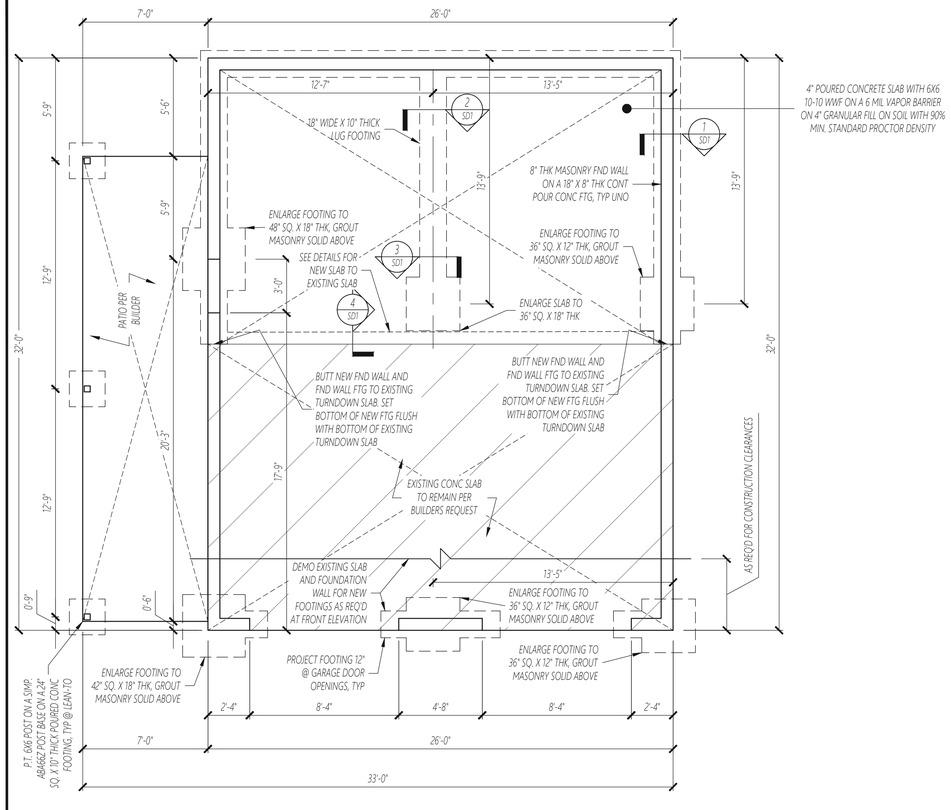


NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

01/21/2022

Harnett COUNTY NORTH CAROLINA

All ceilings shall be 5/8 type x drywall in addition to walls shown on last page

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

FOUNDATION NOTES

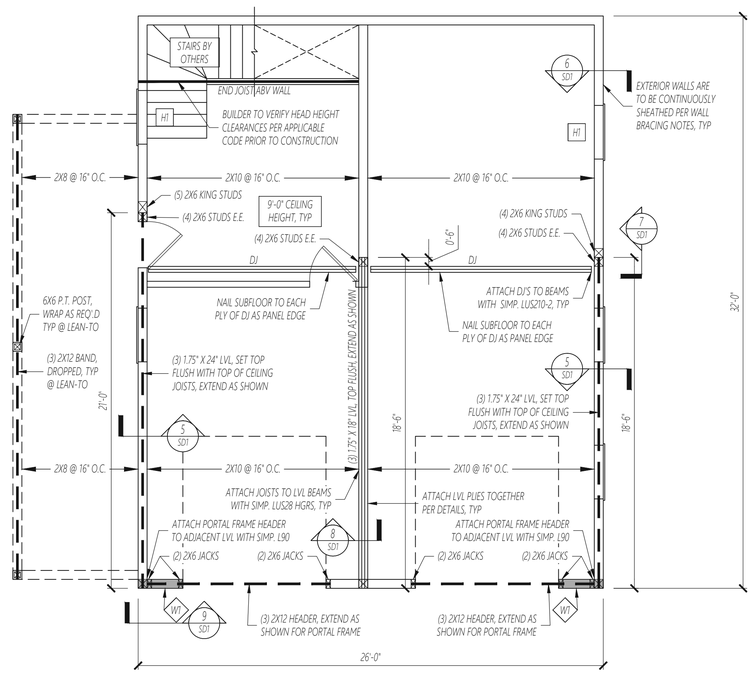
-FOUNDATION WALL HEIGHT AND BACKFILL LIMITATIONS ARE TO BE GOVERNED BY THE NCRC, LATEST EDITION.
-BUILDER IS TO VERIFY REBAR SIZE AND SPACING IF REQUIRED BY WALL HEIGHT AND BACKFILL CONDITIONS.

