

ABBREVIATIONS

ABV ABOVE	L LENGTH
AG AIR CONDITIONING	LA LAUNDRY
AD AREA DRAIN	LAV LAVATORY
ADJ ADJUSTABLE	LVR LOOPER
ALT ALTERNATE	MAX MAXIMUM
ALUM ALUMINUM	MCH MECHANICAL
ARCH ARCHITECTURAL	MFR MANUFACTURER
BA BATHROOM	MIN MINIMUM
BD BOARD	MISC MISCELLANEOUS
BF BI-FOLD (DOOR)	N NORTH
BLDG BUILDING	NTS: NOT TO SCALE
BLK BLOCK (CMU)	O.G.D. OVERHEAD GARAGE DOOR
BLN BELOW	OH OVERHEAD
BM BEAM	OPT OPTIONAL
BP BI-PASS (DOOR)	PAR PARALLEL
BTM BOTTOM	P.B. PUSH BUTTON
BTWN BETWEEN	POD POWDER
CAB CABINET	RED REDISTAL
CER CERAMIC	PL PLATE
C.J. CONTROL JOINT OR CONSTRUCTION JOINT	PR PAIR
CL CLOSET OR CENTER LINE	PT. PRESSURE TREATED WOOD
CLS CEILING	PVG POLYVINYL CHLORIDE PIPE
CLR CLEAR	PVMT PAVEMENT
CMU CONCRETE MASONRY UNIT	PRE-WIRE
COL COLUMN	PXD PLYWOOD
CONC CONCRETE	R RISER
C CARPET	RAG RETURN AIR GRILL
OR CORROSION RESISTANT	REF REFERENCE
CGMT CASEMENT	REFR REFRIGERATOR
C.T. CERAMIC TILE	REQ REQUIRED
D DRYER	S SOUTH
DBL DOUBLE	SD SMOKE DETECTOR
DH DOUBLE HING	S.F. SQUARE FEET
DN DIMENSION	S.G.D. SLIDING GLASS DOOR
DISP DISPOSAL	SH SINGLE HING OR SHELF
DN DOWN	SL SLOPE / SLIDING
DR DOOR	SHP SHELF AND POLE
DS DOWNPOUT	SH SIMILAR
DW DISH WASHER	SPEC SPECIFICATIONS
DWG DRAWING	STD STANDARD
E EAST	STR STRUCTURAL
ELEV ELEVATION	SQ SQUARE
ELEC ELECTRICAL	S4S SMOOTH FOUR SIDES
EG EQUAL	T TREAD (AT STAIRS) OR TILE
EXT EXTERIOR	TEMP. TEMPERED (GLASS)
FAU FORCED AIR UNIT	T16 TONGUE & GROOVE
F.C. FLOOR CHANGE	TOG. TOP OF GARS
F.D. FLOOR DRAIN	TV TELEVISION
F.FL FINISH FLOOR LINE	TV TYPICAL
F.G. FINISHED GRADE	UNO. UNLESS NOTED OTHERWISE
FLR FLOORING	V.B. VAPOR BARRIER
FL FLOURESCENT (LIGHT)	VERT VERTICAL
FND FOUNDATION	V.T.R. VENT THRU ROOF
F.D.S. FACE OF STUD	WASHING MACHINE
FTG FOOTING	WD WOOD
FX FIXED GLASS	WH WINDOW
GAUV GALVANIZED	WH WATER HEATER
GAR GARAGE	WI WROUGHT IRON
G.B. GYPSUM BOARD	W/IN W/IN
GD GRADE OR GRADING	W/OUT W/OUT
G.D./D. GARAGE DOOR OPENER	W/ W/
GFI GROUND FAULT INTERRUPTER	W/ WATERPROOFING
GL GLASS OR GLAZING	W/M WELDED WIRE MESH
GYP BD GYPSUM BOARD	R PROPERTY LINE
HB HOSE BIBB	Ø ROUND / DIAMETER
HD HEAD OR HARD	I AND
HDR HEADER	G CENTERLINE
HGT HEIGHT	# FOUND / NUMBER
HVAC HEATING/VENTILATING/AIR COND.	
HWD HARDWOOD	
INT INTERIOR	
JOINT	
KIT KITCHEN	

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3 SW C	STEM WALL PLAN 'C'		
4 C	1ST FLOOR PLAN 'C'		
5 C	2ND FLOOR PLAN 'C'		
1 D	FRONT ELEVATION 'D'		
1.1 D	ROOF PLAN 'D'		
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3 MS D	MONOLITHIC SLAB PLAN 'D'		
3 SW D	STEM WALL PLAN 'D'		
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5 D	2ND FLOOR PLAN 'D'		
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1.1 E	ROOF PLAN 'E'		
2 E	SIDE AND REAR ELEVATIONS 'E'		
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3 SW E	STEM WALL PLAN 'E'		
4 E	1ST FLOOR PLAN 'E'		
5 E	2ND FLOOR PLAN 'E'		
1 F	FRONT ELEVATION 'F'		
1.1 F	ROOF PLAN 'F'		
2 F	SIDE AND REAR ELEVATIONS 'F'		
3 MS F	MONOLITHIC SLAB PLAN 'F'		
3 SW F	STEM WALL PLAN 'F'		
4 F	1ST FLOOR PLAN 'F'		
5 F	2ND FLOOR PLAN 'F'		

ALL CONSULTANT DRAWINGS ACCOMPANYING THESE ARCHITECTURAL DRAWINGS HAVE NOT BEEN PREPARED BY OR UNDER THE DIRECTION OF GMD DESIGN GROUP, INC. GMD DESIGN GROUP INC. THEREFORE ASSUMES NO LIABILITY FOR THE COMPLETENESS OR CORRECTNESS OF THESE DRAWINGS.

BUILDING CODE COMPLIANCE / PROJECT INFORMATION

ALL CONSTRUCTION TO COMPLY WITH LOCAL CODES AND ORDINANCES CURRENTLY IN USE WITH THE LOCAL JURISDICTION.

APPLICABLE CODES:
FOLLOW ALL APPLICABLE STATE AND LOCAL CODES.
2018 NORTH CAROLINA STATE SUPPLEMENTS AND AMENDMENTS

CONTRACTOR AND BUILDER SHALL REVIEW ENTIRE PLAN TO VERIFY CONFORMANCE WITH ALL CURRENT APPLICABLE CODES IN EFFECT AT TIME OF CONSTRUCTION. BY USING THESE DRAWINGS FOR CONSTRUCTION IT IS UNDERSTOOD THAT CONFORMANCE WITH ALL APPLICABLE CODES IS THE RESPONSIBILITY OF THE BUILDER AND CONTRACTOR.

PRODUCT:
SINGLE FAMILY RESIDENCE

OCCUPANCY CLASSIFICATION
RESIDENTIAL R-3

CONSTRUCTION TYPE:
TYPE VB

GENERAL NOTES DESIGNER NORTH CAROLINA:

THESE DOCUMENTS ARE THE PROPERTY OF THE DESIGNER AND SHALL NOT BE COPIED, DUPLICATED, ALTERED, MODIFIED OR REVISED IN ANY WAY WITHOUT THE EXPRESSED WRITTEN APPROVAL OF THE DESIGNER.

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE AND ALL INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DEVELOPER AND THE DESIGNER BEFORE PROCEEDING WITH WORK.

ANY ERRORS OR OMISSIONS FOUND IN THESE DRAWINGS SHALL BE BROUGHT TO DEVELOPERS AND DESIGNERS ATTENTION IMMEDIATELY.

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.

ALL TRUSS DRAWINGS TO BE REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO ISSUANCE OF BUILDING PERMIT.

ALL OR EQUAL SUBSTITUTIONS MUST BE SUBMITTED TO AND APPROVED BY CITY BUILDING OFFICIAL PRIOR TO INSTALLATION.

ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS OTHERWISE NOTED.

PROVIDE FIREBLOCKING. (PER LOCAL CODES)

ALL ELECTRICAL AND MECHANICAL EQUIPMENT AND METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS, CONTRACTOR TO VERIFY.

PROVIDE BLOCKING AND/OR BACKING AT ALL TONEL BAR, TONEL RING AND/OR TOILET PAPER HOLDER LOCATIONS, AS SHOWN PER PLAN. TYPICAL AT ALL BATHROOMS AND POWDER ROOMS. VERIFY LOCATIONS AT FRAMING WALK.

ELASTOMERIC SHEET WATERPROOFING: FURNISH AND INSTALL ALL WATERPROOFING COMPLETE. A 40 MIL. SELF-ADHERING MEMBRANE OF RUBBERIZED ASPHALT INTEGRALLY BONDED TO POLYETHYLENE SHEETING, OR EQUAL. INSTALL PER MANUFACTURER'S AND TRADE ASSOCIATION'S PRINTED INSTALLATION INSTRUCTIONS. 6" MINIMUM LAP AT ALL ADJACENT WALL SURFACES.

TO THE BEST OF THE DESIGNER'S KNOWLEDGE THESE DOCUMENTS ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE BUILDING AUTHORITIES HAVING JURISDICTION OVER THIS TYPE OF CONSTRUCTION AND OCCUPANCY.

SHOP DRAWING REVIEW AND DISTRIBUTION, ALONG WITH PRODUCT SUBMITTALS, REQUESTED IN THE CONSTRUCTION DOCUMENTS, SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR, UNLESS DIRECTED OTHERWISE UNDER A SEPARATE AGREEMENT.

DEVIATIONS FROM THESE DOCUMENTS IN THE CONSTRUCTION PHASE SHALL BE REVIEWED BY THE DESIGNER AND THE OWNER PRIOR TO THE START OF WORK IN QUESTION. ANY DEVIATIONS FROM THESE DOCUMENTS WITHOUT PRIOR REVIEW, SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS REPRESENTED ON THESE DOCUMENTS INCLUDING THE WORK AND MATERIALS FURNISHED BY SUBCONTRACTORS AND VENDORS.

THE BUILDER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM THE GEOTECHNICAL ENGINEER (SOILS REPORT), ON THE STUDY OF THE PROPOSED SITE, TO THE DESIGNER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR. IN THE EVENT THE GEOTECHNICAL REPORTS DO NOT EXIST, THE SOILS CONDITION SHALL BE ASSUMED TO BE A MINIMUM DESIGN SOIL PRESSURE STATED BY THE STRUCTURAL ENGINEER OF RECORD FOR THE PURPOSE OF STRUCTURAL DESIGN. GENERAL CONTRACTOR SHALL ASSURE THE SOIL CONDITIONS MEET OR EXCEED THE CRITERIA.

ALL WORK PERFORMED BY THE GENERAL CONTRACTOR SHALL COMPLY AND CONFORM WITH LOCAL AND STATE BUILDING CODES, ORDINANCES AND REGULATIONS, ALONG WITH ALL OTHER AUTHORITIES HAVING JURISDICTION. THE GENERAL CONTRACTOR IS RESPONSIBLE TO BE AWARE OF THESE REQUIREMENTS AND GOVERNING REGULATIONS.

PROVIDE AN APPROVED WASHER DRAIN PAN AT SECOND FLOOR ONLY THAT DRAINS TO EXTERIOR.

WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR OPENABLE AREA OF 4.0 SQ FT. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 22" AND THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20". GLAZING TOTAL AREA OF NOT LESS THAN 5.0 SQ FT IN THE CASE OF A GROUND WINDOW AND NOT LESS THAN 5.7 SQ FT IN THE CASE OF AN UPPER STORY WINDOW. (PER NCGS SECTION R310.1)

ALL HANDRAIL BALLUSTERS TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALLUSTERS. (PER LOCAL CODES)

PROVIDE STAIR HANDRAILS AND GUARDRAILS PER LOCAL CODES.

BUILDER SET:

THE SCOPE OF THIS SET OF PLANS IS TO PROVIDE A "BUILDER'S SET" OF CONSTRUCTION DOCUMENTS AND GENERAL NOTES HERINAFTER REFERRED TO AS "PLANS". THIS SET OF PLANS IS SUFFICIENT TO OBTAIN A BUILDING PERMIT; HOWEVER, ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT ARE NOT NECESSARILY DESCRIBED. THE PLANS DELINEATE AND DESCRIBE ONLY LOCATIONS, DIMENSIONS, TYPES OF MATERIALS, AND GENERAL METHODS OF ASSEMBLING OR FASTENING. THEY ARE NOT INTENDED TO SPECIFY PARTICULAR PRODUCTS OR OTHER METHODS OF ANY SPECIFIC MATERIALS, PRODUCT OR METHOD. THE IMPLEMENTATION OF THE PLANS REQUIRES A CLIENT / CONTRACTOR THOROUGHLY KNOWLEDGEABLE WITH THE APPLICABLE BUILDING CODES AND METHODS OF CONSTRUCTION SPECIFIC TO THIS PRODUCT TYPE AND TYPE OF CONSTRUCTION.

CONSTRUCTION REQUIREMENTS AND QUALITY: PROVIDE WORK OF THE SPECIFIC QUALITY, WHERE QUALITY LEVEL IS NOT INDICATED, PROVIDE WORK OF QUALITY CUSTOMARY IN SIMILAR TYPES OF WORK. WHERE THE PLANS AND SPECIFICATIONS, CODES, LAWS, REGULATIONS, MANUFACTURER'S RECOMMENDATIONS OR INDUSTRY STANDARDS REQUIRE WORK OF HIGHER QUALITY OR PERFORMANCE, PROVIDE WORK COMPLYING WITH THOSE REQUIREMENTS AND QUALITY. WHERE TWO OR MORE QUALITY PROVISIONS OF THOSE REQUIREMENTS CONFLICT WITH THE MOST STRINGENT REQUIREMENT; WHERE REQUIREMENTS ARE DIFFERENT BUT APPARENTLY EQUAL, AND WHERE IT IS UNCERTAIN WHICH REQUIREMENT IS MOST STRINGENT, OBTAIN CLARIFICATION FROM THE GMD DESIGN GROUP BEFORE PROCEEDING.

AREA CALCULATIONS:

MODEL 'GALEN' SQUARE FOOTAGES		
AREA		ELEV 'D'/'E'/'F'
1st FLOOR		482 SF
2nd FLOOR		1358 SF
TOTAL LIVING		2340 SF
GARAGE		416 SF
PORCH		87 SF

PLAN CHANGES:

DATE:	DESCRIPTION:
03.30.23	INITIAL PLAN RELEASE
01.04.23	ELECTRICAL REVISIONS

CONSULTANTS:

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CLIENTS NAME:

PROJECT NO: GMD17049

SHEET TITLE: TITLE SHEET

PRINT DATE: March 30, 2023

SHEET NO: 0

EXPRESS HOMES 40' SERIES MODEL 'GALEN-LH'

Mason Ridge
Lot 38
Spring Lake, NC 28390

NO:	DATE:	REVISION:
1	01.04.23	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series



FOR CONSTRUCTION

NOTES:	
- GRADE CONDITIONS MAY VARY FOR INDIVIDUAL SITE FROM THAT SHOWN. BUILDER SHALL VERIFY AND COORDINATE PER ACTUAL SITE CONDITIONS.	
- WINDOW HEAD HEIGHTS: 1ST FLOOR = 6'-8" UNO. ON ELEVATIONS. 2ND FLOOR = 7'-0" UNO. ON ELEVATIONS.	
- ROOFING: PITCHED SHINGLES PER DEVELOPER.	
- WINDOWS: MANUFACTURER PER DEVELOPER. DIVIDED LITES AS SHOWN ON THE EXTERIOR ELEVATIONS	
- ENTRY DOOR: AS SELECTED BY DEVELOPER.	
- GARAGE DOORS: AS SELECTED BY DEVELOPER, RAISED PANEL AS SHOWN.	
- ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.	
- PROTECTION AGAINST DECAY: (ALL PORTIONS OF A PORCH, SCREEN PORCH OR DECK FROM THE BOTTOM OF THE HEADER DOWN, INCLUDING POST, RAILS, PICKETS, STEPS AND FLOOR STRUCTURE.)	
- INSULATION: PER TABLE N102.2. EXTERIOR WALLS: R-15 BATTS MINIMUM. VERIFY CEILING WITH ATTIC ABOVE: R-38 BATTS MINIMUM. VERIFY FLOOR OVER GARAGE: R-19 BATTS MINIMUM. VERIFY ATTIC KNEEWALL: R-19 BATTS MINIMUM. VERIFY CRAWL SPACE FLOORING: R-19 BATTS MINIMUM. VERIFY	
KEY NOTES:	
MASONRY:	
1	ADHERED STONE VENEER AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
2	MASONRY FULL BRICK AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
3	MASONRY FULL STONE AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
4	8" SOLDIER COURSE.
5	ROMLOCK COURSE
6	N/A
TYPICALS:	
7	CORROSION RESISTANT SCREEN LOUVERED VENTS, SIZE AS NOTED.
8	CODE APPROVED TERMINATION CHIMNEY GAP.
9	CORROSION RESISTANT ROOF TO WALL FLASHING. CODE COMPLIANT FLASHING PER NRC R3105.2.B.3
10	STANDING SEAM METAL ROOF, INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
11	DECORATIVE WROUGHT IRON. SEE DETAILS.
SIDING:	
12	VINYL SHAKE SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT SHAKE SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)
13	VINYL LAP SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT LAP SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)
14	VINYL WAVY SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT WAVY SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)
15	VINYL BOARD AND BATT SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT PANEL SIDING W/ 1X3 BATTS AT 12" O.C. PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)
16	VINYL TRIM SIZE AS NOTED (AT SPECIFIC LOCATIONS: 1X FIBER CEMENT TRIM OR EQUAL, UNO. SIZE AS NOTED
17	PYPON SHUTTERS, TYPE AS SHOWN. SIZE AS NOTED. (AT SPECIFIC LOCATIONS: FALSE VINYL SHUTTERS, TYPE AS SHOWN. SIZE AS NOTED.)
ALL WINDOWS WHOSE OPENING IS LESS THAN 24" ABOVE THE FINISH FLOOR AND WHOSE OPENING IS GREATER THAN 12" ABOVE THE OUTSIDE WALKING SURFACE MUST HAVE WINDOW OPENING LIMITING DEVICES COMPLYING WITH THE NRC SECTION R312.2.1 AND R312.2.2.	



Front Elevation 'E'
SCALE: 1/4"=1'-0" AT 22"X34" LAYOUT 1/8"=1'-0" AT 11"X17" LAYOUT

NO:	DATE:	REVISION:
△	07.04.23	

PROFESSIONAL SEAL:

PROJECT TITLE:
40' Series



CLIENTS NAME:

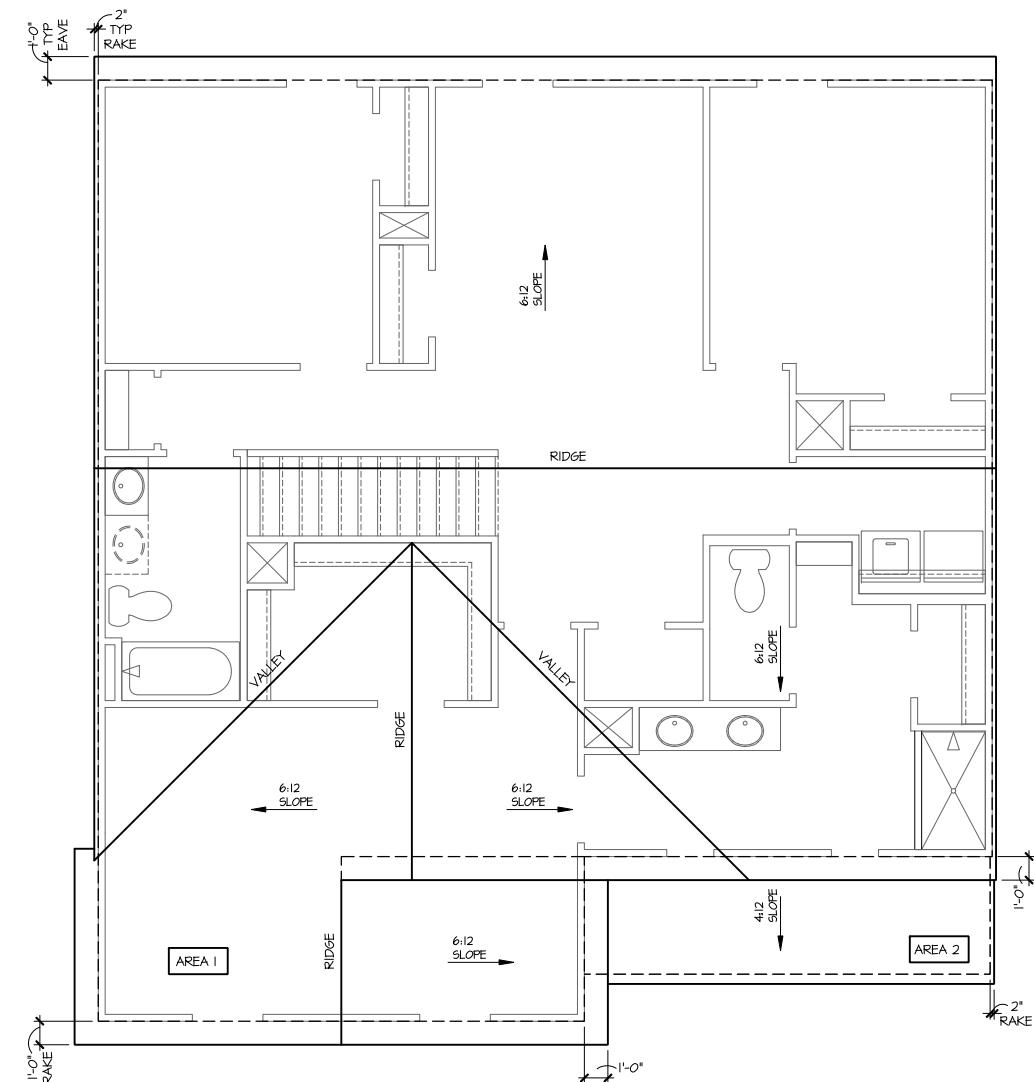
PROJECT NO: GMD17049
SHEET TITLE:
**'GALEN' - LH
EXTERIOR
ELEVATIONS
'4EGF-E'**

PRINT DATE:
March 30, 2023

SHEET NO:
1E

FOR CONSTRUCTION

ATTIC VENT CALCULATION FOR PLAN 'GALEN': 1:150 RATIO.	
<p>THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED, PROVIDED THAT AT LEAST 50 PERCENT AND NOT MORE THAN 80 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.</p> <p>EXCEPTIONS: 1. ENCLOSED ATTIC/RAFTER SPACES REQUIRING LESS THAN 1 SQ. FT. OF VENTILATION MAY BE VENTED WITH CONTINUOUS SOFFIT VENTILATION ONLY. 2. ENCLOSED ATTIC/RAFTER SPACES OVER UNCONDITIONED SPACE MAY BE VENTED WITH CONTINUOUS SOFFIT VENT ONLY.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>(PER SECTION R302.2)</p> <p>1 SQUARE INCH VENT FOR EVERY 150 SQUARE INCHES OF CEILING *144 SQ. IN. = 1 SQ. FT. BLDG. CEILING (SF) X 144 = BLDG. (SQ. IN.) BLDG. (SQ. IN.) / 150 = SQ. IN. OF VENT REQUIRED</p> <p>ROOF AREA 1: = 1349 SF 1349 SQ. FT. X 144 = 20456 SQ. IN. 20456 SQ. IN. / 150 = 1343.04 SQ. IN. OF VENT REQ'D</p> <p>ROOF AREA 2: = 30 SF 30 SQ. FT. X 144 = 4320 SQ. IN. 4320 SQ. IN. / 150 = 28.80 SQ. IN. OF VENT REQ'D</p>
<p>NOTES:</p> <ul style="list-style-type: none"> - 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. 	
ATTIC VENT CALCULATION FOR PLAN 'GALEN': 1:300 RATIO.	
<p>AS AN ALTERNATE TO THE 1/150 RATIO LISTED ABOVE, THE NET FREE CROSS-VENTILATION AREA MAY BE REDUCED TO 1/300 WHEN A CLASS I OR II VAPOR RETARDER IS INSTALLED ON THE WARM - IN - WINTER SIDE OF THE CEILING.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>(PER SECTION R302.2)</p> <p>1 SQUARE INCH VENT FOR EVERY 300 SQUARE INCHES OF CEILING *144 SQ. IN. = 1 SQ. FT. BLDG. CEILING (SF) X 144 = BLDG. (SQ. IN.) BLDG. (SQ. IN.) / 300 = SQ. IN. OF VENT REQUIRED SQ. IN. OF VENT REQUIRED / 2 = 50% AT HIGH & 50% AT LOW.</p> <p>ROOF AREA 1: = 1349 SF 1349 SQ. FT. X 144 = 20456 SQ. IN. 20456 SQ. FT. / 300 = 671.52 SQ. IN. OF VENT REQ'D 671.52 SQ. IN. / 2 = 335.76 SQ. IN. OF VENT AT HIGH & 335.76 SQ. IN. OF VENT AT LOW REQUIRED.</p> <p>ROOF AREA 2: = 30 SF 30 SQ. FT. X 144 = 4320 SQ. IN. 4320 SQ. FT. / 300 = 14.40 SQ. IN. OF VENT REQ'D 14.40 SQ. IN. / 2 = 7.20 SQ. IN. OF VENT AT HIGH & 7.20 SQ. IN. OF VENT AT LOW REQUIRED.</p>
<p>BUILDER TO PROVIDE (2) LAYERS OF UNDERLAYMENT AT ANY ROOF W/ A SLOPE FROM 2:12 TO LESS THAN 4:12</p>	



Roof Plan 'E'
 SCALE: 1/4"=1'-0" AT 22'x34' LAYOUT 1/8"=1'-0" AT 11'x11' LAYOUT

NO.	DATE	REVISION
1	07.04.23	

PROFESSIONAL SEAL:

PROJECT TITLE:
40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:
**'GALEN' - LH
 ROOF PLAN
 '4EGF-E'**

