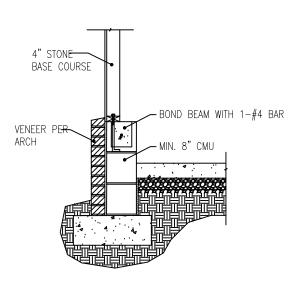












TYPICAL STEM WALL SECTION

NOTE: GROUT BOND BEAMS AND ALL CELLS THAT CONTAIN REBAR, THREADED RODS, AND

MASONRY STEM WALLS SUPPORTING BRACED WALL PANELANCHOR BOLTS INSTALL DETAIL AT PORTAL FRAMES AT GARAGE WINGWALLS. FIGURE R602.10.9

SCALE:

DETAILS ARE N.T.S.

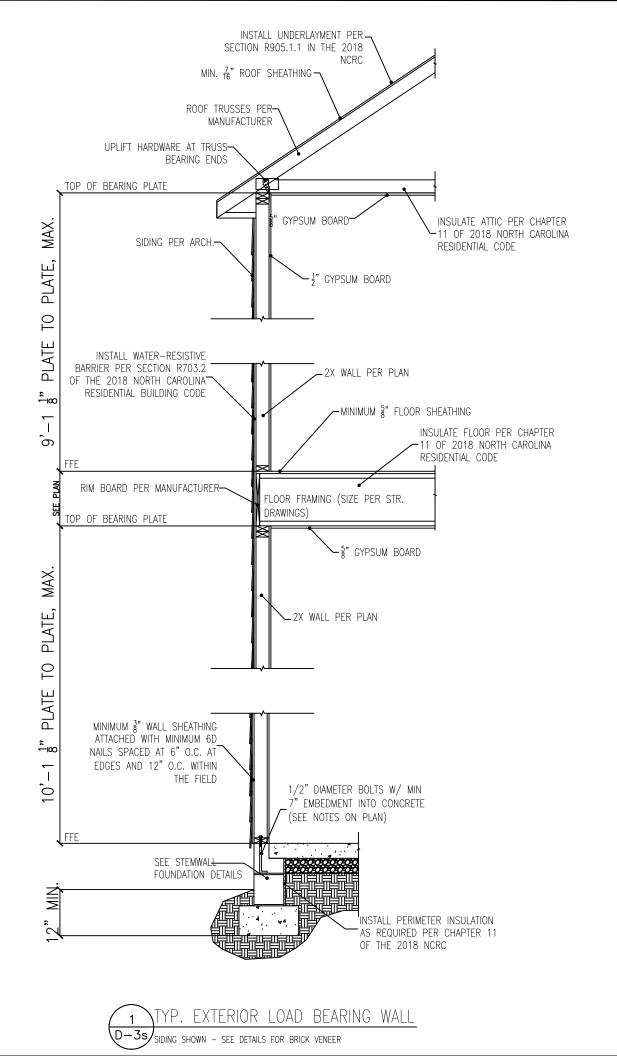
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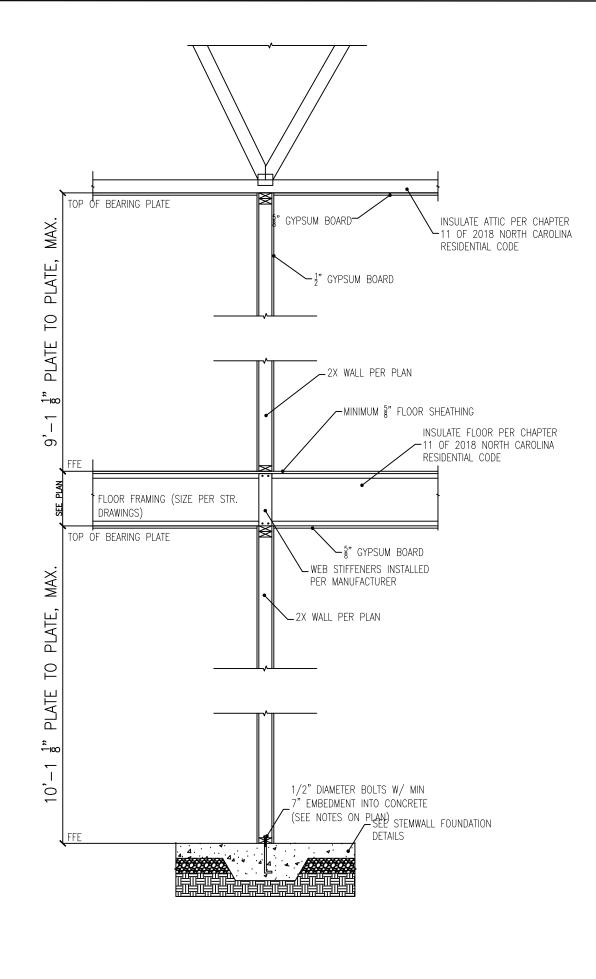
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12.11.24