DISCLAIMER NOTES:

-BUILDER MUST VERIFY ALL EXISTING CONDITIONS DURING DEMOLITION, AND SHALL NOTIFY OKE NICHOLS ENGINEERING, INC OF ANY AND ALL ISSUES OR DISCREPANCIES PRIOR TO CONSTRUCTION.
-BUILDER IS RESPONSIBLE FOR INSPECTING AND VERIFYING THE INTEGRITY OF THE EXISTING FRAMING IN THE AREAS AFFECTED BY THIS DESIGN TO DETERMINE IF THE EXISTING IS TO REMAIN OR BE REPLACED BY EQUAL.
-BUILDER IS TO FIELD VERIFY ALL DIMENSIONS.

FOUNDATION PLAN

1/4" = 1'-0"



ADDITIONAL JOISTS

-NON-LOAD BEARING WALLS, BUILT-INS, AND CABINETRY ON THE FLOOR ABOVE THAT ARE PARALLEL TO THE FRAMING SYSTEM ON THIS SHEET SHALL HAVE AN ADDITIONAL JOIST PLACED BELOW, TYP UNO, BUILDER TO INSTALL AS REQUIRED, FIELD VERIFY DIMENSIONS

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

	BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
SAWN	(2)-PLY SAWN BEAM	2
	(3)-PLY SAWN BEAM	3
LVL	(2)-PLY LVL BEAM	3
	(3)-PLY LVL BEAM	4
	(4)-PLY LVL BEAM	5

NOTES:
-SINGLE PLY LVL BEAMS AND X/S TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.
-WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1: (2) 2X10 ON (1) JACK E.E.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:
-NO. OF KINGS STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.
-SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

THIS FLOOR ONLY

ALL EXTERIOR STUD WALLS ARE TO BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-WSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

EXTERIOR BRACED WALLS:
-CONTINUOUS PERIMETER SHEATHING = 116'

SHADED WALLS = INTERIOR BRACED WALLS AND EXTERIOR WALLS WITH ALTERNATIVE BRACING METHODS

W1- PORTAL FRAME WHERE INDICATED. SEE DETAILS FOR CONSTRUCTION SPECIFICATIONS. SHEATH WALLS @ PORTAL FRAME WITH 7/16" MIN. THICKNESS WOOD STRUCTURAL PANELING.

NOTES:
-WALL BRACING SHALL BE INSTALLED TO BE IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 NCRC.
-WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 NCRC.

DISCLAIMER NOTES:

-BUILDER MUST VERIFY ALL EXISTING CONDITIONS DURING DEMOLITION, AND SHALL NOTIFY OKE NICHOLS ENGINEERING, INC OF ANY AND ALL ISSUES OR DISCREPANCIES PRIOR TO CONSTRUCTION.
-BUILDER IS RESPONSIBLE FOR INSPECTING AND VERIFYING THE INTEGRITY OF THE EXISTING FRAMING IN THE AREAS AFFECTED BY THIS DESIGN TO DETERMINE IF THE EXISTING IS TO REMAIN OR BE REPLACED BY EQUAL.
-BUILDER IS TO FIELD VERIFY ALL DIMENSIONS.

1ST FLOOR FRAMING PLAN

WALLS AND CEILING
1/4" = 1'-0"

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 051386 10/26/2021 CONNER S. DEAN

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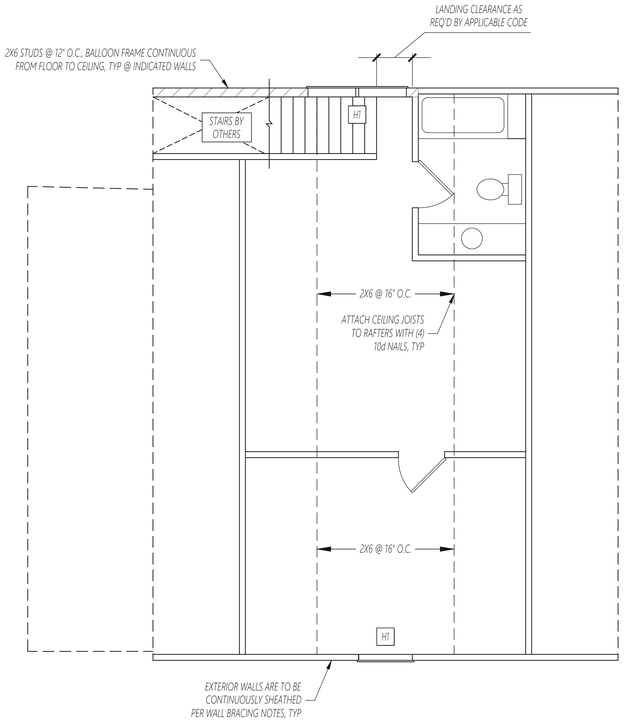
ALL HOME RENOVATION
STRUCTURAL ADDENDUM
246 WOODLAND RIDGE DRIVE

