

2) P GEALED PLANS ARE REQUIRED BY MANCEPALITY ROT STRUCTURE PERSON INCLUDE TO DESIGNER FOR GEALED LETTER AS NEEDED. LOT 1073 Anderson Creek Academ D) ANY ON SITE CHANGES OR WARLATIONS FROM PLANS SHOWN MUST BE VERSTED WITH DESIGNER OR EMANEER MEET LOCAL CODES, GLIDBLINES, LOAD CALCULATIONS

# OWNER / CONTRACTOR NOTES:

THE GEALING OF THIS FLAN FOR A LOT SPECIFIC 1864E, AUTHORIZES THE CONSTRUCTION FROM THESE FLANS FOR ONE HOUSE ON ONE LOT FOR THE LOT FECTIFIC REFERENCED IN TILEBLOCK LINEALED FLANS HIST NOT BE USED OR CONSTRUCTION CONSTRUCTION FROM THESE FLANS HIST BE FROM THE ATTEST APPROVED DATE FLANS, INCLUDEN REVISIONS AND ADEDDAL

2. THE SEALING OF THIS PLAN FOR A MASTER PLAN SET ISSUE, AUTHORIZES THE CONSTRUCTION PROOF THESE PLANS FOR MILLTIPLE HOUSES ON MILLTIPLE LOTS PER BUILDER WITH DESIGNERS' KNOWLEDGE OF CONSTRUCTION PER LOTING MEAN THIS PLANS THIS THOSE SECOND PROOF THESE PLANS THIS THE PROOF THE LATEST APPROVED DATE PLANS, NOLLIDING REVISIONS ON ADDITION ADDITION.

S. COMBTRICTION DEVIATING PROOF THESE PLANS UILL INVALIDATE THEIR PLANS (REVIEW PROPRIET PRODUCTION OF THE PROOF THE PROPRIET PROOF THE PRODUCTION OF PROPRIETION OF THE PROOF THE DESIGNARY MAY BE OSTAINED FOR A PRETINE PROOF THE DESIGNARY MAY BE OSTAINED FOR A PRETINE THE PROOF THE PERION LETTER OF THE PROOF THE PR

, DO NOT SCALE DRAWINGS, BUT RATHER INQUIRE INFORMATION FROM BEIGHER, REPRODUCTION OF THESE DRAWINGS ARE PROHIBITED UNLESS RANITED WRITTEN CONSENT FROM DESIGNIER.

THE OWNER AND/OR CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE LLOUING INFORMATION (NON-EXHAUSTIVE) BUILDING FERRITS, SITE GREETING INCLIDING SURVEYING, TOPOGRAPHIC STUDIES, GEOTECHICAL FORTS, AND SEPTIC FERRITS INTERIOR CASELLORY DESIGNS PLUMBING, CHANICAL, AND ELECTRICAL DESIGN.

# BUILDING CODE NOTES

THIS PLAN HAS BEEN DESIGNED UNDER THE

APPLICABLE CODES:

N.C. FIRE CODE, 2018
N.C. MECHANICAL CODE, 2018
N.C. PLUMBING CODE, 2018

N.C. ENERGY CODE, 2018 N.C. ELECTRICAL CODE, 2017 N.C. GAS CODE 2018

BUILDING DATA:

Use Group: R-3
Number of Stories: 2 Building Ridge Height: (Elevation A) = Building Ridge Height: (Elevation B) =

Building Ridge Height: (Elevation C) = Building Ridge Height: (Elevation D) = Building Ridge Height: (Elevation E) = (Euro)(+/-)35'-5" Mean Roof Height: Mean Roof Heights (Elevation A) = (Elevation B) = Yean Roof Height: (Elevation C) = Tean Roof Heights (Elevation D) = Mean Roof Heights (Elevation E) = (Euro)(4/-)28'-1"

OTE: HEIGHTS LISTED ABOVE ARE BASED ON GRADE LINES PROVIDED ON EXTERIOR ELEVATIONS SHEETS. SUILLDER / INSPECTIONS OFFICIAL TO VERIFY FINAL GRADE HEIGHT IN TELD AS REGUIRED.

# CONSTRUCTION NOTES:

THE POLLOWING 16 A NON-EXHAUSTIVE LIST OF SOME COMPIONLY MISSED CODE RECUIREMENTS AND ARE ENFORCEABLE IN THE CONSTRUCTION FROM THESE PLANS. SEE THE NO. RESIDENTIAL CODE BOOK FOR MORE INFO.

L (RSØ64) ALL GLAZING WITHIN 24" OF EITHER 6IDE OF A DOOR IN A CLOSED POSITION, AND ON THE SAFE WALL PLANE SHALL BE TEMPERED. ALL WINDOWS THAT REET ALL OF THE FOLLOWING CONDITIONS SHALL BE TEMPERED. A) NDIVIDUAL, PANES OF MIN. 9 SP., 5) BOTTOM BOGE IS WITHIN 19" OF FLOOR C) TOP EDGE IS AT LEAST 36" ABOVE FLOOR AND D) GLAZING IS WITHIN 35" HORIZOF WALKING SUFFACE. TEMPERED GLAZING IS ALSO REGUIRED WITHIN 36" OF HOT TUBS OR STAIR LEADING AND FINANCE DOES. TEMPERED WITHIN 36" OF HOT TUBS OR STAIR LEADING AND FINANCE DOES. TEMPERED WITHIN 34. ALSO REGUIRED WITHIN 56" OF HOT TUBS OR STAIR LEADING TO THIS SAFE AND THE SAFE AND

2. (R3(9)) ALL SLEEPING ROOMS AND BASEMENTS WITH HABITABLE SPACE SHALL HAVE AT LEAST ONE EXCRESS WINDOW COMPORTING TO THE ROLLOWING. A) HIN 48 SF. CLEAR OFENING: B) MIN 1074L GLASS AREA OF \$9 SQ (GROUND FLOOR WINDOW AND 51 SF. (WIPTER STORY WINDOW). IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHOSE THE PROPER CONDOWNING WINDOW, AND HAVE EXCRESS WINDOWS PROPERLY DISTRIBUTED AND INSTALLED AS REQUIRED.

3. (R3112) ALL INTERIOR EGREGO DOORS AND A MINIMUM OF ONE EXTERIOR EGREGO DOOR SHALL BE READILY OPENABLE FROM THE EGREGO SIDE WITHOUT USE OF A KEY OR SPECIAL INJOILEDGE.

4. (R311.7.5) MAXIMUM STAIR RISER HEIGHT SHALL BE 8-1/4", AND MINIMUM TREAD SHALL BE 9".

9. (R314.3) SYCKE ALARMS SHALL BE NOTALLED AND INTERCONNECTED, WITH BATTERY BACK-UP IN THE ROLLOWIS AREAS, EACH GLEEPING ROOMS IN THE AREA (HALLIMAY) RIGHT OUTSIDE THE SLEEPING ROOMS! AND EACH STORY. THE ONE OUTSIDE THE SLEEPING ROOMS WILL SATISFY THAT STORY.

6. (R402.12) ALL LUMBER SHALL BE PRESSURE TREATED AND DRIED AFTER TREATED IN ACCORDANCE WITH AWAY UI AND SHALL BEAR THE LABEL OF AN

7. (R406.)) BITUMINOUS DAMPPROOFING SHALL BE APPLIED TO EXTERIOR FOUNDATIONS OF ALL HABITABLE AND USABLE (STORAGE, ETC.) SPACES.

8. (R408.12) INSTALL ONE FOUNDATION VENT WITHIN 3" OF EACH CORNER (NOT ONE EACH SIDE OF EACH CORNER).

(R103.4) FLASH ALL VALLEYS AND WALL/ROOF INTERSECTIONS, AND CHIPNEY AND OTHER ROOF FENETRATIONS. USE ICE AND WATER SHIELD ON ALL ROOFS LESS THAN 4.75 SLOPE. LASHING TO BE NON-CORPOSIVE.

19. (R8911) BUILDER TO LOCATE 22\*390° ATTIC ACCESS IN ALL ATTICS WITHOUT STAIR ACCESS LOCATE ACCESS TO PROVIDE A 500° CLEAR SPACE ABOVE ACCESS DOOR-TYP. IL (RIGOD) MASONRY FIREPLACE WALLS TO BE MIN. 2" THICK, AND MIN. 2" TO FRAMING. POURED HEARTHS TO HAVE MIN 4402" O.C. EACH WAY, HEARTHS TO BE MIN. 20" FROM FREBOX AND HAVE MIN. 2" WIDDER THAN FIREBOX AND IEACH SIDE.

(RAGSLIS) ANCHOR BOLTS SHALL BE HIN. "DIAPETER 4 SHALL EXTEND A HINHEM T INTO MAGNITY OR CONCRETE. ANCHOR BOLTS TO BE NO HORE THAN 5" OC. AND WITHIN 10" OF THE CORNER.

13. (R3IB) INSTALL APPROVED CARBON MONOXIDE ALARM OUTSIDE EACH BEDROOM AND IN IMPEDIATE VICINITY OF EACH SEPARATE SLEEPING AREA.

IA. ALL WINDOWS SHALL BE LABELED TO CORPORT WITH AAMANWUDA WILS.2 BUILDER TO VERRIFY HIN DIP CLASSIFICATION FOR ALL WINDOWS BASED ON LOCATION SHOLE HOPES ARE BUILT BASED ON REQUIREMENTS FOR THAT WIND ZONE AREA.

B. IF CRAILL SPACE FOUNDATION OFTION IS USED BUILDER TO LOCATE ACCESS PER CURRENT CODE REG. WITH 36\*32\*\* ("RIN) CLEAR OFENING IF NO HYAC LOCATED IN CRAILL, OR 36\*36\* ("RIN) WITH HYAC LOCATED IN GRAILL SPACE AREA.

# CLIMATIC AND GEOGRAPHIC NOTES:

	TABLE NII02.12 (R402.12)							
		FENEST. SHGC	CEILING R-YALUE	FRAME WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	R-VALUE	CRAUL WALL R-VALUE
3	Ø.35	030	38 OR 30 CONT.	15, 13-2,5	19	5/13	0	5/13
4	Ø.35		38 OR 30 CONT.	15, 1342,5	£	10/15	19	10/15
3	Ø35		38 OR 30 CONT.	9 9 9 9 9 9	30	10/15	9	10/13

### STRUCTURAL DESIGN FIRM DATA:

Summit Engineering Laboratory Testing ENGNINEER NAME

TELEPHONE NUMBER 919-38Ø-9991

NOTE: PLANS ARE TO BE COORDINATED WITH STRUCTURAL DESIGNS AND TRUSS PLANS BY BUILDER THE COORDINATION AND/OR VERRICATION OF ANY STRUCTURAL MEMBERS, TRUSS PLANS AND/OR NEOFACTION FROM OTHERS IS NOT THE RESPONSIBILITY OF PLAN DESIGN RIPS! IF ANY DISCREPTANCIES WITH FLOOR PLANS, BLEVATIONS OR DETAILS ARE DISCOVERED THE BUILDER SHALL NOTIFY PLANSOR FRIOR TO SUBMITTING PLANS FOR PROTIT OR DEFORE CONSTRUCTION BESINS TO ADJUST PLANS AS RECOVERED THE NUMBER SHALL CONSTRUCTION BESINS TO ADJUST PLANS AS RECOVERED THE NEEDS.

# PROJECT SQUARE FOOTAGES

BEAUFORT - EL	IRO
Heated Square Footage	
, , , , , , , , , , , , , , , , , , ,	
First Floor Htd.	1,278
Second Floor Htd. TOTAL =	1,697
TOTAL =	2,975
Unheated Square Footage	
Covered Porch - Front	212
Covered Porch - Rear	228
Garage - Two Car	555
Unf. Attic Floor	399

# OPT. CRAWL SPACE VENTLATION INFO.

	Crawlspace Vent Calculations - Beaufort - Euro	1
Α	Crawl Space Area	1,278
В	Ventable Area Required by Code (without vapor barrier)	8.52
С	Ventable Area Required by Code (with vapor barrier)	0.9
D	Number of vents required (without vapor barrier)	19.0
Е	Number of vents required (with vapor barrier). (See notes)	2.0
	Formulas:	
	B = A / 150	
	C = A / 1500	
	D = B / 0.47 (sqft of net venting area per vent)	
	E = C / 0.47 (sqft of net venting area per vent)	
	Notes:	
	1. Builder must adjust ventilation calculations if using vents	
	with a net area that is different than 0.47 sqft per vent.	
	2. One foundation vent must be placed within 3 feet of eac	h major come
	in the building.	
	3. Foundation vents must be placed to allow for cross venti	lation.

NOTE: BUILDER TO SIZE AND LOCATE FOUNDATION YENTS IS USED PER THE 2016 N.C. RESIDENTIAL BUILDING CODE BASED ON SITE CONDITIONS. OR OPT. CLOSED CRAWLSPACE

> SEE STRUCTURAL FILES IF APPLICABLE

NOTE: IF SEALED CRAILLSPACE SYSTEM IS USED AREA MUST BE CONSTRUCTED PER THE 2018 N.C. RESIDENTIAL BUILDING CODE.

# ROOF VENTLATION INFO.

Roof Ventilation - Beaufort - Euro					
Α	Ceiling area (square footage)	2,273			
В	Sqft. of ventilation required	15.2			
Formula	as: B = A / 150				
Notes:					
	to calculate quantities and types of vents to m				

soffit, and 50% high (gable end or ridge vents).

# INDEX OF DRAWINGS:

SHEET	SHEET NAME - Beaufort - Euro
CS-1-0	Cover Sheet
A-1-0	Elevations - Front and Right
A-2-0	Elevations - Rear and Left
A-3-0	Wall Sections/Roof Plate Details
A-4-0	First Floor Plan
A-5-0	Second Floor Plan
A-6-0	Attic Floor Plan
AE-1-0	First Floor Lighting
AE-2-0	Second Floor Lighting
AE-3-0	Attic Floor Lighting
AD-1	Standard Architectural Details
AD-2	Standard Architectural Details
	Structural Plans/Sheets
SHEET	See Structural Plans (Done by Others)

Elev. Academy Creek (-9-20) - (LHG)

(4-9-

Set

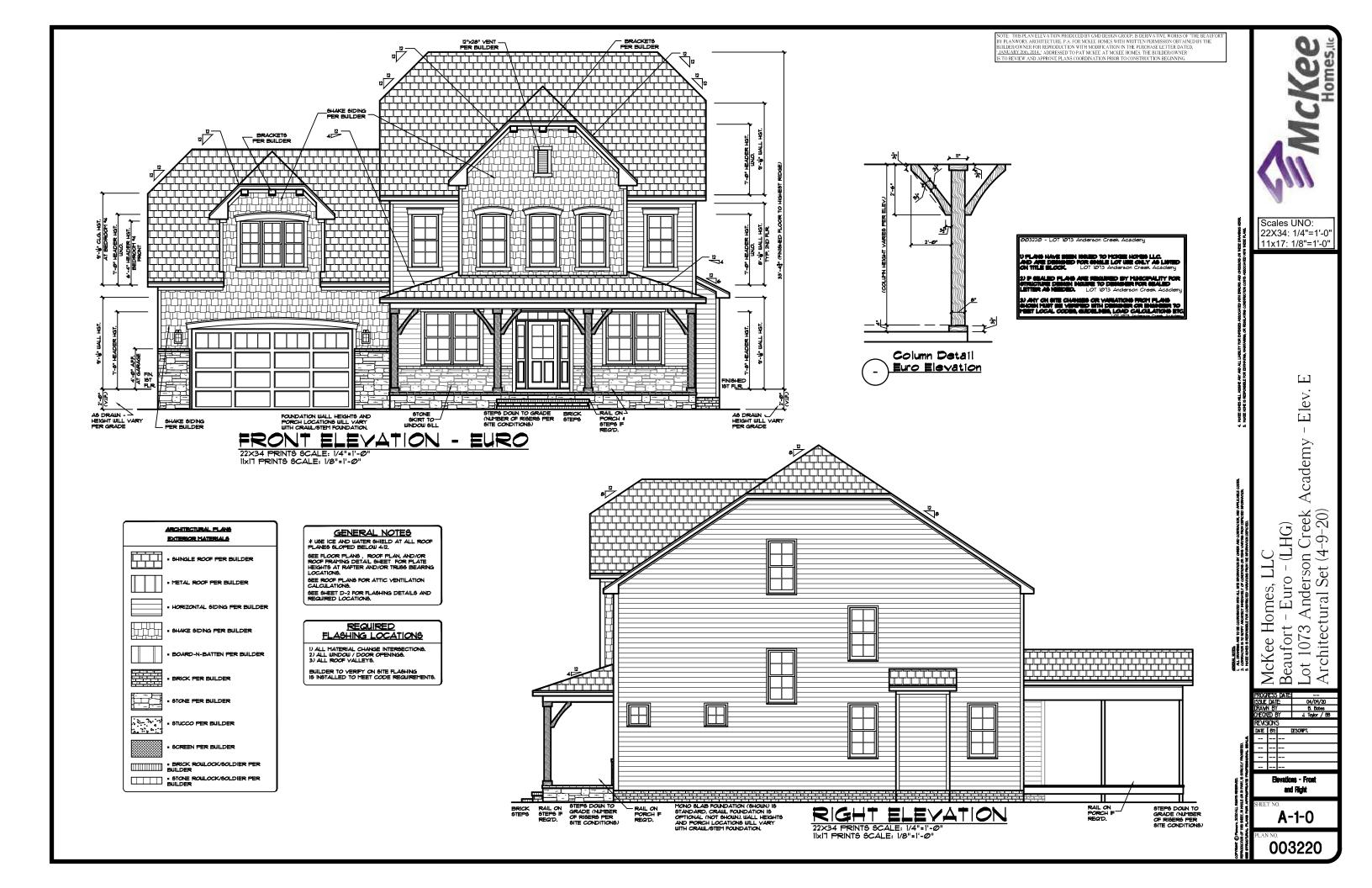
Scales UNO: 22X34: 1/4"=1'-0"