YP. INTERIOR LOAD BEARING WALL 

SCALE: DETAILS ARE N.T.S.

CLIENT:

LGI HOMES DRAWN BY:

D-3s





CLIENT: LGI HOMES

-DROPPED GIRDER (SIZE PER

--- VIRGIN SOIL OR

CONTROLLED FILL

PLAN) ABOVE P.T. PLATE

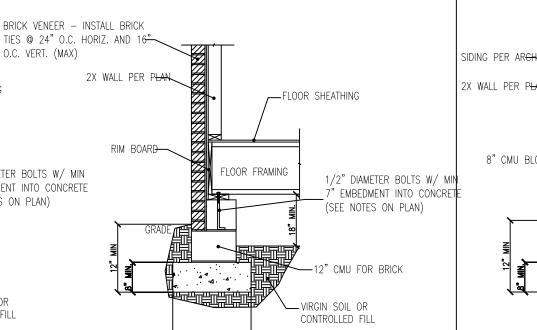
\_\_CMU\_PIER

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SCALE: DETAILS ARE N.T.S.

PAGE:

D-1c



YPICAL FOUNDATION WALL DETAIL  $\overline{\mathsf{D}} - \mathsf{1c} /_{\mathsf{N.T.S.}}$  - Brick veneer and siding options shown above

BRICK VENEER - INSTALL BRICK

O.C. VERT. (MAX)

1/2" DIAMETER BOLTS W/ MIN

7" EMBEDMENT INTO CONCRETE

(SEE NOTES ON PLAN)

-VIRGIN SOIL OR

CONTROLLED FILL

-FLOOR SHEATHING

FLOOR FRAMING

SIDING PER ARCH

2X WALL PER PLAN

RIM BOARD

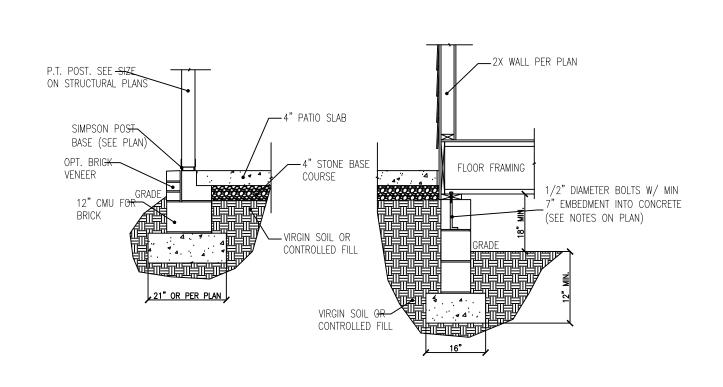
8" CMU BLOCK

1/2" DIAMETER BOLTS W/ MIN O.C. VERT. (MAX) 1/2" DIAMETER BOLTS W/ MIN MBEDMENT INTO CONCRETE 2X WALL PER PLAN 2X WALL PER PLAN EMBEDMENT INTO CONCRETE S**E** NOTES ON PLAN) EE NOTES ON PLAN) 8" CMU BLOCK -EXPANSION JOINT -EXPANSION JOINT -4" CONC. SLAB ←4" CONC. SLAB -4" STONE BASE COURSE 4" STONE BASE COURSE - VIRGIN SOIL OR -VIRGIN SOIL OR CONTROLLED FILL CONTROLLED FILL