ENG:	CSD
DATE:	10/26/2021
REV:	

PROJECT NO.
2110203

SHEET NO.
S1
1 of 3



COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

	BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
SAWN	(2)-PLY SAWN BEAM	2
	(3)-PLY SAWN BEAM	3
LVL	(2)-PLY LVL BEAM	3
	(3)-PLY LVL BEAM	4
	(4)-PLY LVL BEAM	5

NOTES:
-SINGLE PLY LVL BEAMS AND X/S TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.
-WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1: (2) 2X10 ON (1) JACK E.E.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:
-NO. OF KINGS STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.
-SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

THIS FLOOR ONLY

ALL EXTERIOR STUD WALLS ARE TO BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-WSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

EXTERIOR BRACED WALLS:
-CONTINUOUS PERIMETER SHEATHING = 50'

NOTES:
-WALL BRACING SHALL BE INSTALLED TO BE IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 NCRC.
-WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 NCRC.

DISCLAIMER NOTES:

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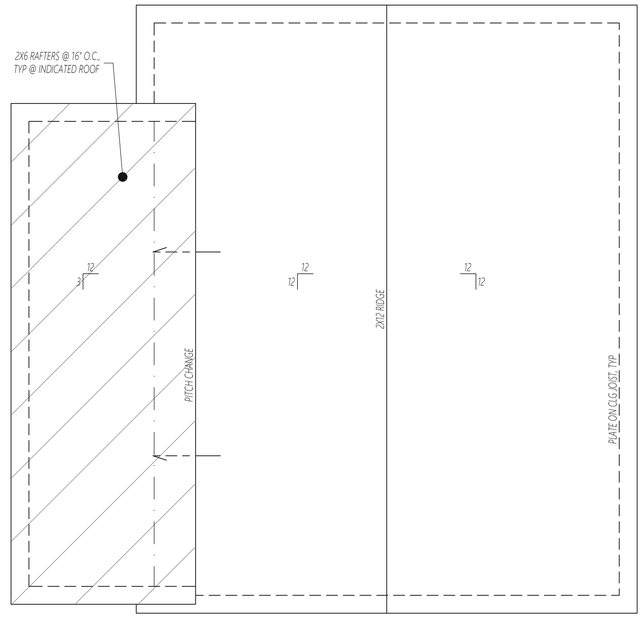
-BUILDER IS RESPONSIBLE FOR INSPECTING AND VERIFYING THE INTEGRITY OF THE EXISTING FRAMING IN THE AREAS AFFECTED BY THIS DESIGN TO DETERMINE IF THE EXISTING IS TO REMAIN OR BE REPLACED BY EQUAL.
-BUILDER IS TO FIELD VERIFY ALL DIMENSIONS.

2ND FLOOR FRAMING PLAN

WALLS AND CEILING

1/4" = 1'-0"



COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

FRAMING NOTES

ROOF ONLY

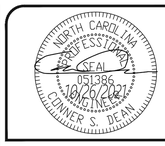
-COMMON RAFTERS SHALL BE 2X8 @ 16" O.C. TYP UNO.
-2X4 COLLAR TIES SHALL BE INSTALLED EVERY 3RD SET OF RAFTERS, SET WITHIN THE UPPER 3RD OF THE ATTIC SPACE, AND ATTACHED WITH A MIN. OF (3) 10d NAILS E.E. TYP UNO.
-CONTRACTOR IS TO VERIFY ALL ROOF PITCHES, OVERHANGS, AND KNEEWALL HEIGHTS PRIOR TO CONSTRUCTION.

DISCLAIMER NOTES:

-BUILDER MUST VERIFY ALL EXISTING CONDITIONS DURING DEMOLITION, AND SHALL NOTIFY OKE NICHOLS ENGINEERING, INC OF ANY AND ALL ISSUES OR DISCREPANCIES PRIOR TO CONSTRUCTION.
-BUILDER IS RESPONSIBLE FOR INSPECTING AND VERIFYING THE INTEGRITY OF THE EXISTING FRAMING IN THE AREAS AFFECTED BY THIS DESIGN TO DETERMINE IF THE EXISTING IS TO REMAIN OR BE REPLACED BY EQUAL.
-BUILDER IS TO FIELD VERIFY ALL DIMENSIONS.