PRINT DATE:
 March 30, 2023

SHEET NO:
1.1 E

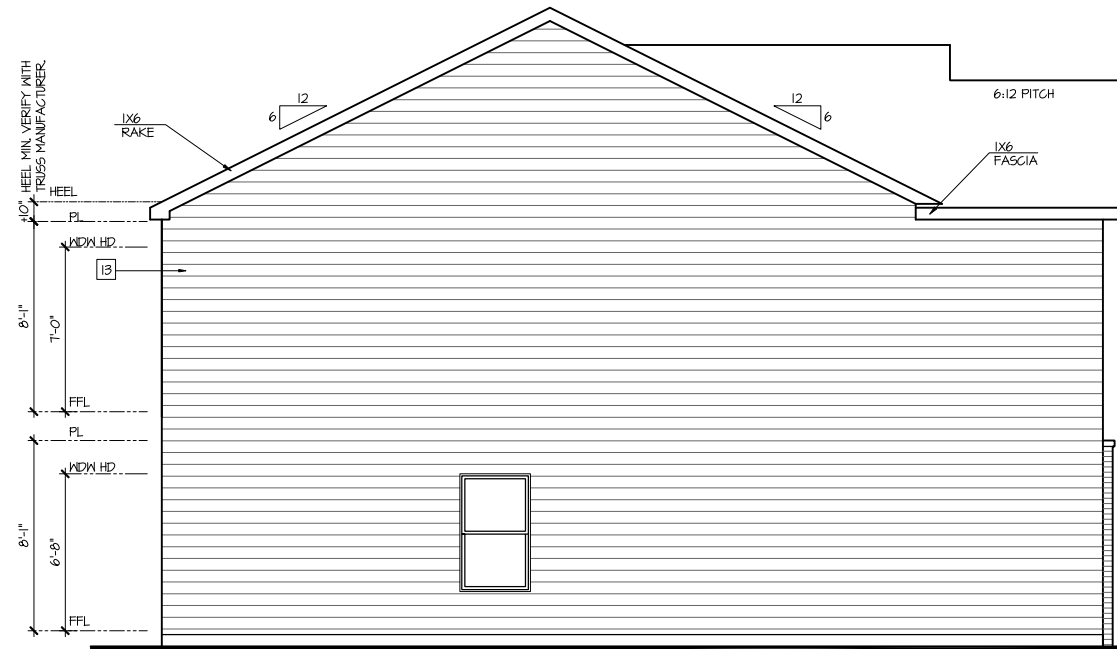
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- INSULATION: PER TABLE N102.1.2.
EXTERIOR WALLS: R-15 BATTS MINIMUM. VERIFY
CEILING WITH ATTIC ABOVE: R-30 BATTS MINIMUM. VERIFY
FLOOR OVER GARAGE: R-19 BATTS MINIMUM. VERIFY
ATTIC KNEEWALL: R-19 BATTS MINIMUM. VERIFY
CRAWL SPACE FLOORING: R-19 BATTS MINIMUM. VERIFY

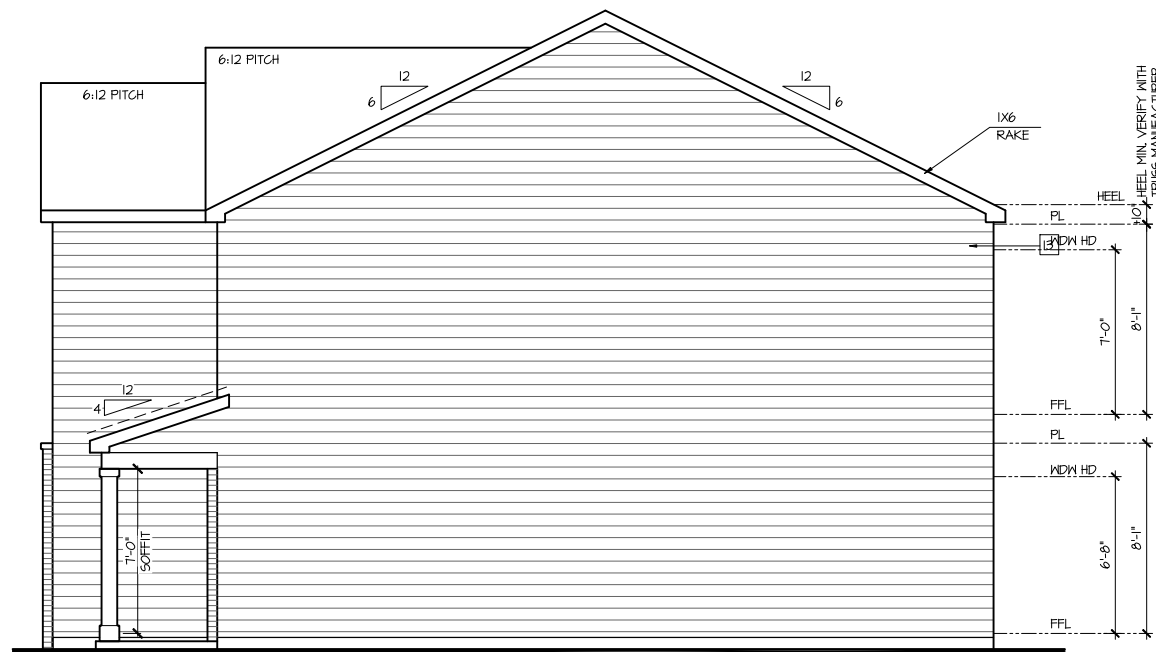
KEY NOTES:

- MASONRY:**
- [1] ADHERED STONE VENEER AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
 - [2] MASONRY FULL BRICK AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
 - [3] MASONRY FULL STONE AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
 - [4] 8" SOLDIER COURSE.
 - [5] ROWLOCK COURSE.
 - [6] N/A.
- TYPICALS:**
- [7] CORROSION RESISTANT SCREEN LOUVERED VENTS, SIZE AS NOTED.
 - [8] CODE APPROVED TERMINATION CHIMNEY CAP.
 - [9] CORROSION RESISTANT ROOF TO WALL FLASHING, CODE COMPLIANT FLASHING PER NRC R905.2.B.3
 - [10] STANDING SEAM METAL ROOF, INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - [11] DECORATIVE WROUGHT IRON. SEE DETAILS.
- SIDING:**
- [12] VINYL SHAKE SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT SHAKE SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)
 - [13] VINYL LAP SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT LAP SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)
 - [14] VINYL NAVY SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT NAVY SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)
 - [15] VINYL BOARD AND BATT SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS: FIBER CEMENT PANEL SIDING W/ 1X3 BATTS AT 12" O.C. PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)
 - [16] VINYL TRIM SIZE AS NOTED (AT SPECIFIC LOCATIONS: 1X FIBER CEMENT TRIM OR EQUAL, U.N.O. SIZE AS NOTED)
 - [17] FYPON SHUTTERS, TYPE AS SHOWN, SIZE AS NOTED. (AT SPECIFIC LOCATIONS: FALSE VINYL SHUTTERS, TYPE AS SHOWN, SIZE AS NOTED.)
- ALL WINDOWS WHOSE OPENING IS LESS THAN 24" ABOVE THE FINISH FLOOR AND WHOSE OPENING IS GREATER THAN 12" ABOVE THE OUTSIDE WALKING SURFACE MUST HAVE WINDOW OPENING LIMITING DEVICES COMPLYING WITH THE NRC SECTION R312.2.1 AND R312.2.2.



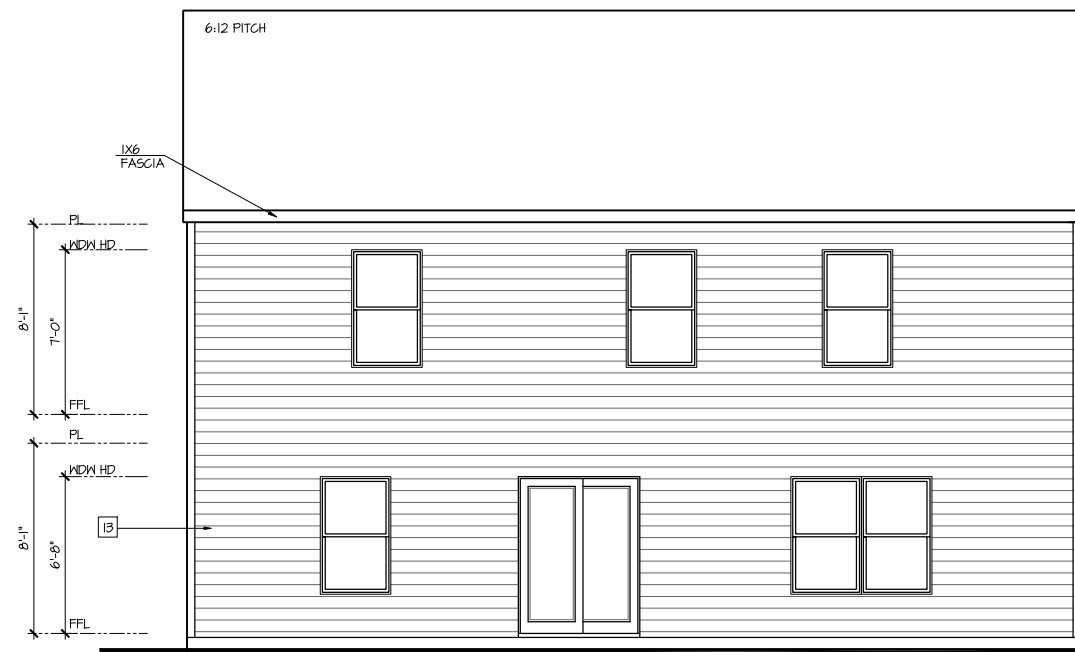
Left Elevation 'E'

SCALE: 1/4"=1'-0" AT 22"X34" LAYOUT 1/8"=1'-0" AT 11"X11" LAYOUT



Right Elevation 'E'

SCALE: 1/4"=1'-0" AT 22"X34" LAYOUT 1/8"=1'-0" AT 11"X11" LAYOUT



Rear Elevation

SCALE: 1/4"=1'-0" AT 22"X34" LAYOUT 1/8"=1'-0" AT 11"X11" LAYOUT

NO.	DATE	REVISION
1	07.04.23	

PROFESSIONAL SEAL:

PROJECT TITLE:
40' Series



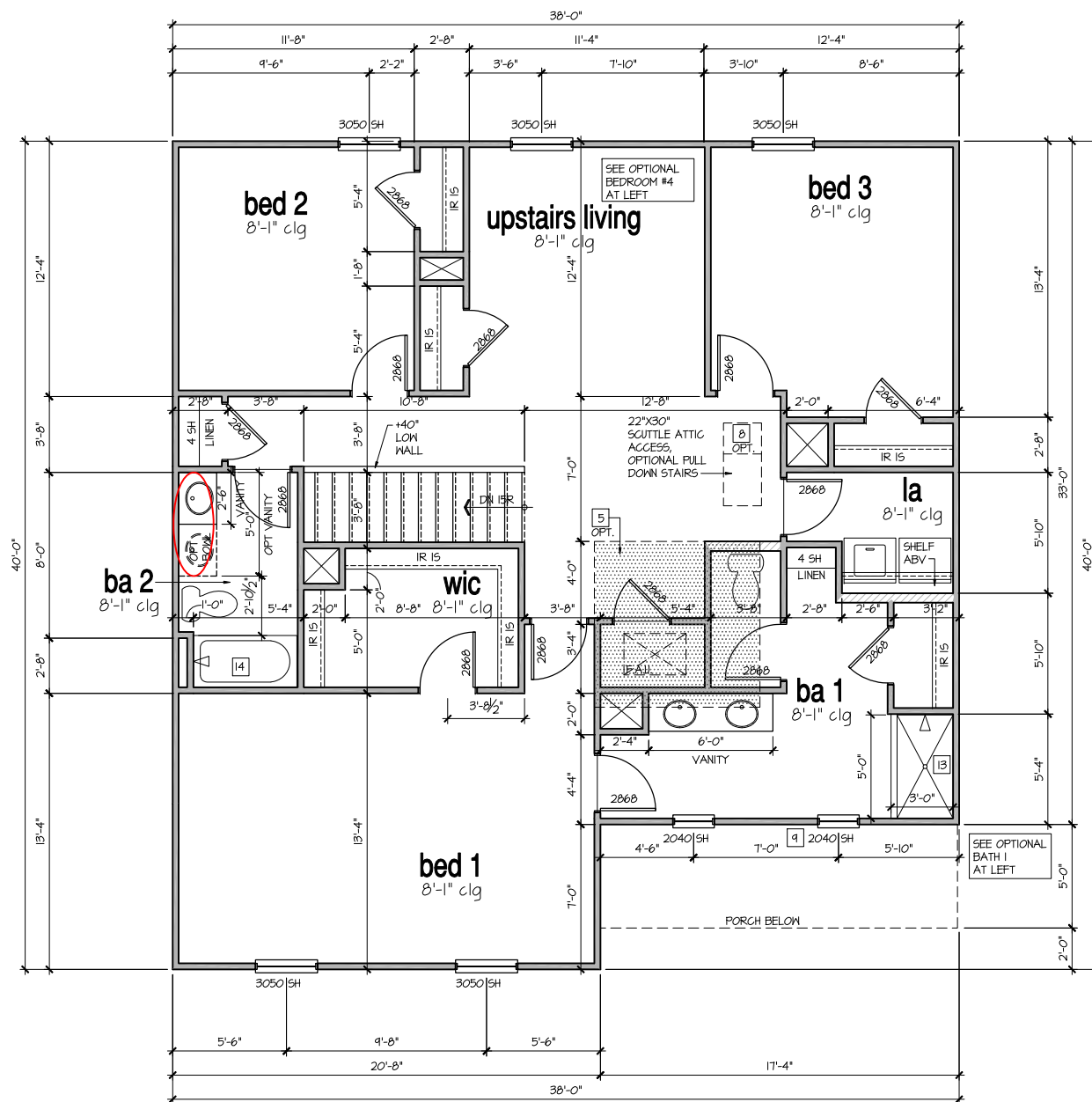
PROJECT NO: GMD17049

SHEET TITLE:
'GALEN' - LH EXTERIOR ELEVATIONS '4EGF-E'

PRINT DATE:
March 30, 2023

SHEET NO:
2E

FOR CONSTRUCTION



2nd Floor Plan 'E'

SCALE: 1/4"=1'-0" AT 22"X34" LAYOUT 1/8"=1'-0" AT 11"X17" LAYOUT

9'-1" STAIR NOTE:
 (USE 14" T.J. WITH 3/4" PLYWOOD SUBFLOOR)
 15 TREADS AT 10" EACH VERIFY
 16 RISERS AT +/- 7.13" = 123 3/4" TOTAL
 RISE VERIFY

8'-1" STAIR NOTE:
 (USE 14" T.J. WITH 3/4" PLYWOOD SUBFLOOR)
 14 TREADS AT 10" EACH VERIFY
 15 RISERS AT +/- 7.45" = 111 3/4" TOTAL
 RISE VERIFY

- FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS.
 - WINDOW HEAD HEIGHTS:
 1ST FLOOR = 6'-8" U.N.O. ON ELEVATIONS.
 2ND FLOOR = 7'-0" U.N.O. ON ELEVATIONS.

ALL DIMENSIONS TO WINDOWS AND DOORS ARE TO CENTERLINE.

WALL LEGEND:

	FULL HEIGHT 2X4 WOOD STUD PARTITION		FULL HEIGHT 2X6 WOOD STUD PARTITION
	BRICK / STONE VENEER		STUD WALL BELOW HEIGHT AND STUD SIZE AS NOTED
	LON GYPSUM BOARD WALL HEIGHT AND STUD SIZE AS NOTED		DRYWALL OPENING HEIGHT AS NOTED ON PLAN

KEY NOTES FOR NORTH CAROLINA:

<p>FIRE PROTECTION:</p> <p>1 HOUSE TO GARAGE FIRE SEPARATION. GARAGE/HOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 1/2" GYPSUM BOARD. (PER NCR TABLE R302.6)</p> <p>GARAGE/HOUSE SEPARATION AT HORIZONTAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD. (PER NCR TABLE R302.6)</p> <p>2 HOUSE TO GARAGE DOOR SEPARATION. PROVIDE 1-3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR. (PER NCR SECTION R302.5.1)</p> <p>3 BENEATH STAIRS AND LANDINGS, 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE AREAS. (PER NCR SECTION R302.1) IN CONCEALED SPACES BETWEEN STAIR STRINGERS PROVIDE FIREBLOCKING PER R302.11</p> <p>MEPS</p> <p>4 GAS WATER HEATER ON 18" HIGH PLATFORM. (PER CHAPTER 5 NCR-PLUMBING)</p>	<p>5 FAU 8'X8' PLATFORM. VERIFY WITH TRUSS MANUFACTURER. (6'-6" MIN. CLEAR HEIGHT TO HORIZONTAL MEMBERS, 2'X6" OVER 2'X4" BOTTOM CHORD. OF TRUSS, VERIFY W/ TRUSSES.)</p> <p>6 A/C CONDENSER PAD. (VERIFY)</p> <p>7 PRE-FABRICATED METAL FIREPLACE. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.</p> <p>8 ATTIC ACCESS LARGE ENOUGH TO REMOVE LARGEST PIECE OF EQUIPMENT BUT NOT LESS THAN 30"X22". FIRE RATED ACCESS AS NOTED. (PER NCR 807.1) ATTIC ACCESS LADDER, VERIFY LOCATION AND SIZE WITH TRUSSES. (25 1/2" X 54" SIZE) FOR GARAGE TO ATTIC SEPARATION PER NCR 302.5.1 EXCEPTION.</p> <p>TYPICALS:</p> <p>9 TEMPERED SAFETY GLASS. (PER NCR SECTION 308.4)</p> <p>10 PLYWOOD SHELF ABOVE WITH DRYWALL FINISH OVER. HEIGHT AS NOTED.</p> <p>11 HALF WALL, HEIGHT AS NOTED.</p>	<p>12 INTERIOR SOFFITS: FFL = 8'-4" U.N.O. SFL = 7'-6" U.N.O. BATHS:</p> <p>13 SHOWER. TEMPERED GLASS ENCLOSURE.</p> <p>14 TUB-SHOWER COMBO. TEMPERED GLASS ENCLOSURE.</p> <p>15 CERAMIC TILE SHOWER AND FLOOR. TEMPERED GLASS ENCLOSURE.</p> <p>16 ACRYLIC TUB W/ CERAMIC PLATFORM</p> <p>KITCHEN:</p> <p>17 30" SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ADV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.</p> <p>18 30" GAS COOKTOP AND HOOD. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.</p> <p>19 ELECTRIC OVEN WITH MICROWAVE OVEN.</p>
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NO.	DATE	REVISION
1	07.04.23	

PROFESSIONAL SEAL:

PROJECT TITLE:
40' Series

CLIENTS NAME:



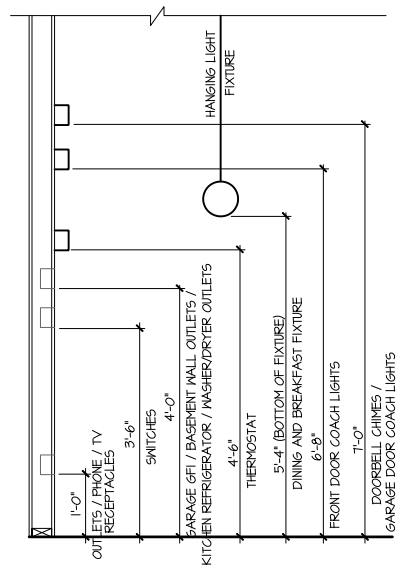
PROJECT NO: GMD1049

SHEET TITLE:
**'GALEN' - LH
 2nd FLOOR
 PLAN '4EGF-E'**

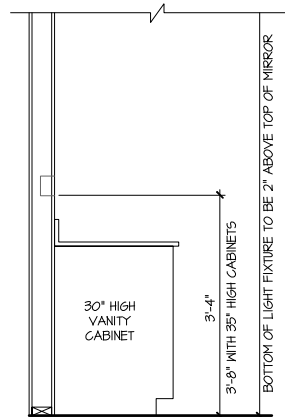
PRINT DATE:
 March 30, 2023

SHEET NO:
5 E

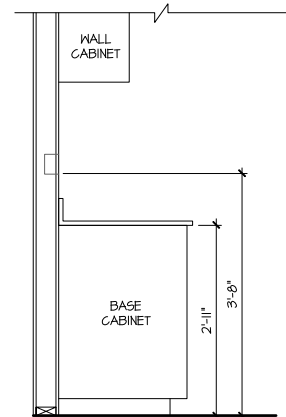
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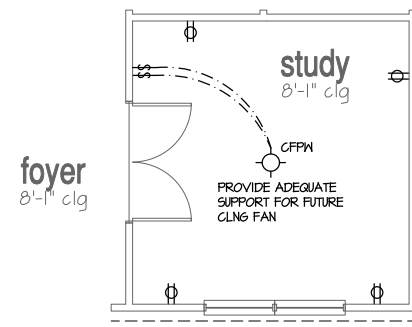
STANDARD ELECTRICAL BOX HEIGHTS



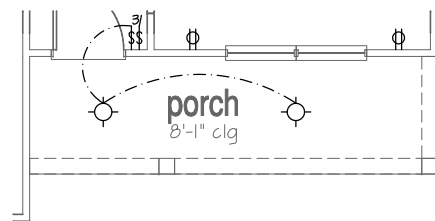
SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS



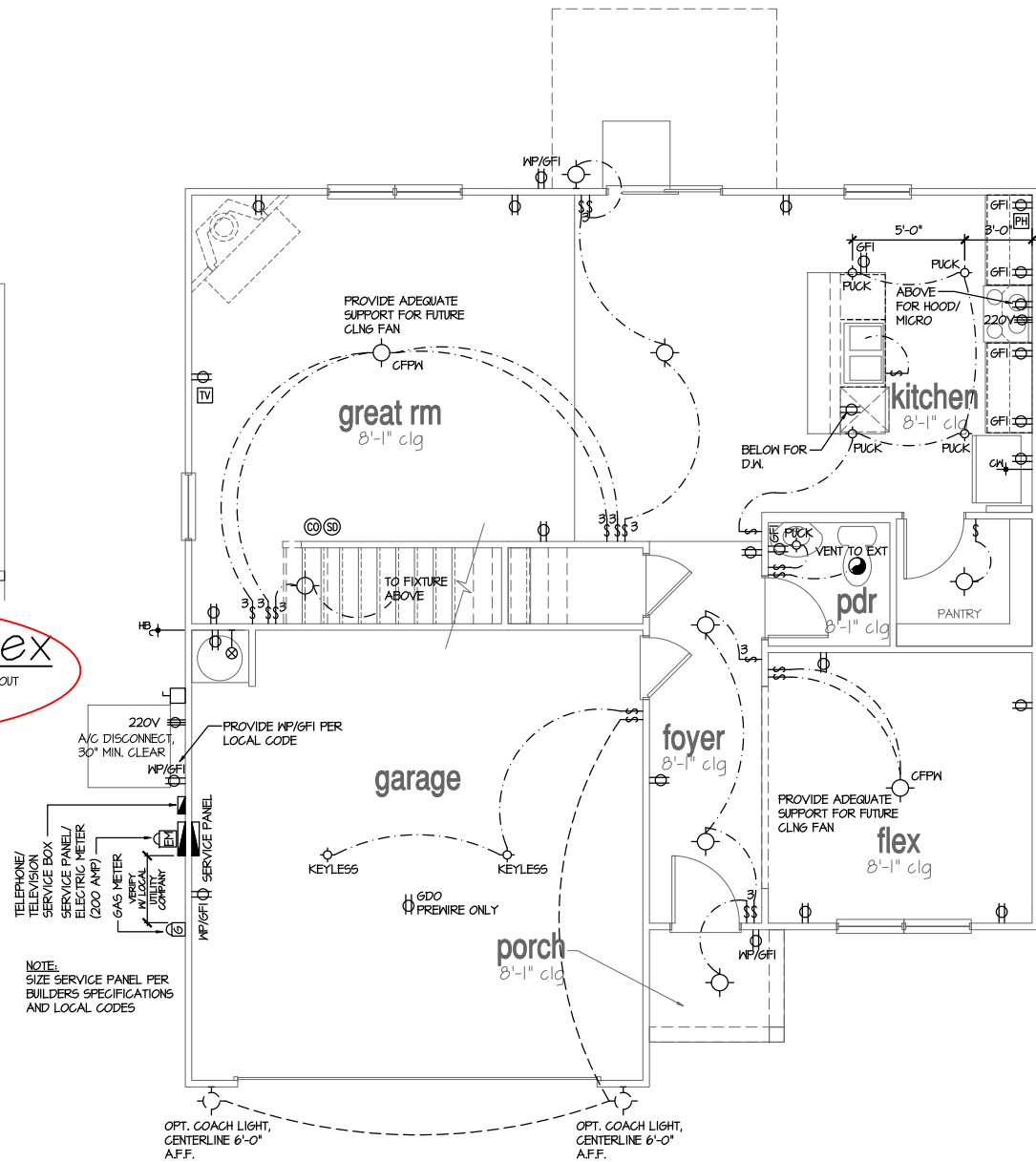
SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS



Opt Study ILO Flex
SCALE: 1/4"=1'-0" AT 22'X34" LAYOUT 1/8"=1'-0" AT 11'X17" LAYOUT



1st Floor Plan 'D'
SCALE: 1/4"=1'-0" AT 22'X34" LAYOUT 1/8"=1'-0" AT 11'X17" LAYOUT



1st Floor Plan 'A'
SCALE: 1/4"=1'-0" AT 22'X34" LAYOUT 1/8"=1'-0" AT 11'X17" LAYOUT

- NOTES:
- PROVIDE GROUNDING ELECTRICAL ROD PER LOCAL CODES.
 - PROVIDE AND INSTALL ARC FAULT CIRCUIT-INTERRUPTERS (AFCI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
 - ALL EXHAUST FANS SHALL HAVE BACKDRAFT DAMPERS.
 - FANLIGHTS IN WET/DAMP LOCATIONS SHALL BE LABELED "SUITABLE FOR WET OR DAMP LOCATIONS."
 - ELECTRICAL SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT.
 - PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
 - PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
 - ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS.
 - HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.
 - ALL ELECTRICAL AND MECHANICAL EQUIPMENT (FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.
 - PROVIDE POWER, LIGHT AND SWITCH AS REQUIRED FOR ATTIC FURNACE PER CODE AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

LEGEND:

⊕	DUPLEX OUTLET	⊕	FLUSH-MOUNT LED CEILING FIXTURE	⊠	CHIMES
⊕ WP/GFI	WEATHERPROOF GFI DUPLEX OUTLET	⊕	HANGING FIXTURE	⊠	PUSHBUTTON SWITCH
⊕ GFI	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET	⊕ CFP	FLUSH-MOUNT LED CEILING FIXTURE (PROVIDE CEILING FAN SUPPORT)	⊠	110V SMOKE DETECTOR W/ BATTERY BACKUP
⊕	HALF-SWITCHED DUPLEX OUTLET	⊕	2-LIGHT VANITY FIXTURE	⊠	CO2 DETECTOR
⊕ 220V	220 VOLT OUTLET	⊕	3-LIGHT VANITY FIXTURE	⊠	THERMOSTAT
⊕	REINFORCED JUNCTION BOX	⊕	4-LIGHT VANITY FIXTURE	⊠	TELEPHONE
⊕	WALL SWITCH	⊕	WALL MOUNT FIXTURE	⊠	TELEVISION
⊕ 3	THREE-WAY SWITCH	⊕	EXHAUST FAN (VENT TO EXTERIOR)	⊠	ELECTRIC METER
⊕ 4	FOUR-WAY SWITCH	⊕		⊠	ELECTRIC PANEL
		⊕		⊠	DISCONNECT SWITCH

NO.	DATE	REVISION
1	07.04.23	

PROFESSIONAL SEAL:

PROJECT TITLE:
40' Series

CLIENTS NAME:



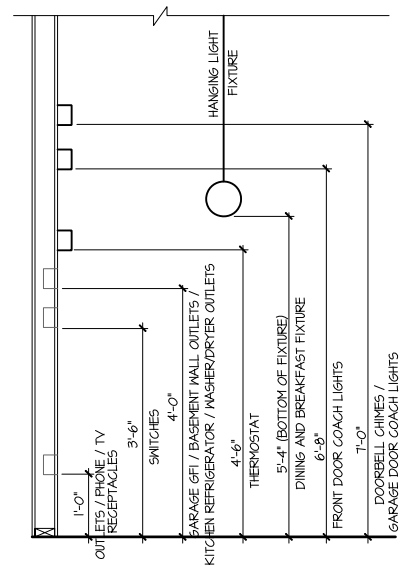
PROJECT NO: GMD1049

SHEET TITLE:
**'GALEN' - LH
1st FLOOR
UTILITY PLAN**

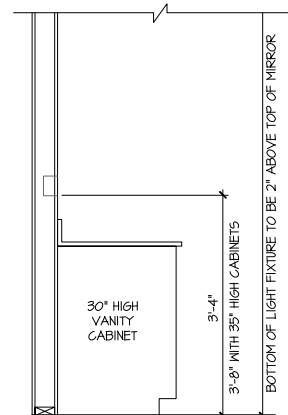
PRINT DATE:
March 30, 2023

SHEET NO:
6

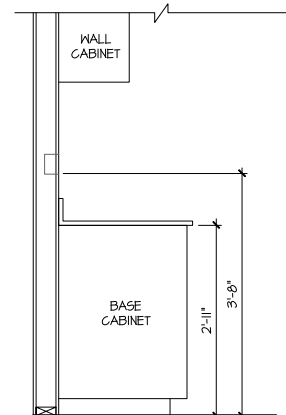
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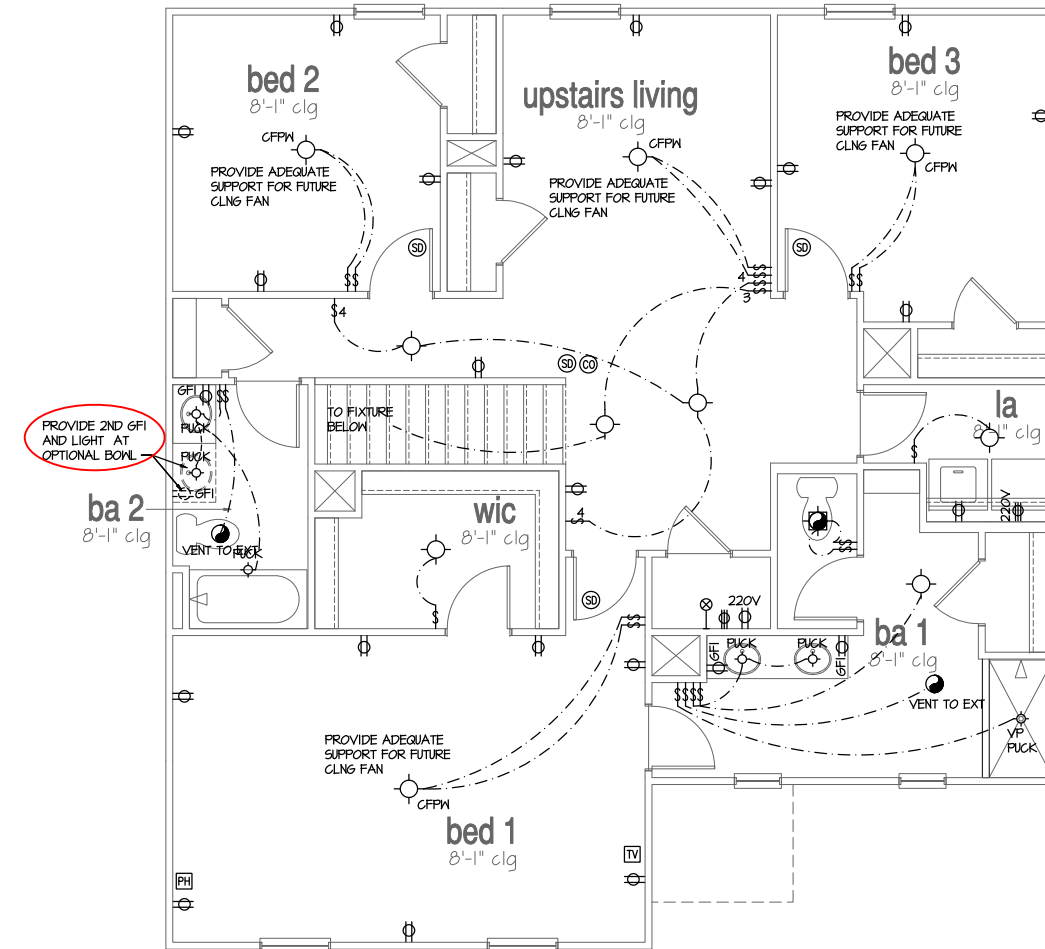
STANDARD ELECTRICAL BOX HEIGHTS



SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS



SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS



2nd Floor Plan 'A'

SCALE: 1/4"=1'-0" AT 22'X34' LAYOUT 1/8"=1'-0" AT 11'X11' LAYOUT

NOTES:		LEGEND:			
- PROVIDE GROUNDING ELECTRICAL ROD PER LOCAL CODES.		⊕	DUPLEX OUTLET	⊕	FLUSH-MOUNT LED CEILING FIXTURE
- PROVIDE AND INSTALL ARC FAULT CIRCUIT-INTERRUPTERS (AFCI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.		⊕/WP/GFI	WEATHERPROOF GFI DUPLEX OUTLET	⊕	HANGING FIXTURE
- ALL EXHAUST FANS SHALL HAVE BACKDRAFT DAMPERS.		⊕/GFI	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET	⊕/CFM	FLUSH-MOUNT LED CEILING FIXTURE (PROVIDE CEILING FAN SUPPORT)
- FANLIGHTS IN WET/DAMP LOCATIONS SHALL BE LABELED "SUITABLE FOR WET OR DAMP LOCATIONS."		⊕	HALF-SWITCHED DUPLEX OUTLET	⊕	2-LIGHT VANITY FIXTURE
- ELECTRICAL SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT.		⊕/220V	220 VOLT OUTLET	⊕	3-LIGHT VANITY FIXTURE
- PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.		⊕	REINFORCED JUNCTION BOX	⊕	4-LIGHT VANITY FIXTURE
- PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.		⊕	WALL SWITCH	⊕	WALL MOUNT FIXTURE
- ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS.		⊕/3	THREE-WAY SWITCH	⊕	EXHAUST FAN (VENT TO EXTERIOR)
- HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.		⊕/4	FOUR-WAY SWITCH	⊕	FLUSH-MOUNT LED CEILING FIXTURE
- ALL ELECTRICAL AND MECHANICAL EQUIPMENT (FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.		⊕		⊕	CHIMES
- PROVIDE POWER, LIGHT AND SWITCH AS REQUIRED FOR ATTIC FURNACE PER CODE AND MANUFACTURER'S WRITTEN INSTRUCTIONS.		⊕		⊕	PUSHBUTTON SWITCH
		⊕		⊕	110V SMOKE DETECTOR W/ BATTERY BACKUP
		⊕		⊕	CO2 DETECTOR
		⊕		⊕	THERMOSTAT
		⊕		⊕	TELEPHONE
		⊕		⊕	TELEVISION
		⊕		⊕	ELECTRIC METER
		⊕		⊕	ELECTRIC PANEL
		⊕		⊕	DISCONNECT SWITCH
		⊕		⊕	CEILING FAN (PROVIDE ADEQUATE SUPPORT)
		⊕		⊕	GAS SUPPLY WITH VALVE
		⊕		⊕	HOSE BIBB
		⊕		⊕	1/4" WATER STUB OUT
		⊕		⊕	WALL SCONCE

NO.	DATE	REVISION
1	07.04.23	

PROFESSIONAL SEAL:

PROJECT TITLE:
40' Series

FOR CONSTRUCTION



CLIENTS NAME:

PROJECT NO: GMD1049

SHEET TITLE:
**'GALEN' - LH
2nd FLOOR
UTILITY PLAN**

PRINT DATE:
March 30, 2023

SHEET NO:
7

FOUNDATION NOTES:

- FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- STRUCTURAL CONCRETE TO BE $F_c = 3000$ PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
- FOOTINGS TO BE PLACED ON UNDISTURBED EARTH, BEARING A MINIMUM OF 12" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE CODE ENFORCEMENT OFFICIAL.
- FOOTING SIZES BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION.
- FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS. PROVIDE 2" MINIMUM FOOTING PROJECTION FROM THE FACE OF MASONRY.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- PILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
- PROVIDE FOUNDATION WATERPROOFING AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
- PROVIDED PERIMETER INSULATION FOR ALL FOUNDATIONS PER 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- CORBEL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEERS.
- CRAWL SPACE TO BE GRADED LEVEL, AND CLEARED OF ALL DEBRIS.
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- ABBREVIATIONS:

DJ = DOUBLE JOIST	SJ = SINGLE JOIST
GT = GIRDER TRUSS	FT = FLOOR TRUSS
SC = STUD COLUMN	DR = DOUBLE RAFTER
EE = EACH END	TR = TRIPLE RAFTER
TJ = TRIPLE JOIST	OC = ON CENTER
CL = CENTER LINE	FL = POINT LOAD
- ALL PIERS TO BE 16"x16" MASONRY AND ALL PILASTERS TO BE 8"x16" MASONRY, TYPICAL (UNO).
- WALL FOOTINGS TO BE CONTINUOUS CONCRETE, SIZES PER STRUCTURAL PLAN.
- A FOUNDATION EXCAVATION OBSERVATION SHOULD BE CONDUCTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER OR HIS QUALIFIED REPRESENTATIVE. IF ISOLATED AREAS OF YIELDING MATERIALS AND/OR POTENTIALLY EXPANSIVE SOILS ARE OBSERVED IN THE FOOTING EXCAVATIONS AT THE TIME OF CONSTRUCTION, SUMMIT ENGINEERING LABORATORY & TESTING, INC. MUST BE PROVIDED THE OPPORTUNITY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
- ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLDDOWNS. ADDITIONAL INFORMATION PER SECTION R602.10.2 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE: ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO FRAMING AND NOT BRICK VENEER UNO

NOTE: A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED WHEN SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1 PER TABLE R405.1

REINFORCE GARAGE PORTAL WALLS PER FIGURE R602.10.3 OF THE 2015 IRC.

BEAM POCKETS MAY BE SUBSTITUTED FOR MASONRY PILASTERS AT GIRDER ENDS. BEAM POCKETS SHALL HAVE A MINIMUM 4" SOLID MASONRY BEARING.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON. COMPLETED/REVISED ON 03/20/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING LABORATORY & TESTING, INC. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING LABORATORY & TESTING, INC. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

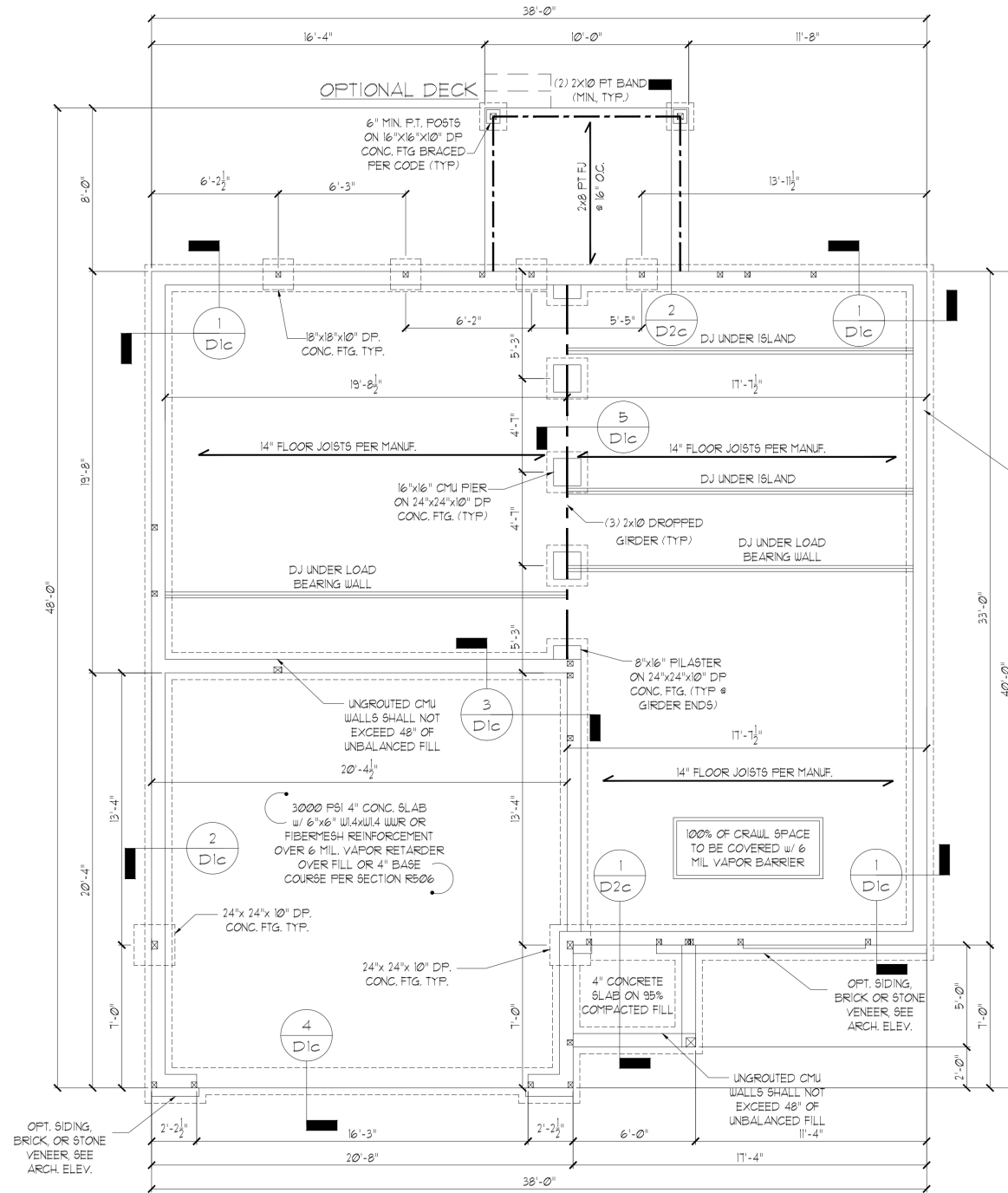
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING LABORATORY & TESTING, INC. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NRC.

CRAWL SPACE FOUNDATION PLAN

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

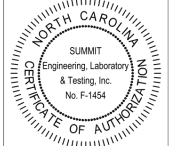


CRAWL SPACE FOUNDATION PLAN - ELEVATION A, B, C

18"x24" MIN. CRAWL SPACE ACCESS DOOR TO BE LOCATED IN FIELD PER BUILDER. PROVIDE MIN. (2) 2"x10" HEADER OVER DOOR w/ MIN. 4" BEARING EACH END. AVOID SHOWN POINT LOADS.

DECK FLOOR JOISTS SHALL BE SPACED AT MAX. 12" ON CENTER WHEN DECKING INSTALLED DIAGONALLY

SIDING VENEER: 8" CMU END WALL ON 16"x10" DP CONT. CONC. FTG. (TYP.)
BRICK VENEER: 8" CMU END WALL w/ BRICK VENEER ON 21"x10" DP CONT. CONC. FTG. (TYP.)



CLIENT:
DE Horton, Inc.
8000 Ardwick Rd.
Charlotte, NC 28217

PROJECT:
Gallen - LH
Crawl Space Foundation



STRUCTURAL MEMBERS ONLY

DRAINS
DATE: 03/20/23
SCALE: 2x34 1/4"=1'-0"
1x17 1/8"=1'-0"
PROJECT: 13047023
DRAWN BY: ED
CHECKED BY: MSB

ORIGINAL INFORMATION
PROJECT: 13047023
DATE: 04/26/23

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

51.0c

FOUNDATION NOTES:

- FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- STRUCTURAL CONCRETE TO BE $F_c = 3000$ PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
- FOOTINGS TO BE PLACED ON UNDISTURBED EARTH, BEARING A MINIMUM OF 1" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE CODE ENFORCEMENT OFFICIAL.
- FOOTING SIZES BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION.
- FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS. PROVIDE 2" MINIMUM FOOTING PROJECTION FROM THE FACE OF MASONRY.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- FILASTERs TO BE BONDED TO PERIMETER FOUNDATION WALL.
- PROVIDE FOUNDATION WATERPROOFING, AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
- PROVIDED PERIMETER INSULATION FOR ALL FOUNDATIONS PER 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- CORBEL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEERS.
- CRAWL SPACE TO BE GRADED LEVEL, AND CLEARED OF ALL DEBRIS.
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.16. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- ABBREVIATIONS:

DJ = DOUBLE JOIST	SJ = SINGLE JOIST
GT = GIRDER TRUSS	FT = FLOOR TRUSS
SC = STUD COLUMN	DR = DOUBLE RAFTER
EE = EACH END	TR = TRIPLE RAFTER
TJ = TRIPLE JOIST	OC = ON CENTER
CL = CENTER LINE	PL = POINT LOAD

- ALL PIERS TO BE 16"x16" MASONRY AND ALL FILASTERs TO BE 8"x16" MASONRY, TYPICAL. (UNO)
- WALL FOOTINGS TO BE CONTINUOUS CONCRETE, SIZES PER STRUCTURAL PLAN.
- A FOUNDATION EXCAVATION OBSERVATION SHOULD BE CONDUCTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER OR HIS QUALIFIED REPRESENTATIVE. IF ISOLATED AREAS OF YIELDING MATERIALS AND/OR POTENTIALLY EXPANSIVE SOILS ARE OBSERVED IN THE FOOTING EXCAVATIONS AT THE TIME OF CONSTRUCTION, SUMMIT ENGINEERING, LABORATORY & TESTING, INC. MUST BE PROVIDED THE OPPORTUNITY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
- ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLDDOWNS. ADDITIONAL INFORMATION PER SECTION R602.10.8 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE: ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO FRAMING AND NOT BRICK VENEER, UNO

NOTE: A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED WHEN SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1 PER TABLE R405.1

REINFORCE GARAGE PORTAL WALLS PER FIGURE R602.10.9 OF THE 2015 IRC.

BEAM POCKETS MAY BE SUBSTITUTED FOR MASONRY FILASTERs AT GIRDER ENDS. BEAM POCKETS SHALL HAVE A MINIMUM 4" SOLID MASONRY BEARING.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR. HORTON COMPLETED/REVISED ON 02/20/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, INC. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, INC. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

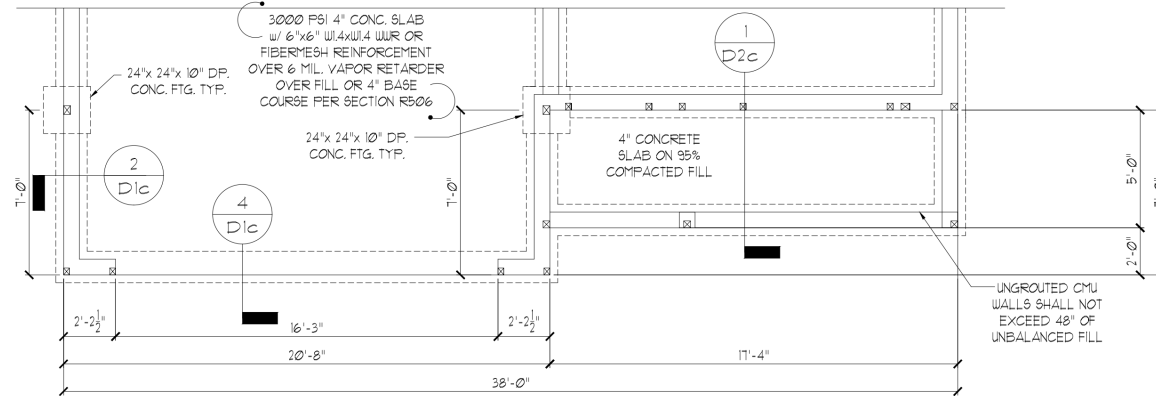
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, INC. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

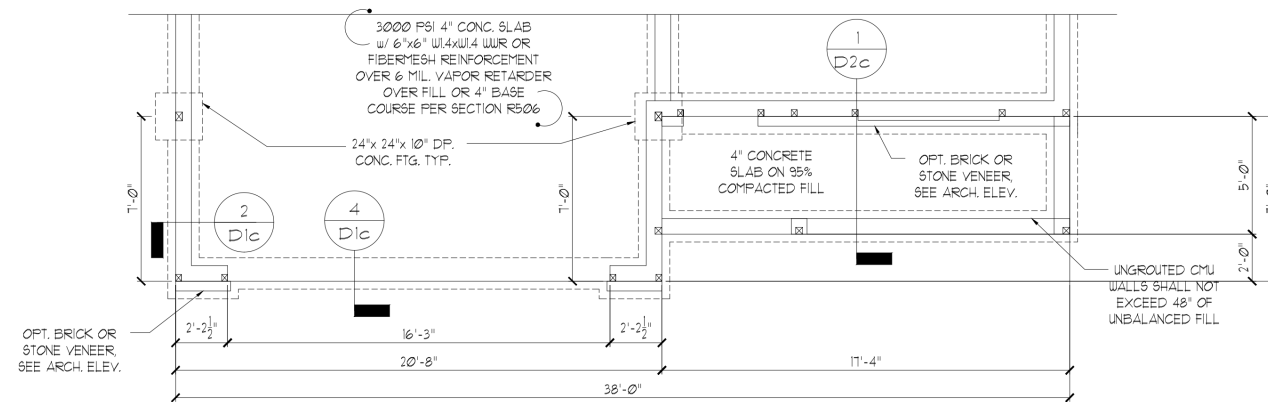
STRUCTURAL ANALYSIS BASED ON 2018 NCR. C.

