	-				
ABBREVIATIONS	IND	FΧ			
ABV ABOVE A/C AIR CONDITIONING L LENGTH A.D. AREA DRAIN LA LAUNDRY	MODEL '	HAYDEN'			
AD. AREA DRAIN LA LANDRY ADJ ADJISTABLE LAV LAVATORY ALT ALTERNATE LVR LOWER	0	TITLE SHEET / COVER SHEET	ΙK	FRONT ELEVATION 'K'	
ALIM ALIMINUM MAX MAXIMUM ARCH. ARCHITECTURAL MECH MECHANICAL	0.1	QUICK VIEW	I.I.K	ROOF PLAN 'K'	
BA BATHROOM MFR. MANUFACTURER BD BOARD MIN MINIMUM	0.2	QUICK VIEW	2K	SIDE AND REAR ELEVATIONS 'K'	
BLDG BUILDING N NORTH	ΙA	FRONT ELEVATION 'A'	2.I K	SIDE AND REAR ELEVATIONS 'K'-	
BLW BELOW O.G.D. OVERHEAD GARAGE DOOR	I.I A	ROOF PLAN 'A'		W/ CRAWL SPACE	
DD DEL OH OVERIEAD BM BH PASS (DOOR) OPT OPTIONAL DOT BOT BOTTOM PAR PARALLEL DOT DOT	2 A	SIDE AND REAR ELEVATIONS 'A'	2.2 K	SIDE AND REAR ELEVATIONS 'K'-	
BTWN BETWEEN P.B. PUSH BUTTON CAB CABINET PDR POWDER	2.I A	SIDE AND REAR ELEVATIONS 'A'-		W BASEMENT	
CER CERAMIC PL PLDESTAL C.J. CONTROL JOINT OR CONSTRUCTION JOINT PL PLATE PL PLATE		W CRAWL SPACE	3 MS K	MONOLITHIC SLAB PLAN 'K'	
CLG CELLING P.T. PRESSURE TREATED WOOD	2.2 A	SIDE AND REAR ELEVATIONS 'A'-	3 SW K	STEM WALL PLAN 'K'	
CMU CONCRETE MASONRY UNIT PVMI PAVEMENT		W/ BASEMENT	3 CS K	CRAWL SPACE PLAN 'K'	
p picep	3 MS A	MONOLITHIC SLAB PLAN 'A'	3 BS K	BASEMENT PLAN 'K'	
CSMT CASEMENT NUL NULNUNCL	3 SW A	STEM WALL PLAN 'A'	4 K	IST FLOOR PLAN 'K'	
REQ REQUIRED	3 CS A	CRAWL SPACE PLAN 'A'	5 K	2ND FLOOR PLAN 'K'	
DH DOUBLE HUNG SE SMOKE DETECTOR	3 BS A	BASEMENT PLAN 'A'			
DISP DISPOSAL SH SINGLE HING OR SHELF	4 A	IST FLOOR PLAN 'A'	IP	FRONT ELEVATION 'P'	
DN DOWN SIM SIMILAR DR DOOR SL SUDOWSPOUT SLP SHELP AND POLE	5 A	2ND FLOOR PLAN 'A'	I.I P 2P	ROOF PLAN 'P'	
DW DISH WASHER SPEC SPECIFICATIONS	IВ	FRONT ELEVATION 'B'	2P 2.I P	SIDE AND REAR ELEVATIONS 'P' SIDE AND REAR ELEVATIONS 'P'-	
E EAST STRUCTURAL	I.I B	ROOF PLAN 'B'	2.1 M	SIDE AND REAR ELEVATIONS P- W CRAWL SPACE	
ELEV ELEVATION SYM SYMBOL ELEC ELEC	2 B	SIDE AND REAR ELEVATIONS 'B'	2.2 P	SIDE AND REAR ELEVATIONS 'P'-	
EQ EQUAL T TREAD (AT 5TAIRS) OR TILE EXT EXTERIOR T.B. TOWEL BAR FAU FORCED AIR INIT TEMPERED (GLASS)	2.I B	SIDE AND REAR ELEVATIONS 'B'	2.2 F	W BASEMENT	
FAU FORCED AIR UNIT F.C. FLOOR CHANGE T46 TONGLE GROOVE F.D. FLOOR DRAIN T.O.C. TOP OF CURB	2.1 D	W CRAWL SPACE	3 MS P	MONOLITHIC SLAB PLAN 'P'	
FFL FINISH FLOOR LINE TV TELEVISION F.G. FINISH FLOOR LINE TYP TYPICAL	2.2 B	SIDE AND REAR ELEVATIONS 'B'-	3 SW P	STEM WALL PLAN 'P'	
FLR FLOOR(ING) U.N.O. UNLESS NOTED OTHERWISE	2.2 0	W BASEMENT	3 CS P	CRAWL SPACE PLAN 'P'	
END ECHIDATION	3 MS B	MONOLITHIC SLAB PLAN 'B'	3 BS P	BASEMENT PLAN 'P'	
FX FIXED GLASS WD WOOD	3 SW B	STEM WALL PLAN 'B'	4 P	IST FLOOR PLAN 'P'	
GALV GALVANIZED MON MINDOW GAR GARAGE NH WATER HEATER G.B. GYPSUM BOARD NI WRQUSHT IRON	3 CS B	CRAWL SPACE PLAN 'B'	5 P	2ND FLOOR PLAN 'P'	
GD GRADE OR GRADING WIC WALK-IN CLOSET	3 BS B	BASEMENT PLAN 'B'			
GL GLASS OR GLAZING WWM WELDED WIRE MESH	4 B	IST FLOOR PLAN 'B'	IR	FRONT ELEVATION 'R'	
GYP BD GYPSUM BOARD PL PROPERTY LINE HB HOSE BIBB Ø ROUND / DIAMETER	5 B	2ND FLOOR PLAN 'B'	1.1 R	ROOF PLAN 'R'	
HD HD<			2R	SIDE AND REAR ELEVATIONS 'R'	
HVAC HEATING/VENTILATING/AIR COND. # POUND / NUMBER HWD HARDWOOD	ΙF	FRONT ELEVATION 'F'	2.I R	SIDE AND REAR ELEVATIONS 'R'-	
INT INTERIOR JST JOIST	1.1 F	ROOF PLAN 'F'		W CRAWL SPACE	
JT JOINT KIT KITCHEN	2 F	SIDE AND REAR ELEVATIONS 'F'	2.2 R	SIDE AND REAR ELEVATIONS 'R'-	
	2.I F	SIDE AND REAR ELEVATIONS 'F'-		W/ BASEMENT	
BUILDING CODE COMPLIANCE /		W CRAWL SPACE	3 MS R	MONOLITHIC SLAB PLAN 'R'	
PROJECT INFORMATION	2.2 F	SIDE AND REAR ELEVATIONS 'B'-	3 SW R	STEM WALL PLAN 'R'	
ALL CONSTRUCTION TO COMPLY WITH LOCAL CODES AND ORDINANCES		W/ BASEMENT	3 CS R	CRAWL SPACE PLAN 'R'	
CURRENTLY IN USE WITH THE LOCAL JURISDICTION.	3 MS F	MONOLITHIC SLAB PLAN 'F'	3 BS R	BASEMENT PLAN 'R'	
APPLICABLE CODES:	3 SW F	STEM WALL PLAN 'F'	4 R	IST FLOOR PLAN 'R'	
FOLLOW ALL APPLICABLE STATE AND LOCAL CODES.	3 CS F 3 BS F	CRAWL SPACE PLAN 'F' BASEMENT PLAN 'F'	5 R	2ND FLOOR PLAN 'R'	
2018 NORTH CAROLINA STATE SUPPLEMENTS AND AMENDMENTS	2 D5 F 4 F	IST FLOOR PLAN 'F'	IAS	BUILDING SECTIONS	
	4 F 5 F	2ND FLOOR PLAN 'F'	LAS	BUILDING SECTIONS BUILDING SECTIONS	
CONTRACTOR AND BUILDER SHALL REVIEW ENTIRE PLAN TO VERIFY CONFORMANCE WITH ALL CURRENT APPLICABLE CODES IN EFFECT AT TIME OF	51	ZND TEOOR TEAN T	I.I.2 A S		
CONSTRUCTION. BY USING THESE DRAWINGS FOR CONSTRUCTION IT IS UNDERSTOOD THAT CONFORMANCE WITH ALL APPLICABLE CODES IS THE				BUILDING SECTIONS	
RESPONSIBILITY OF THE BUILDER AND CONTRACTOR.			1.1.0 A U		
PRODUCT:			6	BASEMENT UTILITY PLAN	
SINGLE FAMILY RESIDENCE			7	IST FLOOR UTILITY PLAN	
OCCUPANCY CLASSIFICATION			8	2ND FLOOR UTILITY PLAN	
RESIDENTIAL R-3			76	ARCHITECTURAL SHEETS	
CONSTRUCTION TYPE: TYPE VB	ALL CONSULT	ANT DRAWINGS ACCOMPANYING THESE ARCHI	TECTURAL DRAL	WINGS HAVE NOT BEEN	
	PREPARED E	Y OR UNDER THE DIRECTION OF GMD DESIGN	GROUP, INC. GMI	D DESIGN GROUP INC.	
	THEREFORE /	ASSUMES NO LIABILITY FOR THE COMPLETENES	5 OK CORRECT	NESS OF THESE DRAWINGS.	

GENERAL NOTES DESIGNER NORTH CAROLINA:

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 INCONSISTENCES SHALL BE BROUGHT TO THE ATTENTION OF THE DEVELOPER AND THE DESIGNER BEFORE PROCEEDING WITH WORK.

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

DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED

ALL DIMENSIONS ARE TO FACE OF STUD OR TO FACE OF FRAMING UNLESS

ALL TRUES 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.

THESE DOCUMENTS ARE THE PROPERTY OF THE DESIGNER AND SHALL NOT BE COPIED, PROVIDE BLOCKING AND/OR BACKING AT ALL TOWEL BAR, TOWEL 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. FIRMISH AND INSTALL ALL WATERPROOFING COMPLETE. A 40 MIL. SELF-ADHERING MEMBRANE OF RUBBERIZED ASPHALT INTEGRALLY BONDED TO POLYETHTLENE SHEETING, OR EQUAL. INSTALL PER MANUFACTURE'S AND TRADE ASSOCIATIONS PRINTED INSTALLATION INSTRUCTIONS. 6" MINIMUM LAP AT ALL ADJACENT WALL SURFACES.

TO THE BEST OF THE DESIGNER'S KNONLEDGE 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 DISTRIBUSTION, 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 T MATERIALS FURNISHED BY SUBCONTRACTORS AND VENDORS.

THE BUILDER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM THE

GEOTECHNICAL ENGINEER (SOILS REPORT), ON THE STUDY OF THE PROPOSED SITE, TO THE DESIGNER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR. IN THE TO THE DELIGIEST SINCE UNREL EXCILES AND DELETED CONTRACTORY IN THE EVENT THE GESTSCHIKCAL REPORTS DO NOT EXIST, THE SOILS CONDITION SHALL BE ASSUMED TO BE A MINIMUM DESIGN SOIL REFESSIRE STATED BY THE STRUCTURAL ENSINEER OF RECORD FOR THE PURPOSE OF STRUCTURAL DESIGN. GENERAL CONTRACTOR SHALL ASSURE THE SOIL CONDITIONS MEET OR EXCEED HE 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 CONTRATION IS RESPONSIBLE TO BE AVARE 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 MIDTH 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 NORC SECTION R3IO.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.

+XPR+54 40'5 ODEL - HAYE

Mason Ridg Lot 36 60 Charlies Spring Lake

PLAN	CHANGES:	
DATE:	DESCRIPTION:	
02.22.21 03.10.21 04.14.21 04.15.21 12.03.21 01.26.22 04.25.22 08.08.22	INITIAL PLAN RELEASE CLIENT REVISIONS CLIENT REVISIONS CLIENT REVISIONS CLIENT REVISIONS CLIENT REVISIONS ADDED LIGHT OVER TUB/SHOWER IN BATH 2 STUDY ILD BEDOOM 4 - REOMVE CLOSET	
CON	ISULTANTS:	
BUILI	DER SET:	I

THE SCOPE OF THIS SET OF PLANS IS TO PROVIDE A "BUILDER'S SET"

THE SCOPE OF THIS SET OF PLANS IS TO PROVIDE A "BUILDER'S SET" OF CONSTRUCTION DOCUMENTS AND GENERAL NOTES HERINAFTER REFERRED TO AS "PLANS". THIS SET OF PLANS IS SUFFICIENT TO OBTAIN A BUILDING PERMIT; HOREVER, 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 FASTENINS. THEY ARE NOT INTENDED TO SPECIFY PARTICULAR PRODUCTS OR OTHER METHODS OF ANY SPECIFIC MATERIALS, PROJUCT OR METHOD. THE IMPLEMENTATION OF THE PLANS REQUIRES A CLIENT / CONTRACTOR THOROUGHLY KNOWLEDSEABLE UNIT THE APPLICABLE BUILDING CODES AND METHODS OF CONSTRUCTION SPECIFIC TO THIS PRODUCT TYPE AND TYPE OF CONSTRUCTION.

CONSTRUCTION REQUIREMENTS AND QUALITY: PROVIDE WORK OF THE SPECIFIC QUALITY WHERE QUALITY LEVEL IS NOT INDICATED, PROVIDE WORK OF QUALITY CUSTOMARY IN SIMILAR TYPES OF WORK. WHERE THE PLANS AND SPECIFICATIONS, CODES, LAWS, REGULATIONS, 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

S HOMES ERIES N 4 BR - LH	NO: DATE: REVISION: ▲ 04:25:22
Bend Way e, NC 28390	PROFESSIONAL SEAL: PROJECT TITLE: 40' Series
AREA CALCULATIONS:	CIENTS NAME:
MODEL 'HAYDEN' SQUARE FOOTAGES AREA ELEV 'F', K' Ist FLOOR 1066 SF 2nd FLOOR 1445 SF TOTAL LIVING 2311 SF GARAGE 422 SF PORCH 109 SF OPT. COVERED PORCH 80 SF IOPT. BASEMENT 1006 SF **BASEMENT AREA IS TAKEN TO INSIDE OF CONCRETE MALL**	PROJECT NO: GMD17049 SHEET ITTLE: TITLE SHEET PRINT DATE: January 22, 2021 SHEET NO: 0





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



NO: DATE:	REVISION:
04.25.22	
PROFESSIONAL SE	AL:
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PROJECT NO:	MD17049
SHEET TITLE:	
QUICK	VIEW
PRINT DATE:	
	22, 2021
SHEET NO:	-
	.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'-O" - EXTERIOR SOFFITS AT 8'-O"

NOTES:

 GRADE CONDITIONS MAY VARY FOR INDIVIDUAL SITE FROM THAT SHOWN, BUILDER SHALL VERIFY AND COORDINATE PER ACTUAL SITE CONDITIONS.
 NIRDOW HEAD HEIGHTS, IST FLOOR = 61-69 UND. ON ELEVATIONS.
 STOP FLOOR = 1-0° UND. ON ELEVATIONS.
 ROOFING: PTICHED SHINALES FER DEVELOPER.
 ROOFING: PTICHED SHINALES FER 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. ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANERACTIRER'S WRITTEN INSTRUCTIO PROTECTION AGAINST DECAN, (ALL PORTIONS OF A PORCH, SCREEN PORCH OR DECK FROM THE BOTTOM OF THE HEADER DOWN, INCLIDING POST, RAILS, PICKETS, STEPS AND FLOOR STRUCTURE.) INSULATION, FRE TABLE NICO2L2. EXTERIOR WALLS. R-IS BATTS MINIMM, VERIFY FLOOR OVER GARAGE. R-IS BATTS MINIMM, VERIFY CRANL SPACE FLOORING. R-IS BATTS MINIMM, VERIFY CRANL SPACE FLOORING. R-IS BATTS MINIMM, VERIFY

KEY NOTES: MASONRY:

- 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 δ" SOLDIER COURSE. 5 ROWLOCK COURSE O NA
 O NA
 TPICALS.
 O corrosion resistant screen lowered vents, size as noted. CORECCION RESISTANT ROOF TO WALL FLASHING. CODE COMPLIANT CORROSION RESISTANT ROOF TO WALL FLASHING. CODE COMPLIANT FLASHING PER NCRC R9052.8.3 0 STANDING SEAM METAL ROOF, INSTALL PER MANUFCATURER'S WRITTEN INSTRUCTIONS. II DECORATIVE WROUGHT IRON. SEE DETAILS.
 SIDING.

 I2) VIM. SHARE SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.

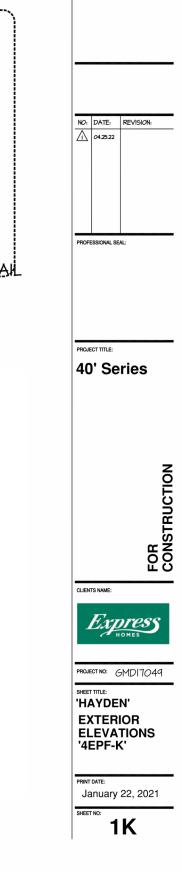
 (AT SPECIFIED LOCATIONG

 FIBER CENENT SHARE SIDING PER DEVELOPER WIX4 CORNER TRIM BOARD.)
 VINTL LAP SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. (AT SPECIFIED LOCATIONS; FIBER CEMENT LAP SIDING PER DEVELOPER W IX4 CORNER TRIM BOARD.)
 III UNIT DATE SIDNE FER DEVELOPER WITH VINT CORRECT RIM DOAD)

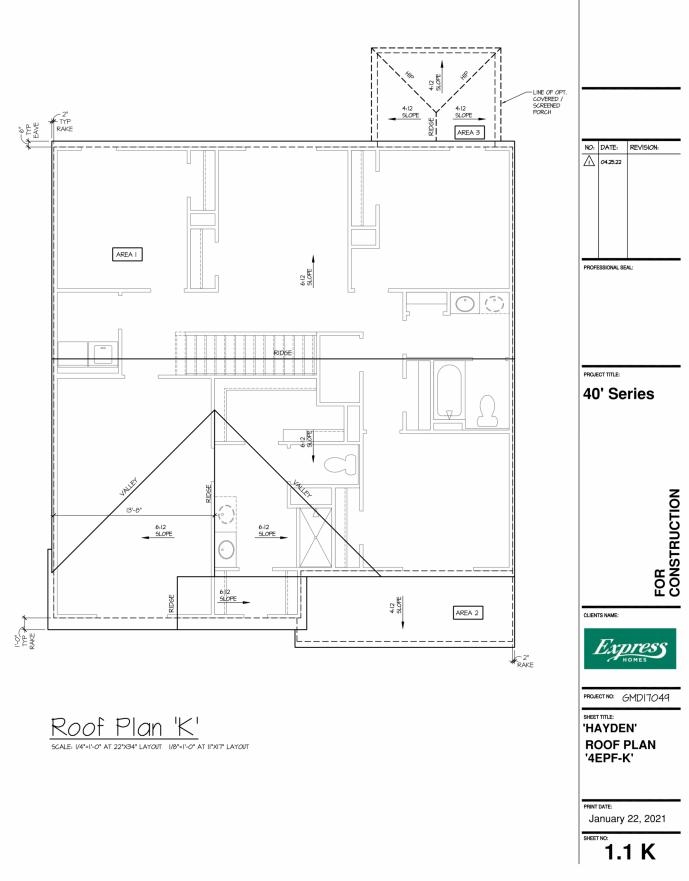
 III VINT WAVY SIDNE PER DEVELOPER WITH VINT CORRECTRIM PER DEVELOPER.

 (AT SPECIFIED LOCATIONS:

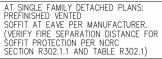
 FIBER CEMENT WAVY SIDING PER DEVELOPER WITH VINT CORRECTRIM BOARD.)
 UNYL BOARD AND BATT SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER. AT SPECIFIED LOCATIONS.
 HERE CHEMIC TANK IN USE DETENDED ANT THE CONCENTRATION OF LECTION IN THE CONCENTRATION OF LICENTRATION OF LICENTRATIONS.
 ANT SPECIFIC LOCATIONS.
 IN FIBER CHEMIC TRIM OR EQUIL, UNIO. SIZE AS NOTED
- TYPON 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 T2" ABOVE THE OUTSIDE WALKING SURFACE MIST HAVE WINDOW OPENING LIMITING BYOLOGE COMPLYING WITH THE NCRC SECTION R312.2.1 AND R312.2.2.