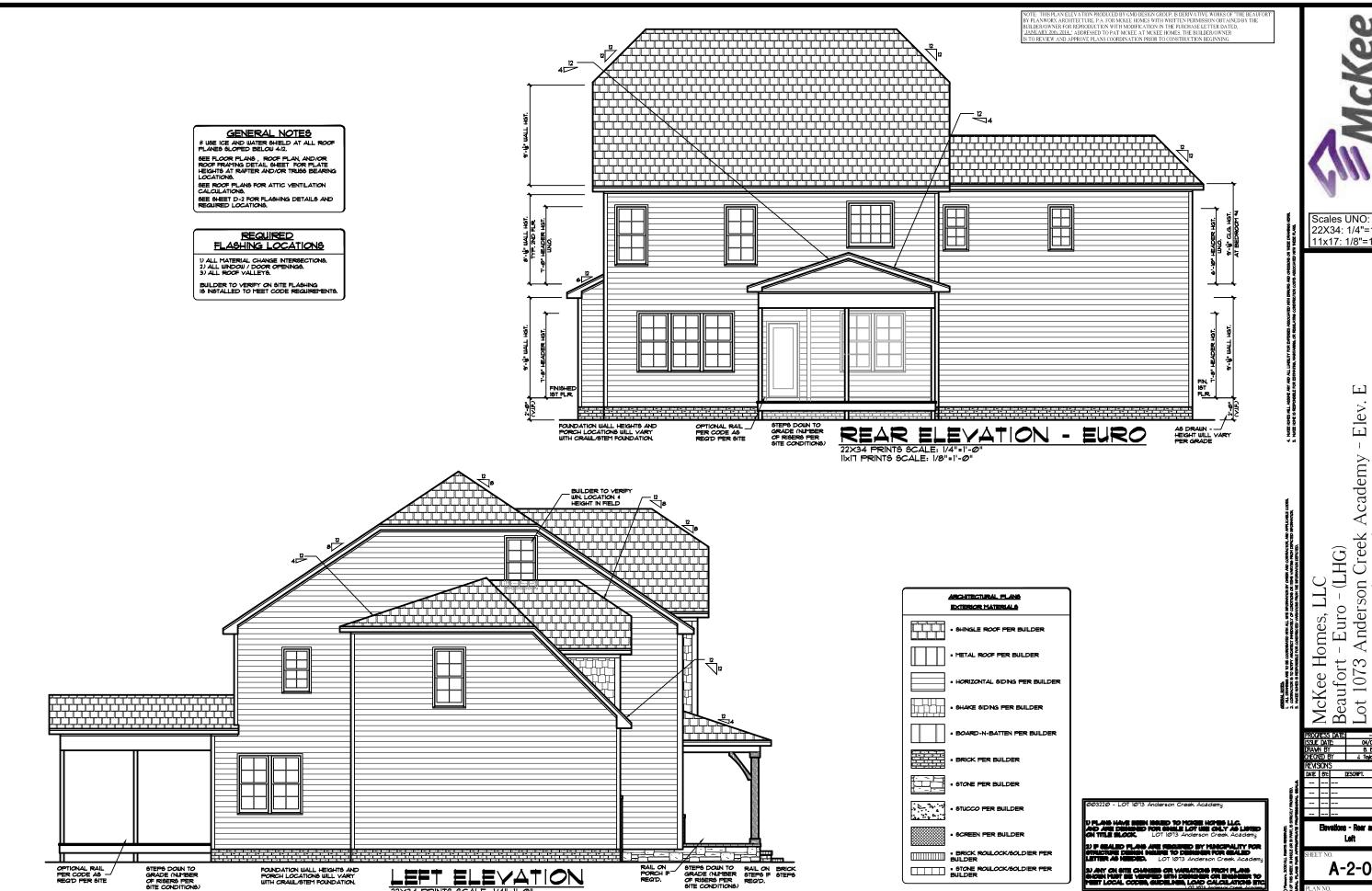
11x17: 1/8"=1'-0"

McKee Homes, LLC Beaufort - Euro - (LH Lot 1073 Anderson (

Architectural **Cover Sheet** 

CS-1





LEFT ELEVATION

IIXIT PRINTS SCALE: 1/8"=1'-0"

McKee

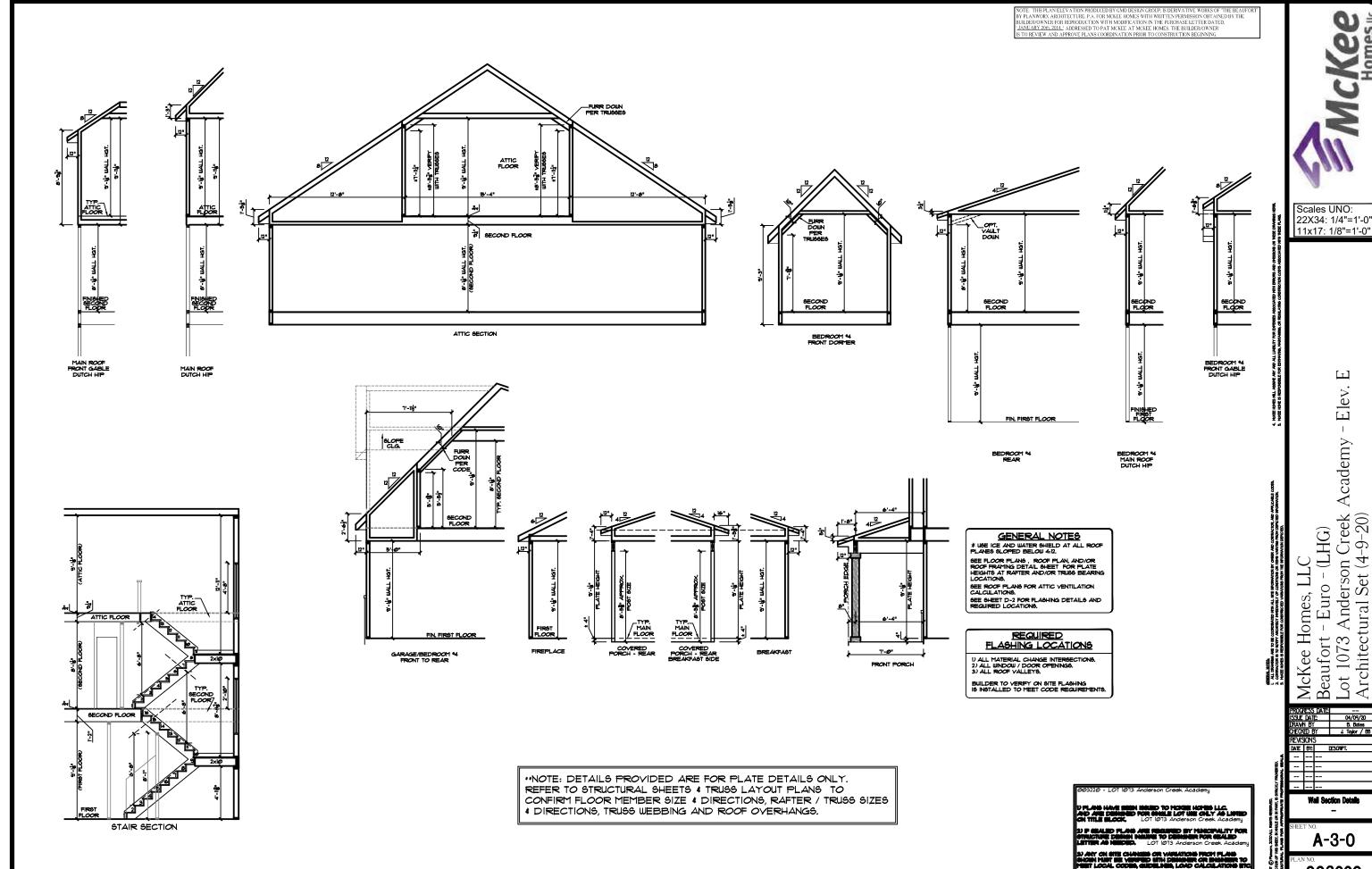
Scales UNO: 22X34: 1/4"=1'-0" 11x17: 1/8"=1'-0"

Anderson Creek ural Set (4-9-20)

Architectural Set

Elevations - Rear and

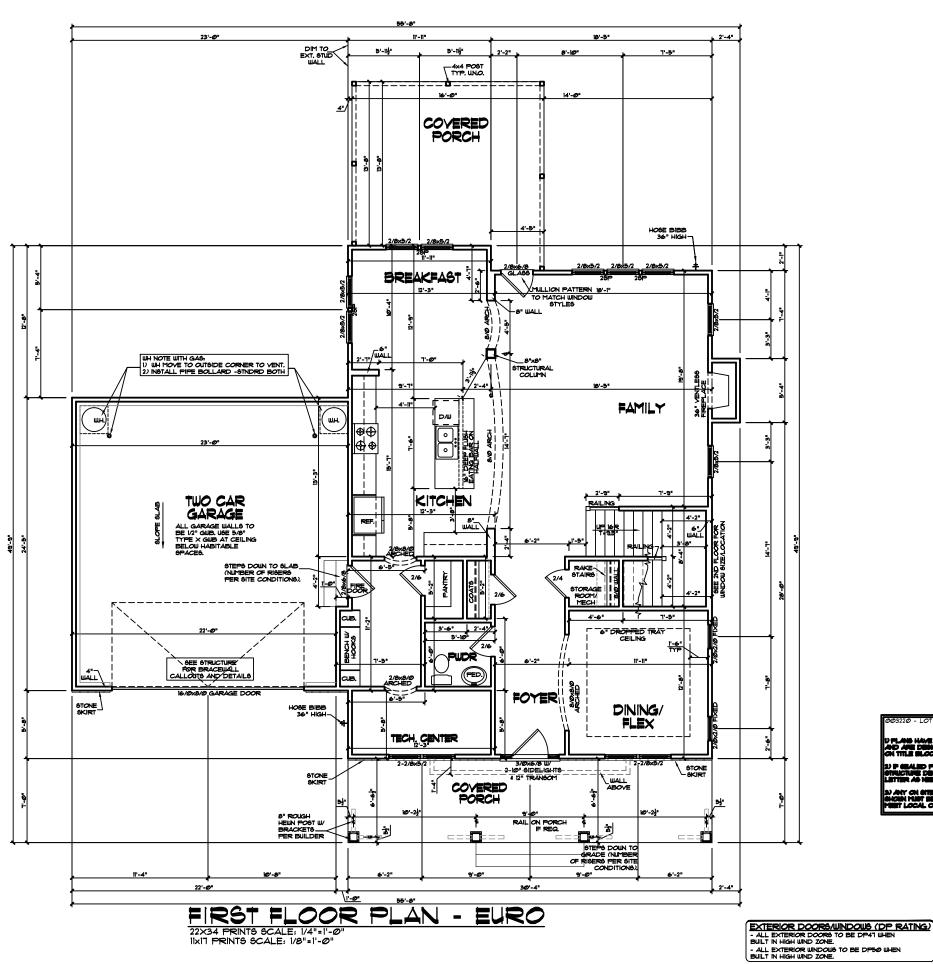
A-2-0



Scales UNO: 22X34: 1/4"=1'-0" 11x17: 1/8"=1'-0"

Architectural Set

**Wall Section Details** 



NOTE: THIS PLAN ELEVATION PRODUCED BY GMD DESIGN GROUP, IS DERIVATIVE WORKS OF THE BEAUFC BY PLANWORN ARCHITECTURE, P.A. FOR NKKEE HOMES WITH WRITTER PERMISSION OBTAINED BY THE BUILDEROWNER FOR REPRODUCTION WITH MODIFICATION IN THE PURICHASE, LETTER DATED, <u>JANUARY 2011</u>, 2014. ADDRESSED TO PAT MCKEE AT MCKEE HOMES. THE BUILDEROWNER IS TO REVEW AND APPROVE PLANS COORDINATION PRIOR TO CONSTRUCTION SEGIONING.



# GENERAL NOTES

WALL THICKNESS / ANGLES
ALL EXTERIOR STUD WALLS ARE DRAWN 4" THICK WAG
ALL INTERIOR STUD WALLS ARE DRAWN 4" THICK WAG.

# EGRESS

ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW HIGH CONFORMS TO EGREES REQUIREMENTS FOR CLEAR OPENING HEIGHT AND MIDTH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EGRESS SIZING PER CODE BASED ON CHOSEN MANUFACTURER, AS PRODUCT SIZES MAY VARY.

### WALL/CEILING HEIGHTS

WALL AND CEILING HEIGHTS NOTES ARE BASED ON NOMINAL WALL SIZE (I.E. A 9'-1 1/8" ACTUAL WALL HEIGHT IS LABELED 9/0 ON THE PLANS).

ALL VAULTED OR SLOPED CEILINGS ARE TO BE PURRED DOWN TO ACCOMMODATE REGUIRED CEILING INSULATION AND IT AIRPORTACE. VERIFY CODES FOR INFORMATION ON INSULATION REGUIRED/ENTS.

# <u>STAIRS</u>

THAN 3-14"

THAN 3-14"

THAN 3-14"

THAN 3-14"

# ARCHITECTURAL PLANS WALL LEGEND

STANDARD STUD WALL INT OR EXT
IF EXT SEE ELEVATIONS FOR SIDING
STYLE THICAVES OF WALL NOTED IN PLAN NOTES
OR AT WALL LOCATIONS

STANDARD STUD WALL WITH 5" BRICK VENEER FOUNDATION WALL LEDGE STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS

STANDARD STUD WALL WITH STACKED STONE VENEER STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS (NOTE BUILDER TO VERIFY STONE THICKNESS & NOTIFY PLAN DESIGNER IF THICKNESS IS MORE THAN 5" BEFORE FOOTINGS ARE POURED)

STANDARD STUD WALL WITH APPLIED STONE VENEER STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS (NOTE: NO FOUNDATION SUPPORT IS REPRESENTED ON STRUCTURAL PLANS)
 IF STACKED STONE IS TO BE USED BUILDER MUST NOTIFY PLAN DESIGNER BEFORE FOOTINGS ARE POURED.

STANDARD STUD WALL WITH LOW APPLIED STONE WANGCOTING.
 STANDARD FOR HEIGHT 4 FINISH MATERIAL AT EXT STUD WALL ABOVE.
 STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS

STANDARD STUD WALL WITH 5" FOUNDATION LEDGE FOR LOW BRICK OR STACKED STONE WAINSCOTING SEE ELEVATIONS FOR HEIGHT 4 FINISH MATERIAL AT EXT STUD WALL ABOVE, STUD THICKNESSA AS NOTED IN FLAN NOTES OR AT WALL LOCATIONS

WINDOW FALL PREVENTION PROTECTION

IF ANY PART OF THE CLEAR OPENING OF THE OPERABLE PORTION OF A WINDOW IS LOCATED

MORE THAN 12' ABOVE THE EXTERIOR GRADE THEN THE LONEST PART OF THE CLEAR OPENING

MIST BE AT LEAST 24' ABOVE THE FLOOR OF THE ROOM IN WHICH IT IS LOCATED.