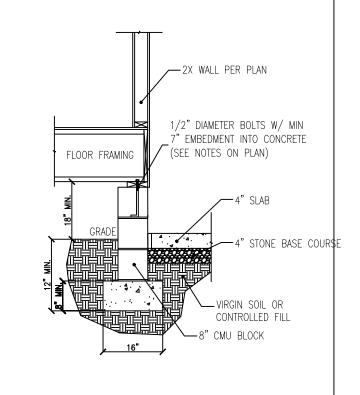
BRICK VENEER - INSTALL BRICK

TIES @ 24" O.C. HORIZ. AND 16"-

ypical garage curb detail N.T.S. - BRICK VENEER AND SIDING OPTIONS SHOWN ABOVE







HOUSE-GARAGE WALL DETAIL

YPICAL PIER DETAIL

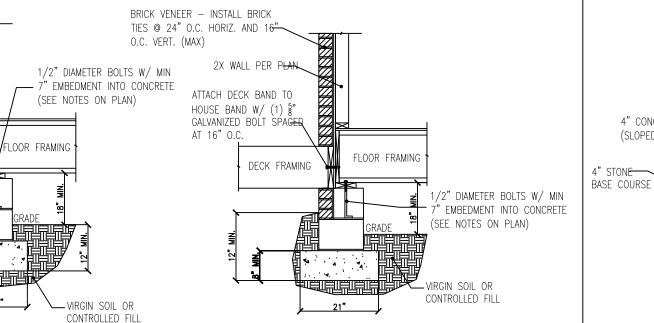
FLOOR FRAMING

24"





STANDARD



SLAB AT GARAGE DOOR \D-2c/

4" CONC. SLAB

(SLOPED PER PLAN

VIRGIN SOIL

FILL

OR CONTROLLED

-WEATHER LIP

-EXPANSION JOINT

-DRIVEWAY PER BUILDER

YPICAL DECK ATTACHMENT DETAIL  $\sqrt{D}-2$ c $/_{ ext{N.T.S.}}$  – Brick veneer and siding options shown above

SIDING PER ARCH 2X WALL PER P<del>LAN</del> FLOOR SHEATHING RIM BOARD-FLOOR FRAMING BRICK - INSTALL BRICK TIES @ 24" O.C. HORIZ. AND 16" O.C. SIMPSON STRONG-TIE MASB VERT. (MAX) MUDSILL ANCHOR EMBEDDED INTO FULLY GROUTED CMU STAGGER SPACING BETWERE INSTALLED COLLAR JOIN (SEE NOTES ON PLAN). AT EVERY CMU BED JOINT SPACED AT 5' O.C. W/ ONE FROM BRICK TO CMU ANCHOR WITHIN 12" OF PLATE BRALAKSOLID FILLED AT ANCHOR LOCATIONS -8" CMU SOLID FILLED AT ANCHOR LOCATIONS VIRGIN SOIL OR CONTROLLED FILL

ATTACH DECK BAND TO HOUSE BAND W/ (1) §"

GALVANIZED BOLT SPAGED

P.T. 2X2 LEDG<del>ER</del>

ATTACHED TO

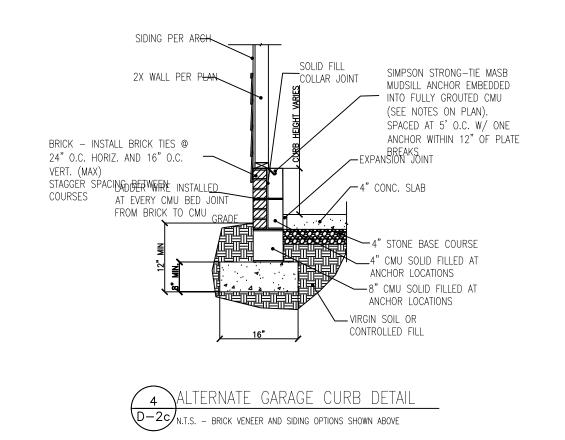
BAND W/ MIN

(3) 10D NAUS PER JOIST

DECK FRAMING

AT 16" O.C.