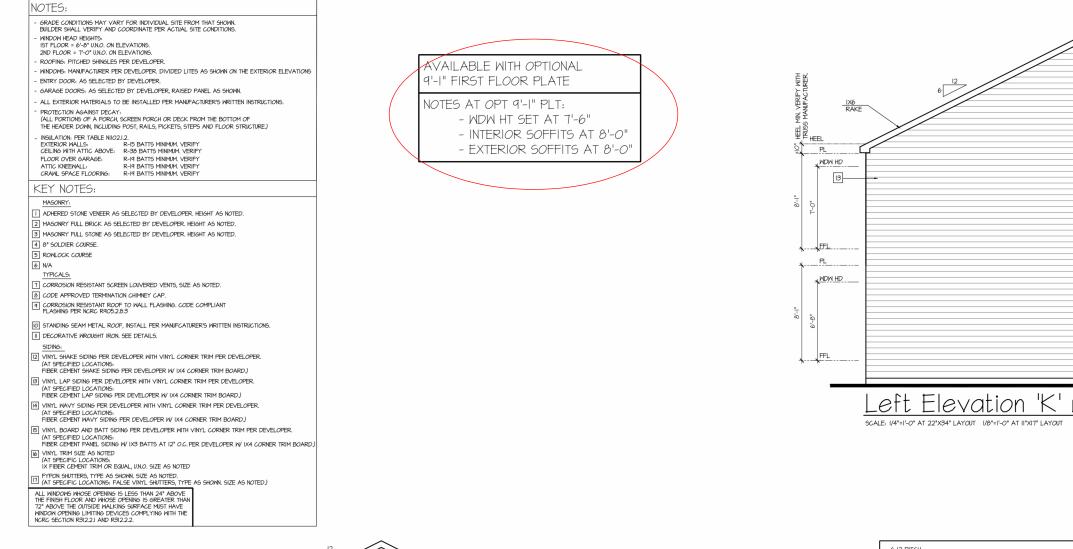


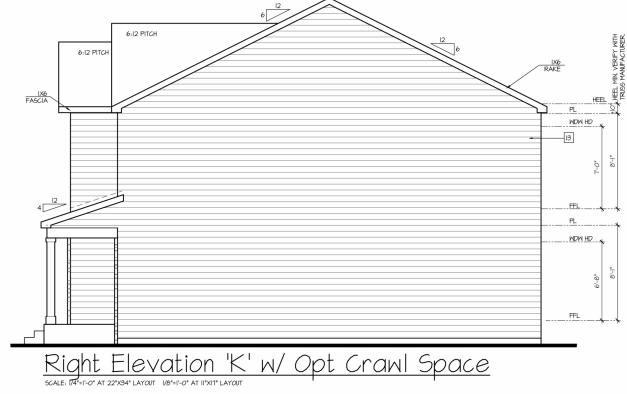
ATTIC VENT CALCULATION FOR PLAN 'HAYDEN': 1:150 RATIO. =0= EAVE (PER SECTION ROOF 2) THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 4 THE NET THE AREA OF THE SPACE VENTILATED, PROVIDED THAT AT LEAST SO PERCENT AND NOT MORE THAN 60 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE I SQUARE INCH VENT FOR EVERY 150 SQUARE INCHES OF CEILING *144 SQ. IN. = 1 SQ. FT. BLDG. CEILING (SF) X 144 = BLDG (SQ. IN.) O BE VENTILATED AT LEAST 3 FEET ABOVE THE EAVE OR BLDG. (SQ. IN.) / ISO = SQ. IN. OF VENT REQUIRED CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. ROOF AREA I:= 1488 SF 1488 SQ. FT. X 144 = 214272 SQ. IN. 214272 SQ. IN. / ISO = 1428.48 SQ. IN. OF VENT REQ'D EXCEPTIONS: EXCEPTIONS: . EXCLOSED ATTIC/RAFTER SPACES REQUIRING LESS THAN I SQ FT OF VENTILATION MAY BE VENTED WITH CONTINUOUS SOFFIT VENTILATION ONLY. ROOF AREA 2:= 39.5F 39.50, FT, X 144 = 5616 50, IN. 5616 50, IN. / 150 = 37.44 50, IN. OF VENT REQ'D 2. ENCLOSED ATTIC/RAFTER SPACES OVER UNCONDITIONED SPACE MAY BE VENTED WITH CONTINUOUS SOFFIT VENT ONLY GENERAL CONTRACTOR SHALL VERIFY THE NET FREE 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 VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VENTILATION OF THE VENT PROUDT SELECTED BY OWNER VENERY 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 RERE AIR MOVEMENT AS REQUIRED BY THE BUILDING OFFICIAL BY THE BUILDING OFFICIAL. ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (KS 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 CANTILEVERED ARCHITECTURAL POP-CUTS, AND ANT LOUG FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2° CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT. NOTES: - ALL ROOF DRAINAGE SHALL BE PIPED TO STREET OR APPROVED DRAINAGE FACILITY. TRUSS MANUFACTURER SHALL SUBMIT STRUCTURAL CALCS AND SHOP DRAWINGS TO THE BUILDER'S GENERAL CONTRACTOR AND BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATIONS. DASHED LINES INDICATE WALL BELOW. - 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. - LOCATE GUTTER AND DOWNSPOUTS PER BUILDER. PITCHED ROOFS AS NOTED. ATTIC VENT CALCULATION FOR PLAN 'HAYDEN': 1:300 RATIO. (PER SECTION R806.2) AS AN ALTERNATE TO THE 1/150 RATIO LISTED ABOVE. THE NET FREE CROSS-VENTILATION AREA MAY BE REDUCED I SQUARE INCH VENT FOR EVERY 300 SQUARE INCHES OF CEILING TO 1/300 WHEN A CLASS I OR II VAPOR RETARDER IS INSTALLED ON THE WARM - IN - WINTER SIDE OF THE CEILING. *144 50 IN = 1 50 FT BLDG. CEILING (SF) X 144 = BLDG (SQ. IN.) 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 MINIMM ACLULATED 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. BLDG. (SQ. IN.) / 300 = SQ. IN. OF VENT REQUIRED SQ. IN. OF VENT REQUIRED / 2 = 50% AT HIGH & 50% AT LOW. ROOF AREA I: = 1488 SF 1488 Sa, FT, X 144 = 142712 Sa, IN, 2142712 Sa, FT, X 300 = 714.24 Sa, IN, OF VENT READ 714.24 Sa, IN, / 2 = 357.12 Sa, IN, OF VENT AT HIGH I 357.12 Sa, IN, OF VENT AT LOW REQUIRED. ROOF AREA 2: # 34 5F 34 50. FT. X 144 5616 50. IN. 5616 50. FT. X 300 18.72 50. IN. OF VENT READ 18.72 50. IN. / 2 = 436 50. IN. OF VENT READ 436 50. IN. OF VENT AT HIGH 1 436 50. IN. OF VENT AT LOW REQUIRED. ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING KG 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. ROOF AREA 3: # 180 SF. 180 Sa. FT. X 144 125420 Sa. IN. 25420 Sa. FT. X 300 86:40 Sa. IN. OF VENT READ 26:40 Sa. IN. / 2 43:20 Sa. IN. OF VENT AT HIGH 4 43:20 43:20 Sa. IN. OF VENT AT HIGH 4 43:20 Sa. IN. OF VENT AT LOW REQUIRED. PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTIRAL POP-OUTS, AND ANY DOUBLE FRAMING FRO. BECTONG THAT ARE SEPARATED FROM THE VITTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2^I CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEVENT. 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.



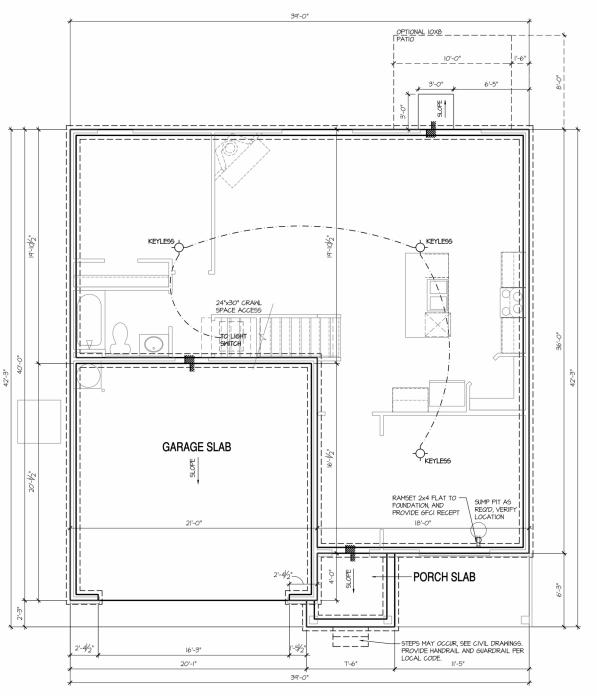












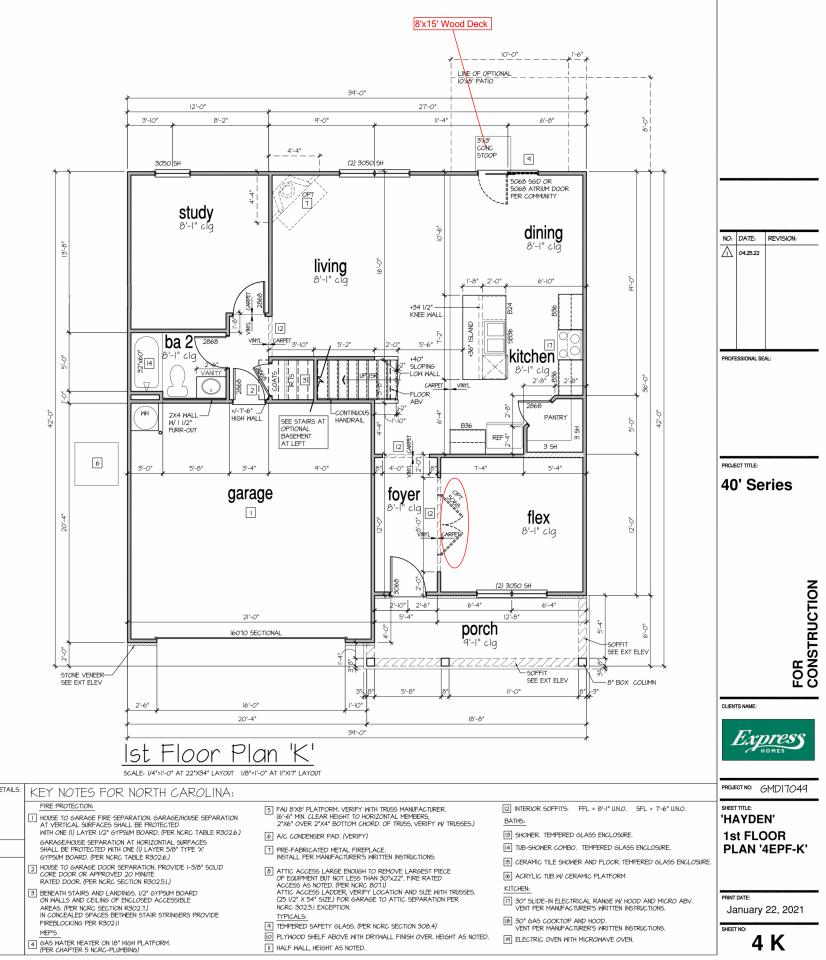
 CRAML SPACE NOTES NORTH CAROLINA: KEY NOTES: REFER TO STRUCTURAL DRAWINGS FOR INFORMATION NOT SHOWN ON THIS PLAN. FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS. PROVIDE FIREDLOCKING. (PER LOCAL CODES) ALL ELECTRICAL AND MECHANICAL EQUIPMENT AND METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONTINGS, CONTRACTOR TO VERIFY. VERIFY ALL DOOR THRESHOLD HEIGHTS TO HARD SURFACES. JUAT WAX AT INSHING DOORS. (PER NERK SECTOR ROLL STARD DETING. SLOPE GALL STOOPS AND HARDSCAPE MATERIAL AWAY FROM DUILDING - TYPICAL. SLOPE GARAGE FLOOR 10³⁶ PER FOOT TO GARAGE DOOR MANEACTURER. REFER TO CIVIL DRAWINGS FOR INISH SURFACE ELEVATIONS. TYP STOOP AT INSHING/SLIDER DOORS. 36³⁶ DEEP BY THE WIDTH OF THE DOOR SERVED, MININM, MERK EXCIDENT FOR PROTECTION FROM TERMITE INVESTATION ACCORDING TO LOCAL CODES). AT VENTED CRANL SPACE. AT VENTED CRANL SPACE DOOR SUBJECTION FROM TERMITE INVESTATION ACCORDING TO LOCAL CODES). AT VENTED CRANL SPACE. PROVIDE VENTS SPACED AROUND FERMETER TO PROMOTE CROSS VENTILATION AT A RATE OF IS Y VENT SOO SF OF CRANL SPACE FIEND AREA. ONE VENT MINING AND READE CR CRANL SPACE FIEN KORG SECTION 402.2. PROVIDE VENTS SPACED AROUND FERMETER TO REMOVE CROSS VENTILATION AT A RATE OF IS Y VENT SOO SF OF CRANL SPACE OF CRANL ACCESS. PROVIDE VENTS SPACED AROUND FERMETER TO PROMOTE CROSS VENTILATION AT A RATE OF IS Y VENT SOO SF OF CRANL SPACE OF CRANL ACCESS. PROVIDE VENTS SPACED AROUND FERMETER TO REMOVER OF THE BUILDING AND LOCATED TO ALLOW FOR CROSS VENTILATION. PROVIDE VENTS SPACED AROUND FERMETER TO REMOVER OF CROM FOR CROSS VENT CONSTANT, GROUND TO RACE SECTION RADE IS CONTAND SPACE THE SPACE OF CRANL ACCESS. PROVIDE VENTS SPAC		
 FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS. FROVIDE FIREBLOCKING, IPER LOCAL CODES) ALL ELECATION DUE TO FIELD CONDITIONS, CONTRACTOR TO VERIFY. VERIFY ALL DOOR THRESHOLD HEIGHTS TO HARD SURFACES. JU'AT WAX AT INSINIS DOORS, IPER NEXCE SECTION R313.1) SLOPE GARGE FLOOR 1/8' PER FOOT TO GARAGE DOOR OPENING. VERIFY CALE STUDIES OFTEN AND METERS ARE SUBJECT TO GRAGE DOOR OPENING. VERIFY CALE STUDIES OFTEN AND MAINFACTURER. REFER TO CIVIL DRAWINGS FOR FINISH SURFACE ELEVATIONS. TYP STOOP AT INSINIS/SLIDER DOORS. 36' DEEP BY THE INDTH OF THE DOOR SERVED, MINIMUM SILE DO FRAMING FOR FROIDE TO FRAME PER PRODUCT SPECIFICATION. SOILS TREATMENT, DOR CONS. 36' DEEP BY THE INDTH OF THE DOOR SERVED, MINIMUM SILE DO FRAMING PER PRODUCT SPECIFICATION. ACCORDING TO LOCAL CODES) AT VENTE D CRANL SPACE. ACCESS OFTING HEIDED TO FRAMING PER PRODUCT SPECIFICATION. ACCORDING TO LOCAL CODES) PROVIDE VARIOS FACE. ACCESS OFTING HEIDER OR REGULALENT, 6 MIL POLY-VINT, GROUND. COVER OVER FINISH GRADE OR CRANL SPACE PER NURCE CROSS VENTILATION. AT A RATE OF 1 SF VENT FOR EXALPER OR DEGIVALENT, 6 MIL POLY-VINT, GROUND COVER OVER FINISH GRADE OR CRANL SPACE PER NURCE CROSS VENTILATION. AT A RATE OF 1 SF VENT FOR EXAMPLER OR THE BUILDING AND LOCATED TO ALLON FOR CROSS VENTILATION. AT A RATE OF 1 SF VENT FOR EXALPERE REGULALENT, 6 MIL POLY-VINT, GROUND TO ALLON FOR CROSS VENTILATION. AT A RATE OF 1 SF VENT FOR EXALPERER CROSS SECTION RACE ACCH CONSULT SPACED AROUND FERMETER TO RECOVER CROSS VENTILATION. AT A RATE OF 1 SF VENT FOR EXALPERE REGULAL AREA. CORES SECTION RACE ACCH CORE OF THE BUILDING AND LOCATED TO ALLON FOR CROSS VENTILATION. AT A RATE OF 1 SF VENT FOR EXALPERER TO REMOVE CROSS VENTILATION. AT A RATE OF 1 SF VENT FOR EXALPERER TO REMOVE CROSS VENTILATION. AT A RATE OF 1 SF VENT FOR EXALPERER TO REMOVE CROSS VENTILATION. (FER NERGE SECTION NERGE OF THE BUILDING AND LOCATED TO	CRAWL SPACE NOTES NORTH CAROLINA:	KEY NOTES:
IE MECHANICAL FOURPENENT IS LOCATED IN CRAW (PER VCRC SECTION 408.8)	 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 FILED CONDITIONS, CONTRACTOR TO VERIFY. VERIFY ALL DOOR THRESHOLD HEIGHTS TO HARD SURFACES. JI/4' MAX AT INSMING DOORS, (PER NORG SECTION RSIII.31) SLOPE ALL STOOPS AND HARDSCAPE MATERIAL AWAY FROM BUILDING - TYPICAL. SLOPE ALL STOOPS AND HARDSCAPE MATERIAL AWAY FROM BUILDING - TYPICAL. SLOPE GARAGE FLOOR I/8' PER FOOT TO GARAGE DOOR OPENING. VERIFY OURS 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 (FER NORG SECTION RSII.3) PROVIDE A SLIP-RESISTANT FINISH. SOLIS TREATMENT: BORACARE TERMITE TO BE APPLIED TO FRAMING PER PRODUCT SPECIFICATIONS. (PROVIDE CHEMICAL TREATMENT FOR FROTECTION FROM TERMITE INVESTATION ACCORDING TO LOCAL CODES.) AT VENTED CRAAL SPACE. PROVIDE VENTS SPACED AROUND PERIMETER TO FROM TERMITE INVESTATION ACCORDING TO LOCAL CODES.) AT VENTED CRAAL SPACE OR CRAAML SPACE FER NORG SECTION 4602. PROVIDE VENTS SPACED AROUND PERIMETER TO FROM TER COSS VENTILATION AT A RATE CF I SF VERT FOR EVERT ISOD SF OF CRAAL ELOCATED WITH MIN SIZE OF ISOLATION, AREA ONE VENT MUST BE LOCATED WITHIN 3'-O' OF EACH CORNER OF THE BUILDING AND LOCATED TO ALLOW FOR CROSS VENTILATION, (FER NCRC SECTION RADULI EXCEPTION) PROVIDE AN ACCESS OPENING, MINIMM SIZE OF IS'X24" FOR CRAAML ACCESS. COORDINATE WITH MECHANICAL COTRACTOR FOR LARGER SIZE REQURPHENTS 	 2 LINE OF FRAMED WALL ABOVE 3 LINE OF FRAMED WALL ABOVE 3 LINE OF FRAMED 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 HOMINAL 4° BRICK. SEE STRUCTURAL DRAININGS FOR ALL STRUCTURAL ATTACHMENTS. ALL BLOCK CELLS AND SPACE BETTREED BLOCK AND BRICK SHALL BE FILLED SOLID WITH CONNETTE. FOUNDATION WALL WITH HULL HEIGHT BRICK VENEER SHALL CONSIST OF 8° CMU WITH HOMINAL 4° BRICK. SEE STRUCTURAL DRAININGS FOR WALL. (MICT COMPLY WITH NCRO SECTION R404, TABLE R404.11.0) THROUGH R404.11.04 AND APPLICABLE SECTIONS OF R606, R607, R603). VERIFY WITH STRUCTURAL DRAININGS FOR WALL FOOTING

- IF MECHANICAL EQUIPEMENT IS LOCATED IN CRAWL. (PER NCRC SECTION 408.8)
- 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.

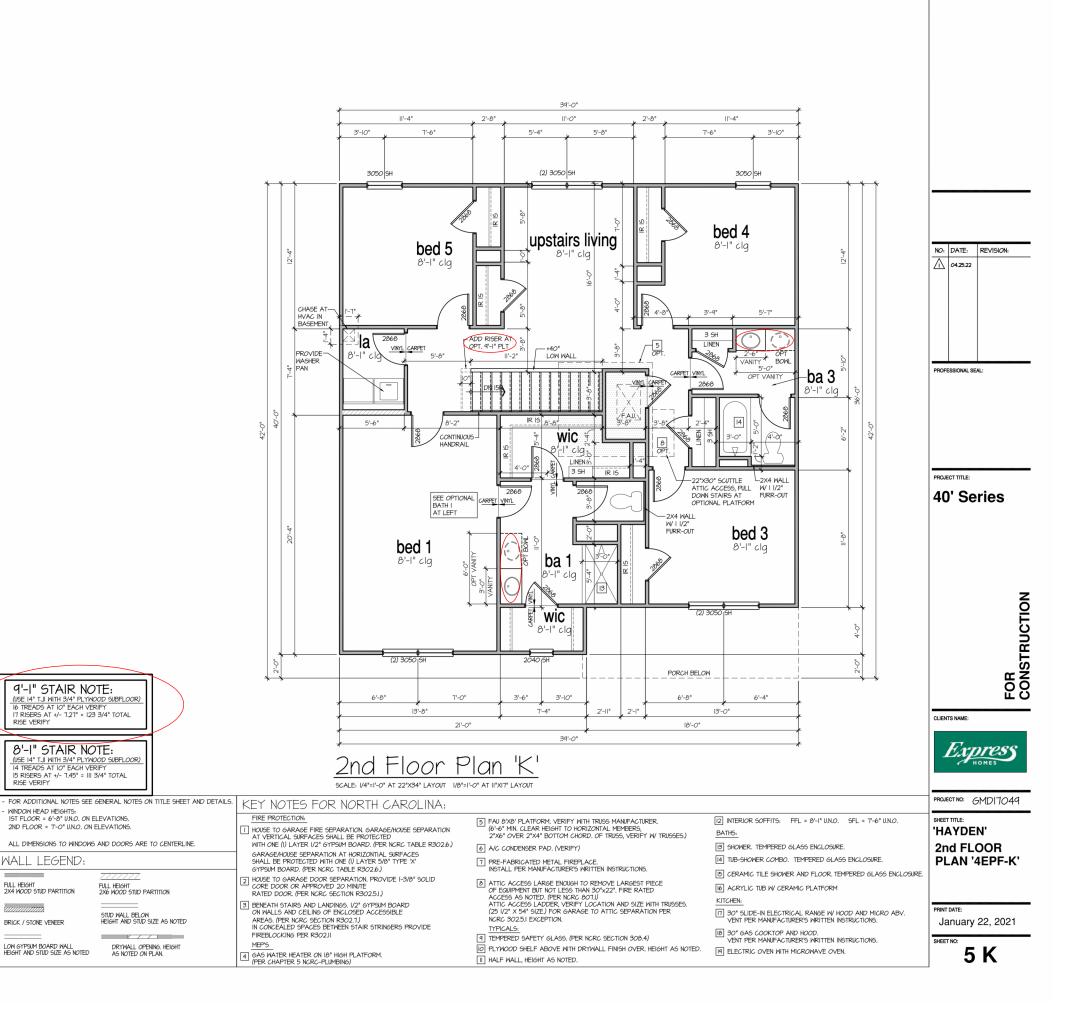
Crawl Space Plan 'K'