CRAWL SPACE FOUNDATION PLAN

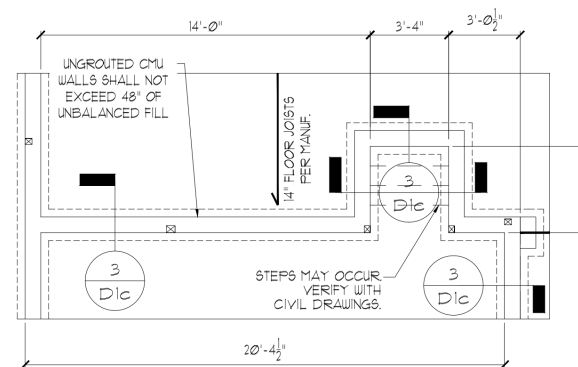
SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



CRAWL SPACE FOUNDATION PLAN - ELEVATION D



CRAWL SPACE FOUNDATION PLAN - ELEVATION E & F

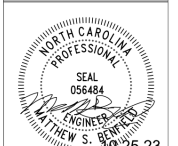


OPT. GARAGE ENTRY STEPS



CLIENT:
DE LUXON, INC.
8000 Ardenwood Blvd.
Charlotte, NC 28217

PROJECT - LH
Galen - LH
Crawl Space Foundation



STRUCTURAL MEMBERS ONLY

DRAWN
DATE: 01/02/2023
SCALE: 22x34 1/4"=1'-0" 11"x17" 1/8"=1'-0"
PROJECT: 130810208
DRAWN BY: ED
CHECKED BY: MSB

ORIGINAL INFORMATION
PROJECT # DATE
10528 04/26/23

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
S1.c

REQUIRED BRACED WALL PANEL CONNECTIONS				
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION	
			# PANEL EDGES	# INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
GB	GYPSUM BOARD	1/2"	5d COOLER NAILS** @ 1" O.C.	5d COOLER NAILS** @ 1" O.C.
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
FF	WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.6.4	PER FIGURE R602.10.6.4

**OR EQUIVALENT PER TABLE R702.3.5

FIRST FLOOR BRACING (FT)		
	CONTINUOUS SHEATHING METHOD	
	REQUIRED	PROVIDED
BULL 1-1	13.9	23.8
BULL 1-2	13.9	14.2
BULL 1-A	9.9	31.0
BULL 1-B	9.9	12.1
BULL 1-C	8.6	33.0

GENERAL STRUCTURAL NOTES:

- CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL COMPLY WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING REQUIRED TO RESIST ALL FORCES ENCOUNTERED DURING ERECTION.
- PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS:
MICRO-LAM (LVL): $F_b = 2600$ PSI, $F_v = 285$ PSI, E = 1.9×10^6 PSI
PARALLAM (PBL): $F_b = 2300$ PSI, $F_v = 230$ PSI, E = 1.25×10^6 PSI
- ALL WOOD MEMBERS SHALL BE #2 SYP OR #2 SPF UNLESS NOTED ON PLAN. ALL STUD COLUMNS AND JOISTS SHALL BE #2 SYP OR #2 SPF (UNO).
- ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 #2 SYP OR A (2) 2x4 #2 SPF STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
- ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- CONTRACTOR TO PROVIDED LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- FLITCH BEAMS, 4-PLY LVL'S AND 3-PLY SIDE LOADED LVL'S SHALL BE BOLTED TOGETHER WITH 1/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1/D/3. MIN. EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM.
- ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP #2 OR (1) FLAT 2x4 SPF #2, DROPPED. FOR NON-LOAD BEARING HEADERS EXCEEDING 8'-0" IN WIDTH AND/OR WITH MORE THAN 2'-0" OF CRIPPLE WALL ABOVE, SHALL BE (2) FLAT 2x4 SYP #2 OR (2) FLAT 2x4 SPF #2 DROPPED. (UNLESS NOTED OTHERWISE)
- ABBREVIATIONS:

- | | |
|-------------------|--------------------|
| DJ = DOUBLE JOIST | SJ = SINGLE JOIST |
| GT = GIRDER TRUSS | FT = FLOOR TRUSS |
| SC = STUD COLUMN | DR = DOUBLE RAFTER |
| EE = EACH END | TR = TRIPLE RAFTER |
| TJ = TRIPLE JOIST | OC = ON CENTER |
| CL = CENTER LINE | PL = POINT LOAD |

NOTE:
----- DESIGNATES JOIST SUPPORTED LOAD BEARING WALL. ABOVE, PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

INSTALL ANY REQUIRED HOLD-DOWNS PER SECTION R602.10.8 AND FIGURES R602.10.6.3, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2018 IRC

NOTE: MEMBER NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDED THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR. HORTON. COMPLETED/REVISED ON 03/20/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, INC. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, INC. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

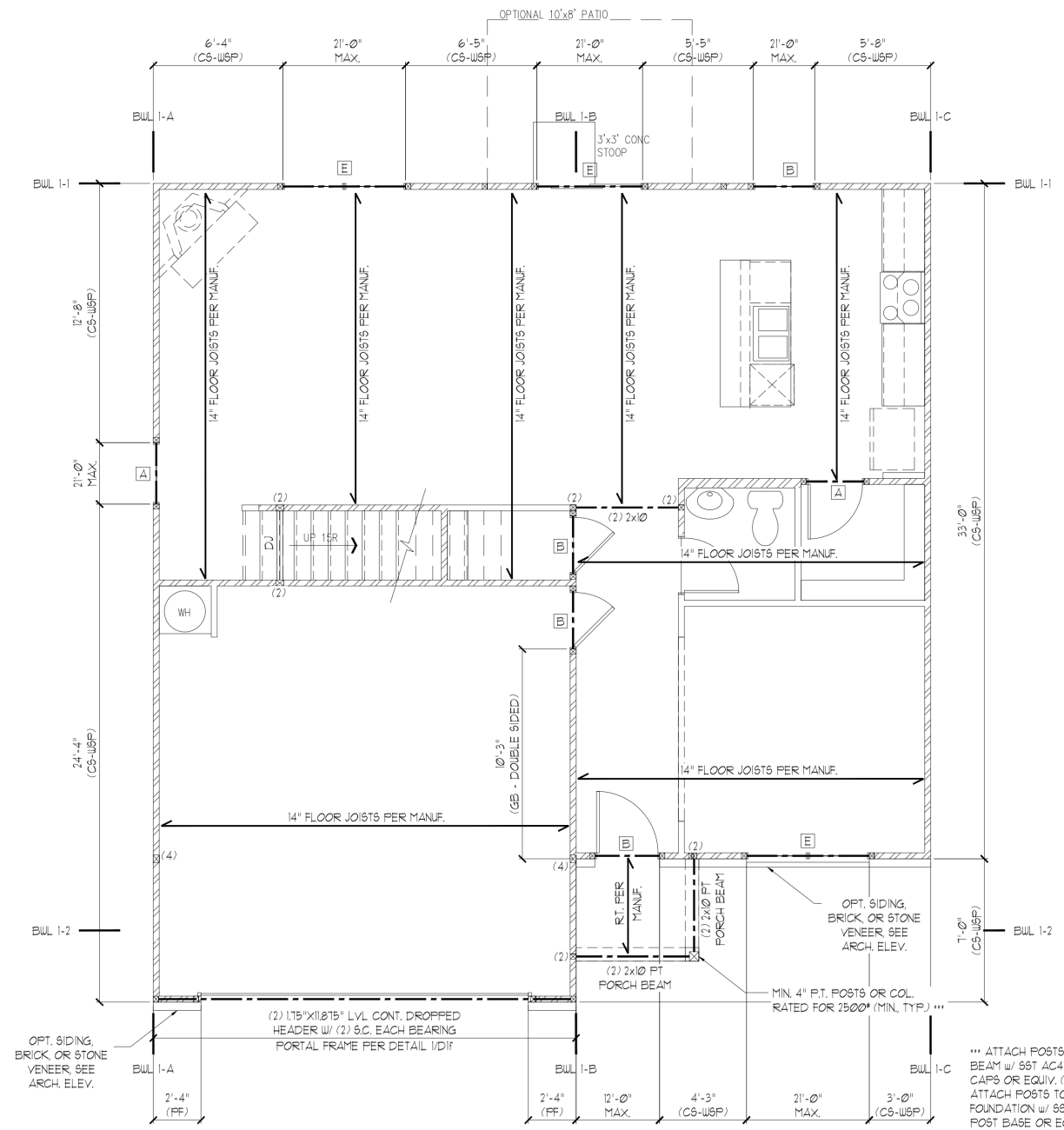
STRUCTURAL MEMBERS ONLY

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STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

FIRST FLOOR FRAMING PLAN

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



FIRST FLOOR FRAMING PLAN - ELEVATION A, B, C

HEADER SCHEDULE		
TAG	SIZE	JACKS (EACH END)
A	(2) 2x6	(1)
B	(2) 2x8	(2)
C	(2) 2x10	(2)
D	(2) 2x12	(2)
E	(2) 9-1/4\"/>	

HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. ALL HEADERS TO BE DROPPED UNLESS NOTED OTHERWISE. SC NOTED ON PLAN OVERRIDE SC LISTED ABOVE.

LINTEL SCHEDULE		
TAG	SIZE	OPENING SIZE
①	L3x3x1/4"	LESS THAN 6'-0"
②	L5x3x1/4"	6'-0" TO 10'-0"
③	L5x3-1/2x5/16"	GREATER THAN 10'-0"
④	L5x3-1/2x5/16"	ALL ARCHED OPENINGS

SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR ③)

ALL HEADERS WHERE BRICK IS USED, TO BE: ① (UNO)

WALL STUD SCHEDULE	
1ST & 2ND FLOOR LOAD BEARING STUDS:	2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.
1ST FLOOR LOAD BEARING STUDS w/ WALK-UP ATTIC:	2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.
BASEMENT LOAD BEARING STUDS:	2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.
NON-LOAD BEARING STUDS (ALL FLOORS):	2x4 STUDS @ 24" O.C.
TWO STORY WALLS:	2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED w/ CROSS BRACING @ 6'-0" O.C. VERTICALLY

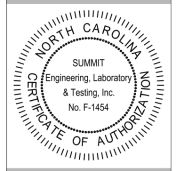
KING STUD REQUIREMENTS	
OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0" TO 4'-0"	(2)
4'-0" TO 8'-0"	(3)
8'-0" TO 12'-0"	(5)
12'-0" TO 16'-0"	(6)

KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 INTERNATIONAL RESIDENTIAL CODE AS ALLOWED PER SECTION R602.10 OF THE 2018 NC RESIDENTIAL CODE.
- WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE WIND SPEEDS UP TO 130 MPH.
- REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES.
- BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH IRC TABLE R602.10.4.
- ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.5.
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (UNO).
- FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- A BRACED WALL PANEL SHALL BE LOCATED WITHIN 10 FEET OF EACH END OF A BRACED WALL LINE.
- THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 20 FEET.
- MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 48" OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.9 OF THE 2018 IRC.
- BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.8
- BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.8.2 AND FIGURES R602.10.8.1(1)&(2)&(3).
- CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10.11
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.6.4 (UNO)
- ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS. ABBREVIATIONS:

GB = GYPSUM BOARD WSP = WOOD STRUCTURAL PANEL
CS-XXX = CONT. SHEATHED ENG = ENGINEERED SOLUTION
FF = PORTAL FRAME FF-ENG = ENG. PORTAL FRAME



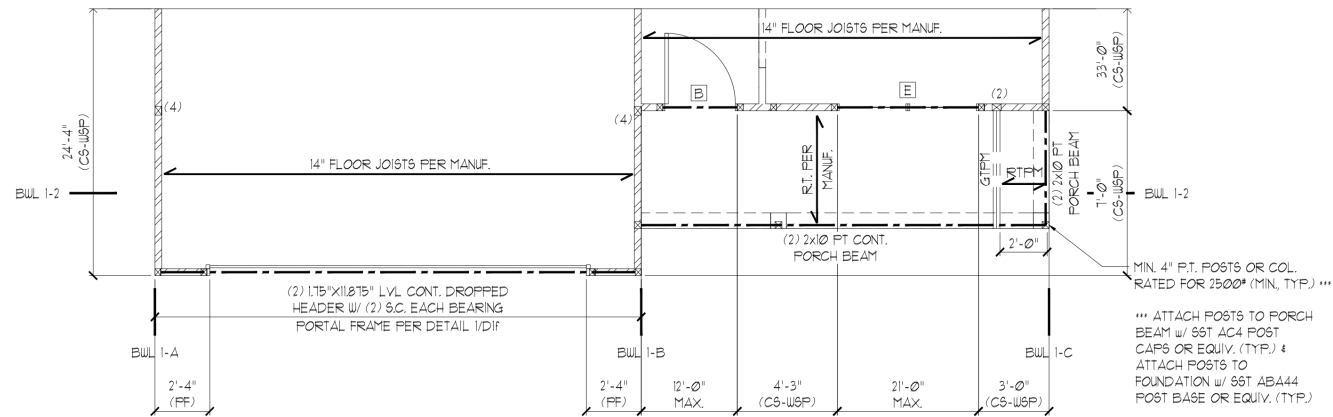
CLIENT:
DE Luxon, Inc.
8000 Ardenwood Blvd.
Charlotte, NC 28217

PROJECT:
Gallen - LH
First Floor Framing Plan



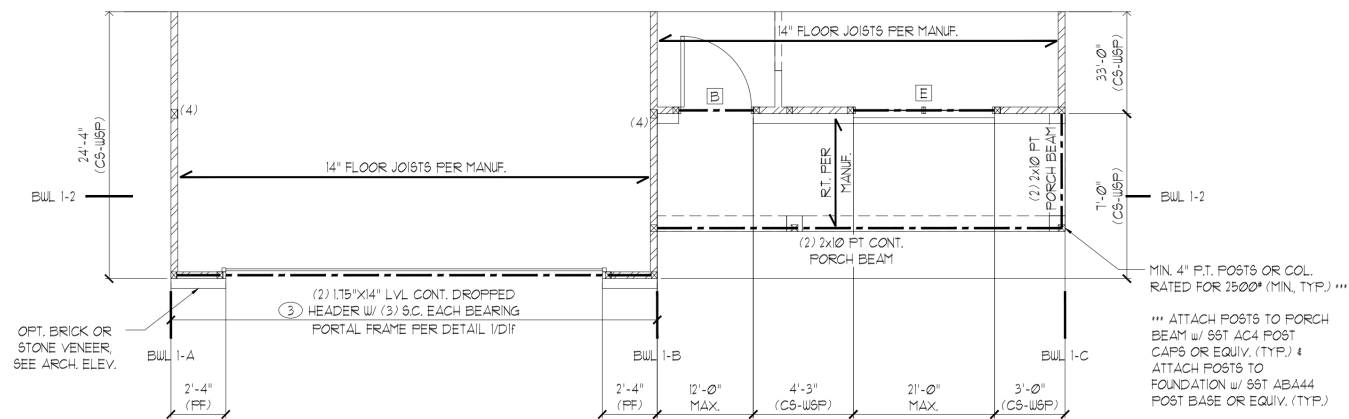
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DATE:	03/20/23
SCALE:	22x34 1/4"=1'-0" 11x17 1/2"=1'-0"
PROJECT #:	1047028
DRAWN BY:	ED
CHECKED BY:	MSB
ORIGINAL INFORMATION	DATE
PROJECT #	10508
DATE	04/26/23

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS



FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BULL 1-1	13.9	23.8
BULL 1-2	13.9	14.2
BULL 1-A	9.9	31.0
BULL 1-B	9.9	12.1
BULL 1-C	8.6	33.0

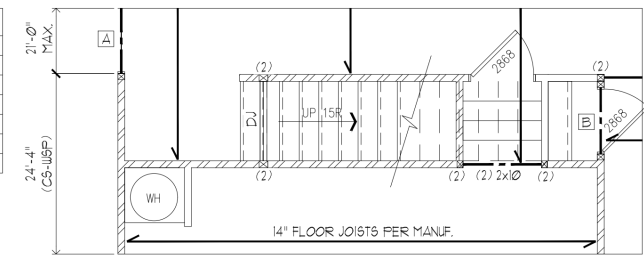
FIRST FLOOR FRAMING PLAN - ELEVATION D



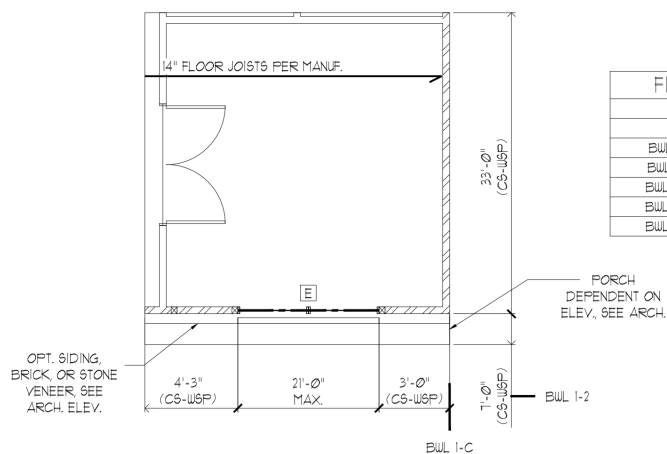
FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BULL 1-1	13.9	23.8
BULL 1-2	13.9	14.2
BULL 1-A	9.9	31.0
BULL 1-B	9.9	12.1
BULL 1-C	8.6	33.0

FIRST FLOOR FRAMING PLAN - ELEVATION E & F

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BULL 1-1	13.9	23.8
BULL 1-2	13.9	14.2
BULL 1-A	9.9	31.0
BULL 1-B	9.9	12.1
BULL 1-C	8.6	33.0



OPT. GARAGE ENTRY STEPS



OPT. STUDY ILO FLEX

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BULL 1-1	13.9	23.8
BULL 1-2	13.9	14.2
BULL 1-A	9.9	31.0
BULL 1-B	9.9	12.1
BULL 1-C	8.6	33.0

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STRUCTURAL MEMBERS ONLY

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STRUCTURAL ANALYSIS BASED ON 2018 NCR.

FIRST FLOOR FRAMING PLAN

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

HEADER SCHEDULE		
TAG	SIZE	JACKS (EACH END)
A	(2) 2x6	(1)
B	(2) 2x8	(2)
C	(2) 2x10	(2)
D	(2) 2x12	(2)
E	(2) 9-1/4" LSL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
H	(3) 2x10	(2)
I	(3) 2x12	(2)

HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. ALL HEADERS TO BE DROPPED UNLESS NOTED OTHERWISE. SC NOTED ON PLAN OVERRIDE SC LISTED ABOVE.

KING STUD REQUIREMENTS	
OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0" TO 4'-0"	(2)
4'-0" TO 8'-0"	(3)
8'-0" TO 12'-0"	(5)
12'-0" TO 16'-0"	(6)

KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS

SECOND FLOOR BRACING (FT)		
	CONTINUOUS SHEATHING METHOD	
	REQUIRED	PROVIDED
BULL 1-1	6.8	29.0
BULL 1-2	6.8	13.3
BULL 1-A	4.3	40.0
BULL 1-B	4.3	7.0
BULL 1-C	4.3	33.0

LINTEL SCHEDULE		
TAG	SIZE	OPENING SIZE
①	L3x3x1/4"	LESS THAN 6'-0"
②	L5x3x1/4"	6'-0" TO 10'-0"
③	L5x3-1/2"x5/16"	GREATER THAN 10'-0"
④	L5x3-1/2"x5/16" ROLLED OR EQUIV.	ALL ARCHED OPENINGS

SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR ③)

ALL HEADERS WHERE BRICK IS USED, TO BE: ① (UNO)

WALL STUD SCHEDULE

1ST & 2ND FLOOR LOAD BEARING STUDS:
 2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.
 1ST FLOOR LOAD BEARING STUDS w/ WALK-UP ATTIC:
 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.
 BASEMENT LOAD BEARING STUDS:
 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.
 NON-LOAD BEARING STUDS (ALL FLOORS):
 2x4 STUDS @ 24" O.C.
 TWO STORY WALLS:
 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED w/ CROSS BRACING @ 6'-0" O.C. VERTICALLY

INSTALL ANY REQUIRED HOLDINGS PER SECTION R602.10.2 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE:
 ----- DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

NOTE: MEMBER NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDED THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR. HORTON COMPLETED/REVISED ON 03/20/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, INC. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, INC. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

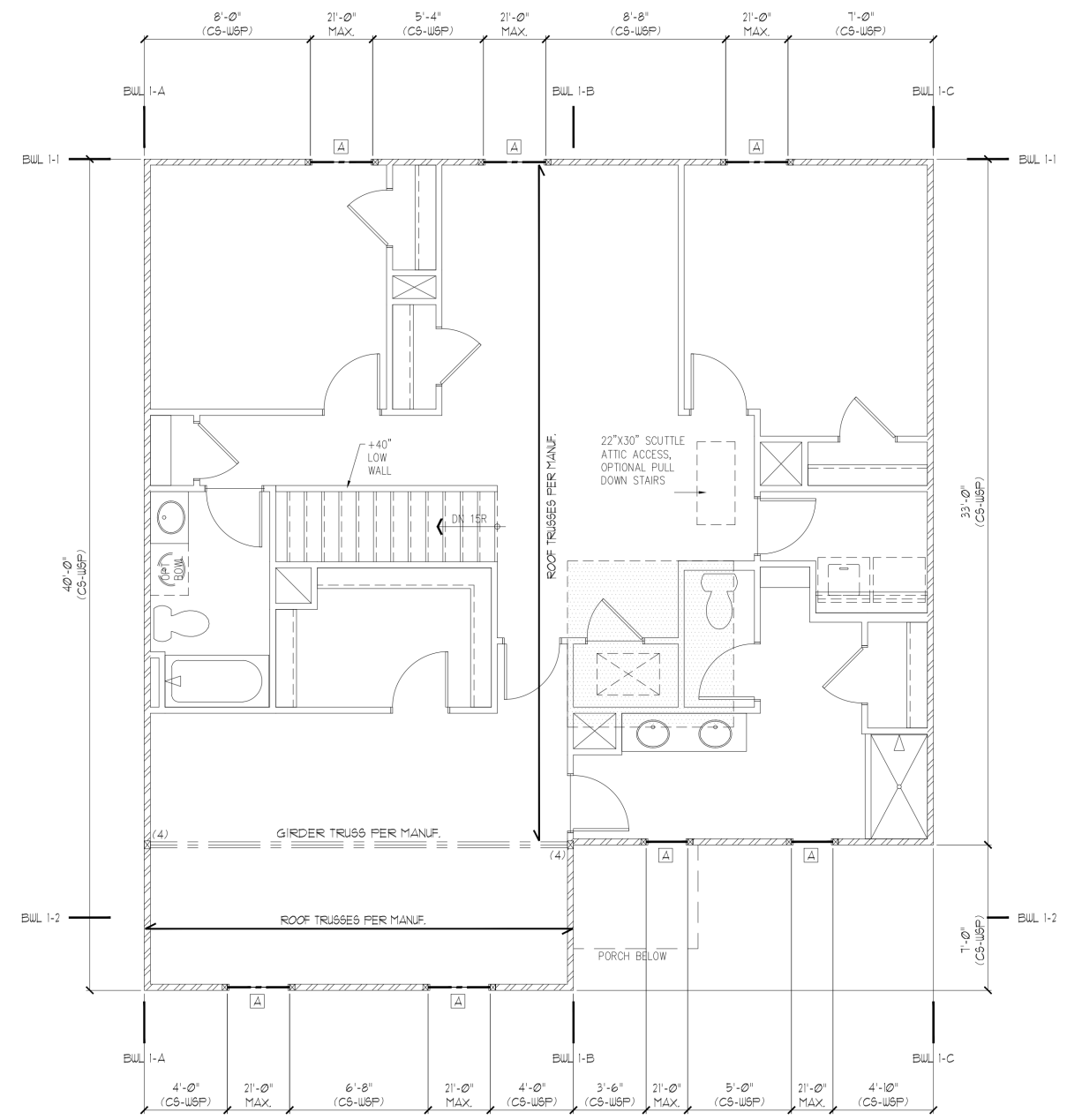
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, INC. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

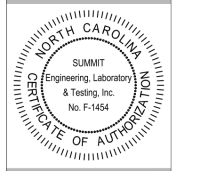
STRUCTURAL ANALYSIS BASED ON 2018 NCR.

SECOND FLOOR FRAMING PLAN

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

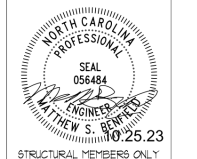


SECOND FLOOR FRAMING PLAN - ELEVATION A, B, C



CLIENT:
 DE Lorton, Inc.
 8001 Ardenwood Blvd.
 Charlotte, NC 28217

PROJECT:
 Galien - LH
 Second Floor Framing Plan



DATE: 03/20/23
 SCALE: 1/4"=1'-0" / 1/8"=1'-0"
 PROJECT: 230203
 DRAWN BY: ED
 CHECKED BY: MSB

ORIGINAL INFORMATION
 PROJECT: 230203 DATE: 04/26/23

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET: 54.0

HEADER SCHEDULE		
TAG	SIZE	JACKS (EACH END)
A	(2) 2x6	(1)
B	(2) 2x8	(2)
C	(2) 2x10	(2)
D	(2) 2x12	(2)
E	(2) 9-1/4" LSL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
H	(3) 2x10	(2)
I	(3) 2x12	(2)

HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. ALL HEADERS TO BE DROPPED UNLESS NOTED OTHERWISE. SC NOTED ON PLAN OVERRIDE SC LISTED ABOVE.

LINTEL SCHEDULE		
TAG	SIZE	OPENING SIZE
①	L3x3x1/4"	LESS THAN 6'-0"
②	L5x3x1/4"	6'-0" TO 10'-0"
③	L5x3-1/2"x5/16"	GREATER THAN 10'-0"
④	L5x3-1/2"x5/16" ROLLED OR EQUIV.	ALL ARCHED OPENINGS

SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR ③)

ALL HEADERS WHERE BRICK IS USED, TO BE: ① (UNO)

WALL STUD SCHEDULE

1ST & 2ND FLOOR LOAD BEARING STUDS:
2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.
1ST FLOOR LOAD BEARING STUDS w/ WALK-UP ATTIC:
2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.
BASEMENT LOAD BEARING STUDS:
2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.
NON-LOAD BEARING STUDS (ALL FLOORS):
2x4 STUDS @ 24" O.C.
TWO STORY WALLS:
2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON
FRAMED w/ CROSS BRACING @ 6'-0" O.C. VERTICALLY

INSTALL ANY REQUIRED HOLDDOVS PER SECTION R602.10.3 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE:
----- DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

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NOTE: MEMBER NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDED THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

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STRUCTURAL MEMBERS ONLY

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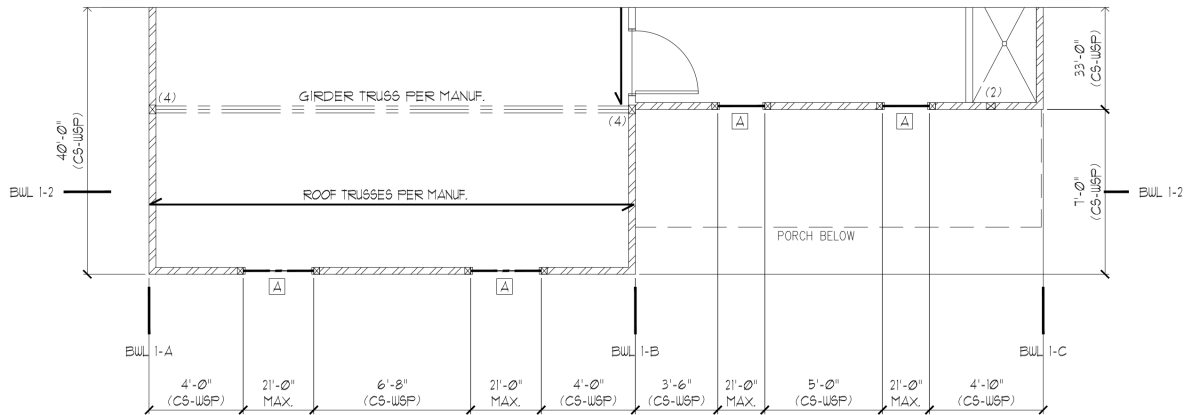
STRUCTURAL ANALYSIS BASED ON 2018 NCR.

