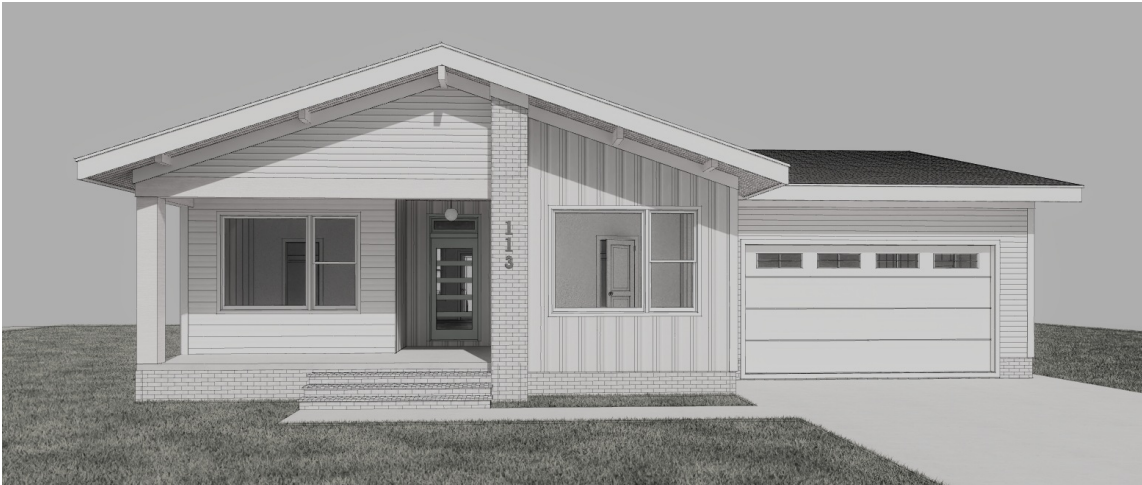




DESIGNER:
TV

VENTING CALCULATIONS
CRAWL SPACE VENTILATION
THE MIN. NET FREE AREA OF CRAWL VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 SQ. FT. FOR EACH 150 SQ. FT. OF CRAWL SPACE AREA.
1,800 SQ. FT. CRAWL SPACE AREA / 150
12.0 SQ. FT. NET FREE AREA REQUIRED
*MAY BE REDUCED BY 50% W/ VAPOR BARRIER
ATTIC VENTILATION
1,800 SQ. FT. OF ATTIC / 180" x 12.0 SQ. FT. OF INLET AND OUTLET VENTILATION MAY BE REDUCED 50% WHEN VENTILATORS ARE USED AT LEAST 2" ABOVE THE CORNICE VENTS.

BRC HOMES
113 OTTAWA DRIVE
LOUISBURG, NC



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Sheet No. **CS-1**
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BUILDING CODES
THIS PLAN HAS BEEN DESIGNED UNDER THE NC BUILDING CODES, 2018 RESIDENTIAL EDITION.

ICE GUARDS:
ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF TWO HORIZONTAL IN 12 UNITS HORIZONTAL (2:12) OR GREATER. FOR ROOF SLOPES OF TWO HORIZONTAL IN 12 UNITS HORIZONTAL (2:12) UP TO FOUR HORIZONTAL IN 12 UNITS HORIZONTAL (4:12), DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH SECTION R905.1.1.

- ASPHALT SHINGLES
- STANDING SEAM METAL ROOF
- HORIZONTAL LAP SIDING
- BOARD AND BATTEN SIDING @ 16" O. C.
- SHAKE SIDING
- BRICK VENEER
- SYNTHETIC STONE VENEER
- PARGED BLOCK FOUNDATION



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Exterior Elevations

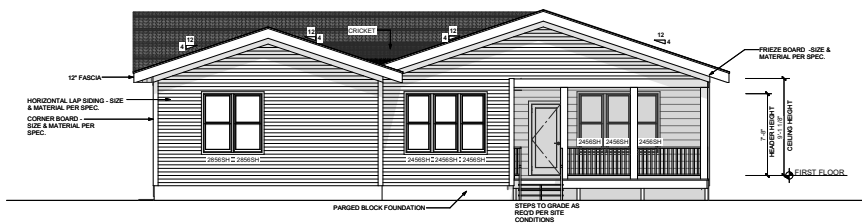
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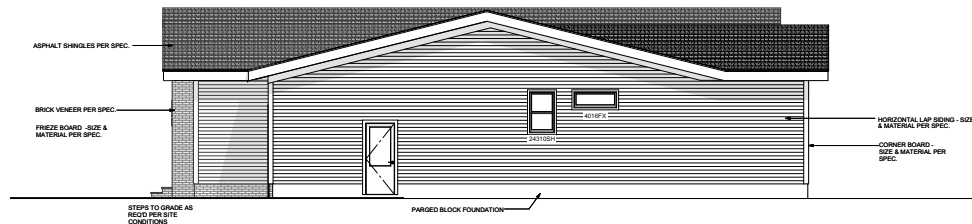
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M026-25

Sheet No. **A-1**
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REAR ELEVATION
Scale: 1/4" = 1'-0"



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

ELEVATION NOTES

BUILDING CODES
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ICE GUARDS
ICE GUARD MATERIALS SHALL BE USED ONLY ON ROOF SLOPES OF 12/12 OR STEEPER. IN 12/12 ROOF SLOPES, ICE GUARDS SHALL BE INSTALLED IN 12" SPACES HORIZONTALLY, 2' TO 4' ON ROOF SLOPES. IN ROOF SLOPES OF 12/12 OR STEEPER, ICE GUARDS SHALL BE INSTALLED IN 12" SPACES HORIZONTALLY, 18" TO 24" ON ROOF SLOPES. APPLICATION IS REQUIRED IN ACCORDANCE WITH SECTION R901.1.

