

Mason Ridge
Lot 18
174 Charlies Bend Way
Spring Lake, NC 28390

PROJECT TITLE:

40' Series

0

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.

BUILDER SET:

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 NCRC SECTION R310.1.1)

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.

AREA CALCULATIONS:

THE SCOPE OF THIS SET OF PLANS IS TO PROVIDE A "BUILDER'S SET" OF CONSTRUCTION DOCUMENTS AND GENERAL NOTES HEREINAFTER 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 SPECIFICATION, 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.

MODEL 'HAYDEN' SQUARE FOOTAGES		
AREA		ELEV 'F', 'K'
1st FLOOR		1066 SF
2nd FLOOR		1445 SF
TOTAL LIVING		2511 SF
GARAGE		422 SF
PORCH		104 SF
OPT. COVERED PORCH		80 SF
OPT. BASEMENT		1006 SF
BASEMENT AREA IS TAKEN TO INSIDE OF CONCRETE WALL		



Front Elevation 'A'

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



Front Elevation 'B'

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



Front Elevation 'F'

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

NO:	DATE:	REVISION:
△	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

QUICK VIEW

PRINT DATE:

January 22, 2021

SHEET NO:

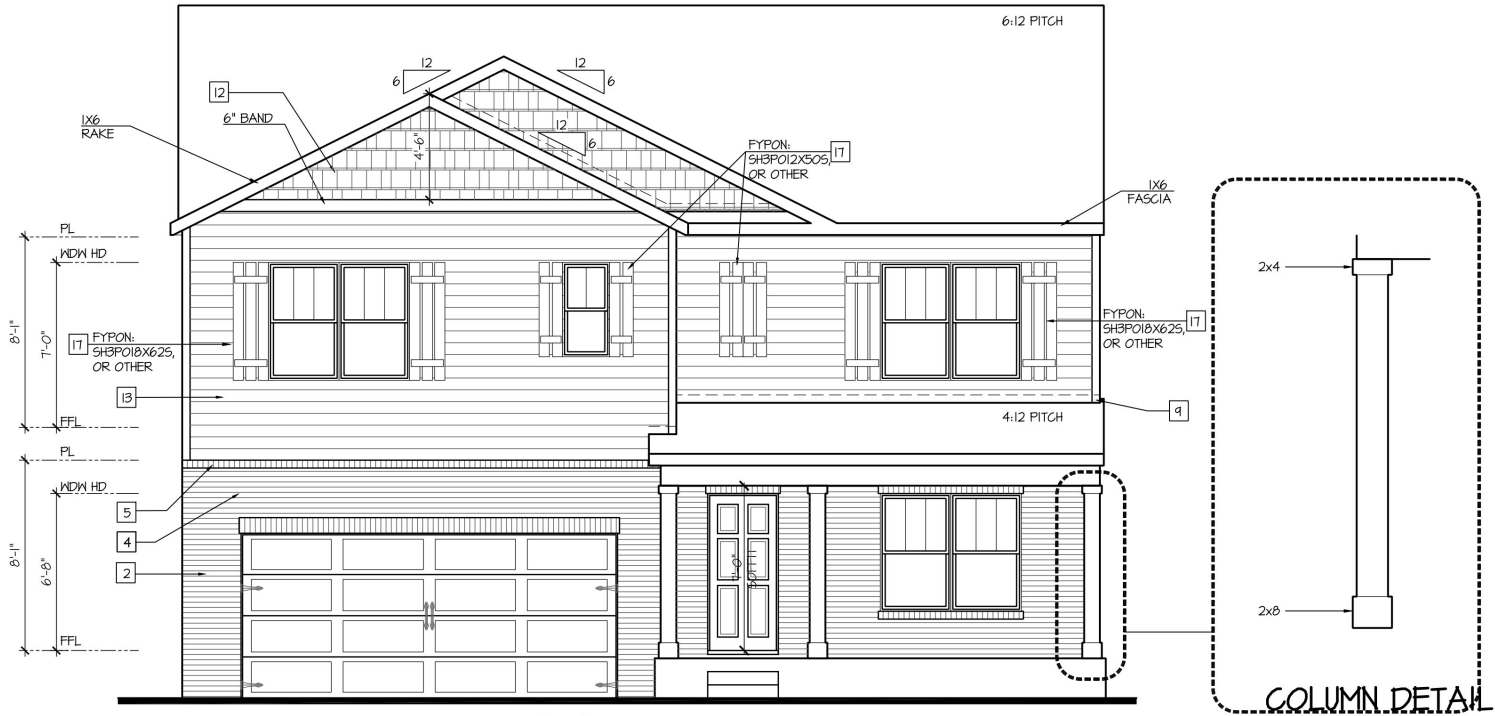
0.1

FOR
CONSTRUCTION

AVAILABLE WITH OPTIONAL
9'-1" FIRST FLOOR PLATE

NOTES AT OPT 9'-1" PLT:
- WDW HT SET AT 7'-6"
- INTERIOR SOFFITS AT 8'-0"
- EXTERIOR SOFFITS AT 8'-0"

- 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'-0" 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 N102.1.2.
EXTERIOR WALLS: R-15 BATTS MINIMUM. VERIFY
CELLING 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:
- ADHERED STONE VENEER AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
 - MASONRY FULL BRICK AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
 - MASONRY FULL STONE AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.
 - 8" SOLDIER COURSE.
 - ROWLOCK COURSE.
 - N/A.
- TYPICALS:
- CORROSION RESISTANT SCREEN LOWERED VENTS, SIZE AS NOTED.
 - CODE APPROVED TERMINATION CHIMNEY CAP.
 - CORROSION RESISTANT ROOF TO WALL FLASHING. CODE COMPLIANT FLASHING PER NRC R405.2.8.3.
 - STANDING SEAM METAL ROOF, INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - DECORATIVE WROUGHT IRON. SEE DETAILS.
- SIDING:
- 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.)
 - 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.)
 - 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.)
 - 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.)
 - VINYL TRIM SIZE AS NOTED
(AT SPECIFIC LOCATIONS:
1X FIBER CEMENT TRIM OR EQUAL, UNO. SIZE AS NOTED.
 - 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 72" ABOVE THE OUTSIDE WALKING SURFACE MUST HAVE WINDOW OPENING LIMITING DEVICES COMPLYING WITH THE NRC SECTION R502.2.1 AND R502.2.2.



Front Elevation 'F'
w/ Opt Crawl Space / Basement

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

NO.	DATE	REVISION
1	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'HAYDEN'
EXTERIOR
ELEVATIONS
'4EPF-F'

PRINT DATE:

January 22, 2021

SHEET NO:

1F

FOR
CONSTRUCTION

ATTIC VENT CALCULATION FOR PLAN 'HAYDEN': 1:150 RATIO.

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.

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.

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

ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (AS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS.

PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.

(PER SECTION R806.2)
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

ROOF AREA 1:= 1488 SF
1488 SQ. FT. X 144 = 214272 SQ. IN.
214272 SQ. IN. / 150 = 1428.48 SQ. IN. OF VENT REQ'D

ROOF AREA 2:= 34 SF
34 SQ. FT. X 144 = 5616 SQ. IN.
5616 SQ. IN. / 150 = 37.44 SQ. IN. OF VENT REQ'D

ROOF AREA 3:= 180 SF
180 SQ. FT. X 144 = 25920 SQ. IN.
25920 SQ. IN. / 150 = 172.80 SQ. IN. OF VENT REQ'D

NOTES:

- 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 'HAYDEN': 1:300 RATIO.

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.

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

ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (AS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS.

PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.

(PER SECTION R806.2)
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.

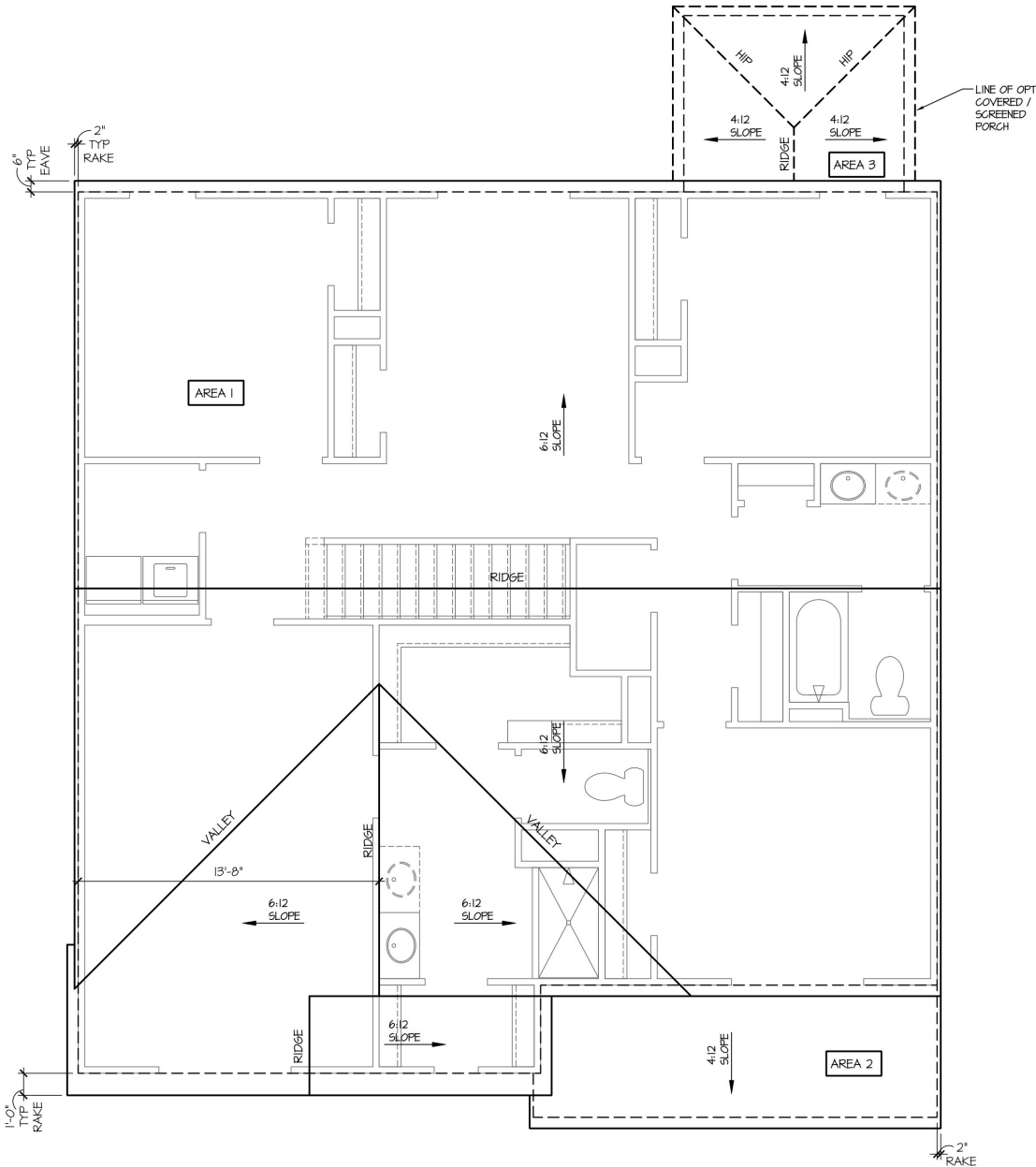
ROOF AREA 1:= 1488 SF
1488 SQ. FT. X 144 = 214272 SQ. IN.
214272 SQ. FT. / 300 = 714.24 SQ. IN. OF VENT REQ'D
714.24 SQ. IN. / 2 = 357.12 SQ. IN.
357.12 SQ. IN. OF VENT AT HIGH & 357.12 SQ. IN. OF VENT AT LOW REQUIRED.

ROOF AREA 2:= 34 SF
34 SQ. FT. X 144 = 5616 SQ. IN.
5616 SQ. FT. / 300 = 18.72 SQ. IN. OF VENT REQ'D
18.72 SQ. IN. / 2 = 9.36 SQ. IN.
9.36 SQ. IN. OF VENT AT HIGH & 9.36 SQ. IN. OF VENT AT LOW REQUIRED.

ROOF AREA 3:= 180 SF
180 SQ. FT. X 144 = 25920 SQ. IN.
25920 SQ. FT. / 300 = 86.40 SQ. IN. OF VENT REQ'D
86.40 SQ. IN. / 2 = 43.20 SQ. IN.
43.20 SQ. IN. OF VENT AT HIGH & 43.20 SQ. IN. OF VENT AT LOW REQUIRED.

BUILDER TO PROVIDE (2) LAYERS OF UNDERLAYMENT AT ANY ROOF W/ A SLOPE FROM 2:12 TO LESS THAN 4:12

AT SINGLE FAMILY DETACHED PLANS:
PREFINISHED VENTED
SOFFIT AT EAVE PER MANUFACTURER.
(VERIFY FIRE SEPARATION DISTANCE FOR
SOFFIT PROTECTION PER NIRC
SECTION R302.1.1 AND TABLE R302.1)



Roof Plan 'F'

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

NO.	DATE:	REVISION:
△	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'HAYDEN'
ROOF PLAN
'4EPF-F'

PRINT DATE:

January 22, 2021

SHEET NO:

1.1 F

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" U.N.O. ON ELEVATIONS.
2ND FLOOR = 7'-0" U.N.O. 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 N102.1.2.
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

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 NCRG R405.2.8.3

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

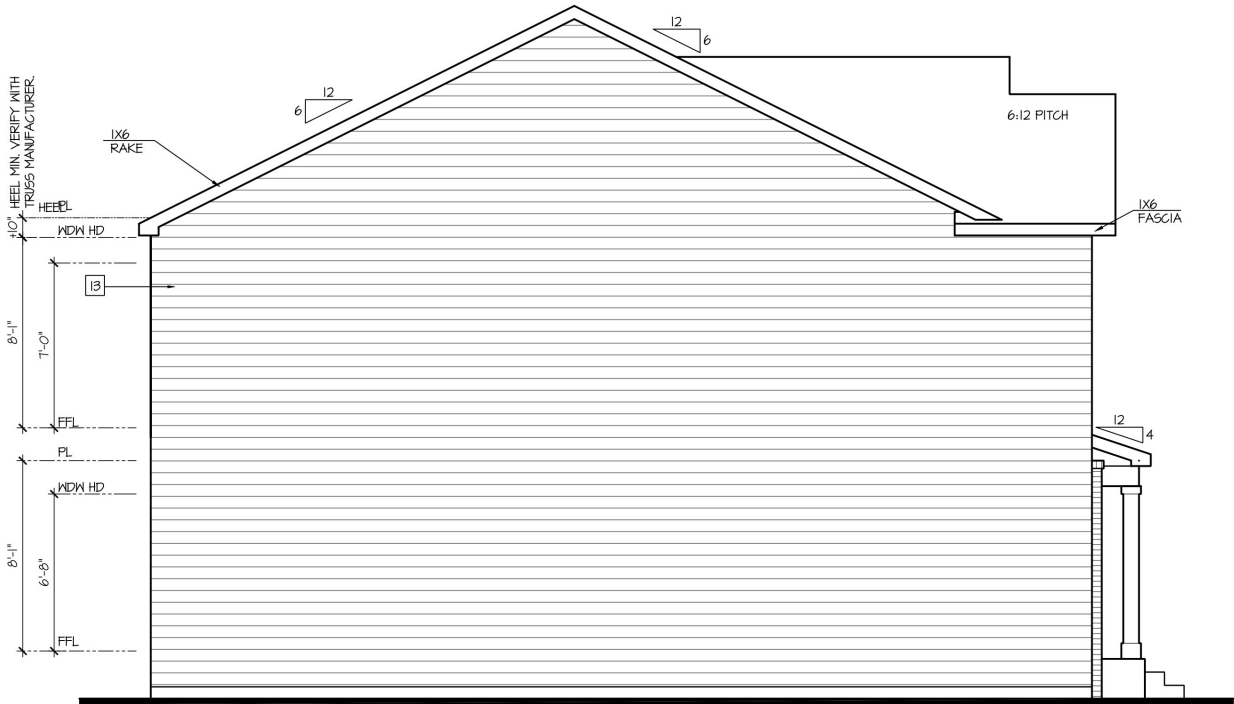
17

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 72" ABOVE THE OUTSIDE WALKING SURFACE MUST HAVE WINDOW OPENING LIMITING DEVICES COMPLYING WITH THE NCRG SECTION R312.2.1 AND R312.2.2.

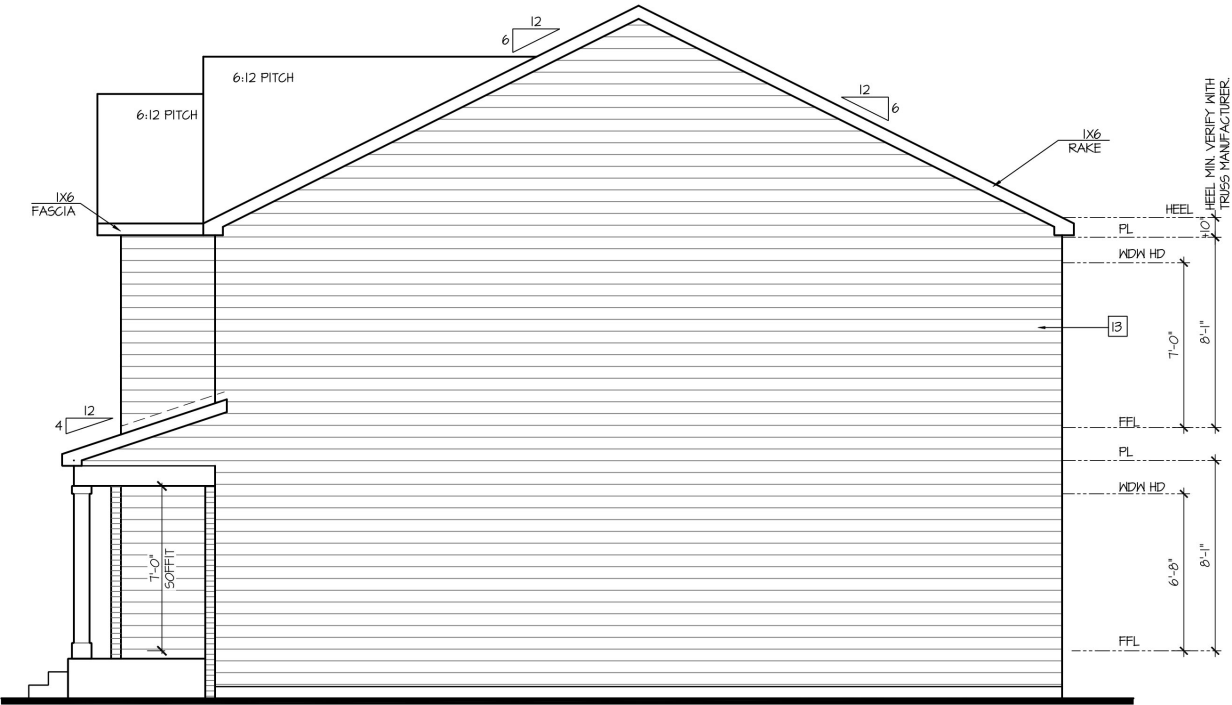
AVAILABLE WITH OPTIONAL
9'-1" FIRST FLOOR PLATE

NOTES AT OPT 9'-1" PLT:
- WDW HT SET AT 7'-6"
- INTERIOR SOFFITS AT 8'-0"
- EXTERIOR SOFFITS AT 8'-0"



Left Elevation 'F' w/ Opt Crawl Space

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



Right Elevation 'F' w/ Opt Crawl Space

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



Rear Elevation 'F' w/ Opt Crawl Space

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

NO:	DATE:	REVISION:
1	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:
'HAYDEN'
EXTERIOR
ELEVATIONS
'4EPF-F'

PRINT DATE:

January 22, 2021

SHEET NO:

2.1 F

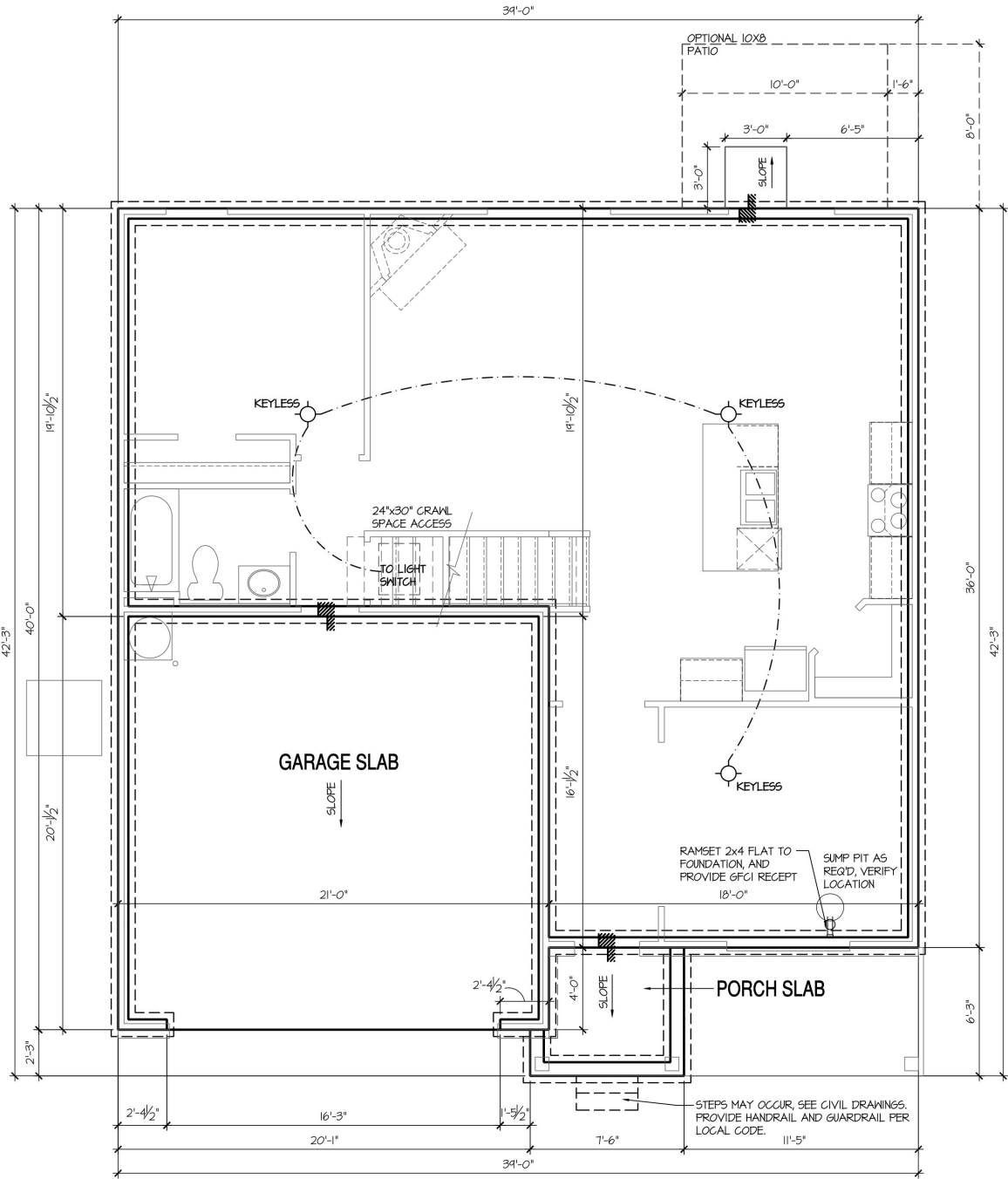
FOR
CONSTRUCTION

CRAWL SPACE NOTES NORTH CAROLINA:

- REFER TO STRUCTURAL DRAWINGS FOR INFORMATION NOT SHOWN ON THIS PLAN.
- FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS.
- PROVIDE FIREBLOCKING (PER LOCAL CODES).
- ALL ELECTRICAL AND MECHANICAL EQUIPMENT AND METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS, CONTRACTOR TO VERIFY.
- VERIFY ALL DOOR THRESHOLD HEIGHTS TO HARD SURFACES, 8 1/4" MAX AT INSWING DOORS. (PER NCRG SECTION R311.3.1)
- SLOPE ALL STOOPS AND HARDSCAPE MATERIAL AWAY FROM BUILDING - TYPICAL.
- SLOPE GARAGE FLOOR 1/8" PER FOOT TO GARAGE DOOR OPENING.
- VERIFY CURB CUT BLOCKOUT WITH GARAGE DOOR MANUFACTURER.
- REFER TO CIVIL DRAWINGS FOR FINISH SURFACE ELEVATIONS.
- TYP STOOP AT INSWING/SLIDER DOORS: 36" DEEP BY THE WIDTH OF THE DOOR SERVED, MINIMUM (PER NCRG SECTION R311.3) PROVIDE A SLIP-RESISTANT FINISH.
- SOILS TREATMENT: BORACARE TERMITE TO BE APPLIED TO FRAMING PER PRODUCT SPECIFICATIONS. (PROVIDE CHEMICAL TREATMENT FOR PROTECTION FROM TERMITE INVESTATION ACCORDING TO LOCAL CODES.)
- AT VENTED CRAWL SPACE: APPLY AN APPROVED VAPOR RETARDER OR EQUIVALENT, 6 MIL POLY-VINYL, GROUND COVER OVER FINISH GRADE OR CRAWL SPACE PER NCRG SECTION 40B.2.
- PROVIDE VENTS SPACED AROUND PERIMETER TO PROMOTE CROSS VENTILATION AT A RATE OF 1 SF VENT FOR EVERY 1500 SF OF CRAWL FLOOR AREA. ONE VENT MUST BE LOCATED WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AND LOCATED TO ALLOW FOR CROSS VENTILATION. (PER NCRG SECTION R40B.1.1 EXCEPTION.)
- PROVIDE AN ACCESS OPENING, MINIMUM SIZE OF 18"x24" FOR CRAWL ACCESS. COORDINATE WITH MECHANICAL CONTRACTOR FOR LARGER SIZE REQUIREMENTS IF MECHANICAL EQUIPMENT IS LOCATED IN CRAWL. (PER NCRG SECTION 40B.B)
- WOOD CONTACTING CONCRETE OR MASONRY OR LESS THAN CODE REQUIRED SEPARATION TO GRADE SHALL BE PRESSURE TREATED OR FOUNDATION GRADE REDWOOD. SET ALL EXTERIOR WALL SILLS IN MASTIC.

KEY NOTES:

- 1 LINE OF SLAB ABOVE
- 2 LINE OF FRAMED WALL ABOVE
- 3 16"x8" CRAWL SPACE VENT
- 4 CRAWL SPACE ACCESS PANEL
- 5 A/C CONDENSER PAD. (VERIFY)
- 6 TYPICAL CRAWL FOUNDATION WALL SHALL BE 8" CMU OR A COMBINATION OF 4" CMU WITH NOMINAL 4" BRICK. SEE STRUCTURAL DRAWINGS FOR ALL STRUCTURAL ATTACHMENTS. ALL BLOCK CELLS AND SPACE BETWEEN BLOCK AND BRICK SHALL BE FILLED SOLID WITH CONCRETE. FOUNDATION WALL WITH FULL HEIGHT BRICK VENEER SHALL CONSIST OF 8" CMU WITH NOMINAL 4" BRICK. SEE STRUCTURAL DRAWINGS FOR ALL STRUCTURAL ATTACHMENTS AND BRICK TIE SPACING. FILL VOIDS SOLID TO TOP OF CMU WALL. (MUST COMPLY WITH NCRG SECTION R404, TABLE R404.1.1(1) THROUGH R404.1.1(4) AND APPLICABLE SECTIONS OF R606, R607, R608.) VERIFY WITH STRUCTURAL DRAWINGS FOR WALL FOOTING SIZE AND DEPTH.



Crawl Space Plan 'F'

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

NO.	DATE:	REVISION:
△	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'HAYDEN'
CRAWL SPACE

PLAN '4EPF-F'

PRINT DATE:

January 22, 2021

SHEET NO:

3 CS F

FOR
CONSTRUCTION

8'-9 1/2" STAIR NOTE:
(USE 14" T.J.I WITH 3/4" PLYWOOD SUBFLOOR)
15 TREADS AT 10" EACH VERIFY
16 RISERS AT +/- 7.50" = 120 1/4" TOTAL
RISE VERIFY

9'-1" STAIR NOTE:
(USE 14" T.J.I WITH 3/4" PLYWOOD SUBFLOOR)
16 TREADS AT 10" EACH VERIFY
17 RISERS AT +/- 7.21" = 123 3/4" TOTAL
RISE VERIFY

8'-1" STAIR NOTE:
(USE 14" T.J.I 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

BRICK / STONE VENEER

LOU GYPSUM BOARD WALL
HEIGHT AND STUD SIZE AS NOTED

FULL HEIGHT
2X6 WOOD STUD PARTITION

STUD WALL BELOW
HEIGHT AND STUD SIZE AS NOTED

DRYWALL OPENING, HEIGHT
AS NOTED ON PLAN.

KEY NOTES FOR NORTH CAROLINA:

1 HOUSE TO GARAGE FIRE SEPARATION. GARAGE/HOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 1/2" GYPSUM BOARD. (PER NCRC TABLE R302.6.) GARAGE/HOUSE SEPARATION AT HORIZONTAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD. (PER NCRC TABLE R302.6.)

2 HOUSE TO GARAGE DOOR SEPARATION. PROVIDE 1-3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR. (PER NCRC SECTION R302.5.1.)

3 BENEATH STAIRS AND LANDINGS, 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE AREAS. (PER NCRC SECTION R302.7.) IN CONCEALED SPACES BETWEEN STAIR STRINGERS PROVIDE FIREBLOCKING PER R302.11

4 GAS WATER HEATER ON 18" HIGH PLATFORM. (PER CHAPTER 5 NCRC-PLUMBING)

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.)

6 A/C CONDENSER PAD. (VERIFY)

7 PRE-FABRICATED METAL FIREPLACE. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

8 ATTIC ACCESS LARGE ENOUGH TO REMOVE LARGEST PIECE OF EQUIPMENT BUT NOT LESS THAN 30"X22". FIRE RATED ACCESS AS NOTED. (PER NCRC BOT.1.) ATTIC ACCESS LADDER, VERIFY LOCATION AND SIZE WITH TRUSSES. (25 1/2" X 54" SIZE) FOR GARAGE TO ATTIC SEPARATION PER NCRC 302.5.1) EXCEPTION, TYPICALS.

9 TEMPERED SAFETY GLASS. (PER NCRC SECTION 308.4)

10 PLYWOOD SHELF ABOVE WITH DRYWALL FINISH OVER. HEIGHT AS NOTED.

11 HALF WALL, HEIGHT AS NOTED.

2 INTERIOR SOFFITS: FFL = 8'-1" U.N.O. SFL = 7'-6" U.N.O. BATHS:

3 SHOWER. TEMPERED GLASS ENCLOSURE.

4 TUB-SHOWER COMBO. TEMPERED GLASS ENCLOSURE.

5 CERAMIC TILE SHOWER AND FLOOR. TEMPERED GLASS ENCLOSURE.

6 ACRYLIC TUB W/ CERAMIC PLATFORM KITCHEN:

7 30" SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

8 30" GAS COOKTOP AND HOOD. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

9 ELECTRIC OVEN WITH MICROWAVE OVEN.

NO.	DATE:	REVISION:
1	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:
40' Series

FOR CONSTRUCTION

CLIENTS NAME:

PROJECT NO: GMD17049

SHEET TITLE:
**'HAYDEN'
1st FLOOR
PLAN '4EPF-F'**

PRINT DATE:
January 22, 2021

SHEET NO:
4 F

9'-1" STAIR NOTE:
(USE 14" T.J.I WITH 3/4" PLYWOOD SUBFLOOR)
16 TREADS AT 10" EACH VERIFY
17 RISERS AT +/- 7.21" = 123 3/4" TOTAL
RISE VERIFY

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

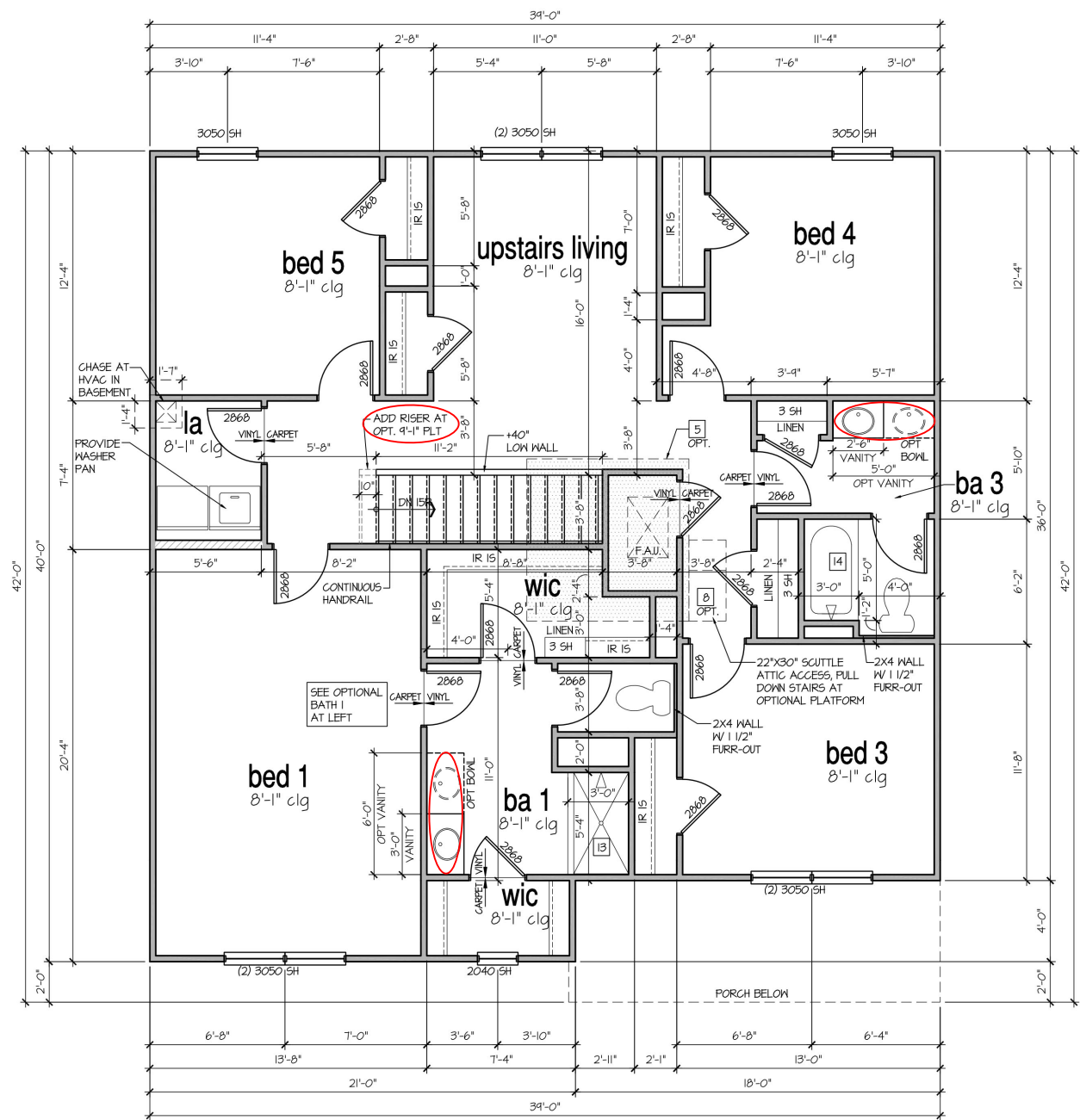
- FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS.
- WINDOW HEAD HEIGHTS:
1ST FLOOR = 6'-8" U.N.O. ON ELEVATIONS.
2ND FLOOR = 7'-0" U.N.O. ON ELEVATIONS.