McKee

Scales UNO: 22X34: 1/4"=1'-0" 11x17: 1/8"=1'-0"

Academy Creek (-9-20) (LHG)

Set

Elev.

- 1

Anderson Cretural Set (4-9-) Euro Homes, McKee Ho Beaufort -Lot 1073

Architectural

First Floor Plan

A-4-0

003220

EN MANUED TO MCIQUE HOMES LLC. ED FOR CONSLE LOT USE ONLY AS LISTE LOT 1073 Anderson Creek Academy

EXCEPTIONS:

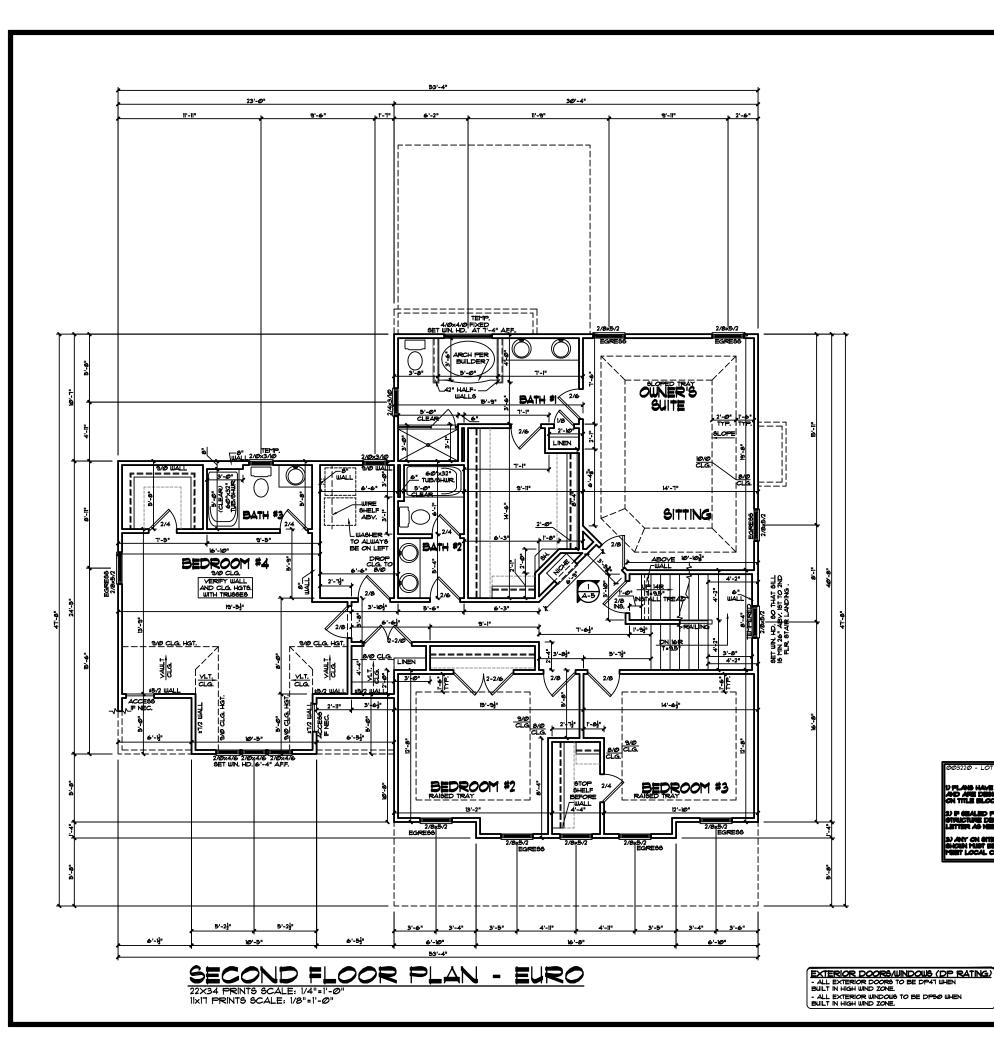
1. THE WINDOW IS A FIXED UNIT

2. THE OPENING DOES NOT ALLOW THE PASSAGE OF A 4- INCH DIAMETER SPHERE.

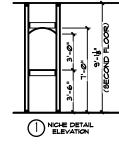
5. THE WINDOW IS EQUIPPED WITH A WINDOW FALL PREVENTION DEVICE MEETING ASTM F2040.

4. THE WINDOW IS EQUIPPED WITH A WAPPROVED WINDOW OPENING LIMITING DEVICE.

NOTE: WHEN USED WITH AN EMERGENCY ESCAPE AND RESCUE WINDOW, OPENING LIMITING DEVICES AND FALL PREVENTION DEVICES MUST BE APPROVED FOR EMERGENCY ESCAPE AND RESCUE PROVISIONS.



NOTE: THIS PLAN ELEVATION PRODUCED BY GMD DESIGN GROUP, IS DERIVATIVE WORKS OF THE BEAUFC BY PLANWORN ARCHITECTURE, P.A. FOR NKKEE HOMES WITH WRITTER PERMISSION OBTAINED BY THE BUILDEROWNER FOR REPRODUCTION WITH MODIFICATION IN THE PURICHASE, LETTER DATED, <u>JANUARY 2011</u>, 2014. ADDRESSED TO PAT MCKEE AT MCKEE HOMES. THE BUILDEROWNER IS TO REVEW AND APPROVE PLANS COORDINATION PRIOR TO CONSTRUCTION SEGIONING.



# GENERAL NOTES

WALL THICKNESS / ANGLES
ALL EXTERIOR STUD WALLS ARE DRAWN 4" THICK WAG
ALL INTERIOR STUD WALLS ARE DRAWN 4" THICK WAG.

### EGRESS ALL BEDROOMS MUST HAVE AT LEAST ONE

ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW HINCH CONFORMS TO ERFEES REQUIREMENTS FOR CLEAR OPENING HEIGHT AND MIDTH. IT SITE CONTRACTOR'S RESPONSIBILITY TO VERIFY ESRESS SIZING PER CODE BASED ON CHOSEN MANUFACTURER, AS PRODUCT SIZES MAY VARY.

### WALL/CEILING HEIGHTS

WALL AND CEILING HEIGHTS NOTES ARE BASED ON NOMINAL WALL SIZE (I.E. A 9'-1 1/8" ACTUAL WALL HEIGHT IS LABELED 9/0 ON THE PLANS).

ALL VAULTED OR SLOPED CEILINGS ARE TO BE PURRED DOWN TO ACCOMMODATE REGUIRED CEILING INSULATION AND IT AIRPORTACE. VERIFY CODES FOR INFORMATION ON INSULATION REGUIRED/ENTS.

### <u>STAIRS</u>

STAIR TREADS ARE MEASURED FROM NOSING TO NOSING (NA). MAXIMUM STAIR RISE HEIGHT TO BE NO GREATER THAN 8-1/4"

# ARCHITECTURAL PLANS WALL LEGEND

STANDARD STUD WALL INT OR EXT
IF EXT SEE ELEVATIONS FOR SIDING
STYLE THICAVES OF WALL NOTED IN PLAN NOTES
OR AT WALL LOCATIONS

STANDARD STUD WALL WITH 5" BRICK VENEER FOUNDATION WALL LEDGE STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS

STANDARD STUD WALL WITH STACKED STONE VENEER STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS (NOTE BUILDER TO VERIFY STONE THICKNESS & NOTIFY PLAN DESIGNER IF THICKNESS IS MORE THAN 5" BEFORE FOOTINGS ARE POURED)

STANDARD STUD WALL WITH APPLIED STONE YENEER STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS (NOTE: NO FOUNDATION SUPPORT IS REPRESENTED ON STRUCTURAL PLANS)
 IF STACKED STONE IS TO BE USED BUILDER MUST NOTIFY PLAN DESIGNER BEFORE FOOTINGS ARE POURED.

STANDARD STUD WALL WITH LOW APPLIED STONE
WANSCOTING.
WANSCOTING.
 ALE LEVATIONS FOR HEIGHT 4 FINISH MATERIAL
 AT EXT STUD WALL ABOVE.
 STUD THICKNESS AS NOTED IN PLAN
 NOTES OR AT WALL LOCATIONS

STANDARD STUD WALL WITH 5" FOUNDATION LEDGE FOR LOW BRICK OR STACKED STONE WAINSCOTING SEE ELEVATIONS FOR HEIGHT 4 FINISH MATERIAL AT EXT STUD WALL ABOVE, STUD THICKNESSA AS NOTED IN FLAN NOTES OR AT WALL LOCATIONS

- HALF WALL WITH IX CAP

(42" HEIGHT UNLESS NOTED OTHERWISE ON PLANS)

WINDOW FALL PREVENTION PROTECTION

IF ANY PART OF THE CLEAR OPENING OF THE OPERABLE PORTION OF A WINDOW IS LOCATED

MORE THAN 12' ABOVE THE EXTERIOR GRADE THEN THE LONEST PART OF THE CLEAR OPENING

MIST BE AT LEAST 24' ABOVE THE FLOOR OF THE ROOM IN WHICH IT IS LOCATED.

EXCEPTIONS:

1. THE WINDOW IS A FIXED UNIT

2. THE OPENING DOES NOT ALLOW THE PASSAGE OF A 4- INCH DIAMETER SPHERE.

5. THE WINDOW IS EQUIPPED WITH A WINDOW FALL PREVENTION DEVICE MEETING ASTM F2040.

4. THE WINDOW IS EQUIPPED WITH A MAPPROVED WINDOW OPENING LIMITING DEVICE.

NOTE: WHEN USED WITH AN EMERGENCY ESCAPE AND RESCUE WINDOW, OPENING LIMITING DEVICES AND FALL PREVENTION DEVICES MUST BE APPROVED FOR EMERGENCY ESCAPE AND RESCUE PROVISIONS.

Elev. Creek (-9-20) - (LHG) Anderson Cretural Set (4-9-)

- 1

Academy

Set

**UCKee**Homes,ic

Scales UNO: 22X34: 1/4"=1'-0" 11x17: 1/8"=1'-0"

Euro McKee Homes, I Beaufort - Euro Lot 1073 Anders

Architectural

Second Floor Plan

A-5-0



Scales UNO: 22X34: 1/4"=1'-0" 11x17: 1/8"=1'-0"

 $\Xi$ 

Academy

Anderson Creek cural Set (4-9-20)

(LHG)

Euro

- 1

Homes,

# GENERAL NOTES

WALL THICKNESS / ANGLES
ALL EXTERIOR STUD WALLS ARE DRAWN 4" THICK WAG.
ALL INTERIOR STUD WALLS ARE DRAWN 4" THICK WAG.

ATTIC NOTES

I. KNEEWALLS IN UNFINISHED ATTIC ARE OPTIONAL, UNLESS USED TO SUPPORT RAFTERS (SEE STRUCTURAL SHEETS). KNEEWALL LOCATION-MEIGHT MAY BE ADJUSTED IN THE FILED IF THESE WALLS ARE NOT LOAD BEARING.

2. CEILING LINES SHOWN IN UNFINISHED ATTIC MAY BE JUST FOR REPRESENTATION OF RITURE FLAT CEILINGS, IF A FLAT CEILING IS DESIRED, THIS WILL HAYE TO BE COORDINATED WITH THE STRUCTURAL FILANS.

# EGRESS

ALL BEDROOMS MUST HAVE AT LEAST ONE ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW HINCH CONFORMS TO ERFEES REQUIREMENTS FOR CLEAR OPENING HEIGHT AND MIDTH. IT SITE CONTRACTOR'S RESPONSIBILITY TO VERIFY ESRESS SIZING PER CODE BASED ON CHOSEN MANUFACTURER, AS PRODUCT SIZES MAY VARY.

### WALL/CEILING HEIGHTS

WALL AND CEILING HEIGHTS NOTES ARE BASED ON NOMINAL WALL SIZE (I.E. A 9'-1 1/8" ACTUAL WALL HEIGHT IS LABELED 9/0 ON THE PLANS).

ALL VAULTED OR SLOPED CEILINGS ARE TO BE PURRED DOWN TO ACCOMMODATE REGUIRED CEILING INSULATION AND IT AIRPORTACE. VERIFY CODES FOR INFORMATION ON INSULATION REGUIRED/ENTS.

# <u>STAIRS</u>

STAIR TREADS ARE MEASURED FROM NOSING TO NOSING (NA). MAXIMUM STAIR RISE HEIGHT TO BE NO GREATER THAN 8-1/4"

# ARCHITECTURAL PLANS WALL LEGEND

STANDARD STUD WALL INT OR EXT
IF EXT SEE ELEVATIONS FOR SIDING
STYLE THICAVES OF WALL NOTED IN PLAN NOTES
OR AT WALL LOCATIONS

STANDARD STUD WALL WITH 5" BRICK VENEER FOUNDATION WALL LEDGE STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS

STANDARD STUD WALL WITH STACKED STONE VENEER STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS (NOTE BUILDER TO VERIFY STONE THICKNESS & NOTIFY PLAN DESIGNER IF THICKNESS IS MORE THAN 5" BEFORE FOOTINGS ARE POURED)

STANDARD STUD WALL WITH APPLIED STONE VENEER STUD THICKNESS AS NOTED IN PLAN NOTES OR AT WALL LOCATIONS
(NOTE: NO FOUNDATION SUPPORT IS REPRESENTED ON STRUCTURAL PLANS)

IF STACKED STONE IS TO BE USED BUILDER MUST NOTIFY PLAN DESIGNER BEFORE FOOTINGS ARE POURED

STANDARD STUD WALL WITH LOW APPLIED STONE
WANNSCOTING.
SEE ELEVATIONS FOR HEIGHT & FNISH MATERIAL
AT EXT STUD WALL ABOVE.
STUD THICKNESS AS NOTED IN PLAN
NOTES OR AT WALL LOCATIONS

STANDARD STUD WALL WITH 5" FOUNDATION LEDGE FOR LOW BRICK OR STACKED STONE WAINSCOTING SEE ELEVATIONS FOR HEIGHT 4 FINISH MATERIAL AT EXT STUD WALL ABOVE, STUD THICKNESSA AS NOTED IN FLAN NOTES OR AT WALL LOCATIONS

- HALF WALL WITH IX CAP

(42" HEIGHT UNLESS NOTED OTHERWISE ON PLANS)

WINDOW FALL PREVENTION PROTECTION

IF ANY PART OF THE CLEAR OPENING OF THE OPERABLE PORTION OF A WINDOW IS LOCATED

MORE THAN 12' ABOVE THE EXTERIOR GRADE THEN THE LONEST PART OF THE CLEAR OPENING

MIST BE AT LEAST 24' ABOVE THE FLOOR OF THE ROOM IN WHICH IT IS LOCATED.

- EXCEPTIONS:

  1. THE WINDOW IS A FIXED UNIT

  2. THE OPENING DOES NOT ALLOW THE PASSAGE OF A 4- INCH DIAMETER SPHERE.

  5. THE WINDOW IS EQUIPPED WITH A WINDOW FALL PREVENTION DEVICE MEETING ASTM F2040.

  4. THE WINDOW IS EQUIPPED WITH A MAPPROVED WINDOW OPENING LIMITING DEVICE.

D FLANG HAVE BEEN MALED TO MORRE HOTES LLC. ACD ATE DESIGNED FOR CANALE LOT USE GALY AS LIGHTE ON TITLE BLOCK. LOT 1073 Anderson Creek Academy

Architectural McKee Ho Beaufort Lot 1073 REVISIONS Attic Floor Plan

NOTE: WHEN USED WITH AN EMERGENCY ESCAPE AND RESCUE WINDOW, OPENING LIMITING DEVICES AND FALL PREVENTION DEVICES MUST BE APPROVED FOR EMERGENCY ESCAPE AND RESCUE PROVISIONS.