SECOND FLOOR FRAMING PLAN

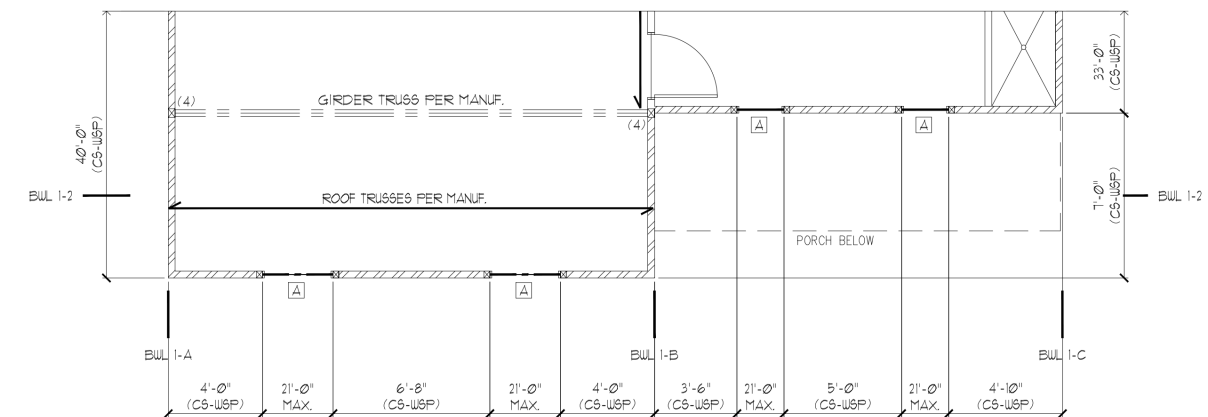
SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"

KING STUD REQUIREMENTS	
OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0" TO 4'-0"	(2)
4'-0" TO 8'-0"	(3)
8'-0" TO 12'-0"	(5)
12'-0" TO 16'-0"	(6)

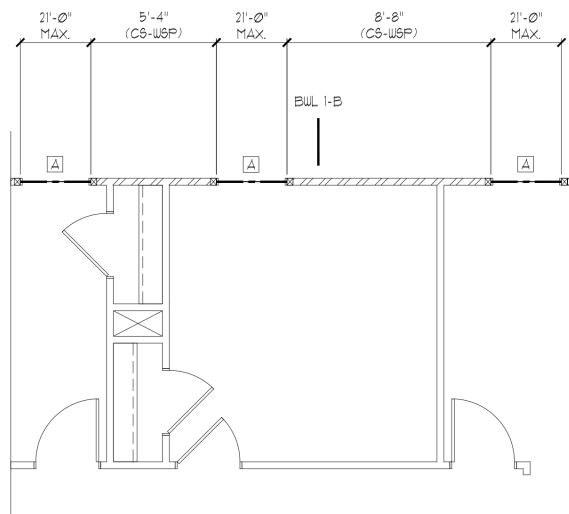
KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS



SECOND FLOOR FRAMING PLAN - ELEVATION D

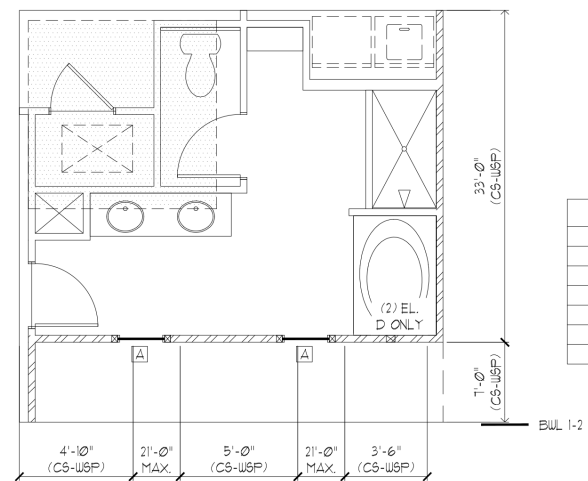


SECOND FLOOR FRAMING PLAN - ELEVATION E & F



OPT. BEDROOM 4

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BULL 1-1	6.8	29.0
BULL 1-2	6.8	13.3
BULL 1-A	4.9	40.0
BULL 1-B	4.9	7.0
BULL 1-C	4.3	33.0

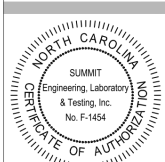


OPT. BATH 1

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BULL 1-1	6.8	29.0
BULL 1-2	6.8	13.3
BULL 1-A	4.9	40.0
BULL 1-B	4.9	7.0
BULL 1-C	4.3	33.0

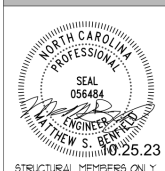
SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BULL 1-1	6.8	29.0
BULL 1-2	6.8	13.3
BULL 1-A	4.9	40.0
BULL 1-B	4.9	7.0
BULL 1-C	4.3	33.0

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BULL 1-1	6.8	29.0
BULL 1-2	6.8	13.3
BULL 1-A	4.9	40.0
BULL 1-B	4.9	7.0
BULL 1-C	4.3	33.0



CLIENT:
DE Luxon, Inc.
8000 Ardenwood Blvd.
Charlotte, NC 28217

PROJECT:
Gallen - LH
Second Floor Framing Plan



STRUCTURAL MEMBERS ONLY

DATE: 01/02/2023
SCALE: 22x34 1/4"=1'-0" 18"=1'-0"
PROJECT: 13047023
DRAWN BY: ED
CHECKED BY: MSB

ORIGINAL INFORMATION
PROJECT # DATE
13028 04/26/23

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
S4.1

CLIENT:
 DE LUXON, INC.
 8000 Ardenwood Blvd.
 Charlotte, NC 28217

PROJECT:
 Galen - LH
 Roof Framing Plan

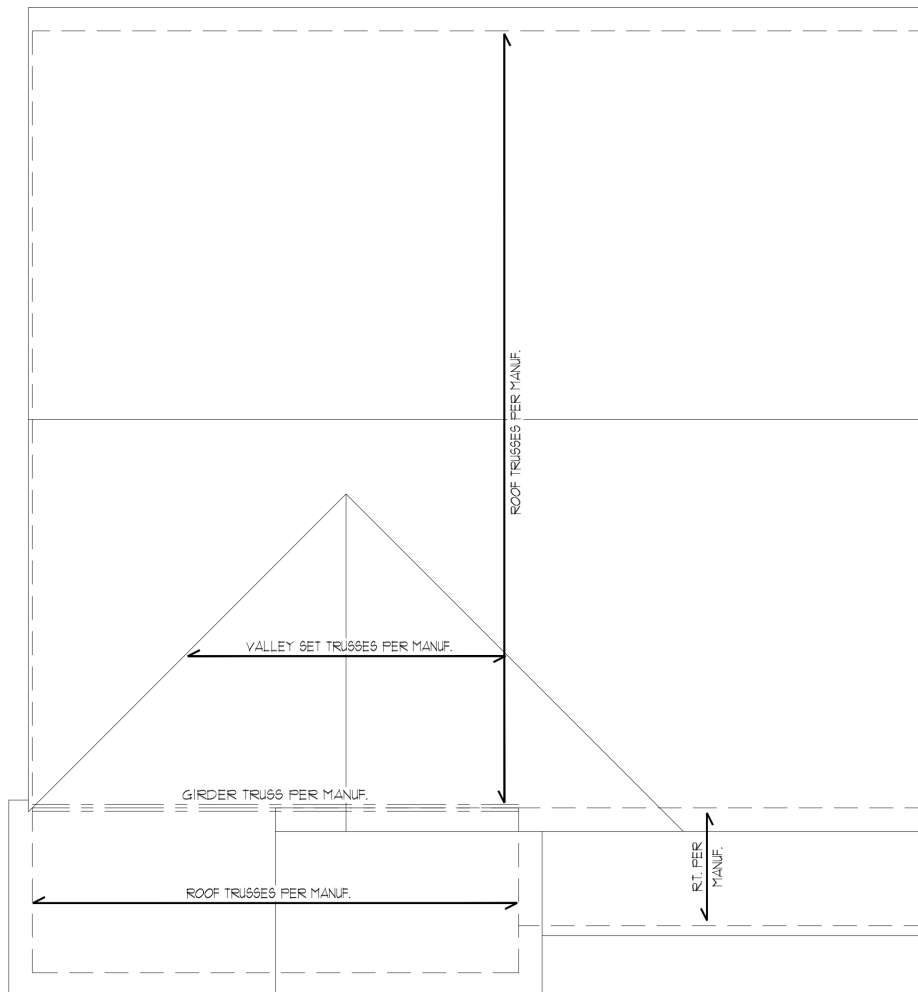
DATE: 01/02/2013
 SCALE: 22x34 1/4"=1'-0"
 16x17 1/2"=1'-0"
 PROJECT # 00A10928
 DRAWN BY: ED
 CHECKED BY: MSB

ORIGINAL INFORMATION
 PROJECT # DATE
 10928 04/26/23

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

55.2



ROOF FRAMING PLAN - ELEVATION E & F

NOTE: 1ST FLY OF ALL SHOWN GIRDER TRUSSES TO ALIGN WITH INSIDE FACE OF WALL (TYP, UNO)

NOTE: ROOF TRUSSES SHALL BE SPACE TO SUPPORT FALSE FRAMED DORMER WALLS (TYP, UNO)

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON COMPLETED/REVISED ON 03/30/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, INC. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, INC. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

STRUCTURAL MEMBERS ONLY

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STRUCTURAL ANALYSIS BASED ON 2018 NCR.

ROOF FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 16"x17"

DESIGN SPECIFICATIONS:

Construction Type: Commercial Residential

Applicable Building Codes:

- 2018 North Carolina Residential Building Code with All Local Amendments
• ASCE 1-10, Minimum Design Loads for Buildings and Other Structures

Design Loads:

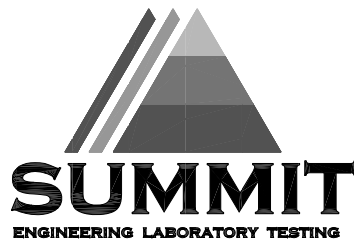
- 1. Roof Live Loads
11. Conventional 2x _____ 20 PSF
12. Truss _____ 20 PSF
12.1. Attic Truss _____ 60 PSF
2. Roof Dead Loads
21. Conventional 2x _____ 10 PSF
22. Truss _____ 20 PSF
3. Snow _____ 15 PSF
3.1. Importance Factor _____ 1.0
4. Floor Live Loads
4.1. Typ. Dwelling _____ 40 PSF
4.2. Sleeping Areas _____ 30 PSF
4.3. Decks _____ 40 PSF
4.4. Passenger Garage _____ 50 PSF
5. Floor Dead Loads
5.1. Conventional 2x _____ 10 PSF
5.2. 1-Joist _____ 15 PSF
5.3. Floor Truss _____ 15 PSF
6. Ultimate Wind Speed (3 sec. gust) _____ PER PLAN
6.1. Exposure _____ B
6.2. Importance Factor _____ 1.0
6.3.1. Vx =
6.3.2. Vy =

7. Component and Cladding (in PSF)

Table with 5 columns: MEAN ROOF HT., UP TO 30', 30'1"-35', 35'1"-40', 40'1"-45'. Rows for ZONE 1 through ZONE 5.

8. Seismic

- 8.1. Site Class _____ D
8.2. Design Category _____ C
8.3. Importance Factor _____ 1.0
8.4. Seismic Use Group _____ I
8.5. Spectral Response Acceleration
8.5.1. Ss = %g
8.5.2. Sml = %g
8.6. Seismic Base Shear
8.6.1. Vx =
8.6.2. Vy =
8.7. Basic Structural System (check one)
[] Bearing Wall
[] Building Frame
[] Moment Frame
[] Dual w/ Special Moment Frame
[] Dual w/ Intermediate R/C or Special Steel
[] Inverted Pendulum
8.8. Arch/Mech Components Anchored _____ No
8.9. Lateral Design Control: Seismic [] Wind []
9. Assumed Soil Bearing Capacity _____ 2000psf



STRUCTURAL PLANS PREPARED FOR:

STANDARD DETAILS

PROJECT ADDRESS: TBD OUNER: DR Horton Carolinas Division 8001 Arrowridge Blvd Charlotte, NC 28213

ARCHITECT/DESIGNER: GMD Design Group 1845 Satellite Blvd. Duluth, GA 30091

These drawings are to be coordinated with the architectural, mechanical, plumbing, electrical, and civil drawings. This coordination is not the responsibility of the structural engineering of record (SER). Should any discrepancies become apparent, the contractor shall notify SUMMIT Engineering, Laboratory 4 Testing, P.C. before construction begins.

PLAN ABBREVIATIONS:

Table with 4 columns: ABBREVIATION, DESCRIPTION, ABBREVIATION, DESCRIPTION. Includes items like AFF ABOVE FINISHED FLOOR, CJ CEILING JOIST, etc.

Roof truss and floor joist layouts, and their corresponding loading details, were not provided to SUMMIT Engineering, Laboratory 4 Testing, P.C. (SUMMIT) prior to the initial design. Therefore, truss and joist directions were assumed based on the information provided by DR Horton, Inc. Subsequent plan revisions based on roof truss and floor joist layouts shall be noted in the revision list, indicating the date the layouts were provided. Should any discrepancies become apparent, the contractor shall notify SUMMIT immediately.

SHEET LIST:

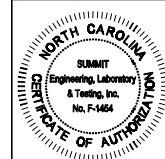
Table with 2 columns: Sheet No., Description. Lists sheets CS1 through D1F.

REVISION LIST:

Table with 4 columns: Revision No., Date, Project No., Description. Lists revisions 1 through 14.

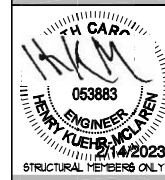
DR HORTON PROJECT SIGN-OFF:

Table with 2 columns: Manager, Signature. Rows for Operations, Operations System, Operations Product Development.



CLIENT: DR Horton Carolina Division 8001 Arrowridge Blvd. Charlotte, NC 28213

PROJECT: Standard Details (OX-15) Coversheet



DRAWING DATE: 05/04/2023 SCALE: 2/24 1/4" = 1'-0" PROJECT: 1528-048 DRAIN BY: JCF CHECKED BY: BCP

ORIGINAL INFORMATION PROJECT # DATE 15/2021 REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET CS1

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 permission of SUMMIT Engineering, Laboratory 4 Testing, P.C. (SUMMIT) or the SER. For the purposes of these construction documents the SER and SUMMIT shall be considered the same entity.
2. 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. 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 SUMMIT 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 SUMMIT.
5. 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 SUMMIT before construction begins.
6. The SER is not responsible for any secondary structural elements or non-structural elements, except for the elements specifically noted on the structural drawings.
7. This structure and all construction shall conform to all applicable sections of the International Residential Code.
8. This structure and all construction shall conform to all applicable sections of local building codes.
9. All structural assemblies are to meet or exceed to requirements of the current local building code.

FOUNDATIONS:

- 1. The structural engineer has not performed a subsurface investigation. Verification of this 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.

- 2. The bottom of all footings shall extend below the frost line for the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.
3. Any fill shall be placed under the direction or recommendation of a licensed professional engineer.
4. The resulting soil shall be compacted to a minimum of 95% maximum dry density.
5. 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.
6. No concrete shall be placed against any subgrade containing water, ice, frost, or loose material.

STRUCTURAL STEEL:

- 1. 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 the manual of Steel Construction "Load Resistance Factor Design" latest editions.
2. Structural steel shall receive one coat of shop applied rust-inhibitive paint.
3. All steel shall have a minimum yield stress (Fy) of 36 ksi unless otherwise noted.
4. Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D11. Electrodes for shop and field welding shall be class E70XX. All welding shall be performed by a certified welder per the above standards.

CONCRETE:

- 1. Concrete shall have a normal weight aggregate and a minimum compressive strength (fc) at 28 days of 3000 psi, unless otherwise noted on the plan.
2. 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".
3. 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 target values as follows:
3.1. Footings: 5%
3.2. Exterior Slabs: 5%
4. No admixtures shall be added to any structural concrete without written permission of the SER.

- 5. Concrete slabs-on-grade shall be constructed in accordance with ACI 302.1R-96: "Guide for Concrete Slab and Slab Construction".
6. The concrete slab-on-grade has been designed using a subgrade modulus of k=250 pci and a design loading of 200 psf. The SER is not responsible for differential settlement, slab cracking or other future defects resulting from unreported conditions not in accordance with the above assumptions.
7. Control or saw cut joints 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.
8. Control or saw cut joints shall be produced using conventional process within 4 to 12 hours after the slab has been finished.
9. Reinforcing steel may not extend through a control joint. Reinforcing steel may extend through a saw cut joint.
10. All welded wire fabric (WWF) for concrete slabs-on-grade shall be placed at mid-depth of slab. The WWF shall be securely supported during the concrete pour.

CONCRETE REINFORCEMENT:

- 1. Fibrous concrete reinforcement, or fibermesh, specified in concrete slabs-on-grade may be used for control of cracking due to shrinkage and thermal expansion/contraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.
2. Fibermesh reinforcing to be 100% virgin polypropylene fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement.
3. Application of fibermesh per cubic yard of concrete shall equal a minimum of 0.1% by volume (15 pounds per cubic yard).
4. Fibermesh shall comply with ASTM C116, any local building code requirements, and shall meet or exceed the current industry standard.
5. Steel reinforcing bars shall be new billet steel conforming to ASTM A615, grade 60.
6. Detailing, fabrication, and placement of reinforcing steel shall be in accordance with the latest edition of ACI 318: "Manual of Standard Practice for Detailing Concrete Structures".
7. 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 with a class B tension splice.
8. Lap reinforcement as required, a minimum of 40 bar diameters for tension or compression unless otherwise noted. Splices in masonry shall be a minimum of 48 bar diameters.

- 9. 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.
10. Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted.

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 be Spruce-Yellow-Pine (SYP) #2.
2. LVL or PSL engineered wood shall have the following minimum design values:
2.1. E = 1,900,000 psi
2.2. Fv = 2,600 psi
2.3. Fx = 285 psi
2.4. Fy = 100 psi
3. Wood in contact with concrete, masonry, or earth shall be pressure treated in accordance with AIAA standard C-19. All other moisture exposed wood shall be treated in accordance with AIAA standard C-7.
4. Nails shall use common wire nails unless otherwise noted.
5. Lag screws shall conform to ANSI/ASME standard B18.21-1981. Lead holes for lag screws shall be in accordance with NDS specifications.
6. All beams shall have full bearing on supporting framing members unless otherwise noted.
7. Exterior and load bearing stud walls are to be 2x4 SYP #2 @ 16" O.C. unless otherwise noted. Studs shall be continuous from the sole plate to the double top plate. Studs shall only be discontinuous at headers for window/door openings. A minimum of one king stud shall be placed at each end of the header. King studs shall be continuous.
8. Individual studs forming a column shall be attached with one 10d nail @ 6" O.C. staggered. The stud column shall be continuous to the foundation or beam. The column shall be properly blocked at all floor levels to ensure proper load transfer.
9. Multi-ply beams shall have each ply attached with (3) 10d nails @ 24" O.C.
10. Fitch beams, 4-ply beams and 3-ply side loaded beams shall be bolted together with (2) rows of 1/2" diameter through bolts staggered @ 16" O.C. unless noted otherwise. Min. edge distance shall be 2" and (2) bolts shall be located a min. 6" from each end of the beam.

WOOD TRUSSES:

- 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 five (5) days for review. The review by the SER shall review for overall compliance with the design documents. The SER shall assume no responsibility for the correctness for 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 1-05), 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 "National Design Specification for Wood Construction" (NDS) and "Design Specification for Metal Plate Connected Wood Trusses."
4. The truss manufacturer shall provide adequate bracing information in accordance with "Commentary and Recommendations for Handling, Installing, and Bracing Metal Plate Connected Wood Trusses" (HIB-9). 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. 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.

EXTERIOR WOOD FRAMED DECKS:

- 1. Decks are to be framed in accordance with local building codes and as referenced on the structural plans, either through code references or construction details.

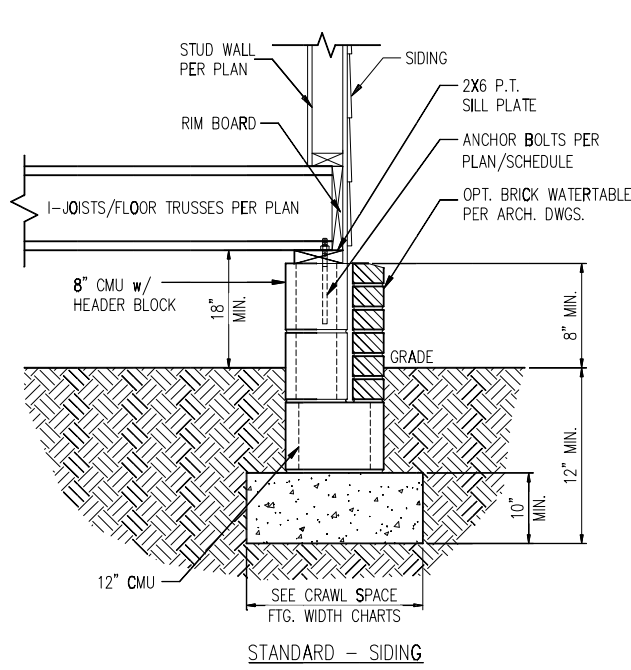
WOOD STRUCTURAL PANELS:

- 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 structurally required wood sheathing shall bear the mark of the APA.

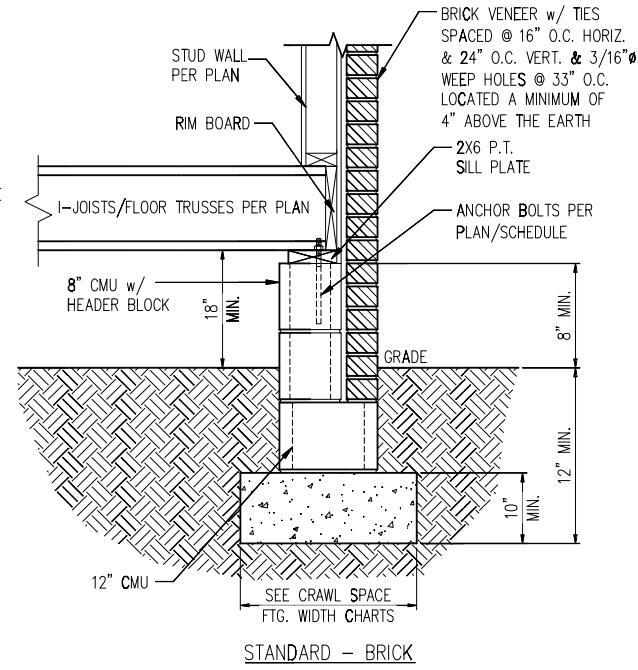
- 3. Wood wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information. Sheathing shall be applied with the long direction perpendicular to framing, unless noted otherwise.
4. Roof sheathing shall be APA rated sheathing exposure 1 or 2. Roof sheathing shall be continuous over two supports and attached to its supporting roof framing with (1)-8d CC 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 with the long direction perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of plywood clips or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
5. Wood floor sheathing shall be APA rated sheathing exposure 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank 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. Use suitable edge support by use of T&G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
6. Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.

STRUCTURAL FIBERBOARD PANELS:

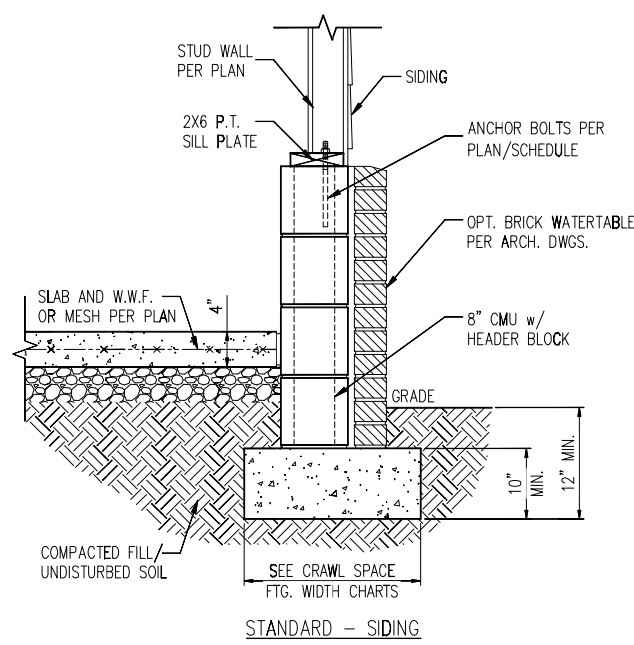
- 1. Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards.
2. All structurally required fiberboard sheathing shall bear the mark of the AFA.
3. Fiberboard wall sheathing shall comply with the requirements of local building codes for the 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.



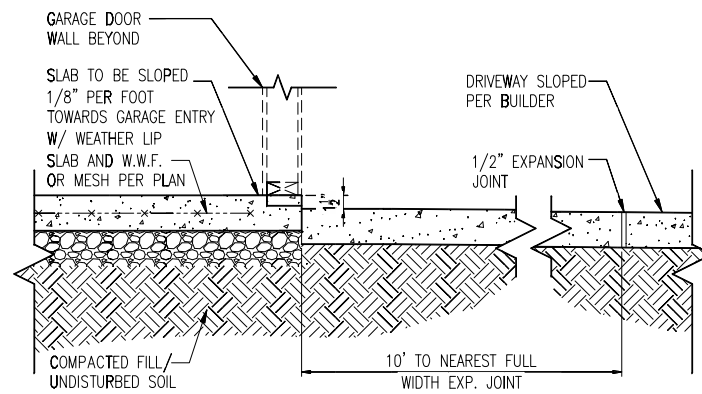
1 TYP. FOUNDATION WALL DETAIL
D1c N.T.S.



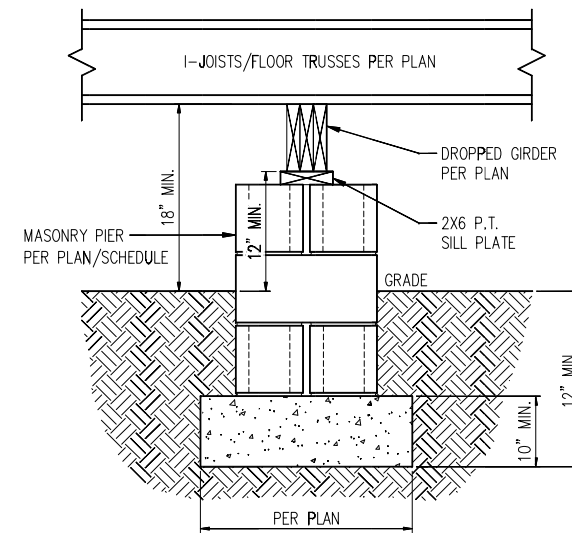
2 TYP. GARAGE CURB DETAIL
D1c N.T.S.