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
 LOW GYPSUM BOARD WALL HEIGHT AND STUD SIZE AS NOTED	 DRYWALL OPENING HEIGHT AS NOTED ON PLAN

- KEY NOTES FOR NORTH CAROLINA:**
- FIRE PROTECTION:**

 - HOUSE TO GARAGE FIRE SEPARATION. GARAGE/HOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 1/2" GYPSUM BOARD. (PER NCRC TABLE R302.6.) GARAGE/HOUSE SEPARATION AT HORIZONTAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD. (PER NCRC TABLE R302.6.)
 - HOUSE TO GARAGE DOOR SEPARATION. PROVIDE 1-3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR. (PER NCRC SECTION R302.5.1.)
 - BENEATH STAIRS AND LANDINGS, 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE AREAS. (PER NCRC SECTION R302.7.) IN CONCEALED SPACES BETWEEN STAIR STRINGERS PROVIDE FIREBLOCKING PER R302.11
 - GAS WATER HEATER ON 18" HIGH PLATFORM. (PER CHAPTER 5 NCRC-PLUMBING)
- 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.)
 - A/C CONDENSER PAD. (VERIFY)
 - PRE-FABRICATED METAL FIREPLACE. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - ATTIC ACCESS LARGE ENOUGH TO REMOVE LARGEST PIECE OF EQUIPMENT BUT NOT LESS THAN 30"X22". FIRE RATED ACCESS AS NOTED. (PER NCRC BOT.1.) ATTIC ACCESS LADDER. VERIFY LOCATION AND SIZE WITH TRUSSES. (25 1/2" X 54" SIZE) FOR GARAGE TO ATTIC SEPARATION PER NCRC 302.5.1) EXCEPTION. TYPICALS.
 - TEMPERED SAFETY GLASS. (PER NCRC SECTION 308.4)
 - PLYWOOD SHELF ABOVE WITH DRYWALL FINISH OVER. HEIGHT AS NOTED.
 - HALF WALL, HEIGHT AS NOTED.
- INTERIOR SOFFITS: FFL = 8'-1" U.N.O. SFL = 7'-6" U.N.O. BATHS:
 - SHOWER. TEMPERED GLASS ENCLOSURE.
 - TUB-SHOWER COMBO. TEMPERED GLASS ENCLOSURE.
 - CERAMIC TILE SHOWER AND FLOOR. TEMPERED GLASS ENCLOSURE.
 - ACRYLIC TUB W/ CERAMIC PLATFORM
 - KITCHEN:
 - 30" SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - 30" GAS COOKTOP AND HOOD. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - ELECTRIC OVEN WITH MICROWAVE OVEN.



2nd Floor Plan 'F'
SCALE: 1/4"=1'-0" AT 22'X34" LAYOUT 1/8"=1'-0" AT 11'X17" LAYOUT

NO.	DATE:	REVISION:
1	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:
40' Series

CLIENTS NAME:



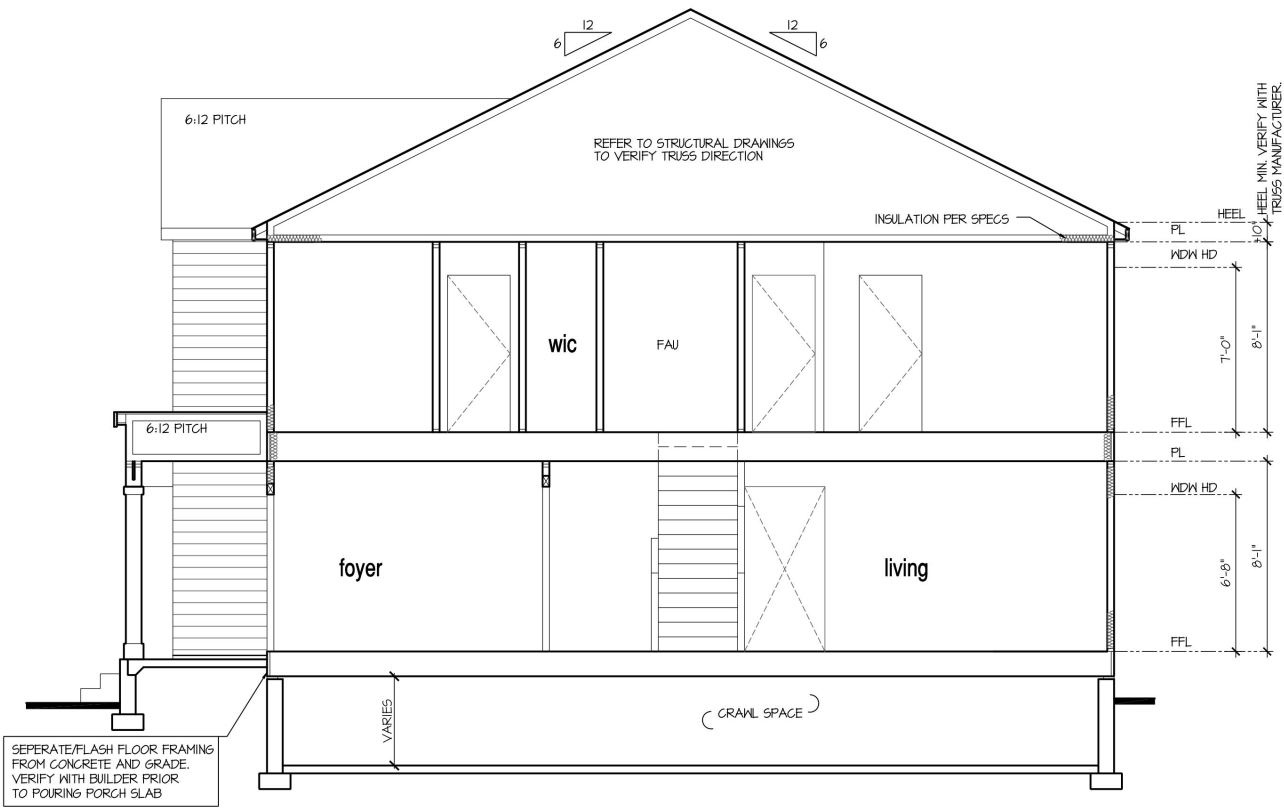
PROJECT NO: GMD17049

SHEET TITLE:
**'HAYDEN'
2nd FLOOR
PLAN '4EPF-F'**

PRINT DATE:
January 22, 2021

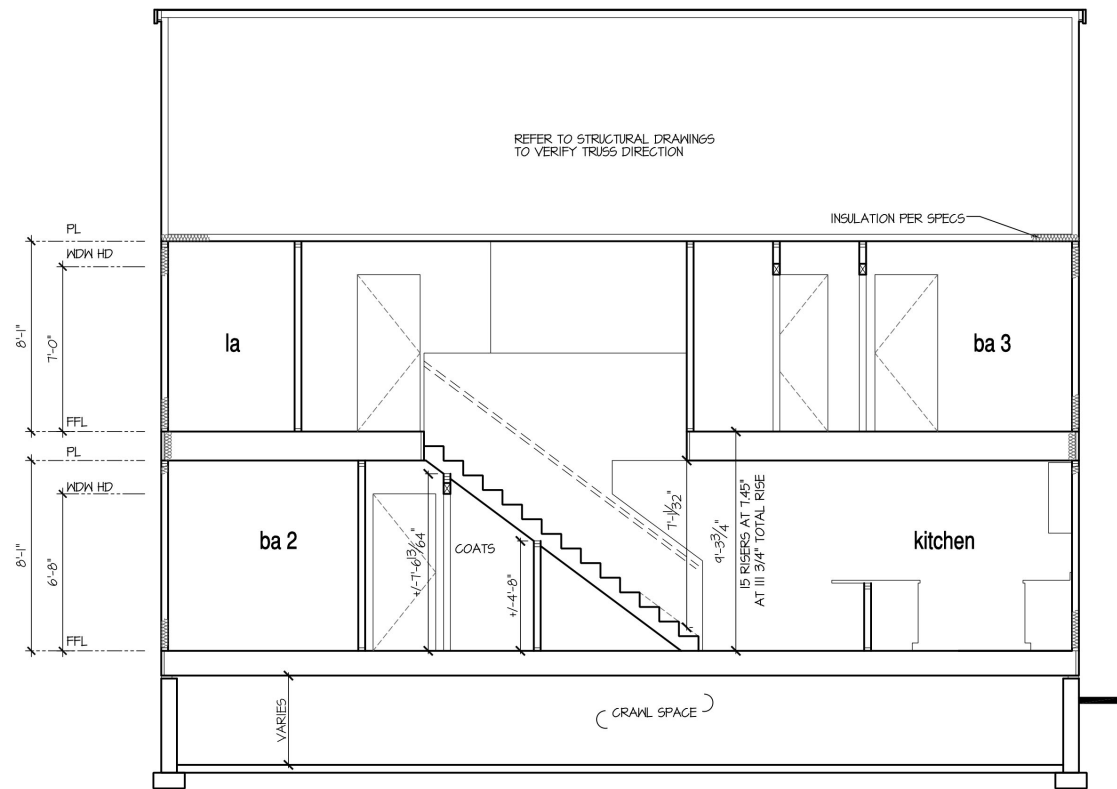
SHEET NO:
5 F

FOR
CONSTRUCTION



Building Section 1 at Crawl Space

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



Building Section 2 at Crawl Space

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

9'-1" STAIR NOTE:
(USE 14" TJI WITH 3/4" PLYWOOD SUBFLOOR)
16 TREADS AT 10" EACH VERIFY
17 RISERS AT +/- 7.21" = 123 3/4" TOTAL
RISE VERIFY

8'-1" STAIR NOTE:
(USE 14" TJI WITH 3/4" PLYWOOD SUBFLOOR)
14 TREADS AT 10" EACH VERIFY
15 RISERS AT +/- 7.45" = 111 3/4" TOTAL
RISE VERIFY

NOTES:		
- REFER TO FLOOR PLAN NOTES FOR TYPICAL FIRE PROTECTION NOTES AND LOCATIONS.		
- THESE BUILDING SECTIONS MAY VARY AT ALTERNATE ELEVATION STYLES AND AT "PLAN OPTION" CONDITIONS. REFER TO MAIN FLOOR PLAN AND ALTERNATE FLOOR PLANS FOR INFORMATION NOT SHOWN HERE.		
- BUILDING SECTIONS SHOWN HERE DEPICT VOLUMN SPACES WITHIN THE STRUCTURE. REFER TO STRUCTURAL DRAWINGS, TRUSS DRAWINGS, STRUCTURAL DETAILS AND CALCULATIONS BY OTHER FOR ALL STRUCTURAL INFO.		
- ROOFING: PITCHED SHINGLE ROOF. REFER TO ROOF PLAN FOR TYPICALS.		
- WOOD FLOORS: FLOOR SHEATHING OVER FLOOR JOIST. REFER TO STRUCTURAL AND TRUSS DRAWINGS BY OTHERS.		
- VERIFY STAIRS MINIMUM AND MAXIMUM REQUIREMENTS FOR CONSTRUCTION CLEARANCES WITH LOCAL CODES.		
- INSULATION:		
EXTERIOR WALLS ZONE 3:	R-13 BATTS MINIMUM. VERIFY	PER STATE RESIDENTIAL CODE COMPLIANCE METHOD TO BE DETERMINED BY BUILDER.
EXTERIOR WALLS ZONE 4:	R-15 BATTS MINIMUM. VERIFY	
CEILING WITH ATTIC ABOVE COMPRESSED INSULATION:	R-30 BATTS MINIMUM. VERIFY	
CEILING WITH ATTIC ABOVE UNCOMPRESSED INSULATION (HEELS IN TRUSSES):	R-30 BATTS MINIMUM. VERIFY	
FLOOR OVER GARAGE:	R-19 BATTS MINIMUM. VERIFY	
ATTIC KNEEWALL:	R-19 BATTS MINIMUM. VERIFY	
CRAWL SPACE FLOORING:	R-19 BATTS MINIMUM. VERIFY	
WINDOW GLAZING "U" FACTOR: 0.35		

NO:	DATE:	REVISION:
1	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'HAYDEN'
BUILDING
SECTIONS

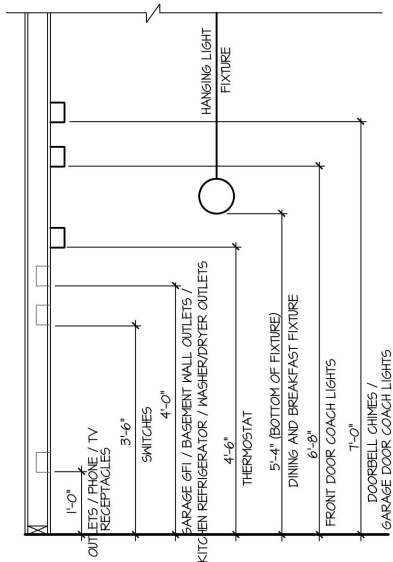
PRINT DATE:

January 22, 2021

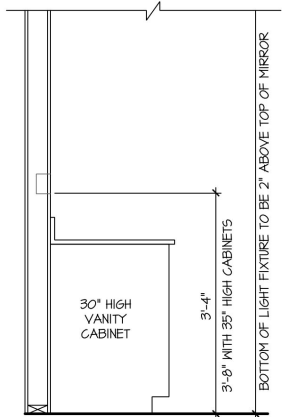
SHEET NO:

1.1.2A S

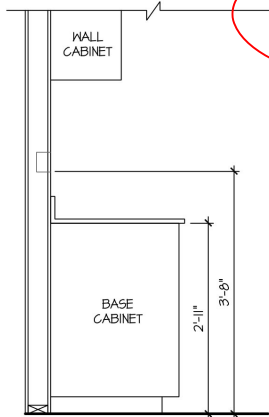
FOR
CONSTRUCTION



STANDARD ELECTRICAL BOX HEIGHTS

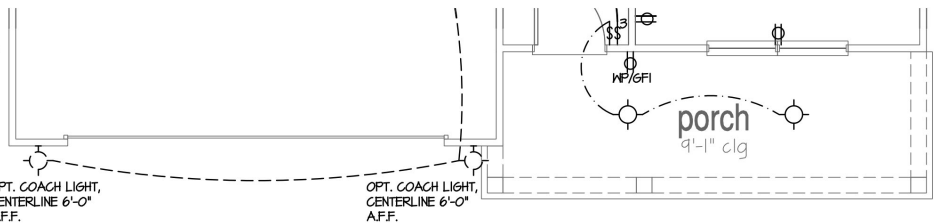


SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS



SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS

NOTE:
SIZE SERVICE PANEL PER
BUILDERS SPECIFICATIONS
AND LOCAL CODES



1st Floor Plan 'B'

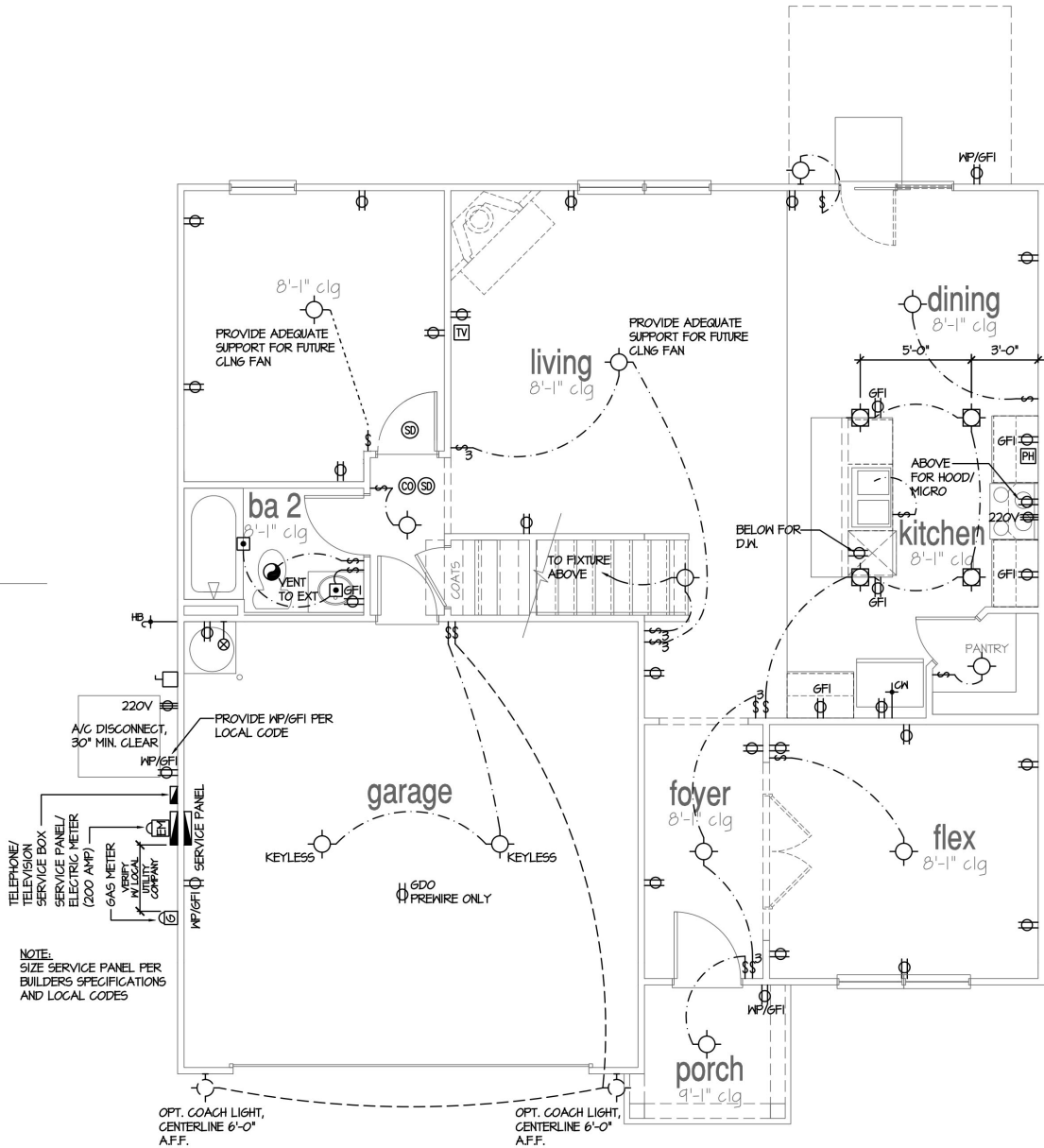
SCALE: 1/4"=1'-0" AT 22"x34" LAYOUT 1/8"=1'-0" AT 11"x17" LAYOUT

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
	WEATHERPROOF GFI DUPLEX OUTLET		HANGING FIXTURE		PUSHBUTTON SWITCH
	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET		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
	220 VOLT OUTLET		3-LIGHT VANITY FIXTURE		THERMOSTAT
	REINFORCED JUNCTION BOX		4-LIGHT VANITY FIXTURE		TELEPHONE
	WALL SWITCH		WALL MOUNT FIXTURE		ELECTRIC METER
	THREE-WAY SWITCH		EXHAUST FAN (VENT TO EXTERIOR)		ELECTRIC PANEL
	FOUR-WAY SWITCH				DISCONNECT SWITCH



1st Floor Plan 'A'

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

NO.	DATE:	REVISION:
1	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'HAYDEN'
1st FLOOR
UTILITY PLAN

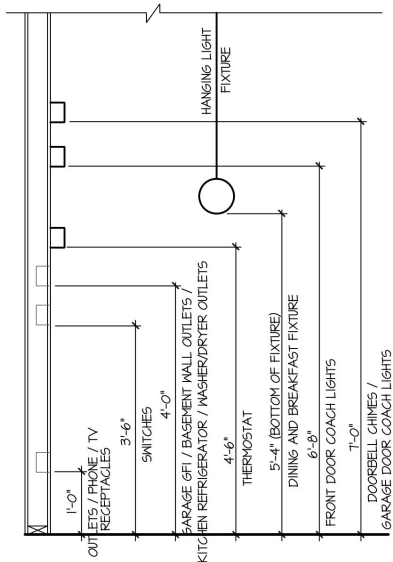
PRINT DATE:

January 22, 2021

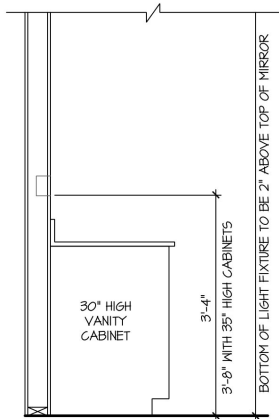
SHEET NO:

7

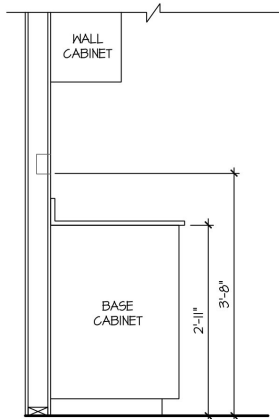
FOR
CONSTRUCTION



STANDARD ELECTRICAL BOX HEIGHTS



SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS



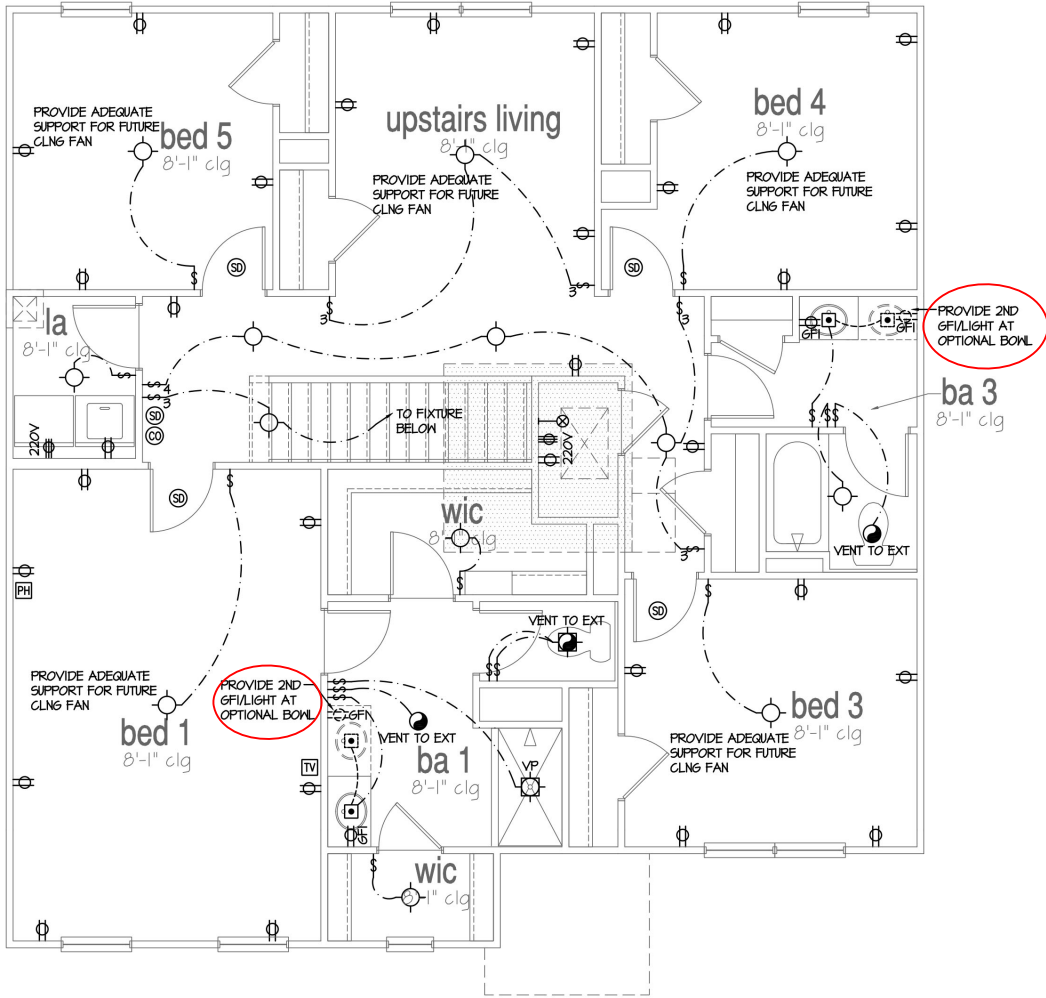
SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS

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
	WEATHERPROOF GFI DUPLEX OUTLET		HANGING FIXTURE		PUSHBUTTON SWITCH
	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET		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
	220 VOLT OUTLET		3-LIGHT VANITY FIXTURE		THERMOSTAT
	REINFORCED JUNCTION BOX		4-LIGHT VANITY FIXTURE		TELEPHONE
	WALL SWITCH		WALL MOUNT FIXTURE		TELEVISION
	THREE-WAY SWITCH		EXHAUST FAN (VENT TO EXTERIOR)		ELECTRIC METER
	FOUR-WAY SWITCH				ELECTRIC PANEL
					DISCONNECT SWITCH
					CEILING FAN (PROVIDE ADEQUATE SUPPORT)
					GAS SUPPLY WITH VALVE
					HOSE BIBB
					1/4" WATER STUB OUT
					WALL SCONCE



2nd Floor Plan 'A'

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

NO.	DATE:	REVISION:
1	04.25.22	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'HAYDEN'
2nd FLOOR
UTILITY PLAN

PRINT DATE:

January 22, 2021

SHEET NO:

8

FOR
CONSTRUCTION

9. Assumed Soil Bearing Capacity 2000psf

1. Concrete shall have a normal weight aggregate and a minimum compressive strength (f_c) 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".
 Air entrained concrete must be used for all structural elements exposed to freezing/thawing cycles and deicing chemicals. Air entrainment amounts (in percent) shall be within -1% to +2% of target values as follows:
 31. Footings: 5%
 32. Exterior Slabs: 5%
4. No admixtures shall be added to any structural concrete without written permission of the SER.

9. All structural assemblies are to meet or exceed to requirements of the current local building code.

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.



Roof truss and floor joist layouts, and their corresponding loading details, were not provided to SUMMIT Engineering, Laboratory & 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 No.	Description
C81	Cover Sheet, Specifications, Revisions
510a	Monolithic Slab Foundation
510b	Stem Wall Foundation
510c	Crawl Space Foundation
510d	Basement Foundation
510	Basement Framing Plan
510	First Floor Framing Plan
510	Second Floor Framing Plan
550	Roof Framing Plan
560	Basement Bracing Plan
570	First Floor Bracing Plan
580	Second Floor Bracing Plan

[illegible]

Manager	Signature
Operations	
Operations System	
Operations Product Development	

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)-2d 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)-2d 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.

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 are recommended in accordance with the AFA.



