

# BUFFINGTON

CANE MILL ESTATES  
LOT 14



PLAN ID: 060120.1201



110 VILLAGE TRAIL SUITE 215  
WOODSTOCK, GA. 30188

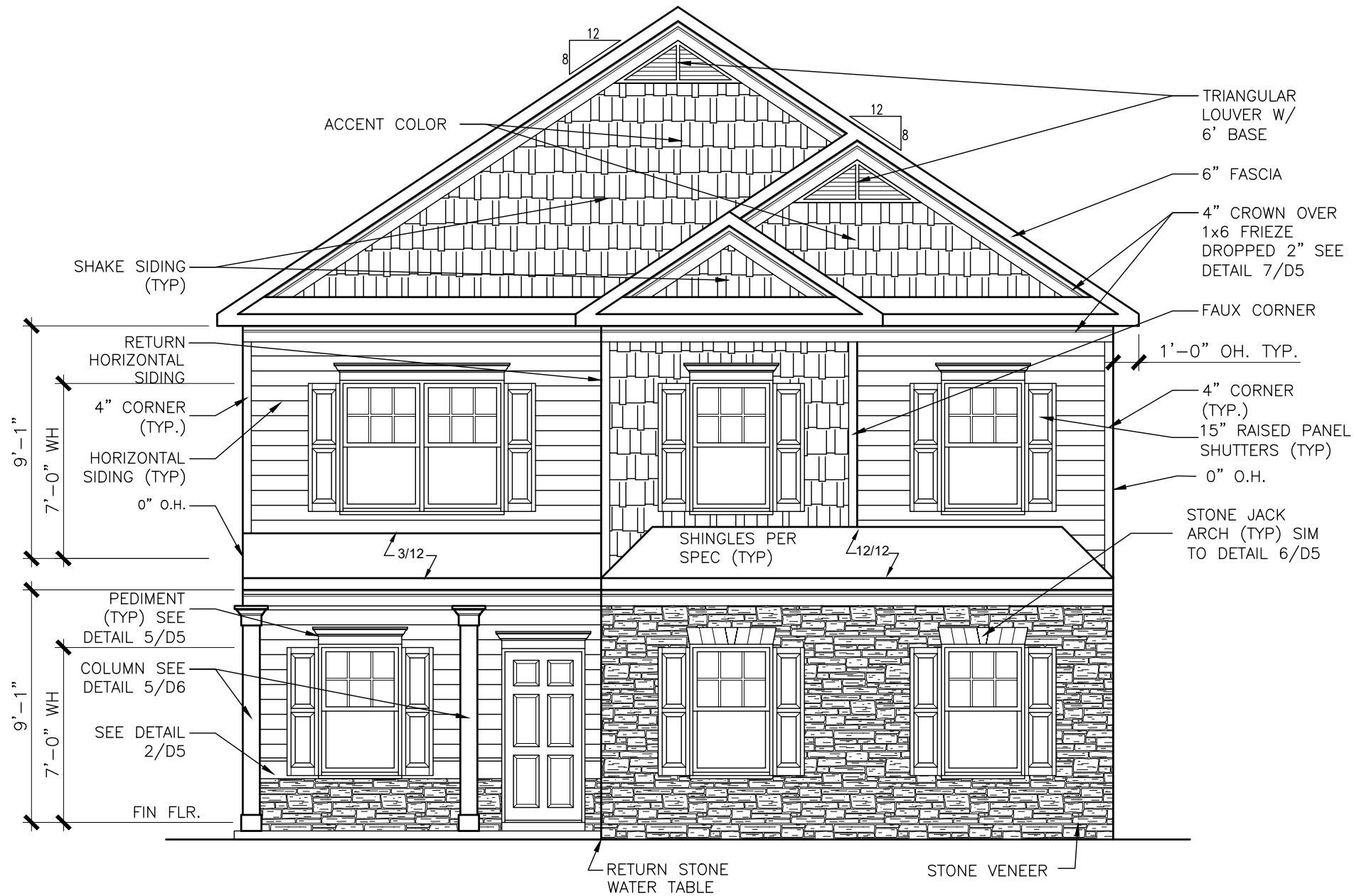
DRAWING INDEX	
A0.0	COVER SHEET
A1.1	FRONT ELEVATIONS
A2.1	SIDE & REAR ELEVATIONS
A3.1	SLAB FOUNDATIONS
A5.1	FIRST FLOOR PLANS & DETAILS
A5.2	SECOND FLOOR PLANS & DETAILS
A6.1	ROOF PLANS
A7.2-A7.3	ELECTRICAL PLANS
A8.1	TRIM LOCATION LAYOUTS

AREA TABULATION	
FIRST FLOOR	1100
SECOND FLOOR	1448
TOTAL	2548
GARAGE	400
FRONT PORCH (COVERED)	86
REAR PATIO	9

PLAN REVISIONS			
DATE	BY	REVISION	PAGE #
10/2/2019	AW	PCR #3254 Reduced island framing depth 1" to accommodate 48" countertop.	A1.5
10/2/2019	AW	PCR #3256 showed Obath switches on door adjacent to W.I.C.	A7.3
10/2/2019	AW	PCR #3247 Added 3-way switches to Owner's Suite light when optional Laundry door is chosen	A7.3
10/8/2019	AW	PCR #3292 moved kitchen light switches over to clear backsplash bullnose on wall adjacent to stairs	A7.2
10/16/2019	AW	Revised location for tankless hot water heater	A3.1, A5.1, A7.2
11/1/2019	AW	PCR #3314 Relocated switch to attic light for the B&C roof massings	A7.2
2/26/2020	AW	PCR #3638 Added 1x10 on front elevations M & T	A1.16, A1.19
6/1/2020	MM	PCR #3765 Added note to return veneer ILO siding on second floor returns above front door.	A1.6, A1.11, A1.15, A1.17
8/11/2020	AW	Updated elevs M & T to remove cedar columns	A1.16, A1.19
10/1/2020	AW	PCR #4084 Removed opt. fireplace in corner location (for 10/1/20 release)	A3.1, A5.1, A7.2, A8.1
11/6/2020	MM	Removed overhang at front porch	A1.1-A1.19, A6.1-A6.1.2
12/1/2020	MM	Shifted upper run of stairs 2" from landing towards outside of house	A5.1, A5.2
12/1/2020	MM	PCR #4239 Changed 2x6 walls at Owner's Bath vanity & WC exterior wall to 2x4 walls	A5.2, A5.2.1

GOVERNMENTAL CODES & STANDARDS
HOME TO BE BUILT TO CONFORM TO ALL APPLICABLE LOCAL CODES, PRACTICES AND STANDARDS
BUILDING CODE ANALYSIS / DESIGN CRITERIA
HOME TO BE BUILT TO MEET OR EXCEED ALL LOCAL CODES AND DESIGN CRITERIA

# CANE MILL ESTATES LOT 14



FRONT ELEVATION "B"

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

ALL NON-MASONRY RETURNS TO  
BE HORIZONTAL SIDING

SEE SHEET D3 OF SDH TYPICAL  
DETAILS FOR SOFFIT DETAILS PER  
SOFFIT MATERIAL

REV	BY	DATE	REVISION
#	#	#	#
#	#	#	#
#	#	#	#
#	#	#	#
#	#	#	#



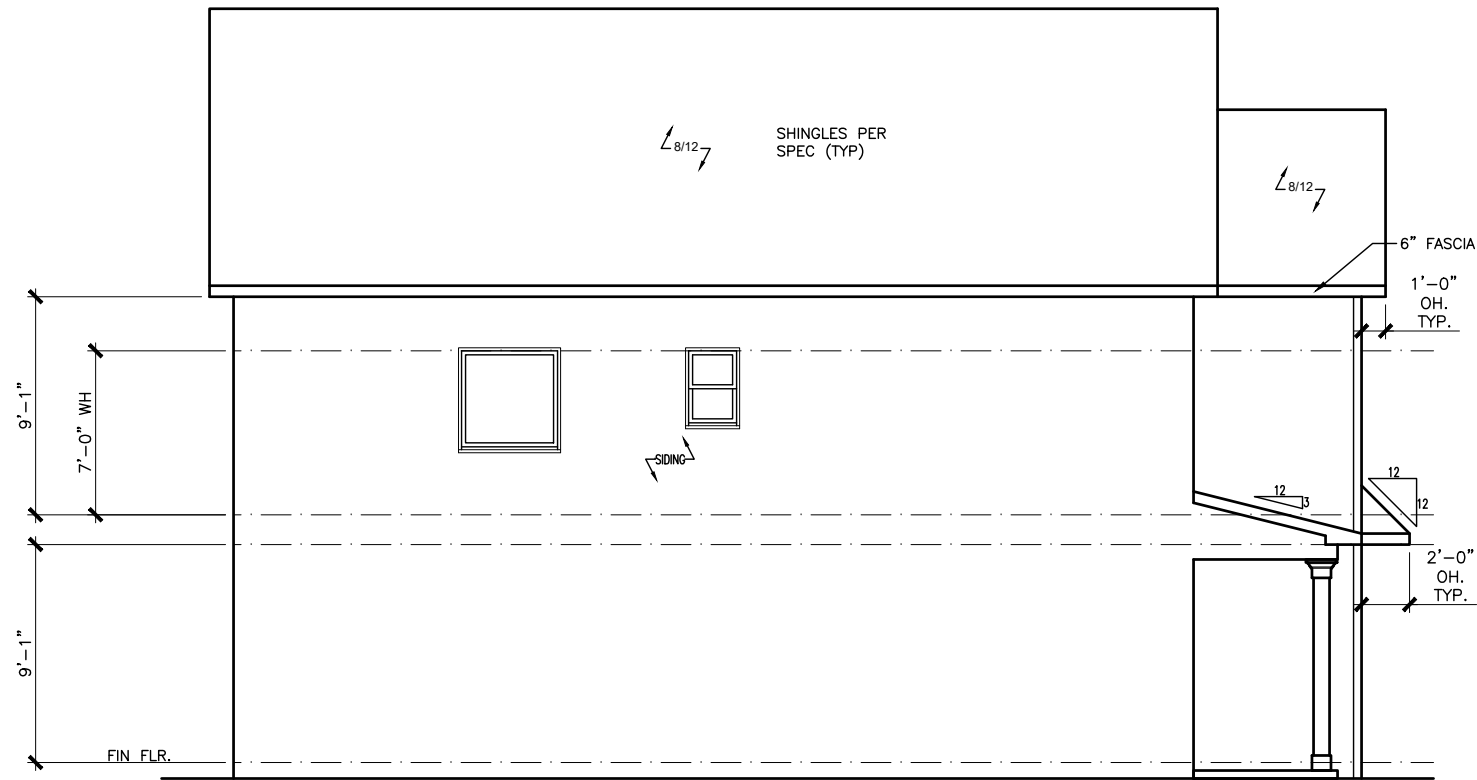
ELEVATIONS  
FRONT ELEVATION  
BUFFINGTON

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES  
expressly reserves its  
property rights in these  
plans and drawings.  
These plans and related  
drawings are not to be  
reproduced without written  
consent from SMITH  
DOUGLAS HOMES.

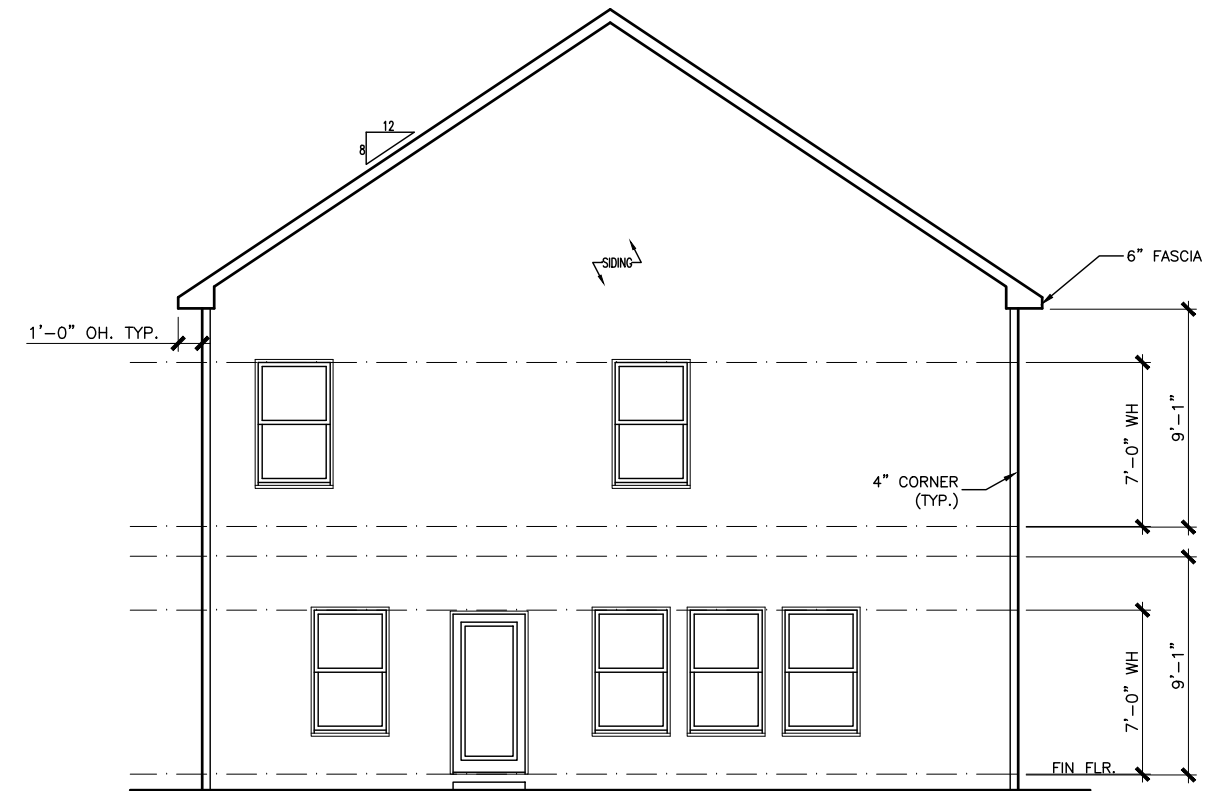
BY: BB	CHK: AW
DATE: 4/2/21	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A1.1	

# CANE MILL ESTATES LOT 14



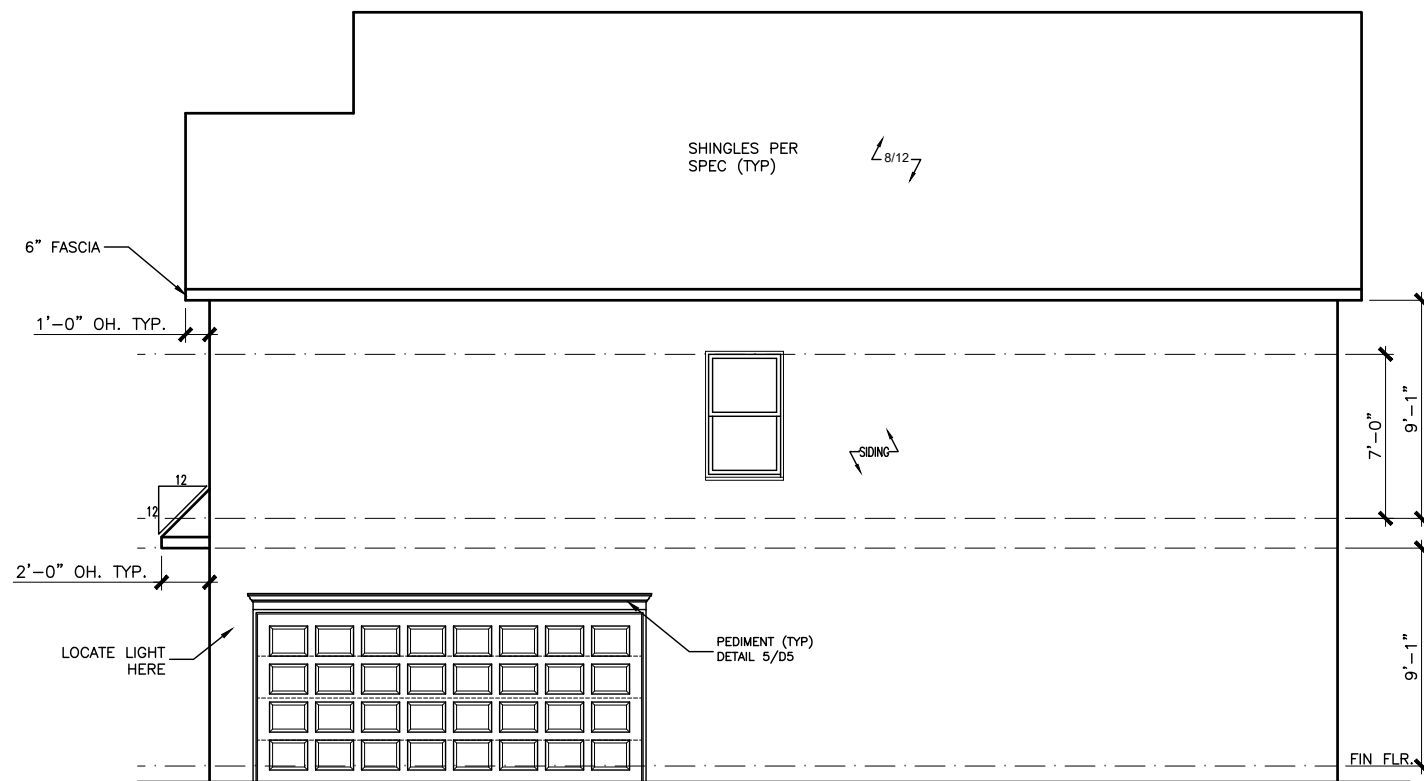
LEFT ELEVATION "B"

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



REAR ELEVATION "B"

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



RIGHT ELEVATION "B"

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

BY	#	REVISION	DATE



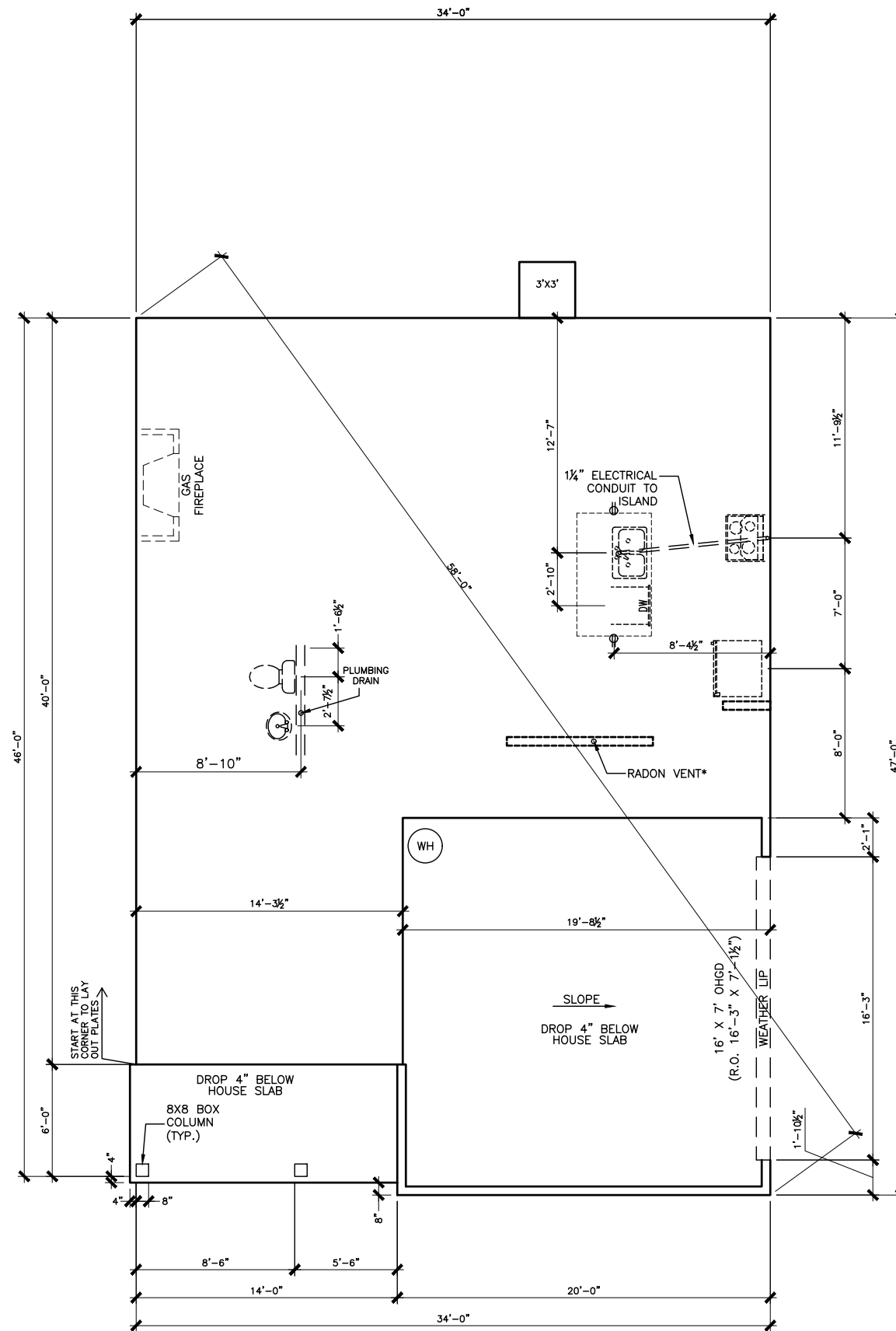
ELEVATIONS  
SIDES AND REAR  
BUFFINGTON