3 HOUSE/GARAGE WALL DETAIL
D1c N.T.S.



4 SLAB AT GARAGE DOOR
D1c N.T.S.



5 TYP. PIER & GIRDER DETAIL
D1c N.T.S.

PIER SIZE AND HEIGHT SCHEDULE

SIZE	HOLLOW	SOLID
8"x16"	UP TO 32" HEIGHT	UP TO 5'-0" HEIGHT
12"x16"	UP TO 48" HEIGHT	UP TO 9'-0" HEIGHT
16"x16"	UP TO 64" HEIGHT	UP TO 12'-0" HEIGHT*
24"x24"	UP TO 96" HEIGHT	UP TO 12'-0" HEIGHT*

* (4) #4 CONT. REBAR w/ #3 STIRRUPS @ 16" O.C. AND 24" MIN. LAP JOINTS

CRAWL SPACE FOOTING WIDTH

# OF STORIES	WIDTH BASED ON SOIL BEARING CAPACITY		
	1500 PSF	2000 PSF	2500 PSF
1 STORY - STD.	16"	16"	16"
1 STORY - BRICK VENEER	21"*	21"*	21"*
2 STORY - STD.	16"	16"	16"
2 STORY - BRICK VENEER	21"*	21"*	21"*
3 STORY - STD.	23"	18"	18"
3 STORY - BRICK VENEER	32"*	24"*	24"*

*5" BRICK LEDGE HAS BEEN ADDED TO THE CRAWL SPACE FOOTING WIDTH FOR BRICK SUPPORT

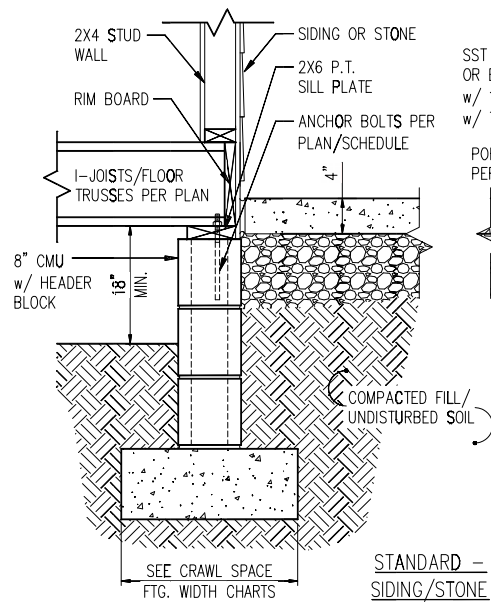
WALL ANCHOR SCHEDULE

TYPE OF ANCHOR	MIN. CONC. EMBEDMENT	SPACING EMBEDMENT	WALL	
			INTERIOR	EXTERIOR
1/2" A307 BOLTS w/ STD. 90° BEND	7"	6'-0"	YES	YES
SST - MAS	4"	5'-0"	NO	YES
HILTI KWIK BOLT KBI 1/2-2-3/4	2-1/4"	6'-0"	YES	NO
1/2" HILTI THREADED ROD w/ HIT HY150 ADHESIVE	7"	6'-0"	YES	YES

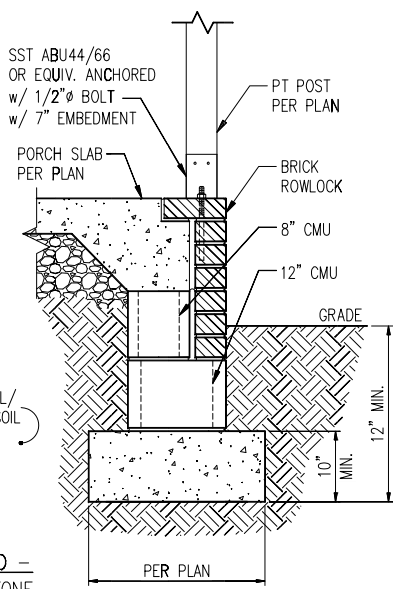
NOTE: INSTALL ALL ANCHORS 12" MAX. FROM ALL BOTTOM PLATE ENDS AND JOINTS.

NOTES:

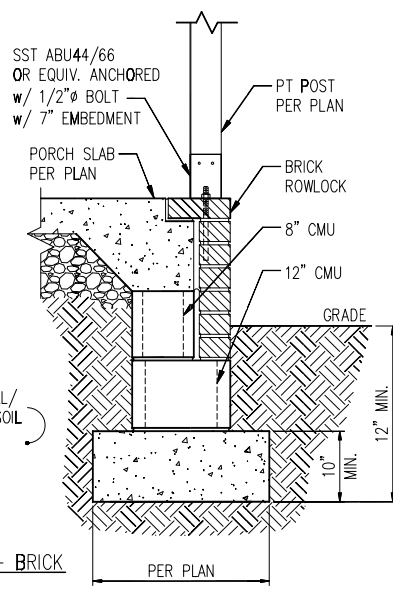
- REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
- PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
- SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
- REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
- REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRS



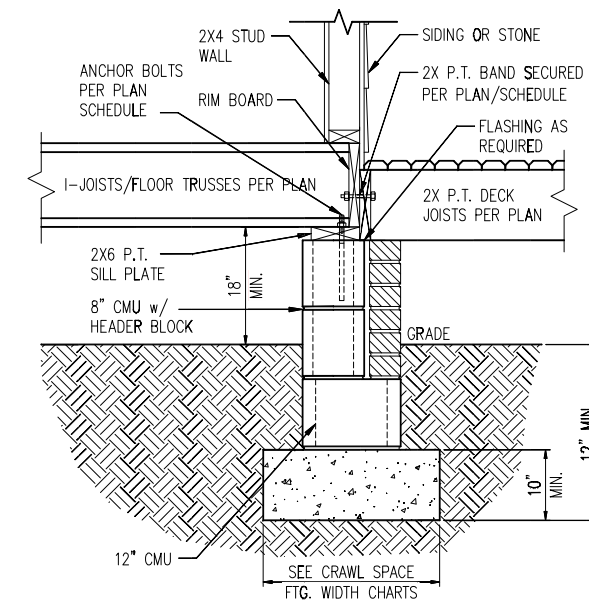
STANDARD - SIDING/STONE



STANDARD - BRICK

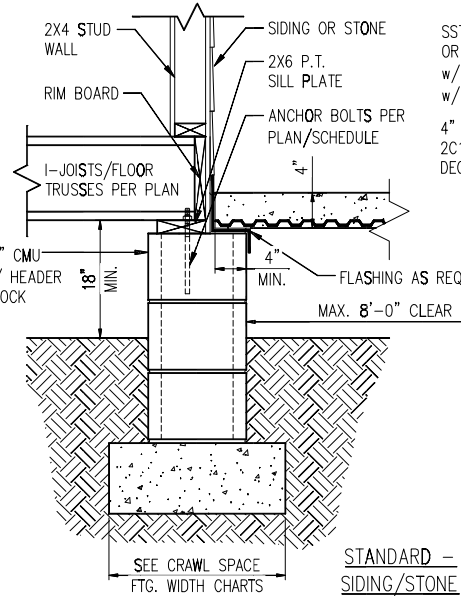


STANDARD - SIDING/STONE

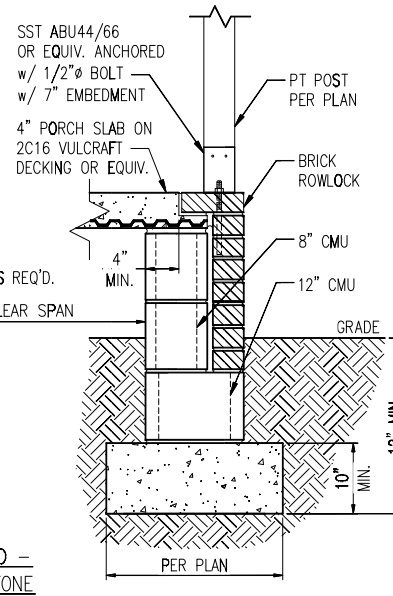


STANDARD - BRICK

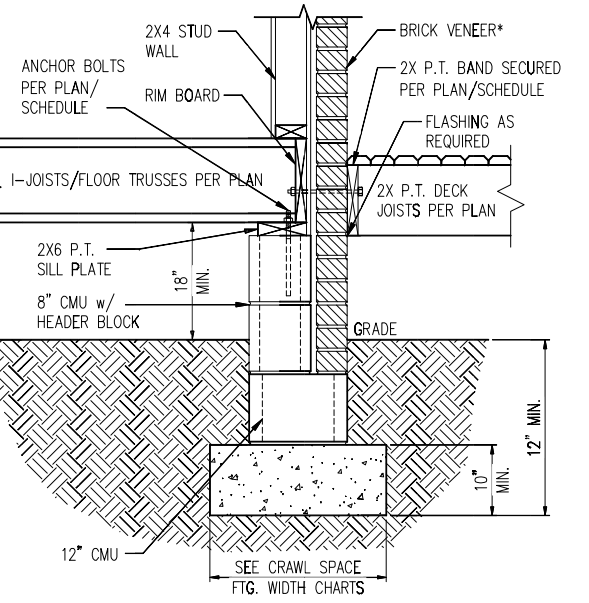
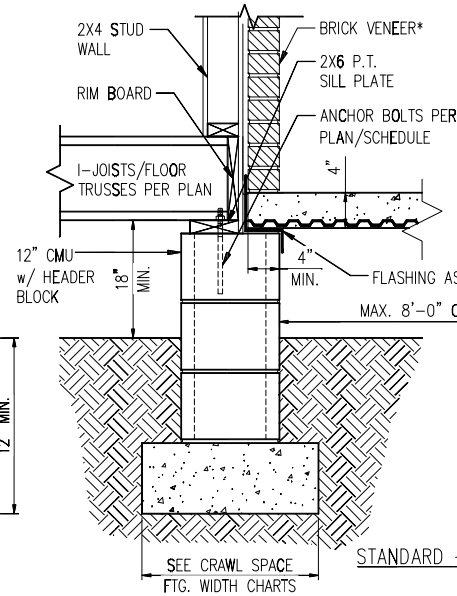
1 TYP. FRONT PORCH DETAIL
D2c N.T.S.



STANDARD - SIDING/STONE



STANDARD - BRICK



1a FRONT PORCH DETAIL w/ SUSPENDED SLAB
D2c N.T.S.

3 DECK ATTACHMENT DETAIL W/ BRICK
D2c N.T.S.

DECK ATTACHMENT SCHEDULE (ALL STRUCTURES EXCEPT BRICK)

FASTENERS	MAX. 8'-0" JOIST SPAN	MAX. 16'-0" JOIST SPAN
5/8" GALV. BOLTS w/ NUT & WASHER ^a	(1) @ 3'-6" O.C.	(1) @ 1'-8" O.C.
AND	AND	AND
12d COMMON GALV. NAILS ^c	(2) @ 8" O.C.	(3) @ 6" O.C.

- a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED.
- b. MINIMUM EDGE DISTANCE FOR BOLTS IS 2 1/2".
- c. NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF 1 1/2"

DECK ATTACHMENT SCHEDULE (BRICK STRUCTURES)

FASTENERS	MAX. 8'-0" JOIST SPAN	MAX. 16'-0" JOIST SPAN
5/8" GALV. BOLTS w/ NUT & WASHER ^b	(1) @ 2'-4" O.C.	(1) @ 1'-4" O.C.

- a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED.
- b. MINIMUM EDGE DISTANCE FOR BOLTS IS 2 1/2".

CRAWL SPACE FOOTING WIDTH

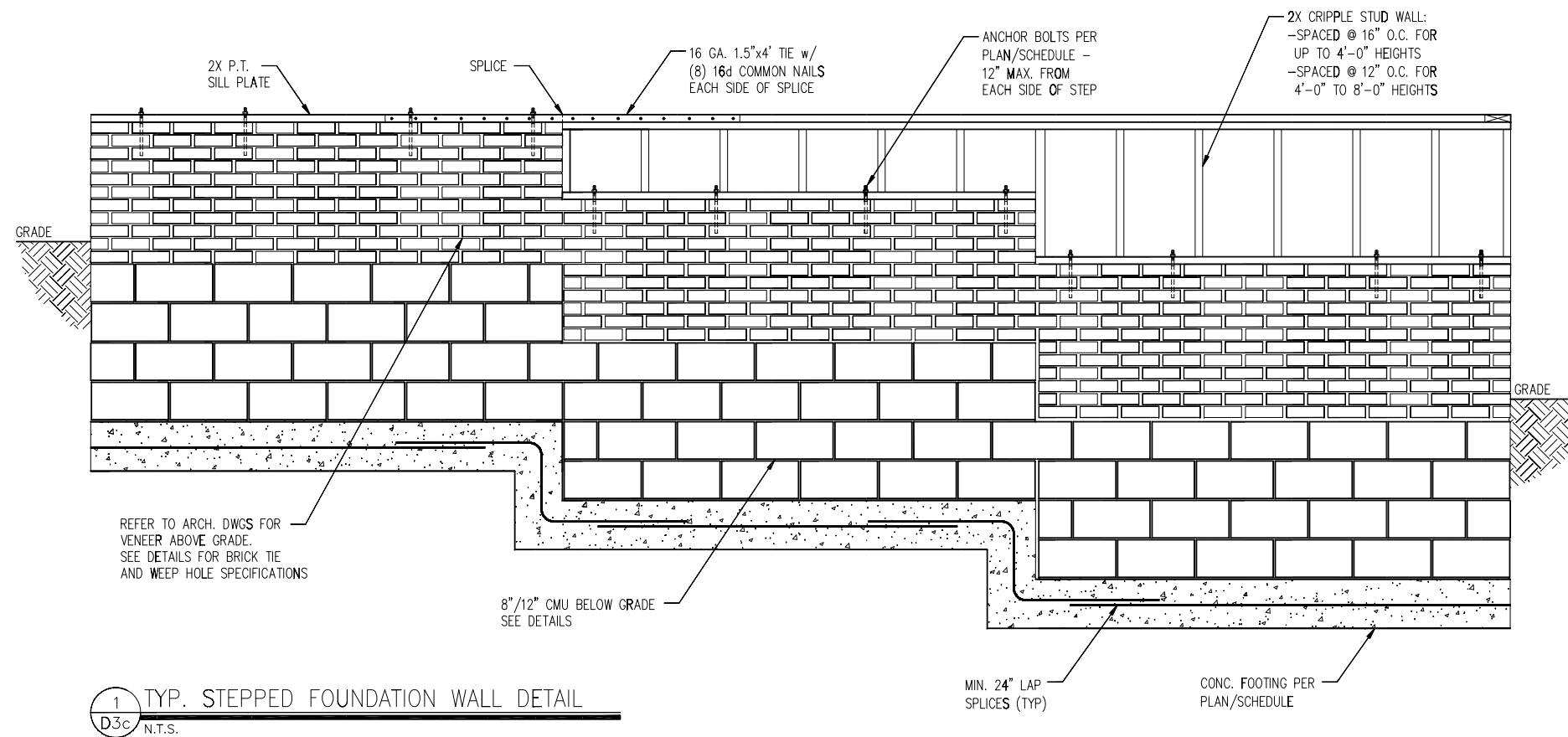
# OF STORIES	WIDTH BASED ON SOIL BEARING CAPACITY		
	1500 PSF	2000 PSF	2500 PSF
1 STORY - STD.	16"	16"	16"
1 STORY - BRICK VENEER	21"*	21"*	21"*
2 STORY - STD.	16"	16"	16"
2 STORY - BRICK VENEER	21"*	21"*	21"*
3 STORY - STD.	23"	18"	18"
3 STORY - BRICK VENEER	32"*	24"*	24"*

*5" BRICK LEDGE HAS BEEN ADDED TO THE CRAWL SPACE FOOTING WIDTH FOR BRICK SUPPORT

*BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT. AND 3/16" Ø WEEP HOLES @ 33" O.C. LOCATED A MINIMUM OF 4" ABOVE THE EARTH

NOTES:

1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
2. PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
3. SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRS



1 TYP. STEPPED FOUNDATION WALL DETAIL
 D3c N.T.S.

- NOTES:**
1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
 2. PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
 3. SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
 4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
 5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
 6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRS

CLIENT:
 DR Horton Carolina Division
 8200 Aronowood Blvd.
 Charlotte NC 28215

PROJECT:
 Standard Details (0x-1b)
Crawl Space Foundation Details

HCM
 ENGINEER
 053883
 HENRY KUEB-MCLAREN
 2/14/2023
 STRUCTURAL MEMBERS ONLY

DRAWING
 DATE: 05/04/2023
 SCALE: 2/24 1/4"=1'-0"
 3/21 1/4"=1'-0"
 PROJECT: A 508-06R
 DRAWN BY: JCF
 CHECKED BY: BCP

ORIGINAL INFORMATION
 PROJECT # DATE
 159/2021

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

MIN. 3/8" ROOF SHEATHING SECURED IN ACCORDANCE WITH FIGURE TABLE R602.3(1) (SEE NOTE G FOR ULTIMATE WIND SPEEDS GREATER THAN 120MPH). PROVIDE UNDERLAYMENT IN ACCORDANCE WITH CHAPTER 9 OF THE 2018 NCRC

PROVIDE MINIMUM INSULATION REQUIRED PER N1102.1.2 OF THE 2018 NCRC

DOUBLE 2X TOP PLATE

NON-LOAD BEARING 2X STUD WALL

I-JOISTS OR OPEN-WEB TRUSSES PER MANUFACTURER

PROVIDE MINIMUM INSULATION REQUIRED PER N1102.1.2 OF THE 2018 NCRC

SAG RESISTANT OR 5/8" DRYWALL

DOUBLE 2X TOP PLATE

1/2" GYPSUM BOARD

LOAD BEARING 2X STUD WALL

FLOOR SHEATHING

FINISHED FLOOR

I-JOISTS/FLOOR TRUSSES

PIER & GIRDER SEE DETAIL

1 TYP. INTERIOR LOAD BEARING WALL SECTION
D4c 3/4" = 1'-0"

-SIMILAR w/ BRICK AND STONE
-BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT.
-MIN. 3/16" Ø WEEP HOLES @ 33" O.C.

MIN. 3/8" ROOF SHEATHING SECURED IN ACCORDANCE WITH FIGURE TABLE R602.3(1) (SEE NOTE G FOR ULTIMATE WIND SPEEDS GREATER THAN 120MPH). PROVIDE UNDERLAYMENT IN ACCORDANCE WITH CHAPTER 9 OF THE 2018 NCRC

PROVIDE MINIMUM INSULATION REQUIRED PER N1102.1.2 OF THE 2018 NCRC

DOUBLE 2X TOP PLATE

WALL SHEATHING PER R602.10 OF THE 2018 NCRC

LOAD BEARING 2X STUD WALL

WATER-RESISTIVE BARRIER INSTALLED PER THE NCRC FOR ALL EXTERIOR WALLS

RIM BOARD PER MANUF.

PROVIDE MINIMUM INSULATION REQUIRED PER N1102.1.2 OF THE 2018 NCRC

DOUBLE 2X TOP PLATE

LOAD BEARING 2X STUD WALL

1/2" GYPSUM BOARD

FLOOR SHEATHING

FINISHED FLOOR

I-JOISTS/FLOOR TRUSSES

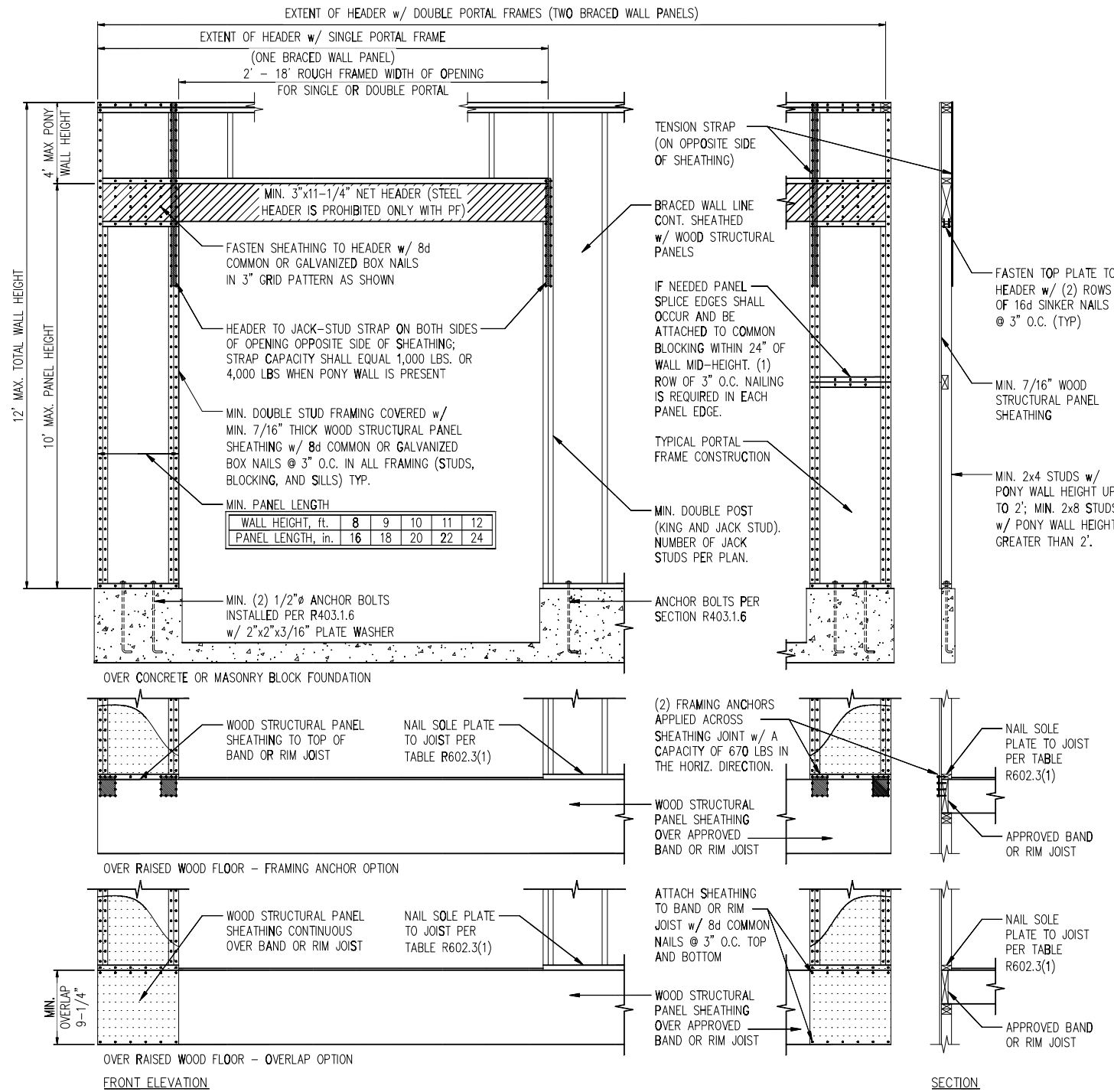
CRAWL SPACE FND. SEE DETAILS

2 TYP. EXTERIOR LOAD BEARING WALL SECTION
D4c 3/4" = 1'-0"

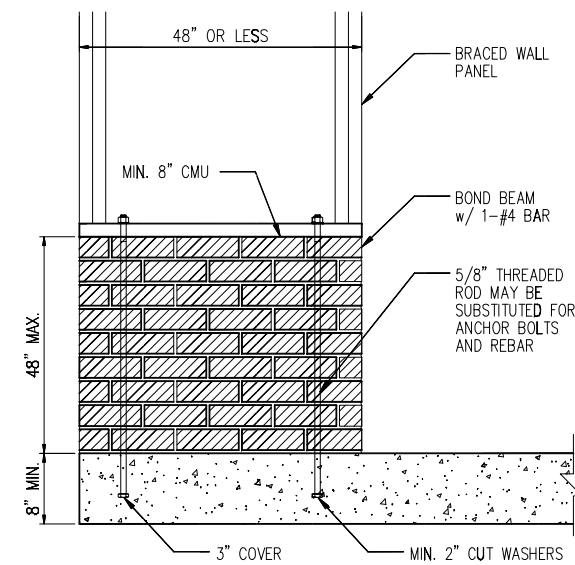
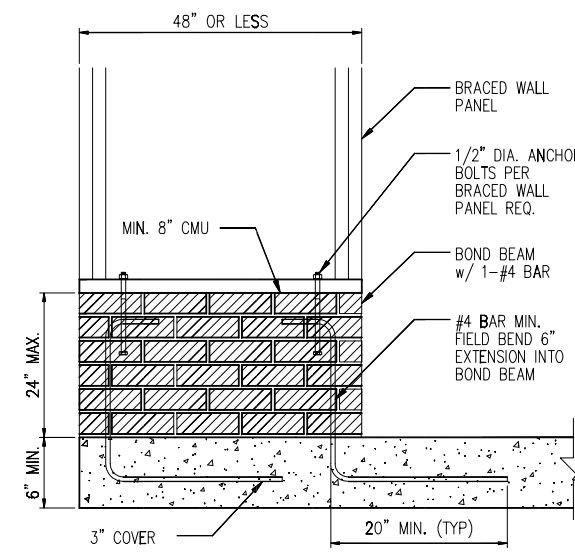
-SIMILAR w/ BRICK AND STONE
-BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT.
-MIN. 3/16" Ø WEEP HOLES @ 33" O.C.