MATERIAL LEGEND

-  ASPHALT SHINGLES
-  STANDING SEAM METAL ROOF
-  HORIZONTAL LAP SIDING
-  BOARD & BATTEN SIDING @ 16" O.C.
-  SHAKE SIDING
-  BRICK VENEER
-  SYNTHETIC STONE VENEER
-  PARGE BLOCK FOUNDATION

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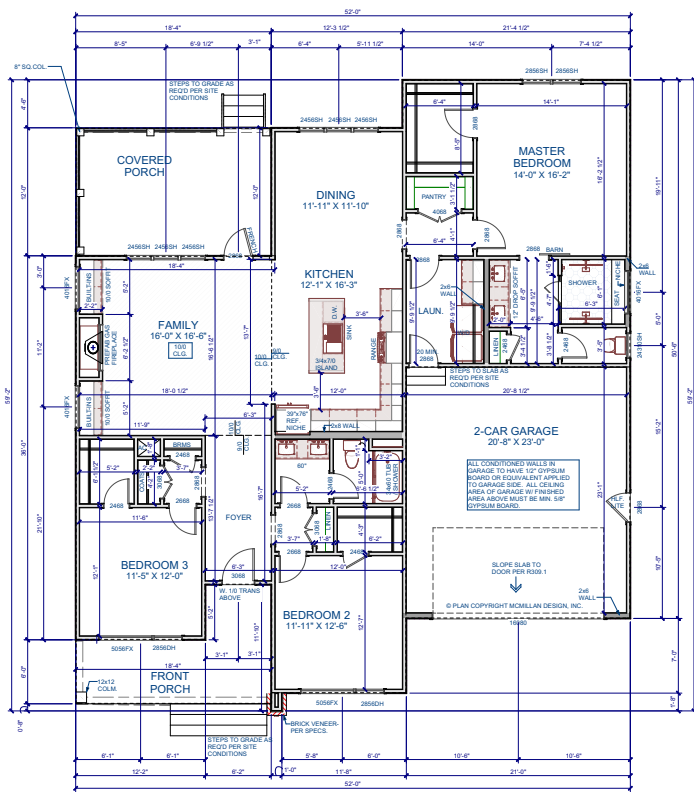
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Exterior Elevations

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GENERAL NOTES

WALLS
ALL WALLS ARE CONCRETE 12\"/>

WINDOW NOTE LEGEND
DH DOUBLE HUNG
SH SINGLE HUNG
FX FIXED
SC SINGLE CASEMENT
DC DOUBLE CASEMENT
TC TRIPLE CASEMENT

Heated Square Footage	
First Floor	1,858
Total Heated	1,858
Unfinished	
Front Porch	146
Covered Porch	220
Two Car Garage	498
Total Unfinished	864

FIRST FLOOR PLAN
Scale: 1/4" = 1'-0"

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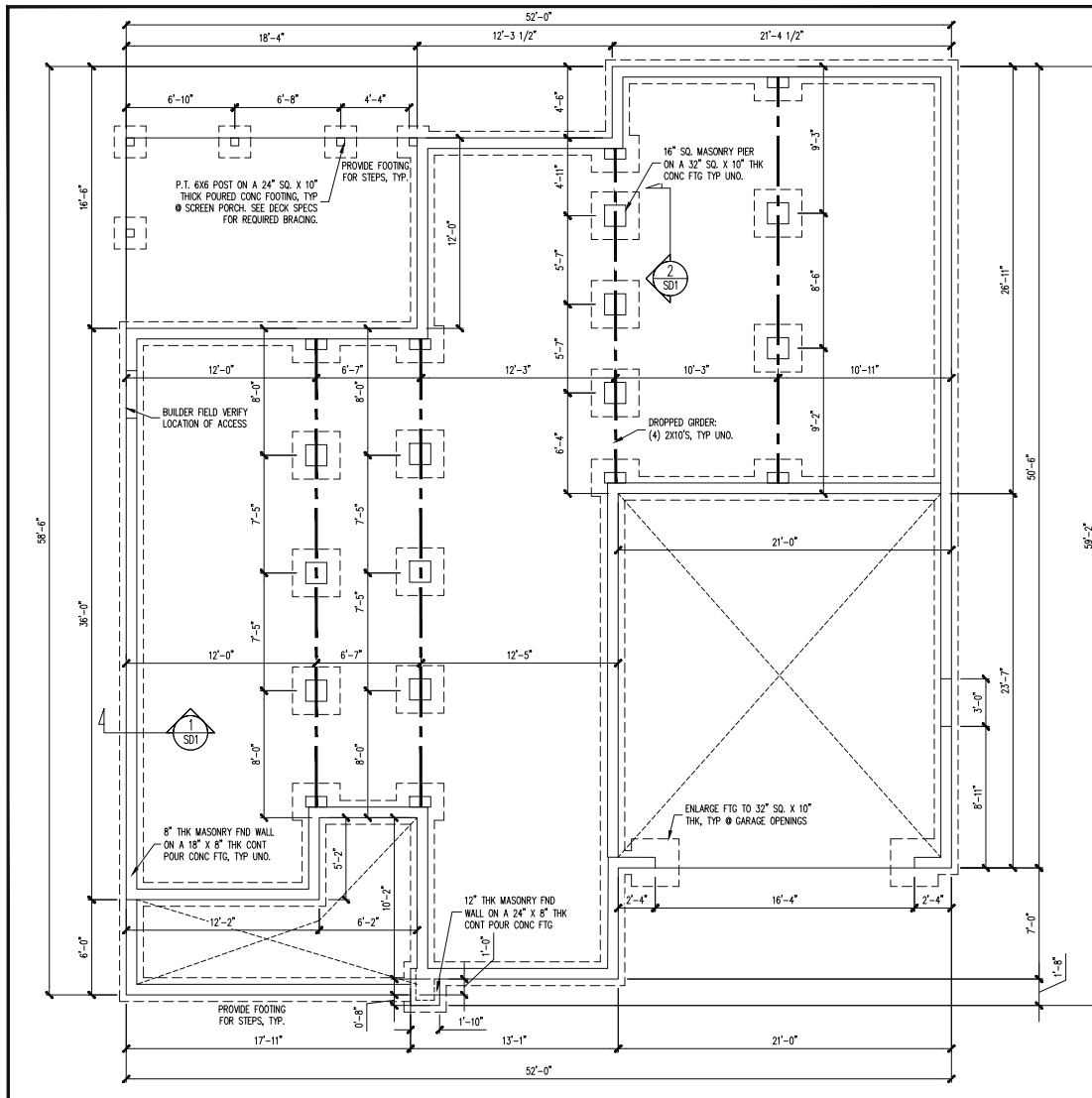
First Floor Plan