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: BB	CHK: AW
DATE: 4/2/21	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A2.1	

# CANE MILL ESTATES LOT 14



\*RADON VENT PROVIDED  
PER LOCAL CODE

REFER TO DETAIL 3/D1  
FOR BRICK LEDGE  
DETAIL WHEN BRICK  
VENEER IS CHOSEN

## SLAB PLAN

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

DATE	REVISION	BY



FOUNDATION PLAN  
SLAB PLAN  
BUFFINGTON

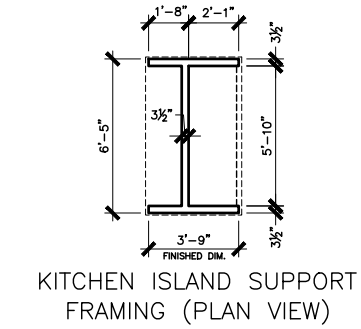
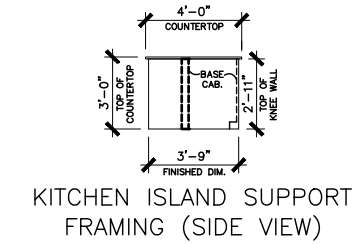
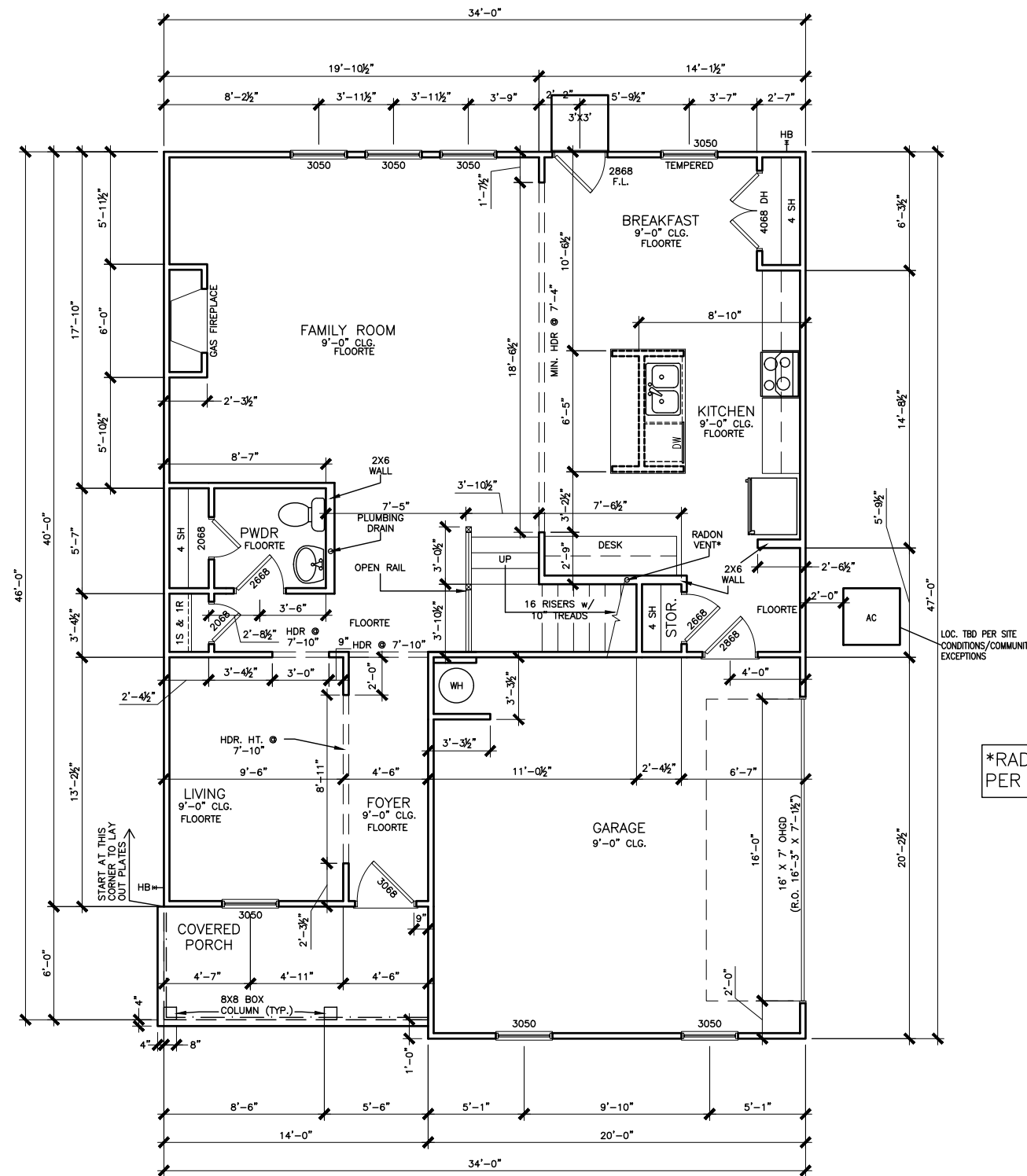
SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES  
expressly reserves its  
property rights in these  
plans and drawings.  
These plans and related  
drawings are not to be  
reproduced without written  
consent from SMITH  
DOUGLAS HOMES.

BY: BB	CHK: AW
DATE: 4/2/21	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A3.1	

# CANE MILL ESTATES

## LOT 14



\*RADON VENT PROVIDED PER LOCAL CODE

FIRST FLOOR PLAN

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

DATE	REVISION

**SMITH DOUGLAS HOMES**  
QUALITY | INTEGRITY | VALUE

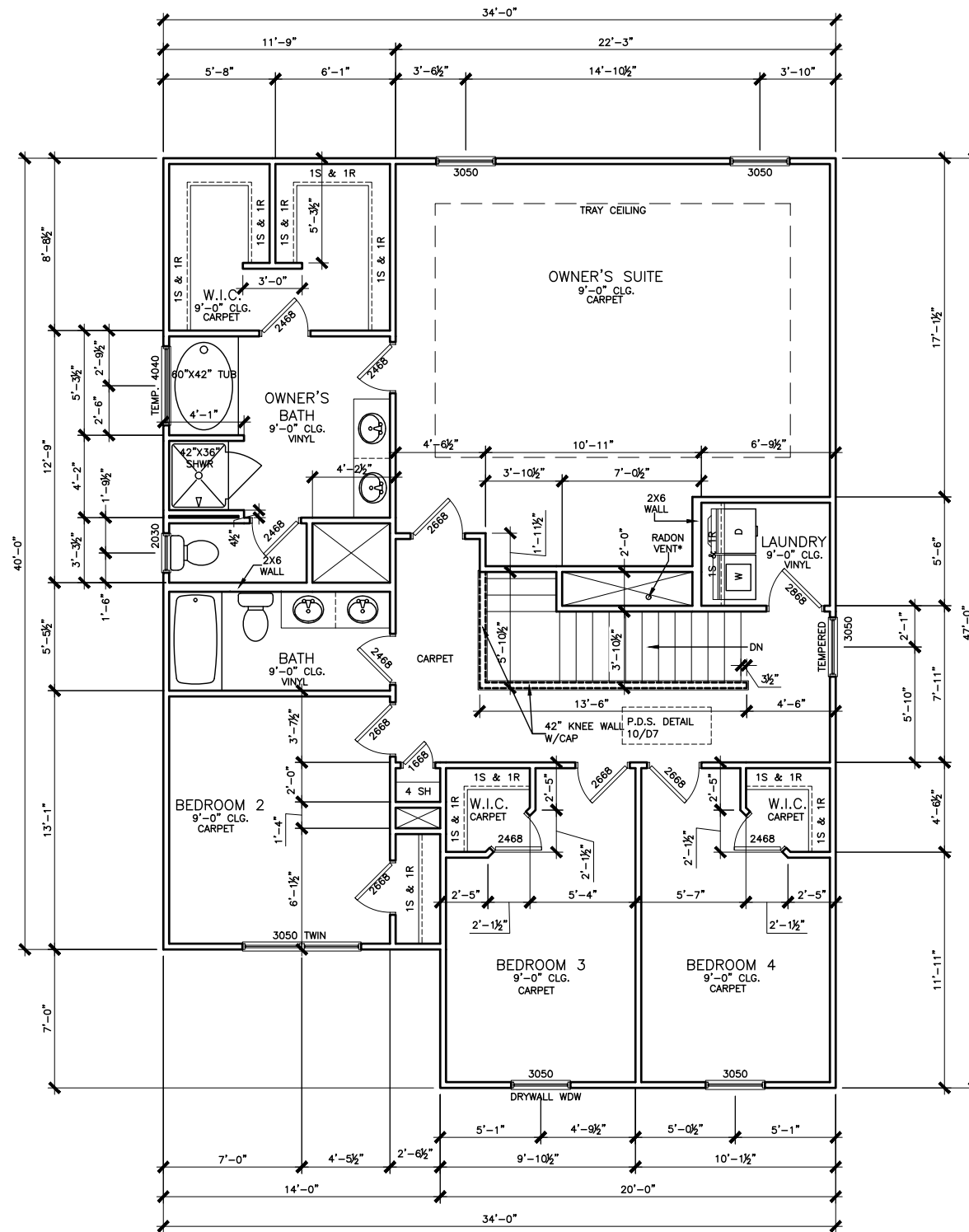
FLOOR PLAN  
FIRST FLOOR  
BUFFINGTON

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: BB	CHK: AW
DATE: 4/2/21	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A5.1	

# CANE MILL ESTATES LOT 14



\*RADON VENT PROVIDED  
PER LOCAL CODE

REFER TO MANUFACTURER'S SPECS.  
FOR DRAIN LOCATIONS ON DETAIL  
SHEETS D12, D12.1, D12.2 & D12.3

SECOND FLOOR PLAN

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

BY	#	REVISION	DATE

**SMITH DOUGLAS HOMES**  
QUALITY | INTEGRITY | VALUE

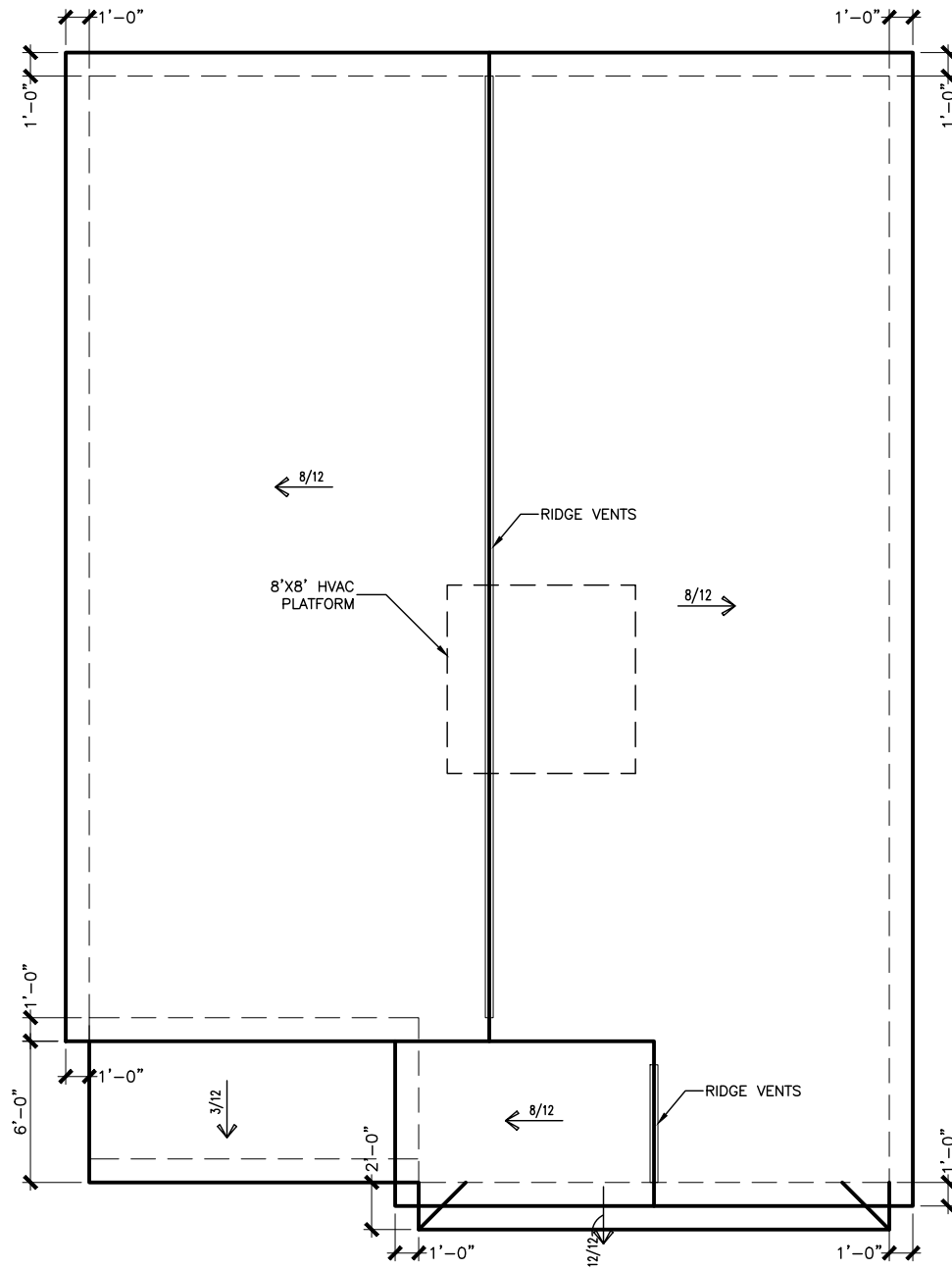
FLOOR PLANS  
**SECOND FLOOR**  
BUFFINGTON

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES  
expressly reserves it's  
property rights in these  
plans and drawings.  
These plans and related  
drawings are not to be  
reproduced without written  
consent from SMITH  
DOUGLAS HOMES.

BY: BB    CR: AW  
DATE: 4/2/21  
FACADE OPT: B  
PLAN ID:  
FND: ALL    ELEV: B  
PAGE NO: A5.2

# CANE MILL ESTATES LOT 14



ROOF LAYOUT "B"

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

DATE	REVISION	BY
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#



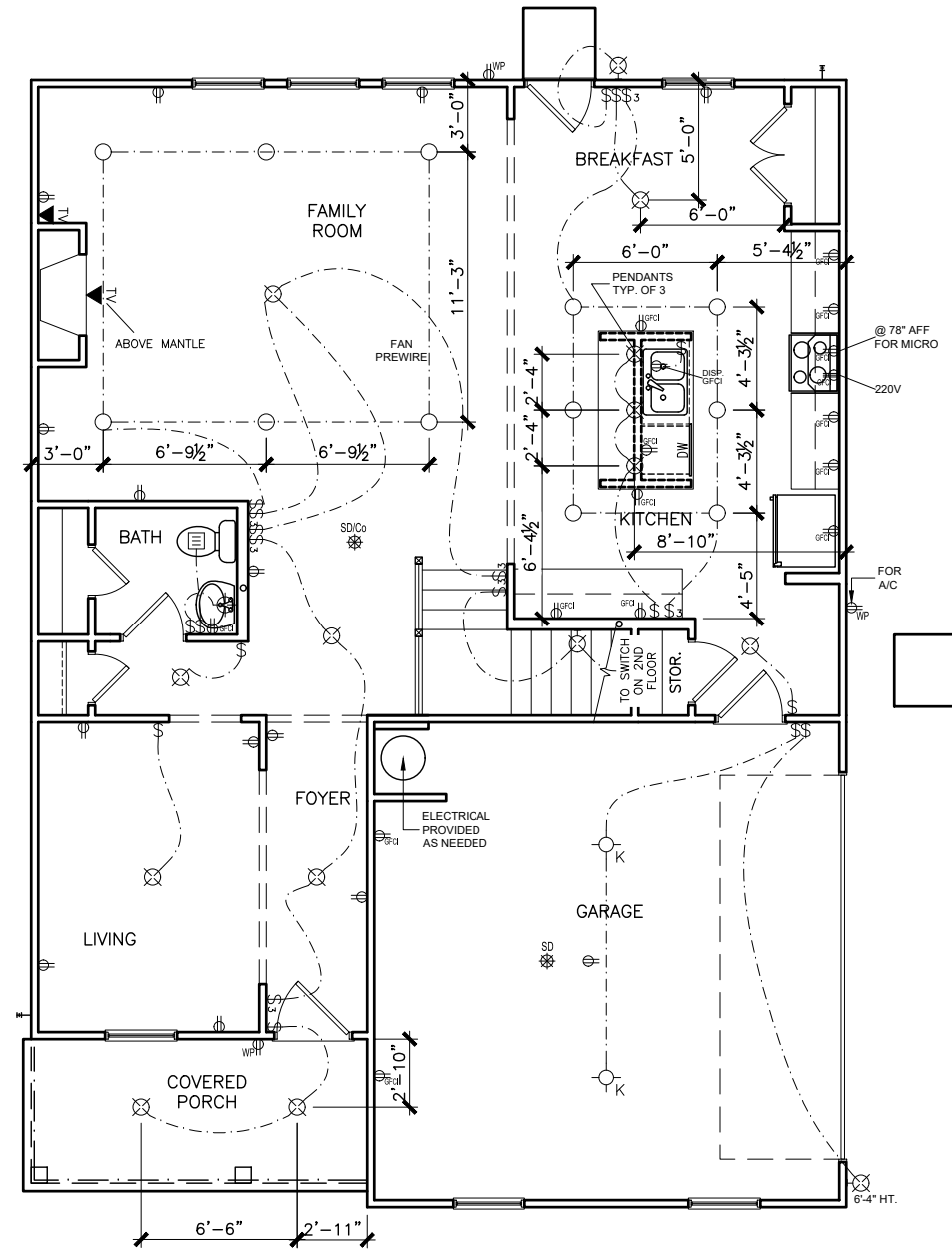
ROOF PLAN  
ROOF PLAN  
BUFFINGTON

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: BB	CHK: AW
DATE: 4/2/21	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A6.1	

# CANE MILL ESTATES LOT 14



## ELECTRICAL LEGEND

\$	SWITCH	TV	TV
\$3	3 WAY SWITCH	⊕	120V RECEPTACLE
\$4	4 WAY SWITCH	⊕	120V SWITCHED RECEPTACLE
⊗	CEILING FIXTURE	⊕	220V RECEPTACLE
⊕ <sub>K</sub>	KEYLESS	⊕ <sub>GFCI</sub>	GFCI OUTLET
⊗	WALL MOUNT FIXTURE	⊕ <sub>AFCI</sub>	ARCH FAULT CIRCUIT INTERRUPTER
○	CEILING FIXTURE	† <sub>GL</sub>	GAS LINE
●	FLEX CONDUIT	† <sub>WL</sub>	WATER LINE
CH	CHIMES	⊥	HOSE BIBB
PH	TELEPHONE	⊕	FLOOD LIGHT
SD/Co	SMOKE DETECTOR & CARBON MONOXIDE	⊕	1x4 LUMINOUS FIXTURE
SO	SECURITY OUTLET	⊗	CEILING FAN
□	GARAGE DOOR OPENER	—	ELECTRICAL WIRING
⊕	EXHAUST FAN	⊕	CEILING FIXTURE
⊕	FAN/LIGHT		

ELECTRICAL PLANS TO FOLLOW ALL LOCAL CODES

APPROX. FIXTURE HGTS (MEASURED FROM BOTTOM OF FIXTURE)

BREAKFAST/DINING ROOM	63" ABOVE FINISHED FLOOR
KITCHEN PENDANT LIGHTS	33" ABOVE COUNTER TOP
TWO STORY FOYER FIXTURE	96" ABOVE FINISHED FLOOR
CEILING FAN	96" ABOVE FINISHED FLOOR