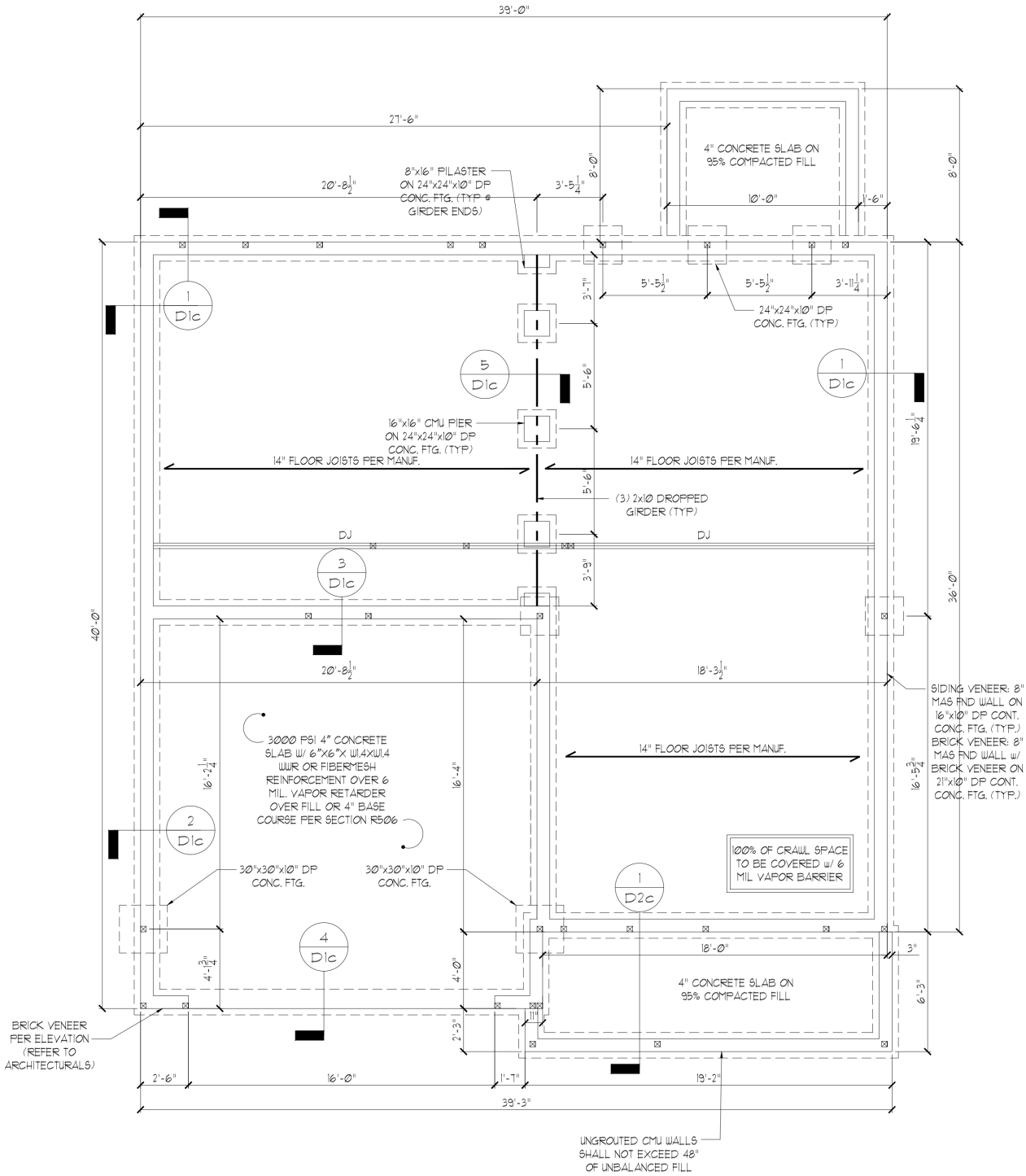
STRUCTURAL MEMBERS ONLY

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, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

CRAWL SPACE FOUNDATION PLAN

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



ELEVATION B/FK

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.
PF	WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.6.4	PER FIGURE R602.10.6.4
**OR EQUIVALENT PER TABLE R702.3.5				

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE WITH ALL LOCAL AND STATE AMENDMENTS.
- WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND MAXIMUM 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 TABLE R602.10.
- 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.
- 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 12 FEET OF EACH END OF A BRACED WALL LINE.
- THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.
- MASONRY OR CONCRETE STEM WALLS w/ A LENGTH OF 40' OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 NCR.
- BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4
- BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5
- CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10.4.6
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO)
- ABBREVIATIONS:

GB = GYPSUM BOARD
CS-XXX = CONT. SHEATHED
FF = PORTAL FRAME

WSP = WOOD STRUCTURAL PANEL
ENG = ENGINEERED SOLUTION
FF-ENG = ENG. PORTAL FRAME

GENERAL STRUCTURAL NOTES:

- CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AND STATE 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 = 1.9x10⁶ PSI
PARALLAM (PSL): F_b = 2300 PSI, F_v = 230 PSI, E = 1.25x10⁶ PSI
- ALL WOOD MEMBERS SHALL BE #2 SYP UNLESS NOTED ON PLAN. ALL STUD COLUMNS AND JOISTS SHALL BE #2 SYP (UNO).
- ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 #2 SYP STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
- ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A635 AND SHALL HAVE A MINIMUM COVER OF 3".
- 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/D3f. 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, 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, DROPPED. (UNLESS NOTED OTHERWISE)

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR. HORTON. COMPLETED/REVISED ON 4/15/21. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

STRUCTURAL MEMBERS ONLY

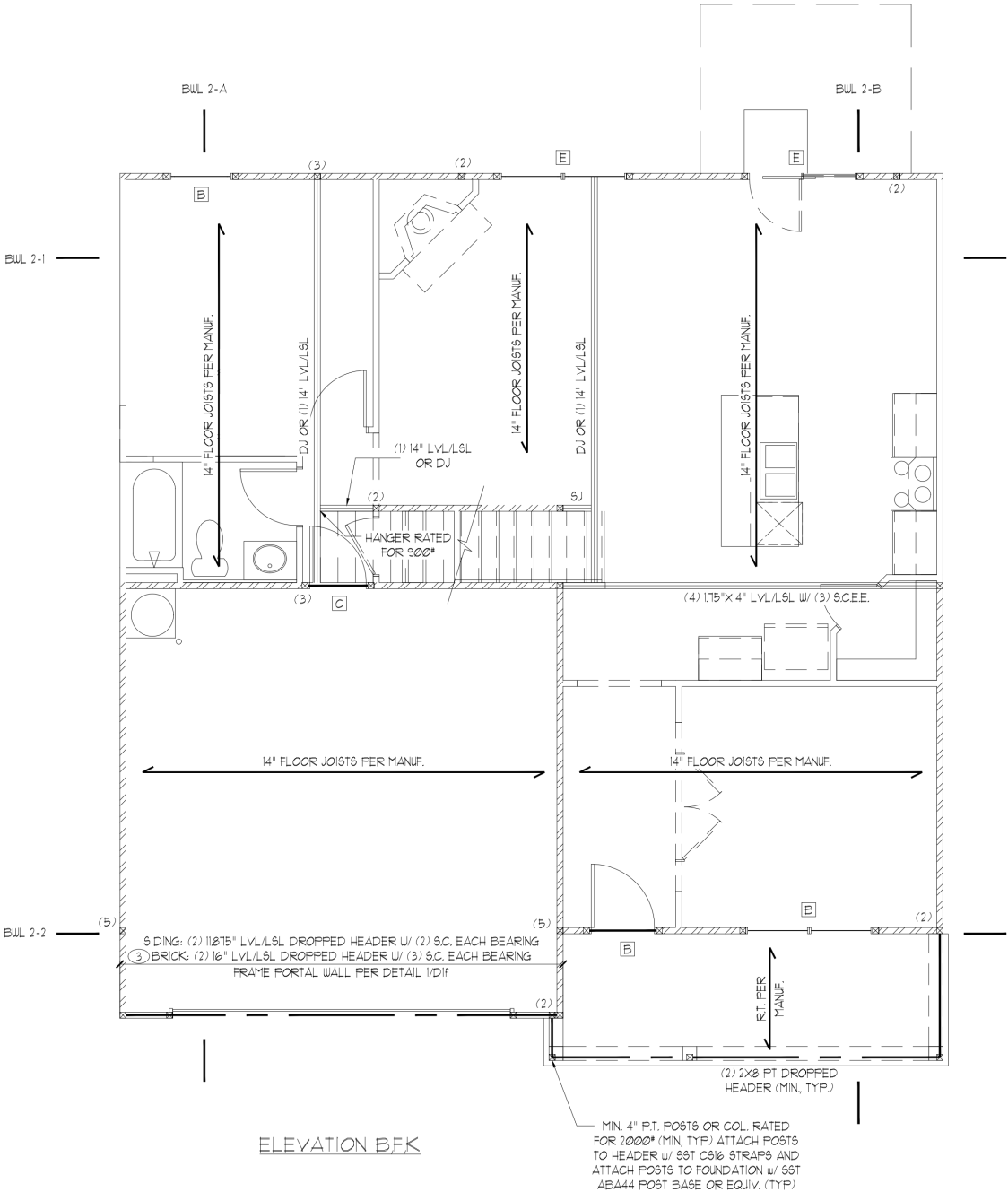
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY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

STRUCTURAL ANALYSIS BASED ON 2018 NCR.

FIRST FLOOR FRAMING PLAN

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

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 1-1	11.6	24.8
BWL 1-2	11.6	15.0
BWL 1-A	11.3	40.0
BWL 1-B	11.3	36.0



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) 3-1/4\" LVL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
H	(3) 2x10	(2)
I	(3) 2x12	(2)

NOTES:
1. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.
2. ALL HEADERS TO BE DROPPED (UNO.).
3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD COLUMNS LISTED ABOVE (UNO.).

KING STUD SCHEDULE	
MAXIMUM HEADER SPAN	MINIMUM KING STUDS E.E.
4'-0"	(1)
6'-0"	(2)
8'-0"	(2)
10'-0"	(3)
12'-0"	(3)
14'-0"	(3)
16'-0"	(4)
18'-0"	(4)

WALL STUD SCHEDULE (10 FT HEIGHT)				
STUD SIZE	STUD SPACING (O.C.)			
	ROOF ONLY	ROOF & 1 FLOOR	ROOF & 2 FLOORS	NON-LOAD BEARING
2x4	24"	16"	12"	24"
2x6	24"	24"	16"	24"

NOTES:
1. BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C.
2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX. OF 16" O.C.
3. TWO STORY WALLS SHALL BE FRAMED w/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED w/ HORIZ. BLOCKING @ 6'-0" O.C. VERTICALLY.

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" ROLLED OR EQUIV.	ALL ARCHED OPENINGS

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

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

- SHADED WALLS INDICATED LOAD BEARING WALLS
- NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.
- JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.
- NOTE:
--- -- DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.
- NOTE: MEMBERS NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDED THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.
- INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.8 & FIG. R602.10.7 OF THE 2018 NCR.
- NOTE: WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE CONTINUOUS WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCR.

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.
PF	WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.6.4	PER FIGURE R602.10.6.4
**OR EQUIVALENT PER TABLE R702.3.5				

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE WITH ALL LOCAL AND STATE AMENDMENTS.
- WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND MAXIMUM 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 TABLE R602.10.1
- 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 R602.10.1
- 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 12 FEET OF EACH END OF A BRACED WALL LINE.
- THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.
- MASONRY OR CONCRETE STEM WALLS w/ A LENGTH OF 48" OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 NCRC.
- BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4
- BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5
- CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10.4.6
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO)
- ABBREVIATIONS:

GB = GYPSUM BOARD
CS-XXX = CONT. SHEATHED
PF = PORTAL FRAME

WSP = WOOD STRUCTURAL PANEL
ENG = ENGINEERED SOLUTION
PF-ENG = ENG. PORTAL FRAME

GENERAL STRUCTURAL NOTES:

- CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AND STATE 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:
MICROLLAM (LVL): $F_b = 2600$ PSI, $F_v = 285$ PSI, $E = 19 \times 10^6$ PSI
PARALLAM (PSL): $F_b = 23000$ PSI, $F_v = 230$ PSI, $E = 125 \times 10^6$ PSI
- ALL WOOD MEMBERS SHALL BE #2 SYP UNLESS NOTED ON PLAN. ALL STUD COLUMNS AND JOISTS SHALL BE #2 SYP (UNO).
- ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 #2 SYP 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".
- CONTRACTOR TO PROVIDED LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- FLITCH BEAMS, 4-PLY LVLS AND 3-PLY SIDE LOADED LVLS SHALL BE BOLTED TOGETHER WITH 1/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1/D3f. 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, 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, DROPPED. (UNLESS NOTED OTHERWISE)

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON
COMPLETED/REVISED ON 4/15/21. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

STRUCTURAL MEMBERS ONLY

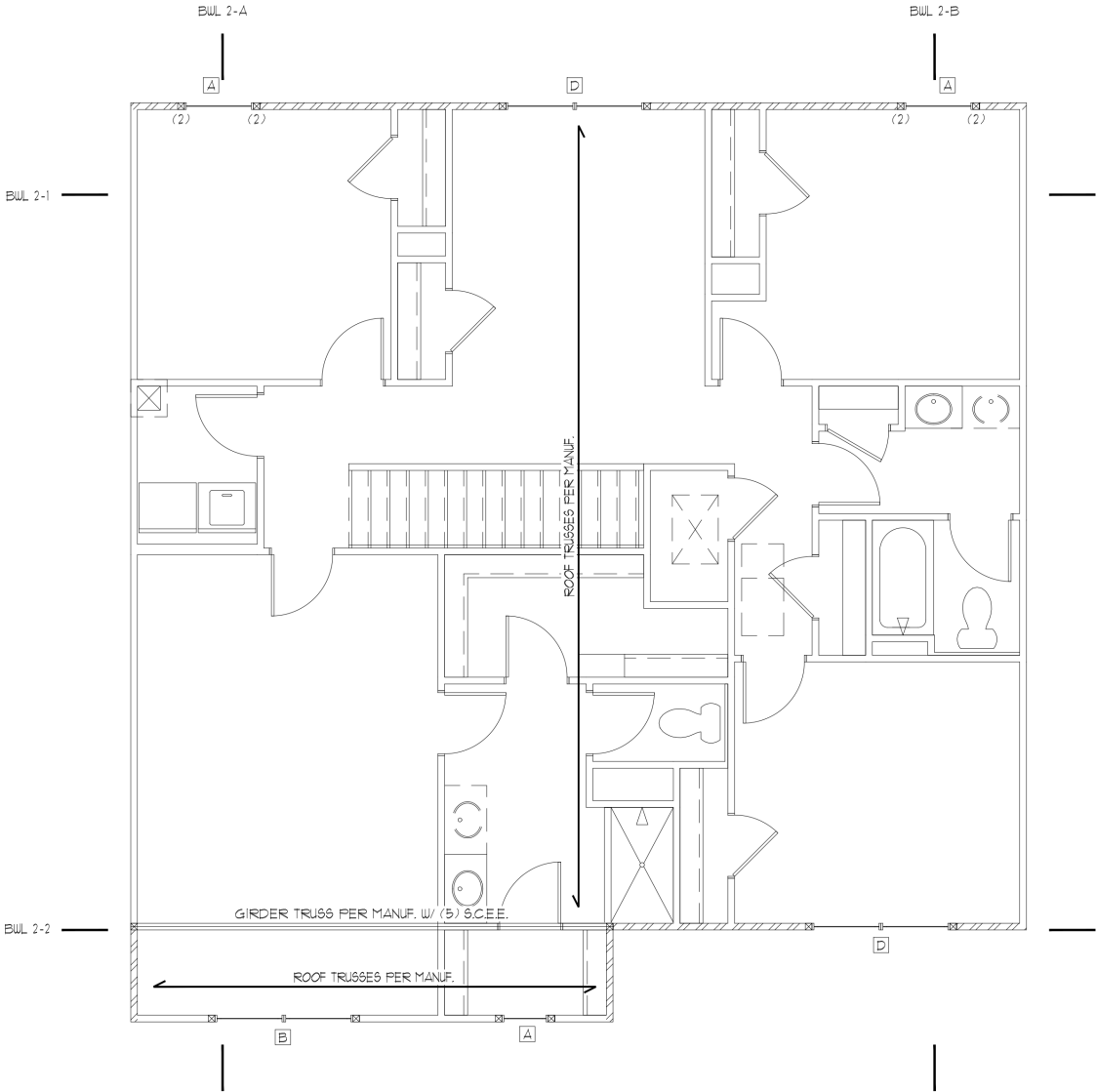
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY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

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

SECOND FLOOR FRAMING PLAN

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

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 2-1	6.0	21.0
BWL 2-2	6.0	25.0
BWL 2-A	5.8	40.0
BWL 2-B	5.8	36.0



ELEVATION B.F.K.

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) 3-1/4" LSL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
H	(3) 2x10	(2)
I	(3) 2x12	(2)

NOTES:
1. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.
2. ALL HEADERS TO BE DROPPED (UNO).
3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD COLUMNS LISTED ABOVE (UNO).

KING STUD SCHEDULE	
MAXIMUM HEADER SPAN	MINIMUM KING STUDS E.E.
4'-0"	(1)
6'-0"	(2)
8'-0"	(2)
10'-0"	(3)
12'-0"	(3)
14'-0"	(3)
16'-0"	(4)
18'-0"	(4)

WALL STUD SCHEDULE (10 FT HEIGHT)				
STUD SIZE	STUD SPACING (O.C.)			
	ROOF ONLY	ROOF & 1 FLOOR	ROOF & 2 FLOORS	NON-LOAD BEARING
2x4	24"	16"	12"	24"
2x6	24"	24"	16"	24"

NOTES:
1. BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C.
2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX. OF 16" O.C.
3. TWO STORY WALLS SHALL BE FRAMED w/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED w/ HORIZ. BLOCKING @ 6'-0" O.C. VERTICALLY.

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" 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: (UNO)

- SHADED WALLS INDICATED LOAD BEARING WALLS
- JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.
- NOTE: MEMBERS NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDED THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.
- INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.8 & FIG. R602.10.1 OF THE 2018 NCRC.
- NOTE: WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE CONTINUOUS WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCRC.



DR Horton, Inc.
8801 Arrowridge Blvd.
Charlotte, NC 28113

Hydrex LH
Second Floor Framing Plan



DATE: 1/23/2021
SCALE: 22x34 1/4"=1'-0" 18"=1'-0"
PROJECT # 508-10811
DRAWN BY: JCF
CHECKED BY: CTB

22869 5/5/19

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

S4.1

TRUSS UPLIFT CONNECTOR SCHEDULE			
MAX. UPLIFT	ROOF TO WALL	FLOOR TO FLOOR	FLOOR TO FND
600 LBS	H2.5A	PER WALL SHEATHING & FASTENERS	
1200 LBS	(2) H2.5A	C916 (END ± 11")	DTT2Z
1450 LBS	HT520	C916 (END ± 11")	DTT2Z
2000 LBS	(2) HT520	(2) C916 (END ± 11")	DTT2Z
2900 LBS	(2) HT520	(2) C916 (END ± 11")	HTT4
3685 LBS	LG13-SD515	M9TC52	HTT4
1. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS. 2. UPLIFT VALUES LISTED ARE FOR 51P #2 GRADE MEMBERS. 3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS MANUFACTURER OVERRIDE THOSE LISTED ABOVE. 4. CONTACT SUMMIT FOR REQUIRED CONNECTORS WHEN LOADS EXCEED THOSE LISTED ABOVE.			

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

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

REFER TO DETAIL 5/D3F FOR EYEBROW RETURN OR SHED ROOF FRAMING REQUIREMENTS. (TYP FOR ROOFS PROTRUDING MAXIMUM 24" FROM STRUCTURE)

NOTE: TRUSS UPLIFT LOADS SHALL BE DETERMINED PER TRUSS MANUFACTURER IN ACCORDANCE WITH SECTION R602.11.11. WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCRC. REFER TO BRACED WALL PLANS FOR SHEATHING AND FASTENER REQUIREMENTS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR. HORTON. COMPLETED/REVISED ON 4/15/21. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

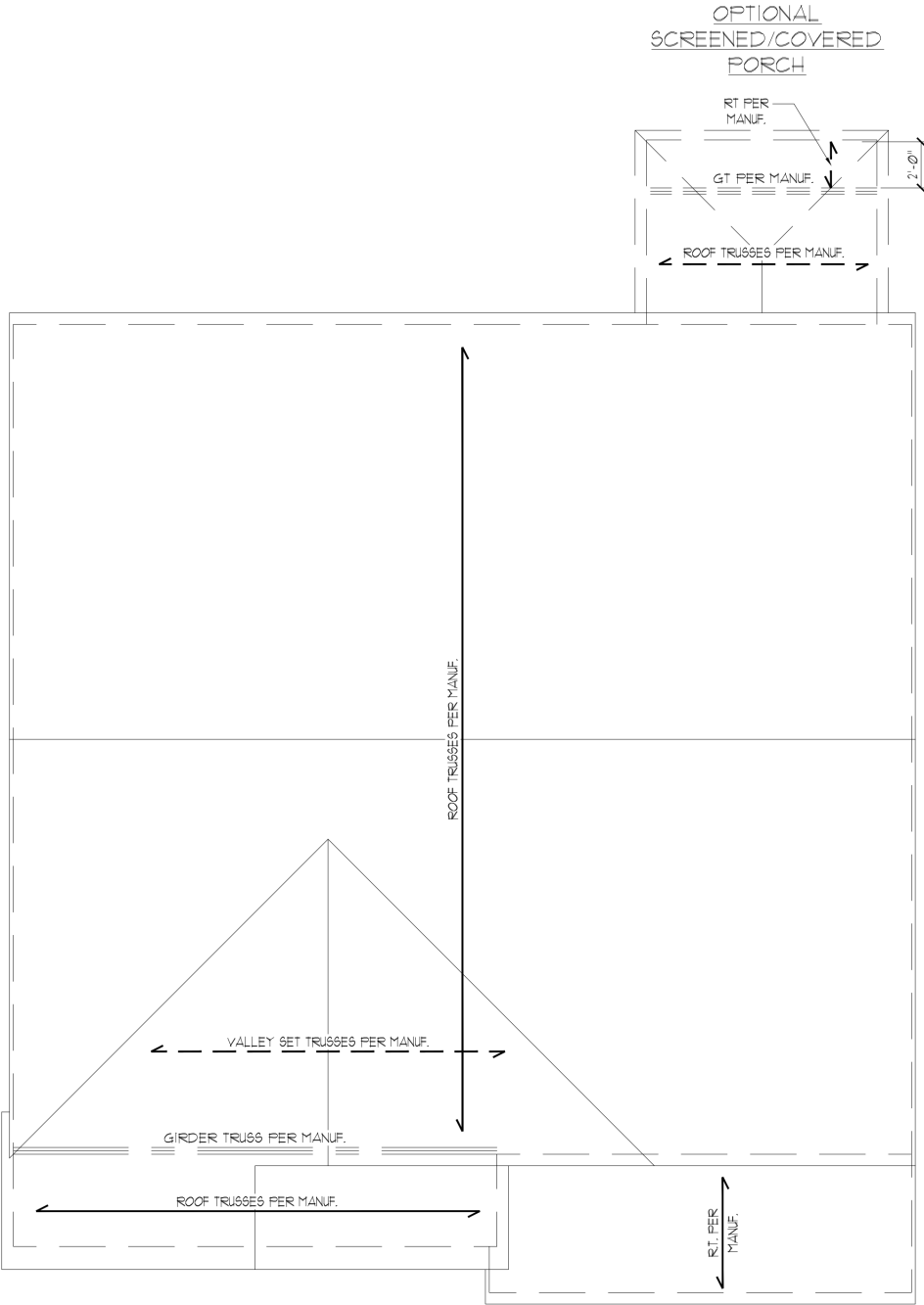
STRUCTURAL MEMBERS ONLY

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, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

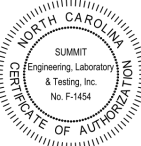
STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