REVISIONS	
NUMBER	DATE

First floor plan for the property of BRC Homes. This plan was prepared by the architect and is not to be used for construction without the approval of the architect. The architect is not responsible for any errors or omissions in this plan. The contractor is responsible for obtaining all necessary permits and for ensuring that the construction complies with all applicable codes and regulations. The architect is not responsible for any construction delays or cost overruns. The contractor is responsible for obtaining all necessary permits and for ensuring that the construction complies with all applicable codes and regulations. The architect is not responsible for any construction delays or cost overruns.

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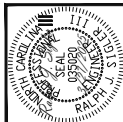
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NOTES:
 -HEIGHT AND BACKFILL LIMITATIONS FOR FOUNDATION WALLS ARE TO BE GOVERNED BY THE NCSBC, LATEST EDITION
 REINFORCEMENT AND GROUTING SHALL BE DETERMINED BY FINAL SITE CONDITIONS.
 -PLUMBING SHOWN FOR REFERENCE ONLY. BUILDER VERIFY FINAL FIXTURE LOCATIONS, SIZES AND REQUIREMENTS PRIOR TO INSTALLATION.

FOUNDATION PLAN
 1/4" = 1'-0"



Engineering Tech Associates, P.A.
 STRUCTURAL ENGINEERS
 License No. C-3870
 318 W. Millbrook Rd., Ste 201
 Raleigh, North Carolina 27609
 Phone (919) 844-1661