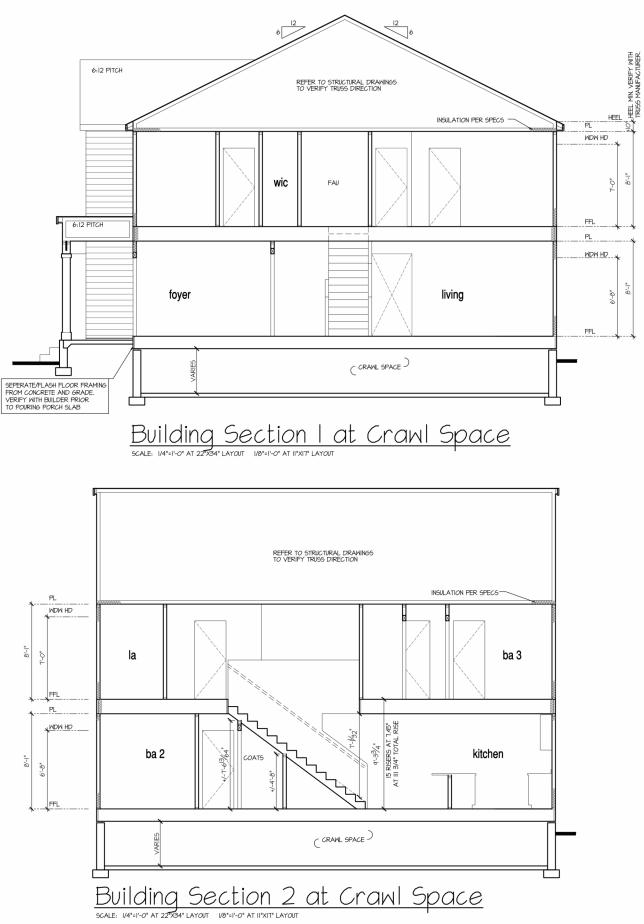
SCALE: 1/4"=1'-0" AT 22"X34" LAYOUT 1/8"=1'-0" AT 11"X17" LAYOUT





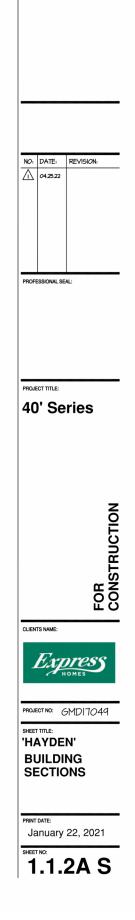
	G 3'-0" 5'-8" 3'-4" 4'-0" 8 garage	4'-0' 4'' 4'-0' 4'' 4'' 4'' 4'' 4'' 4'' 4'' 4'' 4'' 4
8'-9 1/2" STAIR NOTE: (USE 14" TJI NITH 3/4" PLYWOOD SUBPLOOR) 15 TREADS AT 10" EACH VERIFY 16 RISPS AT 4-1 750" = 120 1/4" TOTAL	21'-0"	210- 20-14 2068
RISE VERIFY 9'-1" STAIR NOTE: (USE 14" TJI WITH 3/4" PLYMOOD SUBFLOOR) 16 TREADS AT 10" EACH VERIFY 17 RISERS AT 4/- T2T" = 123 3/4" TOTAL RISE VERIFY 8'-1" STAIR NOTE:	SEE EXT ELEV 2'-6" 16'-0" 1'-10" 20'-4" 39'-0"	5'-8"
(USE 14" TJI WITH 3/4" PLYWOOD SUBFLOOR) 14 TREADS AT 10" EACH VERIFY 15 RISERS AT +/- T.45" = 111 3/4" TOTAL RISE VERIFY	Scale: 1/4*=1'-0" AT 22"X34" LAYOUT 1/8*=1'-0" AT 11"X17" LAYOUT	
FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS. MINDOW HEAD HEIGHTS; IST FLOOR = 6-8' UNO. ON ELEVATIONS, ZND FLOOR = 7'-0' UNO. ON ELEVATIONS, ALL DIMENSIONS TO WINDOWS AND DOORS ARE TO CENTERLINE. WALL LEGEND:	KEY NOTES FOR NORTH CAROLINA: FIRE PROTECTION: II HOUSE TO GARAGE FIRE SEPARATION, GARAGEHOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (I) LAYER 1/2" GYBSIM BOARD, (FEN KCR TABLE R302.6.) GARAGEHOUSE SEPARATION AT HORIZONTIAL SURFACES SHALL BE PROTECTED WITH ONE (I) LAYER 5/6" TYPE "X"	ONTAL MEMBI OF TRUSS, V
FULL HEIGHT ZZZZZZZ FULL HEIGHT FULL HEIGHT 2X4 WOOD STUD PARTITION FULL HEIGHT 2X6 WOOD STUD PARTITION STUD VALL BELON BRICK / STONE VENEER HEIGHT AND STUD SIZE AS NOTED LON GYPSIM BOARD HALL DRYWALL OPENING, HEIGHT HEIGHT AND STUD SIZE AS NOTED DRYWALL OPENING, HEIGHT	GYPSIM BOARD, (PER NCRC TABLE R302.6.) INSTALL PER MANEACTURERS WRIT [2] HOUSE TO GARAGE DOOR SEPARATION, PROVIDE I-3/8' SOLID CORE DOOR OR APPROVED 20 MINITE RATED DOOR, (PER NCRC SECTION R302.5.1.) [a) ATTIC ACCESS LARGE BOUGH TO D FEQUIPMENT BUT NOT LESS THAN ACCESS AS NOTED, (PER NCRC SECTION R302.5.1.) [3] BENEARH STAIRS AND LANDINGS, I/2' GYPSIM BOARD ON WALLS AND CELLING OF ENCLOSED ACCESSIBLE AREAS, (PER NCRC SECTION R302.7.1) IN CONCREALED SPACED BETWEEN STAIR STRINGERS PROVIDE FIREBLOCKING PER R302.11 [b] ATTIC ACCESS LARGE NOVIED, (PER NCRC 807 ATTICA ACCESS LADDER, VERIFY LOL (25 I/2' X 54' SIZE) FOR GARAGE 1 MEP'S (FIR CHAPTER 5 NCRC, CLIMBING) [b] ATTIC ACCESS LARGE NOVIED (PER NCRC 907 ATTICA ACCESS ACCESS PER NCRC 907 ATTICA ACCESS LARGE NOVIED (PER NCRC 907 AT	REMOVE LARI 30"x22". FIRE 7.1) DCATION AND TO ATTIC SEF CRC SECTION

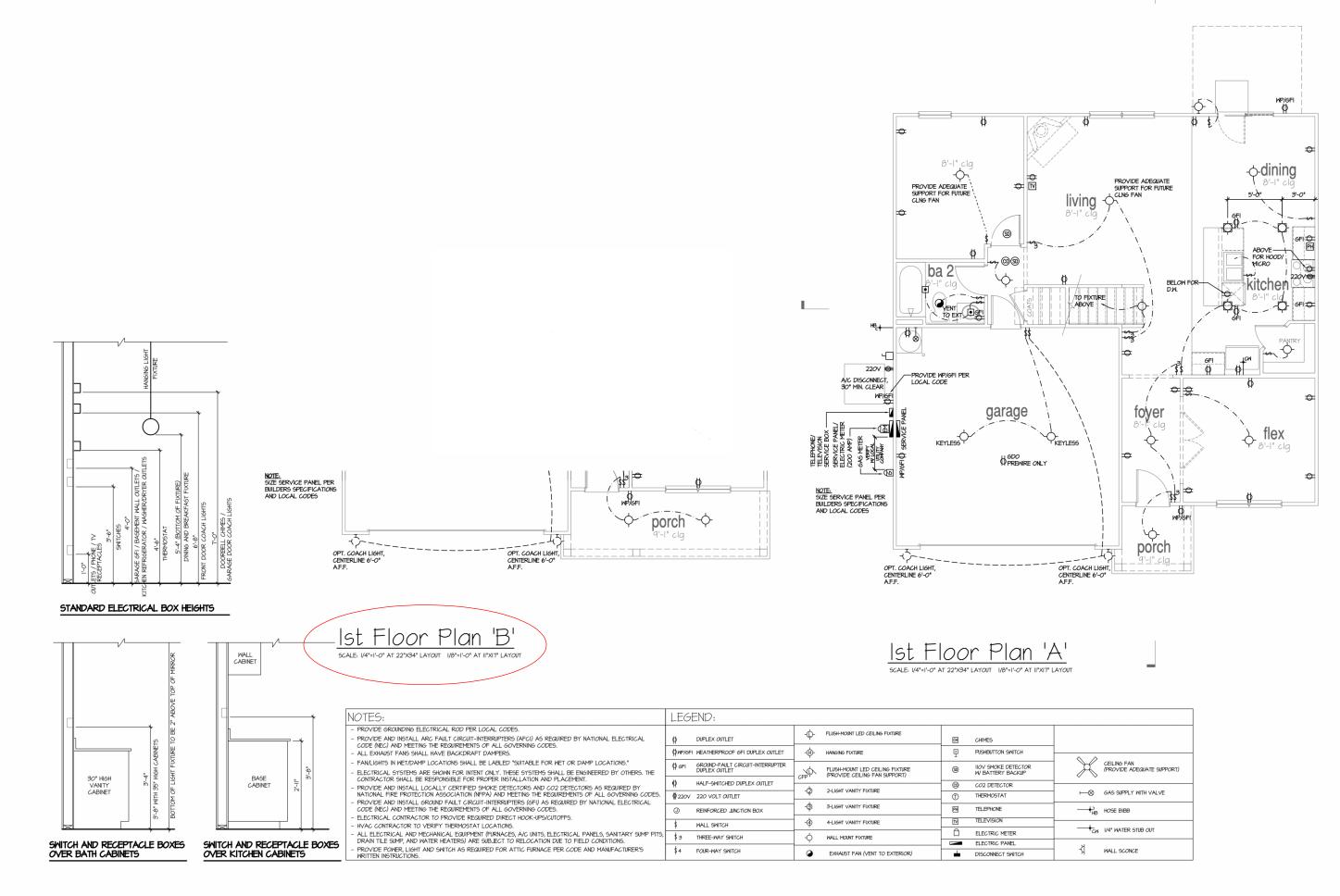




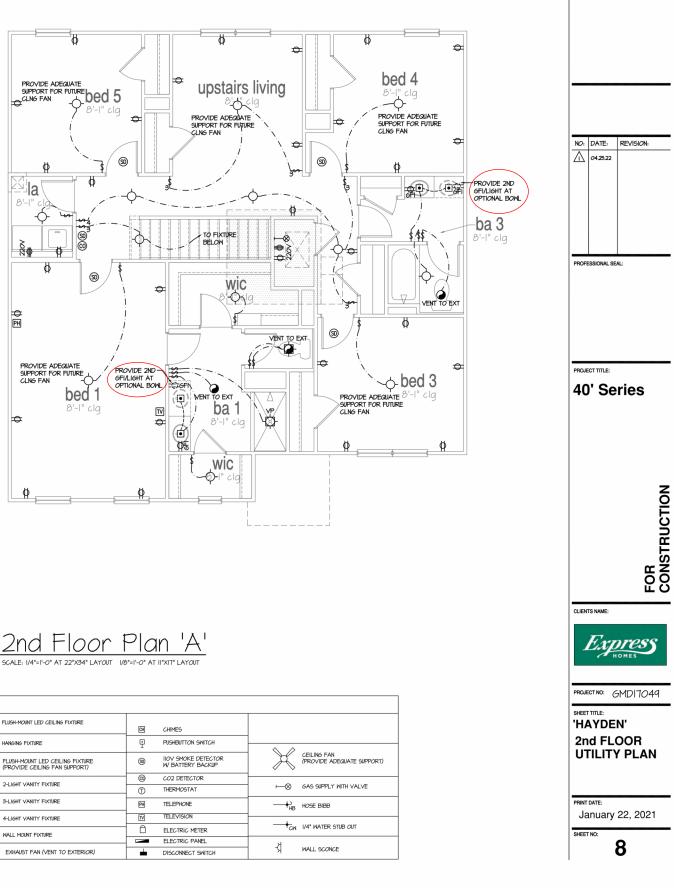


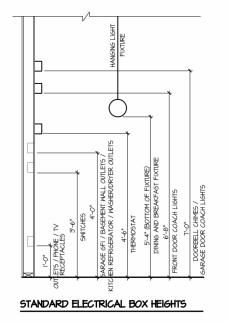
PEEER TO ELOOR PLAN NOT	ES FOR TYPICAL FIRE PROTECTION NOTES AND LOC	ATIONS
 THESE BUILDING SECTIONS N CONDITIONS. REFER TO MAIL BUILDING SECTIONS SHOWN I DRAWINGS, TRUSS DRAWING: 	LET OK THICKEN THE REPORTION NOTES THAT DEC NY VARY AT ALTERNATE ELEVATION STYLES AND N FLOOR PLAN AND ALTERNATE FLOOR PLANS FOR HERE DEPICT VOLUMN SPACES WITHIN THE STRUCTUR 5, STRUCTURAL DETAILS AND CALCULATIONS BY OT ROOF REFER TO ROOF PLAN FOR TYPICALS.	AT "PLAN OPTION" INFORMATION NOT SHOWN HERE. E. REFER TO STRUCTURAL
 WOOD FLOORS: FLOOR SHE REFER TO STRUCTURAL AND 	P TRUSS DRAWINGS BY OTHERS.	
WITH LOCAL CODES. - INSULATION: EXTERIOR WALLS ZONE 3:	D MAXIMUM REQUIREMENTS FOR CONSTRUCTION CLEA R-13 BATTS MINIMUM. VERIFY R-15 BATTS MINIMUM. VERIFY	ARANCES
CEILING WITH ATTIC ABOVE	COMPRESSED INSULATION: R-38 BATTS MINIMUM, VERIFY	PER STATE RESIDENTIAL CODE
CEILING WITH ATTIC ABOVE	UNCOMPRESSED INSULATION (HEELS IN TRUSSES): R-30 BATTS MINIMUM. VERIFY	COMPLIANCE METHOD TO BE DETERMINED BY BUILDER.
FLOOR OVER GARAGE: ATTIC KNEEWALL: CRAWL SPACE FLOORING:	R-19 BATTS MINIMUM. VERIFY	

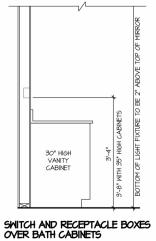


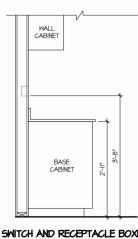




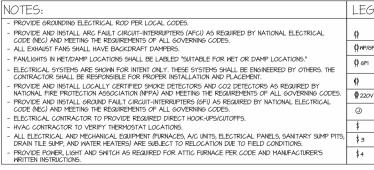








SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS

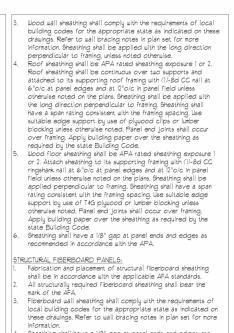


2nd	Floor	Plan	'A'

	LEG	END:					
	ø	DUPLEX OUTLET	-¢-	FLUSH-MOUNT LED CEILING FIXTURE	СН	CHIMES	
	ФиР/6FI	WEATHERPROOF GFI DUPLEX OUTLET		HANGING FIXTURE	P	PUSHBUTTON SWITCH	~
	ф өғі	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET	CFP CFP	FLUSH-MOUNT LED CEILING FIXTURE (PROVIDE CEILING FAN SUPPORT)	99	IIOV SMOKE DETECTOR W BATTERY BACKUP	×
	Ø	HALF-SWITCHED DUPLEX OUTLET	-0	2-LIGHT VANITY FIXTURE	0	CO2 DETECTOR	
	₽ 220V	220 VOLT OUTLET	Ψ	2-LIGHT VANITT FIXTURE	T	THERMOSTAT	щ¢
	J	REINFORCED JUNCTION BOX	-\$	3-LIGHT VANITY FIXTURE	PH	TELEPHONE	-+
	\$	WALL SWITCH	-@	4-LIGHT VANITY FIXTURE	TV	TELEVISION	
<i>,</i> ,	\$3	THREE-WAY SWITCH	-0	WALL MOUNT FIXTURE	Ô	ELECTRIC METER	
	\$4	FOUR-WAY SWITCH				ELECTRIC PANEL	-4
	**			EXHAUST FAN (VENT TO EXTERIOR)		DISCONNECT SWITCH	Я