NOTES:

- REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
- PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
- SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
- REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
- REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRC

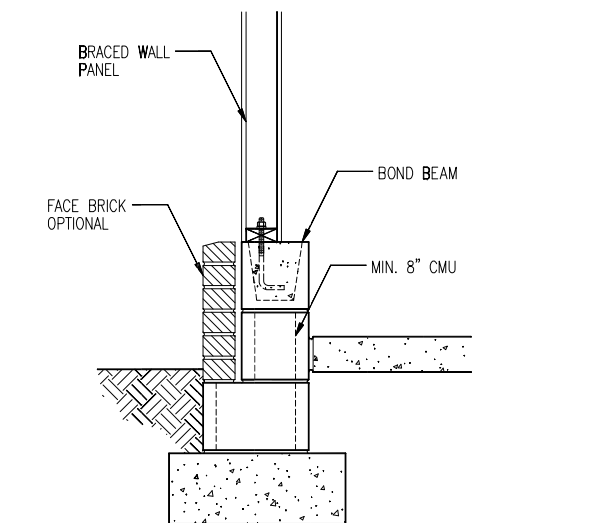
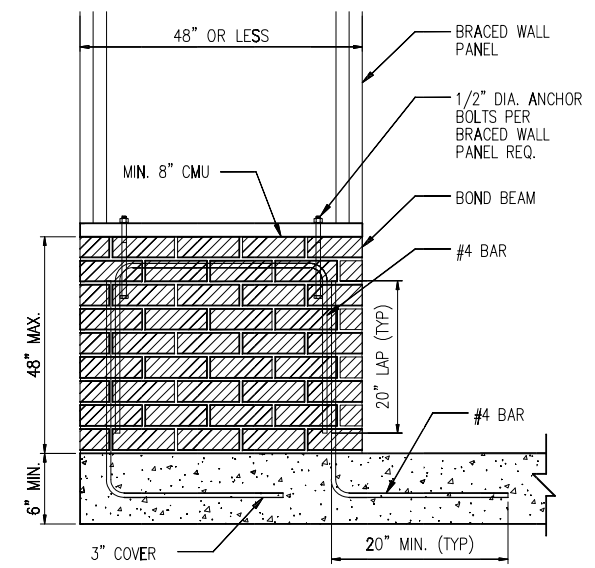


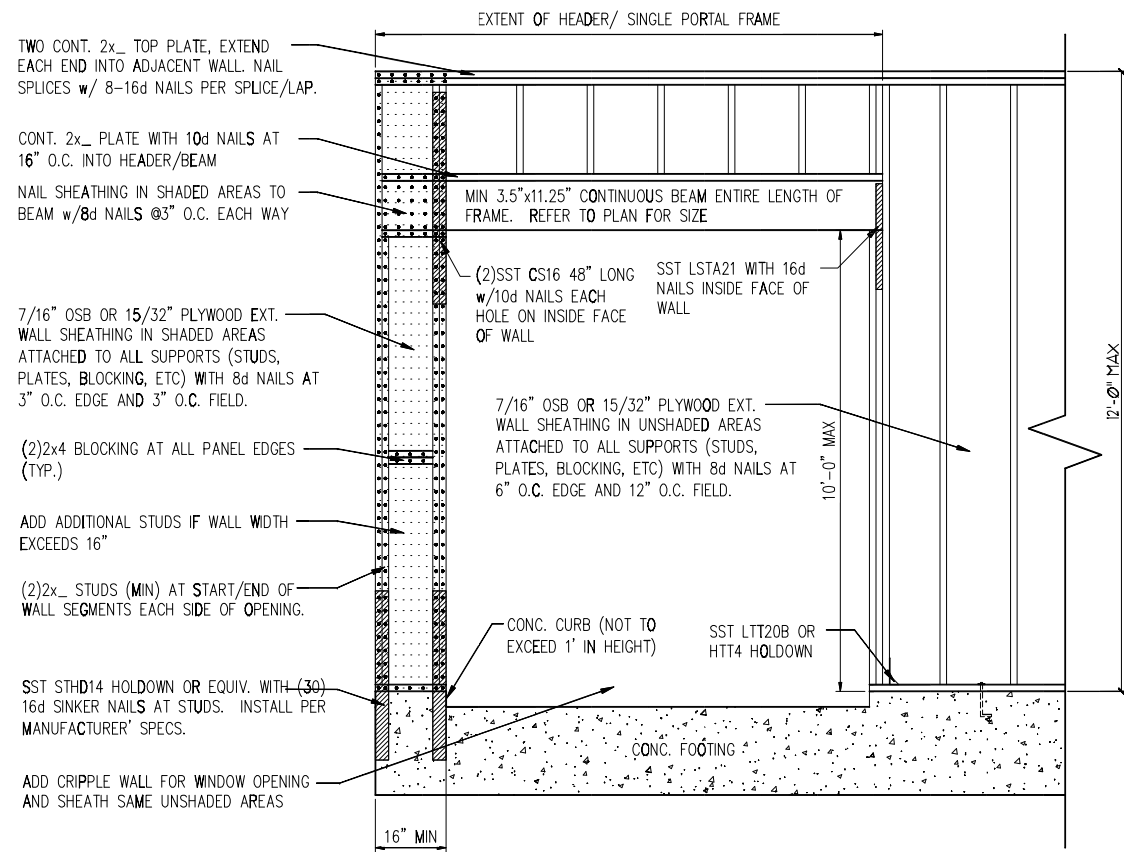
1 METHOD PF: PORTAL FRAME DETAIL
D1f 3/8" = 1'-0"



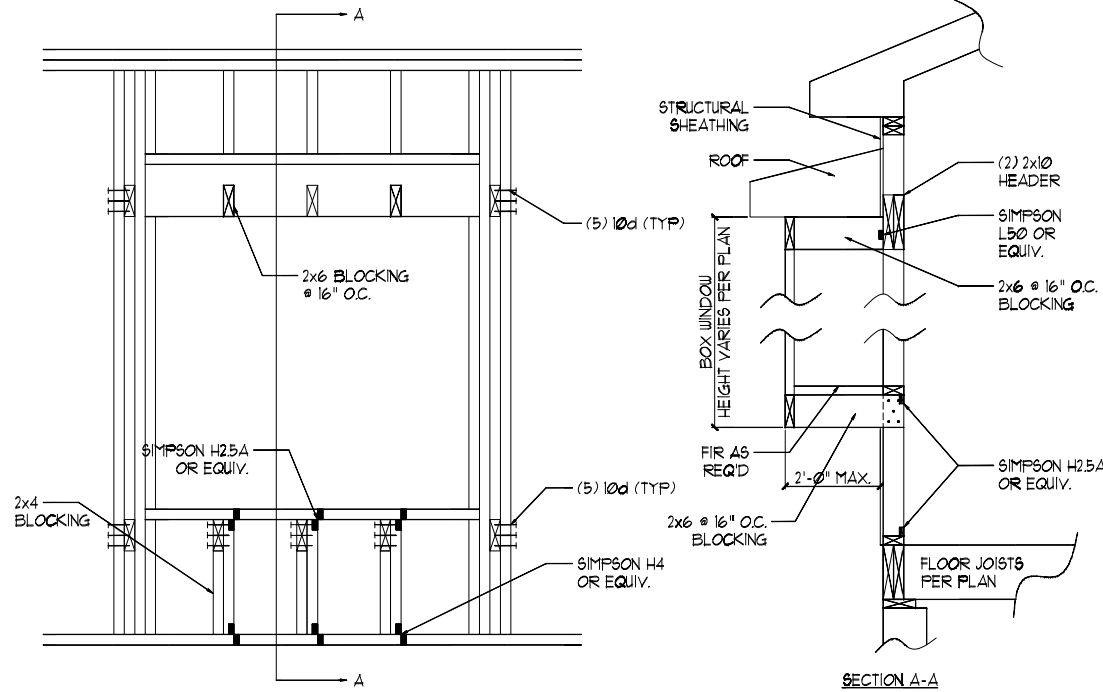
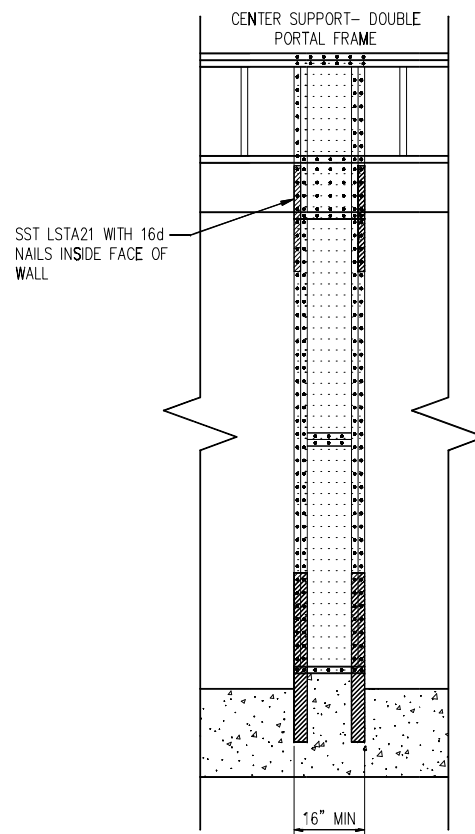
2 MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS
D1f NTS

NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

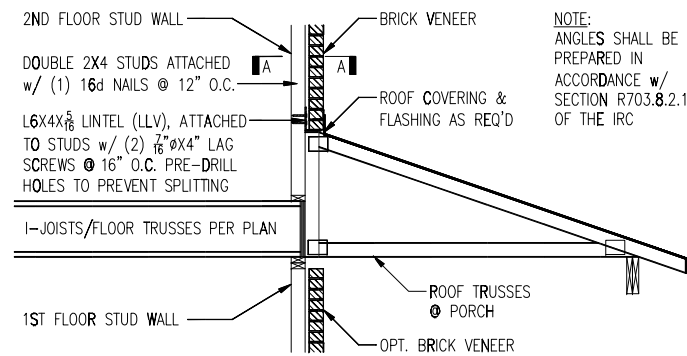




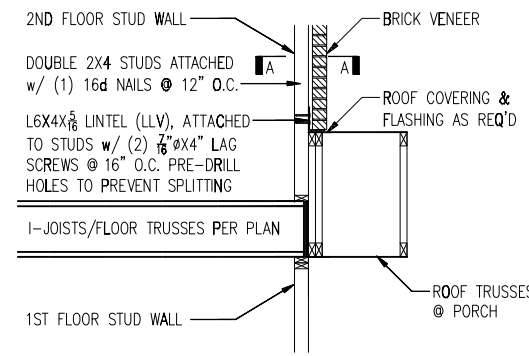
1 METHOD PF: PORTAL FRAME DETAIL w/ HOLD-DOWNS
D2f 3/4" = 1'-0"



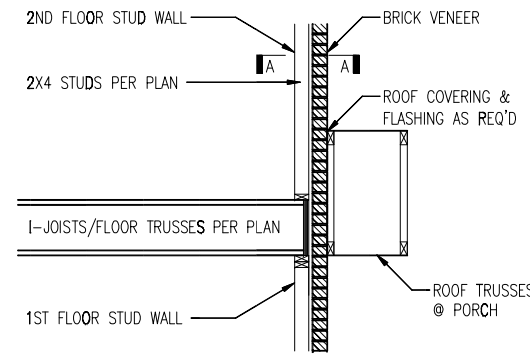
2 BOX WINDOW DETAIL
D2f N.T.S.



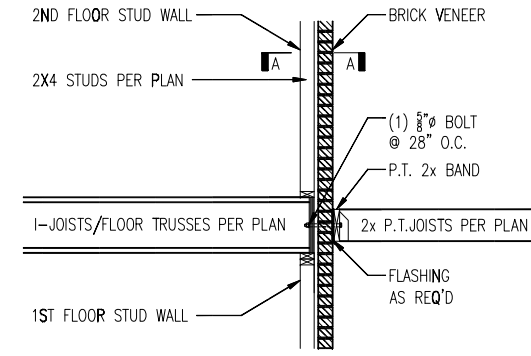
TRUSSES PERPENDICULAR TO STUD WALL



TRUSSES PARALLEL TO STUD WALL

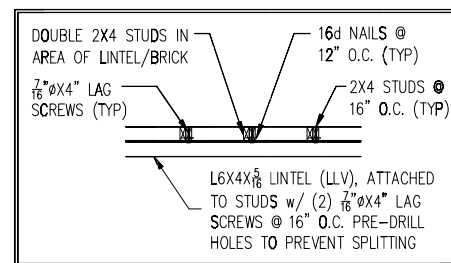


TRUSSES PARALLEL TO STUD WALL
w/ CONTINUOUS BRICK VENEER



4 BALCONY JOIST ATTACHMENT
D2f N.T.S.

3 BRICK SUPPORT ABOVE STORAGE/PORCH ROOF DETAIL
D2f N.T.S.

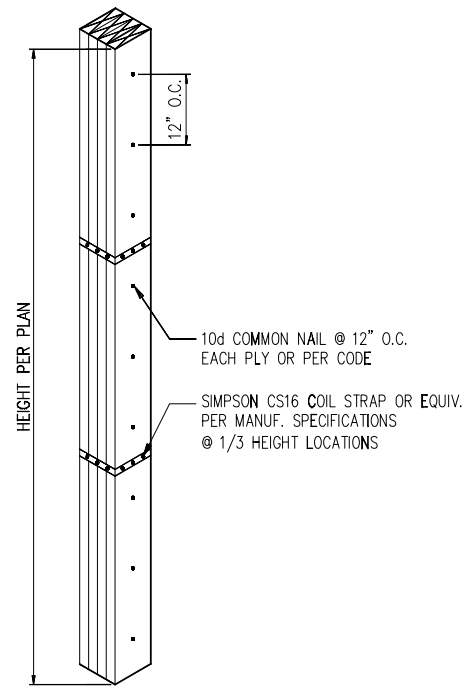


SECTION A-A
N.T.S.

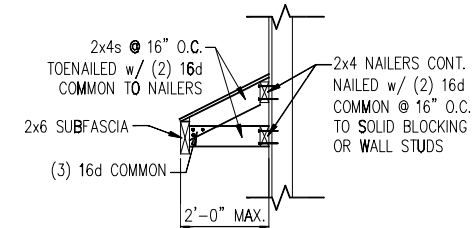
MINIMUM FASTENING REQUIREMENTS FOR TOP- AND SIDE-LOADED MEMBERS

FASTENER TYPE	LVL DEPTH	3 1/2" WIDE		5 1/4" WIDE		7" WIDE	
		2-Ply 1 1/4"	3-Ply 1 1/4"	1 3/4" + 3 1/2"	4-Ply 1 1/4"	2-Ply 1 1/4" + 3 1/2"	2-Ply 3 1/2"
10d (0.128" x 3") Nails	7/4" ≤ d < 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
	d ≥ 14"	4 rows @ 12" o.c.	4 rows @ 12" o.c. (ES)	4 rows @ 12" o.c.	-	4 rows @ 12" o.c. (ES)	-
16d (0.162" x 3 1/2") Nails	7/4" ≤ d < 14"	2 rows @ 12" o.c.	2 rows @ 12" o.c. (ES)	2 rows @ 12" o.c.	-	2 rows @ 12" o.c. (ES)	-
	d ≥ 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
1/2" Through Bolts	d ≥ 7 1/4"	2 rows @ 24" o.c.		2 rows @ 24" o.c.		2 rows @ 24" o.c.	
SDS 1/4" x 3 1/2", WS35, 3 3/4" TrussLok		2 rows @ 24" o.c.	1 row @ 24" o.c. (ES)	2 rows @ 24" o.c.	-	2 rows @ 24" o.c. (ES)	-
SDS 1/4" x 6", WS6		-	-	-	2 rows @ 24" o.c. (ES)		-
5" TrussLok		-	2 rows @ 24" o.c.		-	-	-
6 3/4" TrussLok		-	-	-	2 rows @ 24" o.c.		-

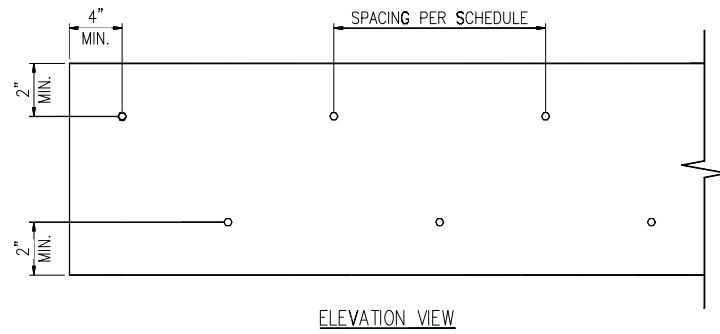
NOTES:
 1. All fasteners must meet the minimum requirements in the table above. Side-loaded multiple-ply members must meet the minimum fastening and side-loading capacity requirements given on page 48.
 2. Minimum fastening requirements for depths less than 7/4" require special consideration. Please contact your technical representative.
 3. Three general rules for staggering or offsetting for a certain fastener schedule:
 (1) if staggering or offsetting is not referenced, then none is required;
 (2) if staggering is referenced, then fasteners installed in adjacent rows on the front side are to be staggered up to one-half the o.c. spacing, but maintaining the fastener clearances above; and
 (3) if "ES" is referenced, then the fastener schedule must be repeated on each side, with the fasteners on the back side offset up to one-half the o.c. spacing of the front side (whether or not it is staggered).



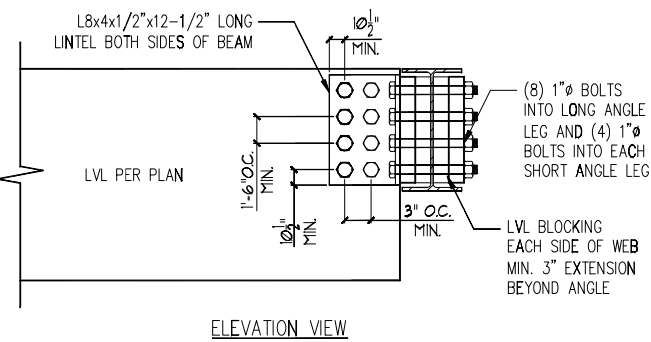
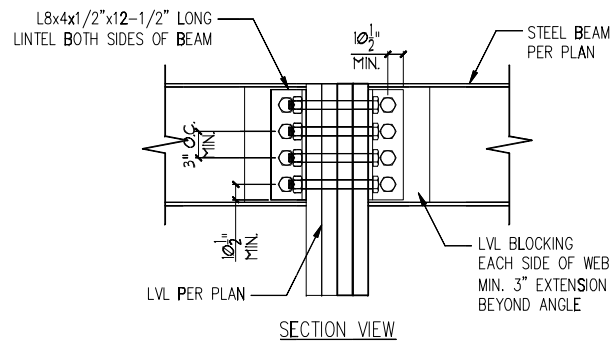
2 MULTI-PLY STUD CONNECTION DETAIL
 D3f N.T.S. 4+ PLYS



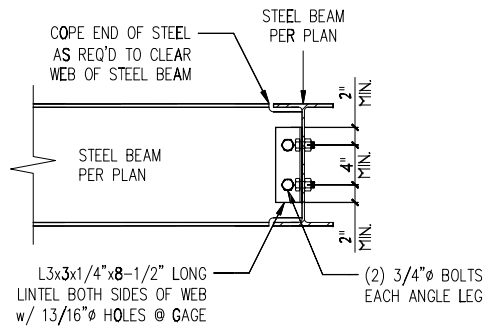
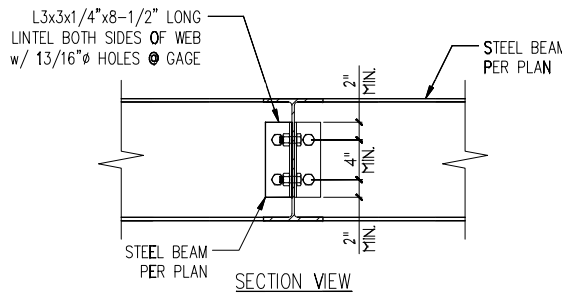
5 GABLE ROOF RETURN
 D3f N.T.S.



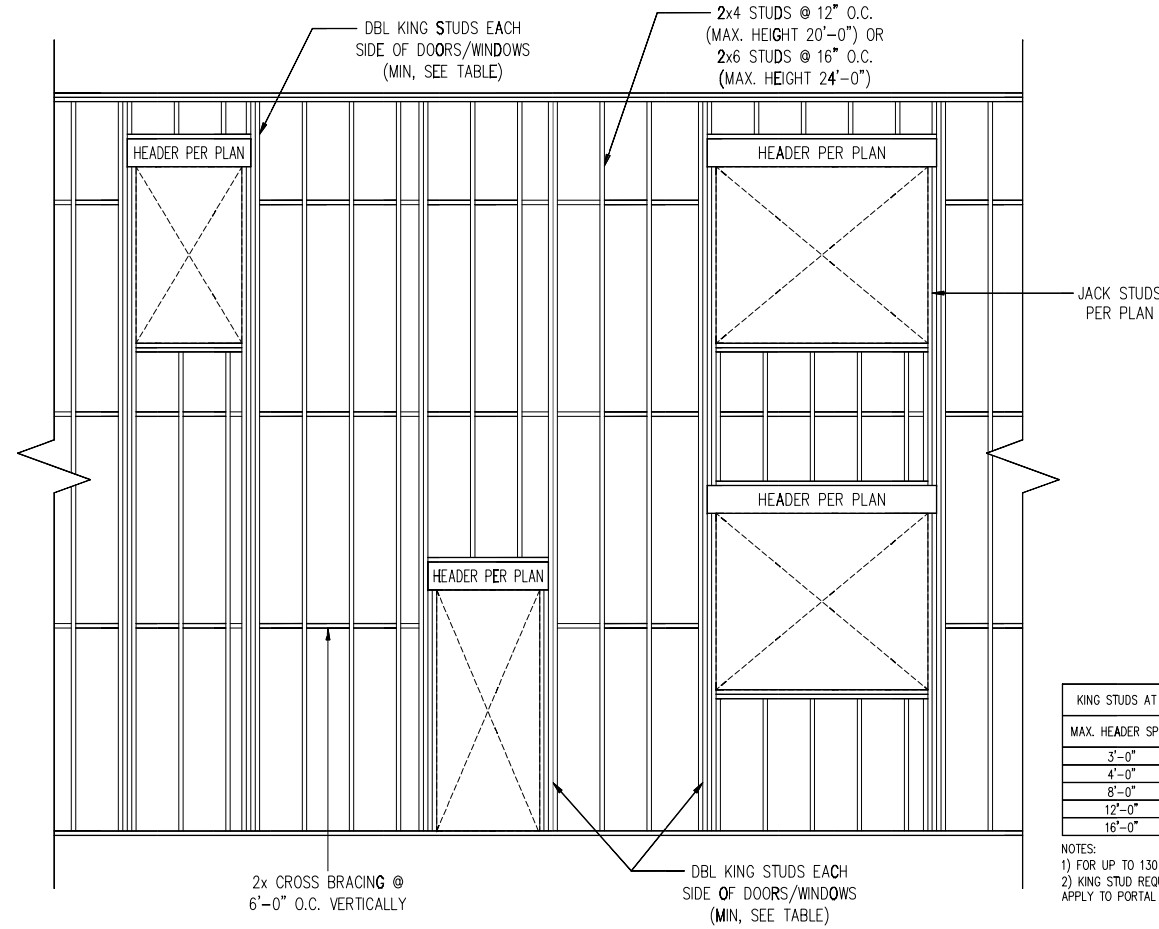
1 MULTI-PLY BEAM CONNECTION DETAIL
 D3f N.T.S.



3 LVL TO STEEL DETAIL
 D3f N.T.S.



4 STEEL TO STEEL DETAIL
 D3f N.T.S.

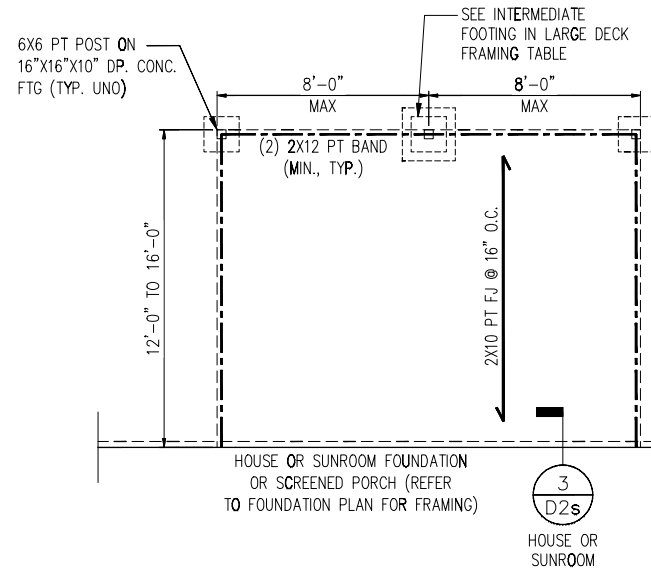


6 TYP. BALLOON FRAMING DETAIL
 D3f N.T.S.

KING STUDS AT EACH END OF HEADERS	
MAX. HEADER SPAN	STUDS (MIN.)
3'-0"	1
4'-0"	2
8'-0"	3
12'-0"	5
16'-0"	6

NOTES:
 1) FOR UP TO 130 MPH, EXPOSURE B
 2) KING STUD REQUIREMENTS DO NOT APPLY TO PORTAL FRAMED OPENINGS

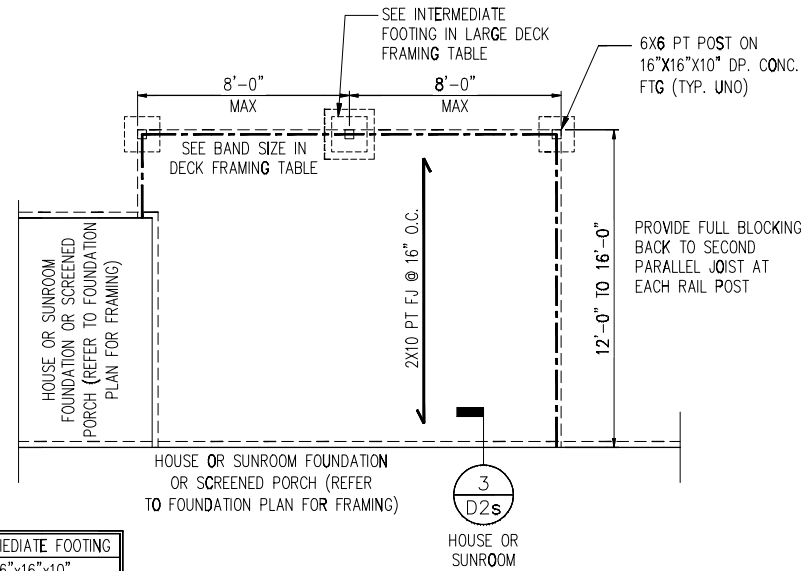
NOTE: BRACE POSTS PER CODE



PROVIDE FULL BLOCKING BACK TO SECOND PARALLEL JOIST AT EACH RAIL POST

LARGE DECK FRAMING

	INTERMEDIATE FOOTING
STANDARD	16"x16"x10"
W/ 8'X8' GRILL DECK	24"x24"x10"



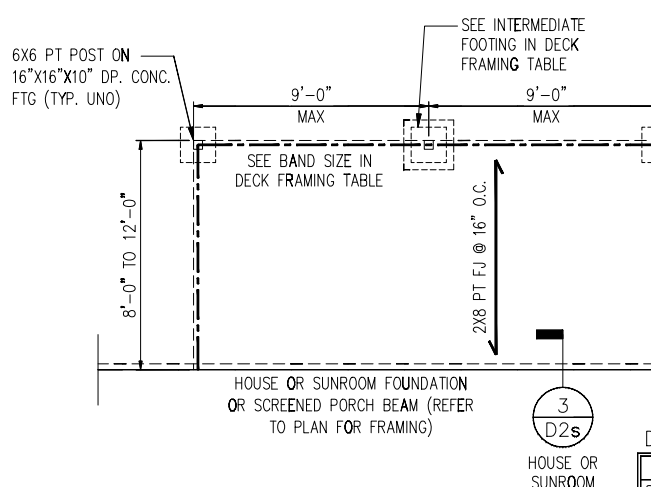
PROVIDE FULL BLOCKING BACK TO SECOND PARALLEL JOIST AT EACH RAIL POST

TYP. LARGE SIDE DECK PLAN

TYP. LARGE REAR DECK PLAN

N.T.S.