ERNATE FOUNDATION WALL DETAIL  $\sqrt{D-2c}/_{ ext{N.T.S.}}$  – Brick veneer and siding options shown above



## GENERAL FOUNDATION NOTES:

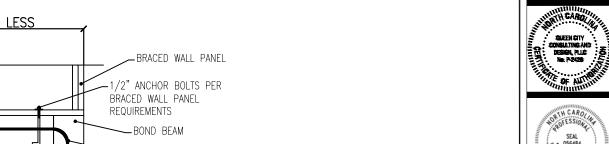
- ALL CONSTRUCTION IS TO CONFORM TO THE 2018 NORTH CAROLINA BUILDING CODE.
- SEE STRUCTURAL PAGES FOR ADDITIONAL
- ALL BRICK VENEER IS TO HAVE WEEP HOLES INSTALLED AT 33" O.C. TO PREVENT MOISTURE BUILDUP.
- FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2000PSF.
- CONCRETE FINISHES MAY BE PARGED AS NEEDED FOR COSMETIC PURPOSES.
- STICK-ON STONE VENEER MAY BE APPLIED TO DETAILS THAT REFERENCE SIDING EXTERIOR.

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SCALE:

DETAILS ARE N.T.S.





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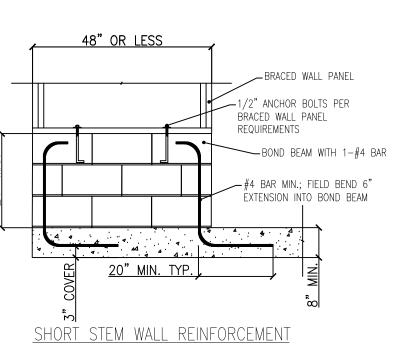


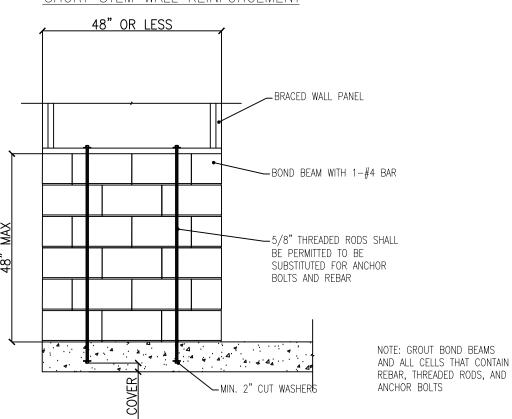


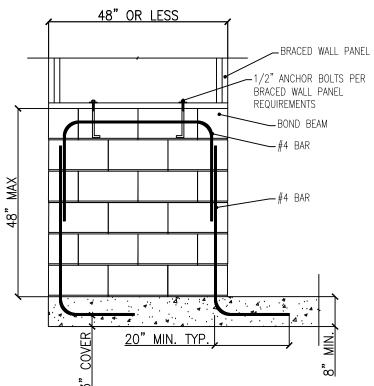
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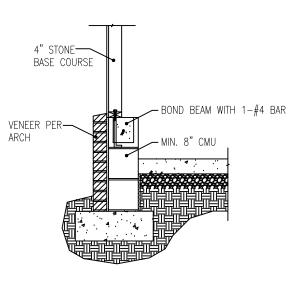
D-3c







TALL STEM WALL REINFORCEMENT



TYPICAL STEM WALL SECTION

ALTERNATE STEM WALL REINFORCEMENT

MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS

QUEEN CITY







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DATE:

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D-4c



-WHERE FOOTING SECTION "A" IS

-2-2X TOP PLATE

\_\_\_2X CRIPPLE STUD WALL

DETAILS)

NOTE: WHERE SECTION "A" IS LESS THAN 8' LONG IN A 25 FOOT LONG WALL, INSTALL BRACING AT CRIPPLE STUD

WALL

-FOUNDATION WALL (SEE CRAWLSPACE FOUNDATION

MORE THAN 8' PROVIDE 4' LONG HORIZONTAL CS-16 STRAP EACH SIDE OF SPLICE.