ROOF FRAMING PLAN

1/4" = 1'-0"



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ALL HOME RENOVATION
STRUCTURAL ADDENDUM
246 WOODLAND RIDGE DRIVE

ENG:	CSD
DATE:	10/26/2021
REV:	

PROJECT NO.
2110203

SHEET NO.
S2
2 of 3

CONSTRUCTION SPECIFICATIONS

GENERAL NOTES

GN.01: CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 ED. ALL WORK IS TO BE DONE IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES.

GN.02: METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

DIMENSIONS

DM.01: DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.

DESIGN LOADS

DL.01: DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW

USE	LIVE LOAD (PSF)
UNINHABITABLE ATTIC WITHOUT STORAGE, LESS THAN 42" HEADROOM	10
UNINHABITABLE ATTIC WITH LIMITED STORAGE	20
HABITABLE ATTIC / ATTIC WITH FIXED STAIR ACCESS	30
COMMON AREAS / SLEEPING ROOMS	40
EXTERIOR BALCONIES / DECKS	40
FIRE ESCAPES	40
STAIRS	40
ROOF	20
PASSENGER VEHICLE GARAGE	50
GUARDRAILS AND HANDRAILS	200
GUARDRAIL IN-FILL COMPONENTS	50

* A UNIFORMLY DISTRIBUTED DEAD LOAD OF 10 PSF SHALL BE APPLIED TO USE CATEGORIES LISTED ABOVE UNLESS NOTED OTHERWISE.
* A UNIFORMLY DISTRIBUTED DEAD LOAD OF 5 PSF SHALL BE APPLIED TO VAULTED CEILING AREAS.
* THE CONTRACTOR IS RESPONSIBLE FOR INDICATING ON PLANS ALL AREAS REQUIRING A DESIGN FOR INCREASED DEAD LOAD SUCH AS TILED FLOOR AREAS OR SLATE ROOF COVERINGS. FOR ALL AREAS NOT INDICATED ON PLANS, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE DEAD LOAD DOES NOT EXCEED THE 10 PSF DESIGN LIMITATION.

DL.02: INTERIOR WALLS: 5 PSF LATERAL

DL.03: BASIC WIND DESIGN VELOCITY, V(ultimate) OF 115 MPH.

DL.04: LOAD DURATION FACTOR FOR ROOF STRUCTURAL MEMBERS IS 1.15.

DL.05: SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

WOOD CONSTRUCTION

WC.01: SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 / NO. 2 SPRUCE PINE FIR FOR JOISTS, RAFTERS, WOOD GIRDERS / BEAMS, ETC. PRESSURE TREATED WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, RAFTERS, WOOD GIRDERS/BEAMS, ETC.

WC.02: STUDS SHALL BE SPRUCE PINE FIR NO.1 / NO. 2 OR EQUAL TYP UNO.

WC.03: LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6(A).

WC.04: LAMINATED VENEER LUMBER (LVL) DESIGN IS BASED ON MICROLAM 1.9E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 2.0E6 PSI, Fb = 2600 PSI, Fv = 285 PSI, Fc = 750 PSI

WC.05: PARALLEL STRAND LUMBER (PSL) DESIGN IS BASED ON PARALLAM 1.8E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 1.8E6 PSI, Fb = 2400 PSI, Fv = 190 PSI, Fc = 545 PSI

WC.06: LAMINATED STRAND LUMBER (LSL) DESIGN IS BASED ON TIMBERSTRAND 1.3E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 1.3E6 PSI, Fb = 1700 PSI, Fv = 425 PSI, Fc = 710 PSI

WC.07: SOLID SAWN, LVL, AND PSL BEAMS BEARING ONTO A STUD WALL SHALL THE BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (2) STUDS MINIMUM FOR SAWN BEAMS AND (3) STUDS MINIMUM FOR LVL AND PSL BEAMS, UNO.

WC.08: SINGLE LVL OR SOLID SAWN MEMBERS OF 1.75" OR LESS WIDTH, BEARING ONTO A STUD WALL SHALL BEAR 2" MINIMUM ONTO THE WALL AND SHALL BE SUPPORTED BY (1) ADDITIONAL STUD.