NOTE: FINAL PLACEMENT OF PHONE/CABLE T.B.D. ON SITE BY THE BUILDER

FIRST FLOOR ELECTRICAL PLAN

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

BY	#	#	#	#	#
REVISION					
DATE					



ELECTRICAL PLAN  
FIRST FLOOR  
BUFFINGTON

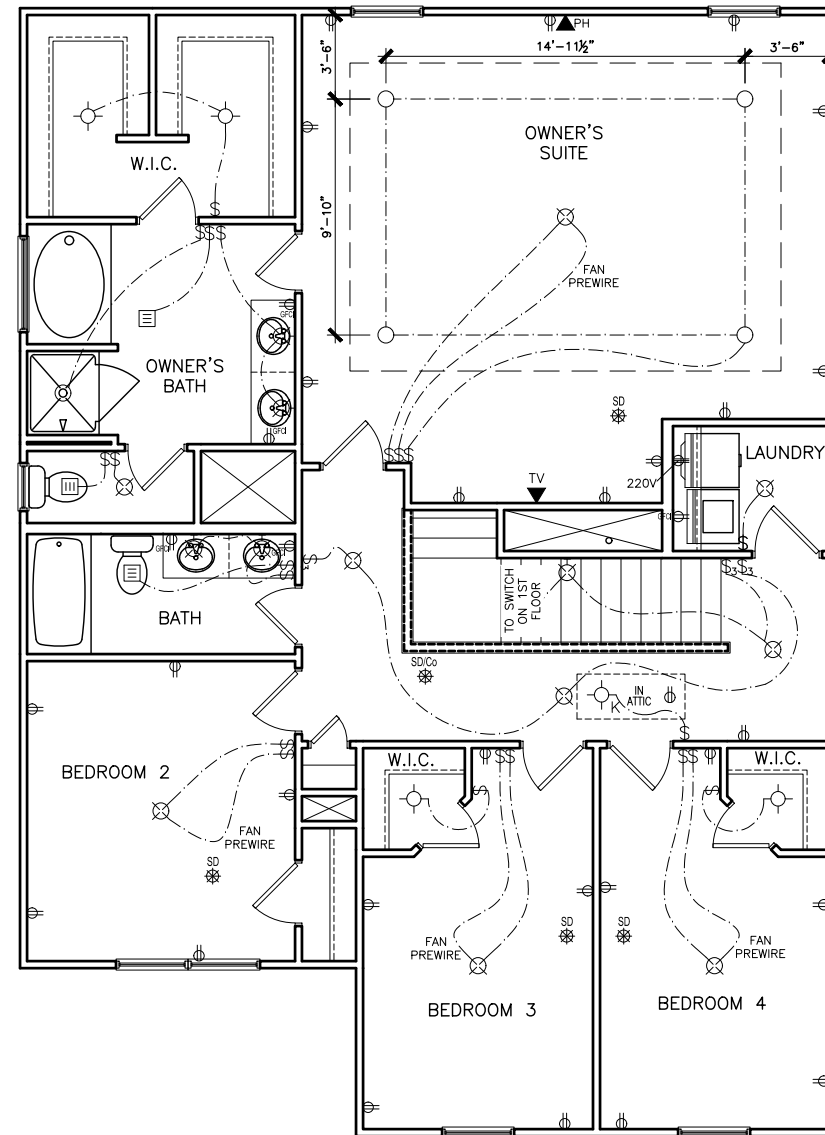
SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY:	BB	CHK:	AW
DATE:	4/2/21		
FACADE OPT:	B		
PLAN ID:			
FND:	ALL	ELEV:	B
PAGE NO:	A7.2		



# CANE MILL ESTATES LOT 14



ELECTRICAL LEGEND			
\$	SWITCH	TV	TV
\$3	3 WAY SWITCH	⊕	120V RECEPTACLE
\$4	4 WAY SWITCH	⊕	120V SWITCHED RECEPTACLE
⊗	CEILING FIXTURE	⊕	220V RECEPTACLE
⊕	KEYLESS	⊕	GFCI OUTLET
⊗	WALL MOUNT FIXTURE	⊕	ARCH FAULT CIRCUIT INTERRUPTER
○	CEILING FIXTURE	†	GAS LINE
●	FLEX CONDUIT	†	WATER LINE
CH	CHIMES	⊥	HOSE BIBB
PH	TELEPHONE	⊕	FLOOD LIGHT
SD/Co	SMOKE DETECTOR & CARBON MONOXIDE	⊕	1x4 LUMINOUS FIXTURE
SO	SECURITY OUTLET	⊕	CEILING FAN
□	GARAGE DOOR OPENER	—	ELECTRICAL WIRING
⊕	EXHAUST FAN	⊕	CEILING FIXTURE
⊕	FAN/LIGHT		

ELECTRICAL PLANS TO FOLLOW ALL LOCAL CODES

APPROX. FIXTURE HGTS (MEASURED FROM BOTTOM OF FIXTURE)

BREAKFAST/DINING ROOM	63" ABOVE FINISHED FLOOR
KITCHEN PENDANT LIGHTS	33" ABOVE COUNTER TOP
TWO STORY FOYER FIXTURE	96" ABOVE FINISHED FLOOR
CEILING FAN	96" ABOVE FINISHED FLOOR

NOTE: FINAL PLACEMENT OF PHONE/CABLE T.B.D. ON SITE BY THE BUILDER

BY	#	REVISION	DATE



ELECTRICAL PLAN  
SECOND FLOOR  
BUFFINGTON

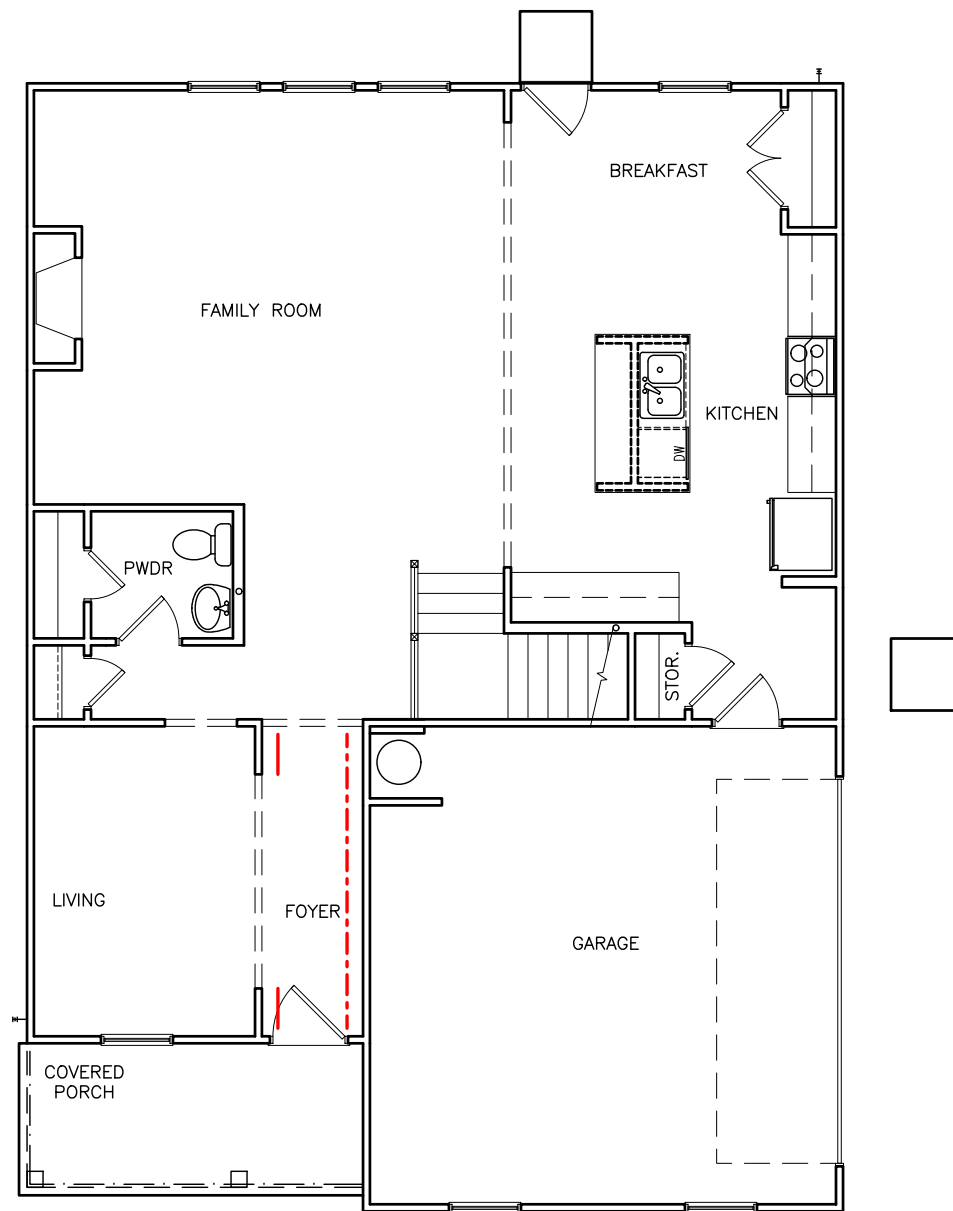
SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: BB	CHK: AW
DATE: 4/2/21	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A7.3	

SECOND FLOOR ELECTRICAL PLAN  
SCALE: 1/8" = 1'-0"

# CANE MILL ESTATES LOT 14



TRIM LAYOUT FIRST FLOOR PLAN

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

DATE	REVISION	BY
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#



FLOOR PLAN  
TRIM LAYOUT  
BUFFINGTON

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: BB	CHK: AW
DATE: 4/2/21	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A8.1	

# CANE MILL ESTATES LOT 14

Lot Definition		
<b>Project:</b> Cane Mill Estates <b>Building:</b> 000 <b>Unit:</b> 0014	<b>Community:</b> Cane Mill Estates <b>Builder:</b> Thomas Kenneth Barlow <b>Status:</b> Sold	
<b>Plan:</b> Buffington B Side Entry <b>Orientation:</b> Garage Right <b>Bedrooms:</b> 4 <b>Address:</b> 302 Planters Lane Coats NC 27521	<b>RTeam:</b> Raleigh West <b>Sq. Ft:</b> 2,548 <b>Bathrooms:</b> 2.5 <b>Permit:</b> <b>Notes:</b>	
<b>Sales Data</b>	<b>Dates</b>	
Contract: 88913 Buyer: Jahsiale Williams Sales Agent: Sam Fulmer	Ratified: 03/27/2021 Original Start: 03/29/2021 Start: 03/29/2021 Scheduled Complete: 08/09/2021	
<b>Option</b>	<b>Description</b>	<b>Quantity</b>
1 Ceiling Fixture Light Wet or Dry	Add One Low Profile Flush Mount LED Light on One Single Switch. This Option can be used in a Wet or Dry Location. Locations to be noted on exhibit for Electrician. NOTE: Option cannot be used to replace light fixtures at a specific location.	1
36" Cabinet (0) Standard	Note: Bath cabinets to match	1
Additional Cable Outlet		1
Automatic Garage Door Opener	Garage Door Opener - Per Door	1
Blind for Rear/Back Door	Blinds - Additional blind to cover rear/back door.	1
Blind per Optional 3050 Single Window	One 3050 blind. For use when you've added a 3050 optional window. See Optional Windows Sales Guide on the Process Model for assistance.	1
Blinds for Base House	Includes blinds for all standard windows on front, sides, and rear that are operational and accessible. Does not include blinds for any optional windows, including windows for optional second floors.	1
Chrome Interior Finish Color Package	Includes chrome kitchen faucet, bath faucets, & fixtures, brushed nickel door hardware (hinges, bumps, knobs/levers, deadbolts), Pkg1 (two) lighting fixtures, & pewter oval mirror. Separate options also affected: shower door, bath hardware (towel bar/ring, tp holder), shower grab bar, cabinet hardware	1
Decorative 4040 Picture Window	Replace clear 4040 Window over Master Garden Tub with Decorative 4040 Picture Window. NOTE: This option cannot be used with the large fig shower option, the large tile shower option, or on any plan/jobs that otherwise does not have a 4040 clear window over Master Garden Tub.	1
Family/Great Room Ceiling Fixture Lights	Family/Great Room Lights - Low Profile Flush Mount LED Lights per plan.	1
User Name: Victoria Wicker 1 of 3 04/01/2021 Database: SmithDouglasCommunities 09:26:56 AM		

Lot Definition		
Fireplace in Family Room - Gas		1
FIPkg 5AA-Floorte Pro, StdCpt (FIPkg1)	Flooring Package 5AA - Floorte Pro, Standard Carpet (from Package 1). SPC (solid polymer core) 0.5 mm vinyl top layer plank	1
FirPkg Opt-Powder Floorte Pro	Flooring Package - Option Powder Room LVP SPC (solid polymer core) 0.5 mm vinyl top layer plank	1
Foyer - Chair Rail/Shadow Box		1
Granite-Kitchen Countertops - Lvl 1 (0)	Kitchen Granite Countertops - Level 1 where Laminite is Std.	1
Granite-Kitchen Sink Level 1	Level 1 Undermount rectangular stainless steel sink upgrade for kitchen granite.	1
G-Tub & PF Shower FD OBATHC	(Garden tub and separate shower with framed door ILO of Large prefab shower - (obathc))	1
Hall Bath Marble 1 Double Ilo LamSgl	***Includes Vanity Double Bowl Option Do Not Select Both***	1
Kitchen Ceiling Fixture Lights ILO Std	Kitchen Lights - Low Profile Flush Mount LED Lights per Plan ILO Standard Light.	1
Level 2 - Package Electric (from E1)	Frigidaire SS 24" Dishwasher*** Frigidaire SS 1.8 Cu. Ft. Micro Frigidaire SS 30" Elec Range	1
Open Rail 1st Floor - Iron		1
Owner Bath Marble 1 Double Ilo LamSgl	***Includes Vanity Double Bowl Option Do Not Select Both***	1
Owner Bath Water Closet Window	2030 Single Window for Owner Bath Water Closet. NOTE: Blind not included.	1
Owner's Bedroom Ceiling Fixture Lights	Owner's Bedroom Lights - 4 Low Profile Flush Mount LED Lights.	1
Paint Interior Ceiling White		1
Paint Wall/Ceiling Color Upgrade	Upgrade Interior Paint Color on Walls and Ceilings for the whole house in lieu of base color	1
Pendant Lights per Plan	Pendant Lights above Island/Bar Top per plan electrical diagram. To match lighting package selected. NOTE: Choose this option only once.	1
PreWire for Ceiling Fan	Pre-wire a light location for a future ceiling fan.	3
Screen Per Optional 3050 Window	Note: If the optional window is a 3050 twin, it needs two screens.	1
Screens Base House Single Family	Add window screens to all operable standard windows on single family home. NOTE: Does not include screens for windows for optional 2nd-floors, side entry garage, or windows added or changed from structural options, optional windows, or basement windows. See additional options to complete screens.	1
Stone 20 A ExtCoPkg(f)		1
Tray Ceiling - Owner's Bedroom		1
Window in Hallway	Optional Window in Hallway. Does not include Blind.	1
User Name: Victoria Wicker 2 of 3 04/01/2021 Database: SmithDouglasCommunities 09:26:56 AM		

Lot Definition		
Activity	Description	Selection Description
Del&Install AppliancePkg	Appliance Package Select - All	Appliance Package Selected
Deliver & Install Blinds	Blind Color	White
Deliver Windows-FirstOut	4040 Decorative Privacy Window	Prairie DF4747PRAI
Install Cabinets Complet	Cabinet Finish - Standard Arts	Standard-Sinclair Birch- Saddle
Install Cabinets Complet	Secondary Bath Vanity Tops-All	Selection not Needed
Install Carpet	Carpet - Standard ALL	Smith Grove II Trade Wind 00502
Install Floorte Pro (LP)	Floorte Pro 1stLggr ALL	Presto Plus - 509 Washed Oak
Install Granite Tops	RDU Granite Counter/KitchenLvl1	Daltile-New Caledonia
Install Granite Tops	Rectangular SS sink LVL 1	5050 Double Bowl Sink
Install Marble Tops	RDU Marble Vanity Top Lvl 1	Matte-#153 White w/ice Grey w/oval bowl
Paint Interior Complete	Interior Paint (Walls) - Upgrd	SW 7029 Agreeable Gray
PM Install Vinyl Floor	VinylPkg-Owner Bath	Highlands Stronghold 529
PM Install Vinyl Floor	VinylPkg-Std 2nd Baths/Laundry	Highlands Stronghold 529
Stain Handrails	Hand Rail Stain - All	MW-Toasted Barrel [LVP-509 Washed Oak]
User Name: Victoria Wicker 3 of 3 04/01/2021 Database: SmithDouglasCommunities 09:26:56 AM		

BY	#	DATE	REVISION



DETAILS  
LOT DEFINITION  
BUFFINGTON

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: BB	CHK: AW
DATE: 4/2/21	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A9.1	

DESIGN SPECIFICATIONS:

Construction Type: Commercial  Residential 
Applicable Building Codes:
• 2018 North Carolina Residential Building Code
• ASCE 7-10: Minimum Design Loads for Buildings and Other Structures

- Design Loads:
1. Roof
1.1 Live..... 20 PSF
1.2 Dead..... 10 PSF
1.3 Snow..... 15 PSF
1.3.1 Importance Factor..... 1.0
2. Floor Live Loads
2.1 Typ. Dwelling..... 40 PSF
2.2 Sleeping Areas..... 30 PSF
2.3 Balconies (exterior) and Decks..... 40 PSF
2.4 Garage Parking..... 50 PSF
3. Floor Dead Loads
3.1 Conventional 2x..... 10 PSF
3.2 I-Joist..... 15 PSF
3.3 Floor Truss..... 15 PSF
4. Ultimate Wind Speed (3 sec. gust)..... 130 MPH
4.1 Exposure..... B
4.2 Importance Factor..... 1.0
4.3 Wind Base Shear
4.3.1 Vx =
4.3.2 Vy =
4.3.2 Vx =
4.3.2 Vy =
5. Component and Cladding (in PSF)

Table with 6 columns: MEAN ROOF HT., UP TO 30', 30'1"-35', 35'1"-40', 40'1"-45'. Rows ZONE 1 to ZONE 5.

- 6. Seismic
6.1 Site Class.....D
6.2 Design Category.....C
6.3 Importance Factor.....1.0
6.4 Seismic Use Group.....1
6.5 Spectral Response Acceleration
6.5.1 Sms = %g
6.5.2 Sm1 = %g
6.6 Seismic Base Shear
6.6.1 Vx =
6.6.2 Vy =
6.7 Basic Structural System (check one)
[ ] Bearing Wall
[ ] Building Frame
[ ] Moment Frame
[ ] Dual w/ Special Moment Frame
[ ] Dual w/ Intermediate R/C or Special Steel
[ ] Inverted Pendulum
6.8 Arch/Mech Components Anchored?.....No
6.9 Lateral Design Control: Seismic [ ] Wind [ ]
7. Assumed Soil Bearing Capacity.....2000psf



STRUCTURAL PLANS PREPARED FOR:
BUFFINGTON

PROJECT ADDRESS: TBD
OWNER: Smith Douglas Homes - Raleigh
2520 Reliance Ave.
Apex, NC 27539
ARCHITECT/DESIGNER: Smith Douglas Homes
110 Village Trail, Suite 215
Woodstock, GA 30188

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:

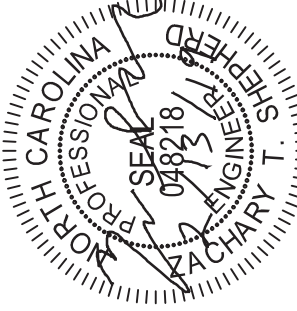
Table with 4 columns: Abbreviation, Full Name, Unit, Notes. Includes AB Anchor Bolt, ACI American Concrete Institute, etc.

SHEET LIST:

Table with 3 columns: Sheet No., Description, Cover Sheet, Specifications, Revisions. Lists sheets CS1 through S8.0.

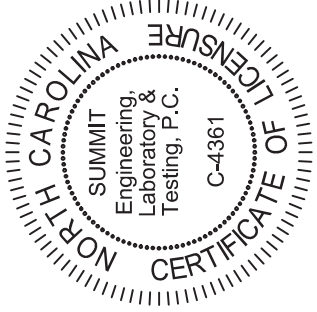
REVISION LIST:

Table with 4 columns: Revision No., Date, Project No., Description. Lists revisions 1 and 2.