—SPLICE

CONCRETE STEPPED— FOOTING

FOOTING SECTION "A"

CLIENT:

SCALE: DETAILS ARE N.T.S.

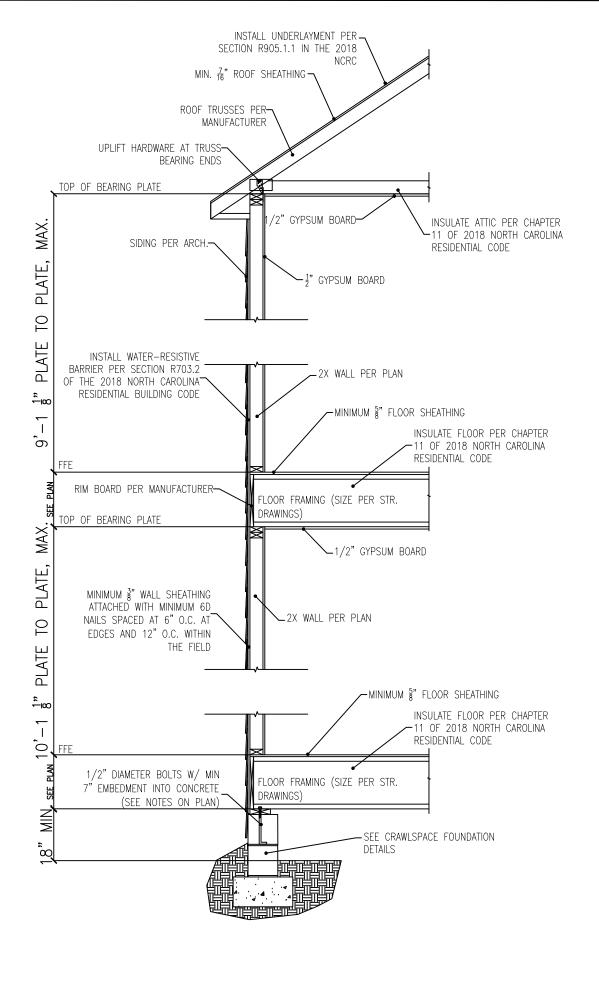
LGI HOMES

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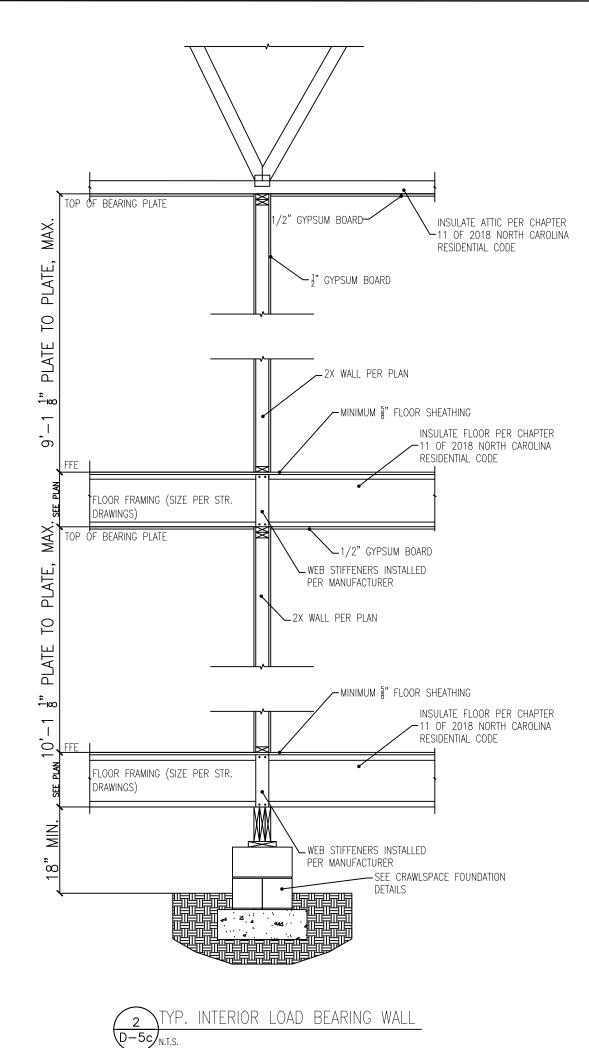
CONSULTING AND DESIGN, PLLC No. P.2426