N.T.S.

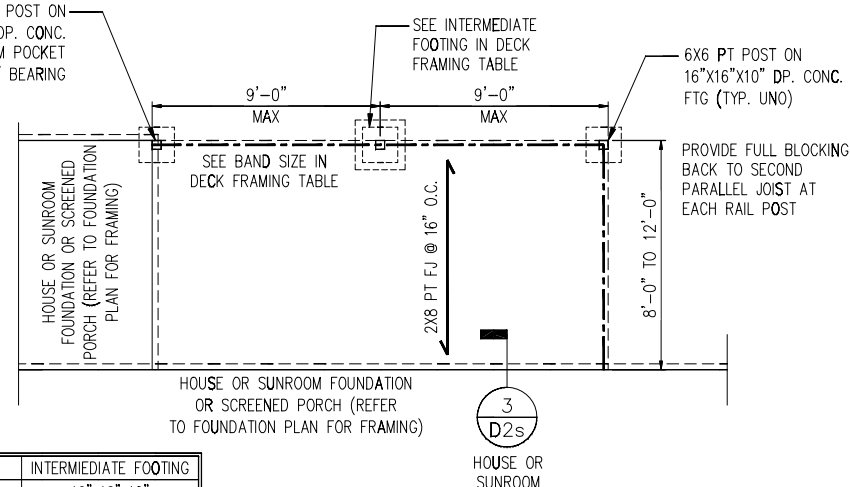


PROVIDE FULL BLOCKING BACK TO SECOND PARALLEL JOIST AT EACH RAIL POST

DECK FRAMING

	BAND SIZE*	INTERMEDIATE FOOTING
STANDARD	(2) 2X10	16"x16"x10"
W/ 8'X8' GRILL DECK	(3) 2X10	24"x24"x10"

* SOUTHERN PINE #2 PT LUMBER



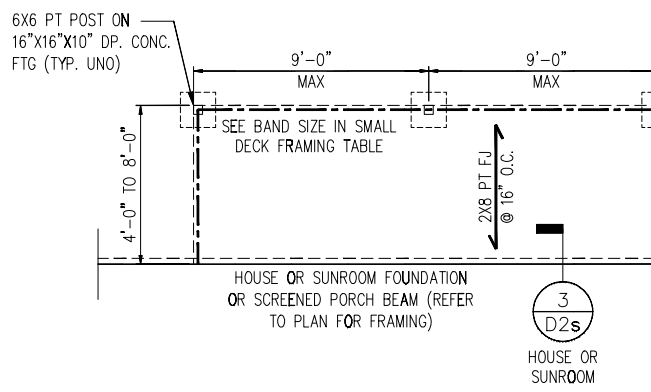
PROVIDE FULL BLOCKING BACK TO SECOND PARALLEL JOIST AT EACH RAIL POST

TYP. SIDE DECK PLAN

TYP. REAR DECK PLAN

N.T.S.

N.T.S.

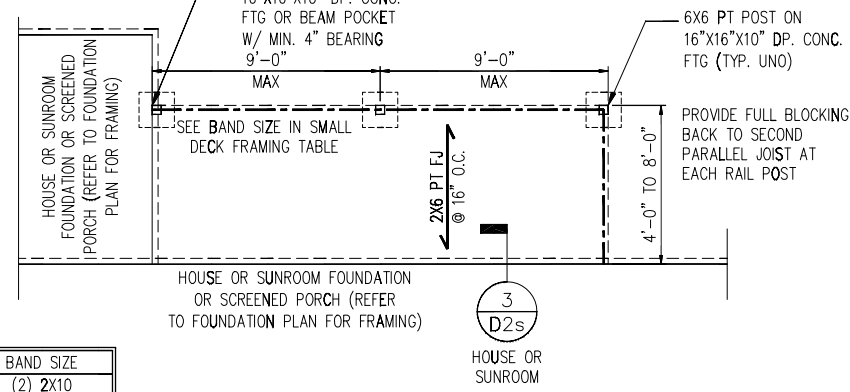


PROVIDE FULL BLOCKING BACK TO SECOND PARALLEL JOIST AT EACH RAIL POST

SMALL DECK FRAMING

	BAND SIZE
STANDARD	(2) 2X10
W/ 8'X8' GRILL DECK	(3) 2X10

* SOUTHERN PINE #2 PT LUMBER



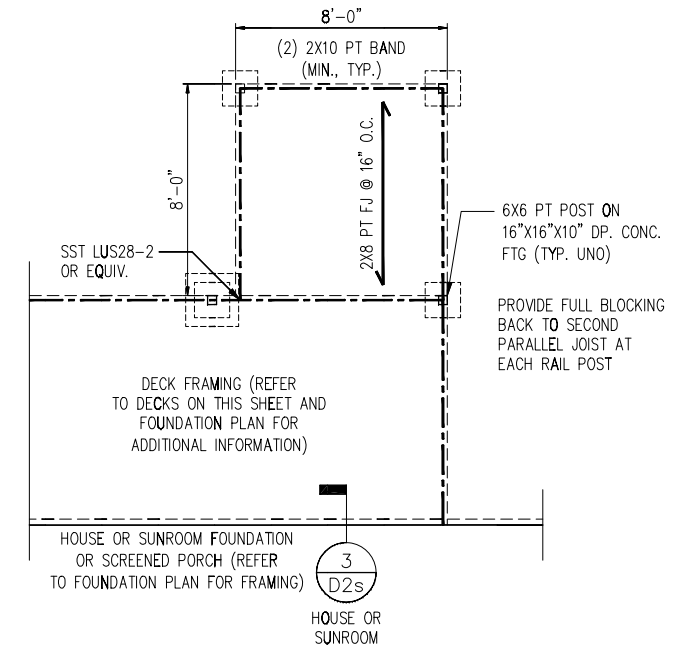
PROVIDE FULL BLOCKING BACK TO SECOND PARALLEL JOIST AT EACH RAIL POST

TYP. SMALL SIDE DECK PLAN

TYP. SMALL REAR DECK PLAN

N.T.S.

N.T.S.



PROVIDE FULL BLOCKING BACK TO SECOND PARALLEL JOIST AT EACH RAIL POST

TYP. DECK PLAN W/ 8'X8' GRILL DECK

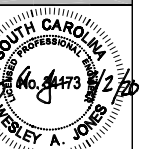
N.T.S.

NOTES:

1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
2. PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
3. SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE IRC

CLIENT:
 Drake-Horton, Caroling Division
 2801 Arroyo Circle Blvd.
 Charlotte, NC 28219

PROJECT:
 Standard Details
 Stem Wall Foundation Details



STRUCTURAL MEMBERS ONLY

DRAWING
 DATE: 10/20/09
 SCALE: 1/8"=1'-0"
 PROJECT: 1308-09R
 DRAWN BY: LAG
 CHECKED BY: WJL

ORIGINAL INFORMATION
 PROJECT # DATE
 1308-09R 10/20/09

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

General Notes: ** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

** LVL AND JOISTS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

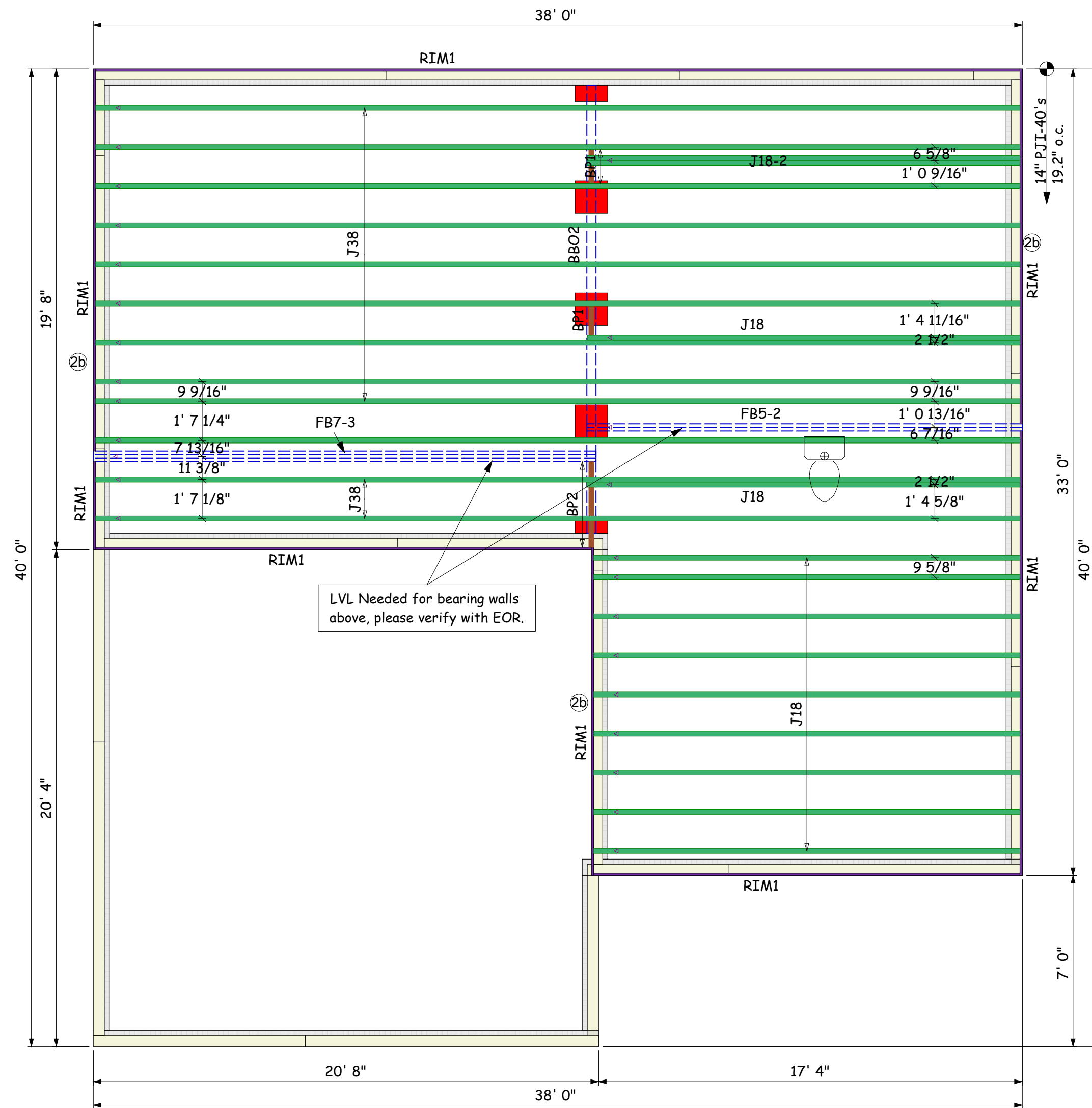
Revisions	
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name

This is an I-Joist Placement Plan Only. All designs of I-joists follow the IBC/IRC Code Requirements along with Manufacturer's guidelines. This is NOT an engineered placement plan. This placement plan is created from plans provided by the customer using Manufacturer's guidelines. It is the responsibility of the EOR, or builder to review and approve all bearing conditions, connections, spans, loading, product usage, and quantities. Do not notch or drill holes in beams or flanges on joists without prior approval from the manufacturing Representative unless following hole guidelines in the installation guide of product. Builder takes full responsibility for doing so and NO Back charge will be accepted.



DR Horton
38 Mason Ridge
Galen E
FLOOR JOIST LAYOUT

Scale: 1/4" = 1'-0"
 Date: // 06/11/24
 Designer: DW
 Project #: 24060040
 Sheet Number:
1 / 2



Products				
PlotID	Length	Product	Plies	Net Qty
J38	38' 0"	14" PJI-40	1	12
J18	18' 0"	14" PJI-40	1	11
J18-2	18' 0"	14" PJI-40	2	2
FB7-3	22' 0"	2.1 RigidLam SP LVL 1-3/4 x 14	3	3
FB5-2	18' 0"	2.1 RigidLam SP LVL 1-3/4 x 14	2	2
RIM1	12' 0"	1 1/8" x 14" APA Rim Board	1	12
BP1	2' 0"	14" PJI-40	1	2
BP2	2' 0"	14" PJI-40	1	2

Accessories				
PlotID	Length	Product	Plies	Net Qty
		3/4" 4x8 OSB	1	31

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

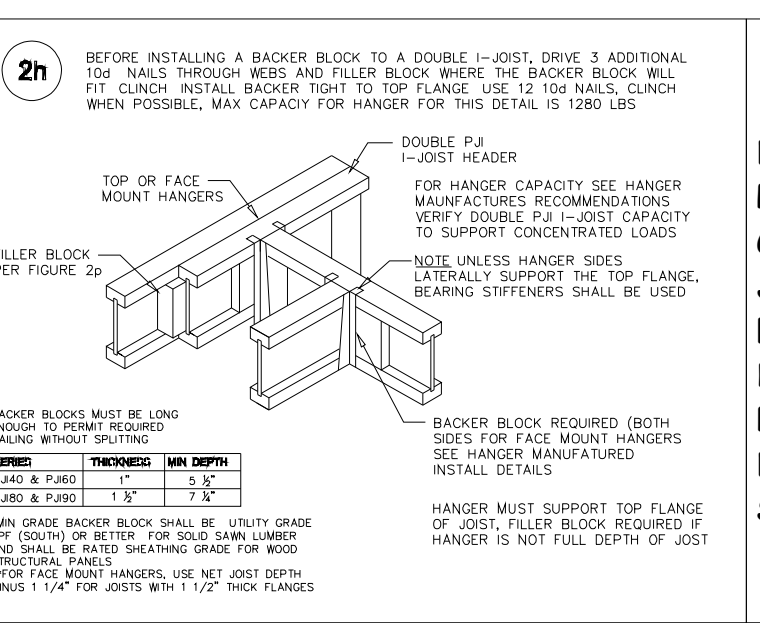
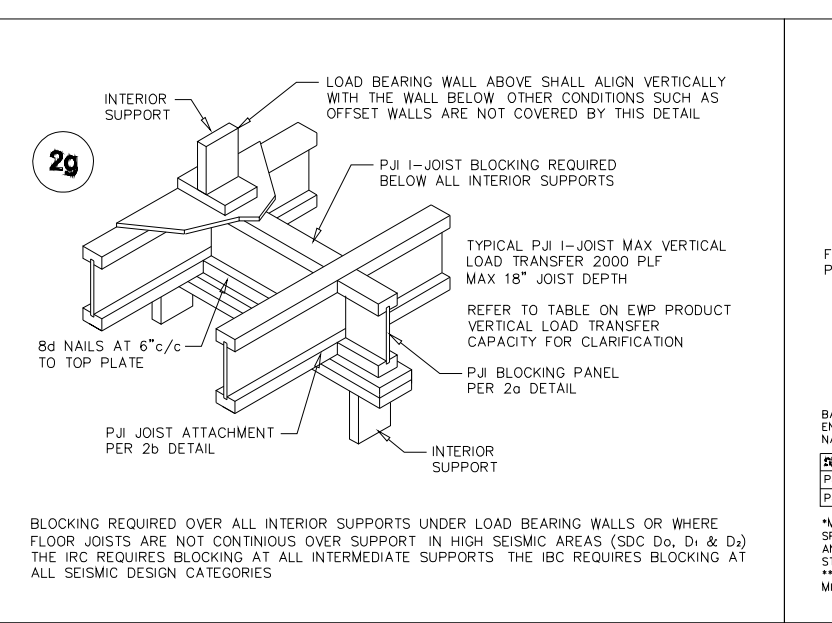
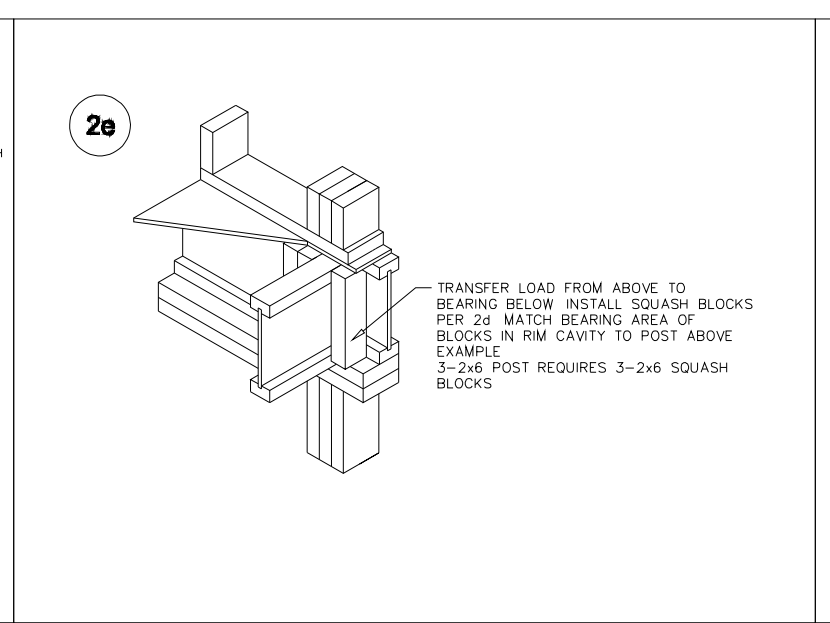
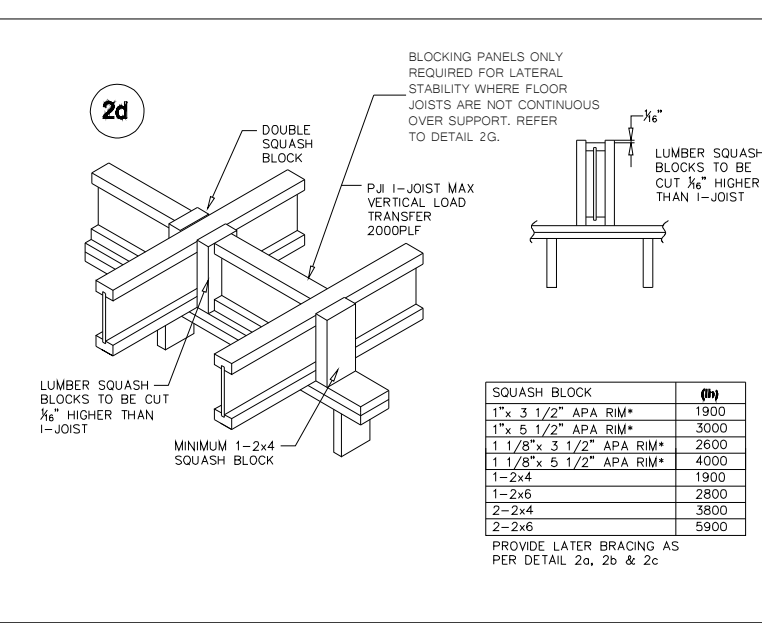
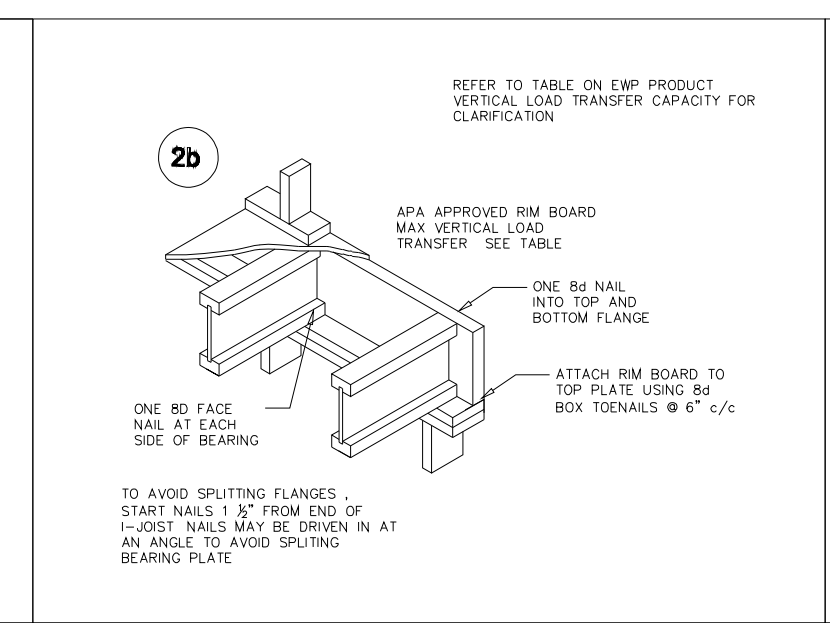
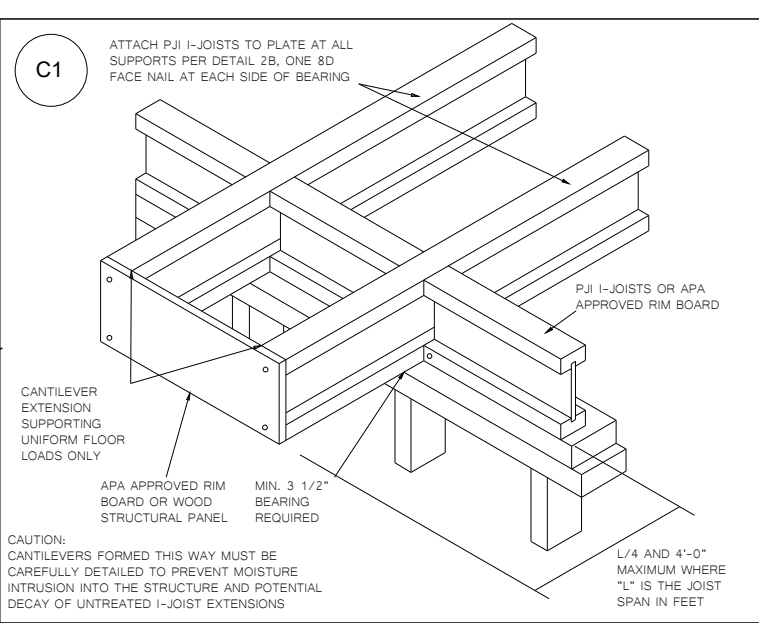
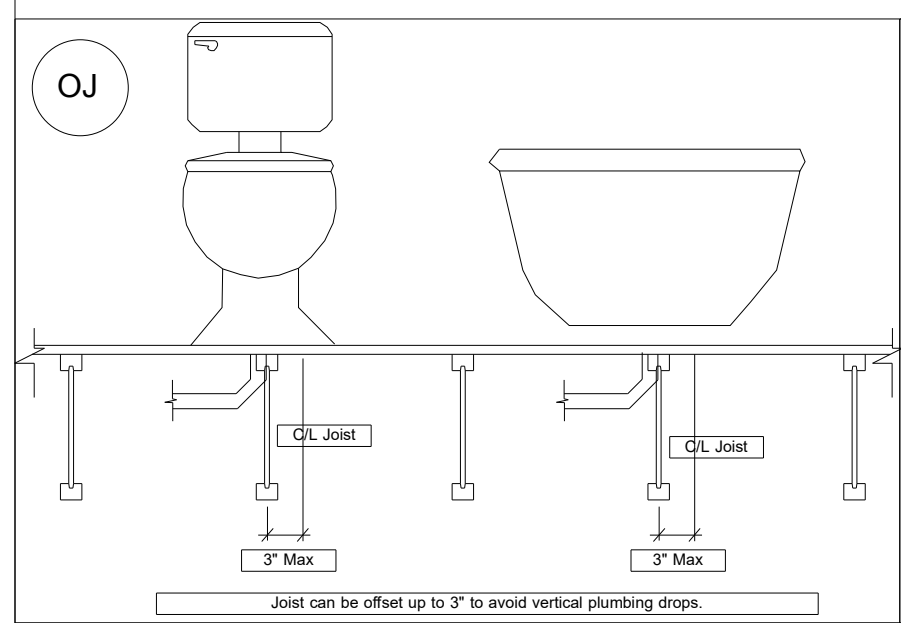
** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** DAMAGED FLOOR JOISTS SHOULD NOT BE INSTALLED UNLESS APPROVED BY COMPONENT PLANT.

1ST FLOOR LAYOUT

LABEL LEGEND

- BBO = Beam by Others
- PBO = Post by Others
- GBO = Girder by Others
- J = I-Joist
- FB = Flush Beam
- DB = Dropped Beam
- RB = Roof Beam
- BP = Blocking Panels
- SB = Squash Blocks



** PLUMBING DROPS NOTED ARE IN APPROXIMATE LOCATIONS PER PLAN. BUILDER MUST VERIFY LOCATIONS BEFORE SETTING JOISTS.

** ALL POINT LOADS FROM ABOVE MUST BE TRANSFERRED TO BEARING FROM UNDER SIDE OF SHEATHING.

** REFER TO INSTALLATION GUIDE FOR PLY TO PLY CONNECTIONS.

**