ATTIC FLOOR PLAN - EURO
22X34 PRINTS SCALE: 1/4"=1'-0"
1|X|T PRINTS SCALE: 1/8"=1'-0"

UNF. HYAC

VERIFY WALL AND CLG. HGT9. WITH TRUSSES

IF NECESSAR

L\_\_\_\_\_\_

RAISED TRAY BELOW

TOPO CLG. HGT.

UNFINISHED

ATTIC STORAGE

RAISED TRAY BELOW

EXTERIOR DOORS/WINDOWS (DP RATING)

- ALL EXTERIOR DOORS TO BE DP41 WHEN
BUILT IN HIGH WIND ZONE.

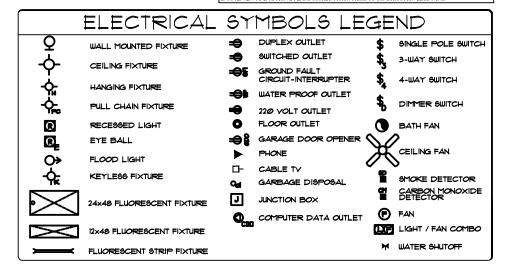
- ALL EXTERIOR WINDOWS TO BE DP50 WHEN
BUILT IN HIGH WIND ZONE.

WIN. HD. 18 38" / LANDIN

A-6-0

IIXIT PRINTS SCALE: 1/8"=1'-0"

NOTE: THIS PLAN ELEVATION PRODUCED BY GMD DESIGN GROUP. IS DERIVATIVE WORKS OF THE BEAUF BY PLANWORX ARCHITECTURE, P.A. FOR MCKEE HOMES WITH WRITTEN PERMISSION OBTAINED BY THE BUILDEROUWNER FOR REPRODUCTION WITH MODIFICATION IN THE PURCHASE LETTER DATED. JANUARY 2011, 2014; ADDRESSED TO PAT MCKEE AT MCKEE HOMES THE BUILDEROUWNER IS TO REVIEW AND APPROVE PLANS COORDINATION PRIOR TO CONSTRUCTION BEGINNING.



### ELECTRICAL:

- ALL SMITCHES TO SE MOUNTED S'-10" ABOVE FINIS UNLESS OTHERWISE NOTED.

- ) INSTALL GROUND FAULT RECEPTACLES IN BATHROOMS OTHER WET LOCATIONS AS REQUIRED BY N.E.C. 210-8.

ELECTRICAL NOTES

1. ELECTRICAL CONTRACTOR MUST CONFIRM ELECTRICAL LAYOUT WITH BUILDER AND/OR HOMEOUNER BUILDER/HOMEOUNER SPECIFICATIONS WILL OVERRIDE THESE DOCUMENTS.

2. VERFY LOCATION OF 240V. RECEPTACLES, AS GAS APPLIANCES MAY BE SUBSTITUTED FOR ELECTRICAL IN SOME CASES.

# UPGRADED LIGHTING PACKAGE 1. ALL CELING MOUNTS TO BE REPLACED WITH RECES CAN LIGHTS IN MAIN LIVING AREAS INCLUDING: - FAMILY - KITCHEN - HALLWAYS

- ELECTRICAL NOTES

   ONLY ONE PHONE LINE IS INCLUDED IN BASE HOUSE

  -- ALL OTHER PHONE LINES ARE OPTIONAL

   2 OUTLETS INCLUDED IN KITCHEN FOR FUTURE UNDER
- CABINET LIGHTING UNDER-CABINET LIGHTING IS OPTIONAL RECEPTACLES ARE TO BE NOTALLED AS STANDARD PER LATEST CODE REGUIREMENTS

Anderson Creek cural Set (4-9-20) (LHG) McKee Homes, LLC Beaufort - Euro - (Ll Lot 1073 Anderson (

McKee Homes,uc

Scales UNO:

22X34: 1/4"=1'-0"

11x17: 1/8"=1'-0"

Elev.

Academy

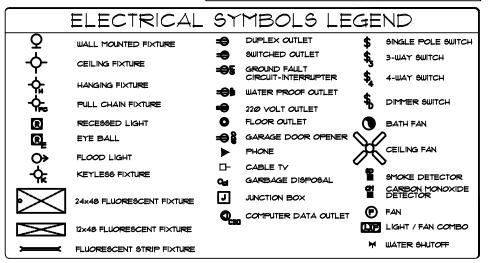
Architectural First Floor Lighting

Lighting

**AE-1-0** 

EURO SECOND FLOOR LIGHTING IIXIT PRINTS SCALE: 1/8"=1'-0"

NOTE: THIS PLAN ELEVATION PRODUCED BY GMD DESIGN GROUP, IS DERIVATIVE WORKS OF BY PLANWORK ARCHITECTURE, P.A. FOR MCKEE HOMES WITH WRITTEN PERMISSION OF I AND BULLDEROWNER FOR REPRODUCTION WITH MODIFICATION IN THE PURCHASE LETTER DATE JANCARY 2016, 2014. ADDRESSED TO PAT MCKEE AT MCKEE HOMES THE BULLDEROWNER IS TO REVIEW AND APPROVE LANAS COORDINATION PRIGHT TO CONSTRUCTION SEGIONNO.



### ELECTRICAL:

- ) INSTALL GROUND FAULT RECEPTACLES IN BATHROOMS, OTHER WET LOCATIONS AS REQUIRED BY N.E.C. 210-8.

ELECTRICAL NOTES

1. ELECTRICAL CONTRACTOR MUST CONFIRM ELECTRICAL LAYOUT WITH BUILDER AND/OR HOMEOUNER BUILDER/HOMEOUNER SPECIFICATIONS WILL OVERRIDE THESE DOCUMENTS.

2. VERFY LOCATION OF 240V. RECEPTACLES, AS GAS APPLIANCES MAY BE SUBSTITUTED FOR ELECTRICAL IN SOME CASES.

# UPGRADED LIGHTING PACKAGE 1. ALL CELLING MOUNTS TO BE REPLACED WITH RECES CAN LIGHTS IN MAIN LIVING AREAS INCLUDING: - FAMILY - KITCHEN - HALLWAYS

- ELECTRICAL NOTES

  ONLY ONE PHONE LINE 16 INCLUDED IN BASE HOUSE

  ALL OTHER PHONE LINES ARE OPTIONAL.

  2 OUTLETS INCLUDED IN KITCHEN FOR FUTURE UNDER CABINET LIGHTING.

  UNDER-CABINET LIGHTING 16 OPTIONAL.

  RECEPTACLES ARE TO BE INSTALLED AS STANDARD PER LATEST CODE REGUIREMENTS.

Anderson Creek cural Set (4-9-20) Euro McKee Homes, I Beaufort - Euro Architectural 1073 Lot

(LHG)

CKee Homes,ile

Scales UNO:

22X34: 1/4"=1'-0"

11x17: 1/8"=1'-0"

Elev.

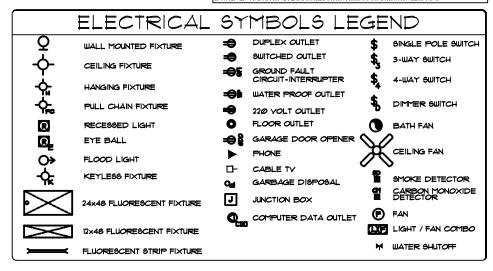
Academy

Second Floor Lighting Lighting

**AE-2-0** 

EURO UNF. ATTIC FLOOR LIGHTING 22x34 PRINTS SCALE: 1/4"=1'-0 11x17 PRINTS SCALE: 1/8"=1'-0"

NOTE: THIS PLAN ELEVATION PRODUCED BY GMD DESIGN GROUP, IS DERIVATIVE WORKS OF THE BEAUF BY PLANWORX ARCHITECTURE, P.A. FOR MIKEE HOMES WITH WRITTEN PERMISSION OF IANKED BY THE BULDEHOWNER FOR REPRODUCTION WITH MODIFIC ATION IN THE PURCHASE. LETTER DATED, JANLARY 2016, 2014: ADDRESSED TO PAT MIKEE AT MIKEE HOMES. THE BULDEHOWNER IS TORKIUM WAD APPROVE HANNS COORDINATION PRIOR TO CONSTRUCTION BEGINNING.



### ELECTRICAL:

- ) INSTALL GROUND FAULT RECEPTACLES IN BATHROOMS, OTHER WET LOCATIONS AS REQUIRED BY N.E.C. 210-8.

ELECTRICAL NOTES

1. ELECTRICAL CONTRACTOR MUST CONFIRM ELECTRICAL LAYOUT WITH BUILDER AND/OR HOMEOUNER BUILDERFAND/OR HOMEOUNER SPECIFICATIONS WILL OVERRIDE THESE DOCUMENTS.

2. VERFY LOCATION OF 240V. RECEPTACLES, AS GAS APPLIANCES MAY BE SUBSTITUTED FOR ELECTRICAL IN SOME CASES.

# UPGRADED LIGHTING PACKAGE 1. ALL CEILING MOUNTS TO BE REPLACED WITH RECESS CAN LIGHTS IN MAIN LIVING AREAS INCLUDINGS FAMILY KITCHEN - HALLWAYS

- ELECTRICAL NOTES

  ONLY ONE PHONE LINE 16 INCLUDED IN BASE HOUSE

  ALL OTHER PHONE LINES ARE OPTIONAL.

  2 OUTLETS INCLUDED IN KITCHEN FOR FUTURE UNDER CABINET LIGHTING.

  UNDER-CABINET LIGHTING 16 OPTIONAL.

  RECEPTACLES ARE TO BE INSTALLED AS STANDARD PER LATEST CODE REGUIREMENTS.

Anderson Creek cural Set (4-9-20) (LHG) McKee Homes, LLC Euro Beaufort Lot 1073

Architectural Set

McKee Homes,ic

Scales UNO:

22X34: 1/4"=1'-0"

11x17: 1/8"=1'-0"

Elev.

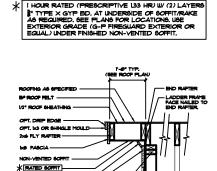
- 1

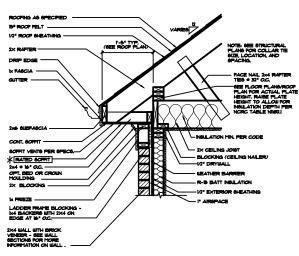
Academy

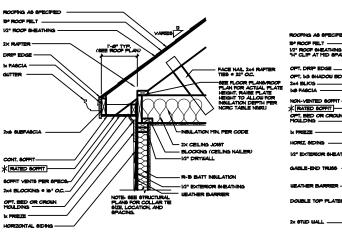
	-	$\neg$		_		7
	PROG	ESS	DATE		_	
	ISSUE				04/09	1/20
	DRAW			B. Bates		
	CHECK	ED E	3Y		J. Taylor	/ BB
	REVIS	:NOI	S			
	DATE	BY:		DESCR	PT.	
3		-	I			
	-	-	ł			
¥		ł	ŀ			
ı						
	_					

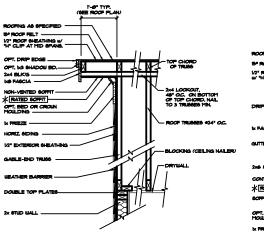
Attic Floor Lighting

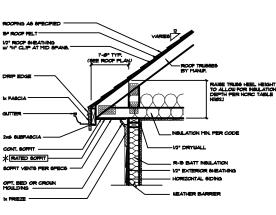
**AE-3-0** 











9 RAKE OVERHANG - STICK

LOPING DOUBLE TOP PLATE -

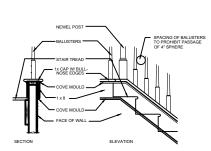
S CORNICE AT BRICK STICK)

CORNICE AT SIDING (STICK)

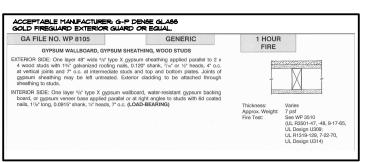
(6) RAKE OVERHANG - (TRUSSES)

5 CORNICE AT SIDING (TRUSSES)

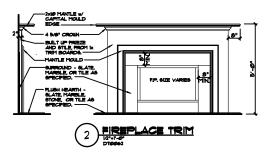
4 STAIR TRIM - OPEN RISERS



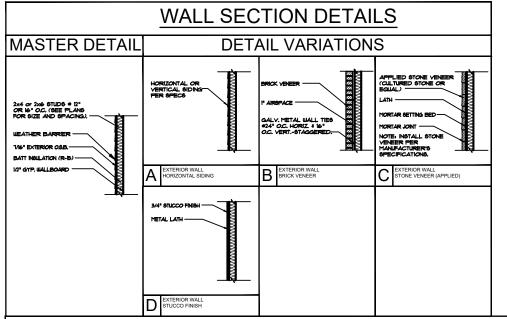
STAIR TRIM - CLOSED RISERS

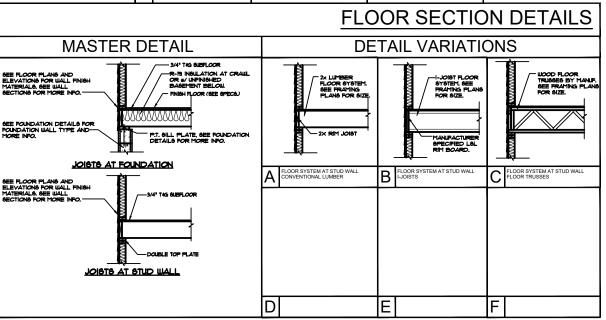


\* SEE STRUCTURAL SHEETS, NOTES AND DETAILS FOR MORE INFORMATION. ALL STRUCTURAL INFORMATION OVER-RIDES THESE ARCHITECTURAL DETAILS



2) ANY ON SITE CHANGES OR VARIATIONS FROM PLANE SHOWN PLUT SE VERWED WITH DESIGNER OR BRANCE MEET LOCAL CODES, GUIDELNES, LOAD CALCULATION





Scales UNO:

22X34: 1/4"=1'-0" 11x17: 1/8"=1'-0"

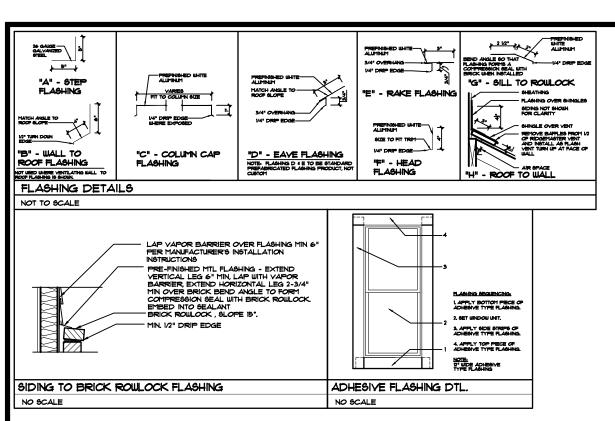
Elev.

Academy

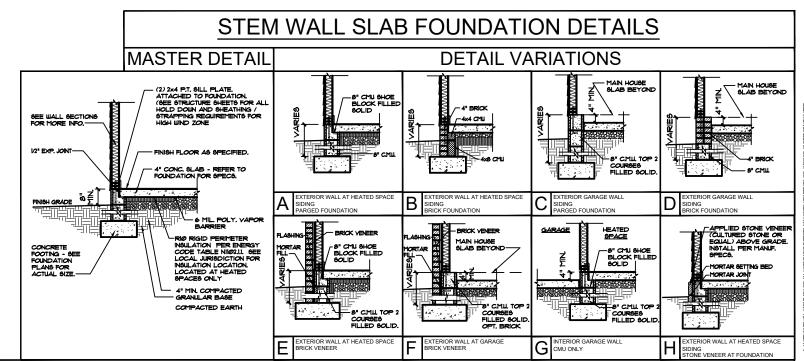
- (LHG)

Anderson Creek cural Set (4-9-20) McKee Homes, LLC Beaufort - Euro - (LH Lot 1073 Anderson C Architectural **Architectural Details** 

AD-1 003220



\* SEE STRUCTURAL SHEETS, NOTES AND DETAILS FOR MORE INFORMATION. ALL STRUCTURAL INFORMATION OVER-RIDES THESE ARCHITECTURAL DETAILS



Scales UNO:

22X34: 1/4"=1'-0" 11x17: 1/8"=1'-0"

Elev.