Cane Mill Lot 14

STRUCTURAL MEMBERS ONLY



PROJECT: Buffington
CLIENT: Smith Douglas Homes - Raleigh
2520 Reliance Ave.
Apex, NC 27539
CoverSheet

CURRENT DRAWING
DATE: 2/13/19
SCALE: 1/8"=1'-0"
PROJECT #: 3832.202R
DRAWN BY: ZTS
CHECKED BY: WAJ
ORIGINAL DRAWING
DATE: 12/11/15
PROJECT#: 3832.09

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

CS1 SHEET

#### 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 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 the 2018 North Carolina Residential Code (NRC) and any local codes or restrictions

#### FOUNDATIONS:

- Foundations shall be constructed in accordance with chapter 4 of the 2018 NC Residential Building Code (Special consideration shall be given to Chapter 45 in wind zones above 130mph)
- 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
- Maximum depth of unbalanced fill against masonry walls to be as specified in section R404.1 of the 2018 NRC
- 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.
- Any fill shall be placed 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 water, ice, frost, or loose material.
- Each crawl space pier shall bear in the middle third of its respective footing and each girder shall bearing in the middle third of the piers. Plasters to be bonded to perimeter foundation wall
- Crawl spaced to be graded level and clear of all debris
- Provide foundation waterproofing and drain with positive slope to outlet as required by site conditions
- Energy efficiency compliance and insulation of the structure to be in accordance with chapter 11 of the 2018 NRC

#### CONCRETE:

- Concrete shall have a normal weight aggregate and a minimum compressive strength (f'c) at 28 days of 3000 psi, unless otherwise noted on the plan.
- Concrete shall be proportioned, mixed, and placed in accordance with the latest editions of ACI 318: "Building Code Requirements for Reinforced Concrete" and ACI 301: "Specifications for Structural Concrete for Buildings".
- 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:
  - Footings: 5%
  - Exterior Slabs: 5%
- 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 302.1R-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 (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. Fibermesh may be used in lieu of W.W.F.

#### 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 C1116, 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.
- 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.
- 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 Spruce-Pine-Fir (SPF) #2.
- LVL or PSL engineered wood shall have the following minimum design values:
  - E = 1,900,000 psi
  - Fb = 2600 psi
  - Fv = 285 psi
  - 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 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 SPF#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 fully blocked at all floor levels to ensure proper load transfer.
- Multi-ply beams shall have each ply attached with (3)10d nails @ 24" O.C.
- Fitth beams and four and five ply beams shall be bolted together with (2) rows of 1/2" dia. through bolts staggered @24" O.C. w/ 2" edge distance and (2) bolts located at 6" from each end, 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 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" (HLB-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.

#### WOOD STRUCTURAL PANELS:

- Fabrication and placement of structural wood sheathing shall be in accordance with the APA Design/Construction Guide "Residential and Commercial," and all other applicable APA standards.
- All structurally required wood sheathing shall bear the mark of the APA.
- 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 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 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of T&G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.

#### STRUCTURAL FIBERBOARD PANELS:

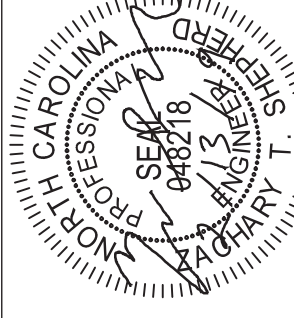
- Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards.
- Fiberboard wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information.
- Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the AFA.

#### EXTERIOR WOOD FRAMED DECKS:

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

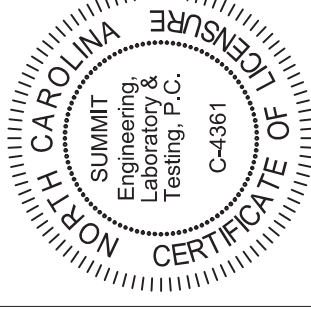
#### STRUCTURAL STEEL:

- 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 of the manual of Steel Construction "Load Resistance Factor Design" latest editions.
- All steel shall have a minimum yield stress (Fy) of 36 ksi unless otherwise noted.
- Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D1.1. Electrodes for shop and field welding shall be class E70XX. All welding shall be performed by a certified welder per the above standards.



Cane Mill  
Lot 14

STRUCTURAL MEMBERS ONLY



PROJECT  
Buttington  
Coversheet  
CLIENT  
Smith Douglas Homes  
2520 Reliance Ave.  
Apex, NC 27539

#### CURRENT DRAWING

DATE: 2/13/19

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

PROJECT #: 3832.202R

DRAWN BY: ZTS

CHECKED BY: WAJ

#### ORIGINAL DRAWING

DATE  
12/11/15

PROJECT#  
3832.09

REFER TO COVER SHEET FOR A  
COMPLETE LIST OF REVISIONS

SHEET

CS2

- FOUNDATION NOTES:**
- FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
  - STRUCTURAL CONCRETE TO BE F<sub>c</sub> = 3000 PSI, PREPARED AND PLACED IN ACCORDANCE WITH SECTION 907.2.1.1. ALL CONCRETE SHALL BE PLACED IN UNDISTURBED EARTH, BEARING A MINIMUM OF 1" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE ARCHITECT.
  - FOOTINGS TO BE PLACED ON UNDISTURBED EARTH, BEARING A MINIMUM OF 1" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE ARCHITECT.
  - FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE WALLS OR COLUMNS.
  - FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE WALLS OR COLUMNS.
  - FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE WALLS OR COLUMNS.
  - MINIMUM FOOTING PROJECTION FROM THE FACE OF MASONRY SHALL BE 2" FOR ALL MASONRY WALLS TO BE AS SPECIFIED IN SECTION 1406.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
  - FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION 1403.16, MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A TYPICAL SPACING INTO MASONRY OF 12" FROM THE END OF THE ANCHOR BOLT TO THE END OF THE PLATE SECTION, MINIMUM 12" ANCHOR BOLTS PER FLAT SECTION, ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
  - ABBREVIATIONS:
    - D1 = DOUBLE JOIST
    - GT = GROSS TRUSS
    - SC = STUD COLUMN
    - EE = EACH END
    - TJ = TRIPLE JOIST
    - CL = CENTER LINE
  - ALL PIERS TO BE 16"x16" MASONRY AND ALL PILASTERS TO BE 8"x6" MASONRY, TYPICAL (UNO).
  - WALL FOOTINGS TO BE CONTINUOUS CONCRETE SIZES PER STRUCTURAL PLAN UNLESS OTHERWISE NOTED.
  - 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, LABORATORY & TESTING, P.C. SHALL BE NOTIFIED IMMEDIATELY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
  - ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

- REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLDINGS. ADDITIONAL INFO PER SECTION R602.12.4 AND FIGURE R602.12.3 (4) OF THE 2018 NCRC.**
- NOTE: ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO FRAMING AND NOT BRICK VENEER UNO**
- THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES. HORIZES COMPLETED/REVISED ON 5/11/19. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. DOES NOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.
- 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 1 PER TABLE R403.**

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLDINGS. ADDITIONAL INFO PER SECTION R602.12.4 AND FIGURE R602.12.3 (4) OF THE 2018 NCRC.

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

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES. HORIZES COMPLETED/REVISED ON 5/11/19. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. DOES NOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

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 1 PER TABLE R403.

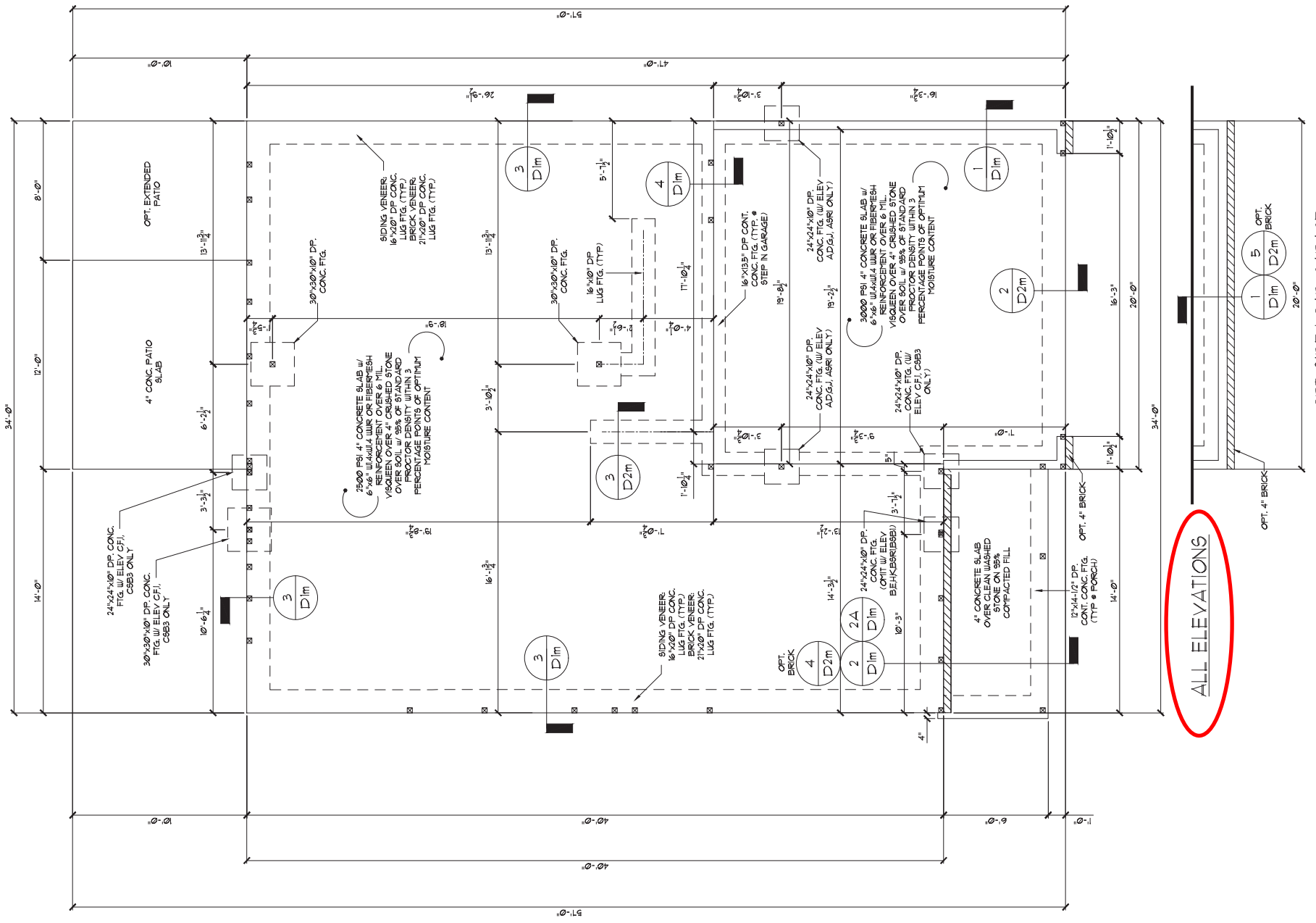
**STRUCTURAL MEMBERS ONLY**

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.

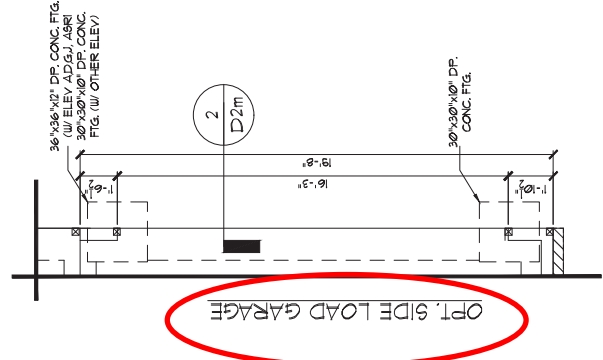
STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

**MONOLITHIC SLAB FOUNDATION**

SCALE: 1/8"=1'



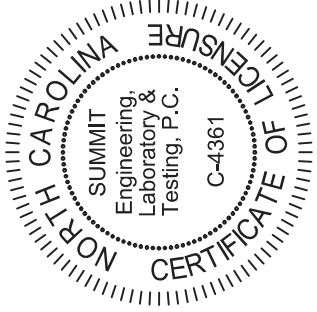
**ALL ELEVATIONS**



**Cane Mill Lot 14**

**SUMMIT**  
ENGINEERING LABORATORY TESTING

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



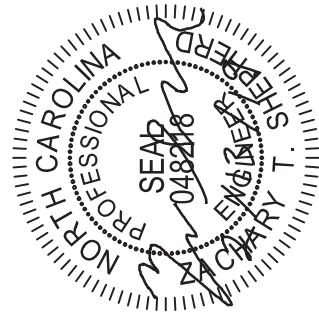
**PROJECT**  
Buftington  
Monolithic Slab Fnd.  
CLIENT  
Smith Douglas Homes - Raleigh  
Apex, NC 27539

**CURRENT DRAWING**  
DATE: 2/13/19  
SCALE: 1/8"=1'-0"  
PROJECT #: 3832.202R  
DRAWN BY: ZTS  
CHECKED BY: WAJ

**ORIGINAL DRAWING**  
DATE: 12/11/15  
PROJECT#: 3832.09

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET  
**S1.0m**



STRUCTURAL MEMBERS ONLY

**HEADER/BEAM SCHEDULE**

HEADER TAG	BEAM TAG	SIZE	JACKS (EACH END)
-	BI	(1) 14" FLOOR JOIST	(2)
-	B3	(2) 14" FLOOR JOIST	(2)
A	B5	(2) 2x6	(1)
B	B4	(2) 2x6	(2)
C	B5	(2) 2x6	(2)
D	B5	(2) 2x6	(2)
E	B5	(2) 9x12 LVL	(3)
F	B5	(2) 12x16 LVL	(3)
G	B5	(2) 14" LVL	(3)
H	B5	(2) 14" LVL	(3)
I	B5	(2) 18" LVL	(3)
J	B5	(2) 24" LVL	(4)
K	B3	(3) 9x12 LVL	(3)
L	B4	(3) 1x16 LVL	(3)
M	B6	(3) 14" LVL	(3)
N	B1	(3) 16" LVL	(3)
O	B3	(3) 18" LVL	(3)
P	B3	(3) 24" LVL	(4)

HEADER/BEAM SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER/BEAM SIZES MAY BE USED FOR EASE OF CONSTRUCTION. ALL HEADERS/BEAMS TO BE FLASH UNLESS NOTED OTHERWISE. ALL BEAMS TO BE FLASH UNLESS NOTED OTHERWISE.

**LINTEL SCHEDULE**

TAG	SIZE	OPENING SIZE
(1)	L3x3x1/4"	LESS THAN 6'-0" TO 10'-0"
(2)	L3x3x1/4"	6'-0" TO 10'-0"
(3)	L5x3-1/2x5/16"	GREATER THAN 10'-0"
(4)	L3x3-1/2x5/16"	ALL ARCHED OPENINGS EQUIV.

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

ALL HEADERS WITH BRICK ABOVE: (1) (UNO)

**WALL STUD SCHEDULE**

8x4 AND FLOOR LOAD BEARING STUDS  
2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.  
8x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.  
8x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.  
BASEMENT LOAD BEARING STUDS  
2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.  
NON-LOAD BEARING STUDS  
2x4 STUDS @ 24" O.C.  
TWO STORY WALLS:  
2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON  
2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. VERTICALLY  
FRAMED w/ CROSS BRACING @ 6'-0" O.C.

**KING STUD REQUIREMENTS**

OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0" TO 4'-0"	(2)
4'-0" TO 8'-0"	(3)
8'-0" TO 12'-0"	(5)
12'-0" TO 16'-0"	(6)

KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS

STUD COLUMN (S.C.) CALLOUTS ON PLAN OVERSIDE JACK STUD COUNT SHOWN IN BEAM/HEADER SCHEDULE. KING STUDS TO BE INSTALLED PER APPLICABLE BUILDING CODE

- GENERAL STRUCTURAL NOTES:**
- CONSTRUCTION SHALL CONFORM TO 2008 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
  - CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL CORRECT WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN.
  - TO RESIST ALL EXCESS UNDESIGNED DURING CONSTRUCTION.
  - PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS:  
MICROLAM (LVL): F<sub>b</sub> = 2600 PSI, F<sub>v</sub> = 285 PSI, E = 1.9x10<sup>6</sup> PSI  
PARALLAM (FRP): F<sub>b</sub> = 2600 PSI, F<sub>v</sub> = 285 PSI, E = 1.9x10<sup>6</sup> PSI  
ALL DIMENSIONS UNLESS NOTED ON PLAN. ALL STUD COLUMNS AND JOISTS SHALL BE 9" STP (UNO).
  - ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 "9" STP STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
  - ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A603 UNLESS NOTED OTHERWISE.
  - FOUNDATION AND GARAGE SHALL BE CONSTRUCTED PER THE 2008 NORTH CAROLINA RESIDENTIAL CODE SECTION R402.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 7" FROM THE END OF EACH PLATE SECTION LOCATED AT THE CENTER THIRD OF THE PLATE.
  - CONTRACTOR TO PROVIDE LOOKOUTS WHEN CEILING JOIST SPAN PERPENDICULAR TO RAFTERS.
  - FITCH BEAMS: 4 FT LVL'S AND 3 FT LVL SIZE LOADED LVL'S SHALL BE BOLTED TO RAFTERS PER DETAIL 1061. MINIMUM 1/2" DIA. BOLTS SHALL BE 6" FROM EACH END OF THE BEAM.
  - ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 STP "9" DROPPED. FOR ALL HEADERS ABOVE SHALL BE (2) FLAT 2x4 STP "9" DROPPED. (UNLESS NOTED OTHERWISE).
  - ABBREVIATIONS:  
S1 = SINGLE JOIST  
S2 = DOUBLE JOIST  
SC = STUD COLUMN  
DR = DOUBLE RAFTER  
TR = TRIPLE RAFTER  
OC = ON CENTER  
CL = CENTER LINE

**NOTE:** DESIGNATED JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

**NOTE:** SHADED WALLS INDICATE LOAD BEARING WALLS.

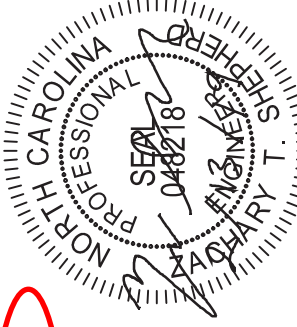
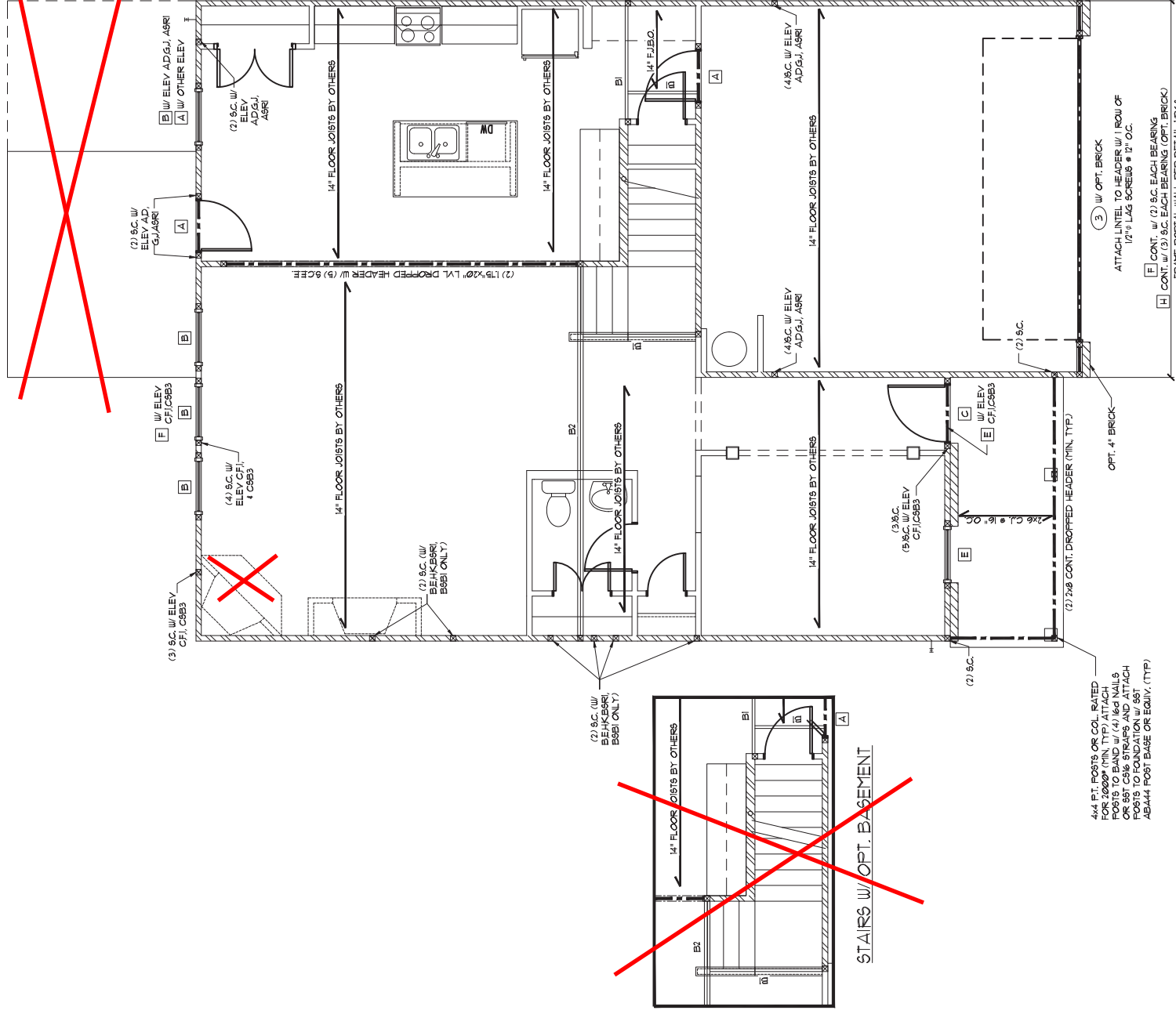
JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER THAT INCREASE DEPTH FOR EASE OF CONSTRUCTION.