					SHEET LIS	57:		
	DESIGN SPECIFICATIONS: Construction Type: Commerical 🗆 Residential 🖂				Sheet			Description
	Applicable Building Codes:				CS SIØ		C	Cover Sheet, Specifications, Revisions Monolithic Slab Foundation
	2018 North Carolina Residential Building Code with All Local ASCE 7-10: Minimum Design Loads for Buildings and Other St				51.Ø	05		Stem Wall Foundation Crawl Space Foundation
	Design Loads:				S1.Ø	Ъ		Basement Foundation
	I. Roof Live Loads II. Conventional 2x 20 P9F			ΙΜΙΤ	52.0 53.0	· /		Basement Framing Plan First Floor Framing Plan
	12. Truss 20 PSF 12. Attic Truss 60 PSF		3 UN		54,4	0		Second Floor Framing Plan
	2. Roof Dead Loads 21. Conventional 2x 10 P6F		ENGINEERING LA	BORATORY TESTING	65. 66.	-		Roof Framing Plan Basement Bracing Plan
	22. Truss 20 PSF 3. Snow 15 PSF	Г			67.0 58.0	-		First Floor Bracing Plan
	3.1. Importance Factor 10 4. Floor Live Loads				583			Second Floor Bracing Plan
	4.1. Typ. Dwelling 40 P9F 4.2. Sleeping Areas 30 P9F		HAYD	DEN LH				
	4.3. Decks 40 P9F 4.4. Passenger Garage 50 P9F		PROJECT ADDRESS:	OUNER:	REVISION	LIST:		
	5. Floor Dead Loads 5.1. Conventional 2x 10 P6F		TBD	DR Horton, Inc. 8001 Arrowridge Blvd.	Revision		Project	-
	52. I-Joist			Charlotte, NC 28273	No.	Date	No.	Description
	 Ultimate Design Wind Speed (3 sec. gust) 130 MPH Exposure B 		DESIGNER: GMD Desian Group		1	4.19.21	TØ177	Updated elevation names Added Stem Wall, Crawlspace, and Basement
	6.2. Importance Factor		102 Fountain Brook Circle Suite C		2	6.14.21	TØ177	Foundations Added OX-15 option and table for framing
	63.l. Vx = 632.Vy =		Cary, NC 27511		3	11.23.21	TØ177	Updated framing in the first floor
	 Component and Cladding (in PSF) MEAN ROOF 			d with the architectural, mechanical, plumbing, prdination is not the responsibility of the				
	HT. UP TO 30' 30'1"-35' 35'1"-40' 40	0' "-45' 8,-202	structural engineering of record (SER)					
	ZONE 2 16.7,-21.0 17.6,-22.1 18.3,-22.9 18.	8,-23.6	P.C. before construction begins.	an in the Engineering, Eaboratory + Teeting,				
		8,-23.6	PLAN ABBREVIATIONS:					
	ZONE 5 182,-24.0 192,-25.2 19.9,-26.2 20	4,-26.9	AB ANCHOR BOLT	PT PRESSURE TREATED				
	8. Seismic 81. Site Class		AFF ABOVE FINISHED FLOOR CJ CEILING JOIST	RS ROOF SUPPORT SC STUD COLUMN				
	82. Design Category		CLR CLEAR DJ DOUBLE JOIST	5J SINGLE JOIST SPF SPRUCE PINE FIR				
	83, Importance Factor[4 84. Selsmic Use Group] 85. Spectral Response Acceleration		DSP DOUBLE STUD POCKET	SST SIMPSON STRONG-TIE				
	85.1.5ms = %g 85.2.5ml = %g		EE EACH END EW EACH WAY	SYP SOUTHERN YELLOW PINE				
	86. Selsmic Base Shear 86. Vx =		NTS NOT TO SCALE	TSP TRIPLE STUD POCKET				
	862.Vy = 8.1. Basic Structural System (check one)		OC ON CENTER PSF POUNDS PER SQUARE FOOT	TYP TYPICAL UNO UNLESS NOTED OTHERWISE				
	⊠ Bearing Wall □ Building Frame		PSI POUNDS PER SQUARE INCH	WUF WELDED WIRE FABRIC				
	☐ Durang Frame ☐ Moment Frame ☐ Dual w/ Special Moment Frame		Roof truss and floor joist layouts, and	d their corresponding loading details,				
	□ Dual w/ Intermediate R/C or Special Stee □ Inverted Pendulum	1	prior to the initial design. Therefore, t	ering, Laboratory & Testing, P.C. (SUMMIT) truss and joist directions were assumed				
	88. Arch/Mech Components AnchoredN 89. Lateral Design Control: Seismic 🗌 Wind 🛛		based on the information provided by revisions based on roof truss and flow	or joist layouts shall be noted in the				
	9. Assumed Soil Bearing Capacity 20	000psf	revision list, indicating the date the la discrepancies become apparent, the c	ayouts were pro∨ided. Should any contractor shall notify SUMMIT immediately.				
GENERAL STRUCTURAL NOTES:	2. The bottom of all footings shall extend below the frost line for	5. Concrete slabs-on-o	rade shall be constructed in accordance	9. Where reinforcing dowels are required, they	shall be equiv	valent	WOOD TRUS	66E6:
 The design professional whose seal appears on these drawings is the structural engineer of record (SER) for this project. The 	the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.	Construction".	Guide for Concrete Slab and Slab	in size and spacing to the vertical reinforcer shall extend 48 bar diameters vertically and			design	ood truss manufacturer/fabricator is responsible for the n of the wood trusses. Submit sealed shop drawings and
SER bears the responsibility of the primary structural elements and the performance of this structure. No other party may revise,	 Any fill shall be placed under the direction or recommendation of a licensed professional engineer. 	subgrade modulus of	n-grade has been designed using a ? k=250 pci and a design loading of 200	into the footing. 10. Where reinforcing steel is required vertically	, dowels shall	be	fabric	rting calculations to the SER for review prior to atom ation. The SER shall have a minimum of five (5) days for
alter, or delete any structural aspects of these construction documents without written permission of SUMMIT Engineering,	 The resulting soil shall be compacted to a minimum of 95% maximum dry density. 	cracking or other fut	responsible for differential settlement, slab ure defects resulting from unreported	provided unless otherwise noted.			compli	u. The review by the SER shall review for overall iance with the design documents. The SER shall assume no
Laboratory 4 Testing, P.C. (SUMMIT) or the SER. For the purposes of these construction documents the SER and SUMMIT	 Excavations of footings shall be lined temporarily with a 6 mil polyethylene membrane if placement of concrete does not occur 	7. Control or saw cut jo	cordance with the above assumptions. Dints shall be spaced in interior	WOOD FRAMING: 1. Solid sawn wood framing members shall confo			the wa	nsibility for the correctness for the structural design for bod trusses.
shall be considered the same entity. 2. The structure is only stable in its completed form. The contractor	within 24 hours of excavation. 6. No concrete shall be placed against any subgrade containing	slabs-on-grade at a	maximum of $ 5'-\mathcal{O}''$ O.C. and in exterior maximum of $ \mathcal{O}'-\mathcal{O}''$ unless otherwise noted.	specifications listed in the latest edition of Design Specification for Wood Construction	(NDS). Unles		as spe	bod trusses shall be designed for all required loadings scified in the local building code, the ASCE Standard
shall provide all required temporary bracing during construction to stabilize the structure. 3. The SER is not responsible for construction sequences, methods.	water, ice, frost, or loose material.	process within 4 to 12	pints shall be produced using conventional 2 hours after the slab has been finished	otherwise noted, all wood framing members ar Southern-Yellow-Pine (SYP) #2.	2		(ASCE	m Design Loads for Buildings and Other Structures." 1-10), and the loading requirements shown on these
 The SER is not responsible for construction sequences, methods, or techniques in connection with the construction of this structure. The SER will not be held responsible for the 	<u>STRUCTURAL STEEL:</u> I. Structural steel shall be fabricated and erected in accordance with the American Institute of Steel Construction "Code of	Reinforcing steel may	y not extend through a control joint. y extend through a saw cut joint. c (WWF.) for concrete slabs-on-grade shall	 LVL or PSL engineered wood shall have the design values: 21. E = 1900000 psi 	rollowing mini	mum	other	Fications. The truss drawings shall be coordinated with all construction documents and provisions provided for shown on these drawings including but not limited to
contractor's failure to conform to the contract documents, should any non-conformities occur.	Standard Practice for Steel Buildings and Bridges" and the manual of Steel Construction "Load Resistance Factor Design"		epth of slab. The W.W.F. shall be securely	2.1. E = 1,300,000 psi 2.2. Fb = 2600 psi 2.3. Fv = 285 psi				equipment, piping, and architectural fixtures attached to
 Any structural elements or details not fully developed on the construction drawings shall be completed under the direction of 	latest editions. 2. Structural steel shall receive one coat of shop applied	CONCRETE REINFORCEME		2.4.Fc = 700 psi 3. Wood in contact with concrete, masonry, or ea	arth chall be		3. The tru	usses shall be designed, fabricated, and erected in dance with the latest edition of the "National Design
a licensed professional engineer. These shop drawings shall be submitted to SUMMIT for review before any construction begins.	rust-inhibitive paint. 3. All steel shall have a minimum yield stress (F_) of 36 ksi unless	1. Fibrous concrete reir	nforcement, or fibermesh, specified in rade may be used for control of cracking	pressure treated in accordance with AWPA s other moisture exposed wood shall be treate	tandard C-15.		Specif	fication for Wood Construction." (NDS) and "Design fication for Metal Plate Connected Wood Trusses."
The shop drawings will be reviewed for overall compliance as it relates to the structural design of this project. Verification of	otherwise noted. 4. Welding shall conform to the latest edition of the American	due to shrinkage and	thermal expansion/contraction, lowered crease in impact capacity, increased	with AWPA standard C-2 4. Nails shall be common wire nails unless otherwi			4. The tru	uss manufacturer shall provide adequate bracing ation in accordance with "Commentary and
the shop drawings for dimensions, or for actual field conditions, is not the responsibility of the SER or SUMMIT.	Welding Society's Structural Welding Code AWS DI.I. Electrodes for shop and field welding shall be class E10XX. All welding	abrasion resistance, a	and residual strength. 1 to be 100% virgin polypropylene fibers	 Lag screws shall conform to ANSI/ASME stand Lead holes for lag screws shall be in accord 	dard B18.2.1-198		Recon	nmendations for Handling, Installing, and Bracing Metal Connected Wood Trusses" (HIB-91). This bracing, both
 Verification of assumed field conditions is not the responsibility of the SER. The contractor shall verify the field conditions for 	shall be performed by a certified welder per the above standards.	containing no reproc	essed olefin materials and specifically as concrete secondary reinforcement.	specifications. 6. All beams shall have full bearing on supporting			tempo	rary and permanent, shall be shown on the shop drawings. the shop drawings shall show the required attachments for
accuracy and report any discrepancies to SUMMIT before construction begins.	CONCRETE:	 Application of fibern a minimum of Ø.1% by v 	mesh per cubic yard of concrete shall equal volume (1.5 pounds per cubic yard)	unless otherwise noted. 1. Exterior and load bearing stud walls are to b	oe 2x4 SYP ₹2	2 @ 16"	the tru 5. Any ch	usses. '
 The SER is not responsible for any secondary structural elements or non-structural elements, except for the elements specifically 	 Concrete shall have a normal weight aggregate and a minimum compressive strength (f'e) at 28 days of 3000 psi, unless 	 Fibermesh shall compl requirements, and sha 	ly with ASTM CIII6, any local building code Il meet or exceed the current industry	O.C. unless otherwise noted. Studs shall be co sole plate to the double top plate. Studs s	hall only be		shown	as a reference only. The final design of the trusses shall ar the manufacturer.
noted on the structural drawings. T. This structure and all construction shall conform to all	otherwise noted on the plan. 2. Concrete shall be proportioned, mixed, and placed in		s shall be new billet steel conforming to	discontinuous at headers for window/door or of one king stud shall be placed at each end				WOOD FRAMED DECKS:
applicable sections of the international residential code. 8. This structure and all construction shall conform to all	accordance with the latest editions of ACI 318: "Building Code Requirements for Reinforced Concrete" and ACI 301:		n, and placement of reinforcing steel shall	King studs shall be continuous. 8. Individual studs forming a column shall be att			codes	are to be framed in accordance with local building and as referenced on the structural plans, either through
applicable sections of local building codes. 9. All structural assemblies are to meet or exceed to requirements	"Specifications for Structural Concrete for Buildings". 3. Air entrained concrete must be used for all structural elements	Standard Practice fo	th the latest edition of ACI 375: "Manual of or Detailing Concrete Structures"	nail @ 6" O.C. staggered. The stud column sh to the foundation or beam. The column shall b	e properly			references or construction details.
of the current local building code.	exposed to freeze/thaw cycles and deicing chemicals. Air entrainment amounts (in percent) shall be within -1% to +2% of	and shall have 90° b	nd wall reinforcement shall be continuous rends, or corner bars with the same	blocked at all floor levels to ensure proper 9. Multi-ply beams shall have each ply attached	10ad transfer 1 with (3) 10d i	naíls a	1. Fabric	UCTURAL PANELS: ation and placement of structural wood sheathing shall be
EOUNDATIONS: 1. The structural engineer has not performed a subsurface investigation. Verification of this assumed value is the	target values as follows: 3.1. Footings: 5% 3.2. Exterior Slabs: 5%	tension splice.	norizontal reinforcement with a class B	24" O.C. 10. Four and five ply beams shall be bolted tog of 1/0" diameter through bolts staggard 6.1			"Resic	ordance with the APA Design/Construction Guide dential and Commercial," and all other applicable APA ards
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	 No admixtures shall be added to any structural concrete without written permission of the SER. 	for tension or compre	required, a minimum of 40 bar diameters ession unless otherwise noted. Splices in nimum of 48 bar diameters.	of 1/2" diameter through bolts staggered © 1 noted otherwise.	0 0.0, UNIESS		2. All stri the AF	ucturally required wood sheathing shall bear the mark of
adverse soil condition be encountered the 5ER must be contacted before proceeding.	witter permission or the JER.	masonry shall be a mit	mmum or 40 dar alameters.				une At	m.

Signature	
	Gignature



Sheathing shall have a 1/8" gap at panel ends and edges are recommended in accordance with the AFA.



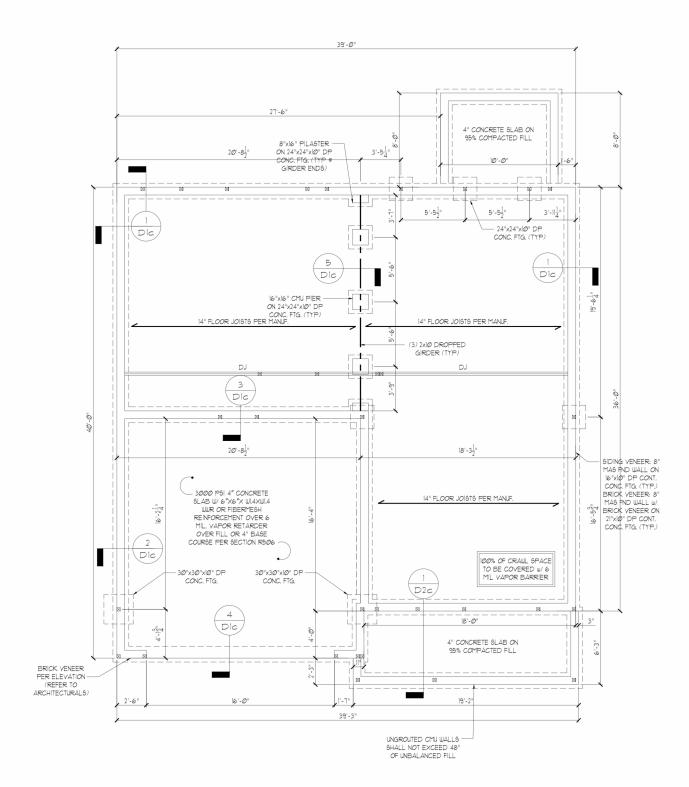
STRUCTURAL MEMBERS ONLY

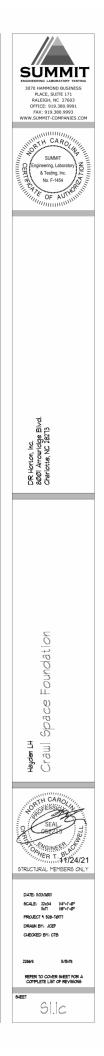
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & 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'-@" ON 22"x34" OR 1/8"=1'-@" ON 11"x17"

<u>ELEVATION B.F.K.</u>





		REQUIRED BRACED WALL PANEL CONNECTIONS			
			MIN. THICKNESS	REQUIRED CONNECTION	
	METHOD	MATERIAL		© 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** © 7™ O.C.	5d COOLER NAILS** @ T" 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 FOUVALEN	T PER TABLE R10235	

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/UNDOW OPENING SIZES 3
- 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 04 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS. 5. MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1
- TIMITUT FARELLENGTH OHALL DE FER TABLE REGULE. THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINITUM 1/2" GYFSUM BOARD (UNO). FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON 8
- ALL SHEATHABLE SUFFACTING INTO, EARLOR WALLS SHEATHAED ON ALL SHEATHABLE SUFFACES 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 9. OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS. 10. 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.
- 12. MASONRY OR CONCRETE STEM WALLS W/ A LENGTH OF 48" OR LESS SUPPORTING A MASCHRY OK CONCRETE 51EM WALLS W/A LENGTH OF 48° CK LESS 50FPORTING A BRACED WALL PAREL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2016 NCRC.
 BRACED WALL PAREL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4
 BRACED WALL PAREL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5

- ACCORDANCE WITH SECTION REVIEWS CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION REVIEWS
- 16. PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO) 17. ABBREVIATIONS:

GB = GYPSUM BOARD	WSP = WOOD STRUCTURAL PANEL
CS-XXX = CONT. SHEATHED	ENG = ENGINEERED SOLUTION
PF = PORTAL FRAME	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 VERITY 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. 3 CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING
- REQUIRED TO REGIST ALL FORCES ENCOUNTERED DURING ERECTION. PROPERTIES USED IN THE DESIGN ARE AS FOLLOUS:
- PROPERTIES USED IN THE DESIGN ARE AS FOLLOUG: MICROLLAM (LVL), F.p. = 12600 PS), F.y. = 235 PS), E. = 1921/0⁶ PSI PARALLAM (PSL), F.g. = 1920 PSI, F.y. = 230 PSI, E. = 1251/0⁶ PSI ALL WOOD MEMBERS SHALL BE '2 SYP UNLESS NOTED ON PLAN, ALL STUD COLUMNS AND JOISTS SHALL BE '2 SYP UND). ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 '2 SYP STUD COLUMN AT EACH END UNLESS NOTED OTHERUISE. ALL REINFORCING STEEL SHALL BE GRADE 6/0 BARS CONFORMING TO ASTM AGE AND GUILAUL UNG & ANNUME COURD COL

- ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3". 8. CONTRACTOR TO PROVIDED LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- FERFENDICULAR IO RAFIERS. FLITCH BEAMS, 4-PLY LVLS AND 3-PLY SIDE LOADED LVLS SHALL BE BOLTED TOGETHER WITH I/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL I/D3f. 9. MINE DEGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM. 10. ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP ¹²,
- DROPPED FOR NON-LOAD BEARING HEADERS CHAELD UN HEADERS 20-0° IN WIDTH AND/OR WITH MORE THAN 2'-0° OF CRIPPLE WALL ABOVE, SHALL BE (2) FLAT 2x4 SYP 12, DROPPED. (UNLESS NOTED OTHERWISE)

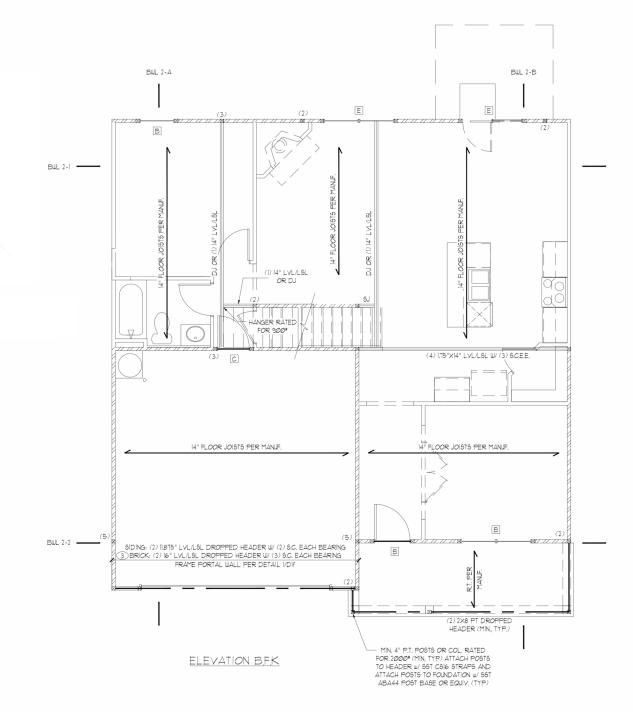
THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL, PLANG PROVIDED BY <u>DR HORTON</u> COMPLETED/REVISED ON <u>4/15/21</u>, IT 16 THE RESPONSIBILITY OF THE CLIENT TO NOTIEY SUMMIT ENGINEERING LABORATORY & TESTING PC, IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY 4 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.

FIRST FLOOR FRAMING PLAN SCALE: 1/4"=1'-0" ON 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			

TAG	SIZE	JACKS (EACH END)
Д	(2) 2x6	(1)
В	(2) 2x8	(2)
С	(2) 2x1Ø	(2)
D	(2) 2x12	(2)
E	(2) 9-1/4" LSL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
Н	(3) 2x1Ø	(2)
1	(3) 2x12	(2)

HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. 2. ALL HEADERS TO BE DROPPED (UN.O.). 3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD

COLUMNS LISTED ABOVE (U.N.O.)

SCHEDULE
MINIMUM KING STUDS E.E.
(D
(2)
(2)
(3)
(3)
(3)
(4)
(4)

WALL STUD SCHEDULE (10 FT HEIGHT) ATUD AITE ATUD ARACING (OC

	STUD SIZE	STUD SPACING (O.C.)			
		ROOF ONLY	ROOF 4 1 FLOOR	ROOF \$ 2 FLOORS	NON-LOAD BEARING
ĺ	2×4	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" OC

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'-Ø" O.C. VERTICALLY.

LINTEL SCHEDULE				
TAG	SIZE	OPENING SIZE		
I L3x3xl/4" 2 L5x3xl/4" 3 L5x3-l/2x5/l6"		LESS THAN 6'-Ø"		
		6'-0" TO 10'-0"		
		GREATER THAN 10'-0"		
4	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 SHOUN 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 R602.0.8 # FIG. R602.0.1 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.



	REQUIRED BRACED WALL PANEL CONNECTIONS				
	METHOD MATERIAL			REQUIRED CONNECTION	
		MATERIAL MIN. THICKNESS	© 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** ⊛ 7" O.C.	5d COOLER NAILS** @ 7" O.C.
	WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAIL5 @ 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 EQUIVALEN	T PER TABLE R102.3.5	

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/UNDOW OPENING SIZES 3
- BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH TABLE R602.10.1
- 5. ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED WE FEET FOR ISOLATED PANEL METHOD AND IS FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1
- THE INTERCE LEATE OF EALE DE LEU LA DE DET HE VOLUME. THE INTERCE 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 8. ALL SHEATHABLE SUFFACES NCLLDING INFILL AREAS BETLEME BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALL FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION
- OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS. 10. 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. 12. MASONRY OR CONCRETE STEM WALLS W/ A LENGTH OF 48" OR LESS SUPPORTING A
- MASCHRY OK CONCRETE SIEM WALLS W/A LENGTH OF 48° OK LESS SUPPORTING A BRACED WALL PAREL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.43 OF THE 2018 NCRC.
 BRACED WALL PAREL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4
 BRACED WALL PAREL 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 R602.00.4.6
- 16. PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO) 17. ABBREVIATIONS:

PANEL

GB = GYPSUM BOARD	WSP = WOOD STRUCTURAL PANE
CS-XXX = CONT, SHEATHED	ENG = ENGINEERED SOLUTION
PF = PORTAL FRAME	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 HIS PLAN
- 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING REQUIRED TO REGIST ALL FORCES ENCOUNTERED DURING ERECTION. PROPERTIES USED IN THE DESIGN ARE AS FOLLOUS:
- PROPERTIES USED IN THE DESIGN ARE AS FOLLOUG: MICROLLAM (LVL), F₀ = 26000 PS), F₂ = 285 PS), E = 192/0⁶ PSI PARALLAM (PSL), F₀ = 2920 PSI, F₂ = 292 PSI, E = 125/10⁶ PSI ALL WOOD MEMBERS SHALL BE *2 SYP UNLESS NOTED ON PLAN, ALL STUD COLUMNS AND JOISTS SHALL BE *2 SYP UND). ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 *2 SYP STUD COLUMN AT EACH END UNLESS NOTED OTHERUISE. ALL REINFORCING STELL SHALL BE GRADE 60 BARS CONFORMING TO ATT ACH END BUILD UNCE A SIMUMA COURD COL

- ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3". 8. CONTRACTOR TO PROVIDED LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- 9 FLITCH BEAMS, 4-PLY LVLS AND 3-PLY SIDE LOADED LVLS SHALL BE BOLTED TOSETHER WITH 1/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1/D3f. MINE DEGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM. 10. ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP ¹²,
- DROPPED. FOR NON-LOAD BEARING HEADERS OLECEDING 3'-0" IN WIDTH AND/OR WITH MORE THAN 2'-0" OF CRIPPLE WALL ABOVE, SHALL BE (2) FLAT 2x4 SYP 12, DROPPED. (UNLESS NOTED OTHERWISE)

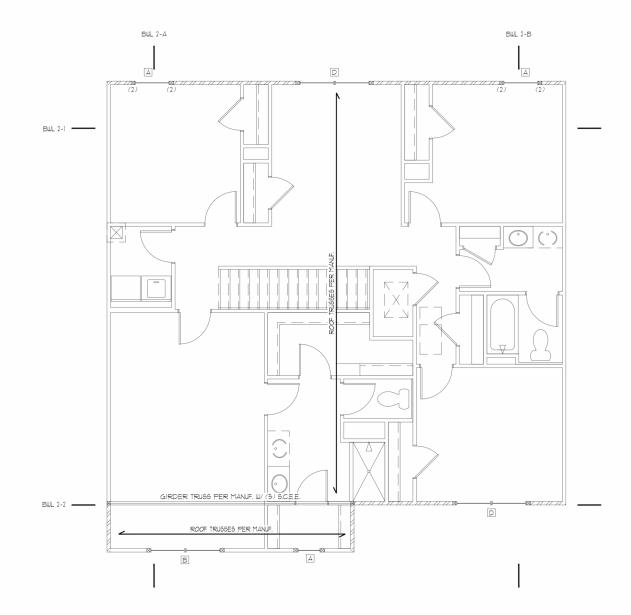
THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY <u>DR HORTON</u> COMPLETED/REVISED ON <u>4/15/21</u>, IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING LABORATORY & TESTING PC, IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY 4 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" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



ELEVATION B.F.K.

SECOND FLOOR BRACING (FT)					
CONTIN	CONTINUOUS SHEATHING METHOD				
	REQUIRED	PROVIDED			
BWL 2-1	6.0	27.0			
BWL 2-2	6.0	25.Ø			
BWL 2-A	5.8	40.0			
BWL 2-B	5.8	36.0			

TAG	SIZE	JACKS (EACH END)	
А	(2) 2x6	(1)	
в	(2) 2x8	(2)	
С	(2) 2x1Ø	(2)	
D	(2) 2x12	(2)	
E	(2) 9-1/4" LSL/LVL	(3)	
F	(3) 2x6	(1)	
G	(3) 2x8	(2)	
Н	(3) 2x1Ø	(2)	
1	(3) 2xl2	(2)	

2. ALL HEADERS TO BE DROPPED (UN.O.) STUD COLUMNS NOTED ON PLAN OVERRIDE STUD

COLUMNS LISTED ABOVE (U.N.O.).