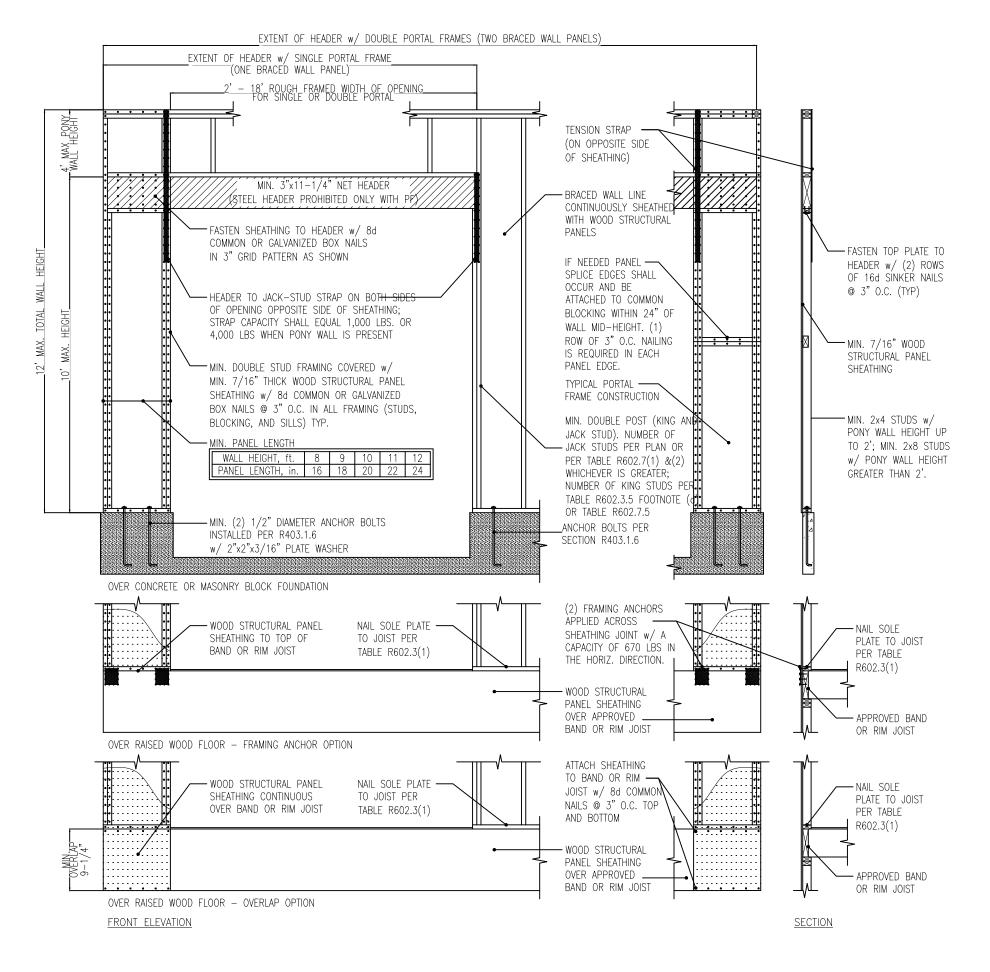
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YP. EXTERIOR LOAD BEARING WALL