ROOF FRAMING PLAN

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



ELEVATION BFK



DR. Horton, Inc.
8801 Arrowridge Blvd.
Charlotte, NC 28115

Horton, L.H.
Roof Framing Plan



STRUCTURAL MEMBERS ONLY

DATE: 10/23/2021
SCALE: 22x34 1/4"=1'-0"
16/1 1/8"=1'-0"
PROJECT # 508-10811
DRAWN BY: JCF
CHECKED BY: CTB

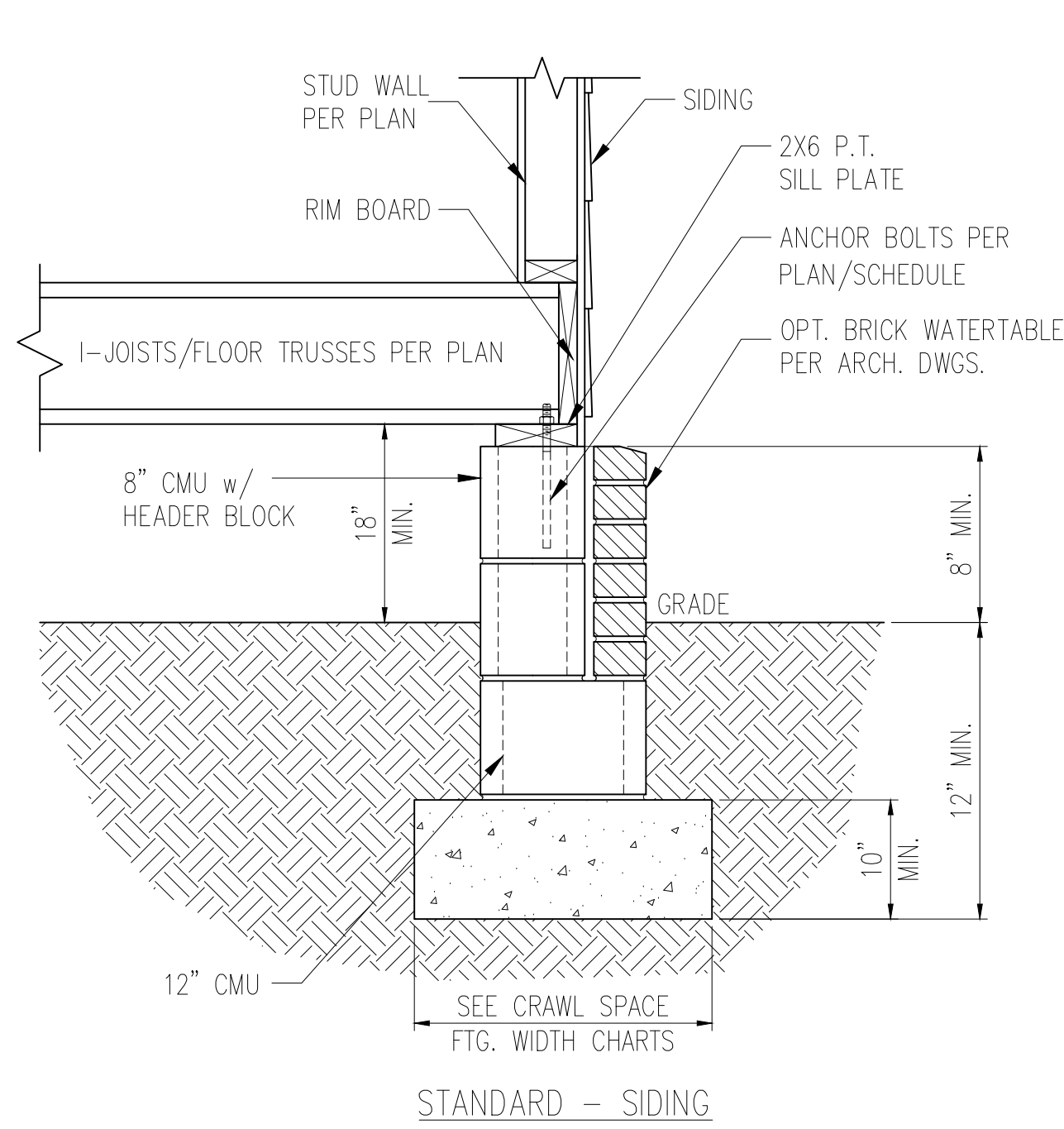
22869 5/5/19

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

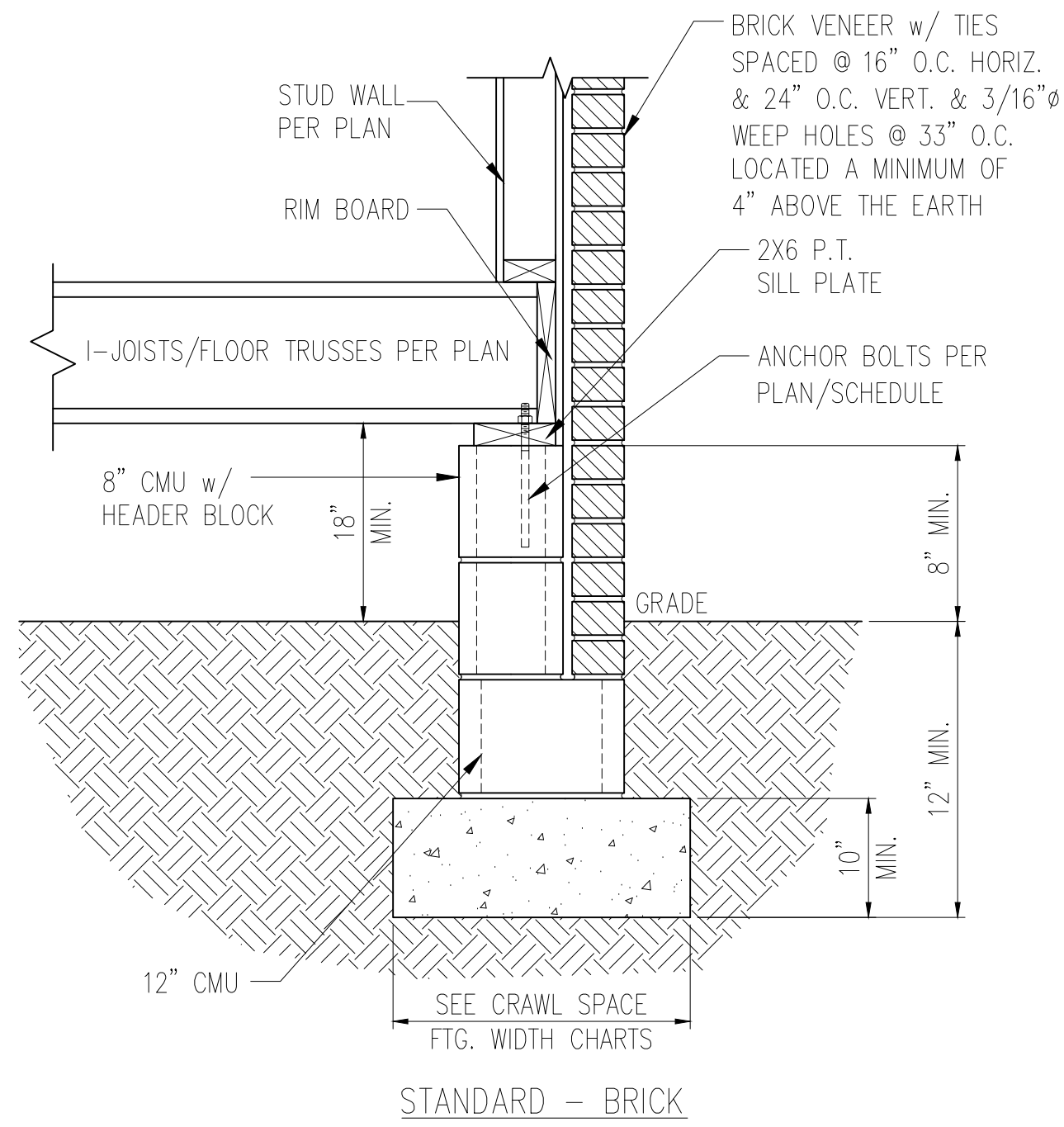
SHEET

95.1

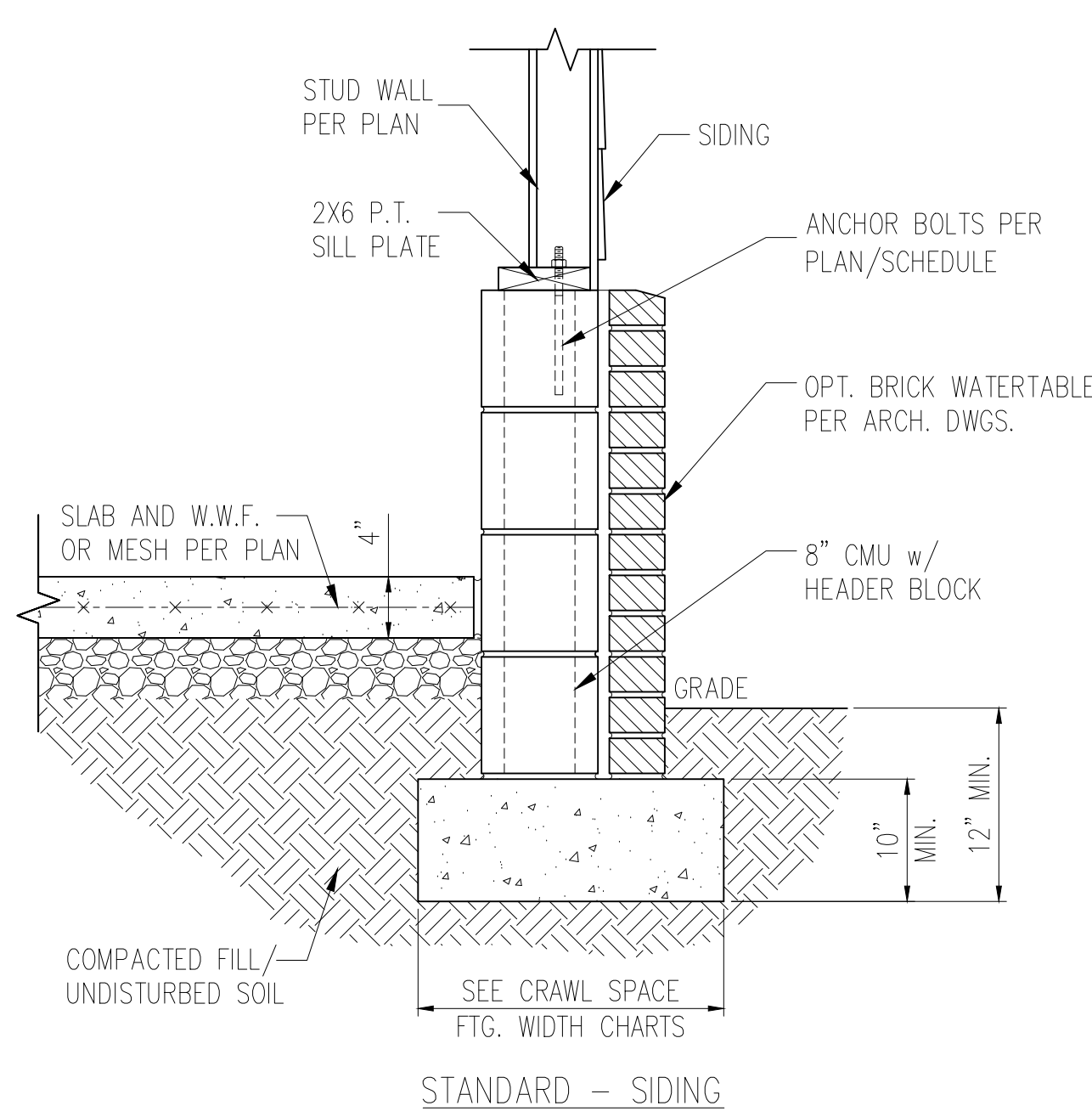




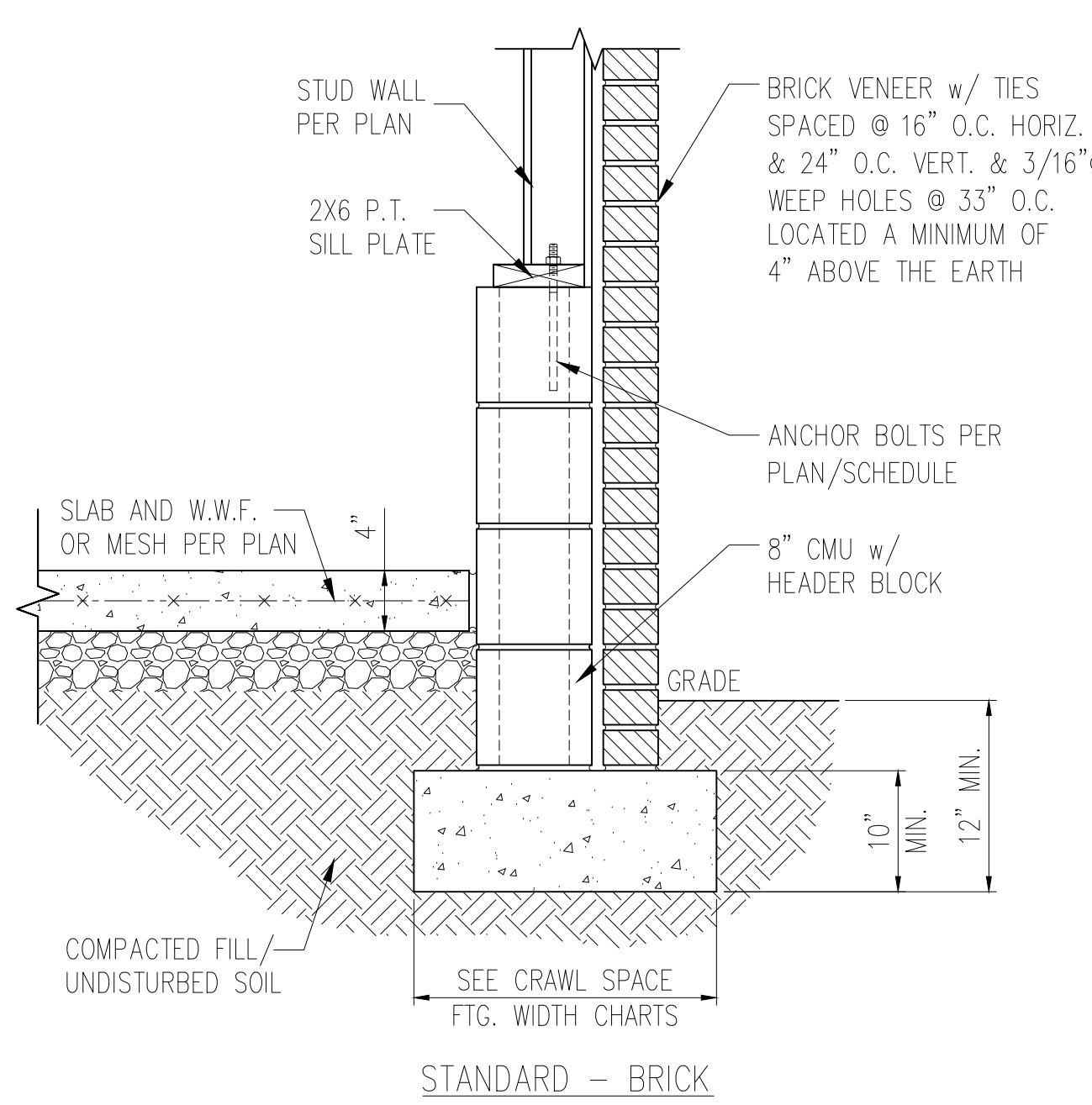
STANDARD – SIDING



STANDARD – BRICK



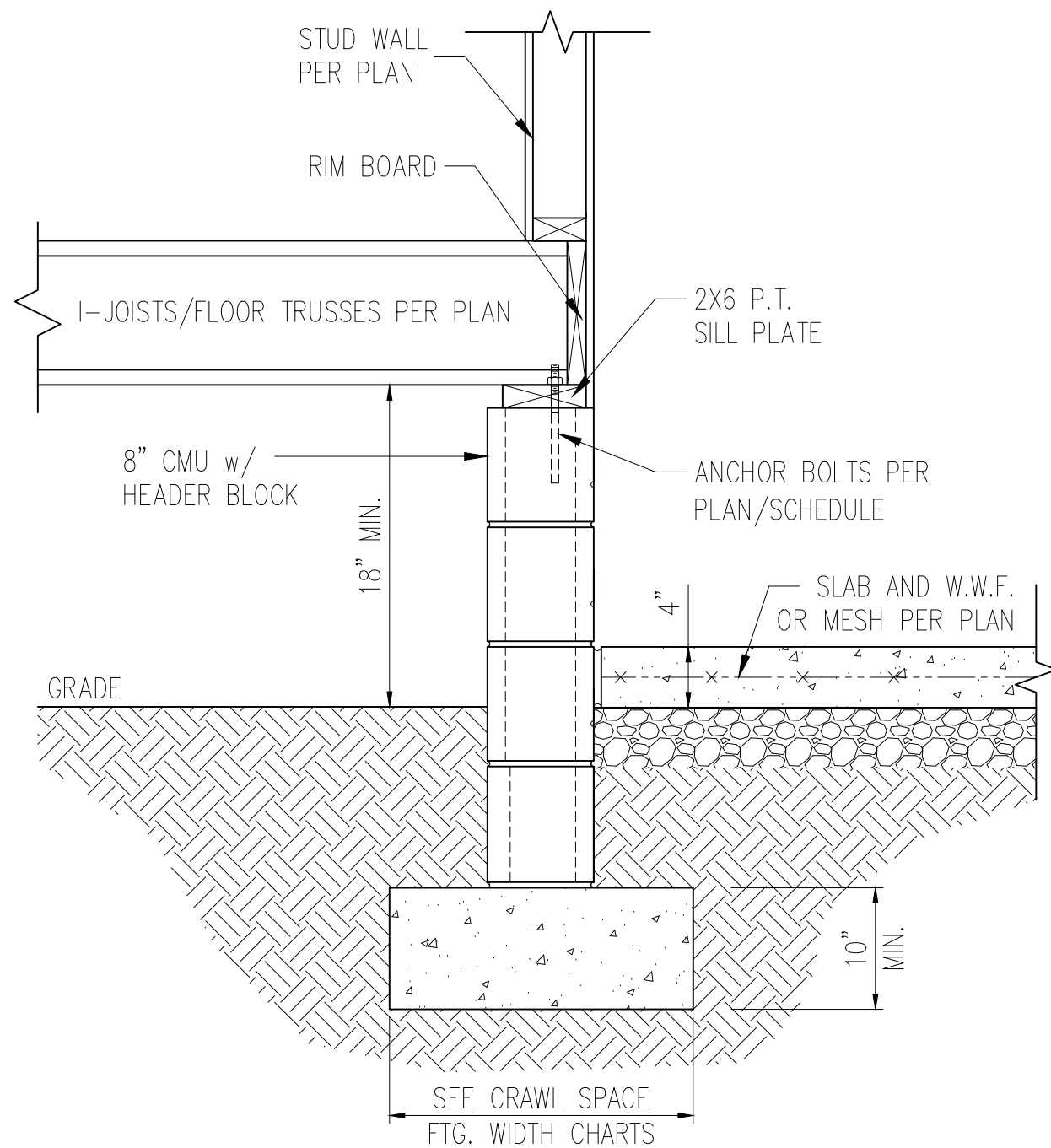
STANDARD – SIDING



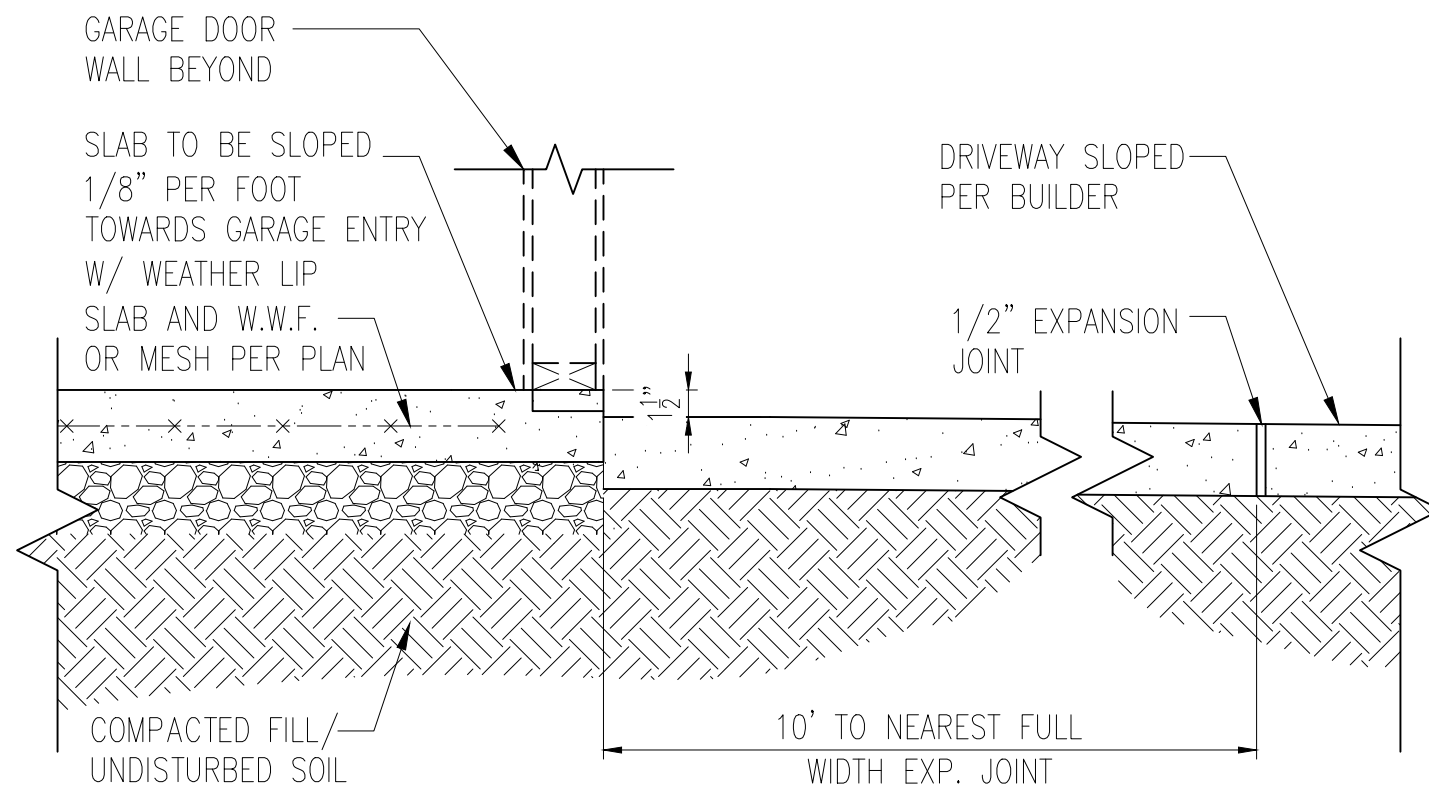
STANDARD – BRICK

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

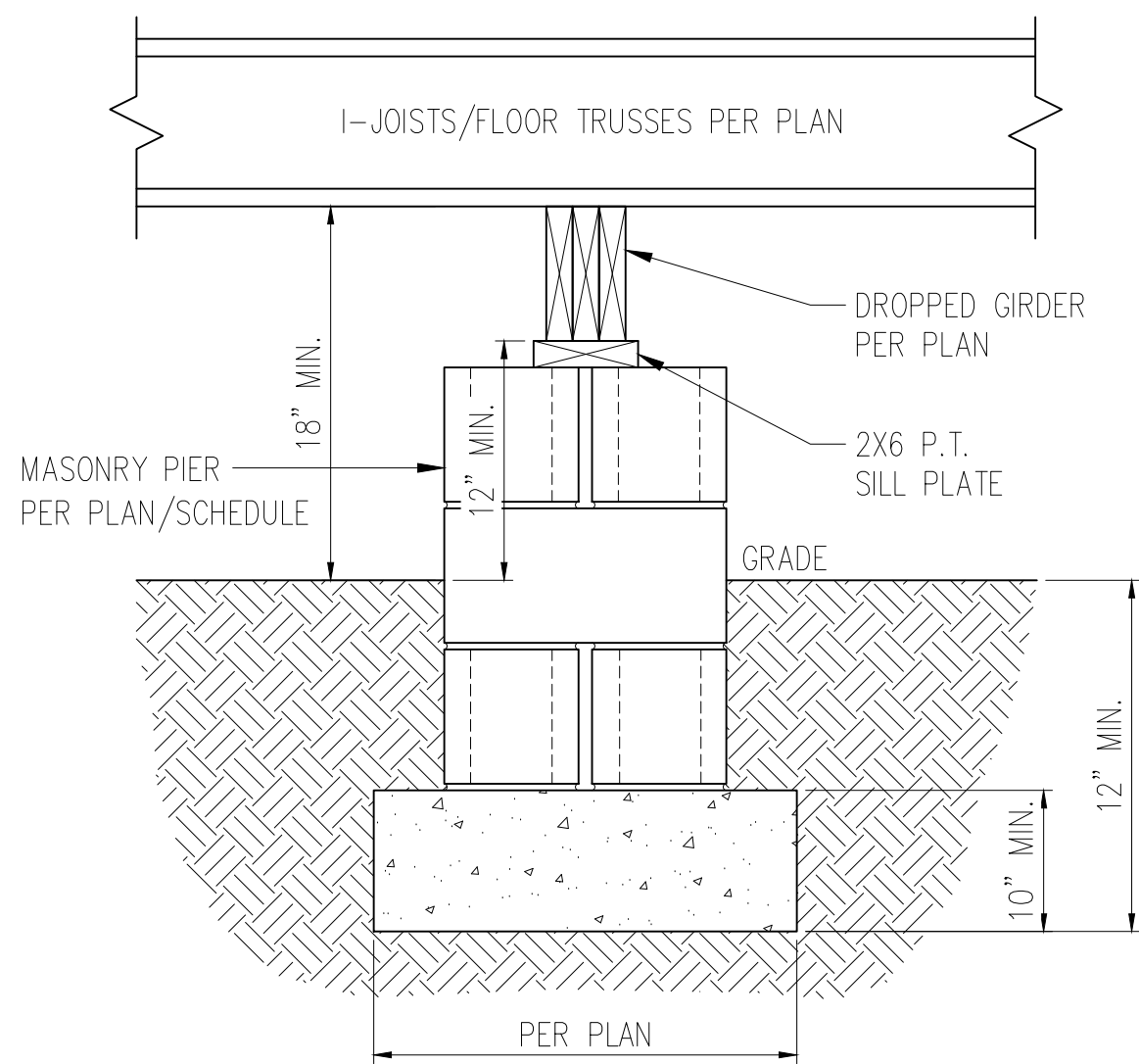
2 TYP. GARAGE CURB DETAIL
D1c N.T.S.



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			

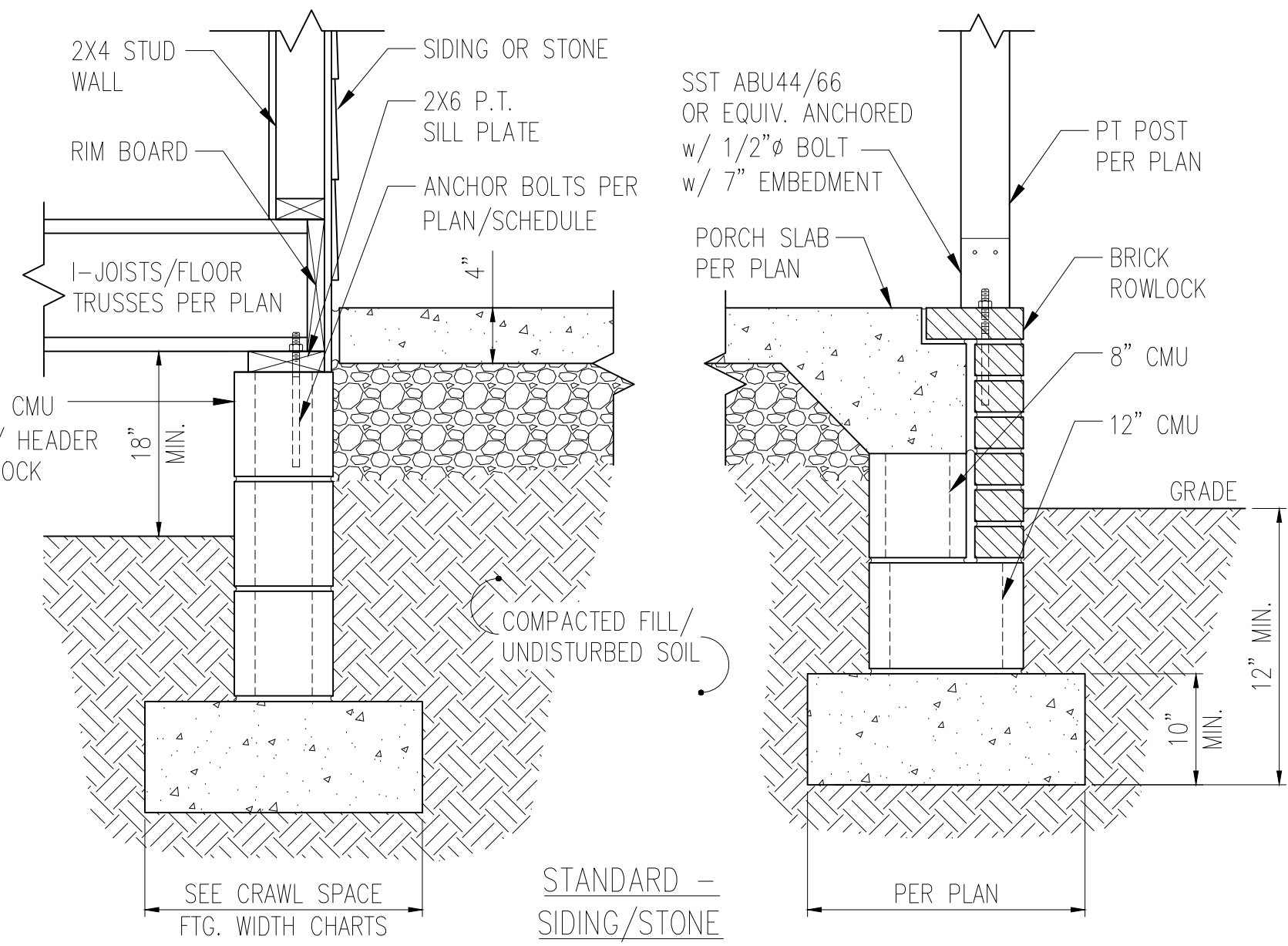
WALL ANCHOR SCHEDULE

TYPE OF ANCHOR	MIN. CONC. EMBEDMENT	SPACING	INTERIOR WALL	EXTERIOR WALL
1/2"Ø A307 BOLTS w/ STD. 90° BEND	7"	6'-0"	YES	YES
SST – MAS	4"	5'-0"	NO	YES
SIMPSON TITEN HD 1/2"Ø – 8"	6-1/2"	6'-0"	YES	YES
1/2"Ø HILTI THREADED ROD w/ HIT HY150 ADHESIVE	7"	6'-0"	YES	YES
1/2"Ø HILTI KWIK BOLT, SST WEDGE-ALL, OR EQUIVALENT WEDGE ANCHORE	7"	6'-0"	YES	YES –2

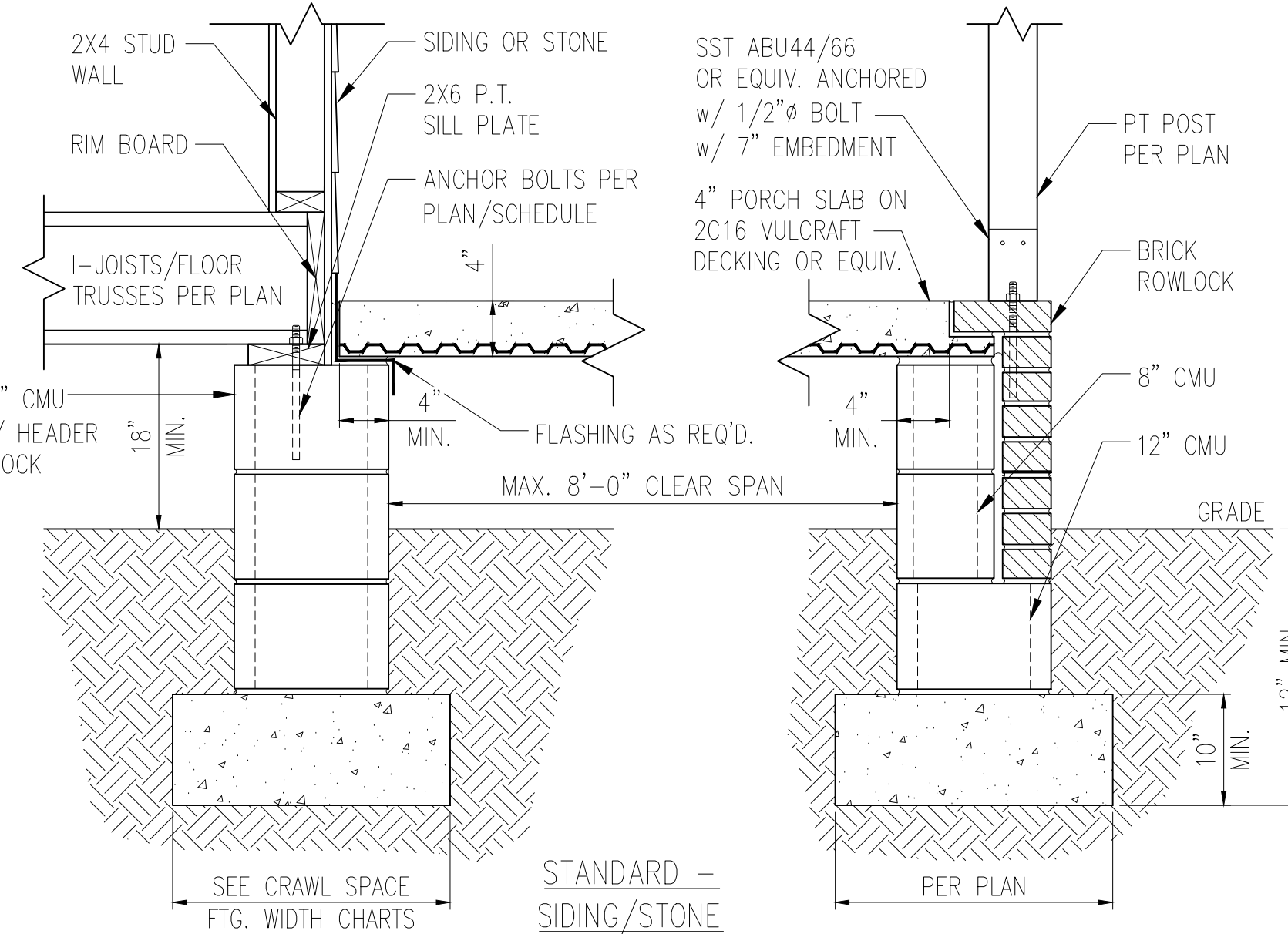
NOTE: 1. INSTALL ALL ANCHORS 12" MAX. FROM ALL BOTTOM PLATE ENDS AND JOINTS.
2. EXPANSION ANCHORS MAY BE INSTALLED ONLY AS ALLOWED PER MANUFACTURE SPECIFICATIONS.

NOTES:

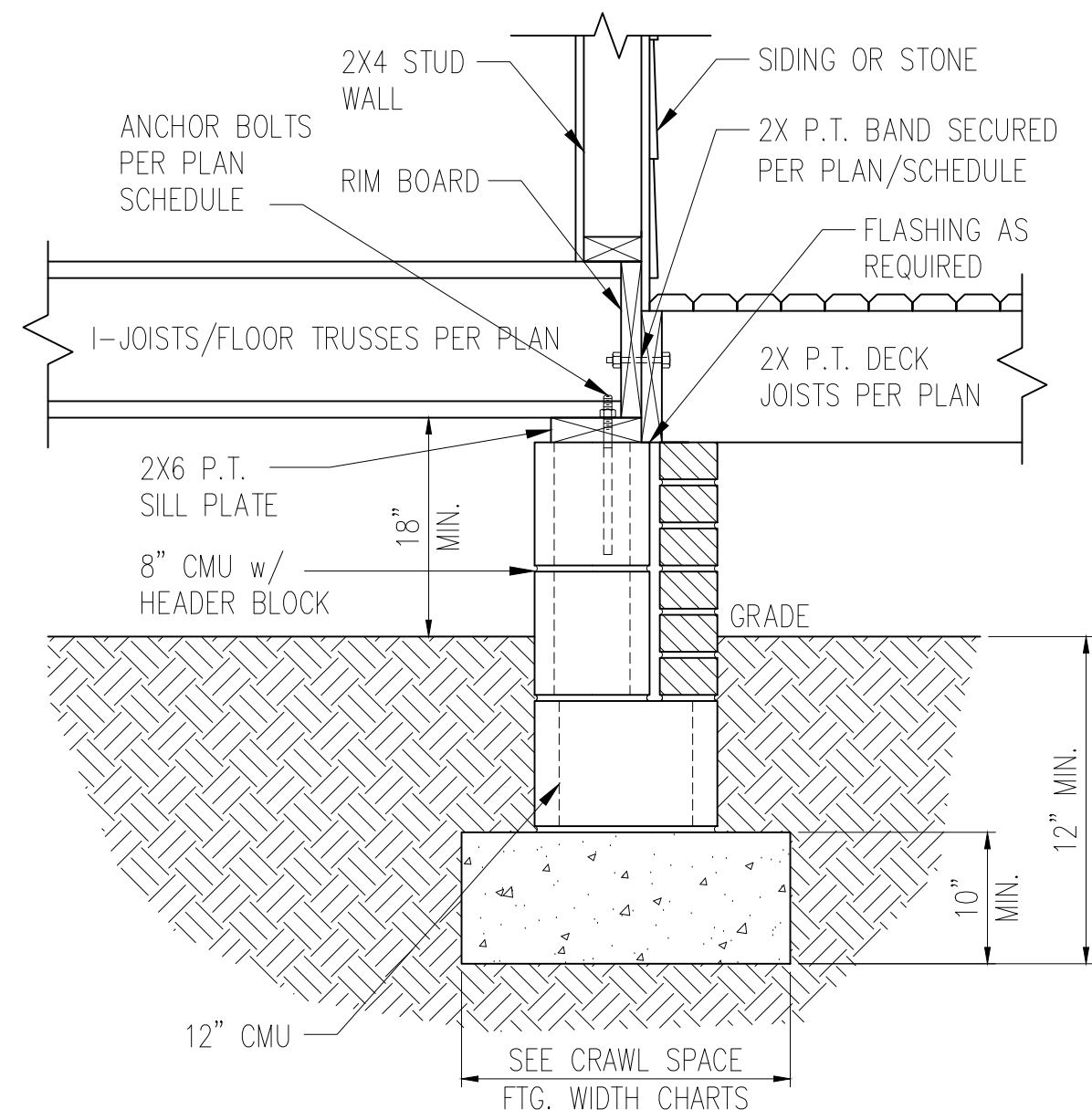
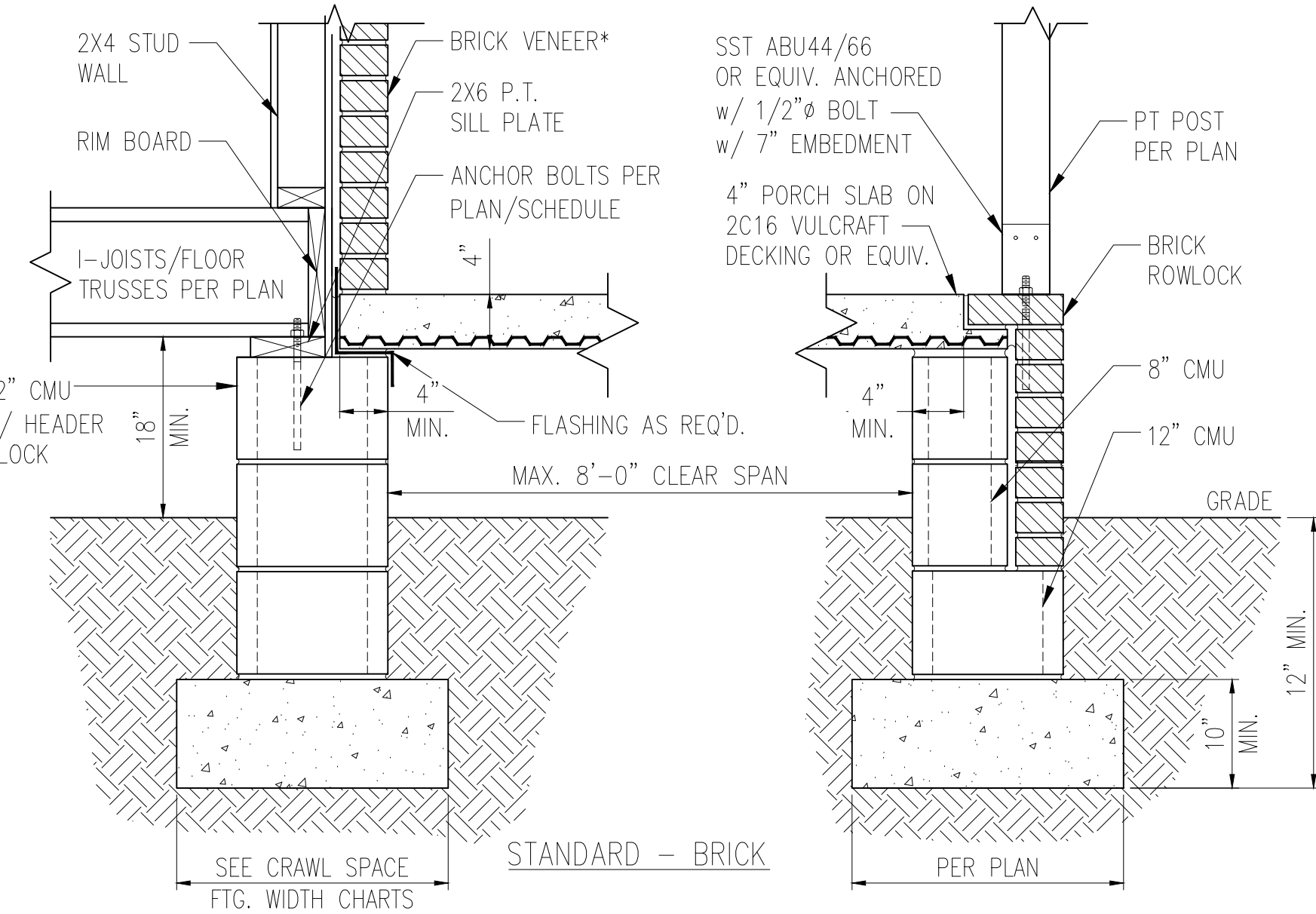
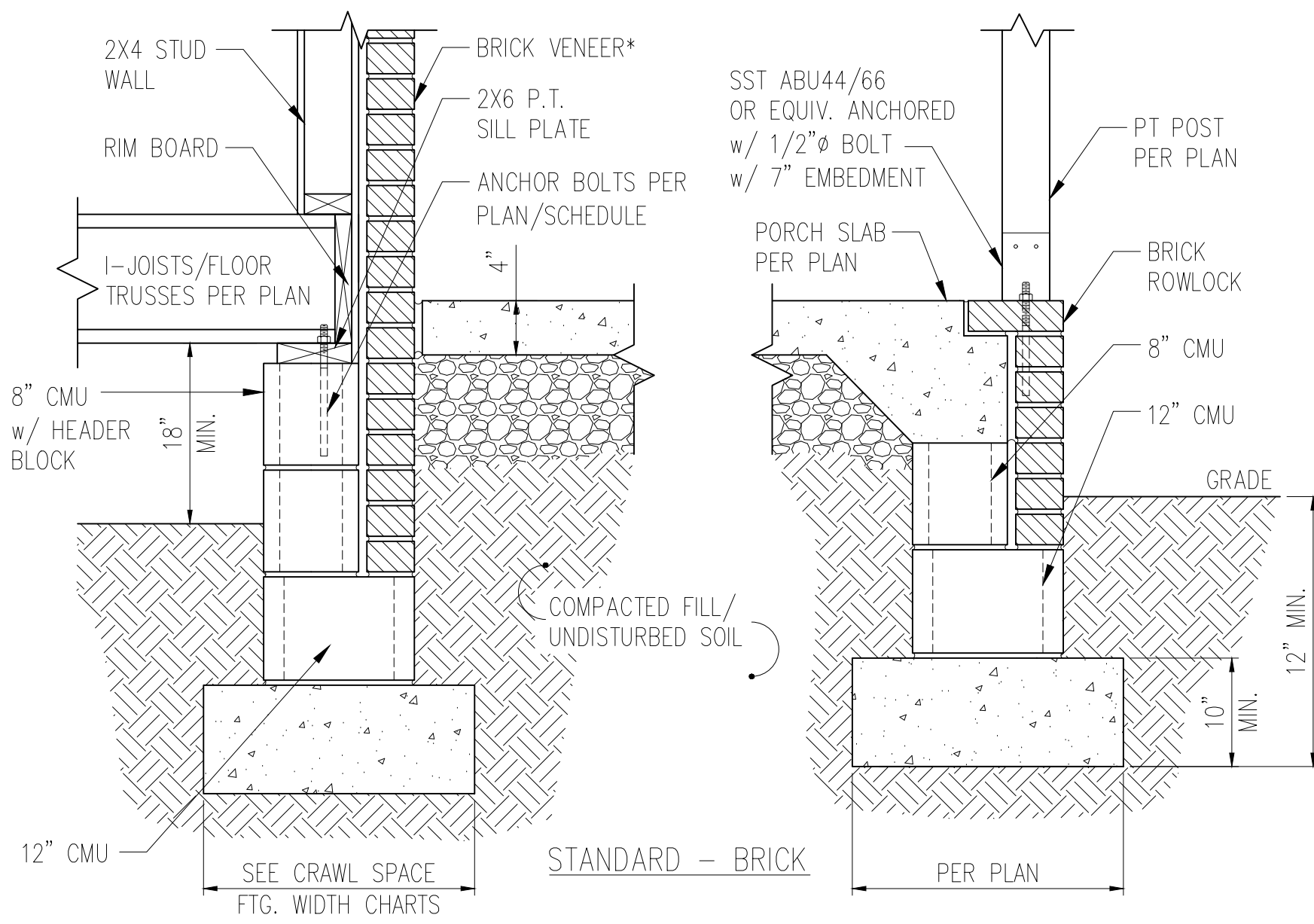
- REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
- PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
- SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
- REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, 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



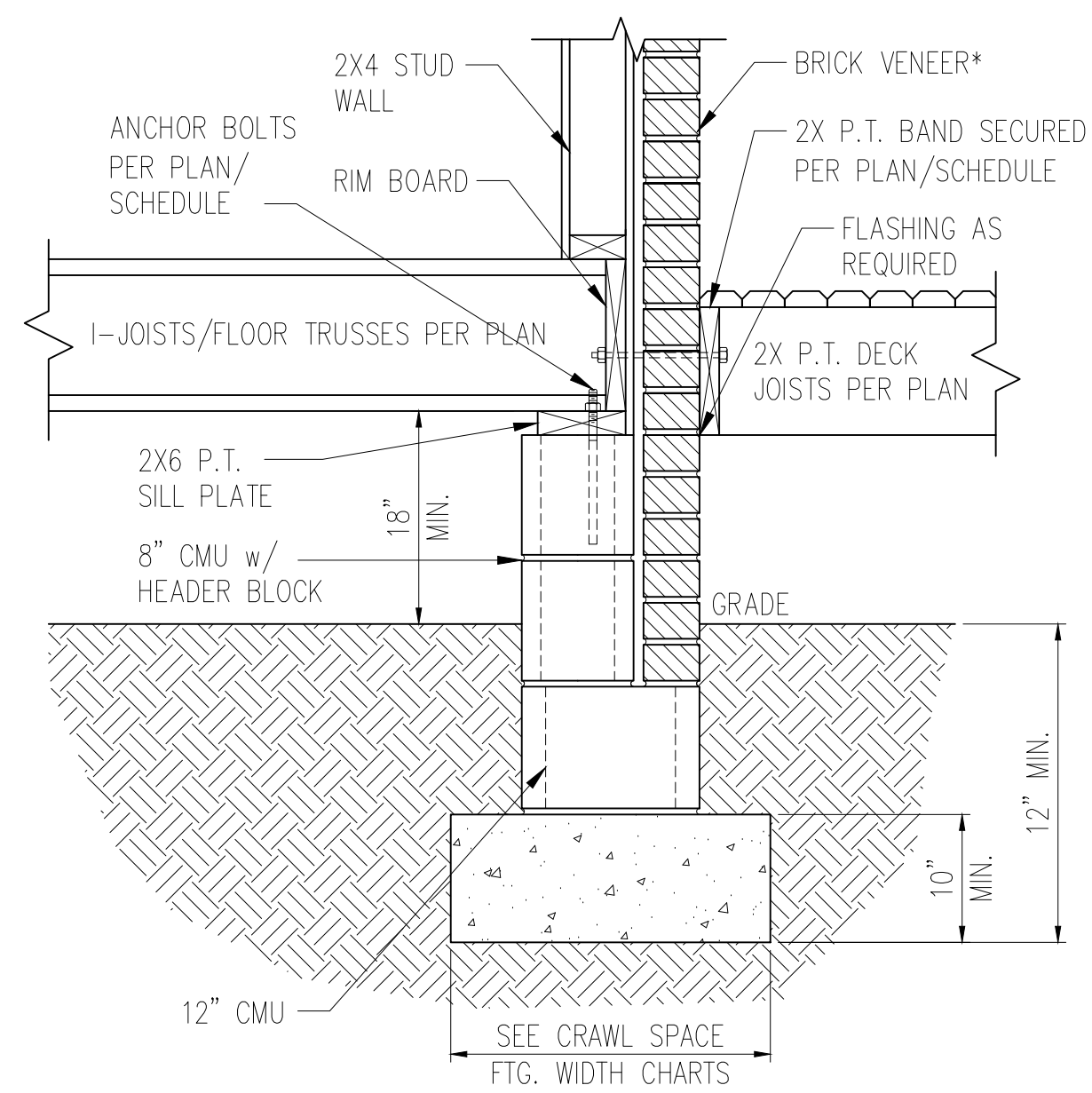
1
D2c TYP. FRONT PORCH DETAIL
N.T.S.