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

WALL STUD SCHEDULE (10 FT HEIGHT)

STUD SIZE	STUD SPACING (O.C.)					
	ROOF ONLY	R00F & 1 FL00R	ROOF \$ 2 FLOORS	NON-LOAD BEARING		
2×4	24"	16"	12 "	24"		
2x6	24"	24"	16 "	24"		
NOTES				-		

I. 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" OC

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 SCHED	DULE		
TAG	SIZE	OPENING SIZE		
	L3x3x1/4"	LESS THAN 6'-Ø"		
2	L5x3x1/4"	6'-0" TO 10'-0"		
3	L5x3-1/2x5/16"	GREATER THAN 10'-0"		
(4) L5x3-1/2x5/16" ALL ARCHED ROLLED OR EQUIV. OPENINGS				
	SECURE LINTEL TO HEADER W/(2)1/2" DIAMETER LAG SCREWS STAGGERED & 16" O.C. (TYP FOR 3))			
ALL HEADERS WHERE BRICK IS USED, TO BE: (1				

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 PROVIDE THE ENTIRETY OF THE MEMBER 15 WRAPPED TO PREVENT MOISTURE INTRUSION.

INSTALL HOLD-DOUNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.8 4 FIG. R602.10.7 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 R60235 OF THE 2018 NCRC.



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.

STRUCTURAL MEMBERS ONLY

ROOF FRAMING PLAN SCALE: 1/4"=1'-@" ON 22"x34" OR 1/8"=1'-@" ON 11"x17"

ELEVATION B,F,K

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

NOTE: TRUSS UPLIFT LOADS SHALL BE DETERMINED PER TRUSS MANUFACTURER IN ACCORDANCE WITH SECTION REGULUI, WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION REG0135 OF THE 2018 NORC, REFER TO BRACED WALL PLANS FOR SHEATHING AND FASTENER REQUIREMENTS.

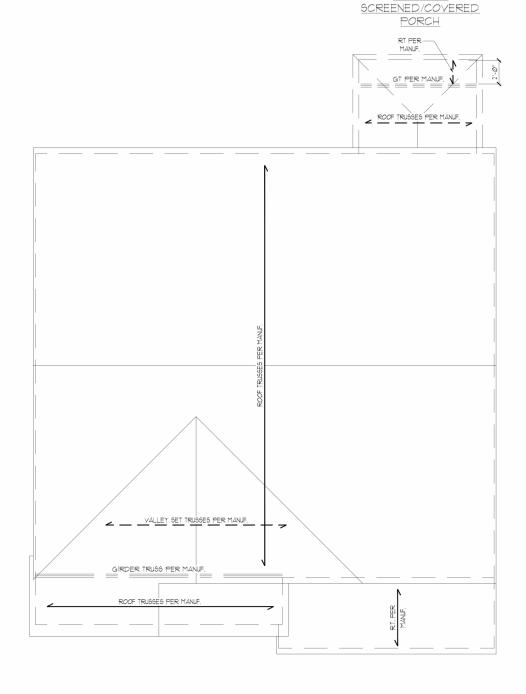
REFER TO DETAIL 5/D3F FOR EYEBROW, RETURN OR SHED ROOF FRAMING REQUIREMENTS. (TYP FOR ROOFS PROTRUDING MAXIMUM 24" FROM STRUCTURE)

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

NOTE: 16T PLY OF ALL SHOWN GIRDER TRUSSES TO ALIGN WITH INSIDE FACE OF WALL (TYP, UNO)

PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.
2. UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.
3. REFER TO TRUSS LAYOUT PER MANUE, FOR UPLIET 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.
LACEED THOSE LIVIED ADDVE.

TRUSS UPLIFT CONNECTOR SCHEDUL					
MAX, UPLIFT	ROOF TO WALL	FLOOR TO FLOOR	FLOOR TO FND		
600 LBS	H2.5A	PER WALL SHEATHIN	G 4 FASTENERS		
1200 LBS	(2) H2.5A	CSI6 (END = 11")	DTT2Z		
145Ø LBS	HTS2Ø	CSI6 (END = 11")	DTT2Z		
2 <i>000</i> LBS	(2) MT62Ø	(2) CSI6 (END = 11")	DTT2Z		
2900 LBS	(2) HTS2Ø	(2) CSI6 (END = 11")	HTT4		
3685 LBS	LGT3-5D52.5	MSTC52	HTT4		
3685 LB5 LG13-50503 M51C52 M114 1. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS. 2. UPLIFT VALUES LISTED ARE FOR STP 12 GRADE MEMBERS. 3. REFER TO TRUSS LAYOUT FER MANUF, FOR WILLT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTOR'S SPECIFIED BY TRUSS MANUFACTURER OVERRIDE THOSE LISTED ABOVE. 4. CONTACT SUMMIT FOR REQUIRED CONNECTORS WHEN LOADS					



<u>optional</u>



uuuu	ion Type: Con	nmerical 🗆	Residential	\boxtimes		
201	Building Code 18 North Caroli CE 7—10: Minir	na Residential				S
In Lo	ads: Roof Live Load	40				
1.	1.1. Conven ⁴ 1.2. Truss	tional 2x				20 PSF
2.	Roof Dead Loo 2.1. Convent	ads tional 2x				10 PSF
3.	2.2. Truss Snow					
		ince Factor				
4.	4.1. Typ. Dw 4.2. Sleeping 4.3. Decks	velling g Areas				30 PSF 40 PSF
5.	Floor Dead Lo 5.1. Convent 5.2. I-Joist	ads tional 2x				10 PSF 15 PSF
6.	5.3. Floor Ti Ultimate Wind					
	Exposure					В
8.	Component an					1.0
	MEAN ROOF HT.	UP TO 30'	30'1"-35'	35'1"-40'	40'1"-45'	
	ZONE 1		17.5,-18.9			
		16.7,-21.0		18.2,-22.9		
				18.2,-22.9	18.7,-23.5	
	ZONE 3	16.7,-21.0	17.5,-22.1	· · · · · · · · · · · · · · · · · · ·		
	ZONE 3 ZONE 4	18.2,-19.0	19.2,-20.0	19.9,-20.7	20.4,-21.3	
0	ZONE 3 ZONE 4 ZONE 5			· · · · · · · · · · · · · · · · · · ·	20.4,-21.3 20.4,-26.9	
9.	ZONE 3 ZONE 4 ZONE 5 Seismic 9.1. Site Clo 9.2. Design 9.3. Importa 9.4. Seismic 9.5. Basic S	18.2,-19.0 18.2,-24.0 Category nce Factor Use Group Use Group Bearing Wa □ Building Fro □ Moment Fr	19.2,-20.0 19.2,-25.2 em (check or III ame ame	19.9,-20.7 19.9,-26.1 e)		C 1.0
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GENERAL STRUCTURAL NOTES:

- The design professional whose seal appears on these drawings is the structural engineer of record (SER) for this project. The SER bears the responsibility of the primary structural elements and the performance of this structure. No other party may revise, alter, or delete any structural aspects of these construction documents without written permission of UES Professional Solutions 29, Inc. (UES) or the SER. For the purposes of these construction documents the SER and UES shall be considered the same entity.
- 2. The structure is only stable in its completed form. The contractor shall provide all required temporary bracing during construction to stabilize the structure.
- 3. The SER is not responsible for construction sequences, methods, or techniques in connection with the construction of this structure. The SER will not be held responsible for the contractor's failure to conform to the contract documents. should any non-conformities occur.
- 4. Any structural elements or details not fully developed on the construction drawings shall be completed under the direction of a licensed professional engineer. These shop drawings shall be submitted to UES for review before any construction begins. The shop drawings will be reviewed for overall compliance as it relates to the structural design of this project. Verification of the shop drawings for dimensions, or for actual field conditions, is not the responsibility of the SER or UES.
- 5. Verification of assumed field conditions is not the responsibility of the SER. The contractor shall verify the field conditions for accuracy and report any discrepancies to UES before construction begins.
- 6. The SER is not responsible for any secondary structural elements or non-structural elements, except for the elements specifically noted on the structural drawings.
- . This structure and all construction shall conform to all applicable sections of the international residential code.
- 8. This structure and all construction shall conform to all applicable sections of local building codes.
- 9. All structural assemblies are to meet or exceed to requirements of the current local building code.

FOUNDATIONS:

The structural engineer has not performed a subsurface investigation. Verification of this assumed value is the responsibility of the owner or the contractor. Should any adverse soil condition be encountered the SER must be contacted before proceeding.

- 2. The bottom of all footings shall extend below the frost line for the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.
- 3. Any fill shall be placed under the direction or recommendation of a licensed professional engineer.
- 4. The resulting soil shall be compacted to a minimum of 95% maximum dry density.
- 5. Excavations of footings shall be lined temporarily with a 6 mil polyethylene membrane if placement of concrete does not occur within 24 hours of excavation.
- 6. No concrete shall be placed against any subgrade containing water, ice, frost, or loose material.

STRUCTURAL STEEL:

- . Structural steel shall be fabricated and erected in accordance with the American Institute of Steel Construction "Code of Standard Practice for Steel Buildings and Bridges" and the manual of Steel Construction "Load Resistance Factor Design" latest editions.
- 2. Structural steel shall receive one coat of shop applied
- rust-inhibitive paint. 3. All steel shall have a minimum yield stress (F_v) of 36 ksi unless otherwise noted.
- 4. Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D1.1. Electrodes for shop and field welding shall be class E70XX. All welding shall be performed by a certified welder per the above standards.

CONCRETE:

- . 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.
- Concrete shall be proportioned, mixed, and placed in accordance with the latest editions of ACI 318: "Building Code Requirements for Reinforced Concrete" and ACI 301: "Specifications for Structural Concrete for Buildings".
- 3. Air entrained concrete must be used for all structural elements exposed to freeze/thaw cycles and deicing chemicals. Air entrainment amounts (in percent) shall be within -1% to +2% of target values as follows:
- 3.1. Footings: 5%
- 3.2. Exterior Slabs: 5%
- 4. No admixtures shall be added to any structural concrete without written permission of the SER.

- 5. Concrete slabs—on—grade shall be constructed in accordance with ACI 302.1R-96: "Guide for Concrete Slab and Slab Construction". 6. The concrete slab-on-grade has been designed using a subgrade modulus of k=250 pci and a design loading of 200 psf. The SER is not responsible for differential settlement, slab cracking or other future defects resulting from unreported conditions not in accordance with the above assumptions.
- 7. Control or saw cut joints shall be spaced in interior slabs—on—grade at a maximum of 15'—0" O.C. and in exterior slabs-on-grade at a maximum of 10'-0" unless otherwise noted. 8. Control or saw cut joints shall be produced using conventional process within 4 to 12 hours after the slab has been finished 9. Reinforcing steel may not extend through a control joint. Reinforcing steel may extend through a saw cut joint. 10. All welded wire fabric (W.W.F.) for concrete slabs-on-grade shall be placed at mid-depth of slab. The W.W.F. shall be securely
- supported during the concrete pour.

CONCRETE REINFORCEMENT:

- 1. Fibrous concrete reinforcement, or fibermesh, specified in concrete slabs-on-grade may be used for control of cracking due to shrinkage and thermal expansion/contraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.
- 2. Fibermesh reinforcing to be 100% virgin polypropylene fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement.

- 3. Application of fibermesh per cubic yard of concrete shall equal a minimum of 0.1% by volume (1.5 pounds per cubic yard) 4. Fibermesh shall comply with ASTM C1116, any local building code requirements, and shall meet or exceed the current industry
- standard. 5. Steel reinforcing bars shall be new billet steel conforming to ASTM A615, grade 60.

- 7. Horizontal footing and wall reinforcement shall be continuous and shall have 90° bends, or corner bars with the same size/spacing as the horizontal reinforcement with a class B tension splice. 8. Lap reinforcement as required, a minimum of 40 bar diameters for tension or compression unless otherwise noted. Splices in masonry shall be a minimum of 48 bar diameters.

FORMERLY SUMMIT ENGINEERING, LABORATOR TESTING INC. STRUCTURAL PLANS PREPARED FOR: STANDARD DETAILS (OX- PROJECT ADDRESS: OWNER:	
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PROJECT ADDRESS: OWNER:	-
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TBD DR Horton Carolinas Division 8001 Arrowridge Blvd Charlotte, NC 28273	n
Duluth, GA 30097 These drawings are to be coordinated with the architectural, mechani electrical, and civil drawings. This coordination is not the responsibili structural engineering of record (SER). Should any discrepancies bec	ity of the ome appo
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5.0	1		
D1c			Crawl Space Foundation Details
D1b			Basement Foundation Details
D1f			Framing Details
REVISION L Revision			
No.	Date	Project No.	Description
1	5.11.17		Added box bay detail (2/D2f). Added deck option: with basement. Revised deck options with stem w and crawl space foundations
2	7.12.17		Revised stem wall insulation note.
3	2.15.18		Revised garage door detail, NC only
4	2.28.18		Added high-wind foundation details
5	12.19.18		Revised per 2018 NCRC
6	2.19.19		Revised per Mecklenburg County Comments
7	3.1.19		Revised stem wall deck attachment and roof sheathing on wall sections.
8	3.6.19		Corrected dimensions at perimeter footings
9	3.2.20		Added tall turndown detail
10	3.18.20		Added balloon framing detail
11	10.20.20		Added alternate two—pour detail for slab and added note for crawl girder above grade
12	3.1.21		Added OX—IS Standard Details
13	5.18.21		Updated OX—IS Standard Details
14	02.14.23		Added 4/D2m — Tall Slab Detail w/ Siding
15	08.10.23		Updated (Hit HY150 Adhesive) for HY200 Adhesive
16	04.01.24		Added Hilti Kwik Bolt KBI 1/2-5 TO Wall Anchor Schedule
17	4.26.24		Update Wall Anchor Schedule
18	5.06.24		Update Wall Anchor Schedule

Description

Cover Sheet, Specifications, Revisions

Monolithic Slab Foundation Details

Stem Wall Foundation Details

<u>Sheet list:</u>

Sheet No. CS1

D1m

D1s

6. Detailing, fabrication, and placement of reinforcing steel shall be in accordance with the latest edition of ACI 315: "Manual of Standard Practice for Detailing Concrete Structures"

- 9. Where reinforcing dowels are required , they shall be equivalent in size and spacing to the vertical reinforcement. The dowel shall extend 48 bar diameters vertically and 20 bar diameters into the footing.
- 10. Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted.
- 11. Unless otherwise specified, concrete reinforcing is not required.

WOOD FRAMING:

- 1. Solid sawn wood framing members shall conform to the specifications listed in the latest edition of the "National Design Specification for Wood Construction" (NDS). Unless otherwise noted, all wood framing members are designed to be
- Spruce-Yellow-Pine (SYP) #2. 2. LVL or PSL engineered wood shall have the following minimum design values:
 - 2.1. E = 1,900,000 psi
 - 2.2. $F_{\rm b} = 2600 \, {\rm psi}$
 - 2.3. F_v = 285 psi
 - 2.4. F_c = 700 psi
- 3. Wood in contact with concrete, masonry, or earth shall be pressure treated in accordance with AWPA standard C-15. All other moisture exposed wood shall be treated in accordance with AWPA standard C-2
- 4. Nails shall be common wire nails unless otherwise noted. 5. Lag screws shall conform to ANSI/ASME standard B18.2.1-1981.
- Lead holes for lag screws shall be in accordance with NDS specifications.
- 6. All beams shall have full bearing on supporting framing members unless otherwise noted.
- 7. Exterior and load bearing stud walls are to be 2x4 SYP #2 @ 16" O.C. unless otherwise noted. Studs shall be continuous from the sole plate to the double top plate. Studs shall only be discontinuous at headers for window/door openings. A minimum of one king stud shall be placed at each end of the header. King studs shall be continuous.
- 8. Individual studs forming a column shall be attached with one 10d nail @ 6" O.C. staggered. The stud column shall be continuous to the foundation or beam. The column shall be properly blocked at all floor levels to ensure proper load transfer.
- 9. Multi-ply beams shall have each ply attached with (3) 10d nails @ 24"O.C.

10. Flitch beams, 4-ply beams and 3-ply side loaded beams shall be bolted together with (2) rows of 1/2" diameter through bolts staggered @ 24" O.C. per schedule unless noted otherwise. Min. edge distance shall be 2" and (2) bolts shall be located a min. 6" from each end of the beam.

WOOD TRUSSES:

- 1. The wood truss manufacturer/fabricator is responsible for the design of the wood trusses. Submit sealed shop drawings and supporting calculations to the SER for review prior to fabrication. The SER shall have a minimum of five (5) days for review. The review by the SER shall review for overall compliance with the design documents. The SER shall assume no responsibility for
- the correctness for the structural design for the wood trusses. 2. The wood trusses shall be designed for all required loadings as specified in the local building code, the ASCE Standard "Minimum Design Loads for Buildings and Other Structures." (ASCE 7-05), and the loading requirements shown on these specifications. The truss drawings shall be coordinated with all other construction documents and provisions provided for loads shown on these drawings including but not limited to HVAC equipment, piping, and architectural fixtures attached to the trusses.
- 3. The trusses shall be designed, fabricated, and erected in accordance with the latest edition of the "National Design Specification for Wood Construction." (NDS) and "Design Specification for Metal Plate Connected Wood Trusses."
- 4. The truss manufacturer shall provide adequate bracing information in accordance with "Commentary and Recommendations for Handling, Installing, and Bracing Metal Plate Connected Wood Trusses" (HIB-91). This bracing, both temporary and permanent, shall be shown on the shop drawings. Also, the shop drawings shall show the required attachments for the trusses.
- 5. Any chords or truss webs shown on these drawings have been shown as a reference only. The final design of the trusses shall be per the manufacturer.

EXTERIOR WOOD FRAMED DECKS:

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

Manager	Signature	
Operations		
Operations System		
Operations Product Development		

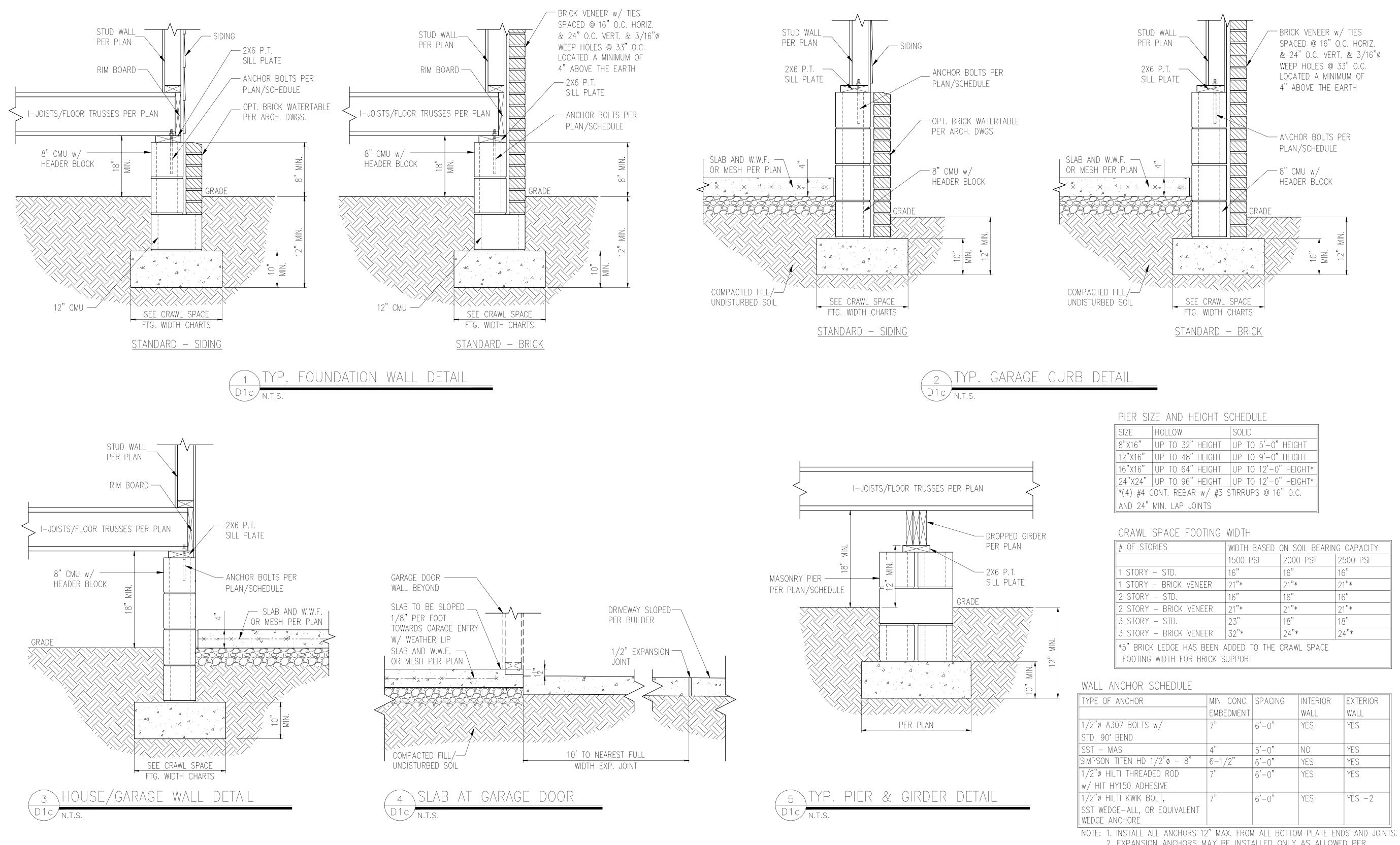
VERPROFESSIONAL SOLUTIONS 29, INC. VERPROFESSIONAL SOLUTIONS 29, INC. CORMERLY SUMMIT ENCINEERING, LABORATORY, & TESTING, INC. 10121 Pineville, NC 28134 Oracio 204, 504, 1717 Eax: 704, 504, 17
vision
CLIENT: DR Horton Carolina Division 8001 Arrowridge Blvd. Charlotte, NC 28273
PROJECT: Standard Details (OX-IS) Coversheet
OS. OG. 2024 OS. OG. 2024 SEAL OZO2222 OSEAL OZO2222 ORIGINE STRUCTURAL MEMBERS ONLY DRAWING DATE: 05/06/2024 SCALE: 22x34 1/4"=1'-0" 11x17 1/8"=1'-0" PROJECT # A21117.00066.000 DRAWN BY: MGC CHECKED BY: GWS ORIGINAL INFORMATION PROJECT # DATE 1/31/2017 REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

C21

WOOD STRUCTURAL PANELS: 1. Fabrication and placement of structural wood sheathing shall be in accordance with the APA Design/Construction Guide "Residential and Commercial," and all other applicable APA

standards. 2. All structurally required wood sheathing shall bear the mark of the APA.