D-5c











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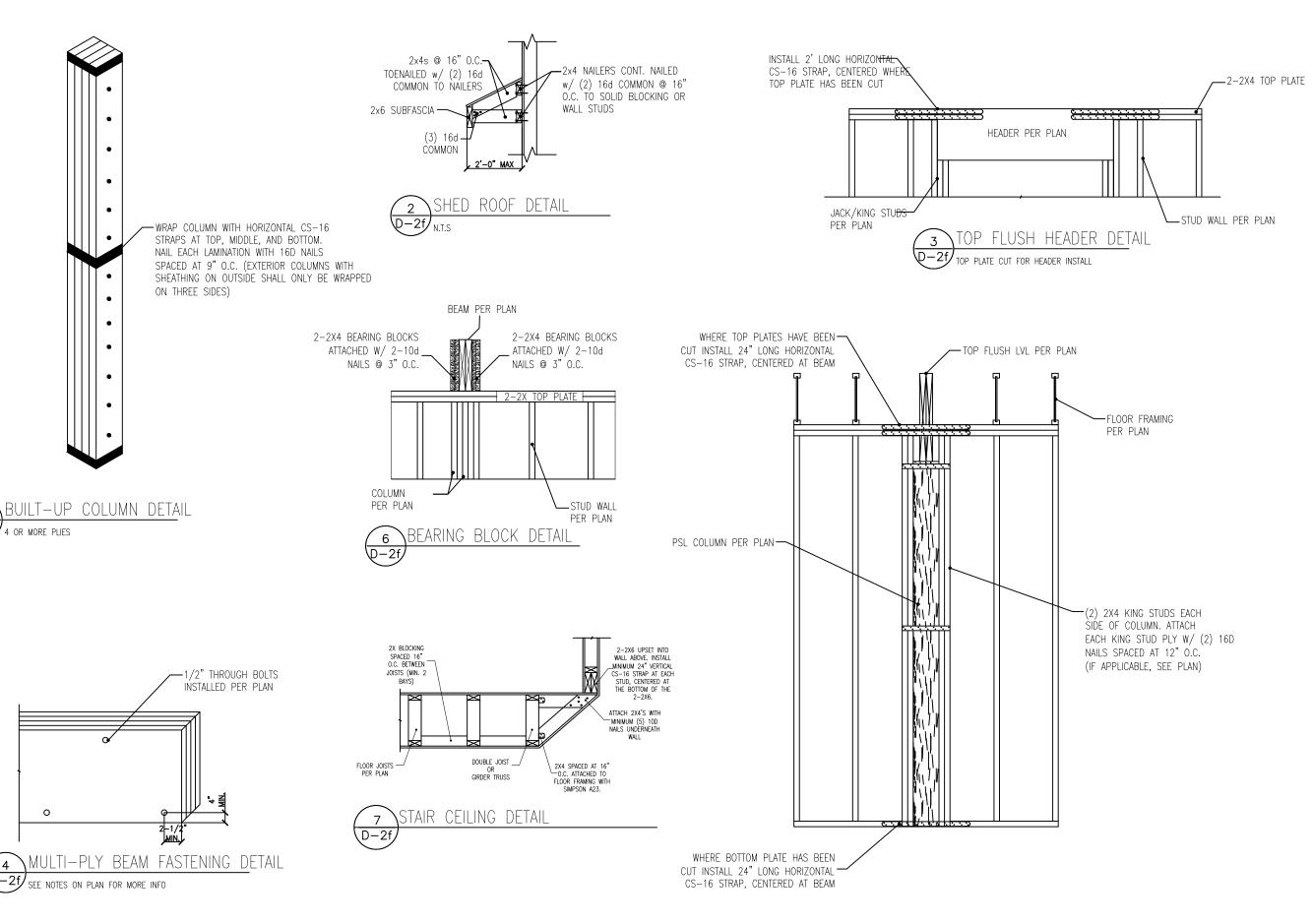
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CLIENT: LGI HOMES

LGI HOMES

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DATE:

SCALE: DETAILS ARE N.T.S.

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