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



2
D2c DECK ATTACHMENT DETAIL
N.T.S.



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

FASTENERS	MAX. 8'-0" JOIST SPAN	MAX. 16'-0" JOIST SPAN
5/8" GALV. BOLTS w/ NUT & WASHER ^b	(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"

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.

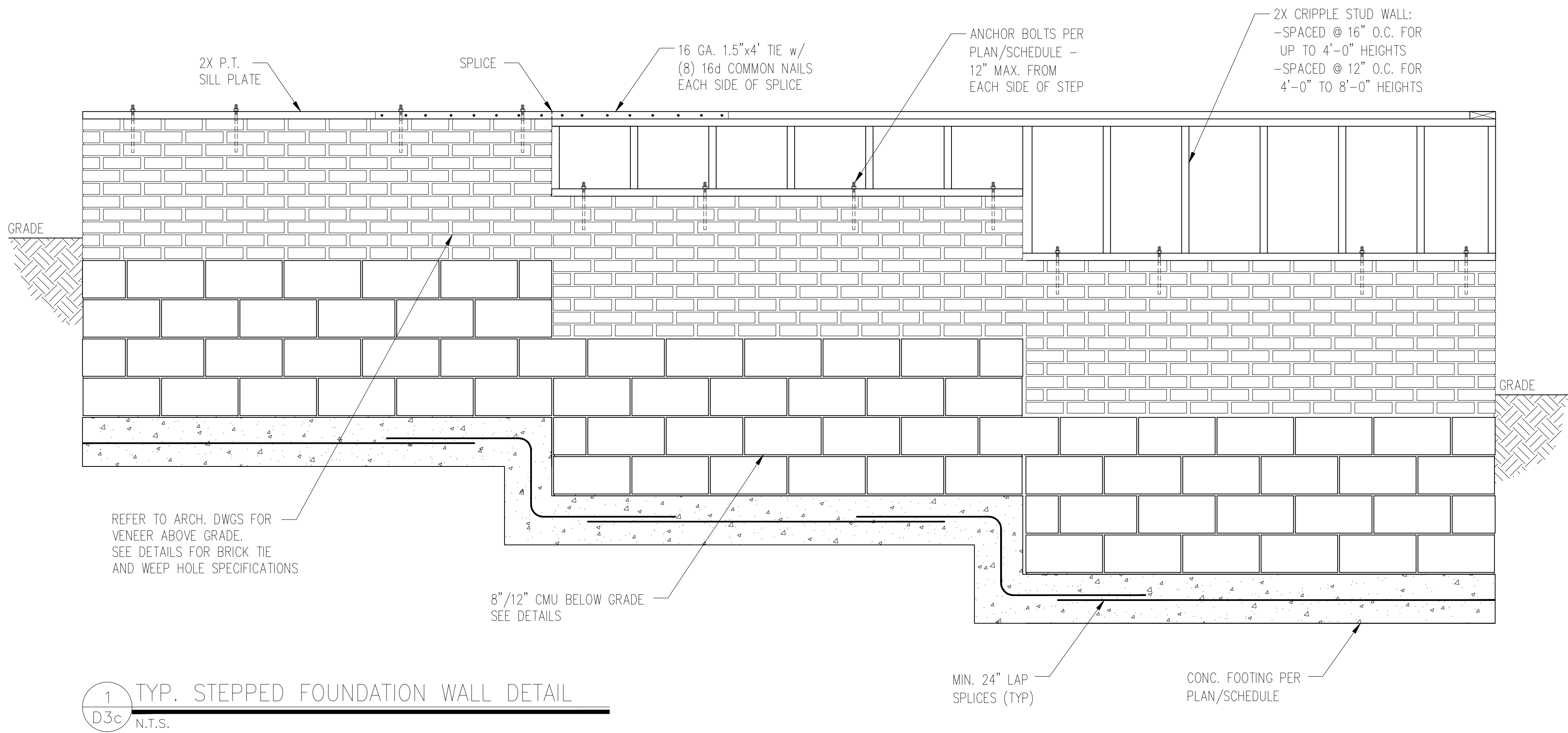
- a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED.
b. MINIMUM EDGE DISTANCE FOR BOLTS IS 2 1/2".

# 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:
- 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

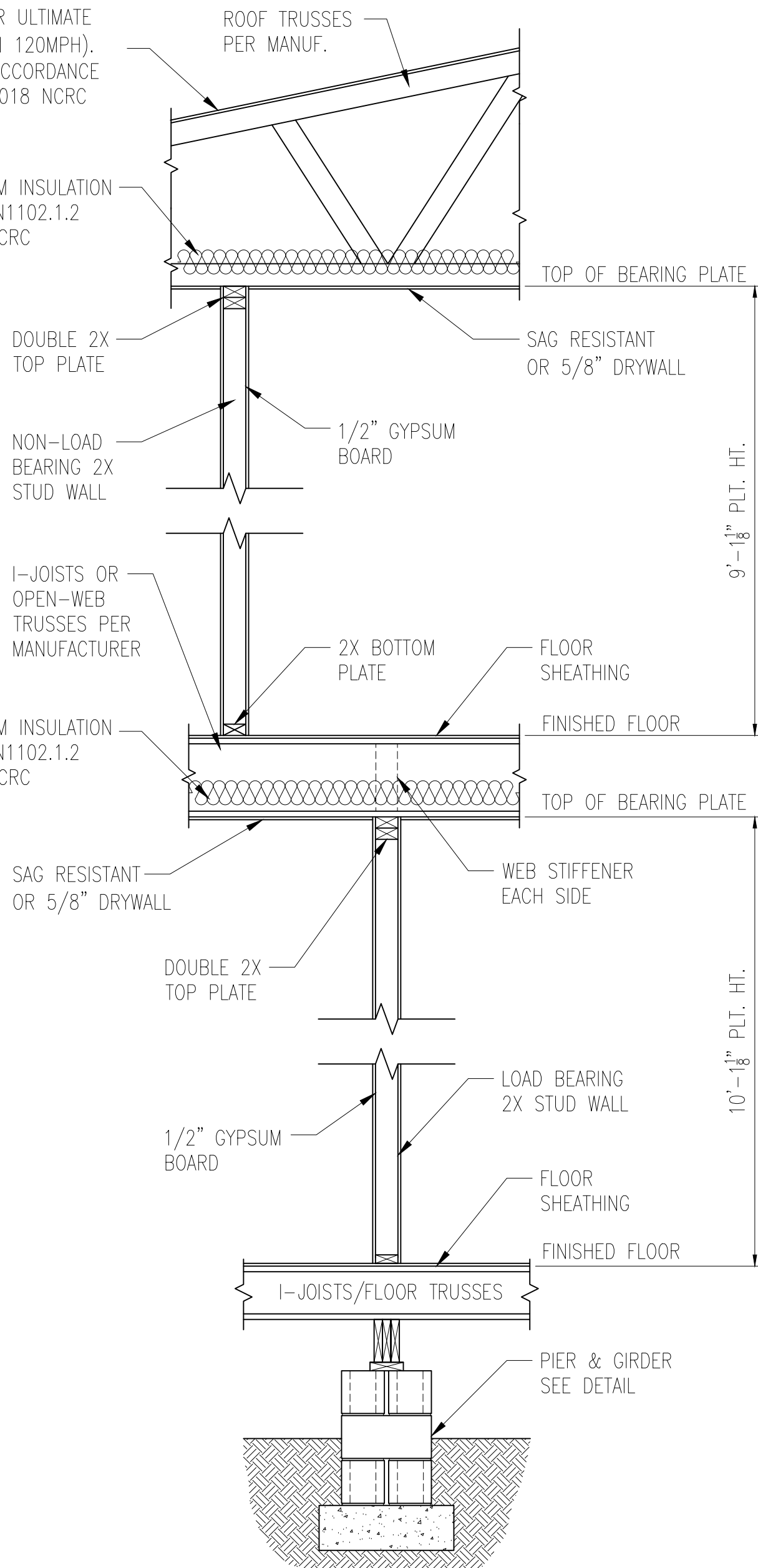


1 TYP. STEPPED FOUNDATION WALL DETAIL
D3c N.T.S.

- 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 NCRC

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

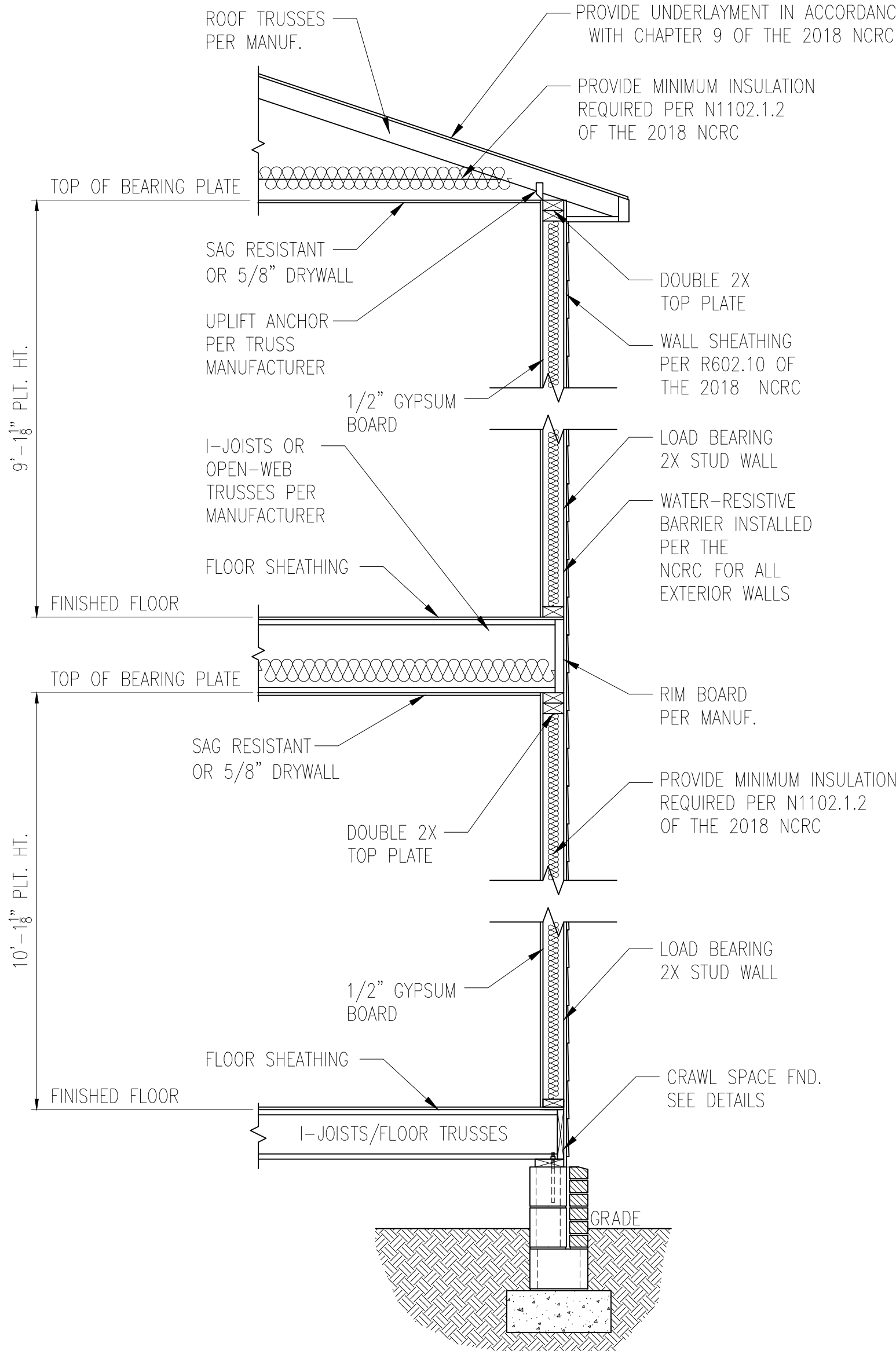
PROVIDE MINIMUM INSULATION
REQUIRED PER N1102.1.2
OF THE 2018 NCRC



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

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

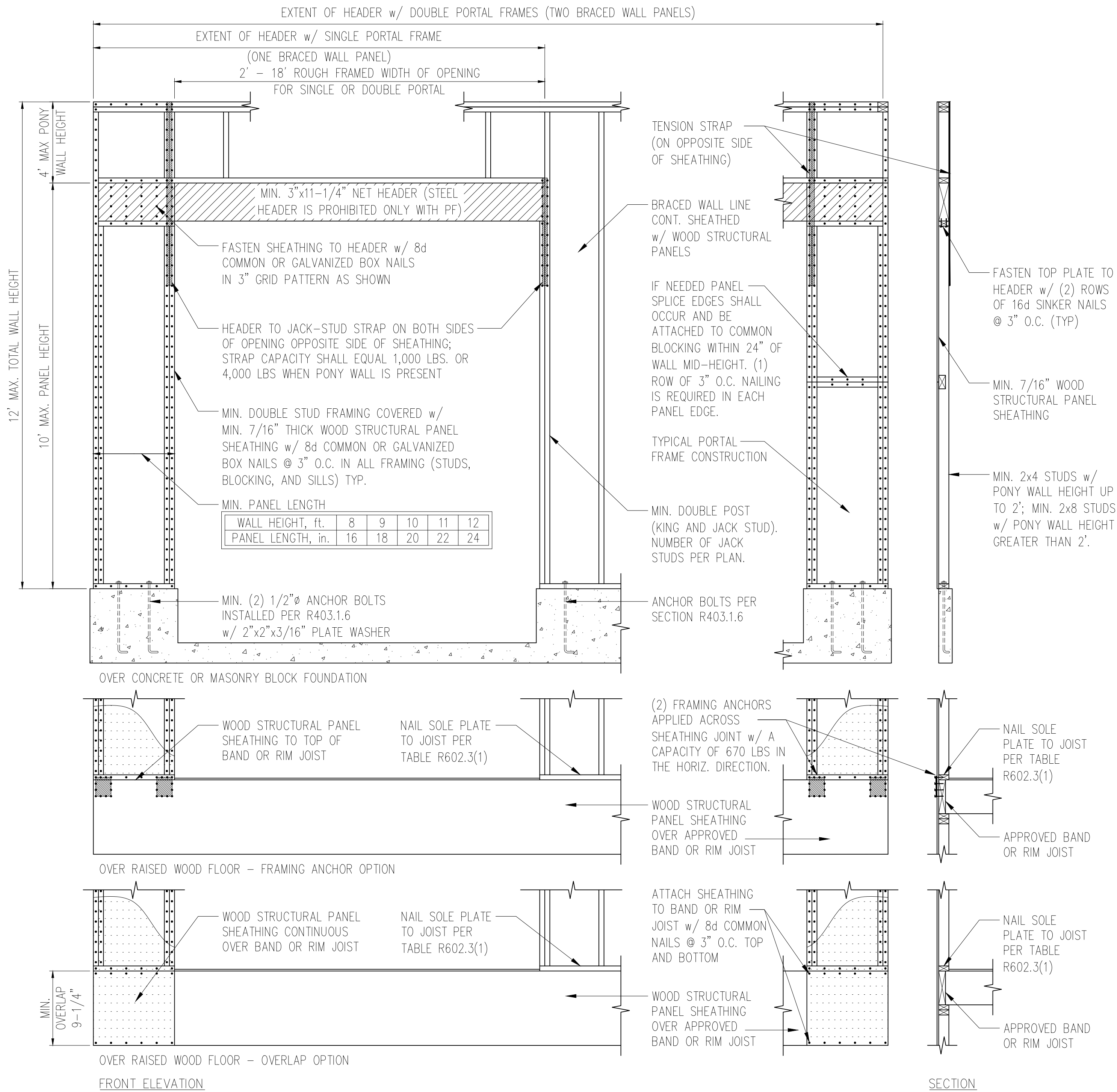
PROVIDE MINIMUM INSULATION
REQUIRED PER N1102.1.2
OF THE 2018 NCRC



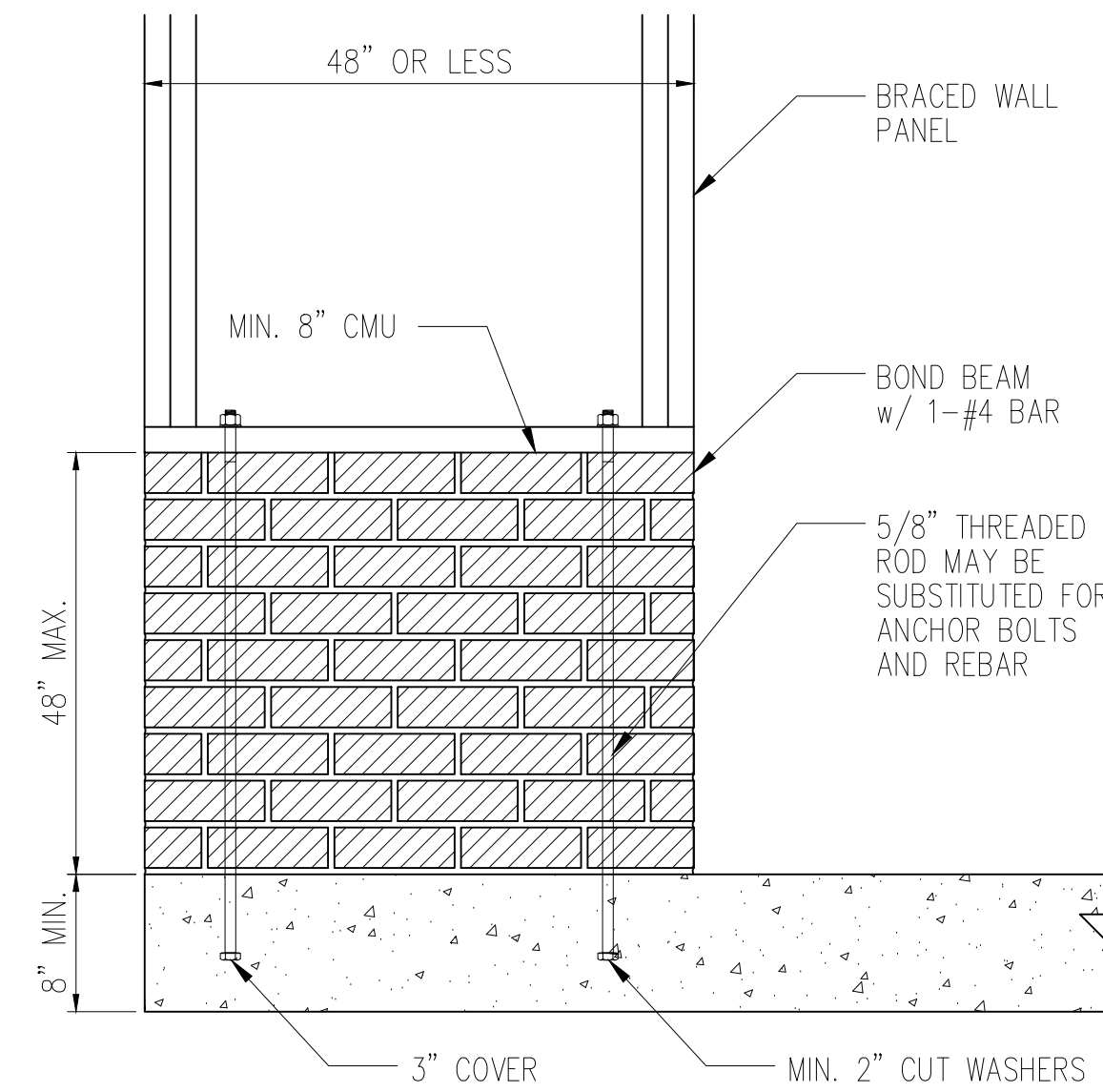
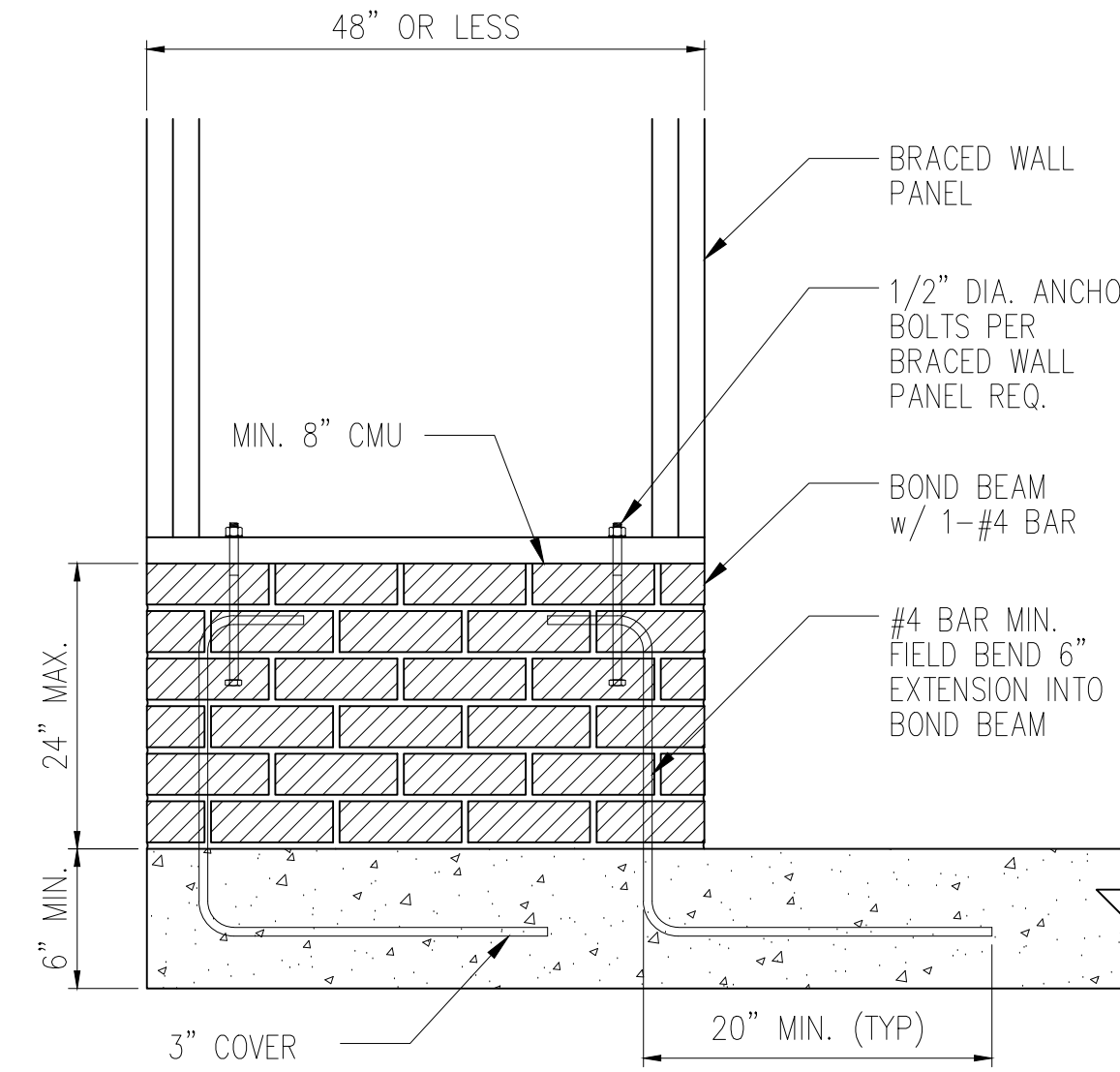
2 TYP. EXTERIOR LOAD BEARING WALL SECTION
D4c 3/4" = 1'-0"
-SIMILAR w/ BRICK AND STONE
-BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT.
-MIN. 3/16"Ø WEEP HOLES @ 33" O.C.

NOTES:

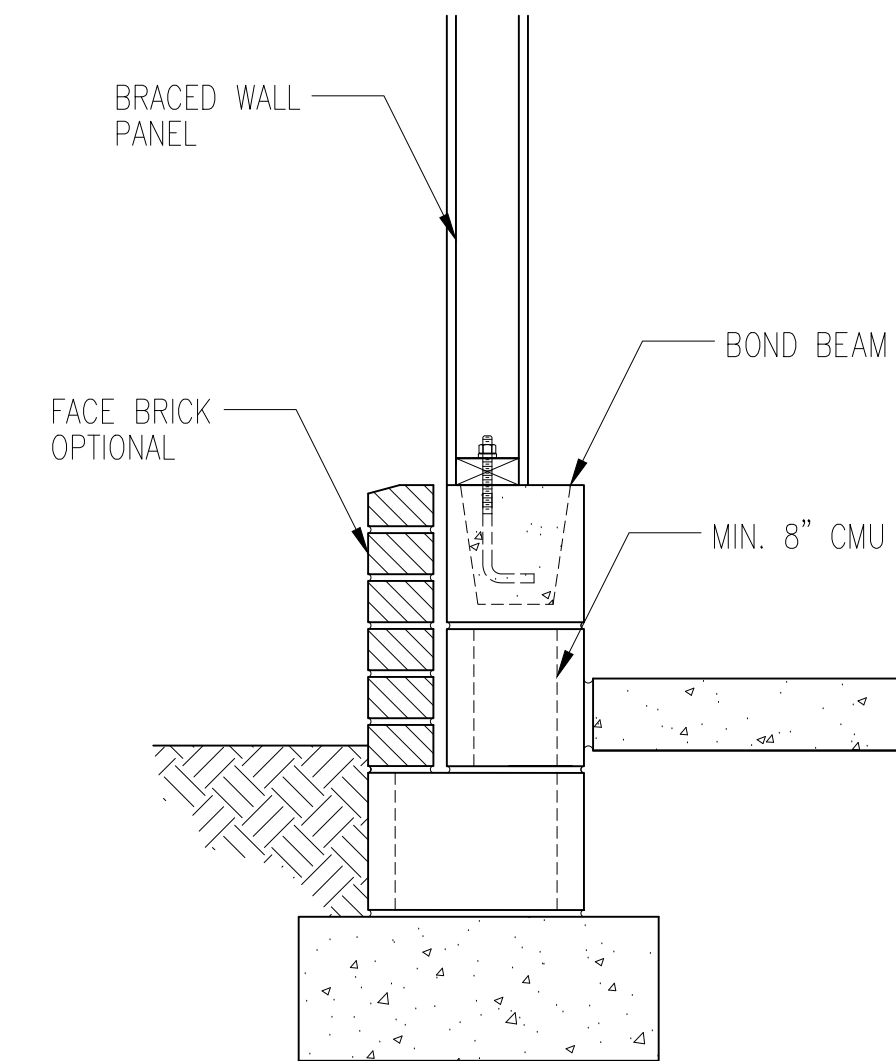
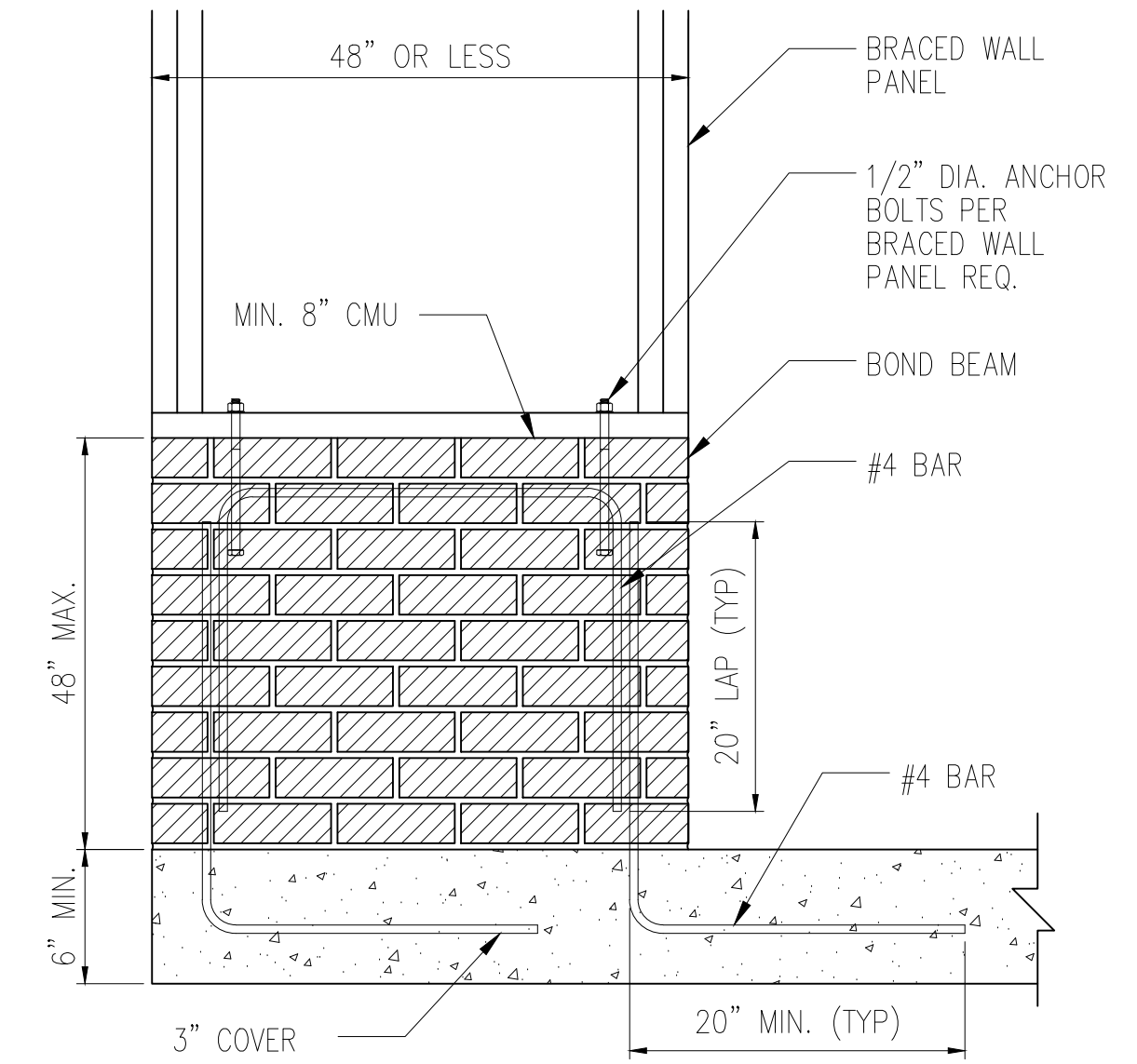
1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
2. PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
3. SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, 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 NCRC