- 3. Wood wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information. Sheathing shall be applied with the long direction perpendicular to framing, unless noted otherwise.
- 4. Roof sheathing shall be APA rated sheathing exposure 1 or 2. Roof sheathing shall be continuous over two supports and attached to its supporting roof framing with (1)-8d CC nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied with the long direction perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of plywood clips or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- 5. Wood floor sheathing shall be APA rated sheathing exposure 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of T&G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- 5. Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.



L AND HEIGHT 3	L AND HLIVITI JUHLDULL					
HOLLOW	SOLID					
UP TO 32" HEIGHT	UP TO 5'-0" HEIGHT					
UP TO 48" HEIGHT	UP TO 9'-0" HEIGHT					
UP TO 64" HEIGHT	UP TO 12'-0" HEIGHT*					
	UP TO 12'-0" HEIGHT*					
:ont. rebar w/ #3 s	STIRRUPS @ 16" O.C.					
MIN. LAP JOINTS						

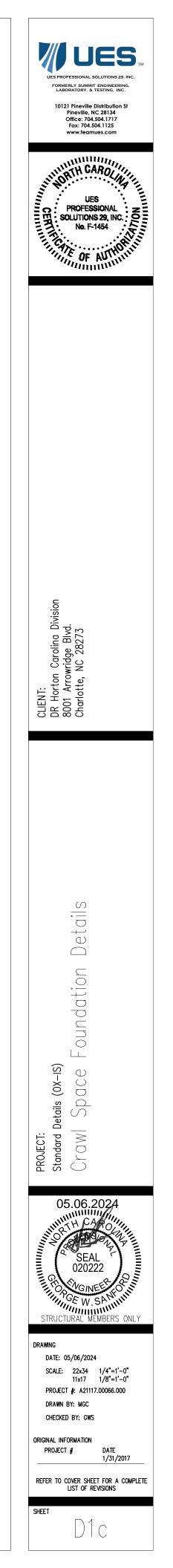
RIES	WIDTH BASED ON SOIL BEARING CAPACITY					
	1500 PSF	2000 PSF	2500 PSF			
- STD.	16"	16"	16"			
– BRICK VENEER	21"*	21"*	21"*			
- STD.	16"	16"	16"			
– BRICK VENEER	21"*	21"*	21"*			
– STD.	23"	18"	18"			
– BRICK VENEER	32"*	24"*	24"*			
CLEDGE HAS BEEN A	DDED TO THE	CRAWL SPACE				
WIDTH FOR BRICK SUPPORT						

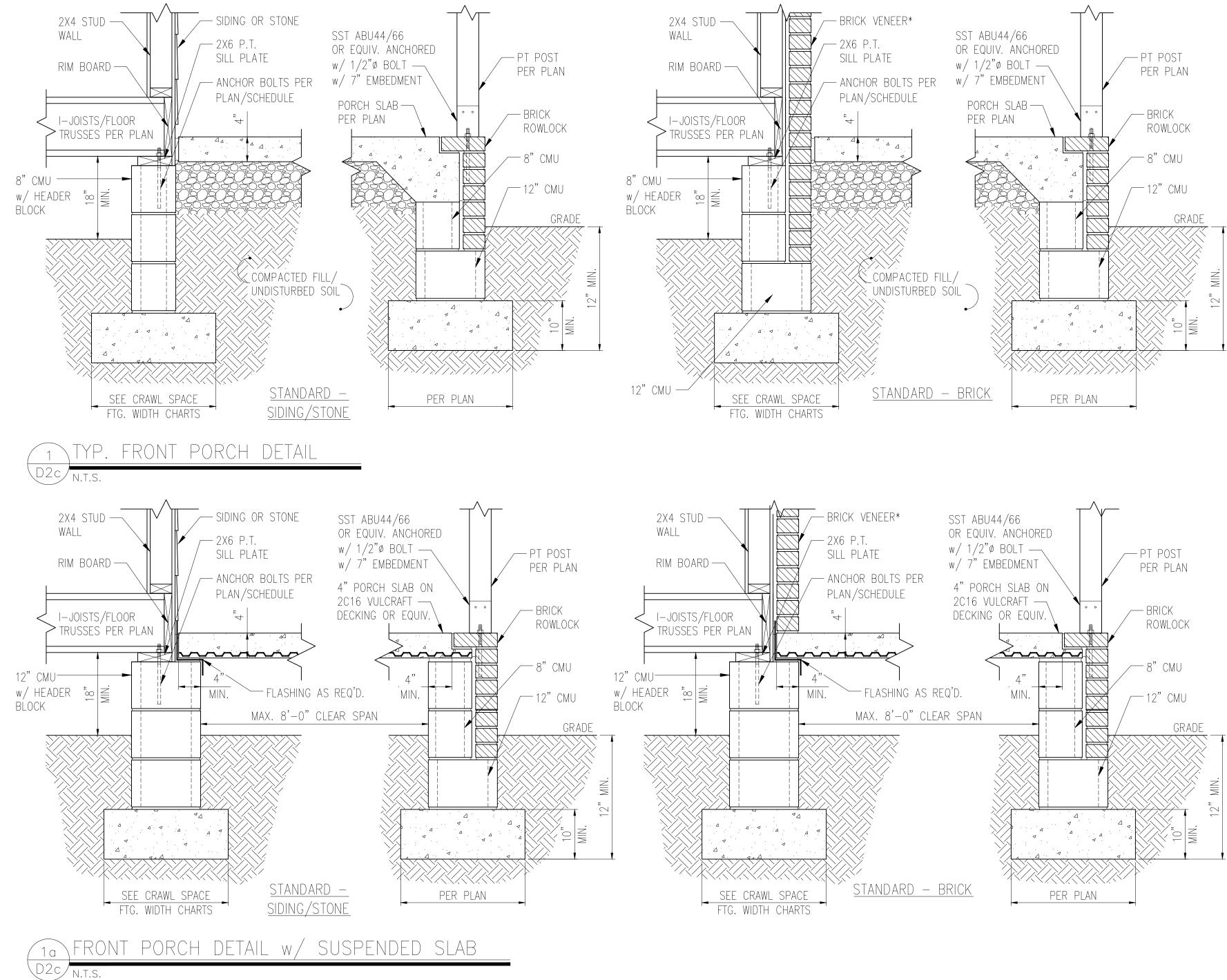
	MIN. CONC.	SPACING	INTERIOR	EXTERIOR
	EMBEDMENT		WALL	WALL
w/	7"	6'-0"	YES	YES
	4"	5'-0"	NO	YES
1/2"ø – 8"	6-1/2"	6'-0"	YES	YES
ed Rod	7"	6'-0"	YES	YES
ESIVE				
OLT,	7"	6'-0"	YES	YES –2
r equivalent				

2. EXPANSION ANCHORS MAY BE INSTALLED ONLY AS ALLOWED PER MANUFACTURE SPECIFICATIONS.

<u>NOTES:</u>

- 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





DECK ATTACHMENT SCHEDULE	(ALL STRUCTURES EXCEPT BRICK)
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		/
FASTENERS	MAX. 8'-0" JOIST	MAX. 16'-0" JOIST
	SPAN	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 $2\frac{1}{2}$ ".

c. NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF $1\frac{1}{2}$ "

DECK ATTACHMENT SCHEDULE (BRICK STRUCTURES)

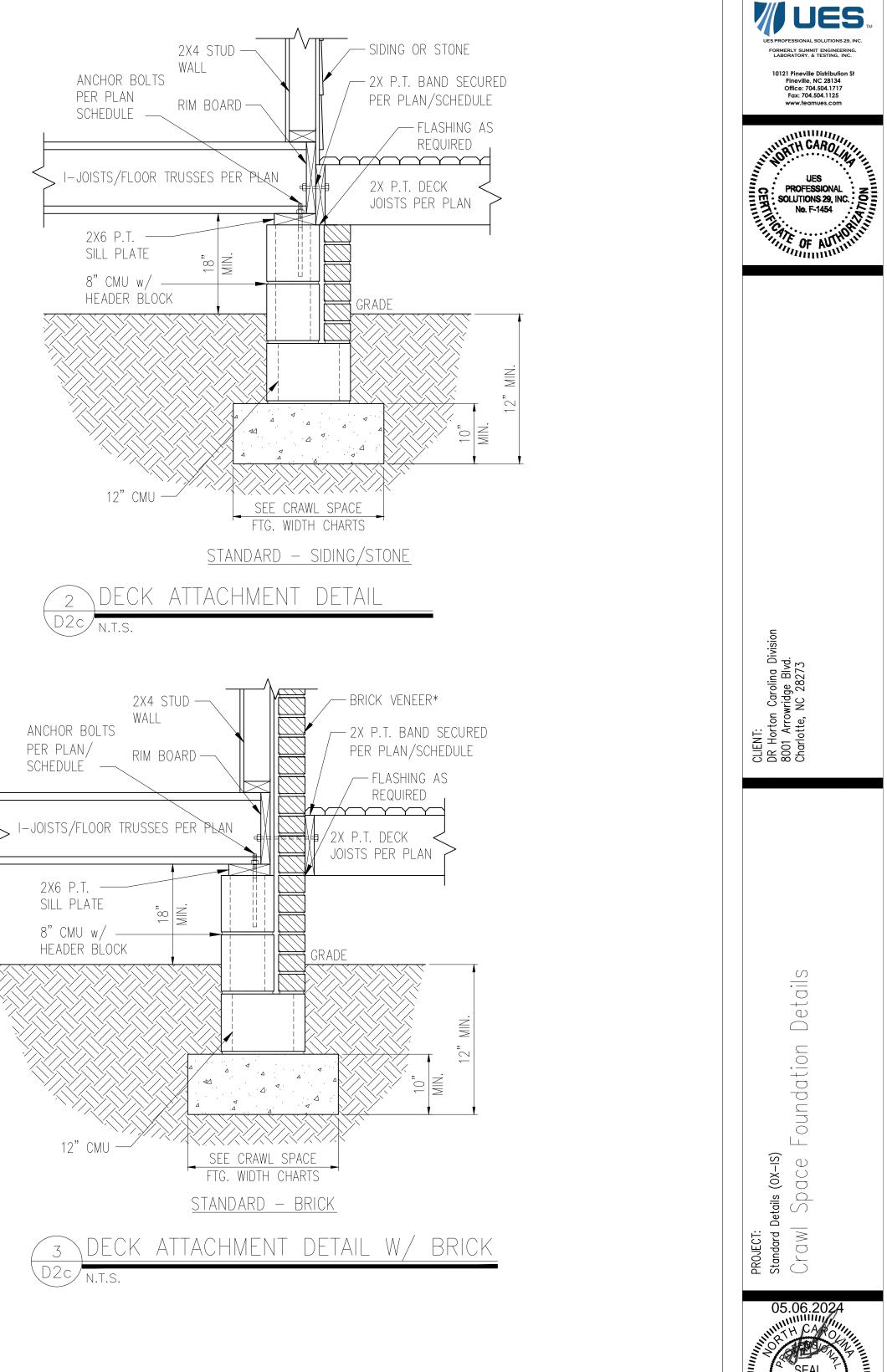
FASTENERS	MAX. 8'-0" JOIST	MAX. 16'-0" JOIST
	SPAN	SPAN
5/8" GALV. BOLTS w∕ NUT & WASHER♭	(1) @ 2'-4" O.C.	(1) @ 1'-4" O.C.

a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED. b. MINIMUM EDGE DISTANCE FOR BOLTS IS $2\frac{1}{2}$ ".

CRAWL SPACE FOOTING WIDTH

# OF STORIES	WIDTH BASED	ON SOIL BEARIN	G
	1500 PSF	2000 PSF	25
1 STORY – STD.	16"	16"	16
1 STORY – BRICK VENEER	21"*	21"*	2
2 STORY – STD.	16"	16"	16
2 STORY – BRICK VENEER	21"*	21"*	2
3 STORY – STD.	23"	18"	18
3 STORY – BRICK VENEER	32"*	24"*	24
*5" BRICK LEDGE HAS BEEN A	ADDED TO THE	CRAWL SPACE	

FOOTING WIDTH FOR BRICK SUPPORT



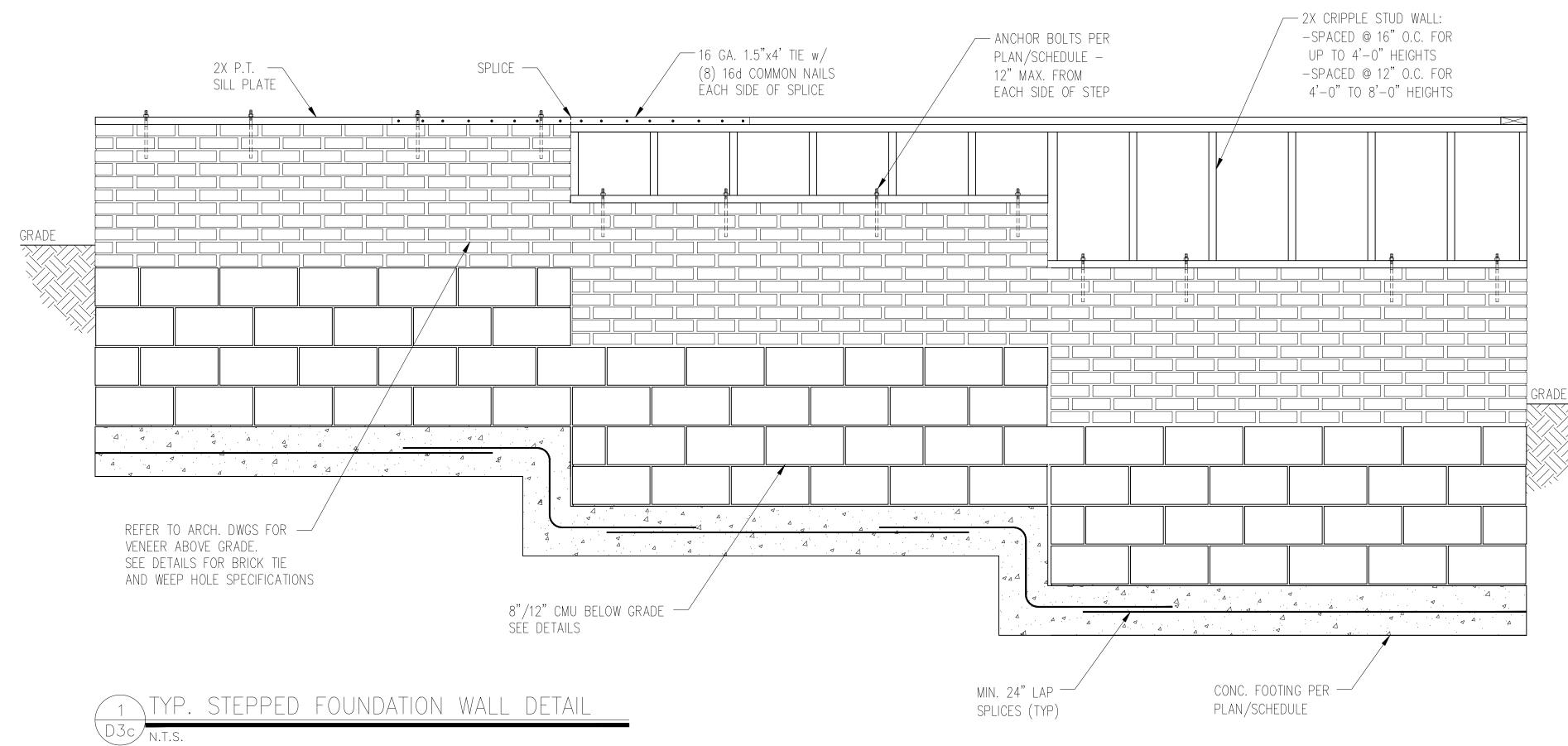
CAPACITY 2500 PSF 1"* 1"* 74"*

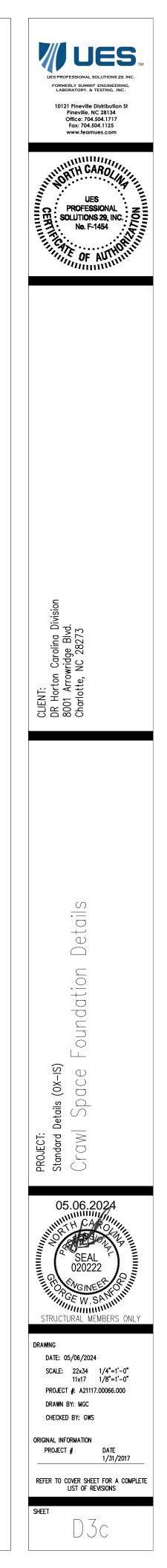
*BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT. AND 3/16"Ø WEEP HOLES @ 33" O.C. LOCATED A MINIMUM OF 4" ABOVE THE EARTH

NOTES:

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

DRAWING DATE: 05/06/2024 SCALE: 22x34 1/4"=1'-0" 11x17 1/8"=1'-0" PROJECT #: A21117.00066.000 DRAWN BY: MGC CHECKED BY: GWS ORIGINAL INFORMATION PROJECT # DATE 1/31/2017 REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS D2c

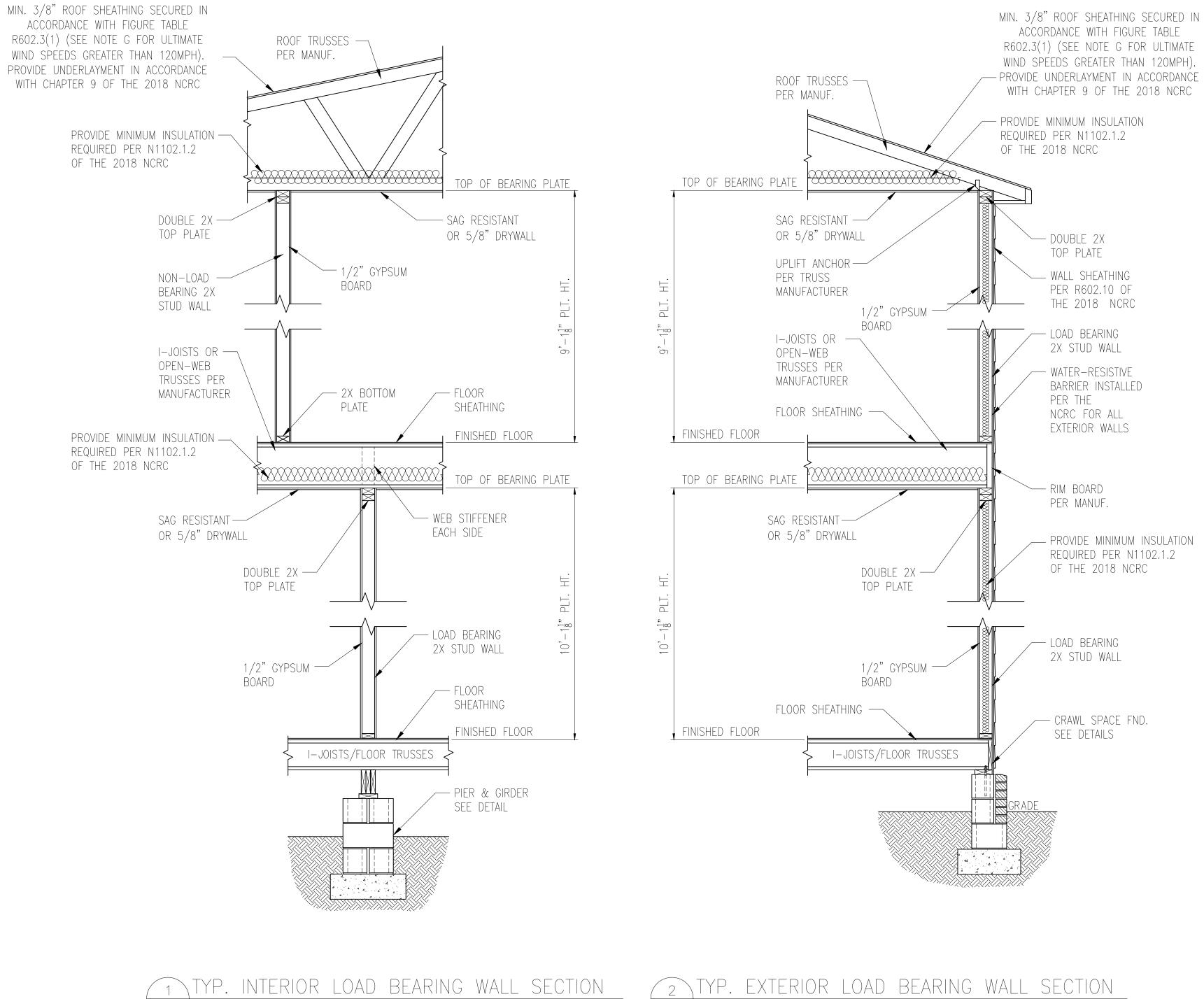




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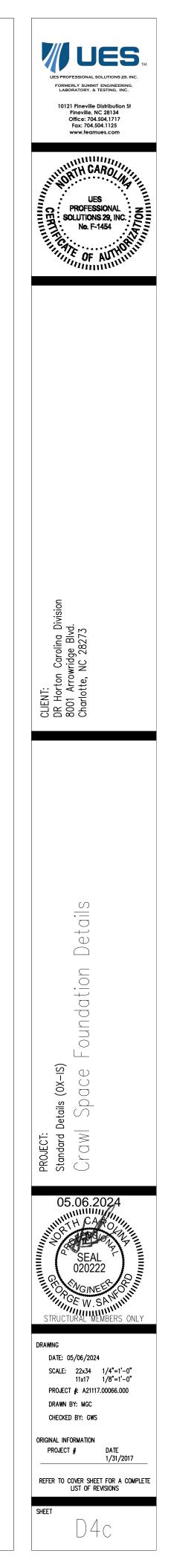
<u>NOTES:</u>