- 1

Academy

- (LHG)

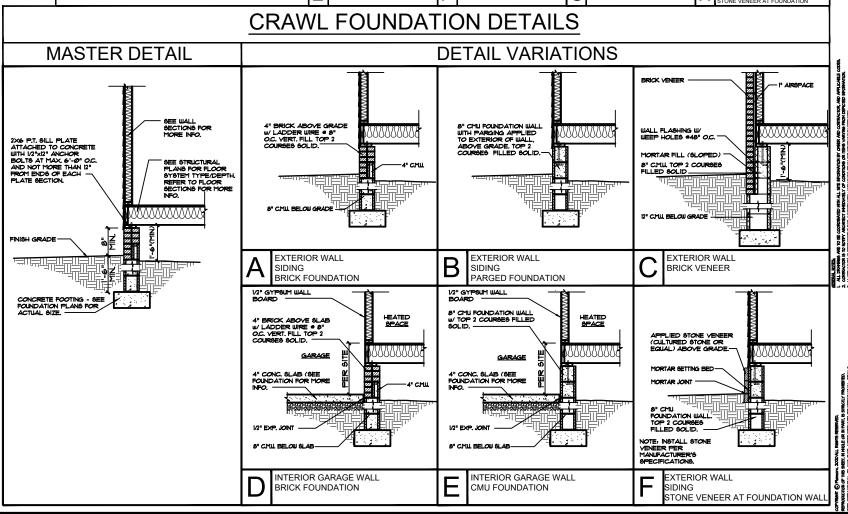
McKee Homes, LLC Beaufort - Euro - (LH Lot 1073 Anderson (

**Architectural Details** 

AD-2

003220

Lot 1073 Anderson Creek Architectural Set (4-9-20)



Applicable Building Codes:

• 2018 North Carolina Residential Building Code with All Local Amendments ASCE 7-10: Minimum Design Loads for Buildings and Other Structures

# Design Loads:

'S'' ₽'	Ju 010.		
~ l.	Roof	Live Loads	
	1.1.	Conventional 2x	20 PSF
	1.2.	Truss	20 PSF
		1.2.1. Attic Truss	60 PSF
2.	Roof	Dead Loads	
	2.1.	Conventional 2x	10 PSF
	2.2.	Truss	20 PSF
3.	Snow		15 PSF
	3.l.	Importance Factor	1.0
4.		Live Loads	
	4.1.	Typ. Dwelling	40 PSF
		Sleeping Areas	
	4.3.		
	4.4.	Passenger Garage	
5.		Dead Loads	
		Conventional 2x	10 PSF
	52		
	53	Floor Truss	
6		te Design Wind Speed (3 sec. gust)	
٠,		Exposure	
	6.2.		10
		Wind Base Shear	1.0
	V.J.	631. VX =	
		U.J.I. Y A -	

7. (	Component and Cladding (in PSF)						
	MEAN ROOF HT.	UP TO 30'	3Ø'1"-35'	35' "-4Ø'	40'1"-45'		
	ZONE 1	16.7,-18.0	17.5,-18.9	18.2,-19.6	18.7,-20.2		
	ZONE 2	16.7,-21.0	17.5,-22.1	18.2,-22.9	18.7,-23.5		
	ZONE 3	16.7,-21.0	17.5,-22.1	18.2,-22.9	18.7,-23.5		
	ZONE 4	18.2,-19.0	19.2,-20.0	19.9,-20.7	20.4,-21.3		
	ZONE 5	18.2,-24.0	19.2,-25.2	19.9,-26.1	20.4,-26.9		

# 8. Seismic

8.1.	Site Class	$\supset$
8.2.	Design Category	C
	Importance Factor	.Ø
8.4.	Seismic Use Group1	
8.5.	Spectral Response Acceleration	
	851 Smc - %0	

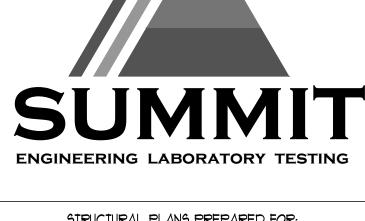
8.5.1. Sms = %q8.5.2. Sml = %q 8.6. Seismic Base Shear 8.6.1. Vx =

6.3.2. Vy =

8.6.2.Vy = 8.7. Basic Structural System (check one) Bearing Wall ☐ Building Frame

> □ Dual w/ Special Moment Frame ☐ Dual w/ Intermediate R/C or Special Steel

□ Inverted Pendulum 8.8. Arch/Mech Components Anchored ...... 8.9. Lateral Design Control: Seismic □ Wind ⊠



# STRUCTURAL PLANS PREPARED FOR:

# LOT 1073 ANDERSON CREEK ACADEMY

PROJECT ADDRESS:

McKee Homes 109 Hay St., Suite 301 Fayetteville, NC 28301

DESIGNER:

Planworx Architecture, P.A. 5711 Six Forks Rd. #100 Raleigh, NC 27609

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

# PLAN ABBREVIATIONS:

AB	ANCHOR BOLT	<del> </del>	PRESSURE TREATED
AFF	ABOVE FINISHED FLOOR	RS	ROOF SUPPORT
CJ	CEILING JOIST	SC	STUD COLUMN
CLR	CLEAR	SJ	SINGLE JOIST
DJ	DOUBLE JOIST	SPF	SPRUCE PINE FIR
DSP	DOUBLE STUD POCKET	SST	SIMPSON STRONG-TIE
EE	EACH END	SYP SY	SOUTHERN YELLOW PINE
ΕW	EACH WAY	ŢJ	TRIPLE JOIST
NTS	NOT TO SCALE	TSP	TRIPLE STUD POCKET
OC.	ON CENTER	TYP	TYPICAL
PSF	POUNDS PER SQUARE FOOT	UNO	UNLESS NOTED OTHERWISE
PSI	POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC

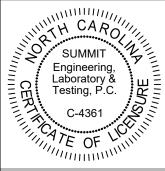
Roof truss and floor joist layouts, and their corresponding loading details, were not provided to SUMMIT Engineering, Laboratory & Testing, P.C. (SUMMIT) prior to the initial design. Therefore, truss and joist directions were assumed based on the information provided by MCKEE HOMES. Subsequent plan revisions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

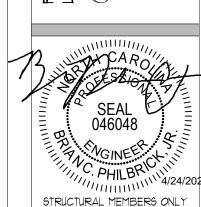
### SHEET LIST: Description Sheet No. CS1 Cover Sheet, Specifications, Revisions S1,Øm Monolithic Slab Foundation S1.0s Stem Wall Foundation S1.0c Crawl Space Foundation S1.0b Basement Foundation S2.Ø Basement Framing Plan S3.Ø First Floor Framing Plan S4.Ø Second Floor Framing Plan S5.Ø Roof Framing Plan S6.0 Basement Bracing Plan S7.Ø First Floor Bracing Plan 58.Ø Second Floor Bracing Plan

# REVISION LIST:

Revision No.	Date	Project No.	Description

# SUMMIT 3070 HAMMOND BUSINESS PLACE, SUITE 171 RALEIGH, NC 27603 OFFICE: 919.380.9991 FAX: 919.380.9993 WWW.SUMMIT-COMPANIES.COM





# recommended in accordance with the APA.

Wood wall sheathing shall comply with the requirements of local

information. Sheathing shall be applied with the long direction

Roof sheathing shall be APA rated sheathing exposure 1 or 2.

attached to its supporting roof framing with (1)-8d CC nail at

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

over framing. Apply building paper over the sheathing as

required by the state Building Code.

blocking unless otherwise noted. Panel end joints shall occur

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

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

Sheathing shall have a 1/8" gap at panel ends and edges as

applied perpendicular to framing. Sheathing shall have a span

Roof sheathing shall be continuous over two supports and

6"o/c at panel edges and at 12"o/c in panel field unless

drawings. Refer to wall bracing notes in plan set for more

perpendicular to framing, unless noted otherwise.

building codes for the appropriate state as indicated on these

# TRUCTURAL FIBERBOARD PANELS:

state Building Code.

Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards. All structurally required fiberboard sheathing shall bear the

mark of the AFA. Fiberboard wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information.

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

# 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 SUMMIT Engineering, Laboratory & Testing, P.C. (SUMMIT) or the SER. For the purposes of these construction documents the SER and SUMMIT shall be considered the same entity.
- The structure is only stable in its completed form. The contractor shall provide all required temporary bracing during construction to stabilize the structure.
- 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.
- Any structural elements or details not fully developed on the construction drawings shall be completed under the direction o a licensed professional engineer. These shop drawings shall be submitted to SUMMIT for review before any construction begins. The shop drawings will be reviewed for overall compliance as it relates to the structural design of this project. Verification of the shop drawings for dimensions, or for actual field conditions,
- is not the responsibility of the SER or SUMMIT. Verification of assumed field conditions is not the responsibility of the SER. The contractor shall verify the field conditions for accuracy and report any discrepancies to SUMMIT before construction begins.
- 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.
- 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.

- 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.
- 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.
- Structural steel shall receive one coat of shop applied rust-inhibitive paint. All steel shall have a minimum yield stress (F,,) of 36 ksi unless
- otherwise noted. Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D.I. Electrodes for shop and field welding shall be class ETØXX. All welding

shall be performed by a certified welder per the above

standards.

- 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".
- 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.

- Concrete slabs-on-grade shall be constructed in accordance with ACI 302.IR-96: "Guide for Concrete Slab and Slab
- The concrete slab-on-grade has been designed using a 3. Any fill shall be placed under the direction or recommendation 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. 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. 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:

- 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.
- Fibermesh reinforcing to be 100% virgin polypropylene fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement. Application of fibermesh per cubic yard of concrete shall equal
- a minimum of 0.1% by volume (1.5 pounds per cubic yard) Fibermesh shall comply with ASTM CIII6, any local building code requirements, and shall meet or exceed the current industry
- 5. Steel reinforcing bars shall be new billet steel conforming to ASTM A615, grade 60.
- 6. Detailing, fabrication, and placement of reinforcing steel shall be in accordance with the latest edition of ACI 315: "Manual of Standard Practice for Detailing Concrete Structures" 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. Lap reinforcement as required, a minimum of 40 bar diameters for tension or compression unless otherwise noted. Splices in masonry shall be a minimum of 48 bar diameters.

- 9. Where reinforcing dowels are required, they shall be equivalent in size and spacing to the vertical reinforcement. The dowel shall extend 48 bar diameters vertically and 20 bar diameters
- into the footing. 10. Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted.

- 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
- Southern-Yellow-Pine (SYP) #2. LVL or PSL engineered wood shall have the following minimum
  - 2.1. E = 1,900,000 psi 2.2. Fb = 2600 psi2.3. FV = 285 psi
- 2.4.Fc = 700 psi 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
- 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. . All beams shall have full bearing on supporting framing members unless otherwise noted.
- 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. 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. Multi-ply beams shall have each ply attached with (3) 10d nails a
- 10. Four and five ply beams shall be bolted together with (2) rows of 1/2" diameter through bolts staggered @ 16" O.C. unless noted otherwise.

- 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. 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 7-10), 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. 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.'
- 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
- 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.

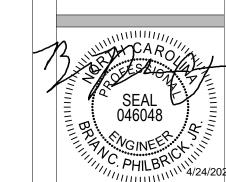
# EXTERIOR WOOD FRAMED DECKS: Decks are to be framed in accordance with local building

<u>WOOD STRUCTURAL PANELS:</u> 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

code references or construction details.

codes and as referenced on the structural plans, either through

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



DATE: 04/24/2020 PROJECT \*: 4240.500: 21831 DRAWN BY: EMB

ORIGINAL INFORMATION

CHECKED BY: LAG

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS



# FOUNDATION NOTES:

- 1. FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- 2. STRUCTURAL CONCRETE TO BE F = 3000 PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
- FOOTINGS TO BE PLACED ON UNDISTURBED EARTH, BEARING A MINIMUM OF 12" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE CODE ENFORCEMENT OFFICIAL.
- 4. FOOTING SIZES BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION.
- 5. FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS, PROVIDE 2" MINIMUM FOOTING PROJECTION FROM THE FACE OF
- 6. MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- PILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
- PROVIDE FOUNDATION WATERPROOFING, AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
- 9. PROVIDED PERIMETER INSULATION FOR ALL FOUNDATIONS PER 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- 10. CORBEL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK
- CRAWL SPACE TO BE GRADED LEVEL, AND CLEARED OF ALL DEBRIS.
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 7" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- 13. ABBREVIATIONS:

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

- 14. ALL PIERS TO BE 16"x16" MASONRY AND ALL PILASTERS TO BE 8"x16" MASONRY, TYPICAL. (UNO)
- 15. WALL FOOTINGS TO BE CONTINUOUS CONCRETE, SIZES PER STRUCTURAL PLAN. 16. A FOUNDATION EXCAYATION OBSERVATION SHOULD BE CONDUCTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER, OR HIS QUALIFIED REPRESENTATIVE. IF ISOLATED AREAS OF YIELDING MATERIALS AND/OR POTENTIALLY EXPANSIVE SOILS ARE OBSERVED IN THE FOOTING EXCAVATIONS AT THE TIME OF CONSTRUCTION, SUMMIT ENGINEERING,
- REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT. 17. ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

LABORATORY & TESTING, P.C. MUST BE PROVIDED THE OPPORTUNITY TO

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLD-DOWNS. ADDITIONAL INFORMATION PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCRC.

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

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

REINFORCE GARAGE PORTAL WALLS PER FIGURE R602.10.4.3 OF THE 2018 NCRC. (TYP)

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

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

DECK JOISTS SHALL BE SPACED AT A MAX. 12" O.C. WHEN DECK BOARDS ARE INSTALLED DIAGONALLY.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>04/09/2020</u>. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY \$ TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING. LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

# STRUCTURAL MEMBERS ONLY

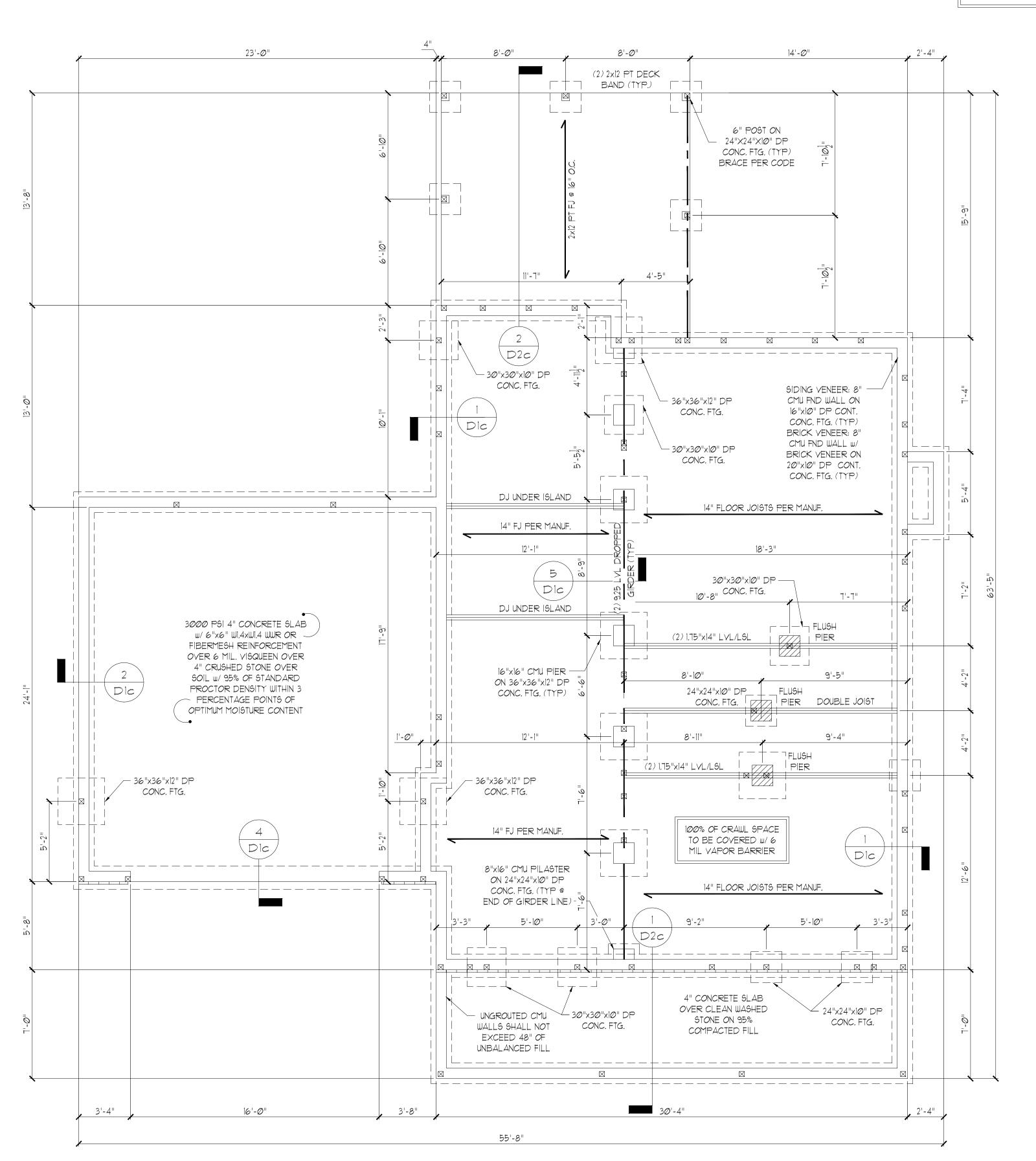
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY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

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

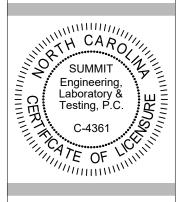
CRAWL SPACE FOUNDATION PLAN

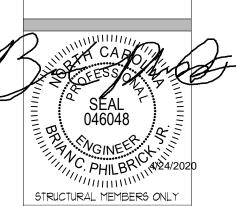
SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"

18"x24" MIN. CRAWL SPACE ACCESS DOOR TO BE LOCATED IN FIELD PER BUILDER. PROVIDE MIN. (2) 2×10 HEADER OVER DOOR W/MIN. 4" BEARING EACH END. AVOID SHOWN POINT LOADS.