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

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL CORRECT WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL CORRECT WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL CORRECT WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN.

**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 2016 NCR.



Cane Mill  
Lot 14

HEADER TAG	BEAM TAG	SIZE	JACKS (EACH END)
-	B1	(1) 14" FLOOR JOIST	(2)
-	B2	(2) 14" FLOOR JOIST	(2)
-	A	(2) 2x6	(0)
-	B4	(2) 2x6	(2)
-	C	(2) 2x6	(2)
-	D	(2) 2x6	(2)
-	E	(2) 1 1/2" x 4" LVL	(3)
-	F	(2) 1 1/2" x 4" LVL	(3)
-	G	(2) 1 1/2" x 4" LVL	(3)
-	H	(2) 1 1/2" x 4" LVL	(3)
-	I	(2) 1 1/2" x 4" LVL	(3)
-	J	(2) 2 1/2" x 4" LVL	(4)
-	K	(3) 1 1/2" x 4" LVL	(3)
-	L	(3) 1 1/2" x 4" LVL	(3)
-	M	(3) 1 1/2" x 4" LVL	(3)
-	N	(3) 1 1/2" x 4" LVL	(3)
-	O	(3) 1 1/2" x 4" LVL	(3)
-	P	(3) 2 1/2" x 4" LVL	(4)

HEADER BEAM SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADERS BEAM SIZES MAY BE USED FOR EASE OF CONSTRUCTION. HEADERS BEAM SIZES TO BE USED FOR CONSTRUCTION SHALL BE SHOWN ON THE CONSTRUCTION SET. ALL BEAMS TO BE FURNISHED UNLESS NOTED OTHERWISE.

TAGS	SIZE	OPENING SIZE
①	L3x3x1/4"	LESS THAN 10'-0"
②	L3x3x1/4"	6'-0" TO 10'-0"
③	L3x3-1/2"x3/8"x1/8"	GREATER THAN 10'-0"
④	L3x3-1/2"x3/8"x1/8"	ALL ARCHED OPENINGS

SECURE LINTEL TO HEADER w/ (3) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" OC. (1) 1/4" FOR ③

ALL HEADERS WITH BRICK ABOVE: (U)NO

WALL STUD SCHEDULE
16" AND 18" CROSS LOAD BEARING STUDS 2x4 STUDS @ 16" OC OR 2x6 STUDS @ 24" OC
20" CROSS LOAD BEARING STUDS w/ WALKUP ATING 2x4 STUDS @ 17" OC OR 2x6 STUDS @ 16" OC
EMERGENCY LOAD BEARING STUDS 2x4 STUDS @ 16" OC OR 2x6 STUDS @ 16" OC
NON-LOAD BEARING STUDS (ALL HEADERS) 2x4 STUDS @ 24" OC
TWO STORY WALLS 2x4 STUDS @ 17" OC OR 2x6 STUDS @ 16" OC. BALLOON FRAMED w/ CROSS BRACING @ 6'-0" OC. VERTICALLY

KING STUD REQUIREMENTS	
OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0" TO 4'-0"	(2)
4'-0" TO 8'-0"	(3)
8'-0" TO 12'-0"	(5)
12'-0" TO 16'-0"	(6)

KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES. COMPLETED/REVISED PLANS WILL BE THE RESPONSIBILITY OF THE CLIENT. OWNER'S REPRESENTATIVE WILL BE RESPONSIBLE FOR ANY CHANGES MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SMITH 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.

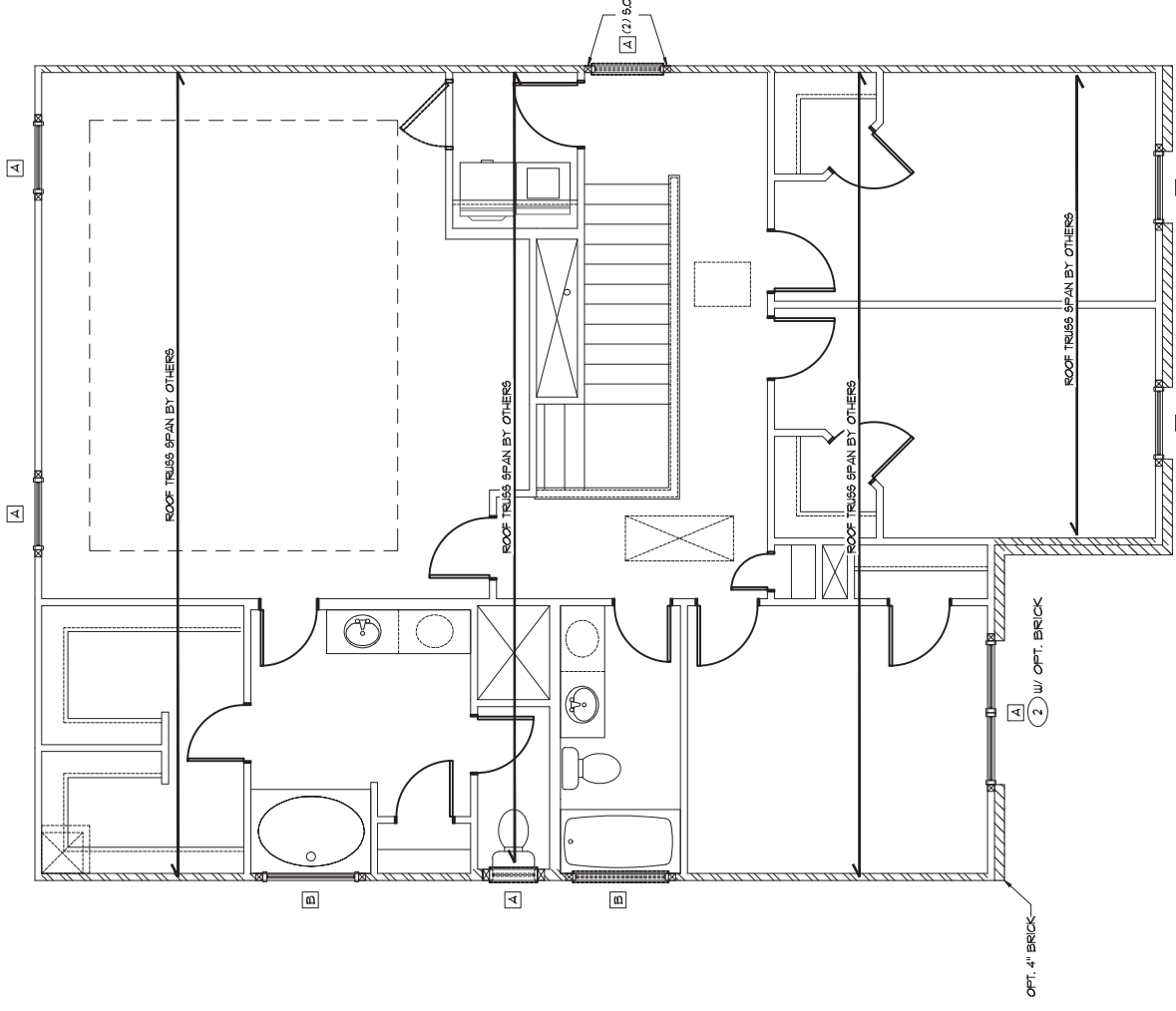
**STRUCTURAL MEMBERS ONLY**

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 SMITH ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2016 NCR. C.

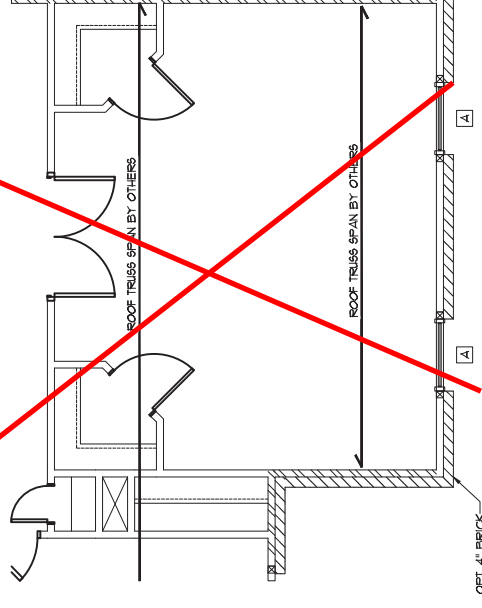
**SECOND FLOOR FRAMING PLAN**  
SCALE: 1/8"=1'

STUD COLUMN (SC) CALLOUTS ON PLAN OVERSIDE JACK STUD COUNT SHOWN IN BEAM/HEADER SCHEDULE. KING STUDS TO BE INSTALLED PER APPLICABLE BUILDING CODE.



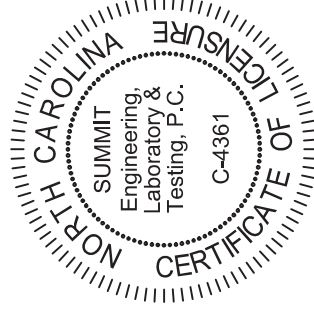
ELEVATIONS BE, HK, BSRI, BSB

OPTIONAL LOFT ILO BEDROOMS 3 & 4



Cane Mill Lot 14

STRUCTURAL MEMBERS ONLY



**PROJECT**  
Burrington  
**CLIENT**  
Smith Douglas Homes - Raleigh  
2520 Reliance Ave.  
Apex, NC 27539

**Second Floor Framing Plan**

**CURRENT DRAWING**  
DATE: 2/13/19  
SCALE: 1/8"=1'-0"  
PROJECT #: 3632.202R  
DRAWN BY: ZTS  
CHECKED BY: WAJ

**ORIGINAL DRAWING**  
DATE: 12/11/15  
PROJECT#: 3832.09

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

**S4.1**



TRUSS UPLIFT CONNECTOR SCHEDULE		
MODEL *	MAX. UPLIFT (LBS)	PLY *
H1	595	2
H2A	575	3
H2SA	600	4
H6	950	2
H10A*	1340	2
H14*	1465	3

USE BELOW ONLY FOR 2-PLY OR GREATER GIRDER TRUSSES THAT EXCEED THE UPLIFT REQUIREMENTS ABOVE.

MODEL *	MAX. UPLIFT (LBS)	PLY *
LG1*	2090	2
LG13-SD513*	3605	3
LG14-SD593*	4060	4
HGT-2*	10390	2
HGT-3*	10530	3
HGT-4*	9230	4

1. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIV. PRODUCTS MAY BE USED PER MANUF. FOR A SINGLE ANCHOR. DOUBLE ANCHORS MAY BE USED TO DOUBLE THE UPLIFT CAPACITIES SHOWN ABOVE. PROVIDED A MINIMUM 2-1/2" MEMBER THICKNESS. ITEMS DENOTED WITH "\*" MAY NOT BE DOUBLED TO INCREASE UPLIFT CAPACITIES. ALL TRUSS MANUFACTURERS SHOULD ABOVE ARE FOR SYP 2 GRADE OR BETTER MEMBERS. PLEASE CONTACT EOR OR TRUSS MANUF. IF SPECIES OR GRADE VARIES. 4. TO THIS CONNECTION. ALL TRUSS MANUF. ARE RESPONSIBLE FOR THESE CONNECTIONS.

NOTE: 1ST 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 CORNER WALLS (TYP. UNO)

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS. 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 BE HELD RESPONSIBLE FOR CHANGES MADE TO ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

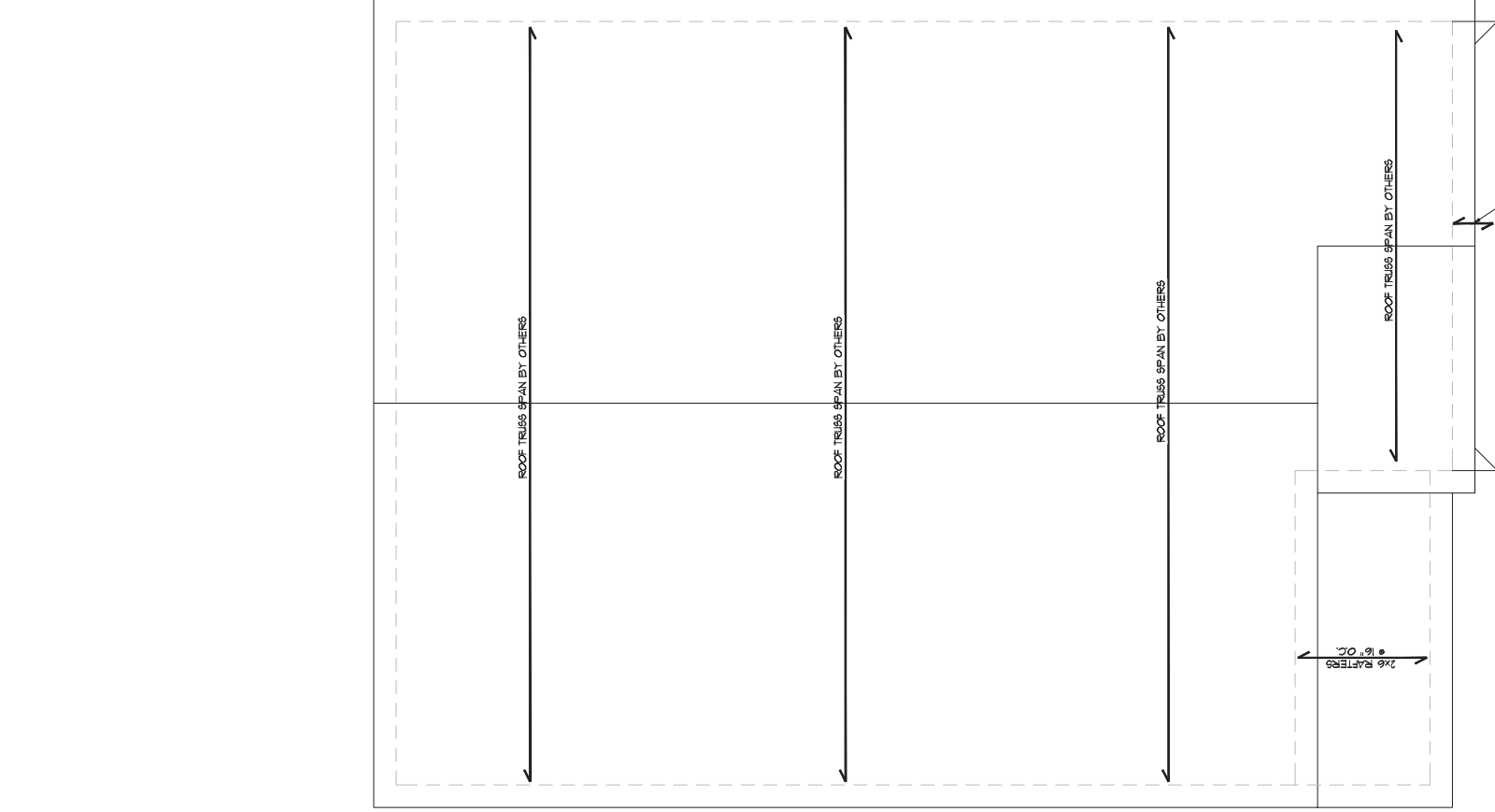
REFER TO TRUSS LAYOUT PER MANUFACTURER FOR UPLIFT CONNECTIONS FROM TRUSS TO TOP PLATE (TYP. UNO)

NOTE: TRUSS UPLIFT LOADS SHALL BE DETERMINED PER TRUSS MANUFACTURER IN ACCORDANCE WITH SECTION R602.11.1 WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.11.1.1. SEE ARCHITECTURAL PLANS FOR SHEATHING AND FASTENER REQUIREMENTS.

**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 2016 NCR. C.

**ROOF FRAMING PLAN**  
SCALE: 1/8"=1'



ELEVATIONS BEHK, BSRI, & BSBI

Cane Mill  
Lot 14

STRUCTURAL MEMBERS ONLY

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

**CERTIFICATE OF LICENSURE**  
NORTH CAROLINA  
SUMMIT  
Engineering,  
Laboratory &  
Testing, P.C.  
C-4361

PROJECT  
Buttington  
Roof Framing Plan  
CLIENT  
Smith Douglas Homes - Raleigh  
2520 Reliance Ave.  
Apex, NC 27539

CURRENT DRAWING  
DATE: 2/13/19  
SCALE: 1/8"=1'-0"  
PROJECT #: 3832.202R  
DRAWN BY: ZTS  
CHECKED BY: WAJ

ORIGINAL DRAWING  
DATE 12/11/15  
PROJECT# 3832.09

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

**S5.1**

REQUIRED BRACED WALL PANEL CONNECTIONS		
METHOD	MATERIAL	MIN. THICKNESS
CS-UWP	WOOD STRUCTURAL PANEL	3/8"
GB	Gypsum Board	1/2"
UWP	WOOD PANEL	3/8"
FF	WOOD PANEL	1/16"

**REQUIRED CONNECTION**

INTERMEDIATE SUPPORTS	6d COMMON NAILS @ 12" O.C.
6d COMMON NAILS @ 6" O.C.	
6d COOLER NAILS @ 1" O.C.	
6d COMMON NAILS @ 12" O.C.	
PER FIGURE R602.10.1	

\*\*OR EQUIVALENT PER TABLE R702.3.5

REAR HOUSE FRONT

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE.
- WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE WIND SPEEDS UP TO 130 MPH.
- ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1.
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD.
- FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING NECK AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- ALL WALLS SHALL BE FINISHED MORE THAN 24" BEYOND THE FOUNDATION OR REBARING WILL BE LOCATED WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- A BRACED WALL PANEL SHALL BE LOCATED WITHIN 12 FEET OF EACH END OF A BRACED WALL LINE.
- 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 NRC.
- CONCRETE OR MASONRY WALLS WITH A LENGTH OF 48" OR LESS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4.
- BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5.
- CEILING WALLS AND WALK OUT BASEMENT WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.6.
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (IND).
- ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS.
- ABBREVIATIONS:
  - GB = GYPSUM BOARD
  - UWP = WOOD STRUCTURAL PANEL
  - CS-XXX = CONT. SHEATHED ENG. ENGINEERED SOLUTION
  - FF = PORTAL FRAME
  - FF-ENG = ENG. PORTAL FRAME

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES COMPLETED/REVISED ON 5/11/21. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING LABORATORY TESTING P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS. SMITH DOUGLAS HOMES, SMITH 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.

INSTALL HOLD-DOWNS PER SECTION R602.10.4 AND FIGURE R602.10.4.1 OF THE 2018 NRC.

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
REQUIRED	PROVIDED	
FRONT SIDE	148	206
LEFT SIDE	11	410
REAR SIDE	148	172
RIGHT SIDE	11	410

FIRST FLOOR BRACING - SIDE LOAD GARAGE (FT)		
CONTINUOUS SHEATHING METHOD		
REQUIRED	PROVIDED	
FRONT SIDE	148	215
LEFT SIDE	11	410
REAR SIDE	148	172
RIGHT SIDE	11	330

STRUCTURAL ANALYSIS BASED ON 2018 NRC.