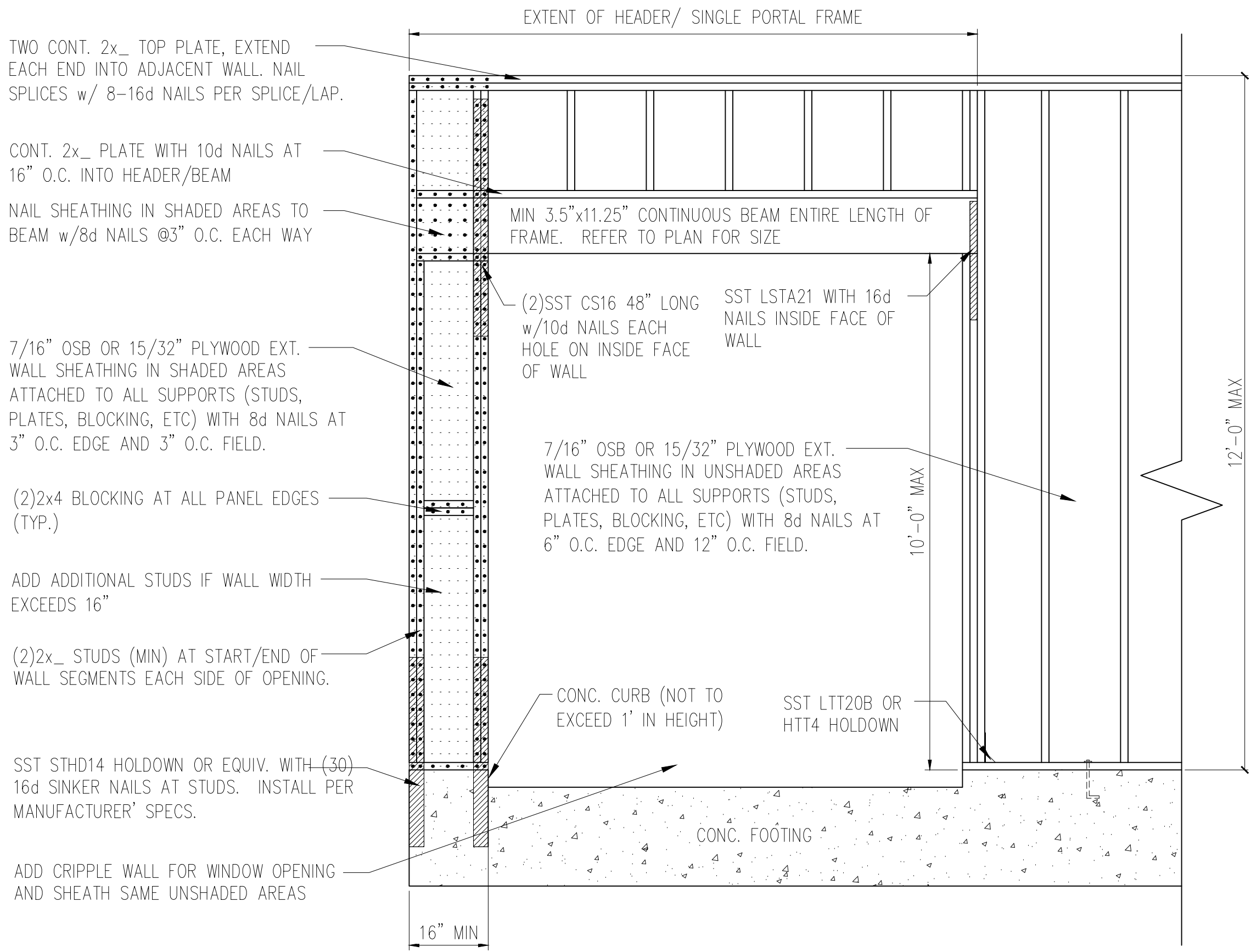
1 METHOD PF: PORTAL FRAME DETAIL
3/8" = 1'-0"



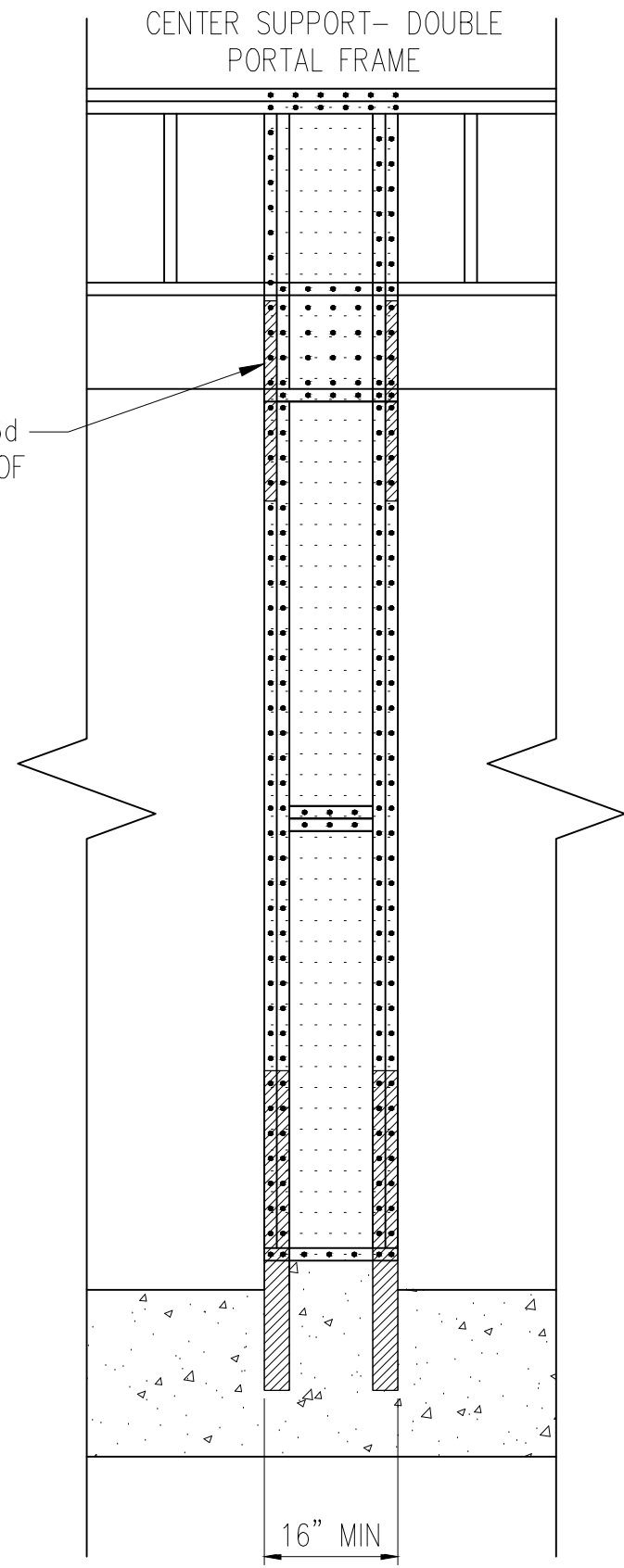
2 MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS
D1f NTS



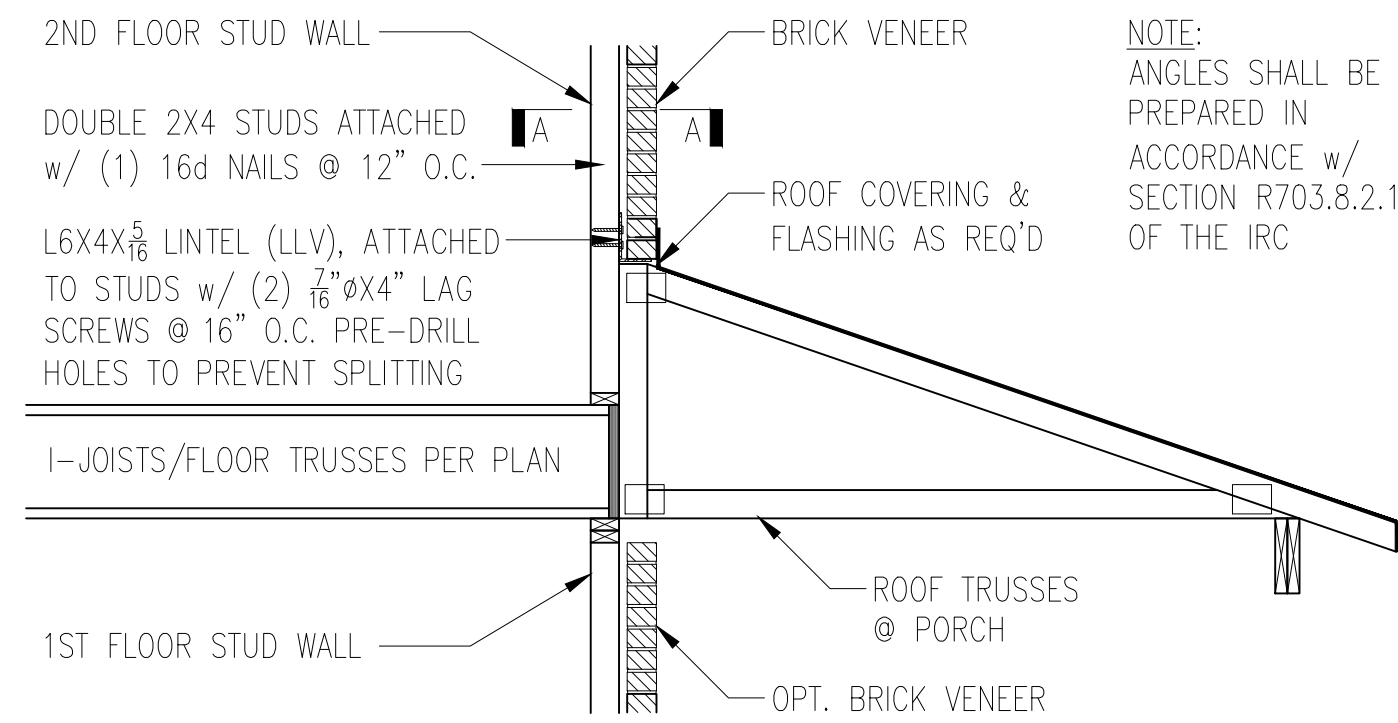
NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS



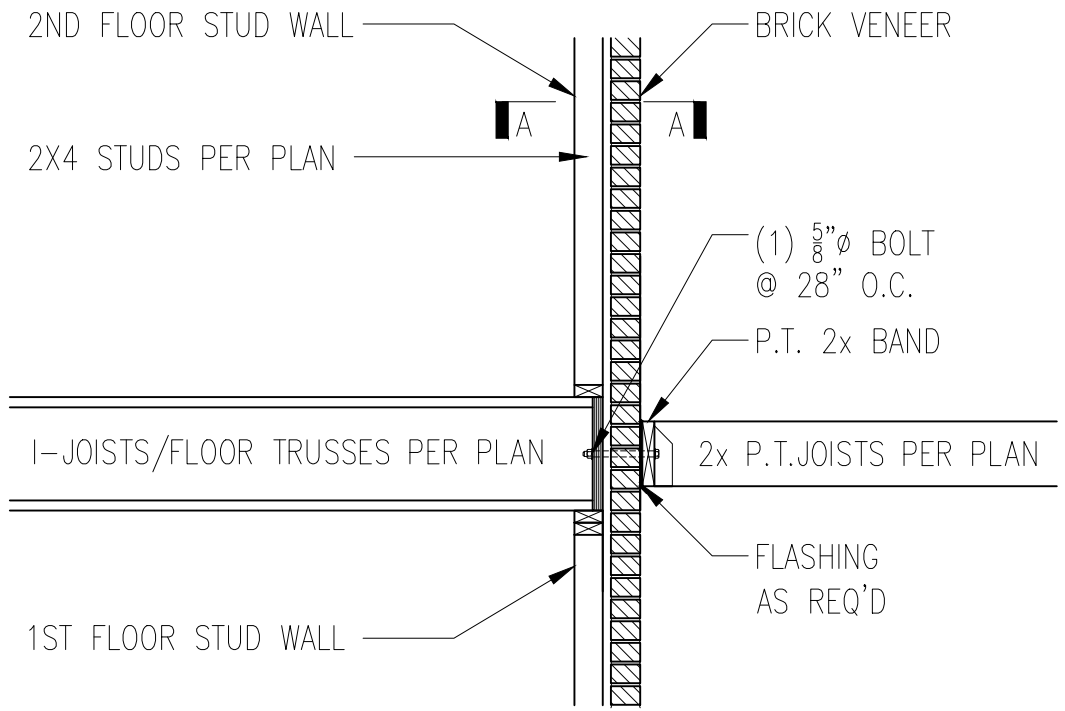
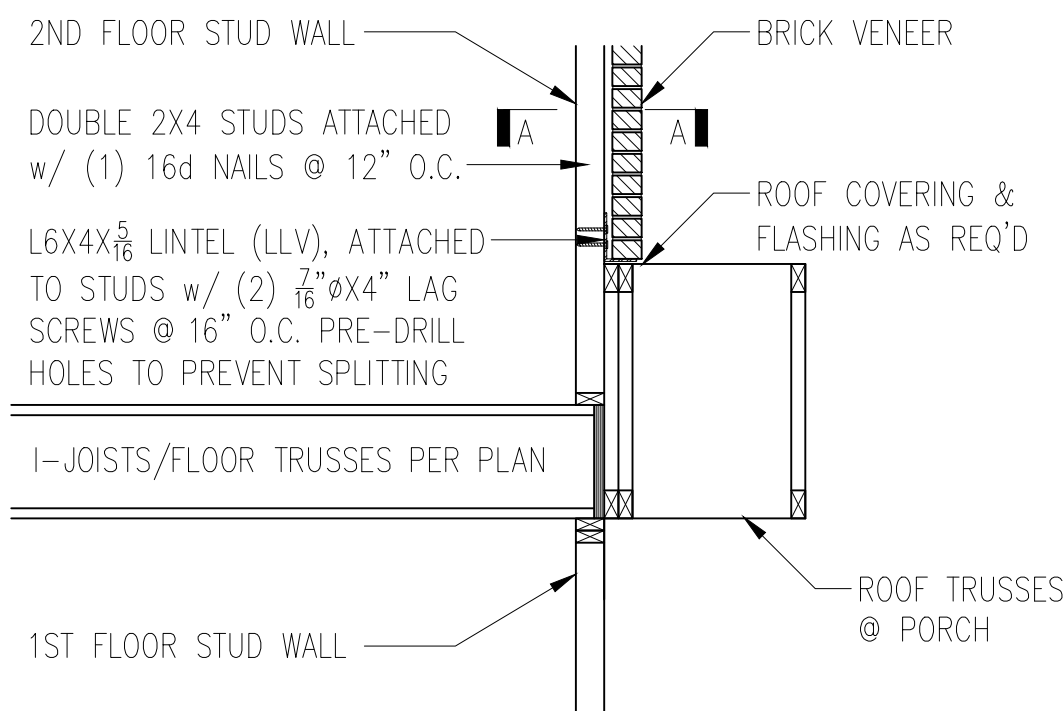
1 METHOD PF: PORTAL FRAME DETAIL w/ HOLD-DOWNS
D2f 3/4" = 1'-0"



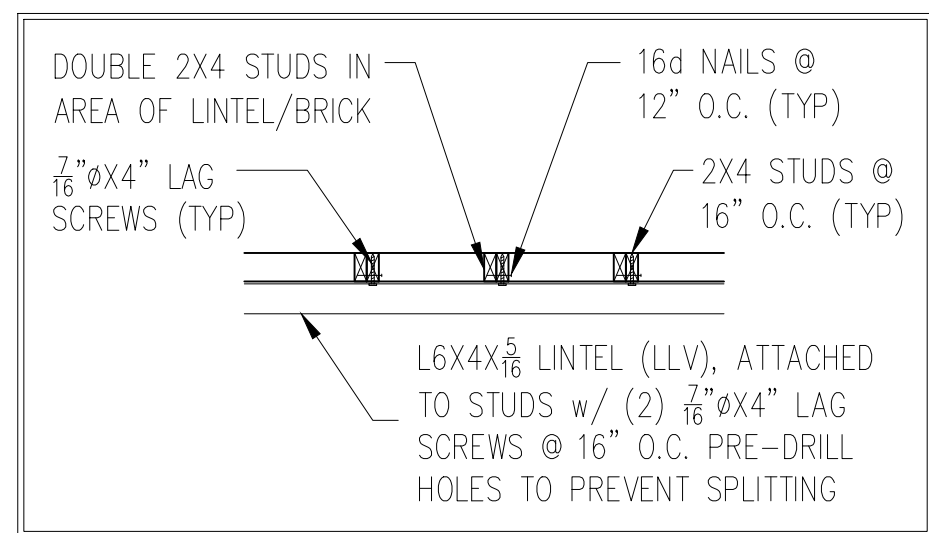
2 BOX WINDOW DETAIL
D2f N.T.S



3 BRICK SUPPORT ABOVE STORAGE/PORCH ROOF DETAIL
D2f NTS



4 BALCONY JOIST ATTACHMENT
D2f NTS

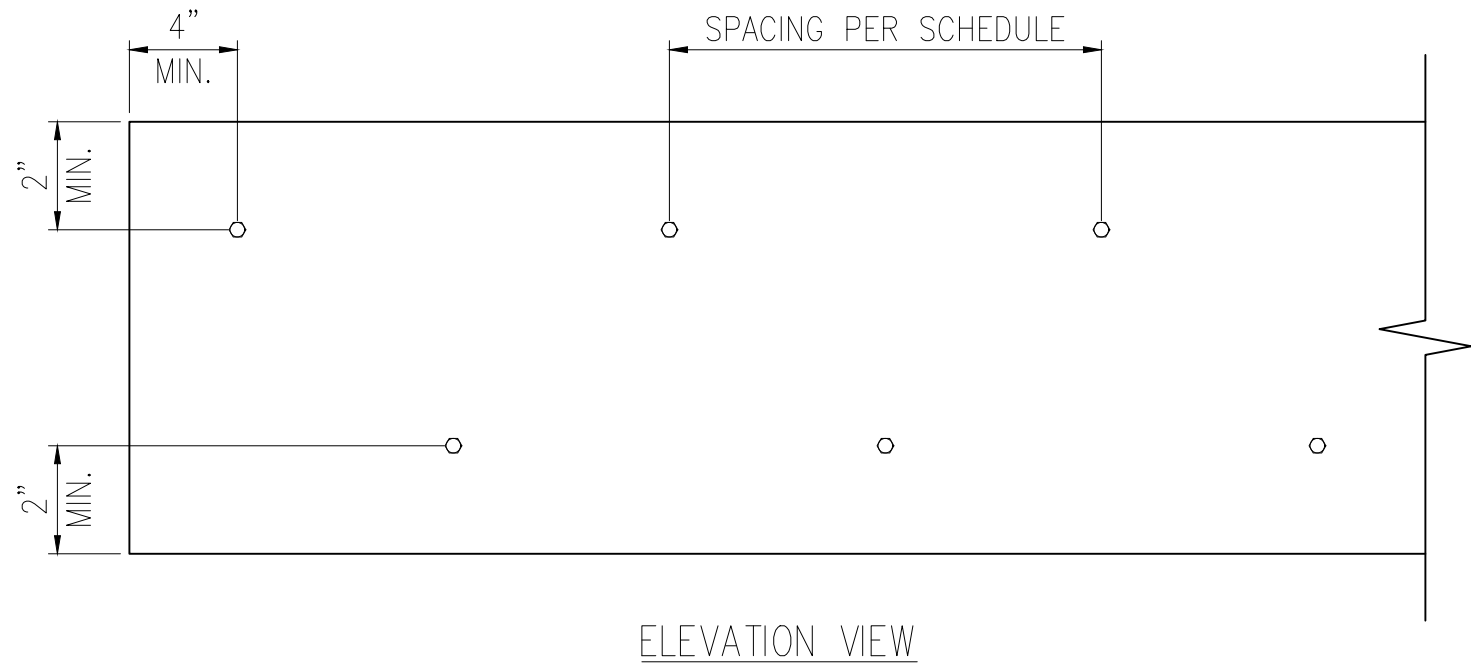


SECTION A-A
NTS

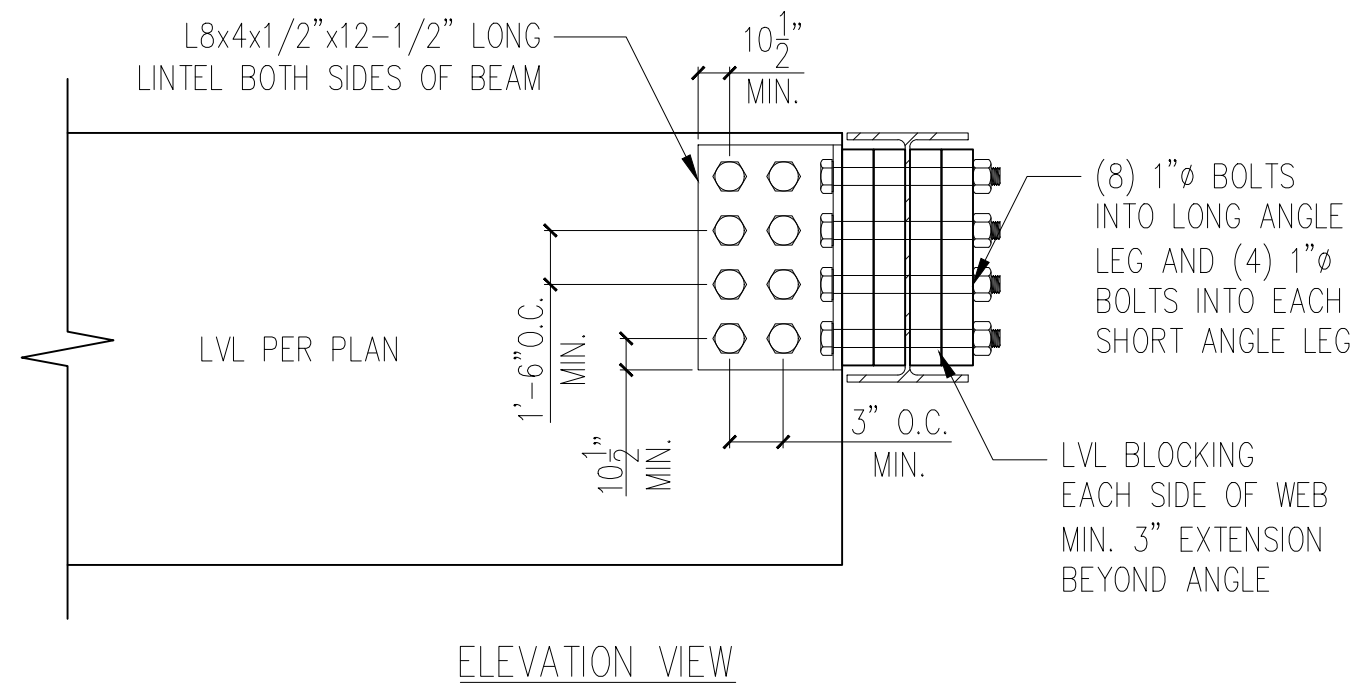
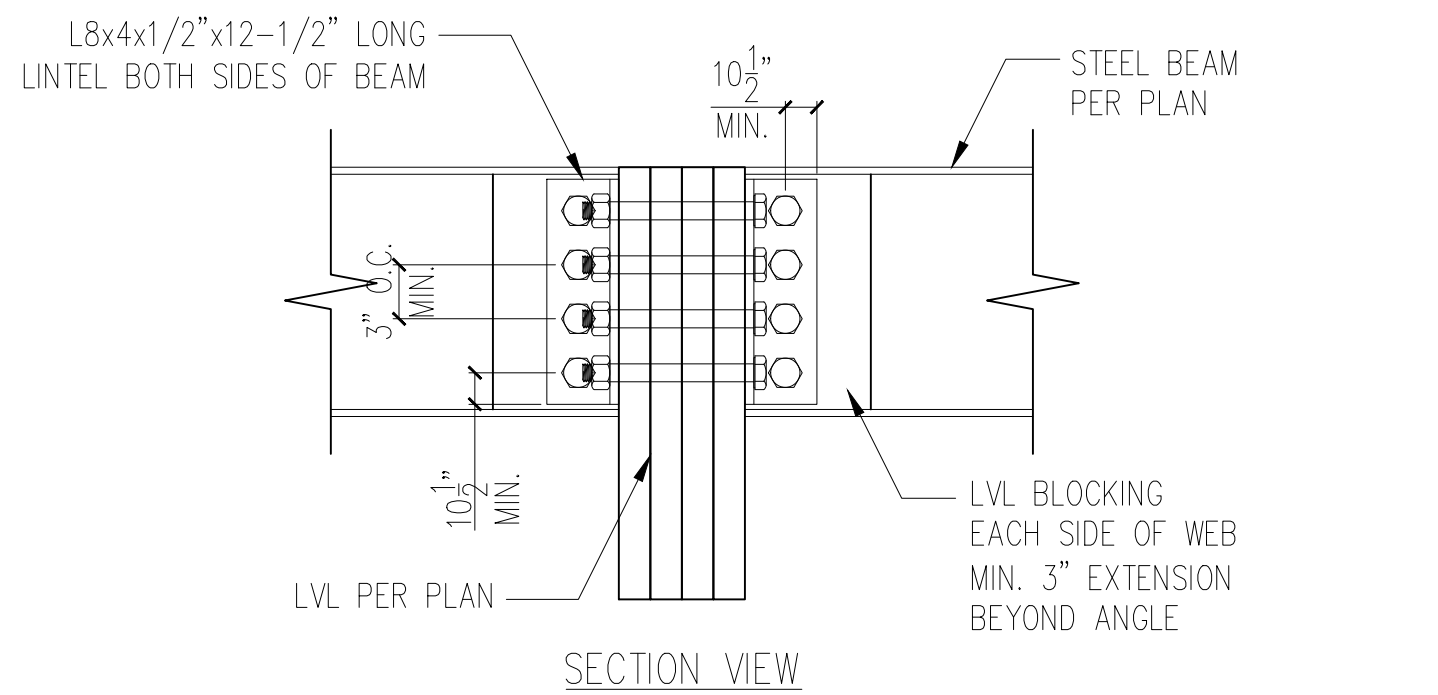
MINIMUM FASTENING
REQUIREMENTS FOR
TOP- AND SIDE-LOADED
MEMBERS

FASTENER TYPE	LVL DEPTH	3 1/2" WIDE	5 1/4" WIDE		7" WIDE		
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. (ES)	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 3/8" TrussLok		2 rows @ 24" o.c.	2 rows @ 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.		

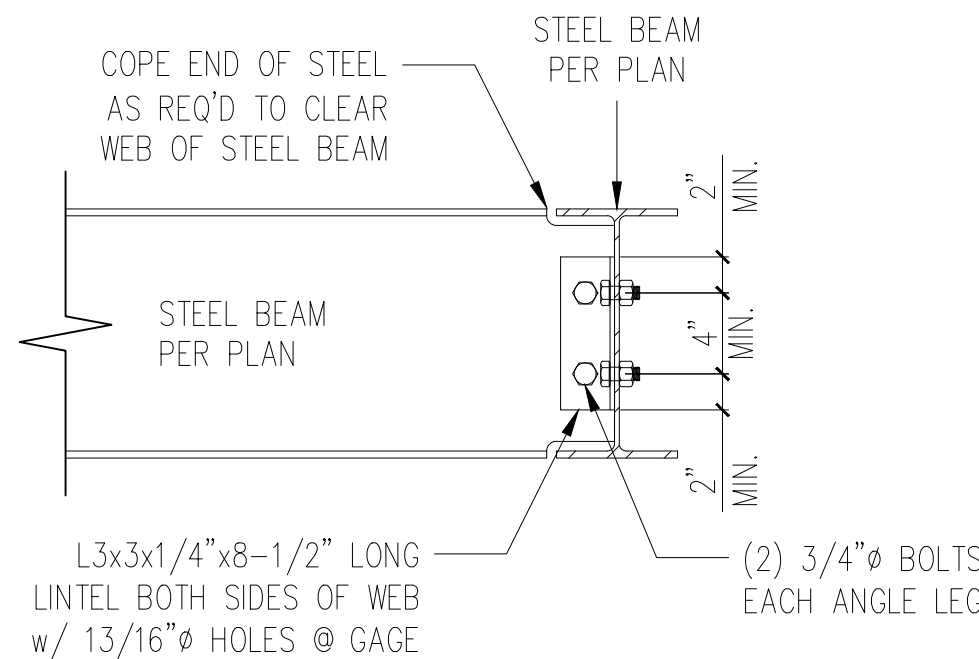
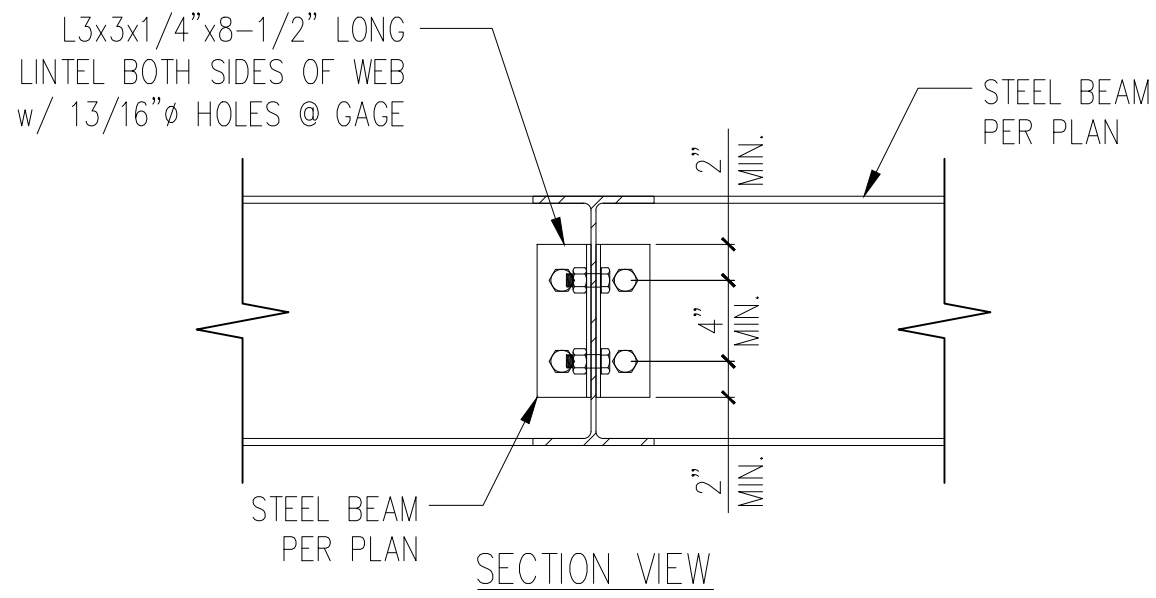
- NOTES:**
- All fasteners must meet the minimum requirements in the table above. Side-loaded multiple-ply members must meet the minimum fastening and side-loading capacity requirements given on page 48.
 - Minimum fastening requirements for depths less than 7 1/4" require special consideration. Please contact your technical representative.
 - 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).