- 1. 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.
 4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
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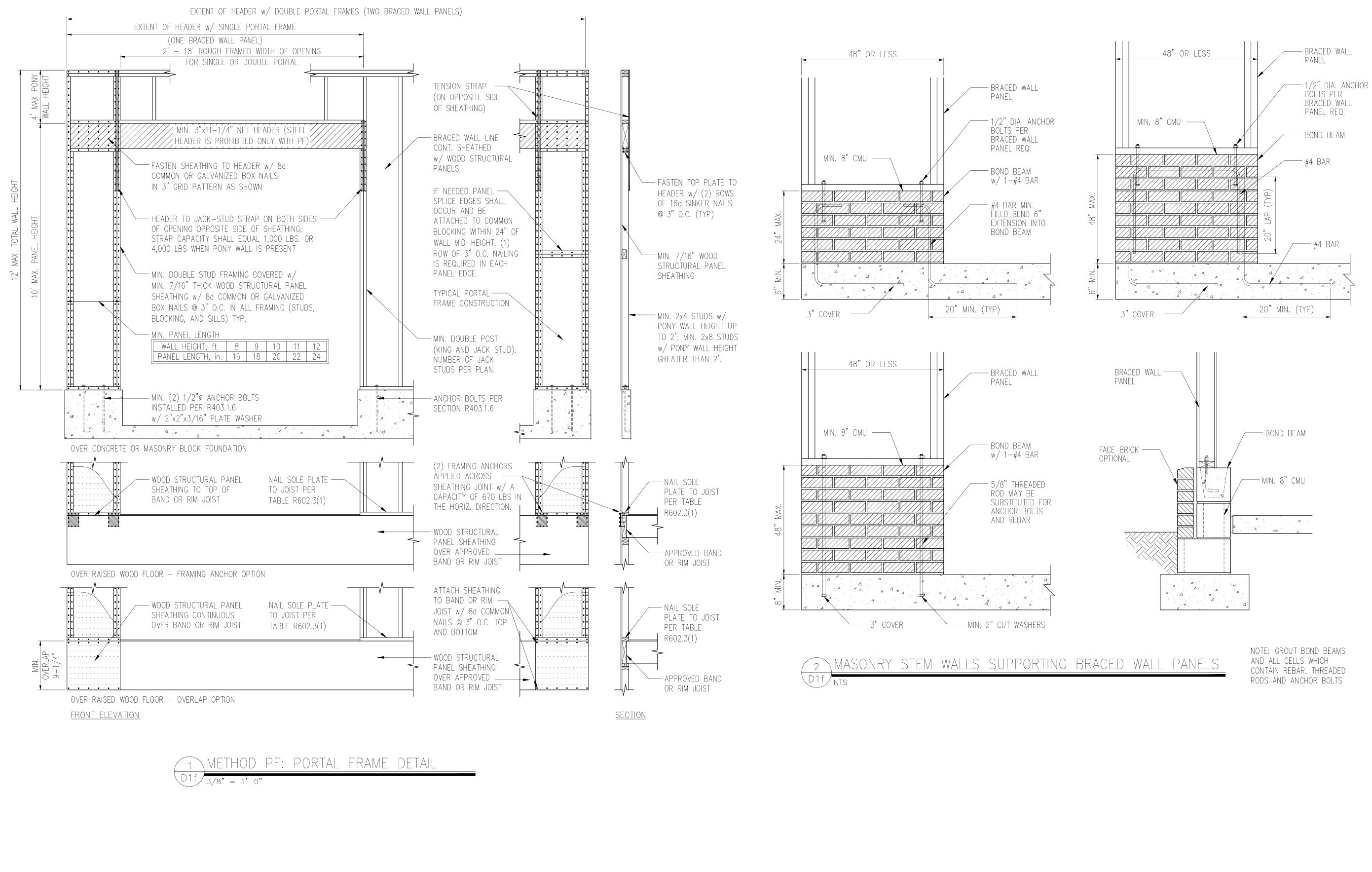
D4c 3/4" = 1'-0"

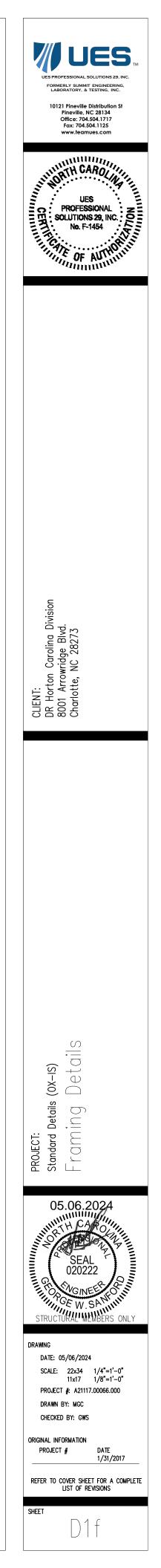
D4C/3/4" = 1'-0" -SIMILAR w/ BRICK AND STONE -BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT. -MIN. 3/16"¢ WEEP HOLES @ 33" O.C.

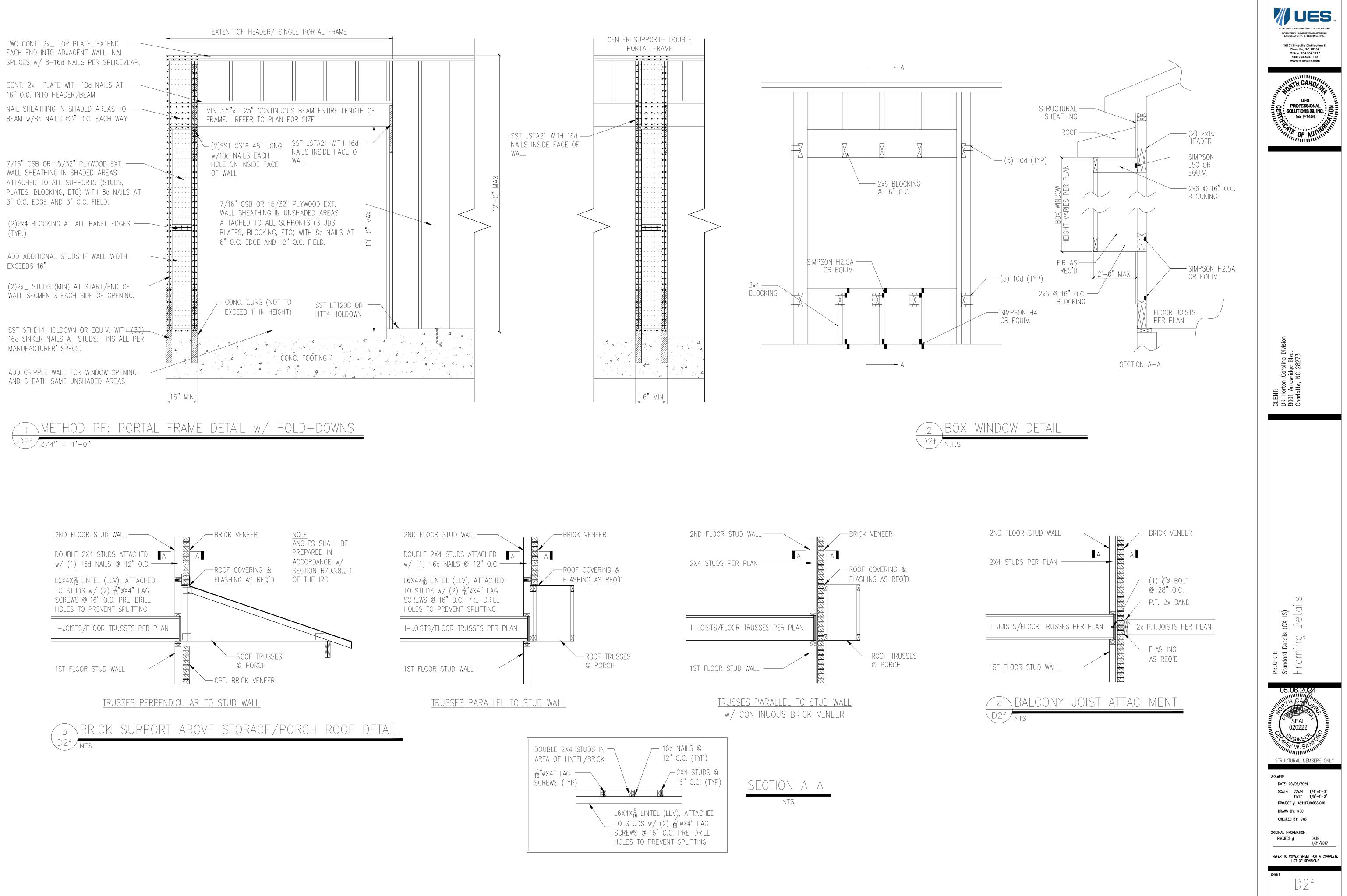


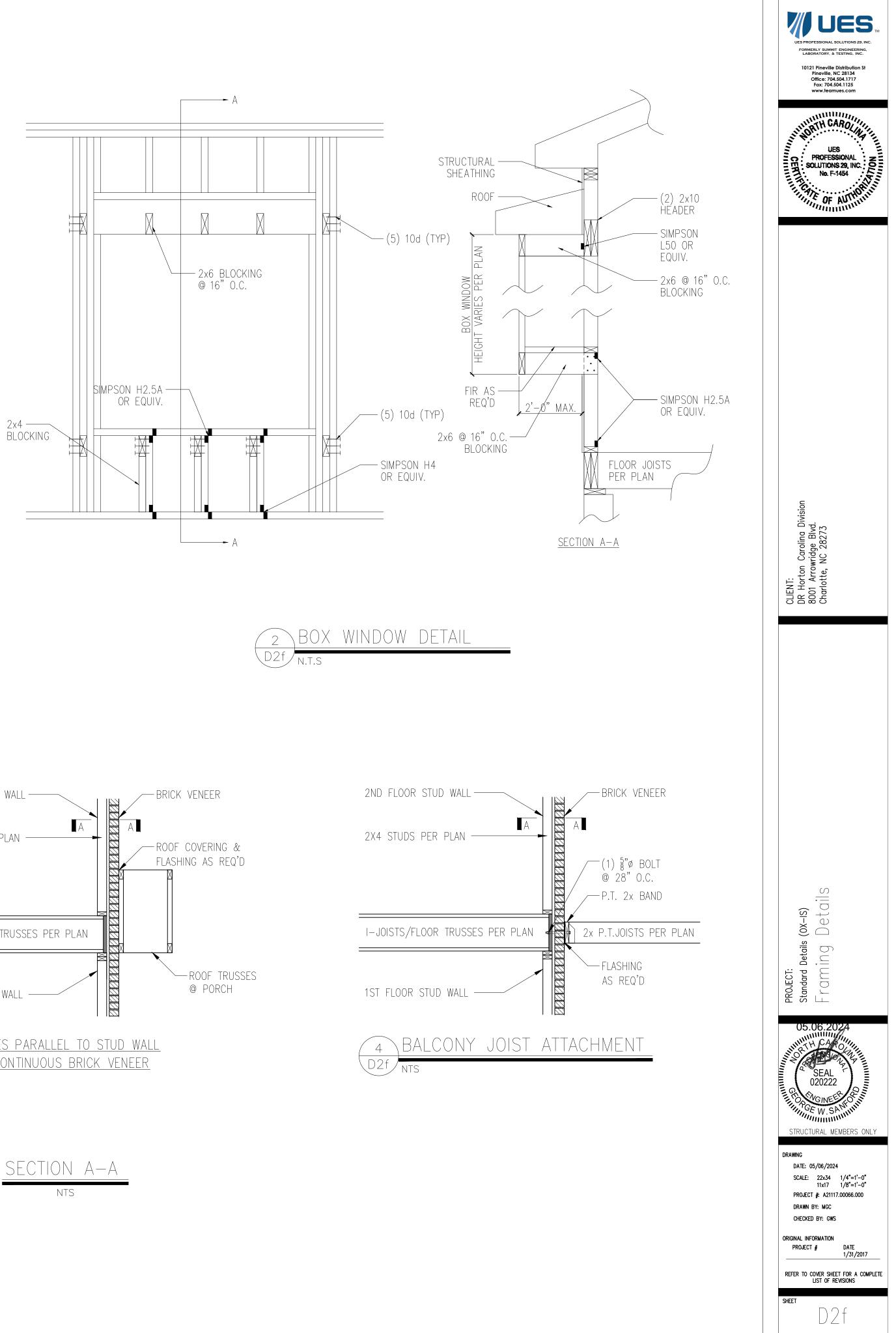
<u>NOTES:</u>

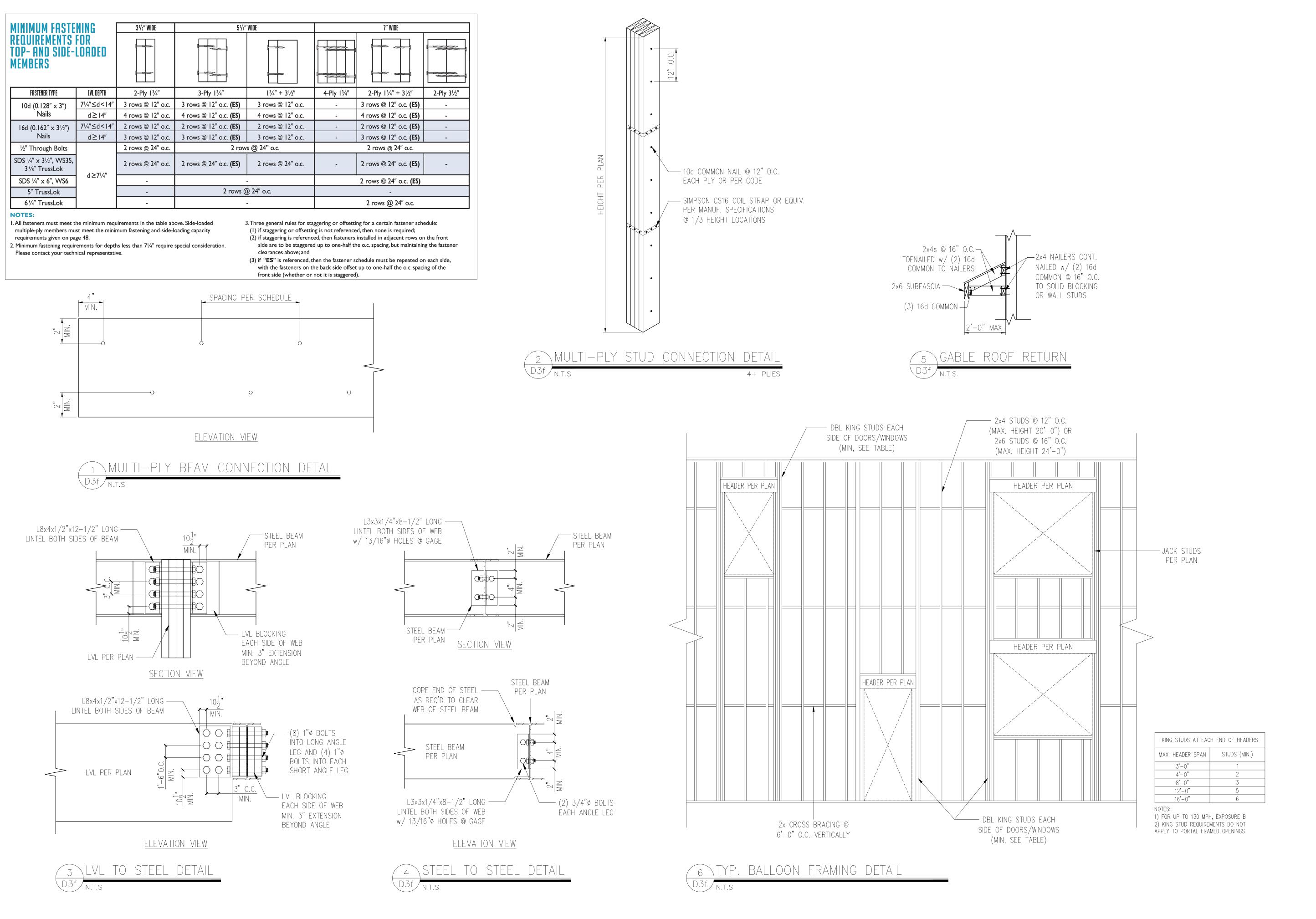
- 1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
- PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
 SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS,
- SLOPES AND DEPRESSIONS.4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS,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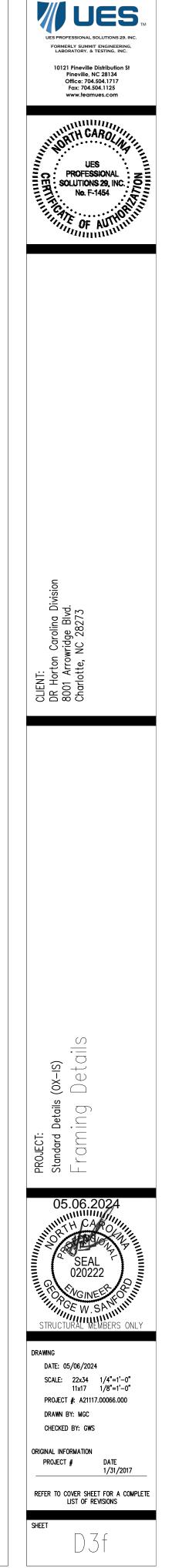