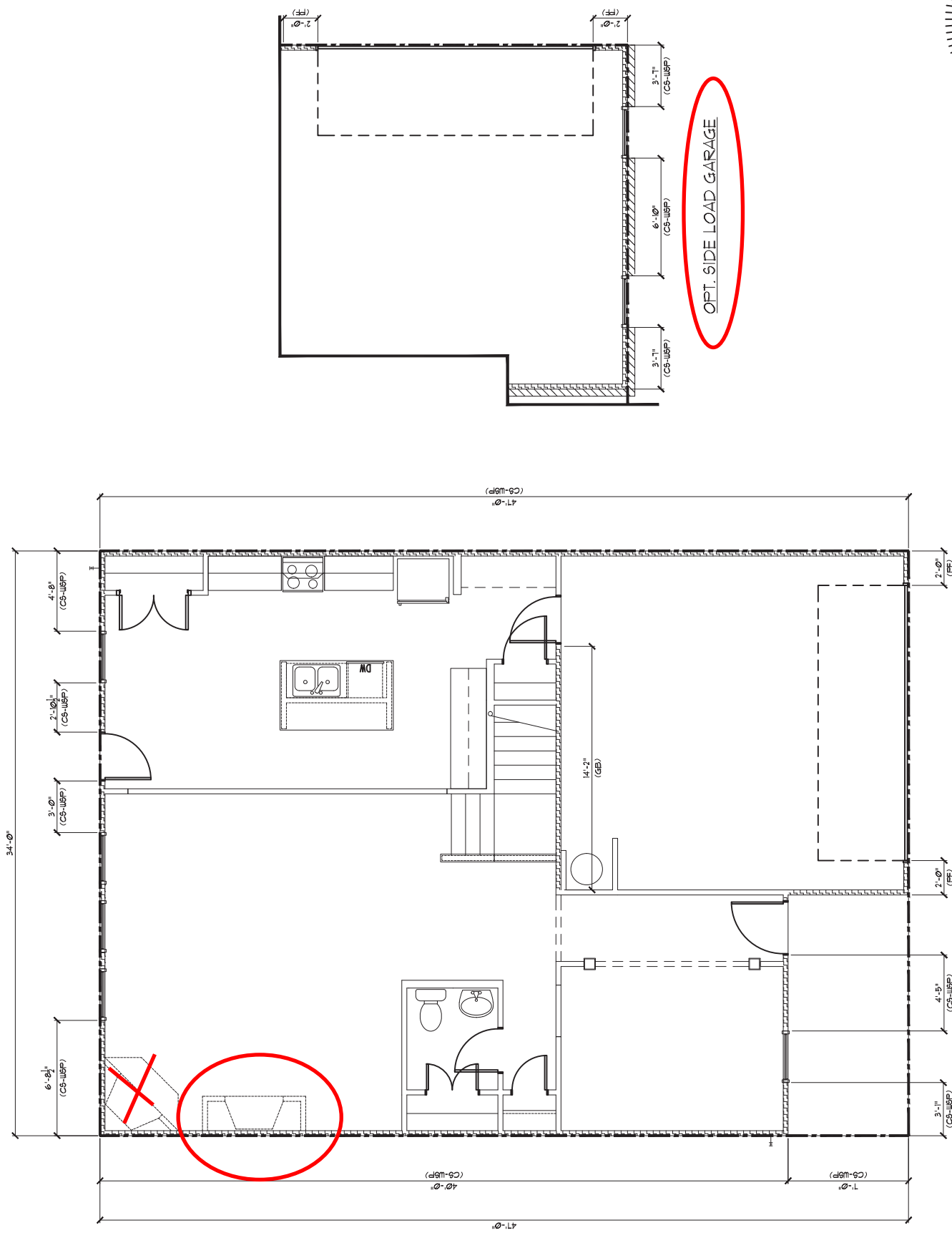
STRUCTURAL MEMBERS ONLY

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 NRC.

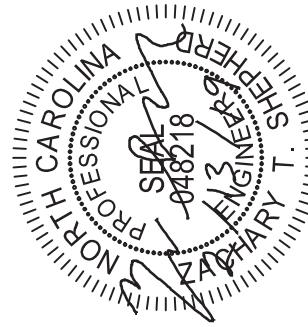
**FIRST FLOOR BRACING PLAN**

SCALE: 1/8"=1'



ALL ELEVATIONS

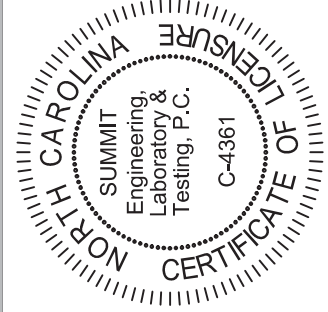
Cane Mill Lot 14



STRUCTURAL MEMBERS ONLY

**SUMMIT**  
ENGINEERING LABORATORY TESTING

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



PROJECT  
Buttington  
Client  
Smith Douglas Homes - Raleigh  
2520 Reliance Ave.  
Apex, NC 27539

CURRENT DRAWING  
DATE: 2/13/19  
SCALE: 1/8"=1'-0"  
PROJECT #: 3832.202R  
DRAWN BY: ZTS  
CHECKED BY: WAJ

ORIGINAL DRAWING  
DATE: 12/11/15  
PROJECT#: 3832.09

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

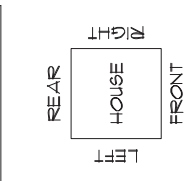
SHEET  
**S7.0**



**REQUIRED BRACED WALL PANEL CONNECTIONS**

METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	INTERMEDIATE SUPPORTS 6d COMMON NAILS @ 12" O.C.
GB	GYPSPUM BOARD	1/2"	5d COOLER NAILS @ 1" O.C.
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 12" O.C.
FF	WOOD PANEL	1/16"	PER FIGURE R602.10.1

\*\*OR EQUIVALENT PER TABLE R702.3.5



- BRACED WALL NOTES:**
- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE.
  - WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE WIND SPEEDS UP TO 130 MPH.
  - ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
  - MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1.
  - THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD.
  - FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING NELL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
  - ALL BRACED WALLS SHALL BE BUILT TO EXCEED MORE THAN 24" BEYOND THE FOUNDATION OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
  - A BRACED WALL PANEL SHALL BE LOCATED WITHIN 12 FEET OF EACH END OF A BRACED WALL LINE.
  - THE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.
  - 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 NCRS.
  - CONCRETE OR MASONRY WALLS SUPPORTING A BRACED WALL PANEL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.
  - BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5.
  - CEILING WALLS AND WALK OUT BASEMENT WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5.
  - PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (IND).
  - ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS.
  - ABBREVIATIONS:  
GB = GYPSUM BOARD  
CS-WSP = WOOD STRUCTURAL PANEL  
CS-XXX = CONT. SHEATHED  
FF = PORTAL FRAME  
FF-ENG = ENG. PORTAL FRAME

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY SMITH DOUGLAS HOMES. NOTES COMPLETED/REVISED ON 5/10/19. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS. SMITH DOUGLAS HOMES, SMITH DOUGLAS HOMES 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.

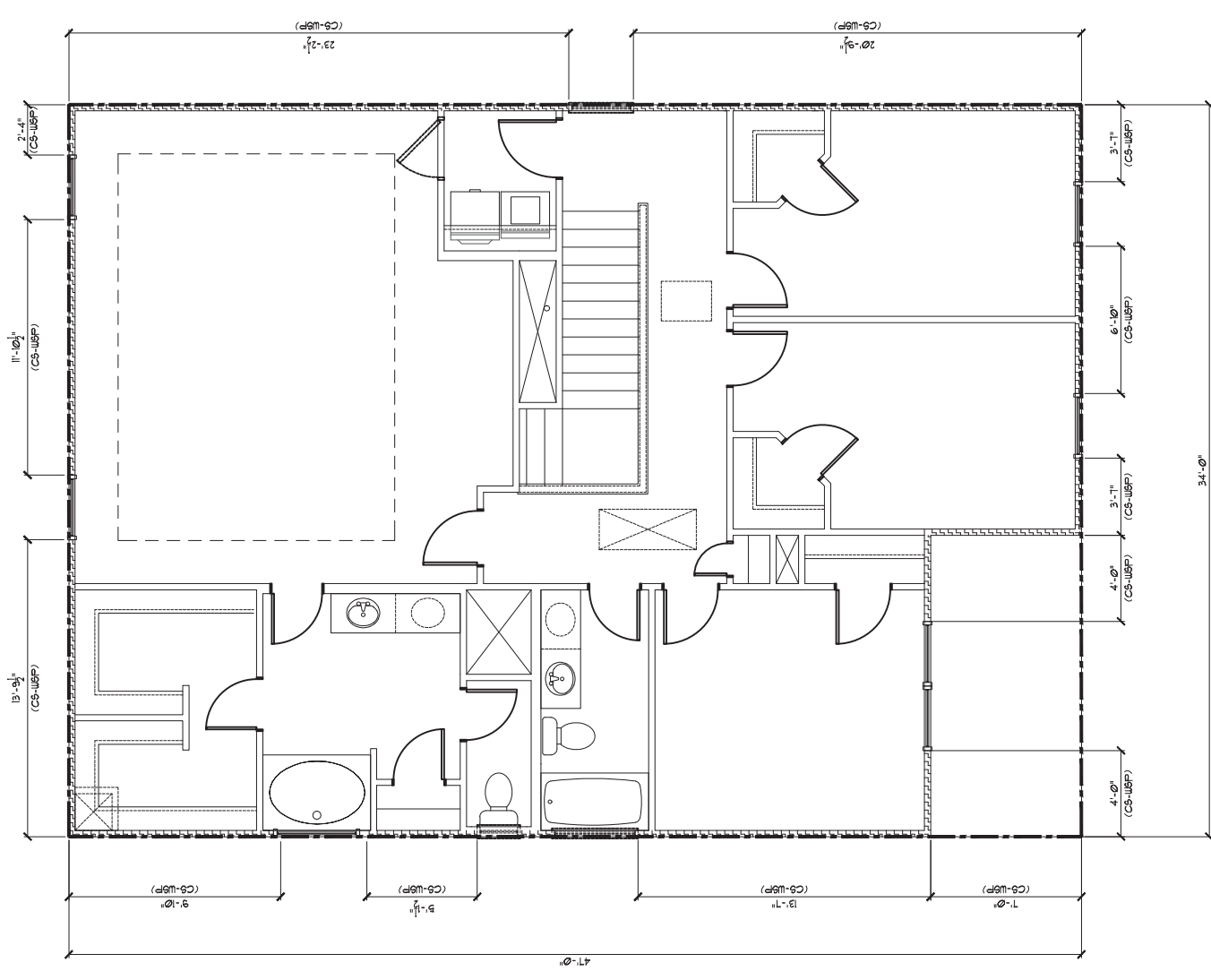
**SECOND FLOOR BRACING (FT)**

CONTINUOUS SHEATHING METHOD		
REQUIRED	PROVIDED	
FRONT SIDE	6.3	21.0
LEFT SIDE	5.1	38.5
REAR SIDE	6.3	28.0
RIGHT SIDE	5.1	44.0

INSTALL HOLD-DOWNS PER SECTION R602.10.4 AND FIGURE R602.10.4.1 OF THE 2018 NCRS.

**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 NCRS.

**SECOND FLOOR BRACING PLAN**  
SCALE: 1/8" = 1'



ALL ELEVATIONS

**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 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 the 2018 North Carolina Residential Code (NCRC) and any local codes or restrictions

**FOUNDATIONS:**

- Foundations shall be constructed in accordance with chapter 4 of the 2018 NC Residential Building Code (Special consideration shall be given to Chapter 45 in wind zones above 130mph)
- 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
- Maximum depth of unbalanced fill against masonry walls to be as specified in section R404.1 of the 2018 NCRC
- 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.
- Any fill shall be placed 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 water, ice, frost, or loose material.
- Each crawl space pier shall bear in the middle third of its respective footing and each girder shall bearing in the middle third of the piers. Pilasters to be bonded to perimeter foundation wall
- Crawl spaced to be graded level and clear of all debris
- Provide foundation waterproofing and drain with positive slope to outlet as required by site conditions
- Energy efficiency compliance and insulation of the structure to be in accordance with chapter 11 of the 2018 NCRC

**CONCRETE:**

- Concrete shall have a normal weight aggregate and a minimum compressive strength (f'c) at 28 days of 3000 psi, unless otherwise noted on the plan.
- Concrete shall be proportioned, mixed, and placed in accordance with the latest editions of ACI 318: "Building Code Requirements for Reinforced Concrete" and ACI 301: "Specifications for Structural Concrete for Buildings".
- 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:
  - Footings: 5%
  - Exterior Slabs: 5%
- 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 302.1R-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 (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. Fibermesh may be used in lieu of W.W.F.

**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 C1116, 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.
- 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.
- 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 Spruce-Pine-Fir (SPF) #2.
- LVL or PSL engineered wood shall have the following minimum design values:
  - E = 1,900,000 psi
  - Fb = 2600 psi
  - Fv = 285 psi
  - 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 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 SPF#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 fully blocked at all floor levels to ensure proper load transfer.
- Multi-ply beams shall have each ply attached with (3)10d nails @ 24" O.C.
- Fitch beams and four and five ply beams shall be bolted together with (2) rows of 1/2" dia. through bolts staggered @24" O.C. w/ 2" edge distance and (2) bolts located at 6" from each end, 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 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 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.

**WOOD STRUCTURAL PANELS:**

- Fabrication and placement of structural wood sheathing shall be in accordance with the APA Design/Construction Guide "Residential and Commercial," and all other applicable APA standards.
- All structurally required wood sheathing shall bear the mark of the APA.
- 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 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of T&G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.

**STRUCTURAL FIBERBOARD PANELS:**

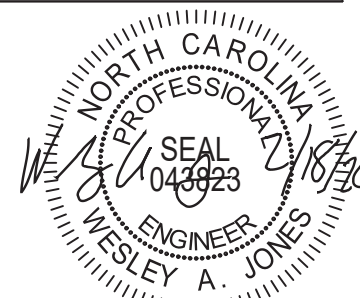
- Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards.
- Fiberboard wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information.
- Sheathing shall have a 1/8" gap at panel ends and edges are recommended in accordance with the AFA.

**EXTERIOR WOOD FRAMED DECKS:**

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

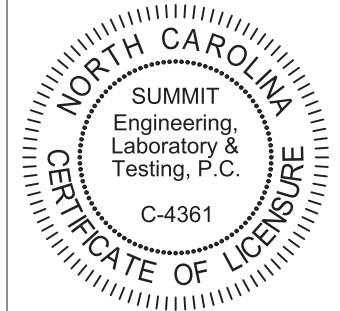
**STRUCTURAL STEEL:**

- 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 of the manual of Steel Construction "Load Resistance Factor Design" latest editions.
- All steel shall have a minimum yield stress (Fy) of 36 ksi unless otherwise noted.
- Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D1.1. Electrodes for shop and field welding shall be class E70XX. All welding shall be performed by a certified welder per the above standards.



STRUCTURAL MEMBERS ONLY

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



PROJECT  
**Standard Details**  
**Notes and Specifications**  
CLIENT  
**Smith Douglas Homes**  
**110 Village Trail, Suite 215**  
**Woodstock, GA 30188**

**CURRENT DRAWING**

DATE: 2/18/20  
SCALE: NTS  
PROJECT #: 3832  
DRAWN BY: LBV  
CHECKED BY: WAJ

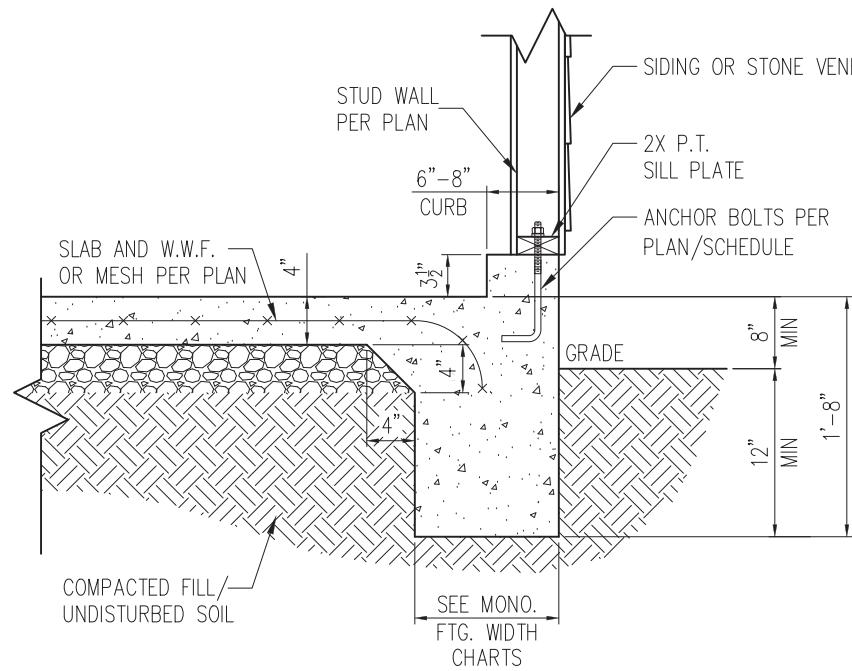
**ORIGINAL DRAWING**

NO.	DATE	PROJECT #
0	1/7/16	3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

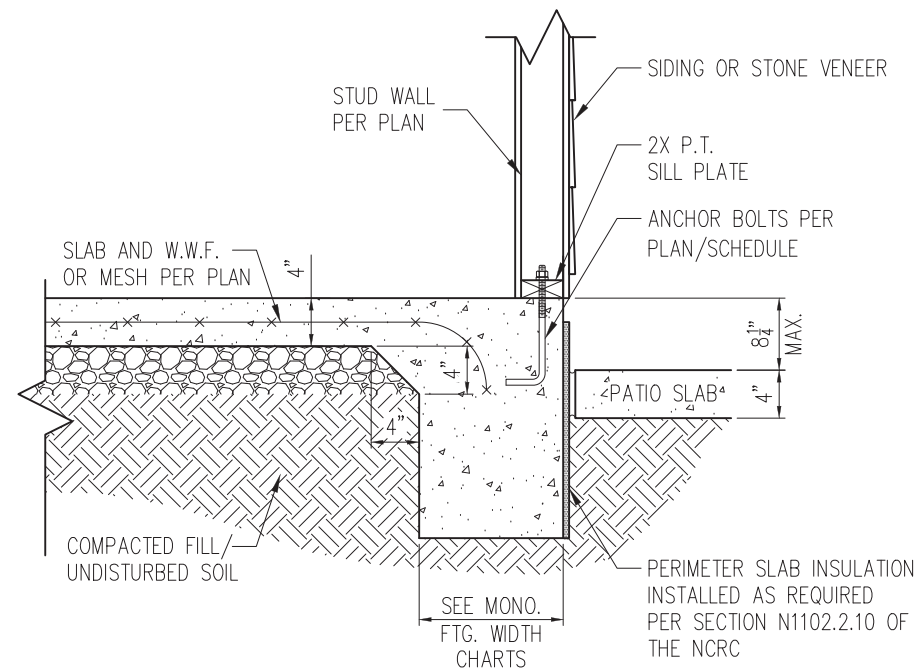
SHEET

**CS2**



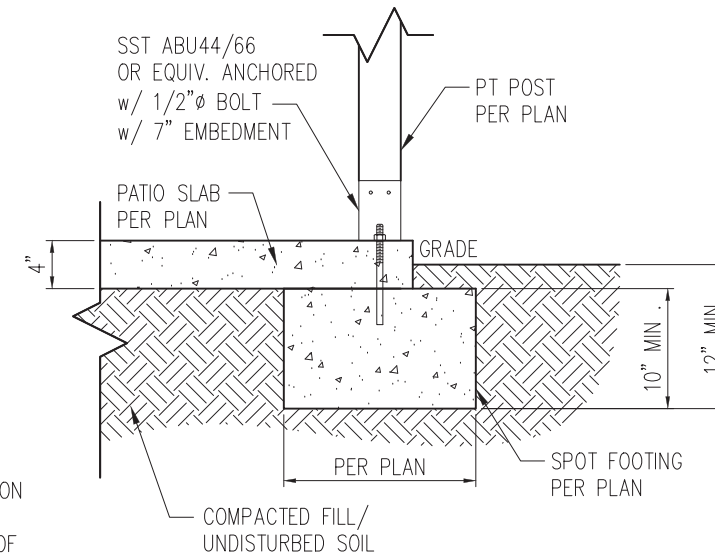
STANDARD - SIDING/STONE

1 TYP. GARAGE CURB DETAIL  
D1m 3/4" = 1'-0"

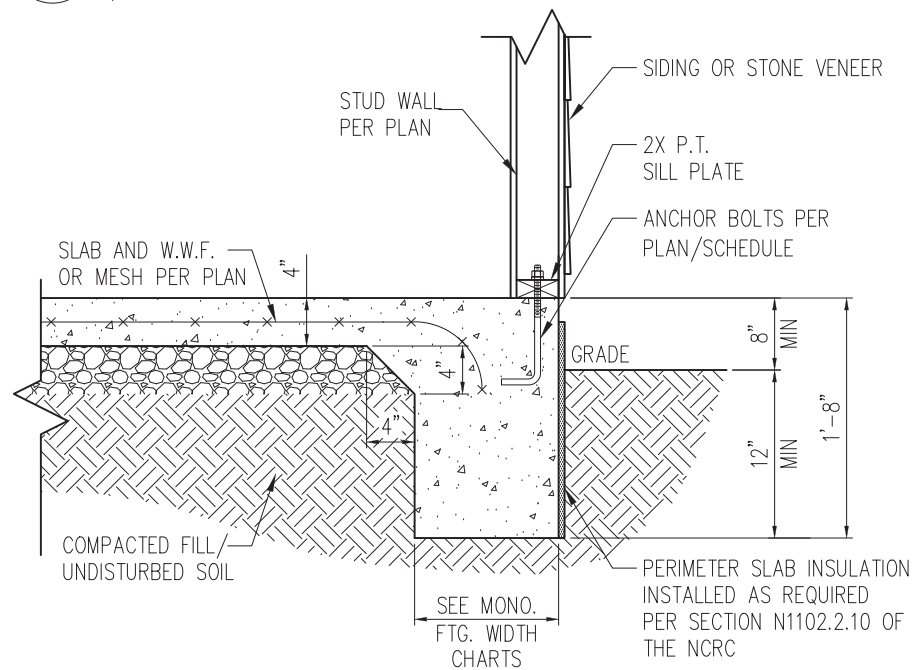


STANDARD - SIDING/STONE

2 PATIO SLAB DETAIL  
D1m 3/4" = 1'-0"

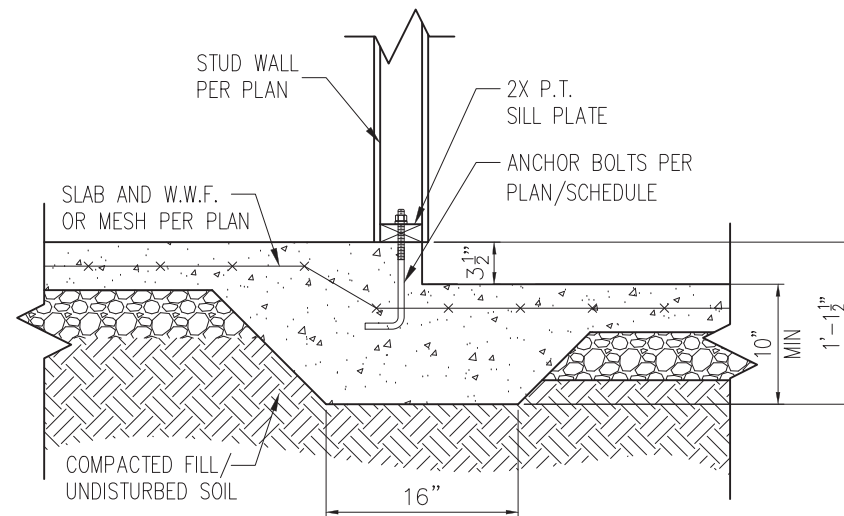


2A COVERED PATIO DETAIL  
D1m 3/4" = 1'-0"