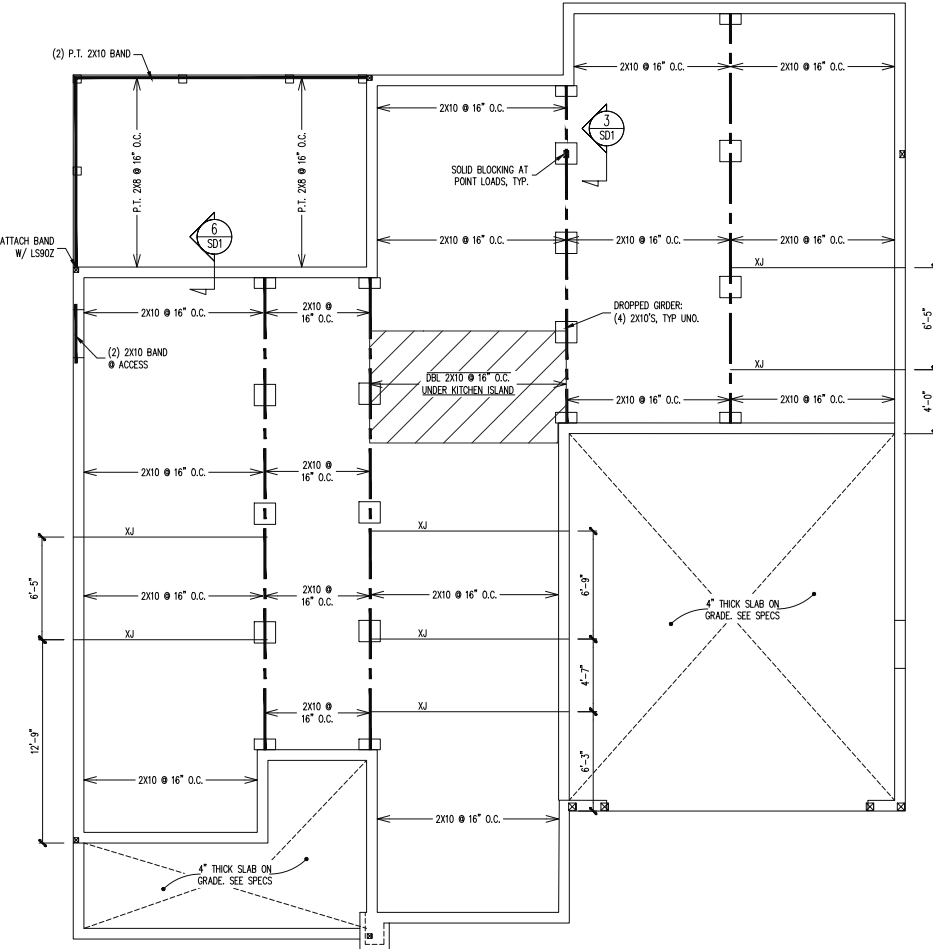
SCOPE	BRC HOMES
LOC	STRUCTURAL ADDENDUM
REV #	REF PROJ #
DATE	

ENG: RJS/CR
 DATE: 3/27/2025

PLAN NO.
 M026-25

PROJECT NO.
 25-21-066

SHEET NO.
 S1
 1 of 7



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BRC HOMES	
STRUCTURAL ADDENDUM	
SCOPE	REV # REF PROJ # DATE
LOC	113 OTTAWA LAKE ROYALE

ENG: RJS/CR
 DATE: 3/27/2025

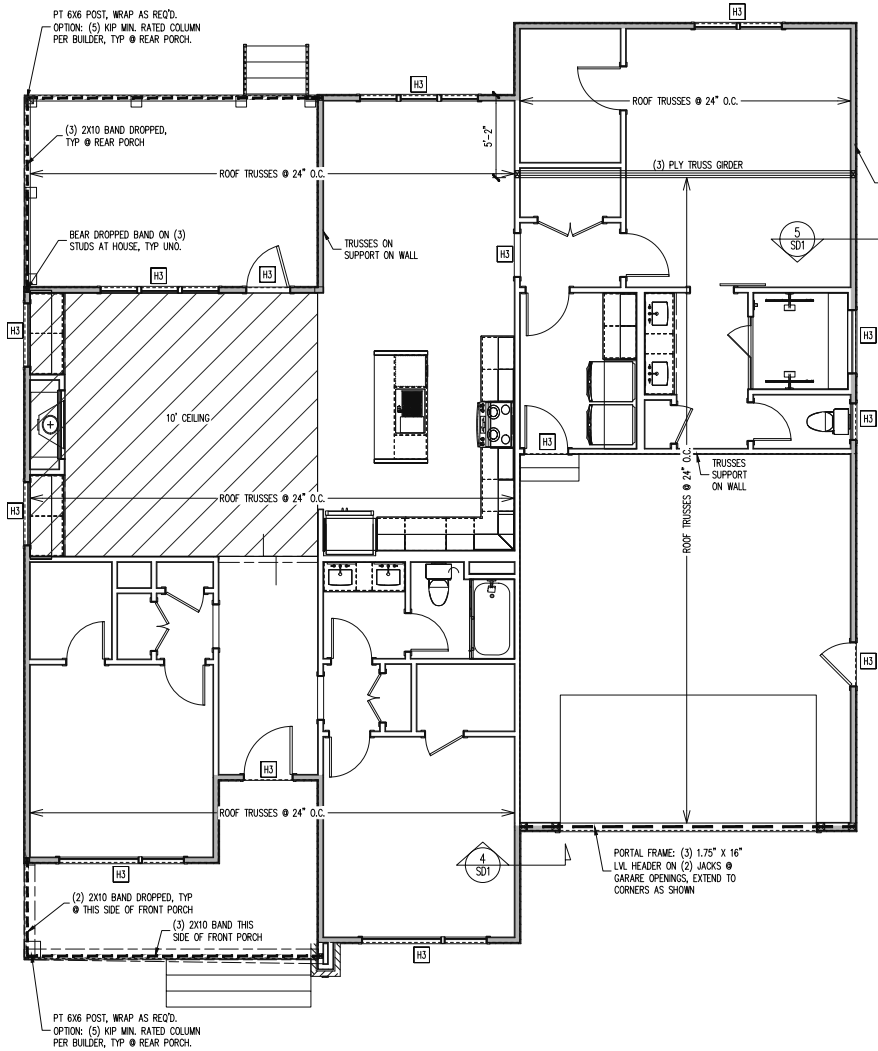
PLAN NO.
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PROJECT NO.
 25-21-066

SHEET NO.
 S2

2 of 7

CRAWL SPACE FRAMING PLAN
 1/4" = 1'-0"



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CONSTRUCTION SPECIFICATIONS INSTANT REFERENCES

REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION:

PART 1.01: CURRENT GOVERNING CODE

PART 14: STUD SUPPORT FOR BEAMS

PART 17: KING STUDS FOR EXTERIOR WALLS

SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR I-JOISTS ALLOWABLE SUBSTITUTIONS

WALL BRACING

SHADED WALLS:

ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

NOTES:
PROVIDED CONTINUOUS SHEATHING = 206" MIN.
REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

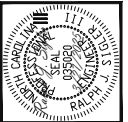
HEADER SCHEDULE

- H1 SINGLE 2X4 TURNED FLAT (A)
 - H2 (2) 2X4'S ON SINGLE JACKS (B)
 - H3 (2) 2X10'S ON SINGLE JACKS (C)
 - H4 (2) 1.75" X 9.25" LVL'S ON DBL JACKS
 - H5 (3) 2X10'S ON SINGLE JACKS
- (A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
- (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
- (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