WC.09: SOLID SAWN LUMBER PLIES THAT ARE GANGED TO FORM UP TO A (4) PLY A BEAM SHALL HAVE ADJACENT PLIES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 10d NAILS @ 16" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED (1) OUTER SIDE AND ON EACH ADJACENT PLY OF A (3) OR MORE GANGED PLY BEAM, TYP UNO

WC.10: LVL PLIES THAT ARE GANGED TO FORM UP TO A (3) PLY BEAM, LESS THAN 16" IN DEPTH, SHALL HAVE ADJACENT PLIES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 12d NAILS @ 12" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED ON BOTH OUTER SIDES OF A (3) PLY BEAM. LVL BEAMS 15" DEEP OR GREATER OR (4) OR MORE GANGED PLIES SHALL BE FASTENED AS INDICATED ON PLANS.

WC.11: TYPICAL STUD WALL FRAMING SHALL BE 2X4 STUDS SPACED AT 16" O.C. OR, OF A WIDTH, OR SPACING AS INDICATED OTHERWISE ON PLANS. STUD WALLS SHALL BE FRAMED CONTINUOUS, WITHOUT BREAK, ALONG THE HEIGHT OF THE WALL AND SHALL CONSIST OF A SOLE PLATE AT THE BOTTOM OF THE WALL AND A DOUBLE TOP PLATE AT THE TOP OF THE WALL. DISCONTINUITIES IN A STUD WALL SHALL NOT OCCUR EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS.

WC.12: THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS IN 2X4 STUD WALLS SHALL BE DETERMINED BY NCSBC TABLE 602.3(5)(ii) UNLESS NOTED OTHERWISE ON PLANS. FOR 2X6 OR WIDER STUD WALLS THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS WALLS SHALL BE EQUAL TO 1/2 THE AMOUNT OF STUDS AS INDICATED BY THE TABLE LISTED ABOVE.

WC.13: STUDS THAT ARE GANGED TO FORM A LOAD BEARING COLUMN OR A COLUMN TRANSFERRING LOAD FROM ONE FLOOR TO THE NEXT SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH (2) ROWS OF 10d NAILS AT 8" O.C. (3) ROWS OF 10d NAILS @ 8" O.C. FOR 2X8 OR 2X10 STUDS). ALL COLUMNS SHALL PROVIDE A CONTINUOUS LOAD PATH DOWN TO THE FOUNDATION OR OTHER ENGINEERED STRUCTURAL ELEMENTS INCLUDING SOLID BLOCKING OF EQUAL WIDTH OF THE COLUMN PROVIDED WITHIN THE DEPTH OF THE FLOOR SYSTEM CAVITY.

WC.14: NAILS SHALL BE COMMON WIRE NAILS TYP UNO.

WC.15: LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1-1981.

WC.16: PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS.

WC.17: BOLTS AND LAG SCREWS USED FOR BOLTING WOOD MEMBERS SHALL HAVE STANDARD WASHERS INSTALLED FOR THE NUTS AND BOLT / SCREW HEADS.

STEEL CONSTRUCTION

ST.01: STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

ST.02: HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500 GRADE C.

ST.03: ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 MINIMUM GRADE TYP UNO.

ST.04: BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO.

ST.05: WELDING ELECTRODES SHALL BE E70XX.

ST.06: ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER.

ST.07: REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO.

ST.08: STEEL FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER. PLATE AND LUMBER AS SIZED PER PLANS. BOLT ASSEMBLY TOGETHER USING 1/2" ø THROUGH BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" FROM EACH END OF THE BEAM.

ST.09: ALL STEEL, HSS, AND STEEL FLITCH PLATE BEAMS BEARING ONTO A STUD WALL SHALL THE BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL, AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (3) STUDS MINIMUM UNO.

MASONRY CONSTRUCTION

MS.01: MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530-95, LATEST EDITION.

MS.02: CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90 OR ASTM C 55.

MS.03: MORTAR SHALL BE TYPE M OR S CONFORMING TO ASTM C 476.

MS.04: ALL LOAD BEARING MASONRY UNITS SHALL BE LAID IN A RUNNING BOND, TYP.

MS.05: MASONRY PILASTERS SHALL BE BLOCK BONDED TO THE MASONRY WALL IMMEDIATELY ADJACENT, TYP.

MS.06: THE MAXIMUM HEIGHT OF HOLLOW AND SOLID GROUTED MASONRY UNITS USED IN MASONRY PIER CONSTRUCTION SHALL CONFORM WITH THE TABLE BELOW

LEAST PIER DIMENSION	MAX HEIGHT FOR HOLLOW UNITS	MAX HEIGHT FOR SOLID UNITS
8"	32"	80"
12"	48"	120"
16"	64"	160"
20"	80"	NA
24"	96"	NA

CONCRETE CONSTRUCTION

CN.01: REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.