STANDARD - SIDING/STONE

3 TYP. SLAB DETAIL  
D1m 3/4" = 1'-0"



4 STEP IN GARAGE  
D1m 3/4" = 1'-0"

WALL ANCHOR SCHEDULE

TYPE OF ANCHOR	MIN. CONC. EMBEDMENT	SPACING EMBEDMENT	INTERIOR WALL	EXTERIOR WALL
1/2" Ø A307 BOLTS w/ STD. 90° BEND	7"	6'-0"	YES	YES
SST - MAS	4"	5'-0"	NO	YES
HILTI KWIK BOLT KBI 1/2-2-3/4	2-1/4"	6'-0"	YES	NO
1/2" Ø HILTI THREADED ROD w/ HIT HY150 ADHESIVE	7"	6'-0"	YES	YES

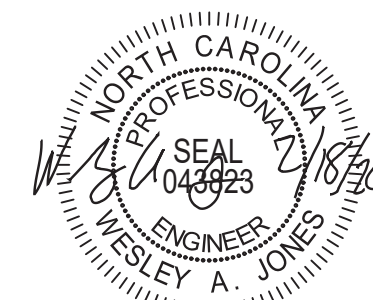
NOTE: INSTALL ALL ANCHORS 12" MAX. FROM ALL BOTTOM PLATE ENDS AND JOINTS.

MONOLITHIC FOOTING WIDTH

# OF STORIES	WIDTH BASED ON SOIL BEARING CAPACITY		
	1500 PSF	2000 PSF	2500 PSF
1 STORY - STD.	16"	16"	16"
1 STORY - BRICK VENEER	21"	21"	21"
2 STORY - STD.	20"	16"	16"
2 STORY - BRICK VENEER	25"	21"	21"

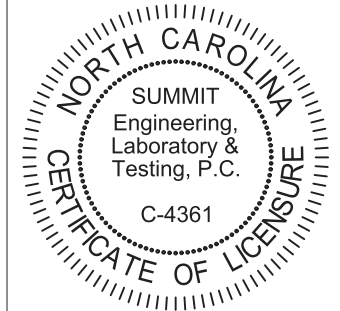
\*5" BRICK LEDGE HAS BEEN ADDED TO THE MONOLITHIC FOOTING WIDTH FOR BRICK SUPPORT

- NOTES:
- REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET CS2 FOR ADDITIONAL INFORMATION.
  - PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
  - SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.



STRUCTURAL MEMBERS ONLY

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



PROJECT  
Standard Details  
Monolithic Slab Details  
CLIENT  
Smith Douglas Homes  
110 Village Trail, Suite 215  
Woodstock, GA 30188

CURRENT DRAWING  
DATE: 2/18/20  
SCALE: NTS  
PROJECT #: 3832  
DRAWN BY: LBV  
CHECKED BY: WAJ

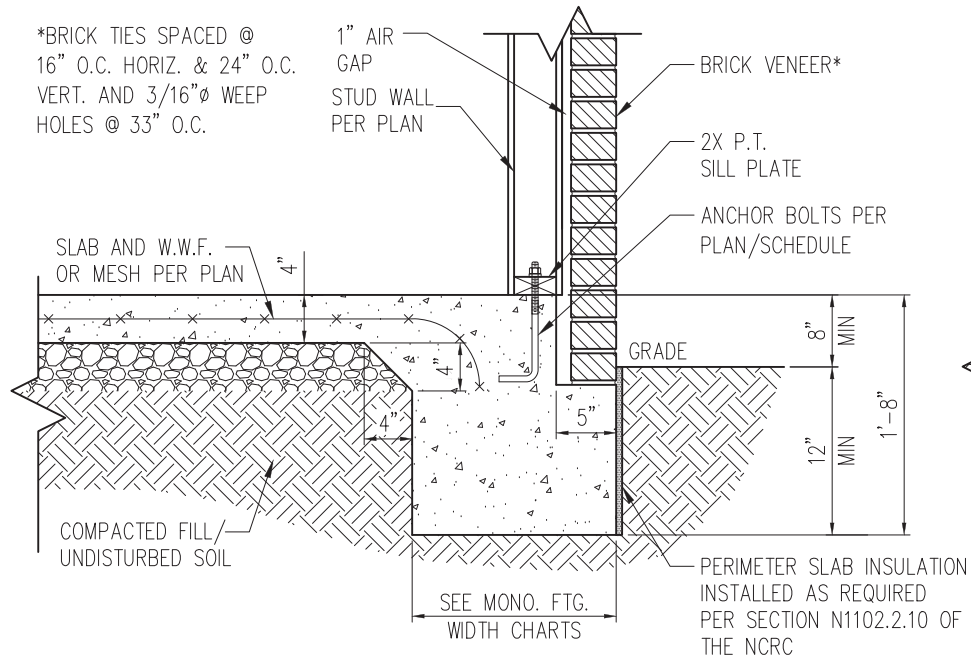
ORIGINAL DRAWING  
NO. DATE PROJECT #  
0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

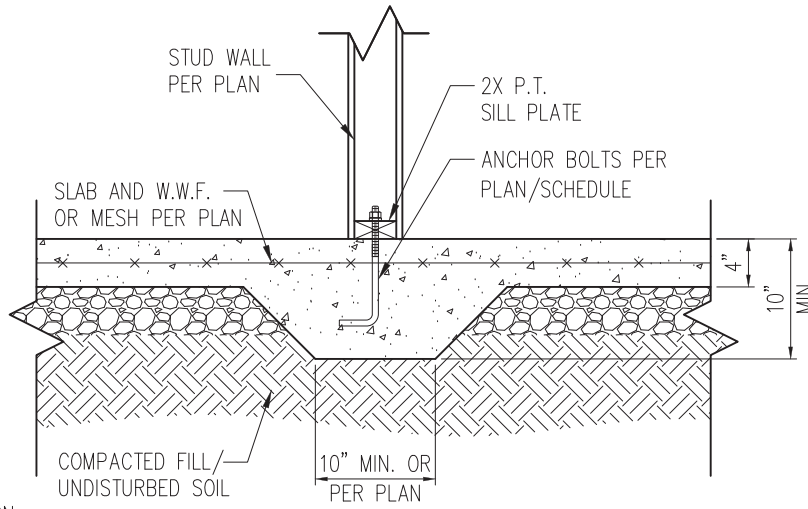
D1m

\*BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT. AND 3/16" Ø WEEP HOLES @ 33" O.C.



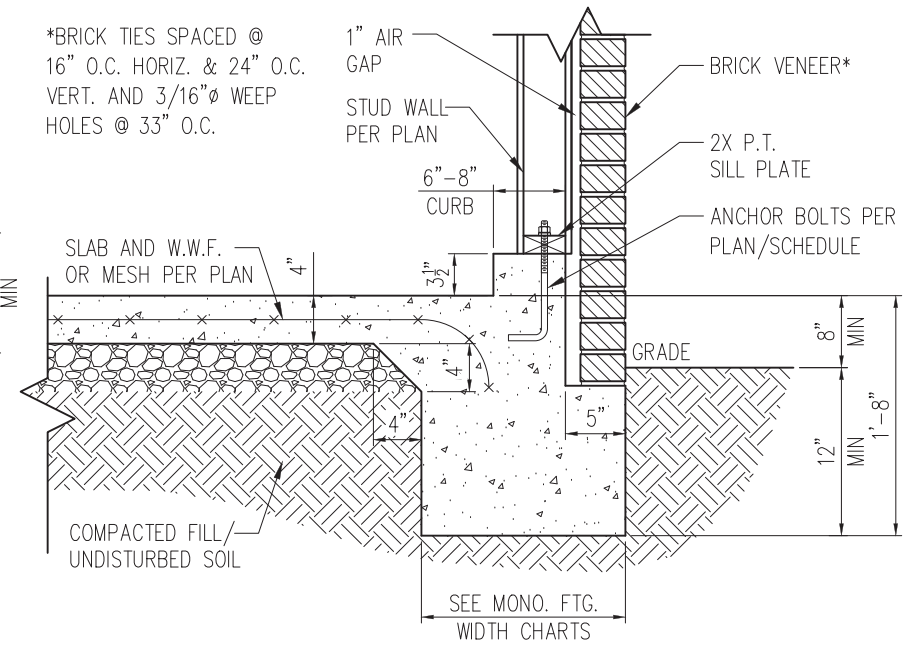
STANDARD - BRICK

1 TYP. SLAB DETAIL W/ BRICK VENEER  
D2m 3/4" = 1'-0"



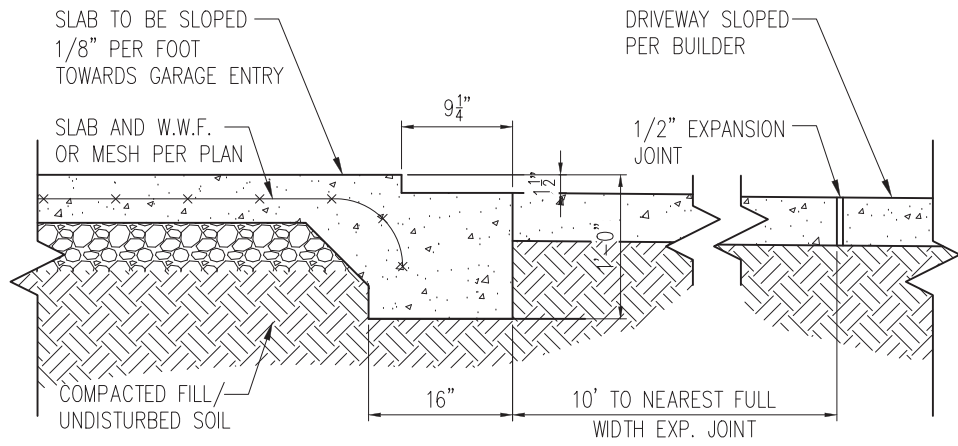
3 TYP. THICKENED SLAB DETAIL  
D2m 3/4" = 1'-0"

\*BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT. AND 3/16" Ø WEEP HOLES @ 33" O.C.

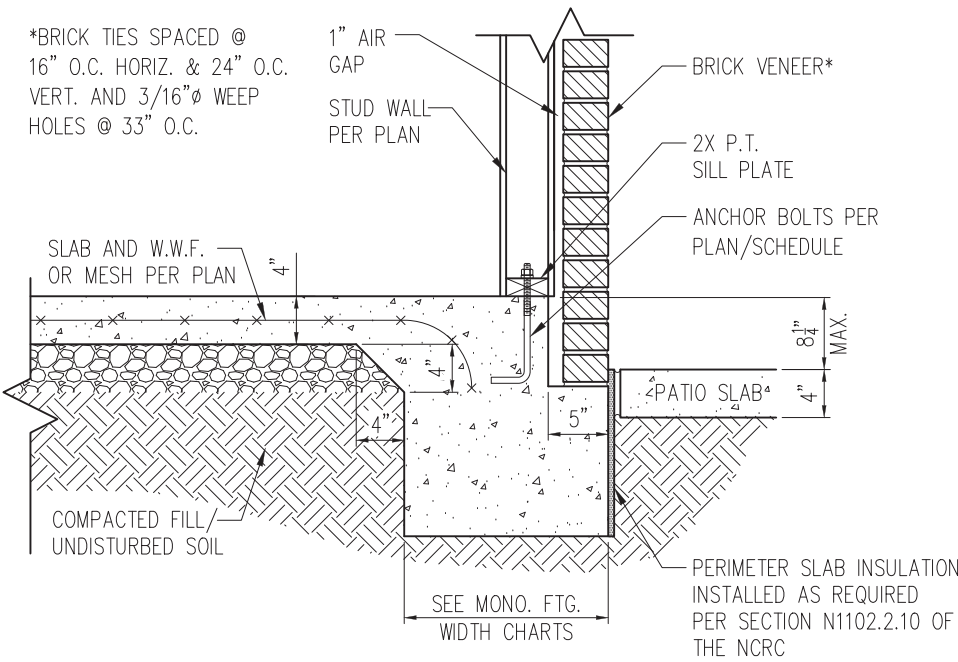


STANDARD - BRICK

5 TYP. GARAGE CURB DETAIL W/ BRICK VENEER  
D2m 3/4" = 1'-0"



2 SLAB AT GARAGE DOOR  
D2m 3/4" = 1'-0"



STANDARD - BRICK

4 PATIO SLAB DETAIL W/ BRICK VENEER  
D2m 3/4" = 1'-0"

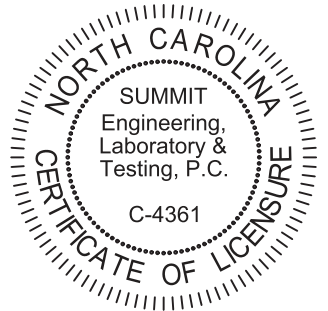
NOTES:

1. REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET CS2 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.



STRUCTURAL MEMBERS ONLY

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



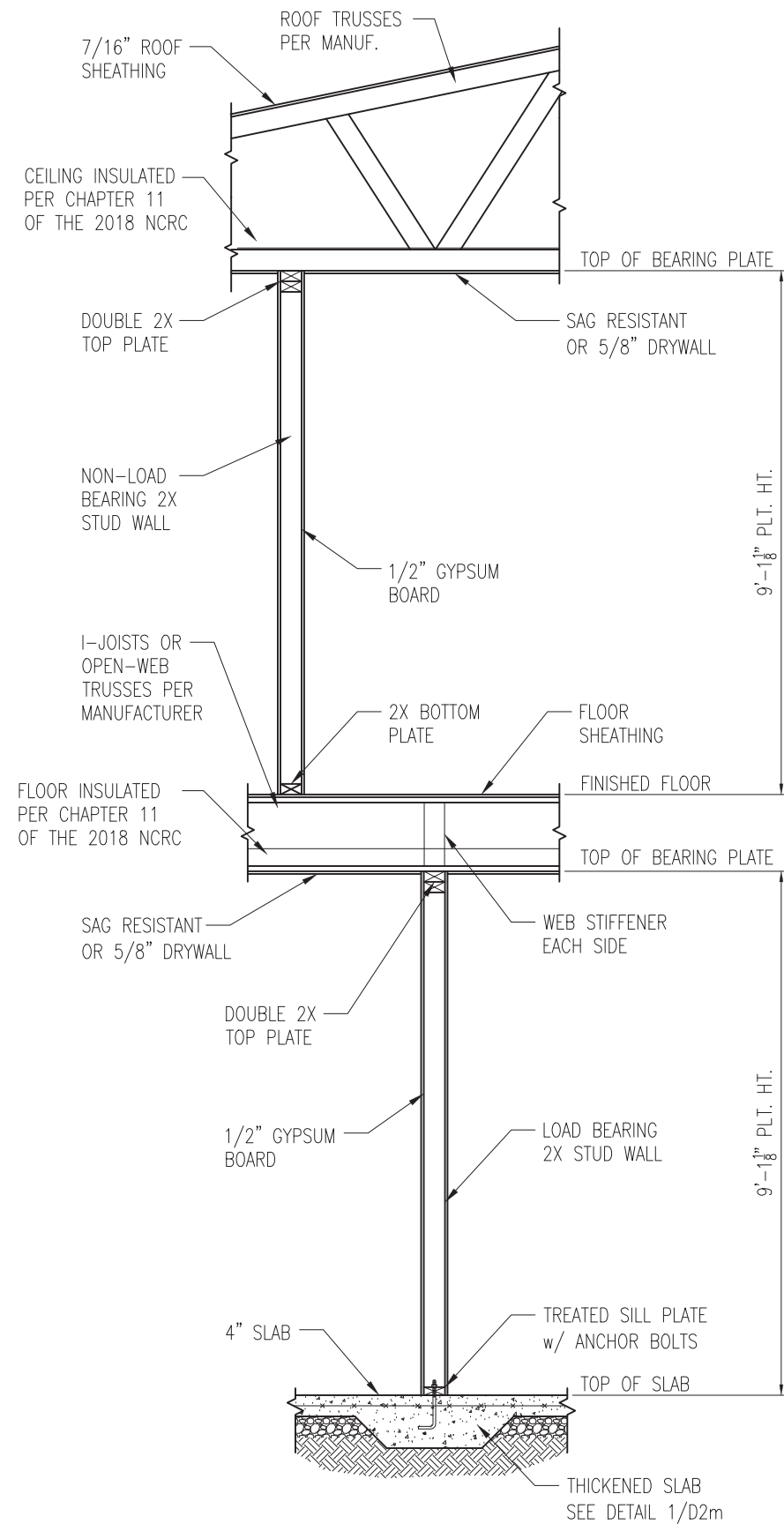
PROJECT  
**Standard Details**  
**Monolithic Slab Details**  
CLIENT  
**Smith Douglas Homes**  
110 Village Trail, Suite 215  
Woodstock, GA 30188