1ST FLOOR FRAMING PLAN

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



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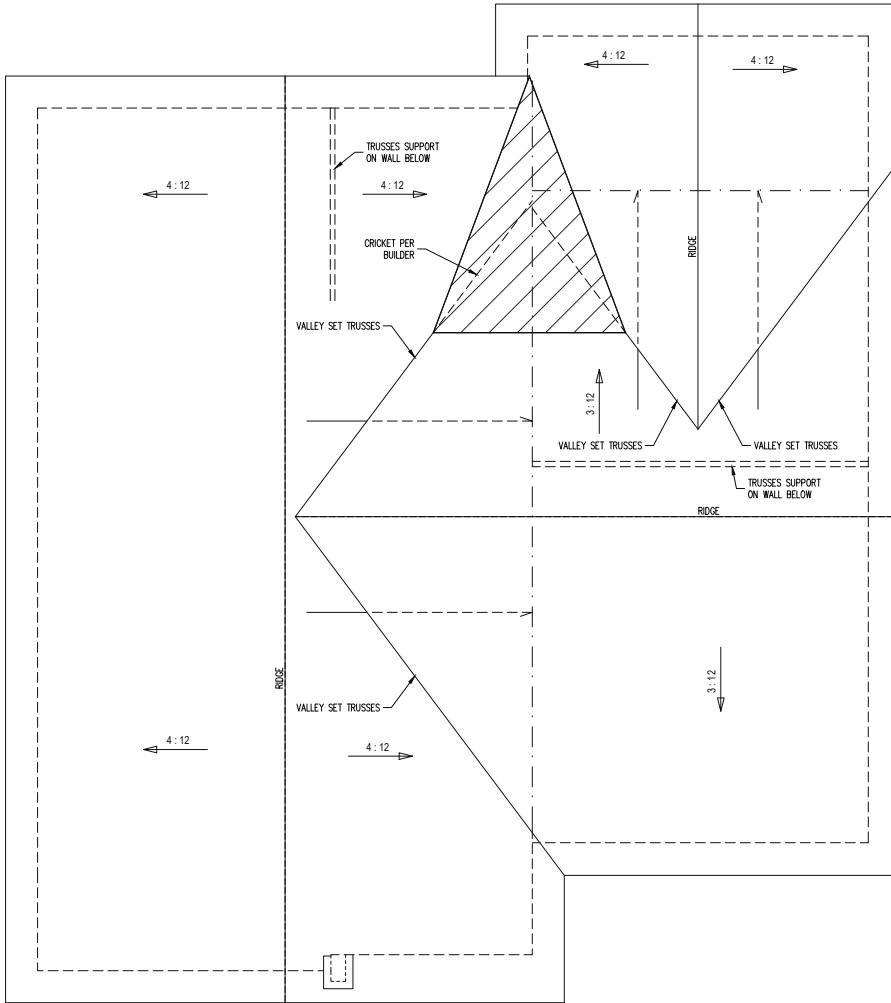
BRC HOMES	
STRUCTURAL ADDENDUM	
SCOPE	REV # REF PROJ # DATE
LOC	113 OTTAWA LAKE ROYALE

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DATE: 3/27/2025

PLAN NO.
M026-25

PROJECT NO.
25-21-066

SHEET NO.
S3
3 of 7



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FRAMING NOTES

ROOF ONLY

-VERIFY ROOF PITCHES, OVERHANG LENGTHS, AND KNEEWALL FRAMING HGTS WITH ARCHITECTURAL DRAWINGS, TYPICAL.

TRUSS UPLIFT CONNECTORS

DISPOSABLE & ITS MFG. ANY DETAIL

24" O.C. MAX ROOF TRUSS SPACING

TRUSSES SHALL BE ATTACHED TO SUPPORT WALL FOR UPLIFT RESISTANCE. CONTINUOUS OSB WALL SHEATHING BELOW PROVIDES CONTINUOUS UPLIFT RESISTANCE TO FOUNDATION. ALL TRUSSES SUPPORTED BY INTERMEDIATE SUPPORT WALLS, KNEEWALLS OR BEAMS SHALL BE ATTACHED TO SUPPORTING MEMBER PER SCHEDULE BELOW.

ROOF SPAN IS MEASURED HORIZONTALLY BETWEEN FURTHEST SUPPORT POINTS.

ROOF SPAN UP TO 28'	CONNECTOR NAILING PER TABLE 602.3(1) NORBC 2018 EDITION
OVER 28'	(1) SIMPSON H2-5A HURRICANE CLIP TO DBL TOP PLATE OR BEAM

ROOF FRAMING PLAN
1/4" = 1'-0"



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License No. C-3870
318 W. Millbrook Rd., Ste 201
Raleigh, North Carolina 27609
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STRUCTURAL ADDENDUM	
SCOPE	REV # REF PROJ # DATE
LOC	113 OTTAWA LAKE ROYALE