SUMMIT 3070 HAMMOND BUSINESS PLACE, SUITE 171 RALEIGH, NC 27603 OFFICE: 919.380.9991 FAX: 919.380.9993 WWW.SUMMIT-COMPANIES.COM





DATE: 04/24/2020 SCALE: 22x34 1/4"=1'-0" 11x17 1/8"=1'-0" PROJECT \*: 4240.500: 21831 DRAWN BY: EMB CHECKED BY: LAG

ORIGINAL INFORMATION

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

51.0c

# GENERAL STRUCTURAL NOTES:

- 1. CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- 2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONTRACTOR SHALL COMPLY WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN.
- 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING REQUIRED TO RESIST ALL FORCES ENCOUNTERED DURING ERECTION.
- 4. PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS:

  MICROLLAM (LVL):  $F_b = 2600$  PSI,  $F_V = 285$  PSI,  $E = 1.9 \times 10^6$  PSI

  PARALLAM (PSL):  $F_b = 2900$  PSI,  $F_V = 290$  PSI,  $E = 1.25 \times 10^6$  PSI
- 5. ALL WOOD MEMBERS SHALL BE #2 SYP UNLESS NOTED ON PLAN. ALL STUD COLUMNS AND JOISTS SHALL BE #2 SYP (UNO).
- 6. ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 #2 SYP STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
- 1. ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".
- 8. FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018
  NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2"
  DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM
  EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE
  12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS
  PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE
  CENTER THIRD OF THE PLATE.
- 9. CONTRACTOR TO PROVIDED LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- 10. FLITCH BEAMS, 4-PLY LVLS AND 3-PLY SIDE LOADED LVLS SHALL BE BOLTED TOGETHER WITH 1/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1/D3f. MIN. EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM.
- 11. ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP #2, DROPPED. FOR NON-LOAD BEARING HEADERS EXCEEDING 8'-0" IN WIDTH AND/OR WITH MORE THAN 2'-0" OF CRIPPLE WALL ABOVE, SHALL
- BE (2) FLAT 2x4 SYP #2, DROPPED. (UNLESS NOTED OTHERWISE)
  12. ABBREVIATIONS:

DJ = DOUBLE JOIST
GT = GIRDER TRUSS
SC = STUD COLUMN
EE = EACH END
TJ = TRIPLE JOIST
CL = CENTER LINE

SJ = SINGLE JOIST
FT = FLOOR TRUSS
DR = DOUBLE RAFTER
TRIPLE RAFTER
OC = ON CENTER
PL = POINT LOAD

# SHADED WALLS INDICATED LOAD BEARING WALLS

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

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

NOTE:

TOTAL DESIGNATES JOIST SUPPORTED LOAD
BEARING WALL ABOVE. PROVIDE BLOCKING UNDER

JOIST SUPPORTED LOAD BEARING WALL.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON 04/09/2020. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

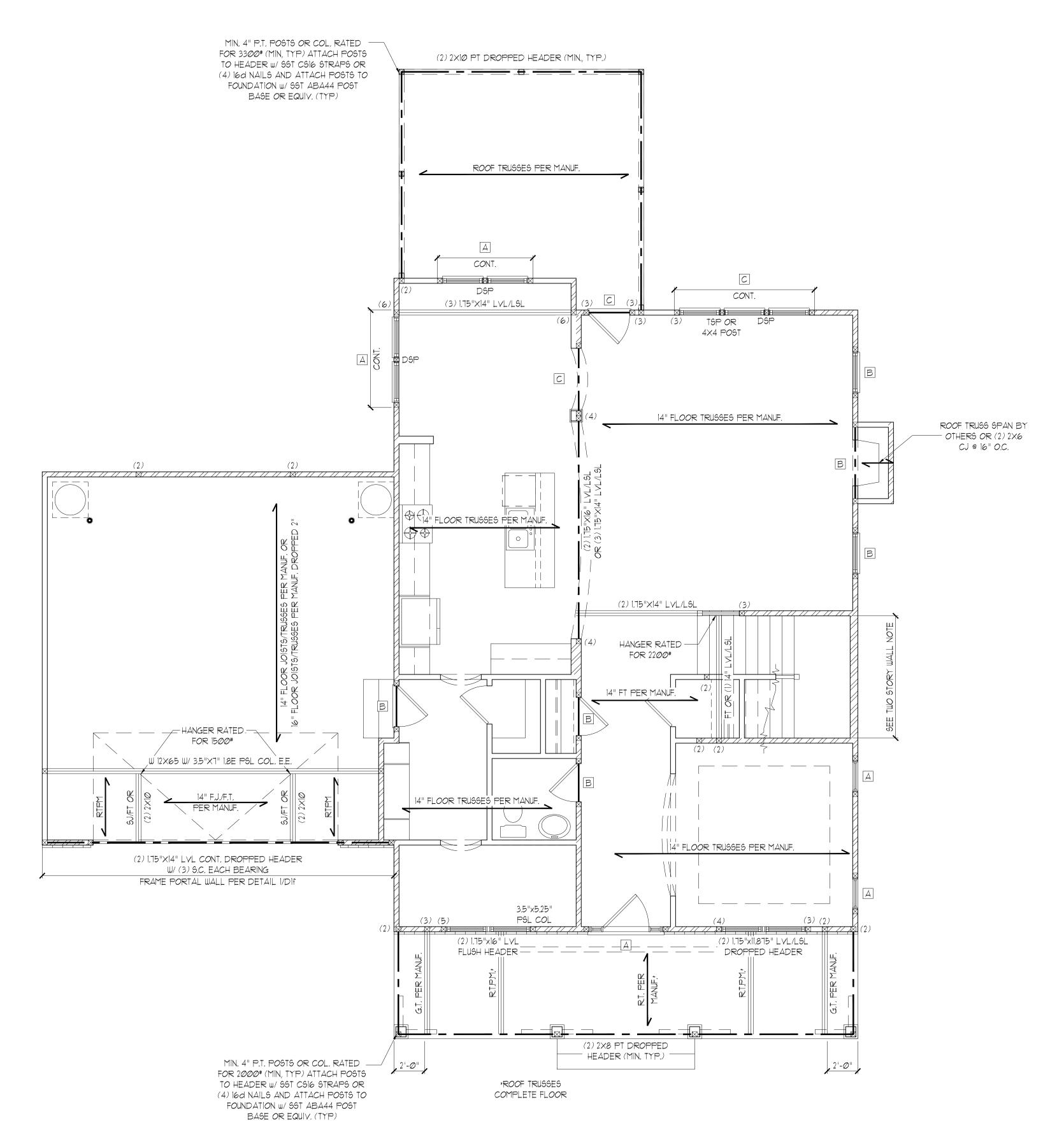
# STRUCTURAL MEMBERS ONLY

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

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

FIRST FLOOR FRAMING PLAN

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



HEADER SCHEDULE							
TAG	SIZE	JACKS (EACH END)					
А	(2) 2x6	(1)					
В	(2) 2×8	(2)					
С	(2) 2xlØ	(2)					
D	(2) 2×12	(2)					
E	(2) 9-1/4" LSL/LVL	(3)					
F	(3) 2x6	(1)					
G	(3) 2x8	(2)					
Н	(3) 2xlØ	(2)					
	(3) 2xl2	(3)					
110±=0							

NOTES:

1. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS, GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.

2. ALL HEADERS TO BE DROPPED (U.N.O.).

3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD COLUMNS LISTED ABOVE (U.N.O.).

4. OPENINGS LESS THAN 3'-O" USE (1) KING STUD AT E.E. OPENINGS 3'-1" TO 4'-O" USE (2) KING STUDS AT E.E. OPENINGS 8'-1" TO 8'-O" USE (5) KING STUDS AT E.E. OPENINGS 8'-1" TO 12'-O" USE (6) KING STUDS AT E.E. OPENINGS 12'-1" TO 16'-O" USE (6) KING STUDS AT E.E.

ALL HEADERS WHERE BRICK IS USED, TO BE:

LINTEL (U.N.O.)

LINTEL SCHEDULE:

STEEL ANGLES TO HAVE MINIMUM 4" BEARING ONTO BRICK AT EACH END.

L3x3x1/4"

2 L5x3"x1/4"

3 L5x3-1/2x5/16"

4 L5x3-1/2"x5/16" ROLLED OR EQUAL ARCHED COMPONENT.

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

WALL STUD SCHEDULE (10 FT HEIGHT)						
STUD SIZE	STUD SIZE STUD SPACING (O.C.)					
	ROOF ONLY	ROOF & 1 FLOOR	ROOF & 2 FLOORS	NON-LOAD BEARING		
2×4	24"	16"	12"	24"		
2x6	24"	24"	16"	24"		
NOTES.						

NOTES:

1. BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C.

2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX. OF 16" O.C.

3. TWO STORY WALLS SHALL BE FRAMED w/ 2x4 STUDS @ 12"
O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED w/ CROSS
BRACING @ 6'-0" O.C. VERTICALLY.

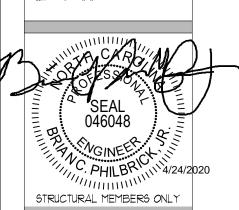
SUMMIT
ENGINEERING LABORATORY TESTING
3070 HAMMOND BUSINESS
PLACE, SUITE 171
RALEIGH, NC 27603
OFFICE: 919.380.9991
FAX: 919.380.9993



ite 301

CLIENT:
MCKee Homes
109 Hau St., S

PROJECT: Lot 1013 Anderson Creek Academy (Beaufort E) First Floor Framina Plan



RAWING

DATE: 04/24/2020

SCALE: 22x34 |/4"=1'-0"
||x|1 |/8"=!'-0"

PROJECT \* 4240500: 21831

DRAWN BY: EMB

CHECKED BY: LAG

ORIGINAL INFORMATION
PROJECT \* DATE
27831 04040000

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

53*.*Ø

HEADER SCHEDULE							
TAG	SIZE	JACKS (EACH END)					
Д	(2) 2×6	(1)					
В	(2) 2×8	(2)					
С	(2) 2x1Ø	(2)					
D	(2) 2×12	(2)					
E	(2) 9-1/4" LSL/LVL	(3)					
F	(3) 2x6	(1)					
G	(3) 2x8	(2)					
Н	(3) 2x1Ø	(2)					
	(3) 2x12	(3)					

1. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. 2. ALL HEADERS TO BE DROPPED (U.N.O.).

3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD COLUMNS LISTED ABOVE (U.N.O.).

4. OPENINGS LESS THAN 3'-O" USE (1) KING STUD AT E.E. OPENINGS 3'-1" TO 4'-0" USE (2) KING STUDS AT E.E. OPENINGS 4'-1" TO 8'-0" USE (3) KING STUDS AT E.E. OPENINGS 8'-1" TO 12'-0" USE (5) KING STUDS AT E.E. OPENINGS 12'-1" TO 16'-0" USE (6) KING STUDS AT E.E.

ALL HEADERS WHERE BRICK IS USED, TO BE:

1 LINTEL (U.N.O.)

LINTEL SCHEDULE:

STEEL ANGLES TO HAVE MINIMUM 4" BEARING ONTO BRICK AT EACH END.

1 L3x3x1/4"

2 L5x3"x1/4"

3 L5x3-1/2x5/16"

4 L5x3-1/2"x5/16" ROLLED OR EQUAL ARCHED COMPONENT.

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

WALL STUD SCHEDULE (10 FT HEIGHT							
STUD SIZE	STUD SPACING (O.C.)						
	ROOF ONLY	ROOF & 1 FLOOR	ROOF & 2 FLOORS	NON-LOAD BEARING			
2×4	24"	16"	12"	24"			
2x6	24"	24"	16"	24"			

1. BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C. 2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX. OF 16" O.C.

3. TWO STORY WALLS SHALL BE FRAMED w/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED W/ CROSS BRACING @ 6'-0" O.C. VERTICALLY.

SHADED WALLS INDICATED LOAD BEARING WALLS

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

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>04/09/2020</u>. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

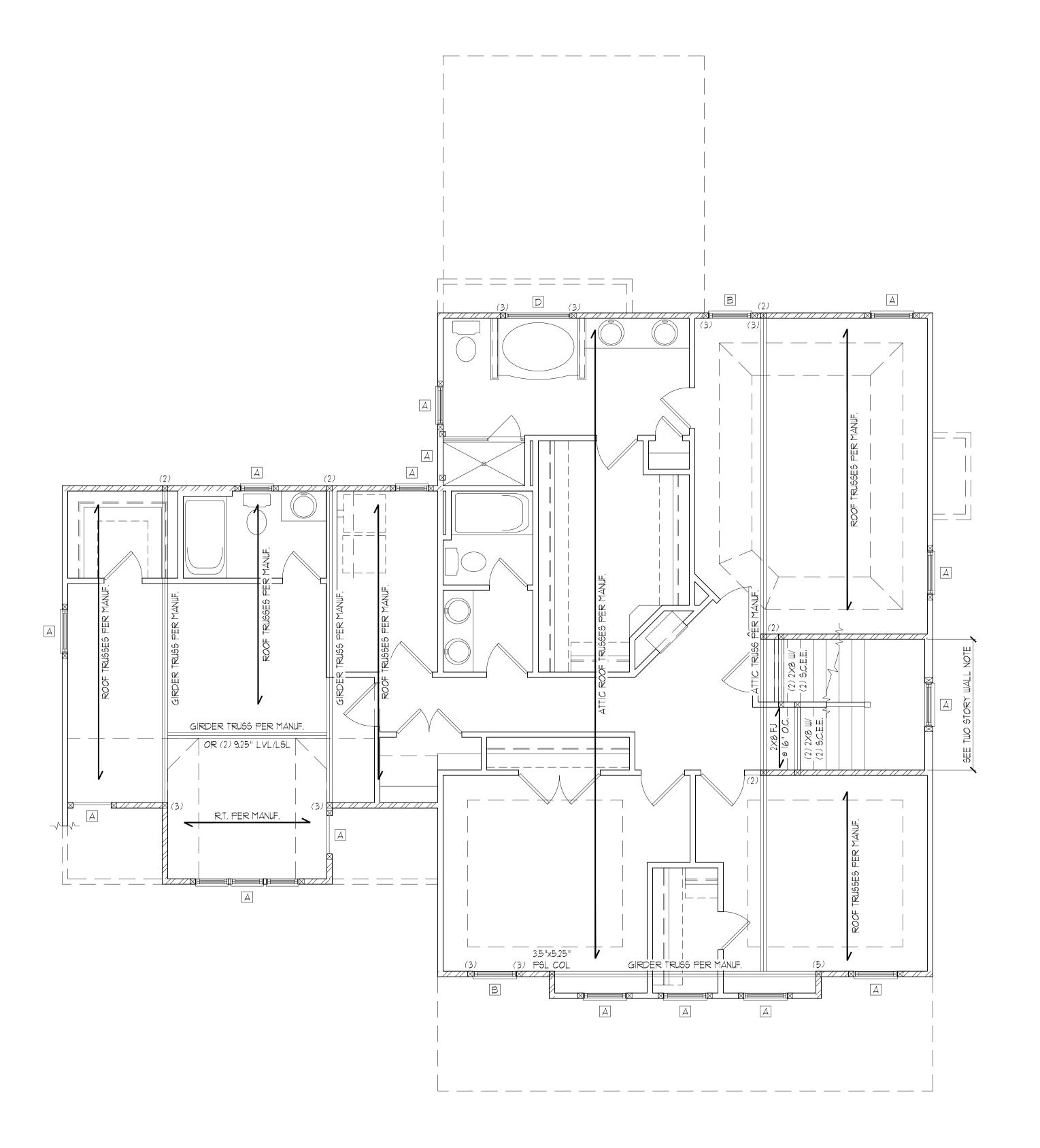
# STRUCTURAL MEMBERS ONLY

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

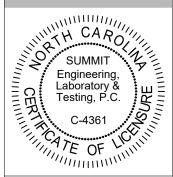
STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