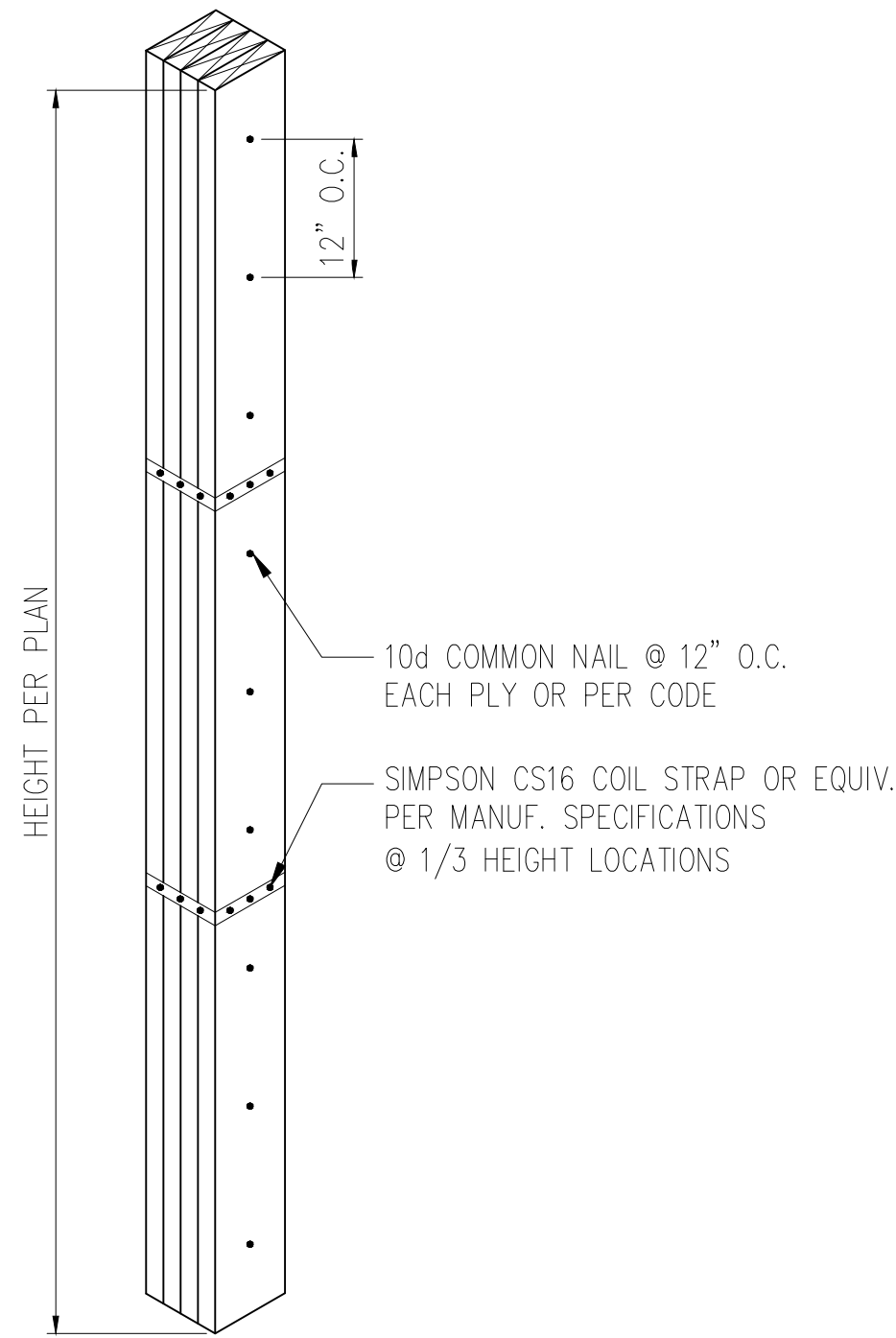
1 MULTI-PLY BEAM CONNECTION DETAIL
D3f N.T.S.



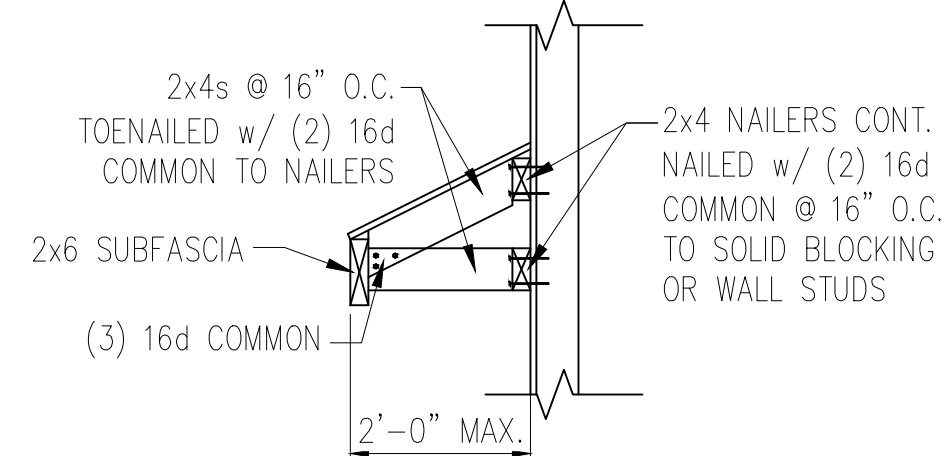
3 LVL TO STEEL DETAIL
D3f N.T.S.



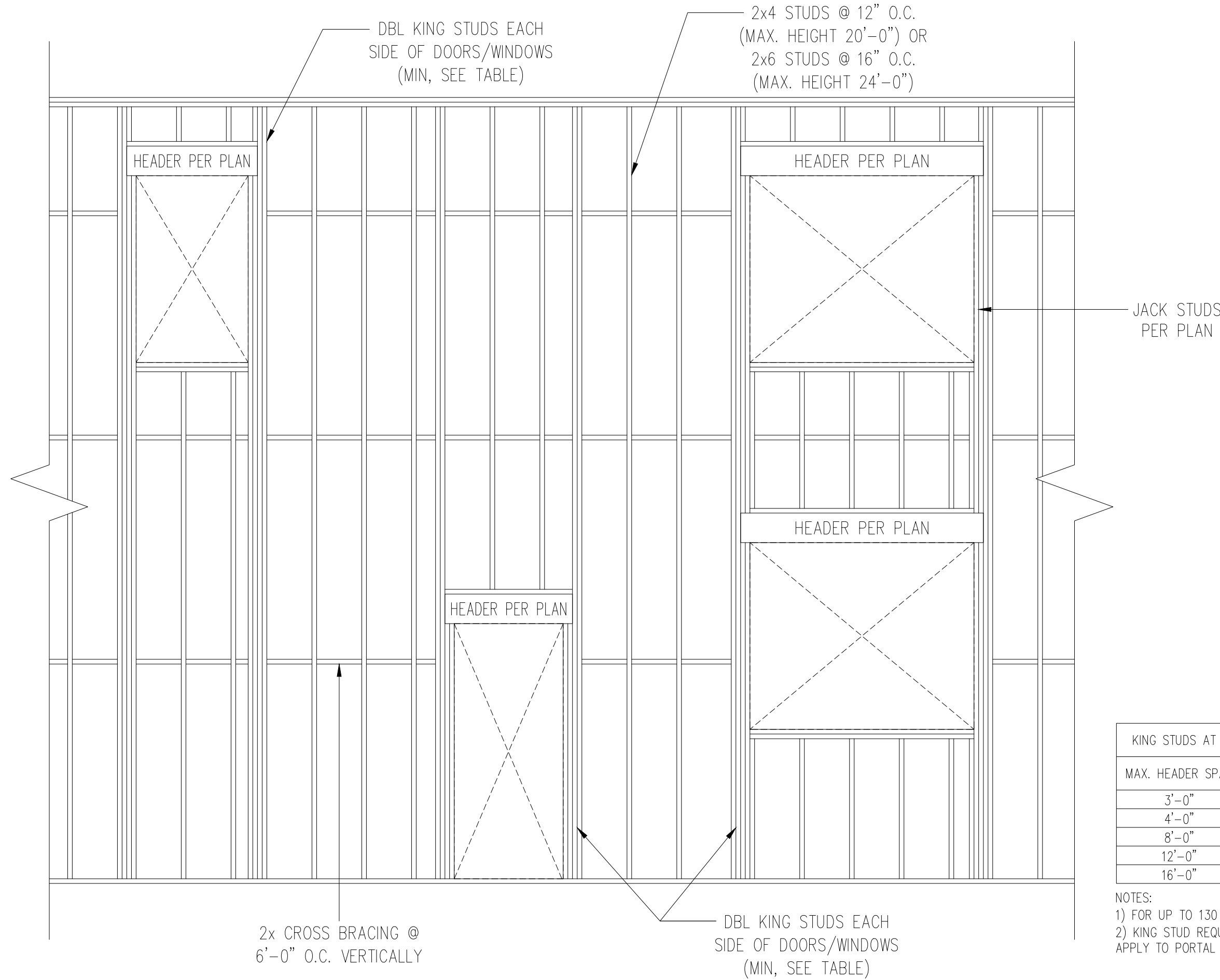
4 STEEL TO STEEL DETAIL
D3f N.T.S.



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



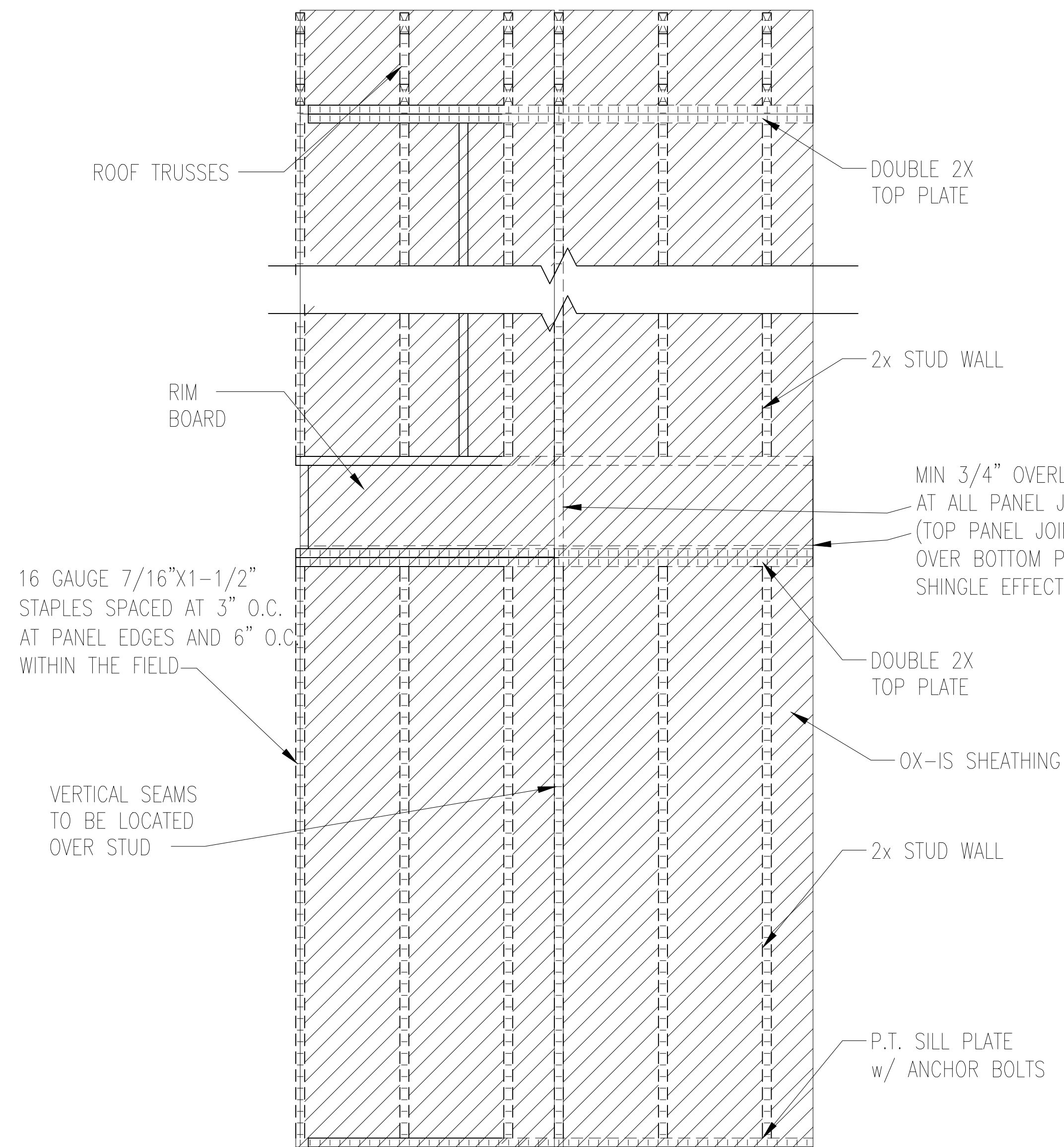
5 GABLE ROOF RETURN
D3f N.T.S.



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:
- FOR UP TO 130 MPH, EXPOSURE B
 - KING STUD REQUIREMENTS DO NOT APPLY TO PORTAL FRAMED OPENINGS

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



TWO CONT. 2x_ TOP PLATE, EXTEND EACH END INTO ADJACENT WALL. NAIL SPLICES WITH 8-16d NAILS PER SPLICE/LAP.

CONT. 2x_ PLATE WITH 10d NAILS AT 16" O.C. INTO HEADER/BEAM

OX-IS EXT. WALL SHEATHING IN SHADED AREAS ATTACHED TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC) WITH 16 GA. STAPLES AT 3" O.C. EDGE AND 3" O.C. FIELD 1" MIN. EMBEDMENT.

(2)2x4 BLOCKING AT ALL PANEL EDGES (TYP.)

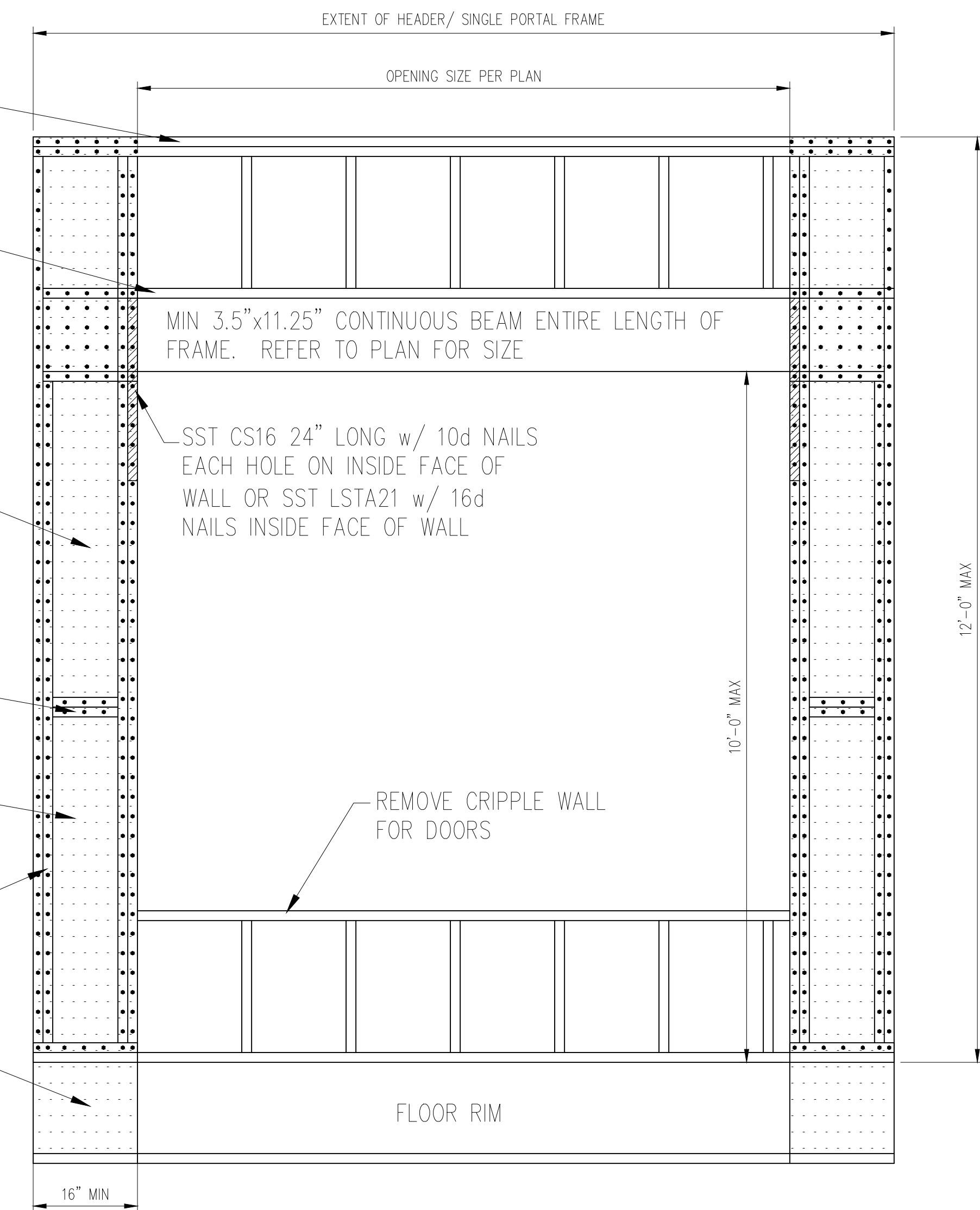
ADD ADDITIONAL STUDS IF WALL WIDTH EXCEEDS 16"

(2)2x_ STUDS (MIN) AT START/END OF WALL SEGMENTS EACH SIDE OF OPENING.

EXTEND OX-IS SHEATHING TO COVER FLOOR RIM AND ATTACH TO SILL PLATE ON FOUNDATION OR TOP PLATE OF WALL BELOW. SAME ATTACHMENT AS ALL OTHER SHADED AREAS.

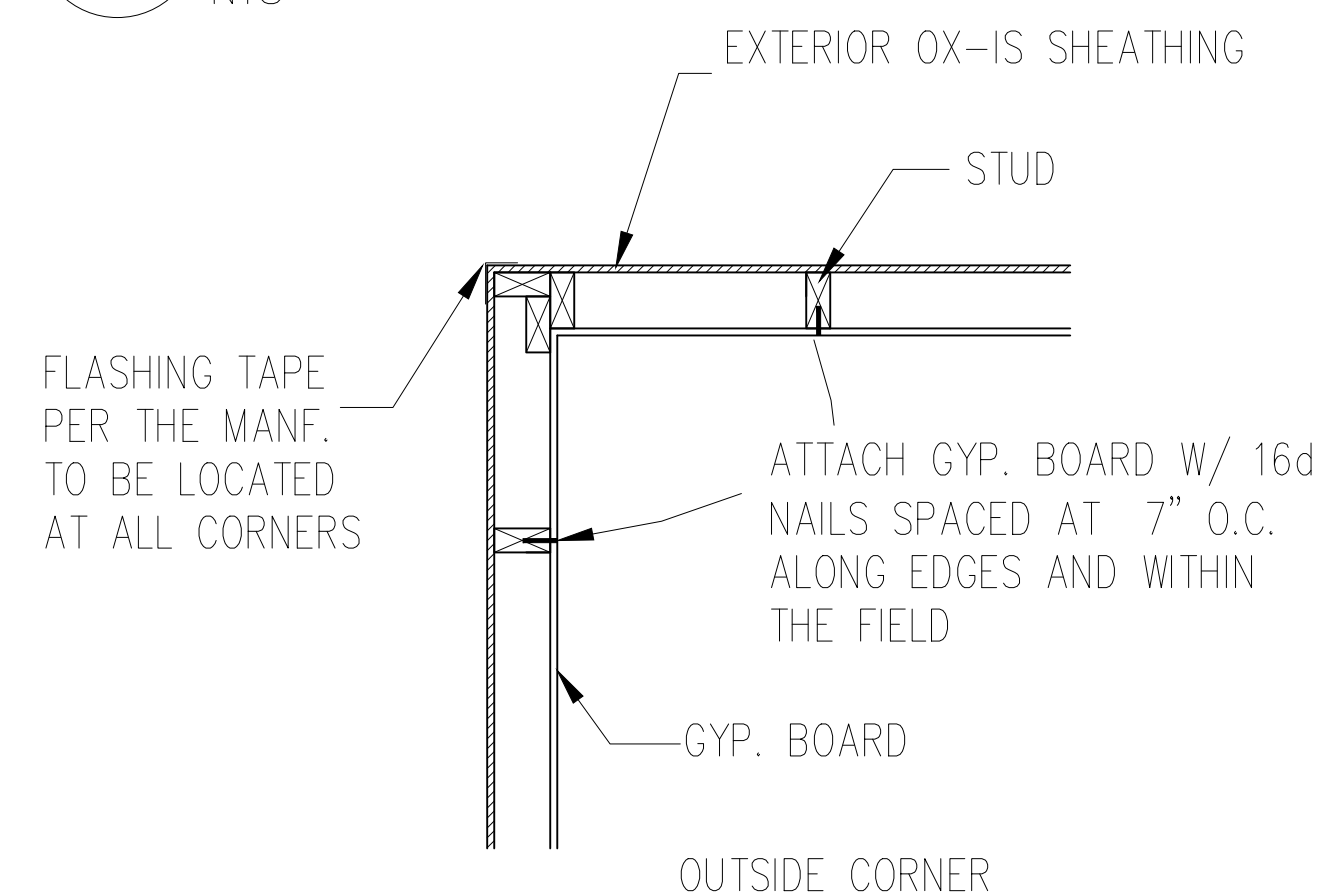
2x4 P.T. PLATE WITH (2)1/2" DIA ANCHOR BOLTS EMBEDDED IN CONC. 7" MIN. WITH 3/16"x2"x2" PLATE WASHERS

NOTES:
 -OX-IS MAY BE INSTALLED IN LIEU OF OSB FOR CS-WSP AND CS-PF BRACING METHODS SHOWN ON THE BRACING PLAN.
 BRACED WALLS SHALL BE INSTALLED PER LENGTHS SHOWN ON THE SEALED PLANS.
 -16 GA. STAPLES MAY BE SUBSTITUTED WITH 0.113-INCH DIAMETER (3/8" HEAD OR 2" CAP) NAILS WITH MINIMUM 1" EMBEDMENT.
 -STAPLES MAY RUN PARALLEL WITH WOOD GRAIN OF FRAMING STUDS AT SHEATHING SEAMS.
 -WHERE 3/4" OVERLAP IS NOT INSTALLED, CONTRACTOR MAY COVER SEAM WITH 5" BUTYL FLASHING TAPE.
 -FLASH WINDOWS AND DOORS PER MANF.
 -THE DETAILS ABOVE ARE LIMITED TO 130 MPH WIND ZONES.

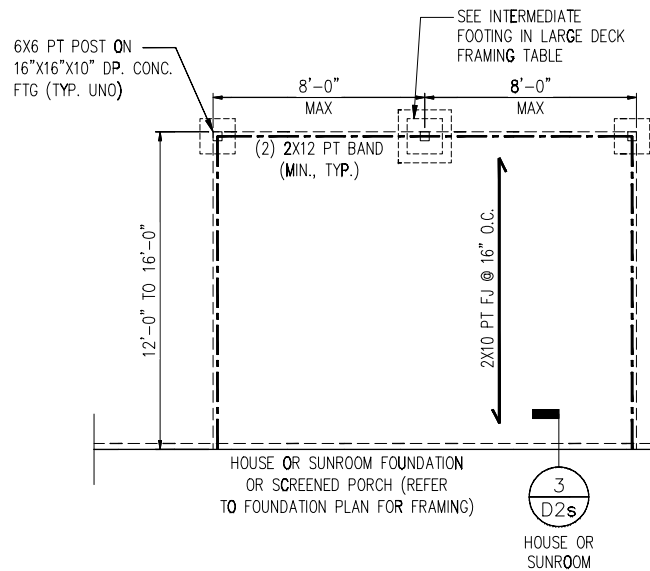


3 METHOD PF: PORTAL FRAME DETAIL
 D4f NTS

1 TYP. WALL BRACING
 D4f NTS

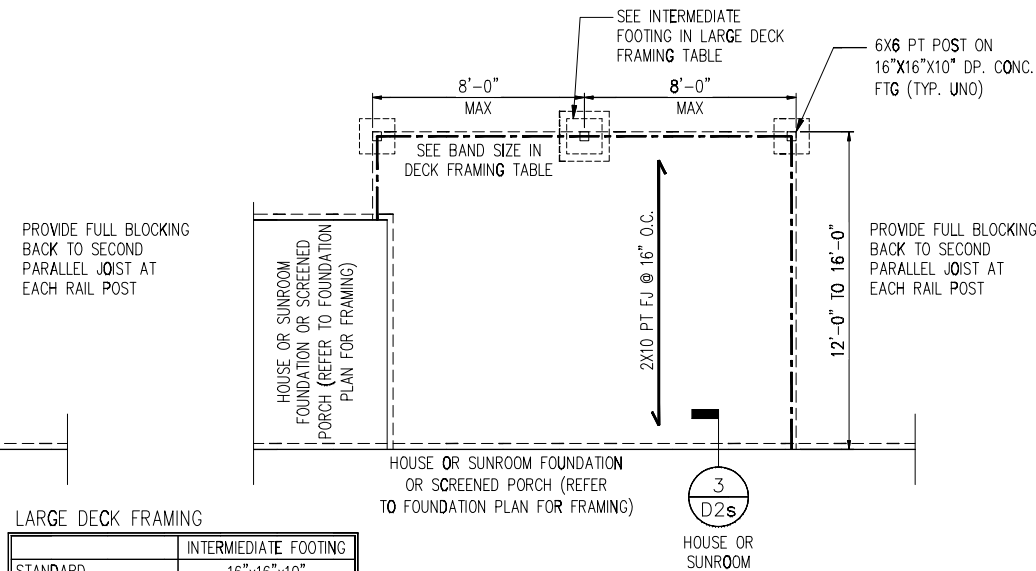


2 TYP. EXTERIOR CORNER ATTACHMENT
 D4f NTS



TYP. LARGE REAR DECK PLAN

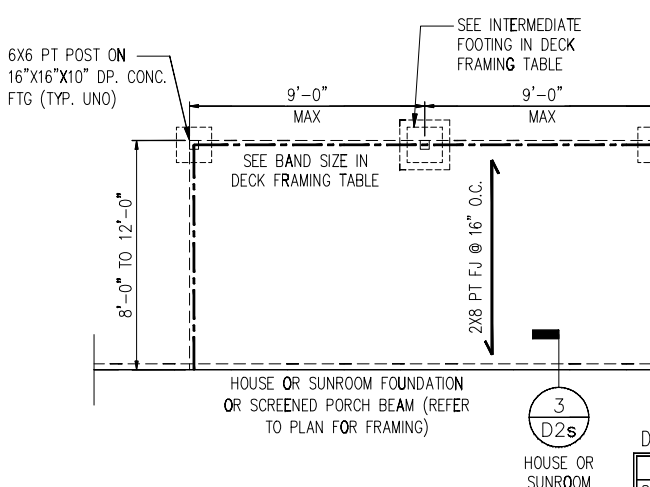
N.T.S.



TYP. LARGE SIDE DECK PLAN

N.T.S.

LARGE DECK FRAMING	
STANDARD	INTERMEDIATE FOOTING
16"x16"x10"	16"x16"x10"
W/ 8'x8' GRILL DECK	24"x24"x10"

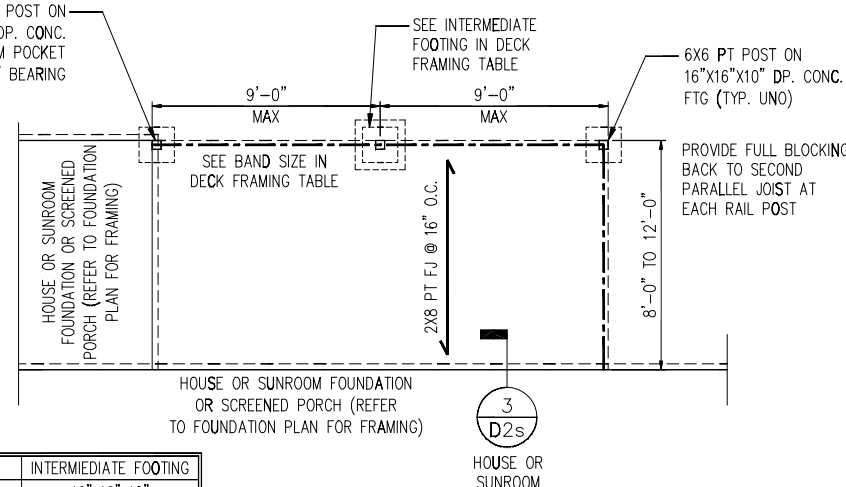


TYP. REAR DECK PLAN

N.T.S.

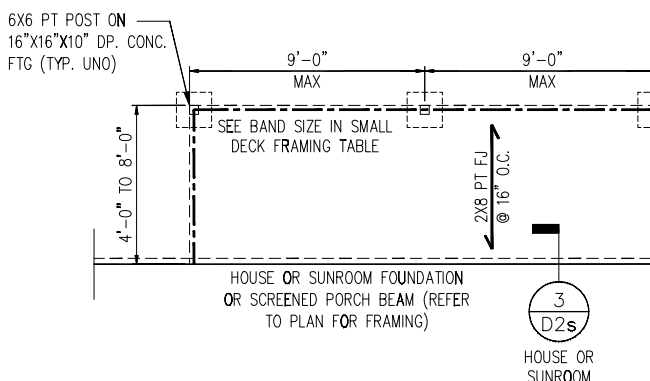
DECK FRAMING		
	BAND SIZE*	INTERMEDIATE FOOTING
STANDARD	(2) 2X10	16"x16"x10"
W/ 8'x8' GRILL DECK	(3) 2X10	24"x24"x10"

* SOUTHERN PINE #2 PT LUMBER



TYP. SIDE DECK PLAN

N.T.S.

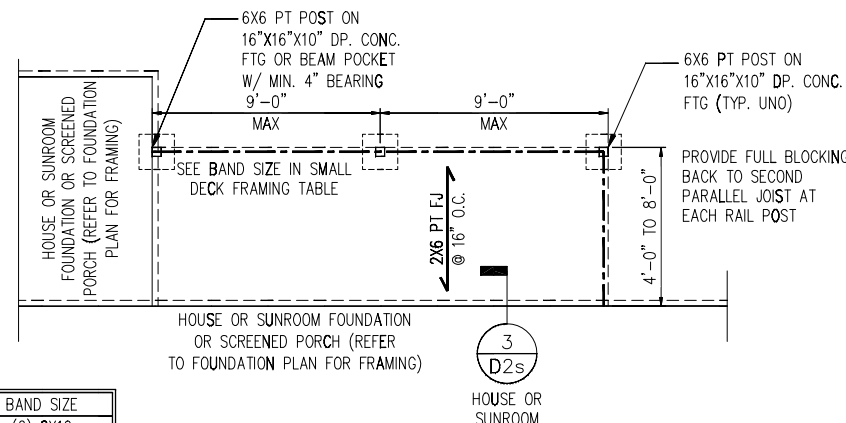


TYP. SMALL REAR DECK PLAN

N.T.S.

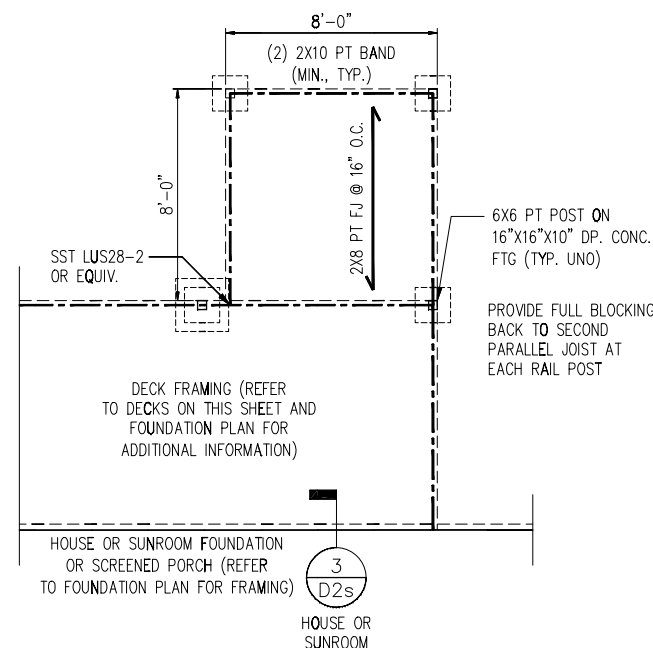
SMALL DECK FRAMING	
STANDARD	BAND SIZE
(2) 2X10	(2) 2X10
W/ 8'x8' GRILL DECK	(3) 2X10

* SOUTHERN PINE #2 PT LUMBER



TYP. SMALL SIDE DECK PLAN

N.T.S.



TYP. DECK PLAN W/ 8'x8' GRILL DECK

N.T.S.