ENG:	RJS/CR
DATE:	3/27/2025
PLAN NO.	M026-25
PROJECT NO.	25-21-066
SHEET NO.	S4
	4 of 7

DECK SPECIFICATIONS

- A DECK IS AN EXPOSED EXTERIOR FLOOR STRUCTURE WHICH MAY BE ATTACHED TO A STRUCTURE OR BE FREE STANDING. ROOSTER FLOORS, OPEN OR SCREENED IN, MAY BE CONSTRUCTED USING THESE DIMENSIONS.
- SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING.
- WHEN ATTACHED TO A STRUCTURE, THE STRUCTURE TO WHICH ATTACH SHALL HAVE A TREATED WOOD BAND FOR THE LENGTH OF THE DECK, OR CORROSION RESISTANT FLESHING TO PREVENT ROTURE FROM COMING IN CONTACT WITH THE UNWEATHERED FRAMING OF THE STRUCTURE. THE DECK BAND AND THE STRUCTURE BAND SHALL BE CONSTRUCTED IN CONTACT WITH EACH OTHER EXCEPT AT BRACK KNEES AND WHERE PLUMB BRACING IS REQUIRED AND PROPERLY FLASHED. SOUND SHALL NOT BE INSTALLED BETWEEN THE DECK AND THE DECK BAND. A ATTACHED TO A STRUCTURE, THE UNWEATHERED FLASHING UNDER A TREATED BAND FOR THE BRACK STRUCTURE IS REQUIRED. IN ADDITION, THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE BRACK.
- WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SIZES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

JOIST LENGTH		JOIST SPAN		DECKING	
UP TO 8' MAX.	UP TO 16' MAX.	12" O.C.	16" O.C.	1" S4S	1" S4S
REQUIRED FASTENERS: ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	12" O.C.	16" O.C.	1" S4S	1" S4S
ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	12" O.C.	16" O.C.	1" S4S	1" S4S
- WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SIZES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

JOIST LENGTH		JOIST SPAN		DECKING	
UP TO 8' MAX.	UP TO 16' MAX.	12" O.C.	16" O.C.	1" S4S	1" S4S
REQUIRED FASTENERS: ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	12" O.C.	16" O.C.	1" S4S	1" S4S
ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	12" O.C.	16" O.C.	1" S4S	1" S4S
- ALL STRUCTURES EXCEPT BRACK STRUCTURES
- WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SIZES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

JOIST LENGTH		JOIST SPAN		DECKING	
UP TO 8' MAX.	UP TO 16' MAX.	12" O.C.	16" O.C.	1" S4S	1" S4S
REQUIRED FASTENERS: ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	12" O.C.	16" O.C.	1" S4S	1" S4S
ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	12" O.C.	16" O.C.	1" S4S	1" S4S
- BRACK KNEER STRUCTURES
- WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SIZES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

JOIST LENGTH		JOIST SPAN		DECKING	
UP TO 8' MAX.	UP TO 16' MAX.	12" O.C.	16" O.C.	1" S4S	1" S4S
REQUIRED FASTENERS: ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	12" O.C.	16" O.C.	1" S4S	1" S4S
ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	ONE - 5/8" x 8" BOLT @ 42" O.C. OR ONE - 5/8" x 12" BOLT @ 42" O.C. OR TWO RWS OF 3/8" O.D. SPOON STAGGERED @ 24" O.C.	12" O.C.	16" O.C.	1" S4S	1" S4S
- IF THE DECK BAND IS SUPPORTED BY A 1/2" MAXIMUM MAXIMUM LAG ALONG THE DECKING BAND, 5/8" x 8" BOLTS @ 42" O.C. MAY BE USED FOR SUPPORT.
- OTHER MEANS OF SUPPORT, SUCH AS JACK HANDERS, MAY BE USED TO CONNECT DECK JOISTS TO A TREATED STRUCTURE.
- BRACKS SHALL BEAR DIRECTLY ON POSTS OR BE CONNECTED TO THE JOISTS OF POSTS WITH 2 - 5/8" x 8" BOLTS
- FLOOR DECKING SHALL BE NO. 2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT. THE TREATED FLOOR DECKING THICKNESS SHALL BE AS FOLLOWS:

JOIST SPAN

POST SIZE	MAX POST HEIGHT
4x4	8'0"
4x6	10'0"
ENGINEERED	20'0"

DECKING

JOIST SPAN	MAX POST HEIGHT
12" O.C.	1" S4S
16" O.C.	1" S4S
24" O.C.	1 1/2" S4S
32" O.C.	2" S4S

MAXIMUM HEIGHT OF DECK SUPPORT POSTS IS AS FOLLOWS:

NOTES: 1. THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE.

2. THIS TABLE IS BASED ON A MAXIMUM WIND VELOCITY OF 128 SQ. FT.

3. POST HEIGHT IS FROM TOP OF FOOTING TO BOTTOM OF ORIGIN.

- DECKS SHALL BE BRACKS TO PROVIDE LATERAL STABILITY BY ONE OF THE FOLLOWING METHODS:

 - WHEN THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION 4. LATERAL BRACING IS NOT REQUIRED.
 - 4x4 WOOD BRACKS SHALL BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACKS SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACKS SHALL BE ANGLED BETWEEN 45° AND 60° FROM THE HORIZONTAL. KNEE BRACKS SHALL BE ATTACHED AT THE TOPS TO THE ORDER AND THE POST WITH ONE - 5/8" x 8" BOLT.
 - FOR FREE STANDING DECKS WITHOUT KNEE BRACKS OR DIAGONAL, BRACKING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN CONCRETE IN ACCORDANCE WITH THE FOLLOWING:

POST SIZE	TIMBER LATERAL	POST HEIGHT	EMBED. DEPTH	CONC. DIA.
4x4	48 SQ. FT.	12'0"	2'-0"	18"
6x6	1			



Engineering
SLTech
ASSOCIATES, P.A.