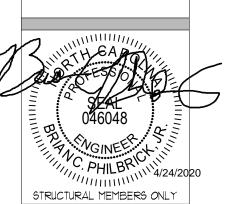
SECOND FLOOR FRAMING PLAN

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









DATE: 04/24/2020 SCALE: 22x34 1/4"=1'-0" ||x|1 ||/8"=1'-0" PROJECT . 4240.500: 27837

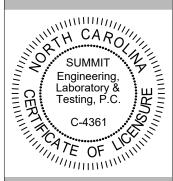
DRAWN BY: EMB

CHECKED BY: LAG

ORIGINAL INFORMATION

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS





STRUCTURAL MEMBERS ONLY

DATE: 04/24/2020 9CALE: 22x34 1/4"=1'-0" 1|x17 1/8"=1'-0" PROJECT \*: 4240500: 21831 DRAWN BY: EMB CHECKED BY: LAG

ORIGINAL INFORMATION

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>04/09/2020</u>. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

# STRUCTURAL MEMBERS ONLY

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

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

SECOND FLOOR FRAMING PLAN

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

TRUSS UPLIFT CONNECTOR SCHEDULE							
MAX, UPLIFT	ROOF TO WALL	FLOOR TO FLOOR	FLOOR TO FND				
600 LBS	600 LBS H2.5A PER WALL SHEATHING & FASTENERS						
12 <i>00</i> LBS	(2) H2.5A	CS16 (END = 11")	DTT2Z				
1450 LBS	HTS2Ø	CS16 (END = 11")	DTT2Z				
2000 LBS	(2) MTS2Ø	(2) CS16 (END = 11")	DTT2Z				
2900 LBS	(2) HTS2Ø	(2) CS16 (END = 11")	HTT4				
3685 LBS	LGT3-SDS2.5	MSTC52	HTT4				
1 ALL PRODUCTS LISTED ARE SIMPSON STRONG THE FOLIVALENT							

1. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.

2. UPLIFT VALUES LISTED ARE FOR SYP \*2 GRADE MEMBERS.

3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS MANUFACTURER OVERRIDE THOSE LISTED ABOVE.

4. CONTACT SUMMIT FOR REQUIRED CONNECTORS WHEN LOADS EXCEED THOSE LISTED ABOVE.

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

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

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

NOTE: TRUSS UPLIFT LOADS SHALL BE DETERMINED PER TRUSS MANUFACTURER IN ACCORDANCE WITH SECTION R802.II.I.I. WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCRC. REFER TO BRACED WALL PLANS FOR SHEATHING AND FASTENER REQUIREMENTS.

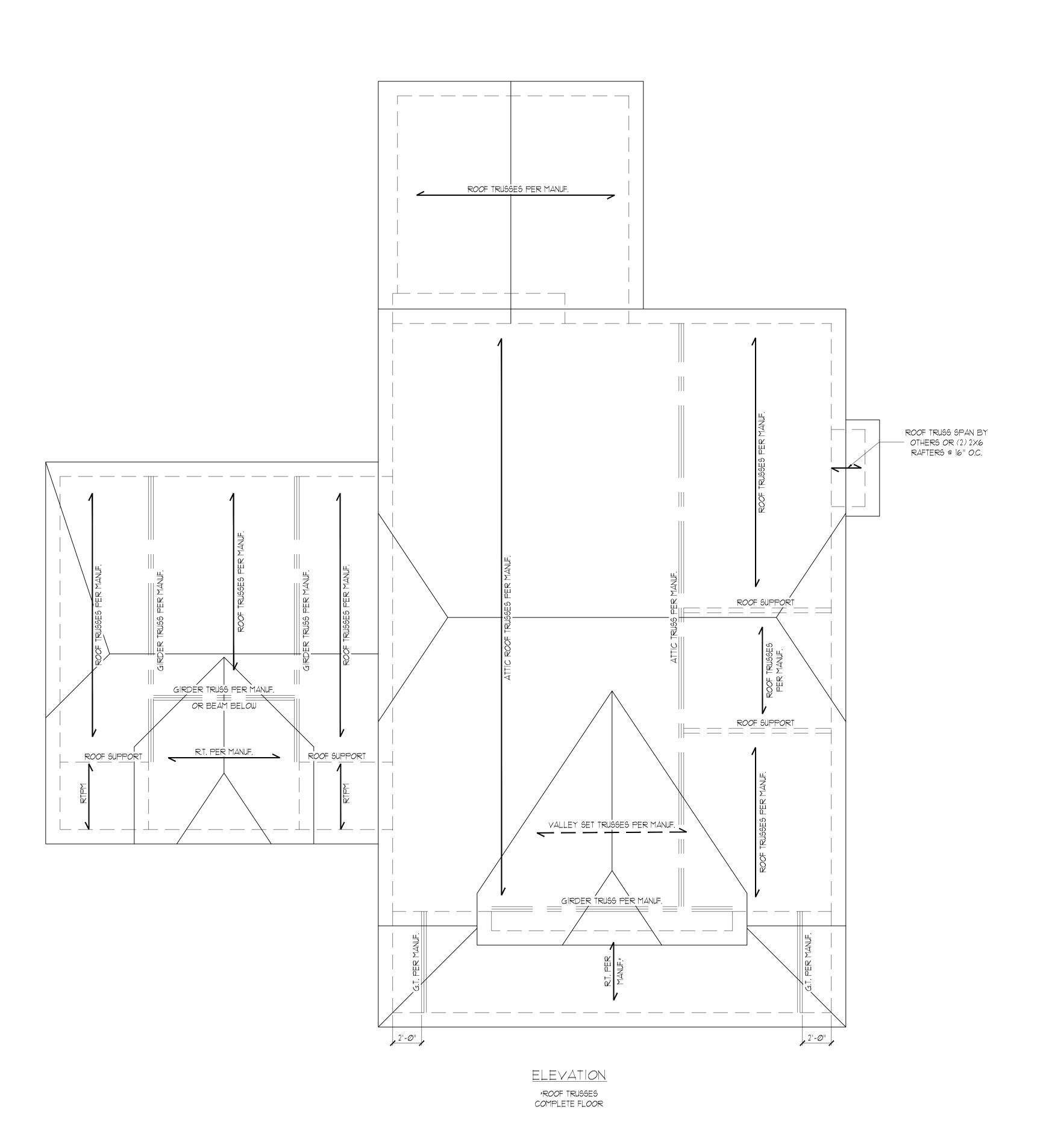
THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON 04/09/2020. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

# STRUCTURAL MEMBERS ONLY

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

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

ROOF FRAMING PLAN

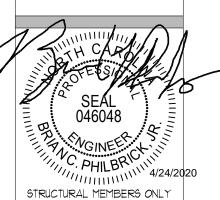






McKee Homes
109 Hay St., Suite 301
Equation (1) 28301

PROJECT: Lot 1013 Anderson Greek Academy (Beaufort EROOF = RAM/NO = ROO



RAWING

DATE: *04/24/2020*9CALE: 22x34 |/4"=1'-0'

9CALE: 22x34 |/4"=1"-0" | ||x|1 | |/6"=1"-0" |
PROJECT \*: 4240500: 21831 |
DRAWN BY: EMB |
CHECKED BY: LAG

ORIGINAL INFORMATION
PROJECT DATE
21831 04/24/202

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

S5.0

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

REQUIRED BRACED WALL PANEL CONNECTIONS							
		REQUIRED CONNECTION					
MATERIAL	MIN. THICKNESS	@ PANEL EDGES	@ INTERMEDIATE SUPPORTS				
WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS				
GYPSUM BOARD	1/2"	5d COOLER NAILS** @ 7" O.C.	5d COOLER NAILS** @ 7" O.C.				
WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.				
WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.1	PER FIGURE R602.10.1				
	MATERIAL  WOOD STRUCTURAL PANEL  GYPSUM BOARD  WOOD STRUCTURAL PANEL  WOOD STRUCTURAL	MATERIAL MIN. THICKNESS  WOOD STRUCTURAL PANEL 3/8"  GYPSUM BOARD 1/2"  WOOD STRUCTURAL PANEL 3/8"  WOOD STRUCTURAL 1/6"	MATERIAL  MIN. THICKNESS      PANEL EDGES    GO COMMON NAILS  66 COMMON NAILS  66 COLER NAILS**  70 T' O.C.   WOOD STRUCTURAL  PANEL				

\*\*OR EQUIVALENT PER TABLE R102.3.5

REAR

HOUSE

# BRACED WALL NOTES:

1. WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 INTERNATIONAL RESIDENTIAL CODE WITH ALL LOCAL AND STATE AMENDMENTS.

2. WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE DESIGN WIND SPEEDS UP TO 130 MPH.

REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES. 4. 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 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.

6. MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1. 1. THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (UNO).

8. FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.

9. 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.

11. THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.

12. MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 48" OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN

ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 IRC OR DETAIL 2/D2f. 13. BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4

14. BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5

15. CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED

IN ACCORDANCE WITH SECTION R602.104.6 16. PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE

R602.10.1 (UNO) 17. ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS.

18. ABBREVIATIONS:

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

INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCRC.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>04/09/2020</u>. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

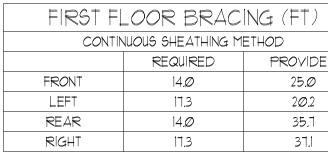
# STRUCTURAL MEMBERS ONLY

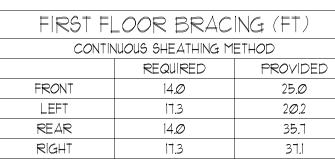
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY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

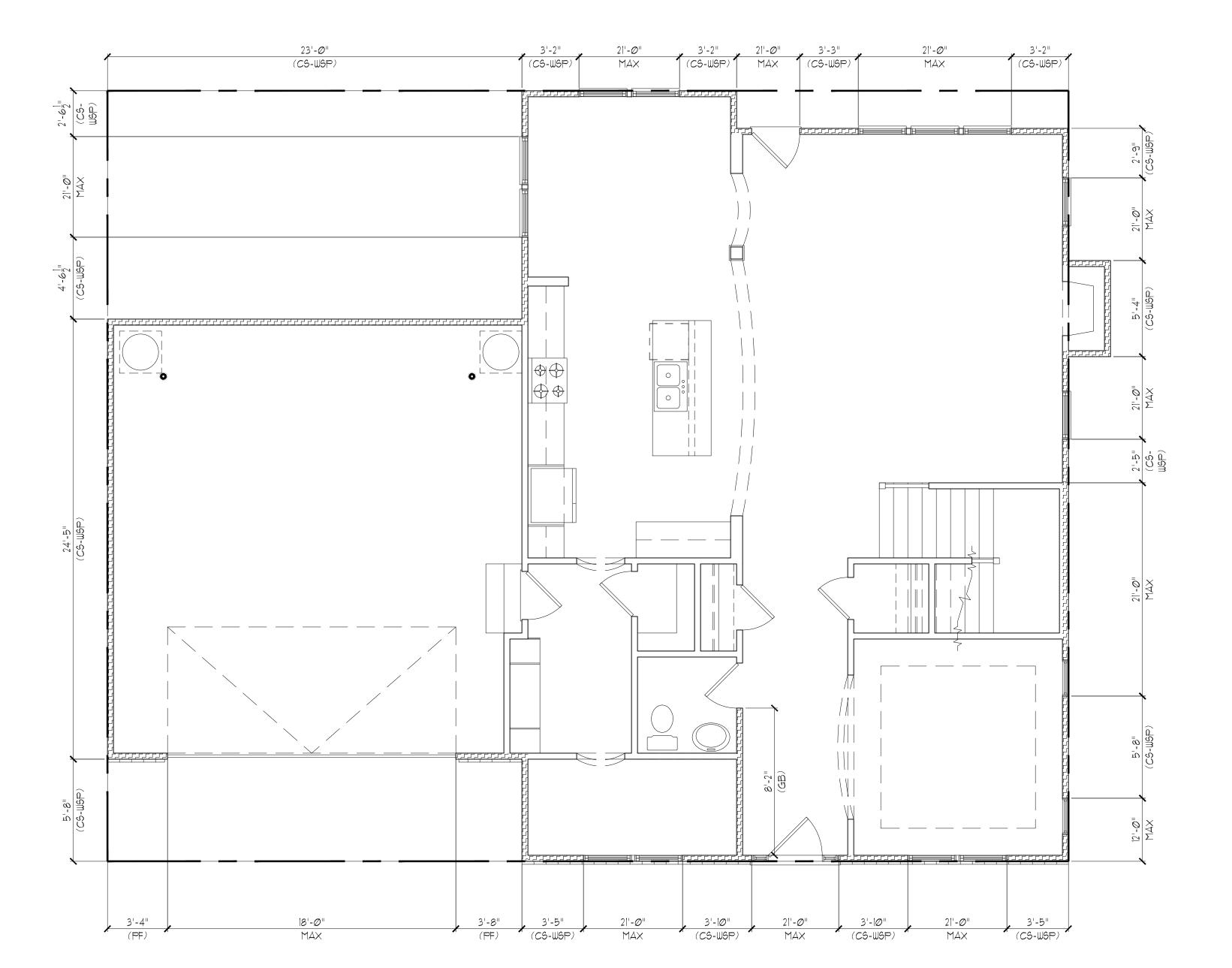
STRUCTURAL. ANALYSIS BASED ON 2018 NCRC.