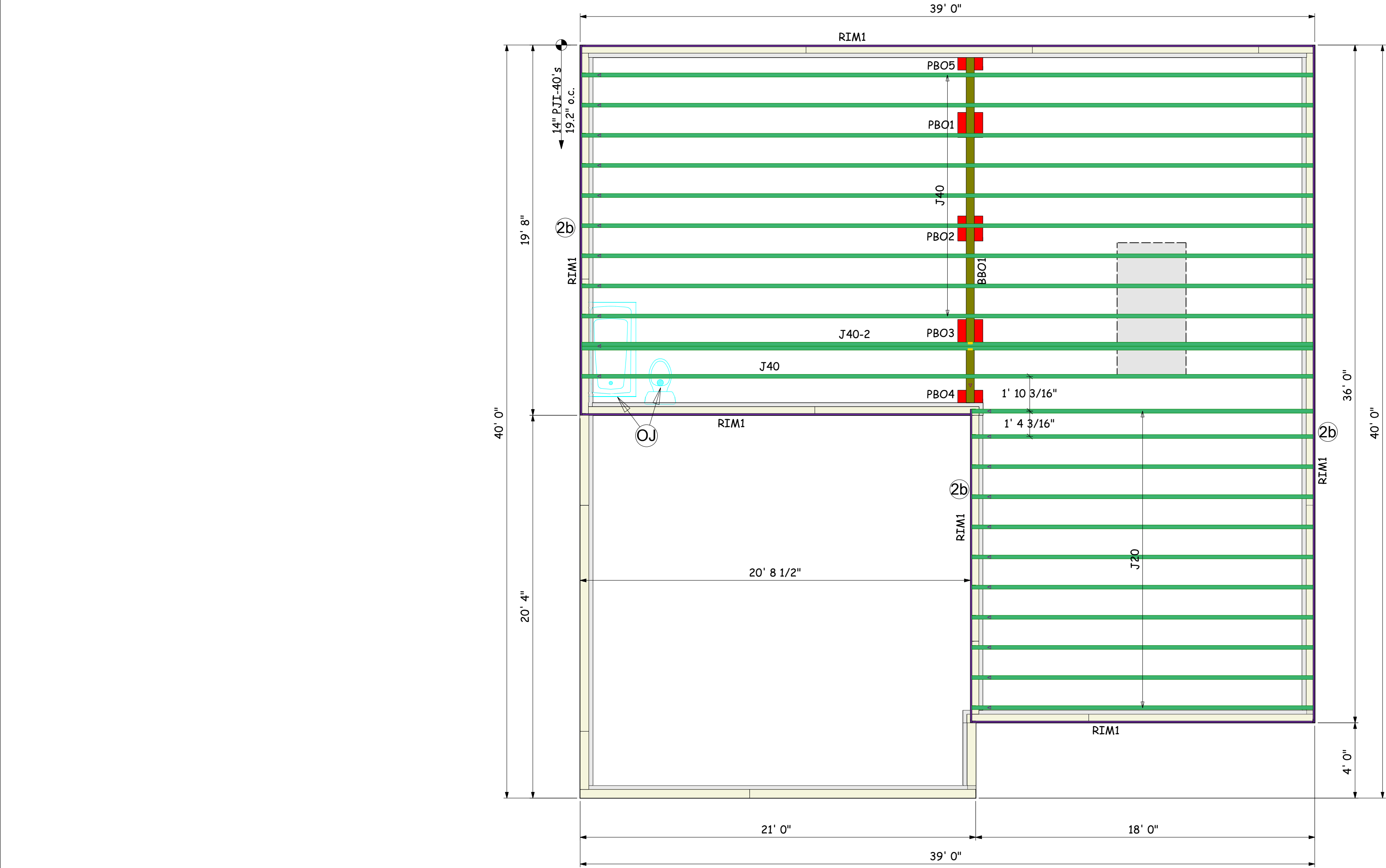
NOTES:

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

NOTE: BRACE POSTS PER CODE

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.

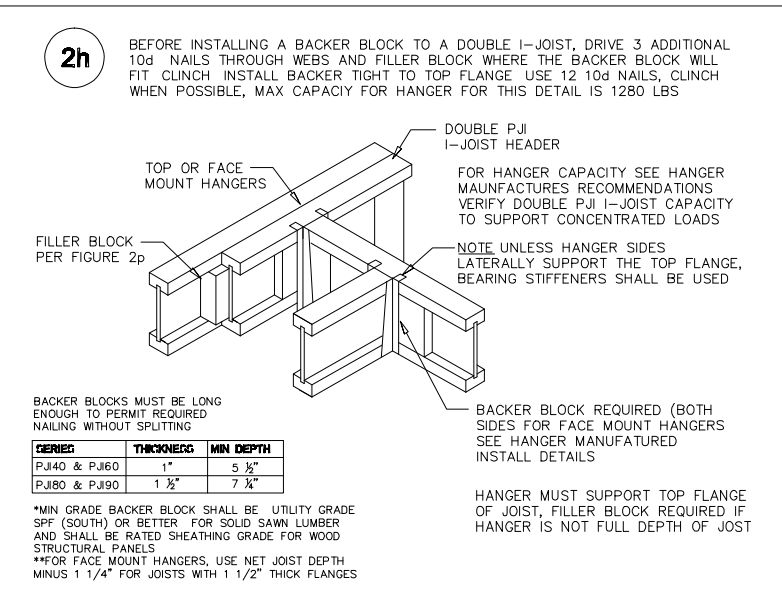
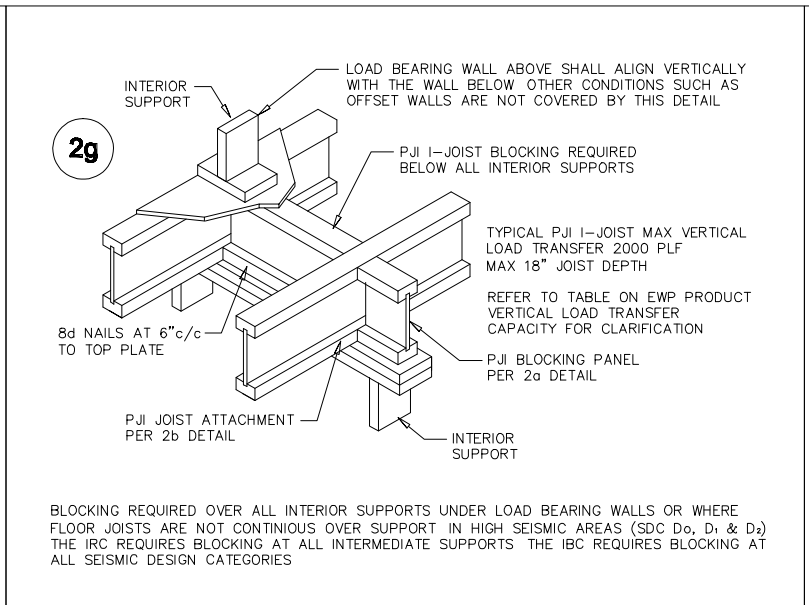
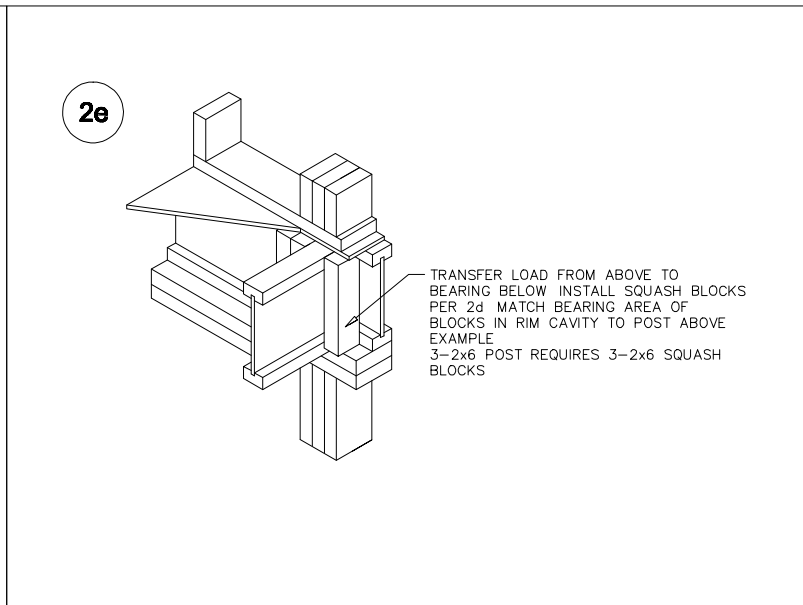
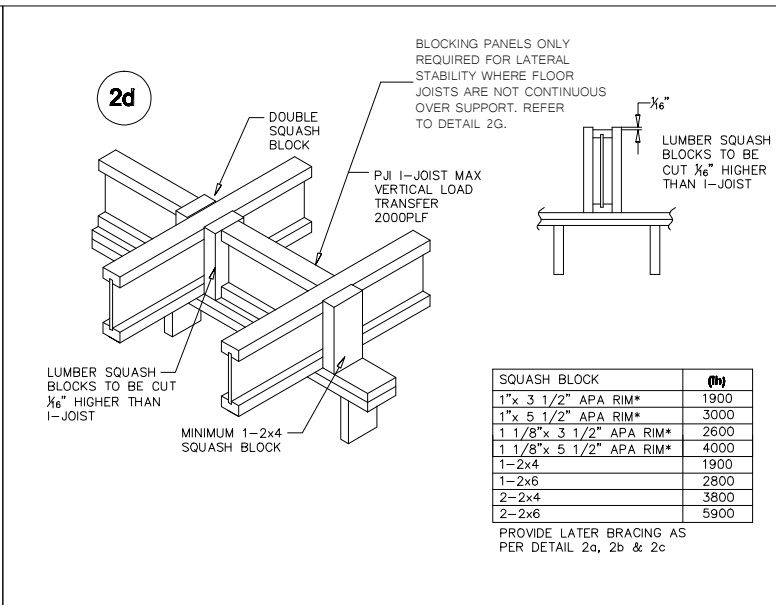
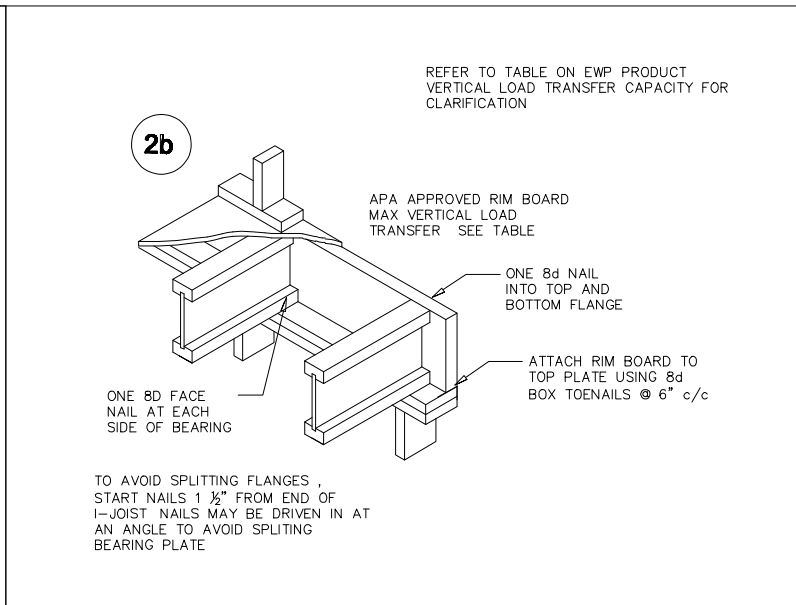
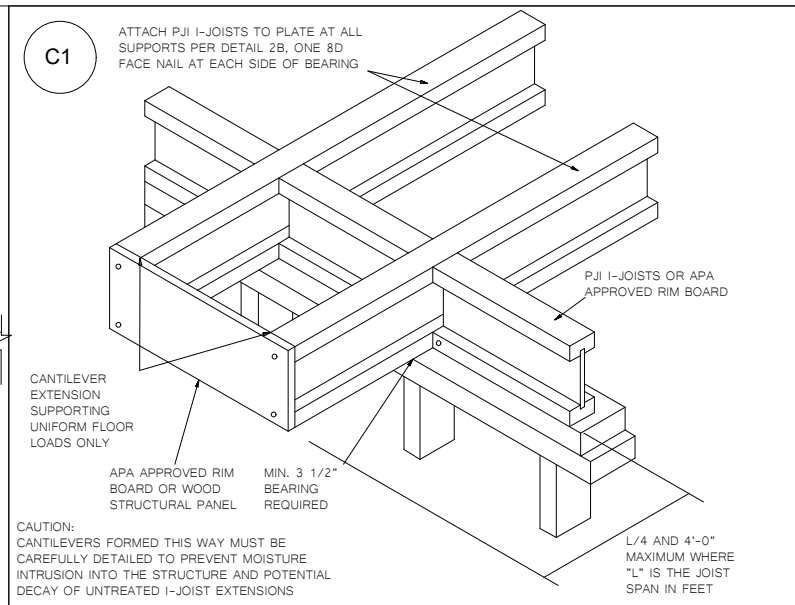
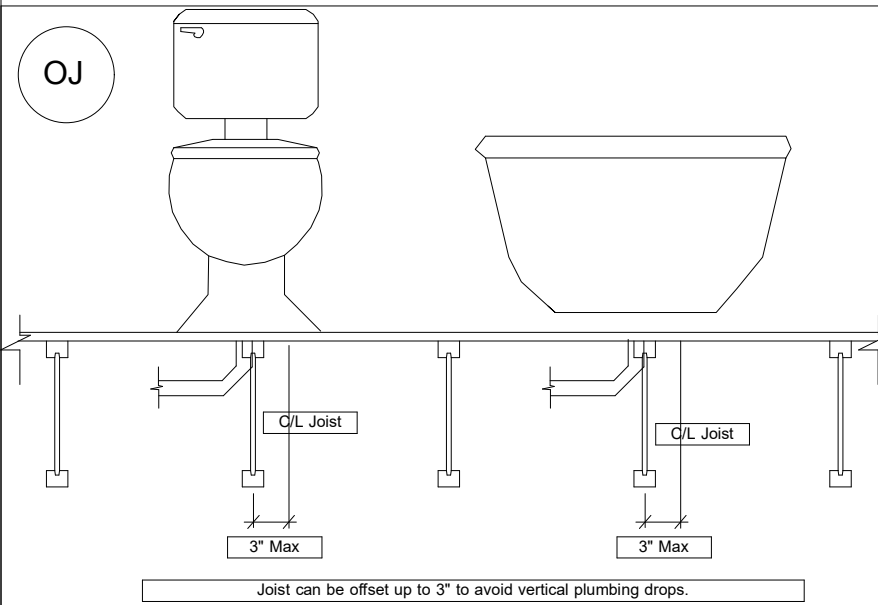


Products				
PlotID	Length	Product	Plies	Net Qty
J40	40-00-00	14" PJI-40	1	10
J40-2	40-00-00	14" PJI-40	2	2
J20	20-00-00	14" PJI-40	1	11
RIM1	12-00-00	1 1/8" x 14" APA Rim Board	1	13

Accessories				
PlotID	Length	Product	Plies	Net Qty
		3/4" 4x8 OSB	1	34

KEMPSVILLE BUILDING MATERIALS IS NOT RESPONSIBLE FOR THE DESIGN OR CALCULATION OF ANY AND ALL I-JOIST AND LVL/PSL BEAM MATERIAL. ALL ENGINEERING AND INFORMATION FOR THIS MATERIAL IS TO BE PROVIDED BY THE ENGINEER OF RECORD MARKED ON APPROVED SET OF PLANS. ALL BEAM PLACEMENTS ARE PER THE ENGINEERING RECEIVED. ALL CONNECTION DETAILS TO BE PROVIDED BY ENGINEER OF RECORD. REFER TO ENGINEER OR RECORD FOR ALL MULTI-PLY LVL/ I-JOIST CONNECTION PATTERNS. BUILDER TO VERIFY ALL MATERIAL LENGTHS, QUANTITIES, AND SIZES PRIOR TO ORDERING.

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 VERY 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.

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

DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

Scale: 1/4" = 1'-0"

Date: // 10/23/25

Designer: DW

Project #: 25100129

Sheet Number:

1 / 2

DR Horton

18 Mason Ridge

Hayden F

FLOOR JOIST LAYOUT

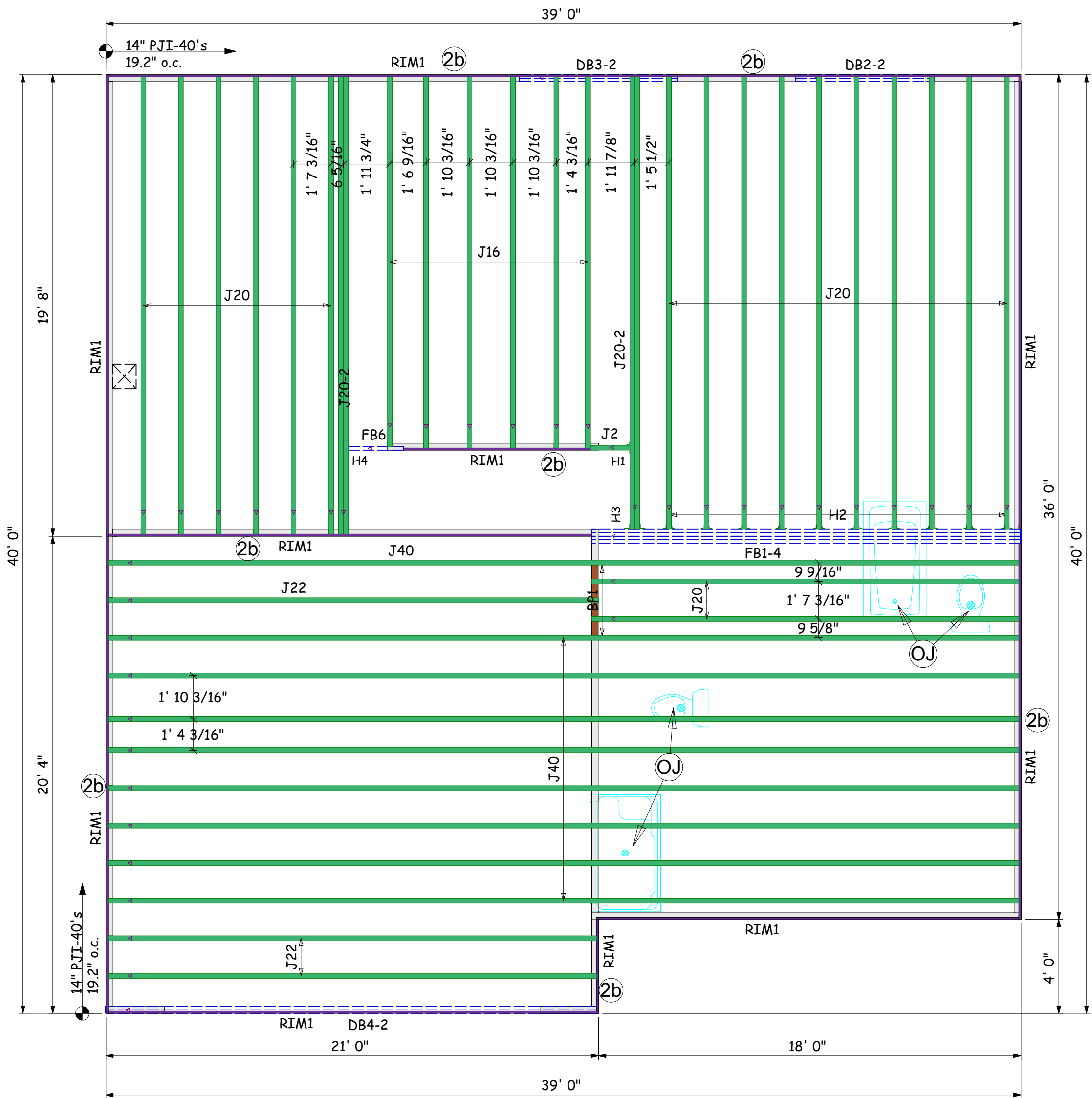


This is an I-Joist Placement Plan Only. All designs of I-Joist follow the ISC/IBC Code Requirements along with Manufacturer's guidelines. This is NOT an engineered placement plan. This placement plan is created from plans provided by the customer using Manufacturer's guidelines. It is the responsibility 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.

Revisions	
09/20/23	DW
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name

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.



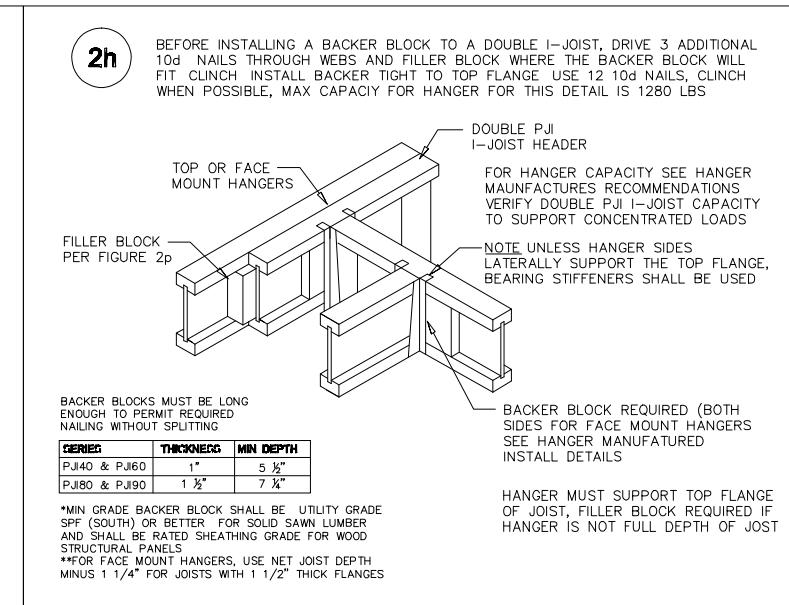
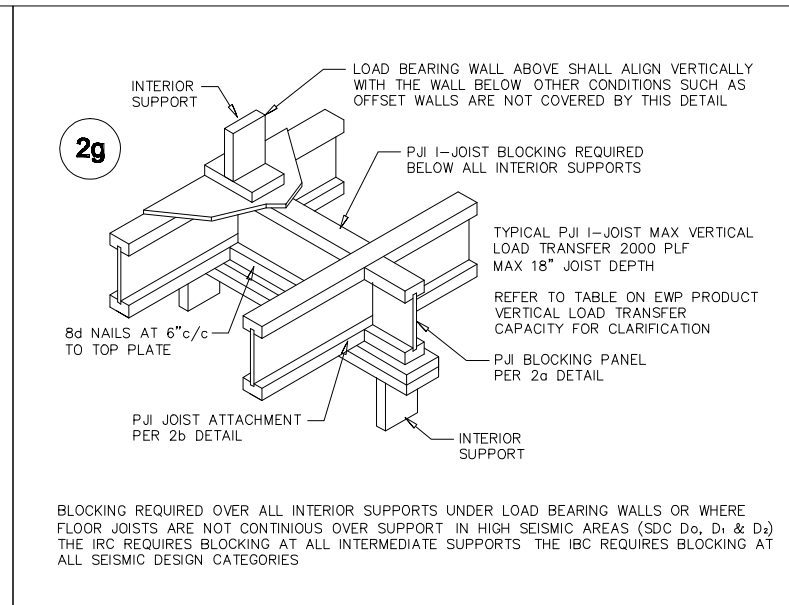
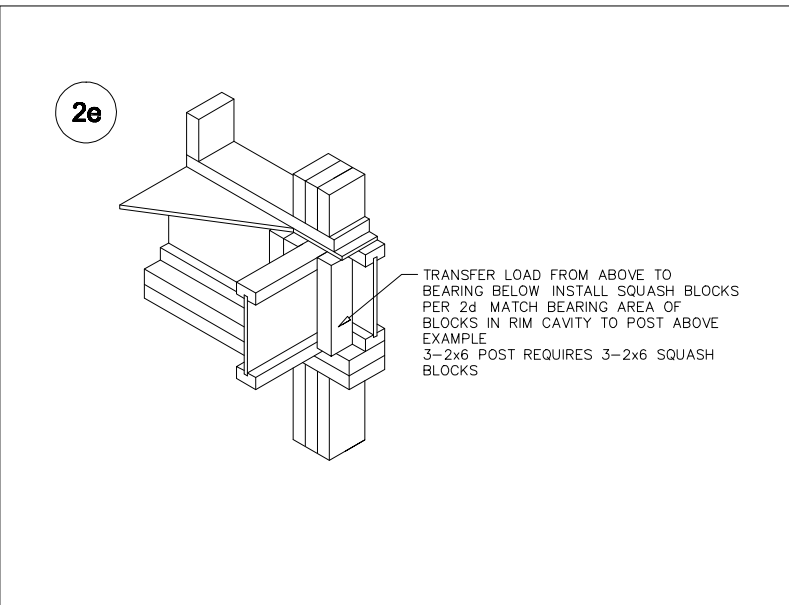
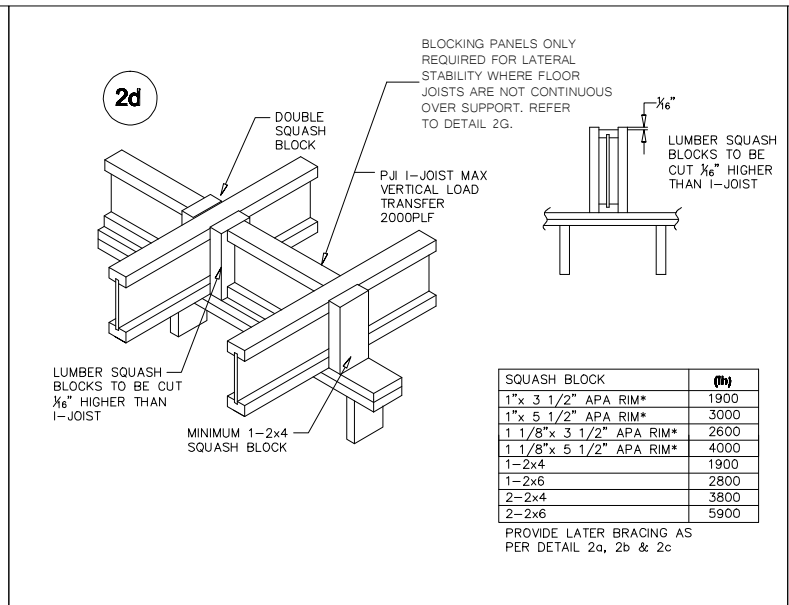
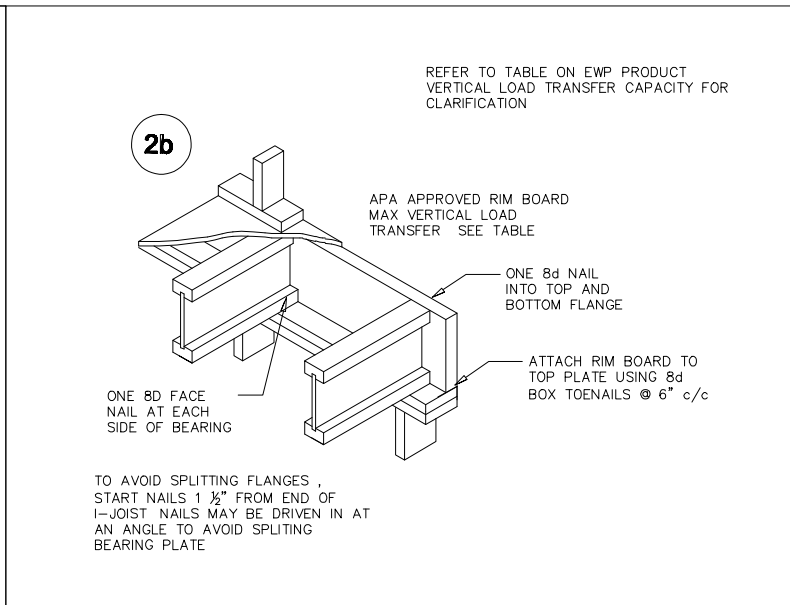
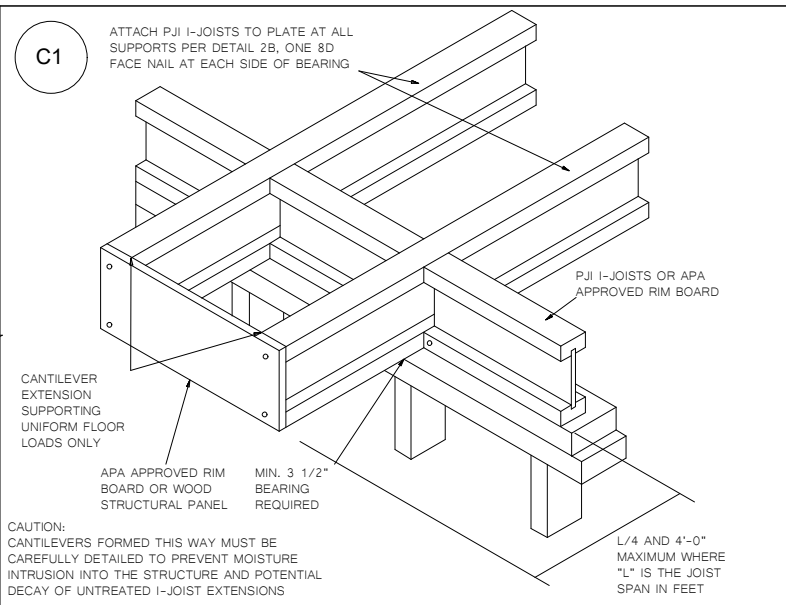
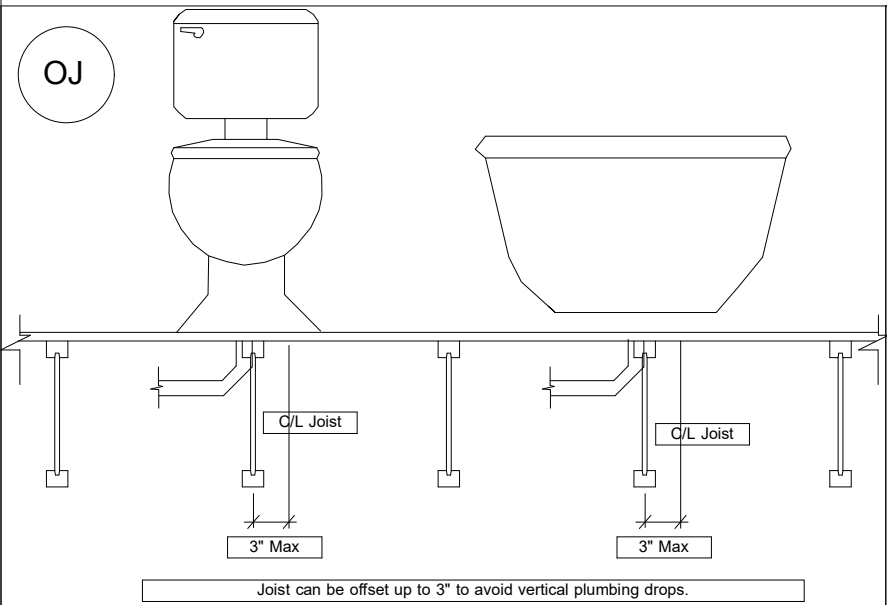
Products				
PlotID	Length	Product	Plies	Net Qty
J40	40-00-00	14" PJI-40	1	9
J22	22-00-00	14" PJI-40	1	3
J20	20-00-00	14" PJI-40	1	18
J20-2	20-00-00	14" PJI-40	2	4
J16	16-00-00	14" PJI-40	1	6
J2	2-00-00	14" PJI-40	1	1
DB3-2	8-00-00	2.1 RigidLam SP LVL 1-3/4 x 9-1/4	2	2
DB2-2	6-00-00	2.1 RigidLam SP LVL 1-3/4 x 9-1/4	2	2
FB1-4	20-00-00	2.1 RigidLam SP LVL 1-3/4 x 14	4	4
FB6	4-00-00	2.1 RigidLam SP LVL 1-3/4 x 14	1	1
DB4-2	22-00-00	2.1 RigidLam SP LVL 1-3/4 x 16	2	2
RIM1	12-00-00	1 1/8" x 14" APA Rim Board	1	16
BP1	2-00-00	14" PJI-40	1	2

Accessories				
PlotID	Length	Product	Plies	Net Qty
		3/4" 4x8 OSB	1	46

Connector Summary					
PlotID	Qty	Manuf	Product	Backer Blocks	Web Stiff
H1	1	Simpson	IUS2.56/14	2 and Filler	No
H2	10	Simpson	IUS2.56/14	No	No
H3	1	Simpson	MIU5.12/14	No	No
H4	1	Simpson	HUS1.81/10	No	No

KEMPSTVILLE BUILDING MATERIALS IS NOT RESPONSIBLE FOR THE DESIGN OR CALCULATION OF ANY AND ALL I-JOIST AND LVL/PSL BEAM MATERIAL. ALL ENGINEERING AND INFORMATION FOR THIS MATERIAL IS TO BE PROVIDED BY THE ENGINEER OF RECORD MARKED ON APPROVED SET OF PLANS. ALL BEAM PLACEMENTS ARE PER THE ENGINEERING RECEIVED. ALL CONNECTION DETAILS TO BE PROVIDED BY ENGINEER OF RECORD. REFER TO ENGINEER OR RECORD FOR ALL MULTI-PLY LVL/ I-JOIST CONNECTION PATTERNS. BUILDER TO VERIFY ALL MATERIAL LENGTHS, QUANTITIES, AND SIZES PRIOR TO ORDERING.

2ND 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.

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

DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

Scale: 1/4" = 1'-0"

Date: // 10/23/25

Designer: DW

Project #: 25100129

Sheet Number:

2 / 2

DR Horton

18 Mason Ridge

Hayden F

FLOOR JOIST LAYOUT



This is an I-Joist Placement Plan Only. All designs of I-Joist follow the ISC/IPC 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.

Revisions	
09/20/23	DW
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name