STRUCTURAL ENGINEERS
License No. C-3870
318 W. Millbrook Rd., Ste. 201
Raleigh, North Carolina 27609
Phone (919) 844-1661

BRC HOMES			
SCOPE:	STRUCTURAL ADDENDUM		
LOC:	113 OTTAWA LAKE ROYALE	REV #	REF PROJ #
			DATE:

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PLAN NO.
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25-21-066

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SPEC1

CONSTRUCTION SPECIFICATIONS

PART 1: GENERAL			7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT, TV = 1,500 PSI MIN.			BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM.		
1.01 CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.			7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW.			2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 2" ONTO THE WALL AND BE SUPPORTED BY A GANGED STUD GANGED COLUMN TYP. UNO.		
1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.			7.03 MORTAR SHALL BE TYPE S MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI.			14.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD.		
1.05 METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.			7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530.			14.04 STUDS THAT ARE GANGED TO FORM A COLUMN SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN WALLS TOGETHER WITH ONE ROW OF 10d NAILS AT 16" O.C. (TWO ROWS OF 10d NAILS @ 8" O.C., 2" APART) FOR 2X8 OR 2X10 STUDS. ALL COLUMNS SHALL BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED STRUCTURAL ELEMENT SUCH AS A BEAM COLUMN. TRANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED FOR THE FULL WIDTH OF THE STUD COLUMN WITHIN THE CAVITY FORMED BY THE FLOOR JOISTS.		
PART 2: DESIGN LOADS			7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A685, 4" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS.			PART 15: NAILING OF MULTI-PLY WOOD BEAMS		
2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:			PART 8: BOLTS AND LAG SCREWS			15.01 SOLID SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM WALLS TOGETHER WITH THREE ROWS OF 10d NAILS @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 8" MIN.		
USE			LIVE LOAD (PSF)			DEAD LOAD (PSF)		
BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, UNFURNISHED UNITS INCLUDING ATTICS WITH FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES			40			10		
GARAGES (PASSENGER CARS ONLY)			50			---		
ATTICS (NO STORAGE, LESS THAN 5' HEADROOM)			10			10		
ATTICS (WITH STORAGE)			20			10		
ROOF			20			10 (15 FOR VAULTS)		
NOTES:			8.01 BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP. UNO. INSTALL USE STEEL WASHERS (ASTM F444-07a) FOR THE NUT / BOLT HEAD WHEN BOLLING WOOD MEMBERS. HOLES FOR BOLTS SHALL BE ASG. STANDARD HOLES UNO.			15.02 LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP. UNO.		
- INDIVIDUAL STAIR TREADS ARE TO BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED LIVE LOAD OF 40 PSF OR A 300 LB. CONCENTRATED LOAD ACTING OVER AN AREA OF 4' x 6' UNLESS OTHERWISE INDICATED.			8.02 LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1-1981. PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NOS SPECIFICATIONS. INSTALL STANDARD STEEL WASHERS (ASTM F444-07a) FOR SCREW HEAD.			PART 16: WALL FRAMING AND BEARING		
- BUILDER TO VERIFY DEAD LOAD DOES NOT EXCEED TO PSF WHEN HEAVY FLOOR OR ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER THESE CONDITIONS.			8.03 ANCHOR RODS AND BOLTS SHALL CONFORM TO ASTM F1554-15 GRADE 36 UNO. BENT ANCHOR BOLTS SHALL HAVE A 2" MIN HOOK UNO.			16.01 STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. STUDS SHALL BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CEILING OR ROOF. NO INTERMEDIATE BRANS OR PLATES SHALL BE DISCONTINUED IN A STUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP. UNO.		
PART 3: STRUCTURAL STEEL			PART 9: DRIVEN FASTENERS			MAX ALLOWABLE WALL HEIGHTS FOR EXTERIOR STUD WALLS, INCLUSIVE OF SOLE PLATE AND DOUBLE TOP PLATE AND 7/16" CSB EXTERIOR BRACING AND ROW OF 2X4 2X8 PARALLEL AT 8" HEIGHT (NO AT 16" HEIGHT FOR WALL WALLS), TYP. UNO: 2X4 @ 16" O.C.: 11'-1 1/2" 2X6 @ 16" O.C.: 17'-0" 2X8 @ 12" O.C.: 15'-1 1/2" 2X8 @ 12" O.C.: 18'-0" DBL 2X4 @ 16" O.C.: 15'-4" DBL 2X6 @ 16" O.C.: 21'-0"		
3.01 WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A992 MINIMUM GRADE.			9.01 NAILS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667--15. NAILS ARE TO BE COMMON WIRE OR BOX.			16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY: -BRACING AT UNSUPPORTED FLOOR JOISTS IS REQUIRED TYP. UNO. -WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION 16.02.10 OF THE 2018 NRC. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NRC HAS BEEN MET AND EXCEEDED. -BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.10(1) TO PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE WITH NRC 602.1.3 AND 602.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS. -MAY SUBSTITUTE WIP FOR CSB. -SINGLE JOIST, CONTINUOUS RM JOIST, OR BRACING OF EQUAL DEPTH IS REQUIRED ABOVE AND BELOW ALL BRACED WALLS. WALL BRACING ABOVE WALL TO TOP PLATE WITH 16d 16d NAILS @ 6" O.C. MAX. SOLE PLATE OF BRACED WALL TO BRACING BELOW WITH 16d NAILS @ 16" O.C. BRACING AT HORIZONTAL JOINTS IN BRACED WALL LINES ONLY REQUIRED AT SHADDED WALLS, UNO.		