CN.02: ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNO.

CN.03: CAST IN PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO.

CN.04: WHERE CAST IN PLACE CONCRETE WALLS RETAIN 4 FEET OR MORE OF UNBALANCED FILL, THEY SHALL BE LATERALLY SUPPORTED AT THE TOP AND BOTTOM BEFORE BACKFILLING.

SUBSTITUTIONS

SB.01: SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2". DOSAGE RATE 1 1/2 LBS/CU YD. MAY BE USED IN LIEU OF WELDED WIRE FABRIC IN GROUND SUPPORTED SLAB CONSTRUCTION.

SB.02: SOLID SAWN LUMBER SPECIES AND GRADE SUBSTITUTION IS ALLOWED ONLY BY WRITTEN AUTHORIZATION OF SUBSTITUTION BY ENGINEER OF RECORD.

SB.03: ENGINEERED WOOD BEAM AND I-JOIST SUBSTITUTION IS ALLOWED PROVIDED THAT THE CONTRACTOR OR THE LUMBER SUPPLIER RESPONSIBLE FOR THE SUBSTITUTION PROVIDES DOCUMENTATION AT THE TIME OF INSPECTION DEMONSTRATING THAT THE MATERIAL SUBSTITUTION MEETS OR EXCEEDS THE MINIMUM DESIGN SPECIFICATIONS OF THE ENGINEERED WOOD BEAMS OR I-JOISTS NOTED ON THE SEALED SET OF ENGINEERED PLANS. IN ALL CASES, THE I-JOIST SPACING NOTED ON THE SEALED SET OF PLANS IS TO REMAIN THE SAME.

SB.04: ALL OTHER UNAUTHORIZED SUBSTITUTIONS AND / OR DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. FAILURE OF THE CONTRACTOR TO CONFORM TO THE STRUCTURAL DRAWINGS SHALL VOID THE ENGINEER'S SEAL AND THE FIRM'S LIABILITY UNLESS CHANGES TO THE STRUCTURAL PLANS ARE APPROVED BY THE ENGINEER OF RECORD.

LEGAL DISCLAIMER / MISCELLANEOUS NOTES

THE ELECTRONIC DISTRIBUTION OF THIS DOCUMENT TO PARTIES OTHER THAN THE INTENDED CLIENT AND / OR DIGITAL MODIFICATION OF THIS DOCUMENT IN ANY WAY IS PROHIBITED AND SHALL VOID THE ENGINEER OF RECORD'S SEAL.

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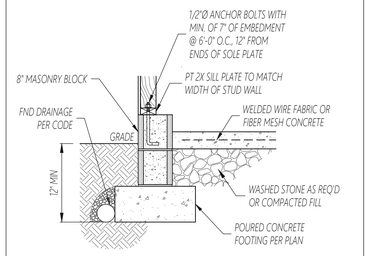
COMMON ABBREVIATIONS

ABV	ABOVE
B.E.	BOTH ENDS
BTWN	BETWEEN
CJ	CEILING JOIST
CONC.	CONCRETE
CONT	CONTINUOUS
CS	CONTINUOUS SHEATHING
DIA	DIAMETER
DBL	DOUBLE
DJ	DOUBLE JOIST
DSP	DBL STUD POCKET
E.E.	EACH END
FLR	FLOOR
FND	FOUNDATION
FTG	FOOTING
HDG	HOT DIPPED GALVANIZED
HGR	HANGER
LVL	LAMINATED VENEER LUMBER
NO.	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
SIMP.	SIMPSON
SQ	SQUARE
THK	THICK
TYP	TYPICAL
TRPL	TRIPLE
TSP	TRIPLE STUD POCKET
UNO	UNLESS NOTED OTHERWISE
WF	WIDE FLANGE BEAM
XJ	EXTRA JOIST

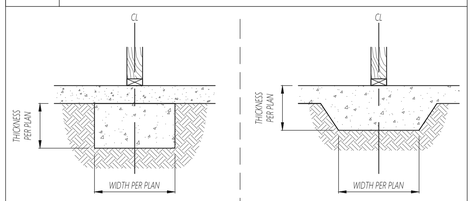
1 SECTION, 3/4" = 1'-0"