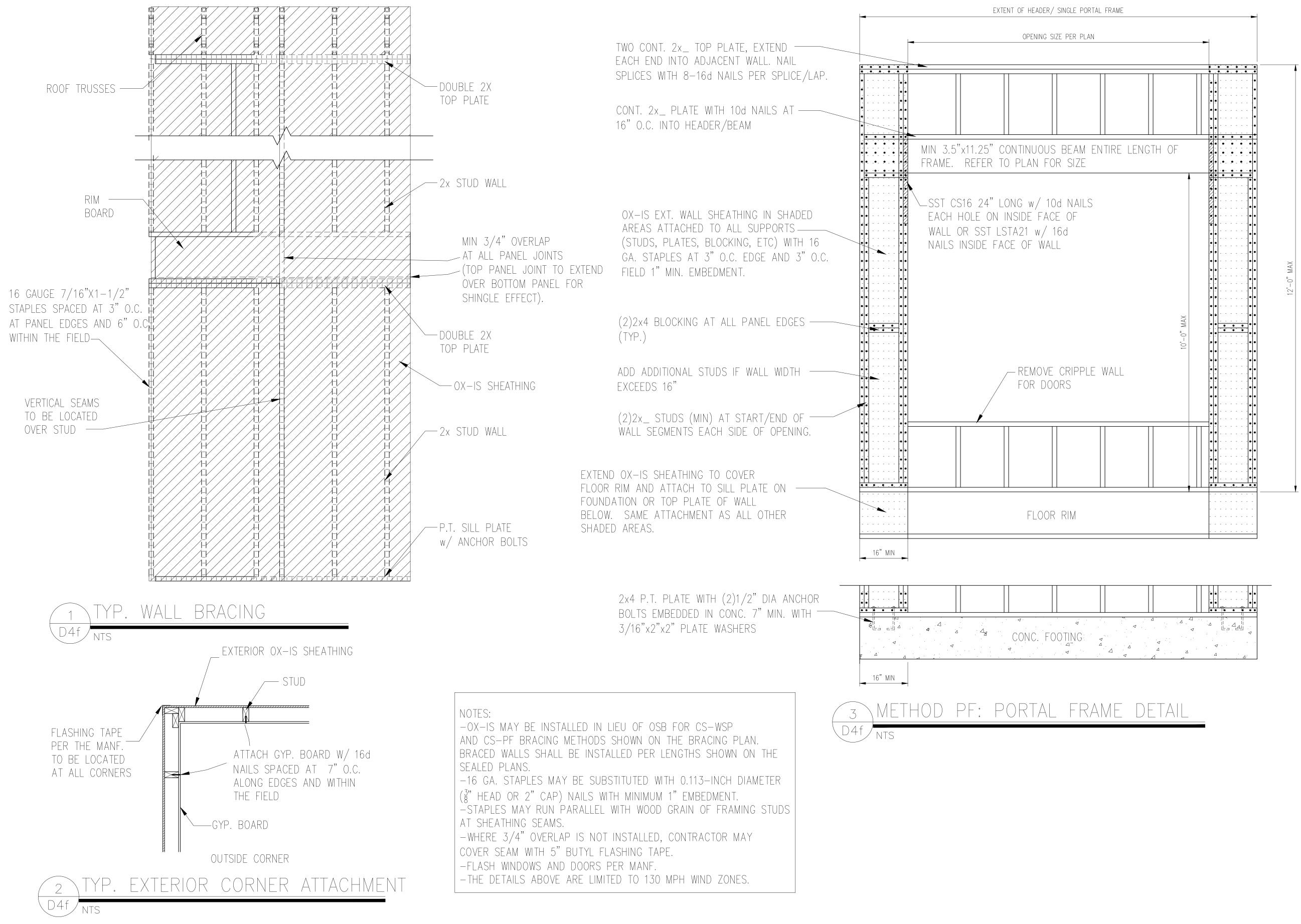




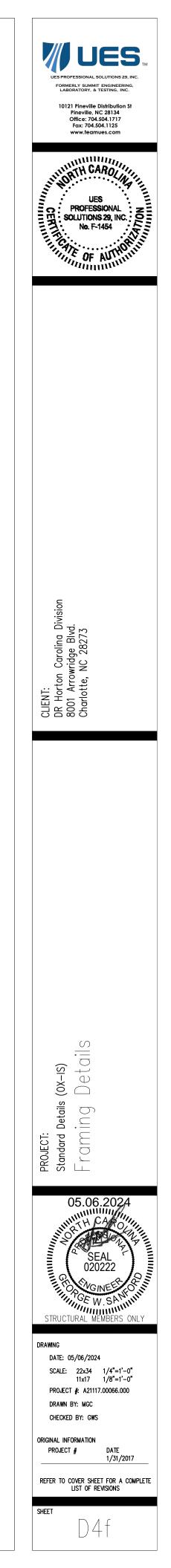


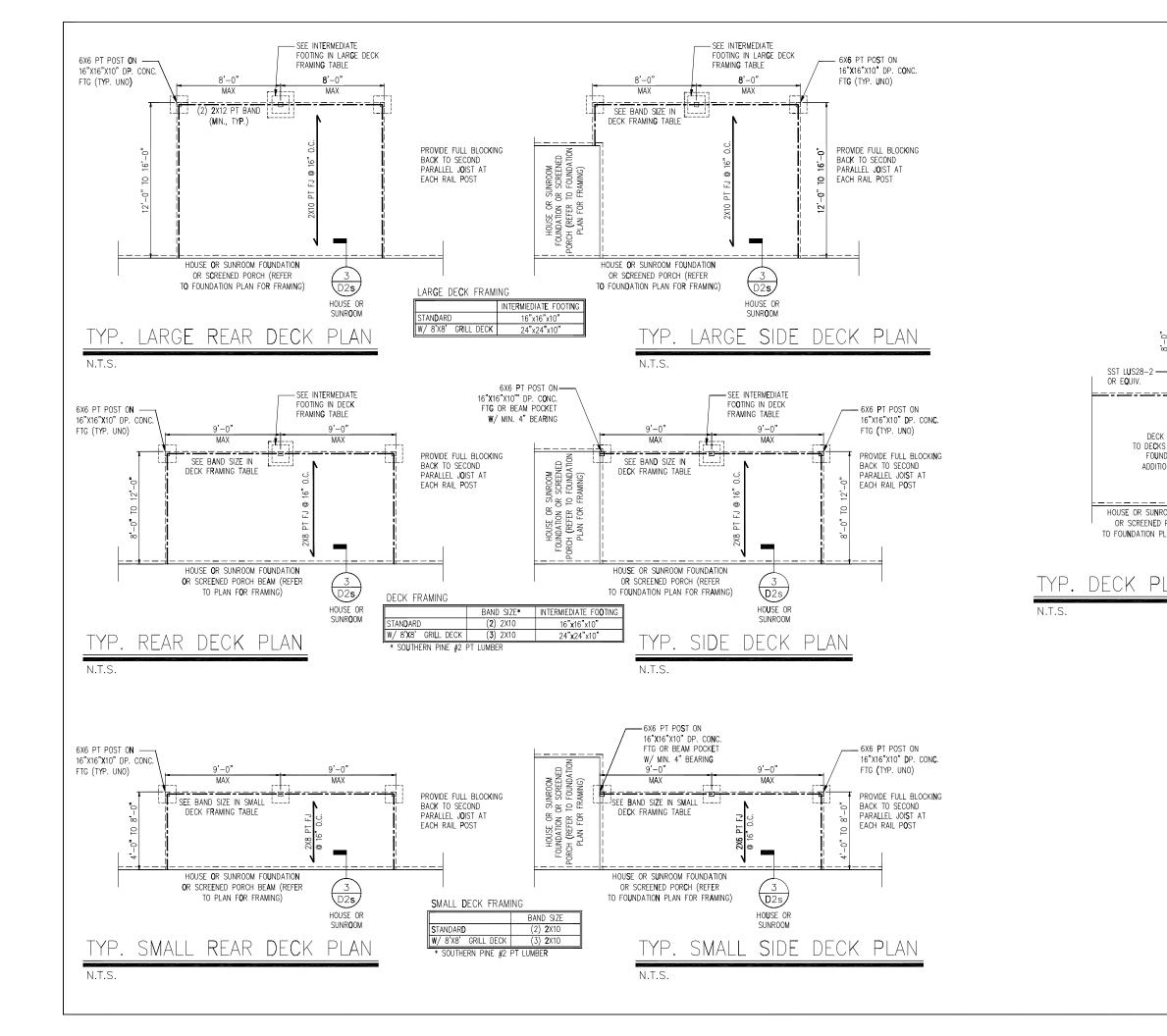


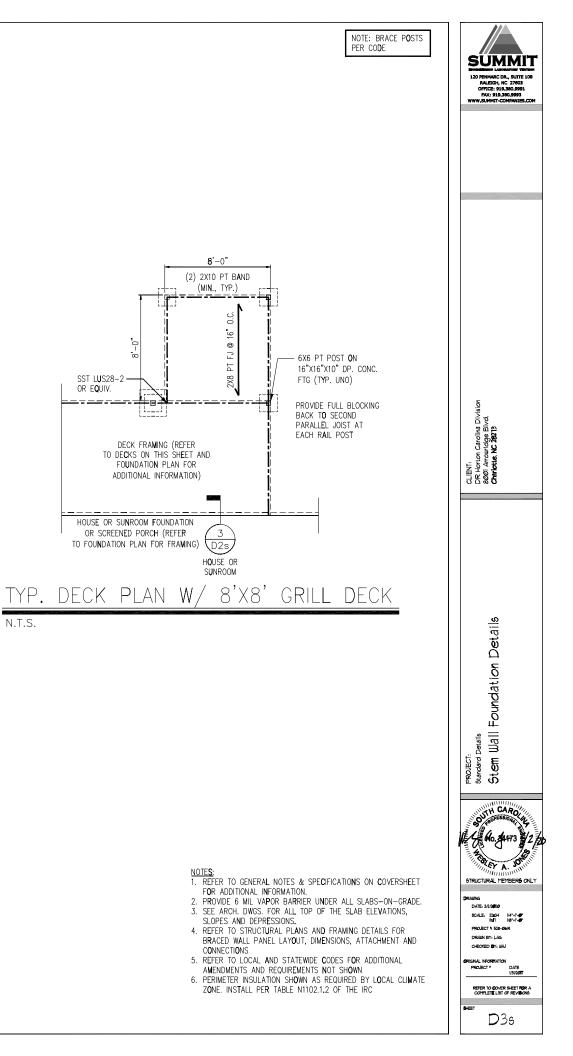




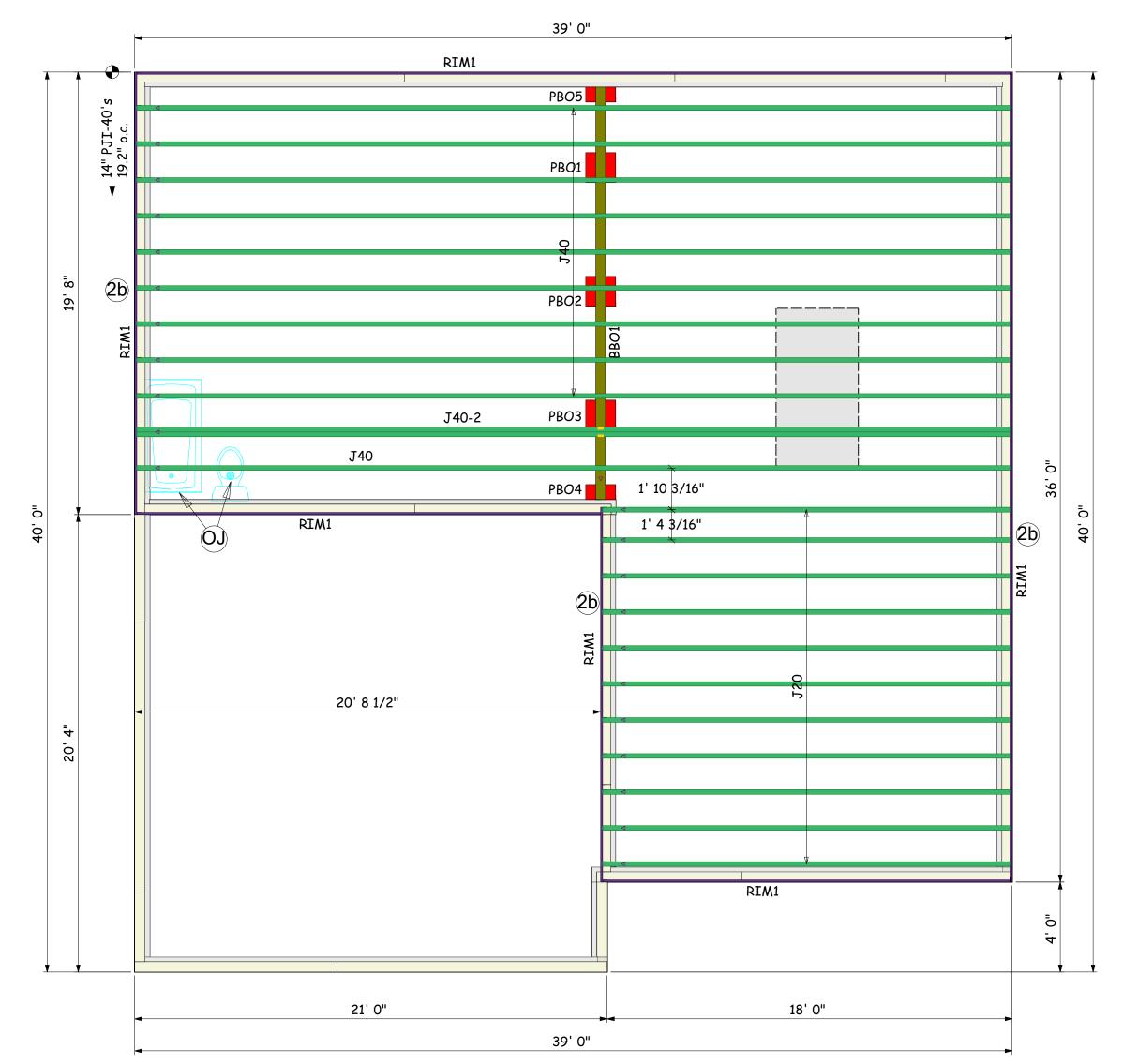
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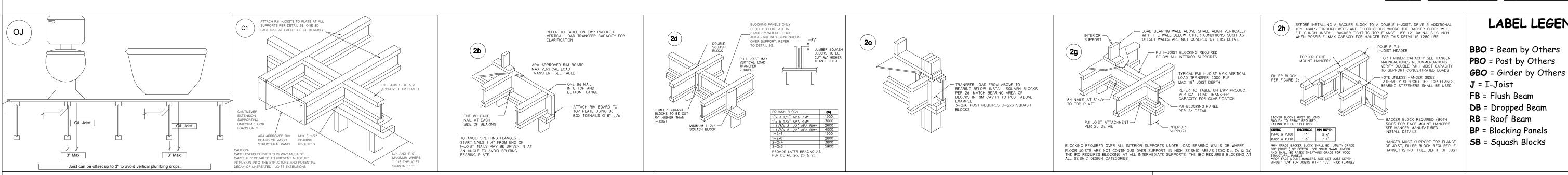












** PLUMBING DROPS NOTED ARE IN APPROXIMATE LOCATIONS PER PLAN. BUILDER MUST VERY LOCATIONS BEFORE SETTING JOISTS.

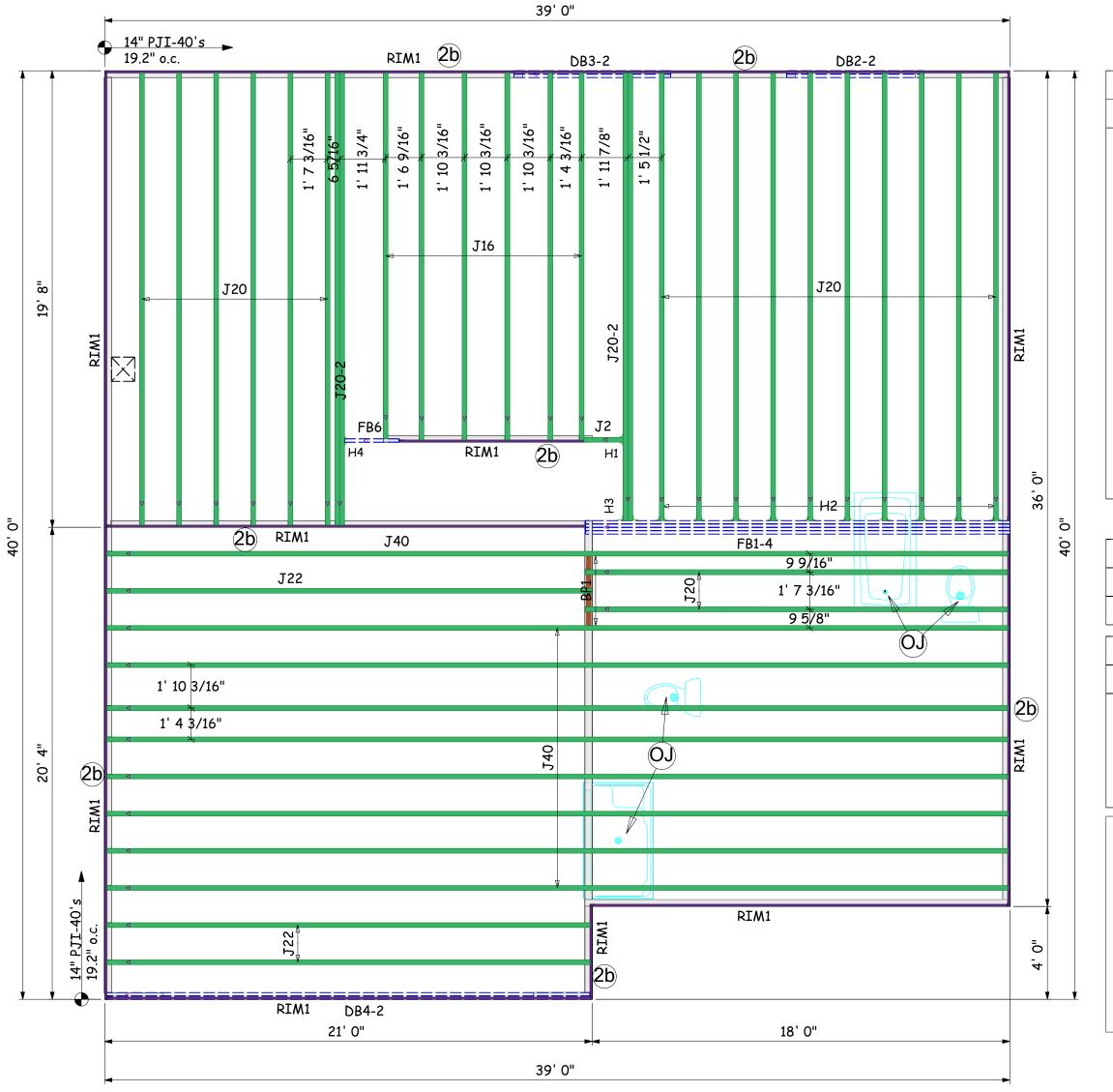
3/4" 4×8 OSB	1	34	
KEMPSVILLE BUILDING MATER			
FOR THE DESIGN OR CALCULATION	N OF	ANY AND ALL I-	JOIST AND
LVL/PSL BEAM MATERIAL. ALL ENGI	NEER:	ING AND INFOR	MATION FOR
THIS MATERIAL IS TO BE PROVIDE	ED BY	THE ENGINEER	OF RECORD
MARKED ON APPROVED SET OF P	LANS	5. ALL BEAM PLA	CEMENTS
ARE PER THE ENGINEERING R	ECEI	VED. ALL CONNE	CTION
DETAILS TO BE PROVIDED BY E	ENGIN	NEER OF RECORD). REFER
TO ENGINEER OR RECORD FOR	ALL N	NULTI-PLY LVL/	I-JOIST
CONNECTION PATTERNS. BUILD	DER T	O VERIFY ALL M	ATERIAL
LENGTHS, QUANTITIES, AND	SIZE	S PRIOR TO ORD	ERING.

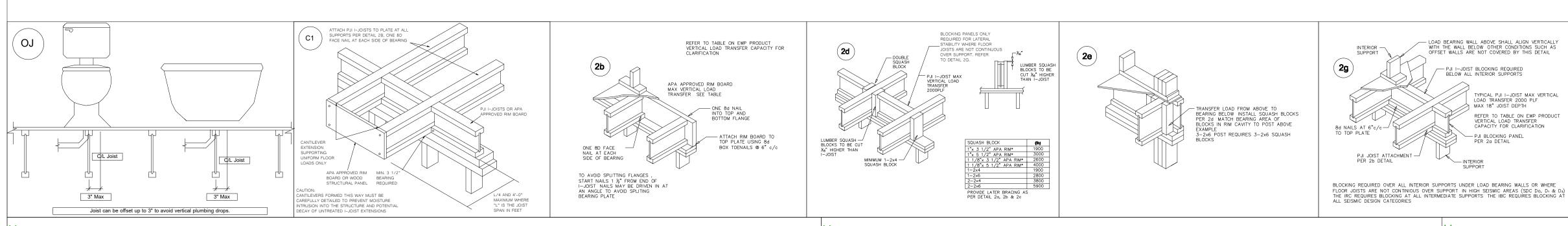
		Produc	ts			
PlotID	Length	Product			Plies	Net Qty
J40	40' 0"	14" PJI-40			1	10
J40-2	40' 0"	14" PJI-40			2	2
J20	20' 0"	14" PJI-40			1	11
RIM1	12' 0"	1 1/8" × 14" APA	A Rim Bo	ard	1	13
		Accessories				
PlotID	Length	Product	Plies	Net	· Qty	
		2/41 4 2 2 2 2	4	~ 4		

	F 00/00/ 00/00/ 00/00/	00	ns Name Name Name Name		
** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.	This is an I-Joist Placement Plan Only. All designs of I-Joist follow the IBC/IRC Code Requirements along with Manufacturer's guidelines. This is NOT an engineered placement plan. This placement plan is created from plans	00	flanges on joists without prior approval from the manufacturing Representative unless following hole guidlines in the installation guide of product. Builder takes full responsibility for doing so and NO Back charge will be accepted.		
** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. ** FR	This i I-Joist Manuf		flange Repre guide and N		
VSTALLED UNLESS APPROVED BY COMPONENT PLANT.	DR Horton	36 Mason Ridge Havden K	FLOOR JOIST LAYOUT		
DAMAGED FLOOR JOISTS SHOULD NOT BE INSTALLED UI	Scale: 1/4" = 1'-0" Date: // 05/01/25 Designer: DW Project #: 25040239 Sheet Number: 1 / 2				

LABEL LEGEND







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

	Products					
PlotID	Length	Product	Plies	Net Qty		
J40	40' 0"	14" PJI-40	1	9		
J22	22' 0"	14" PJI-40	1	3		
J20	20' 0"	14" PJI-40	1	18		
J20-2	20' 0"	14" PJI-40	2	4		
J16	16' 0"	14" PJI-40	1	6		
J2	2' 0"	14" PJI-40	1	1		
DB3-2	8' 0"	2.1 RigidLam SP LVL 1-3/4 × 9-1/4	2	2		
DB2-2	6' 0"	2.1 RigidLam SP LVL 1-3/4 × 9-1/4	2	2		
FB1-4	20' 0"	2.1 RigidLam SP LVL 1-3/4 x 14	4	4		
FB6	4' 0"	2.1 RigidLam SP LVL 1-3/4 x 14	1	1		
DB4-2	22' 0"	2.1 RigidLam SP LVL 1-3/4 x 16	2	2		
RIM1	12' 0"	1 1/8" x 14" APA Rim Board	1	16		
BP1	2' 0"	14" PJI-40	1	2		

		Acces	sories			
PlotID	Length	n Produc	†	Plies	Net Qty	
		3/4" 4	x8 OSB	1	46	
		6	Connector	Summ	ary	
PlotID	Qty	Manuf	Product		Backer Bloc	ks Web Stiff
H1	1	Simpson	IUS2.5	6/14	2 and Filler	No
H2	10	Simpson	IUS2.5	6/14	No	No
H3	1	Simpson	MIU5.1	2/14	No	No
H4	1	Simpson	HUS1.8	1/10	No	No
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.

TEENTH. ** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.	cement Plan Only . All designs of Code Requirements along with nes. This is NOT an engineered	Resisting in the image of the			
** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.					
DAMAGED FLOOR JOISTS SHOULD NOT BE INSTALLED UNLESS APPROVED BY COMPONENT PLANT.	DR Horton	36 Mason Ridge Hayden K	FLOOR JOIST LAYOUT		
** DAMAGED FLOOR JOISTS SHOULD NOT BE IN	Date: Desig Projec	: 1/4" = // 05/01 ner: DW ct #: 250 Sheet Numb	/25 / 40239		

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
- MIN GRADE BACKER BLOCK SHALL BE UTULTY GRADE SPF (SOUTH) OR BETTER FOR SOLD SAWN LUMBER AND SHALL BE RATED SHEATHING GRADE FOR WOOD STRUCTURAL PANELS **FOR FACE MOUNT HANGERS, USE NET JOIST DEPTH MINUS 1 1/4* FOR JOISTS WITH 1 1/2* THICK FLANGES

2h BEFORE INSTALLING A BACKER BLOCK TO A DOUBLE I-JOIST, DRIVE 3 ADDITIONAL 10d NAILS THROUGH WEBS AND FILLER BLOCK WHERE THE BACKER BLOCK WILL FIT CLINCH INSTALL BACKER TIGHT TO TOP FLANGE USE 12 10d NAILS, CLINCH WHEN POSSIBLE, MAX CAPACIY FOR HANGER FOR THIS DETAIL IS 1280 LBS

— DOUBLE PJI I-JOIST HEADER

FOR HANGER CAPACITY SEE HANGER MAUNFACTURES RECOMMENDATIONS VERIFY DOUBLE PJI I-JOIST CAPACITY TO SUPPORT CONCENTRATED LOADS

<u>NOTE</u> UNLESS HANGER SIDES LATERALLY SUPPORT THE TOP FLANGE, BEARING STIFFENERS SHALL BE USED

BACKER BLOCK REQUIRED (BOTH SIDES FOR FACE MOUNT HANGERS SEE HANGER MANUFATURED INSTALL DETAILS

HANGER MUST SUPPORT TOP FLANGE OF JOIST, FILLER BLOCK REQUIRED IF HANGER IS NOT FULL DEPTH OF JOST

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

BACKER BLOCKS MUST BE LONG ENOUGH TO PERMIT REQUIRED NAILING WITHOUT SPLITTING

 Server
 THICKNECS
 MIN DEPTH

 PJI40 & PJI60
 1"
 5 %"

PJI40 & PJI60 1 5 ½ PJI80 & PJI90 1 ½" 7 ¼"