3.02 SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE B MINIMUM GRADE.			PART 10: DIMENSIONAL LUMBER			PART 17: KING STUDS		
3.03 STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B, TYPE S, MINIMUM GRADE.			10.01 SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR OR QP #2 FOR JOISTS, RAFTERS, GIRDERS, BEAMS, STUDS, ETC. MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS: EX: 14,000 PSI, F _b = 425 PSI, F _v = 135 PSI, SPECIFIC GRAVITY = 0.42 MIN F _b = 675 PSI FOR 2X4, 2X6, 2X8, F _v = 800 PSI FOR 2X10S, 750 PSI FOR 2X12S			17.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:		
3.04 ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 MINIMUM GRADE.			PART 11: ENGINEERED LUMBER			MAX. OPENING WIDTH		
3.05 STRUCTURAL STEEL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.			11.01 LVL OR PSL MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS: EX: 14,000 PSI, F _b = 2800 PSI, F _v = 285 PSI, F _{EM} = 750 PSI LVL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS: EX: 1.3 X 168 PSI, F _b = 1700 PSI, F _v = 400 PSI, F _{EM} = 680 PSI			5'-0" 8'-0" 12'-0" 17'-0" 21'-0"		
PART 4: WELDING			11.02 LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS. MAY SUBSTITUTE PSB AND LVL FOR EACH OTHER UNO.			STUD SIZE		
4.01 WELDING ELECTRODES SHALL BE E70XX AND ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER.			PART 12: PRESSURE TREATED LUMBER			2X6 2X8		
PART 5: CONCRETE AND SLABS ON GRADE			12.01 LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESURE TREATED IN ACCORDANCE WITH AWWA STANDARD C-115. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWWA STANDARD C-115 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE TREATING CODE OFFICE MAY ALSO APPROVE A NATURAL, DECAY RESISTANT WOOD PER SECTION 19-4(A).			PART 18: SUBSTITUTIONS		
5.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 4-IN. ARE ENTIREMENT, FOR EXTERIOR CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP. UNO. ALL ITEMS NOTED AS "CONCRETE" ARE TO BE CAST IN PLACE, TYP. UNO.			PART 13: STEEL FLUTCH PLATE BEAMS			18.01 MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNER. UNAUTHORIZED DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.		
5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.			13.01 FLUTCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER AS SIZED ON THE PLANS. BOLT PICES TOGETHER USING 1/2" BOLTS SPACED AT 16" O.C. STAGGERED TOP TO BOTTOM OF THE BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 16" MAX. FROM EACH END OF THE BEAM. TYP. UNO.			PART 19: OWNERSHIP OF STRUCTURAL DESIGN		
5.03 SLABS ON GRADE, IF ANY, SHALL BE CAST IN PLACE, CONTAIN SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DENSITY RATE 1 1/2 LB/SQ YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER ON 4" MIN GRANULAR FILL ON SOIL WITH MIN 90% STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT IN ENCLOSED AREAS.			PART 14: STUD SUPPORTS FOR BEAMS			19.01 THE STRUCTURAL DESIGN OF THIS PLAN IS THE PROPERTY OF ENGINEERING TECH ASSOCIATES (ETA). THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION INDICATED AND FOR THE CLIENT (S). ETA ASSUMES NO LIABILITY FOR THESE PLANS IF THEY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT WRITTEN PERMISSION FROM ETA.		
PART 6: REBAR AND WIRE REINFORCEMENT			14.01 STEEL, ENGINEERED LUMBER, AND FLUTCH PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:					
6.01 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP. UNO.			1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED BY A MINIMUM OF THREE GANGED STUDS, OR A GANGED STUD COLUMN WITH A MINIMUM OF 2 STUDS SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE TRUE WIDTH OF THE BEAM BEING SUPPORTED. UNLESS OTHERWISE NOTED OTHERWISE, TYP. UNO. FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM.					
6.02 LAP SPLICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP. UNO. STAGGER ADJACENT SPLICES A MINIMUM OF ONE LAP LENGTH.			2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TRIPLE STUD GANGED COLUMN TYP. UNO.					
6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A648.			14.02 DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:					
PART 7: MASONRY			1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED (LESS 1 1/2" TO ALLOW FOR A CONTINUOUS RM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A GANGED STUD COLUMN THE SAME WIDTH AS THE BEAM TYP. UNO. (E.G. A TRIPLE 2X10 IS TO BE SUPPORTED BY (3) STUDS). FOR THE SKEWED CONDITION PARTICULAR CARE SHALL					



STRUCTURAL ENGINEERS
 License No. C-3870
 318 W. Millbrook Rd., Ste 201
 Raleigh, North Carolina 27609
 Phone (919) 844-1661



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BRC HOMES STRUCTURAL ADDENDUM 113 OTTAWA LAKE ROYALE				

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