TYPICAL GARAGE FOUNDATION WALL



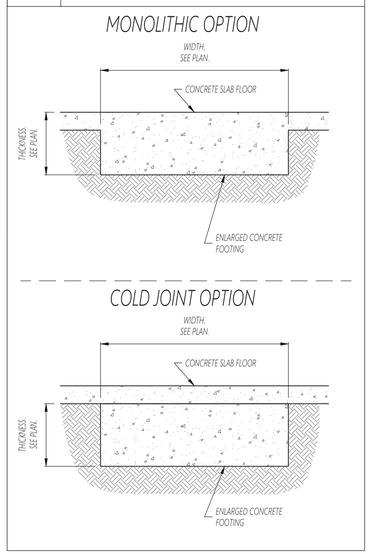
2 SECTION, 3/4" = 1'-0"

TYPICAL LUG FOOTING: COLD JOINT, MONO POUR OPTIONS



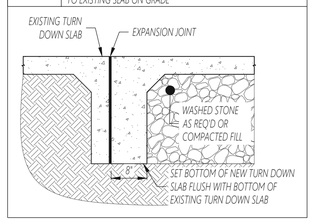
3 SECTION, 3/4" = 1'-0"

TYPICAL ENLARGED FOOTING



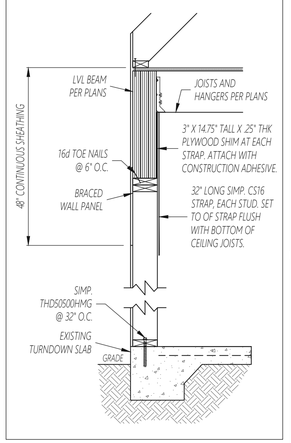
4 SECTION, 3/4" = 1'-0"

CONSTRUCTION OF NEW SLAB ADJACENT TO EXISTING SLAB ON GRADE



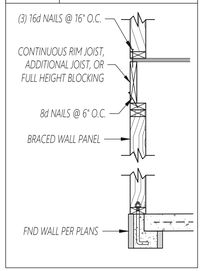
5 SECTION, 3/4" = 1'-0"

TYPICAL BRACED WALL PANEL @ EXISTING PATIO SLAB



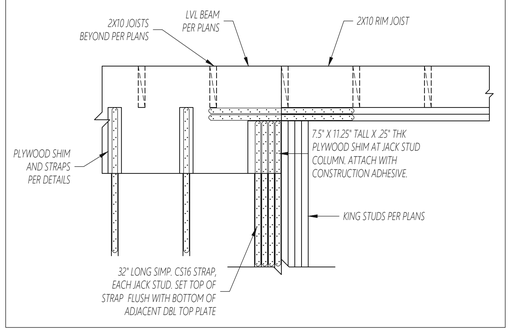
6 SECTION, 3/4" = 1'-0"

TYPICAL BRACED WALL PANEL



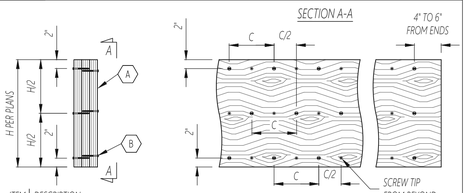
7 SECTION, 3/4" = 1'-0"

TYP ATTACHMENT OF LVL PARALLEL TO RIM JOIST AT EXTERIOR WALLS



8 SECTION, 3/4" = 1'-0"

TYPICAL 20" AND DEEPER LVL FASTENING ATTACHMENT



ITEM	DESCRIPTION
A	LVL BEAM (E= 2.0E6 PSI Fb= 2600 PSI), SEE PLANS FOR NUMBER OF PLIES AND HEIGHT
B	SCREWS PER TABLE (A), EACH SIDE OF BEAM
C	O.C. SPACING= 12"

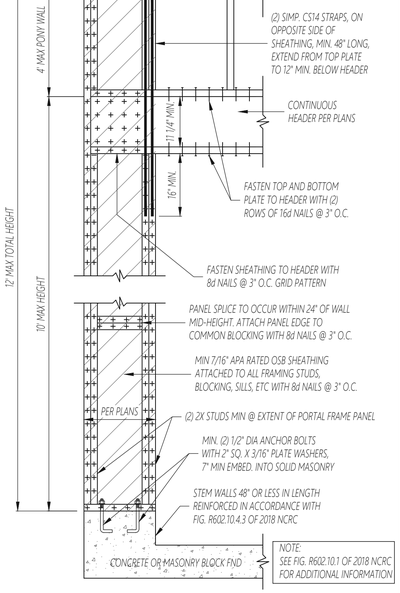
TABLE (A), ATTACHMENT OF LVL PLIES PER NUMBER OF PLIES

NUMBER OF LVL PLIES	SIMPSON BRAND SCREW OPTION
(3) PLY LVL	SDS25312 STRUCTURAL WOOD SCREWS
(4) PLY LVL	SDS25600 STRUCTURAL WOOD SCREWS