FIRST FLOOR BRACING PLAN

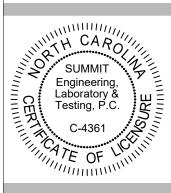
SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"

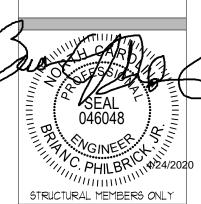












DATE: Ø4/24/2Ø2Ø SCALE: 22x34 1/4"=1'-0" 11x17 1/8"=1'-0" PROJECT \*: 4240500: 21831 DRAWN BY: EMB CHECKED BY: LAG

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

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			
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 NAILS @ 6" O.C.	6d COMMON NAILS 2 'O.C.			
PF	WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.1	PER FIGURE R602.10.1			
**OR EQUIVALENT PER TABLE RT02.3.5							

HOUSE

**OR EQUIVALENT	PER TABL

# BRACED WALL NOTES:

- 1. WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 INTERNATIONAL RESIDENTIAL CODE WITH ALL LOCAL AND STATE AMENDMENTS.
- 2. WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE DESIGN WIND SPEEDS UP TO 130 MPH.
- 3. REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES.
- 4. 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 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- 6. MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1. 1. THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (UNO).
- 8. FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- 9. 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. 11. THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL
- NOT EXCEED 21 FEET. 12. MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 48" OR LESS
- SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 IRC OR DETAIL 2/D2f.
- 13. BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4
- 14. BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5
- 15. CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.104.6
- 16. PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO)
- 17. ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS. 18. ABBREVIATIONS:
  - GB = GYPSUM BOARD

WSP = WOOD STRUCTURAL PANEL CS-XXX = CONT. SHEATHED ENG = ENGINEERED SOLUTION PF = PORTAL FRAME PF-ENG = ENG. PORTAL FRAME

INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCRC.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>04/09/2020</u>, IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

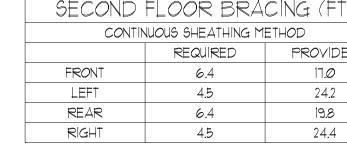
# STRUCTURAL MEMBERS ONLY

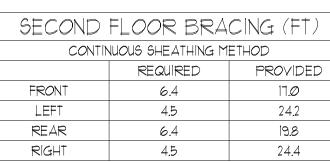
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY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

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

SECOND FLOOR BRACING PLAN

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







SUMMIT

3070 HAMMOND BUSINESS

PLACE, SUITE 171 RALEIGH, NC 27603

OFFICE: 919.380.9991



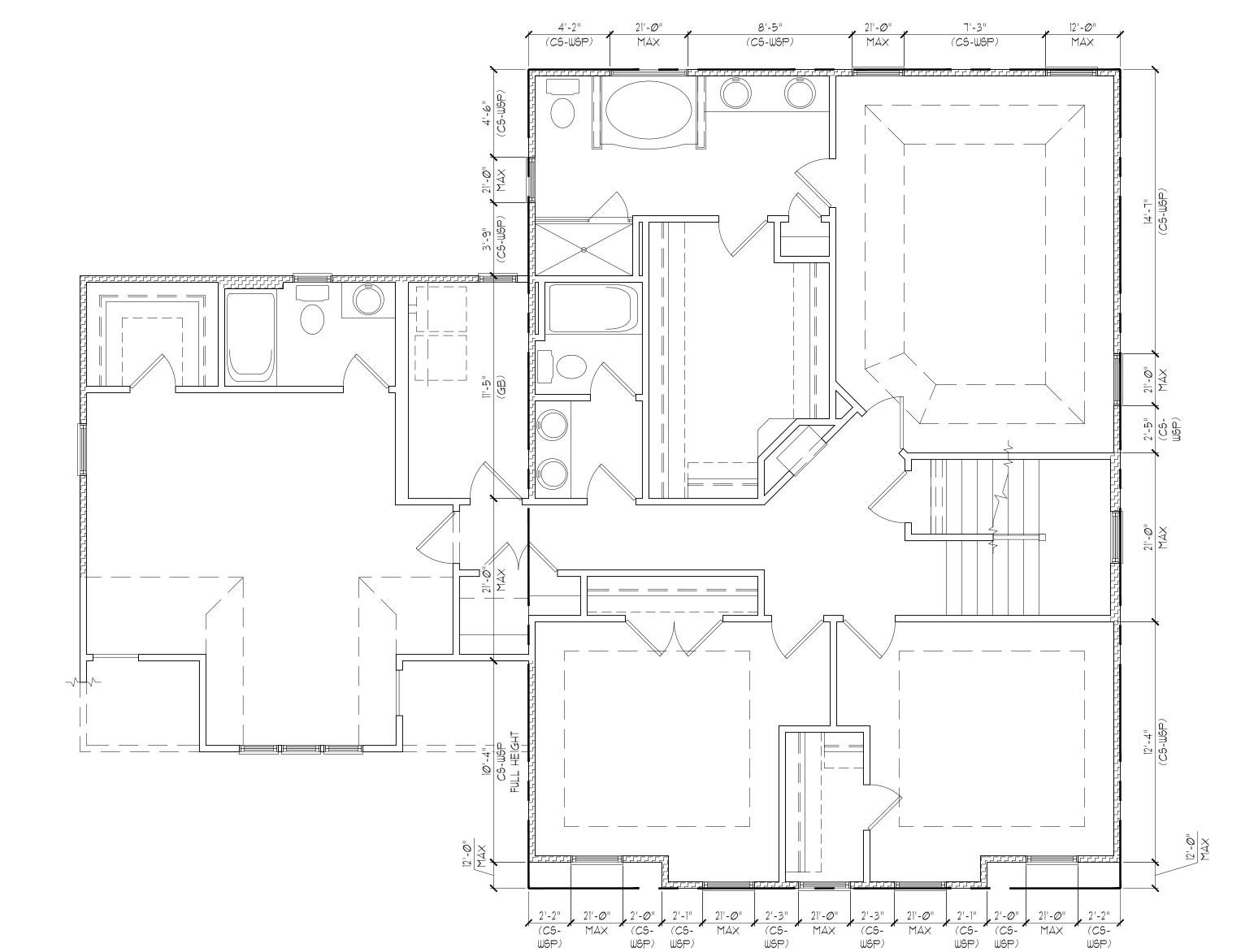
STRUCTURAL MEMBERS ONLY

DATE: 04/24/2020

SCALE: 22x34 1/4"=1'-0" 11x17 1/8"=1'-0" PROJECT \*: 4240500: 21831 DRAWN BY: EMB CHECKED BY: LAG

ORIGINAL INFORMATION

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS





STRUCTURAL PLANS PREPARED FOR:

# Standard Details

McKee Homes

109 Hay St., Suite 301 Fayetteville, NC 28301

DESIGNER:

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

### PLAN ABBREVIATIONS:

AB	ANCHOR BOLT	PT	PRESSURE TREATED
AFF	ABOVE FINISHED FLOOR	R6	ROOF SUPPORT
CJ	CEILING JOIST	9C	STUD COLUMN
CLR	CLEAR	SJ	SINGLE JOIST
DJ	DOUBLE JOIST	SPF	SPRUCE PINE FIR
DSP	DOUBLE STUD POCKET	551	SIMPSON STRONG-TIE
EE	EACH END	SYP	SOUTHERN YELLOW PINE
ΕW	EACH WAY	TJ	TRIPLE JOIST
NTS	NOT TO SCALE	TSP	TRIPLE STUD POCKET
oc	ON CENTER	TYP	TYPICAL
PSF	POUNDS PER SQUARE FOOT	UNO	UNLESS NOTED OTHERWISE
PSI	POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC

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

Sheet No.	Description	
CSI	Cover Sheet, Specifications, Revisions	
Dlm	Monolithic Slab Foundation Details	_
Dis	Stem Wall Foundation Details	
Dlc	Crawl Space Foundation Details	
Dlb	Basement Foundation Details	_
DIf	Framing Details	_
		_
	·	
•		

### REVISION LIST:

SHEET LIST:

Revision No.	Date	Project No.	Description
ı	1.11.19	-	Updated to 2018 NCRC

GENERAL STRUCTURAL NOTES:

1. The design professional whose seal appears on these drawings is the structural engineer of record (SER) for this project. The SER bears the responsibility of the primary structural elements and the performance of this structure. No other party may revise alter, or delete any structural aspects of these construction documents without written permission of SUMMIT Engineering, Laboratory 4 Testing, P.C. (SUMMIT) or the SER. For the purposes of these construction documents the SER and SUMMIT shall be considered the same entity.

The structure is only stable in its completed form The contractor hall provide all required temporary bracing during construction to stabilize the structure.

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.

Any structural elements or details not fully developed on the

any structural elements or details not fully developed on the construction drawings shall be completed under the direction of a licensed professional engineer. These shop drawings shall be submitted to SUMMIT for review before any construction begins. The shop drawings will be reviewed for overall compliance as it. relates to the structural design of this project. Verification of the shop drawings for dimensions, or for actual field conditions, is not the responsibility of the SER or SUMMIT.

Verification of assumed field conditions is not the responsibility

of the SER. The contractor shall verify the field conditions for accuracy and report any discrepancies to SUMMIT before

construction begins.

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.

This structure and all construction shall conform to all applicable sections of local building codes.

All structural assemblies are to meet or exceed to requirements

of the current local building code.

### FOUND ATIONS:

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 contacted before proceeding.

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, the bottom of all loads under the direction or recommendation of a licensed professional engineer.

The resulting soil shall be compacted to a minimum of 95%

maximum dry density. 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.

No concrete shall be placed against any subgrade containing

### 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.

Structural steel shall receive one coat of shop applied rust-inhibitive paint.

All steel shall have a minimum yield stress (F  $_{\! u}\!\!$  ) of 36 ksi unless otherwise noted.

Welding shall conform to the latest edition of the American

Welding Society's Structural Welding Code AWS D.I. Electrodes for shop and field welding shall be class ETØXX. All welding shall be performed by a certified welder per the above

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".

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 taraet values as follows:

3.2. Exterior Slabs: 5% No admixtures shall be added to any structural concrete without

Concrete slabs-on-grade shall be constructed in accordance with ACI 302.IR-96: "Guide for Concrete Slab and Slab Construction".

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.

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

Control or saw cut Joints shall be produced using conventional process within 4 to 12 hours after the slab has been finished

Reinforcing steel may not extend through a control joint. Reinforcing steel may extend through a saw cut joint. All welded wire fabric (WWF.) for concrete slabs-on-grade shall be placed at mid-depth of slab. The WWF, shall be securely supported during the concrete pour.

CONCRETE REINFORCEMENT:

1. Fibrous concrete reinforcement, or fibermesh, specified in concrete slabs-on-grade may be used for control of cracking due to shrinkage and thermal expansion/contraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.
Fibermesh reinforcing to be 100% virgin polypropylene fibers

containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement.

Application of fibermesh per cubic yard of concrete shall equal

a minimum of 0.1% by volume (1.5 pounds per cubic yard)
Fibermesh shall comply with ASTM CIII6, any local building code
requirements, and shall meet or exceed the current industry

standard. Steel reinforcing bars shall be new billet steel conforming to ASTM A615, grade 60.

ASITI Abib, grade 60.

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" 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

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. 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.

Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted

### WOOD FRAMING:

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 Southern-Yellow-Pine (SYP) 2.

LVL or PSL engineered wood shall have the following minimum

design values: 2.1. E = 1,900,000 psi

2.2. Fb = 2600 psi 2.4.Fc = 700 psi

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

Nails shall be common wire nails unless otherwise noted. Lag screws shall conform to ANSI/ASME standard B182.1-1981. Lead holes for lag screws shall be in accordance with NDS

specifications. All beams shall have full bearing on supporting framing members

unless otherwise noted.

Exterior and load bearing stud walls are to be 2x4 SYP \*2 \* 16" OC. 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.

Kina studs shall be continuous. king stude shall be continuous.

Individual stude forming a column shall be attached with one lod nail a 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. Multi-ply beams shall have each ply attached with (3) 10d nails \$\frac{1}{2}\$

Four and five ply beams shall be bolted together with (2) rows of 1/2" diameter through bolts staggered © 16" O.C. unless noted otherwise.

### WOOD TRUSSES:

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.

The wood trusses shall be designed for all required loadings as specified in the local building code, the ASCE Standard "Minimum Design Loads for Buildings and Other Structures." (ASCE 1-10), 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 shall be designed, fabricated, and erected in specification for Metal Plate Connected Wood Trusses."

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.

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:

Decks are to be framed in accordance with local building codes and as referenced on the structural plans, either through

UDOD STRUCTURAL PANELS:

I. 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

All structurally required wood sheathing shall bear the mark of

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.

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.

Wood floor sheathing shall be APA rated sheathing exposure I or 2. Attach sheathing to its supporting framing with (I)-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 T4G plywood or lumber blocking unless otherwise noted. Panel and joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
Sheathing shall have a 1/8" gap at panel ends and edges as

### TRUCTURAL FIBERBOARD PANELS:

Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards. All structurally required fiberboard sheathing shall bear the

Fiberboard wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more

Sheathing shall have a 1/8" gap at panel ends and edges are

SUMMIT





DATE: ØVII/2Ø19 SCALE: 22x34 1/4"+1"-@" ||x|T 1/8"+1"-@" DRAWN BY: EMB CHECKED BY: WAJ

ORIGINAL INFORMATION
PROJECT P DATE

REFER TO COVER SHEET FOR A

TYP. FOUNDATION WALL DETAIL

FTG. WIDTH CHARTS

STANDARD - BRICK

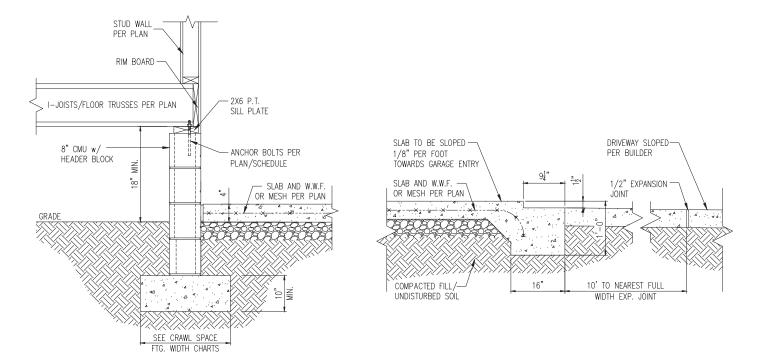
SLAB AT GARAGE DOOR

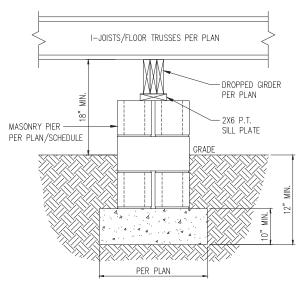
FTG. WIDTH CHARTS

STANDARD - SIDING

HOUSE/GARAGE WALL DETAIL

TYP. GARAGE CURB DETAIL





STANDARD - SIDING

TYP. PIER & GIRDER DETAIL

## PIER SIZE AND HEIGHT SCHEDULE

	HOLLOW	SOLID				
8"X16"	UP TO 32" HEIGHT	UP TO 5'-0" HEIGHT				
12"X16"	UP TO 48" HEIGHT	UP TO 9'-0" HEIGHT				
16"X16"	UP TO 64" HEIGHT	UP TO 12'-0" HEIGHT*				
24"X24"	UP TO 96" HEIGHT	UP TO 12'-0" HEIGHT*				
*(4) #4 CONT. REBAR w/ #3 STIRRUPS @ 16" O.C.						
AND 24"	MIN. LAP JOINTS					

STANDARD - BRICK

## CRAWL SPACE FOOTING WIDTH

ONAME SI AGE I GOTING MID III					
# OF STORIES	WIDTH BASED ON SOIL BEARING CAPACITY				
	1500 PSF	2000 PSF	2500 PSF		
1 STORY - STD.	16"	16"	16"		
1 STORY - BRICK VENEER	21"*	21"*	21"*		
2 STORY - STD.	16"	16"	16"		
2 STORY - BRICK VENEER	21"*	21"*	21"*		
3 STORY - STD.	23"	18"	18"		
3 STORY - BRICK VENEER	32"*	24"*	24"*		
*5" BRICK LEDGE HAS BEEN ADDED TO THE CRAWL SPACE FOOTING WIDTH FOR BRICK SUPPORT					

## WALL ANCHOR SCHEDULE

11/ALL	ANOHOR SOFIEDOLL				
TYPE	OF ANCHOR	MIN. CONC.	SPACING	INTERIOR	EXTERIOR
		EMBEDMENT	EMBEDMENT	WALL	WALL
1/2"ø	A307 BOLTS w/	7"	6'-0"	YES	YES
STD. 9	90° BEND				
SST -	MAS	4"	5'-0"	NO	YES
HILTI I	KWIK BOLT KBI 1/2-2-3/4	2-1/4"	6'-0"	YES	NO
1/2"ø	HILTI THREADED ROD	7"	6'-0"	YES	YES
w/ HI	T HY150 ADHESIVE				

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

- 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 N1102.2.10 OF THE 2018 NCRC

SUMMIT 3070 HAMMOND BUSINES: PLACE; SUITE 171 RALEIGH, NC 27603 OFFICE: 919.380.9991 FAX: 919.380.9993 WWW.SUMMIT-COMPANIES.0

TH CAR SUMMIT

tails Det PROJECT: Standard D Crâwl



DATE: ØVII/2Ø19 SCALE: 22x34 1/4"+1"-@" llxi1 1/8"+1"-@" PROJECT \*: 424@5@@ DRAWN BY: EMB CHECKED BY: WAJ

PROJECT DATE

REFER TO COVER SHEET FOR A

Dic

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





CLIENT:
MCKee Homes LLC
MOS Hay Street, Suite 36
Fayetteville, NC 28301

PROJECT: Standard Details Frâming Details



ORIGINAL INFORMATION
PROJECT P DATE

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

Dlf