NOTES:
-LVL'S WITH HEIGHT OF 20" OR GREATER SHALL BE SCREWED PER THIS DETAIL

9 SECTION, 3/4" = 1'-0"

TYPICAL PORTAL FRAME CONSTRUCTION, SINGLE FRAME



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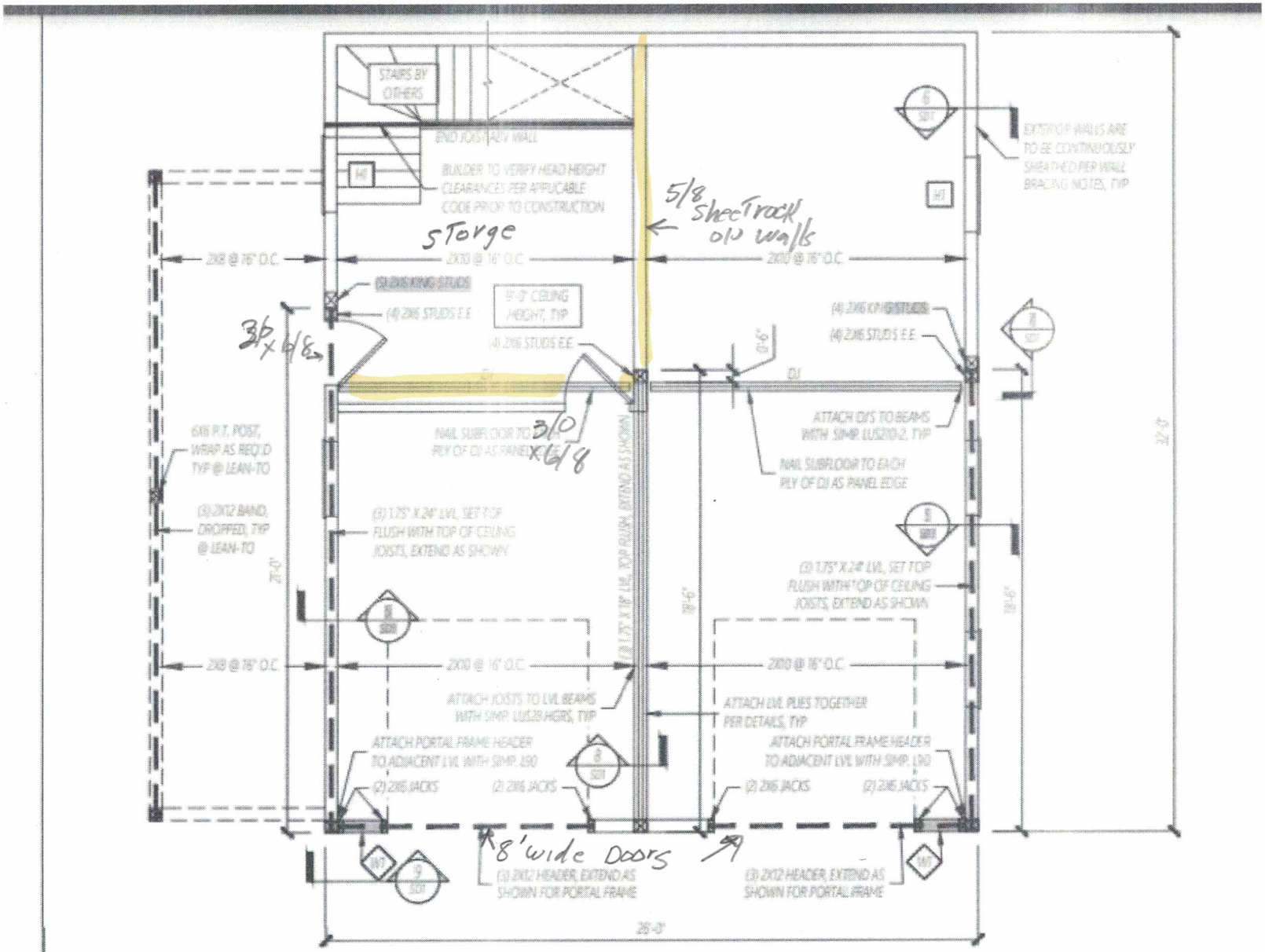
ALL HOME RENOVATION
STRUCTURAL ADDENDUM
246 WOODLAND RIDGE DRIVE

ENG:	CSD
DATE:	10/26/2021
REV:	

PROJECT NO.
2110203

SHEET NO.
SD1
3 of 3

246 Woodland Ridge Dr.



246 Woodland Ridge Dr