CURRENT DRAWING  
DATE: 2/18/20  
SCALE: NTS  
PROJECT #: 3832  
DRAWN BY: LBV  
CHECKED BY: WAJ

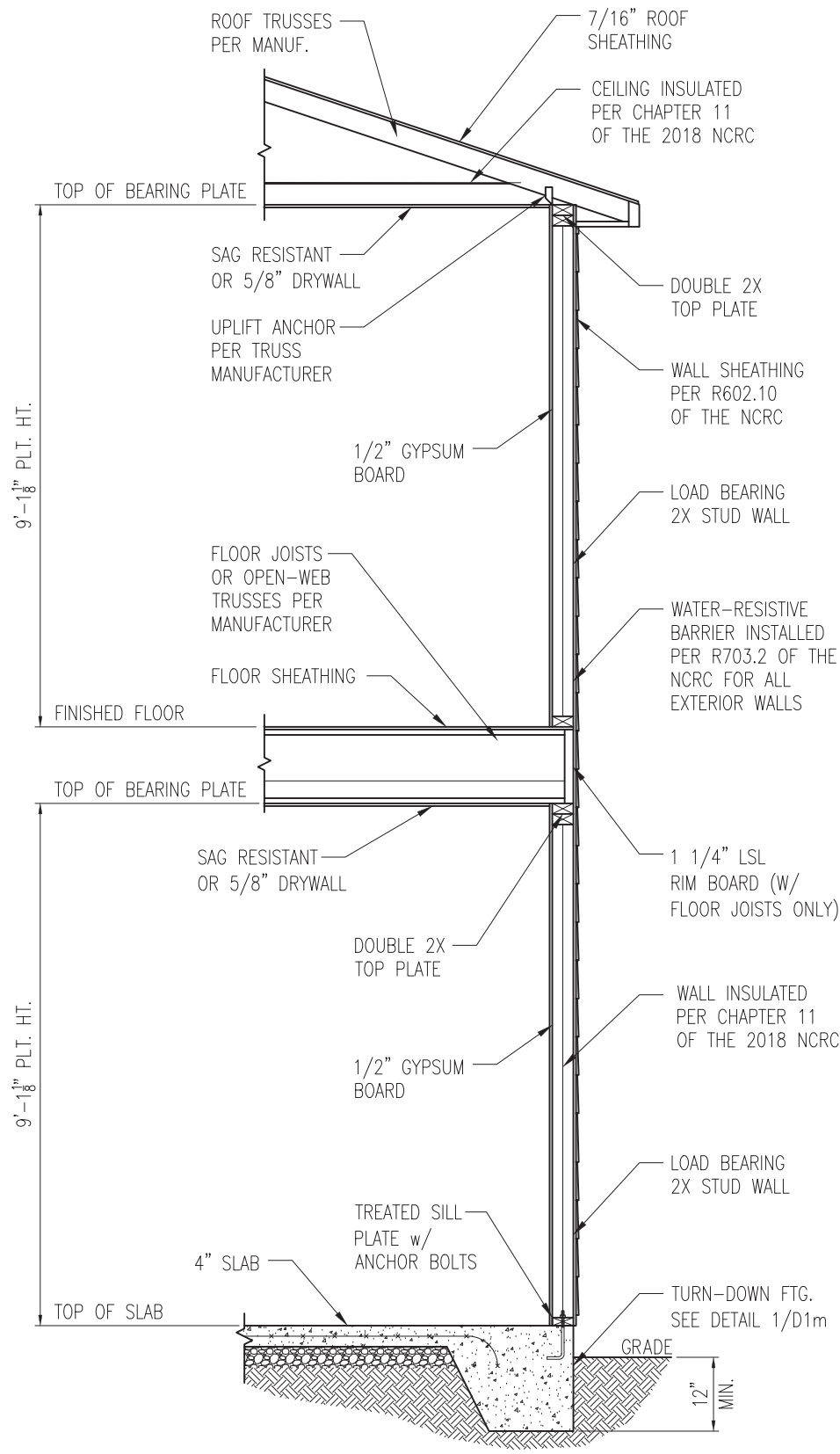
ORIGINAL DRAWING  
NO. DATE PROJECT #  
0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET  
**D2m**



1 TYP. INTERIOR LOAD BEARING WALL SECTION  
 D3m 3/4" = 1'-0"

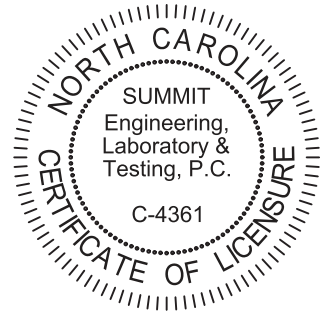


2 TYP. EXTERIOR LOAD BEARING WALL SECTION  
 D3m 3/4" = 1'-0"  
 -SIMILAR w/ BRICK AND STONE  
 -BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT.  
 -MIN. 3/16" Ø WEEP HOLES @ 33" O.C.

- NOTES:
1. REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET CS2 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.



STRUCTURAL MEMBERS ONLY



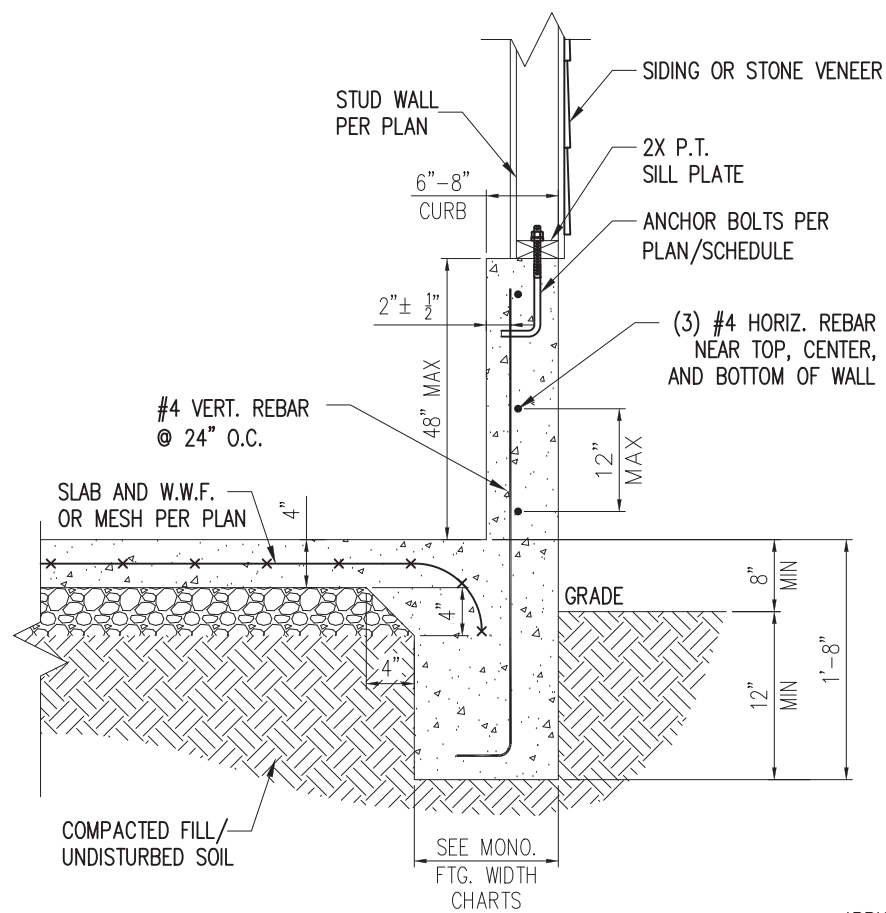
PROJECT  
**Standard Details**  
**Monolithic Slab Details**  
 CLIENT  
**Smith Douglas Homes**  
 110 Village Trail, Suite 215  
 Woodstock, GA 30188

CURRENT DRAWING  
 DATE: 2/18/20  
 SCALE: NTS  
 PROJECT #: 3832  
 DRAWN BY: LBV  
 CHECKED BY: WAJ

ORIGINAL DRAWING  
 NO. DATE PROJECT #  
 0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

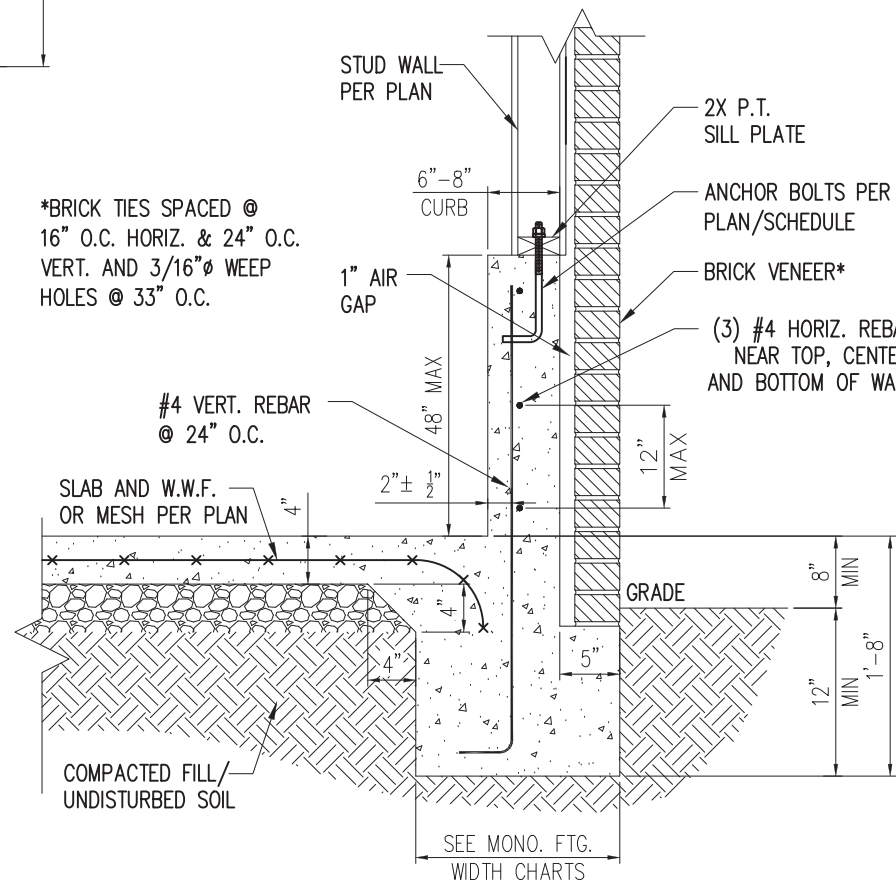
SHEET  
**D3m**



STANDARD - SIDING/STONE

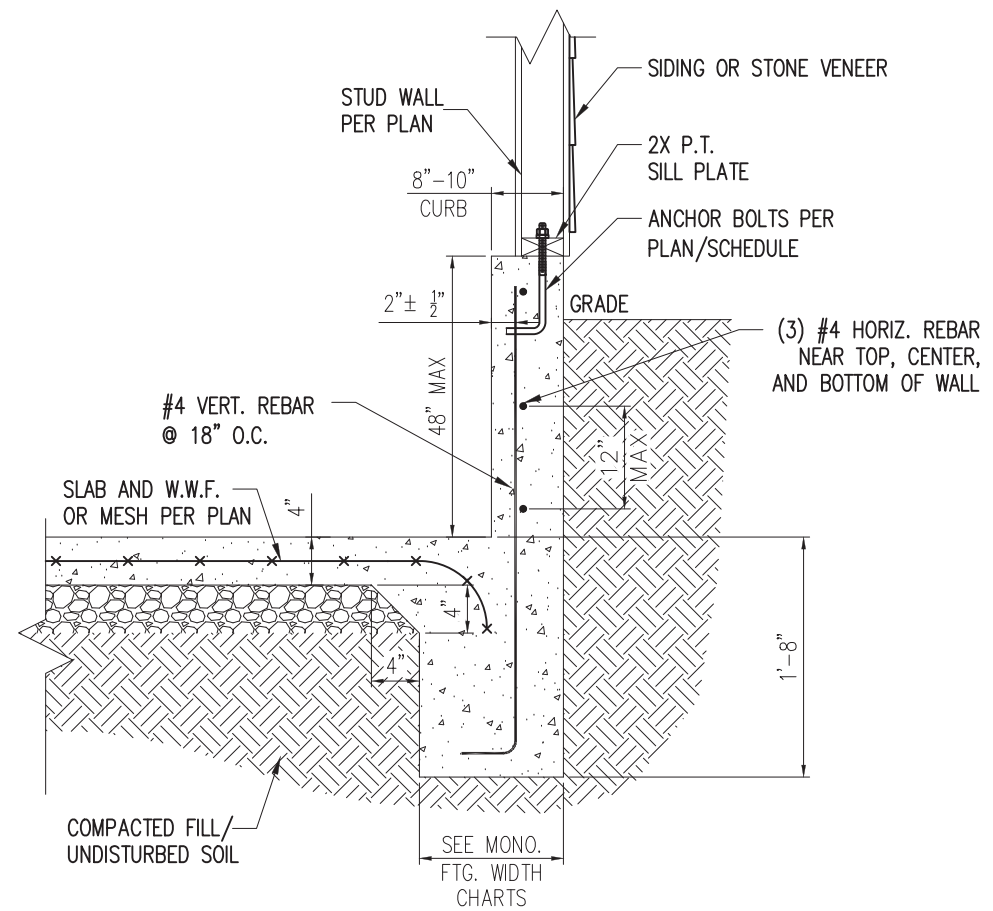
1 EXTENDED GARAGE CURB DETAIL  
D4m NTS

\*BRICK TIES SPACED @  
16" O.C. HORIZ. & 24" O.C.  
VERT. AND 3/16" Ø WEEP  
HOLES @ 33" O.C.



STANDARD - BRICK

3 EXTENDED GARAGE CURB DETAIL  
W/ BRICK VENEER  
D4m NTS



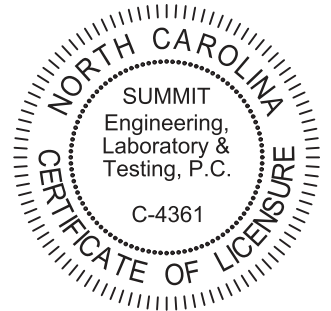
STANDARD - SIDING/STONE

2 EXTENDED GARAGE CURB DETAIL  
W/ UNBALANCED FILL  
D4m NTS



STRUCTURAL MEMBERS ONLY

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



PROJECT  
Standard Details  
Monolithic Slab Details  
CLIENT  
Smith Douglas Homes  
110 Village Trail, Suite 215  
Woodstock, GA 30188

CURRENT DRAWING  
DATE: 2/18/20

SCALE: NTS  
PROJECT #: 3832  
DRAWN BY: LBV  
CHECKED BY: WAJ

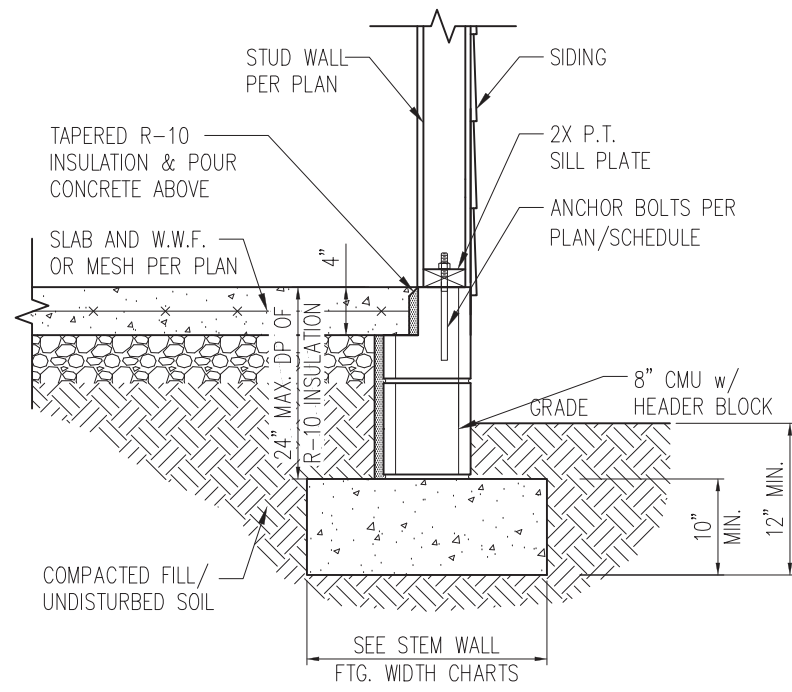
ORIGINAL DRAWING  
NO. DATE PROJECT #  
0 1/7/16 3832

REFER TO COVER SHEET FOR A  
COMPLETE LIST OF REVISIONS

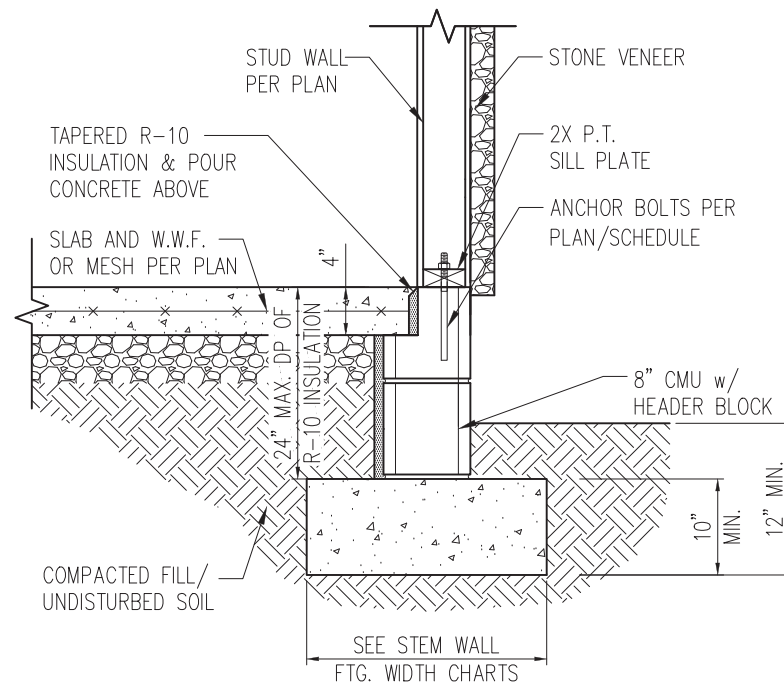
SHEET

D4m

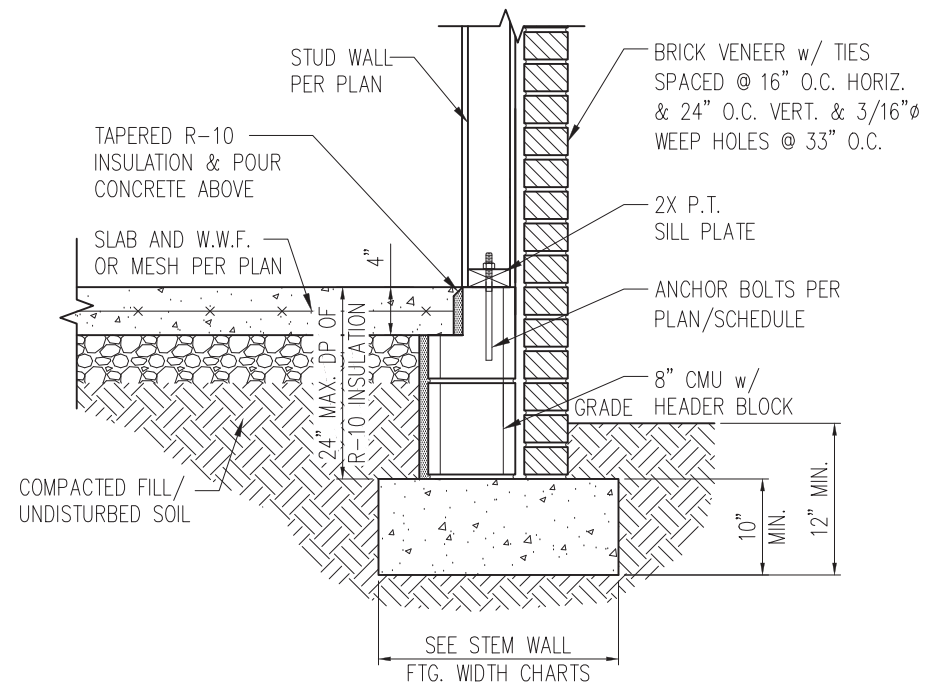




STANDARD - SIDING

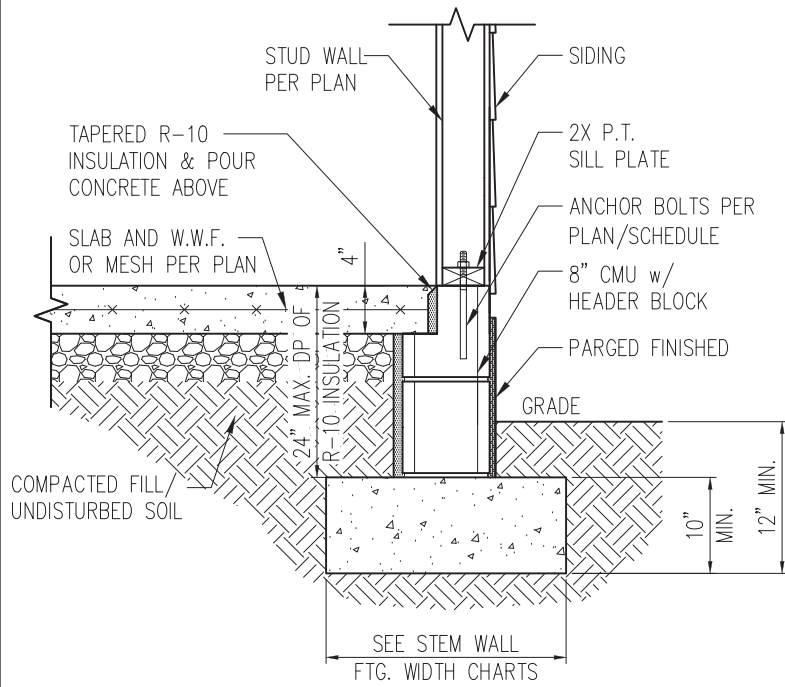


STANDARD - STONE

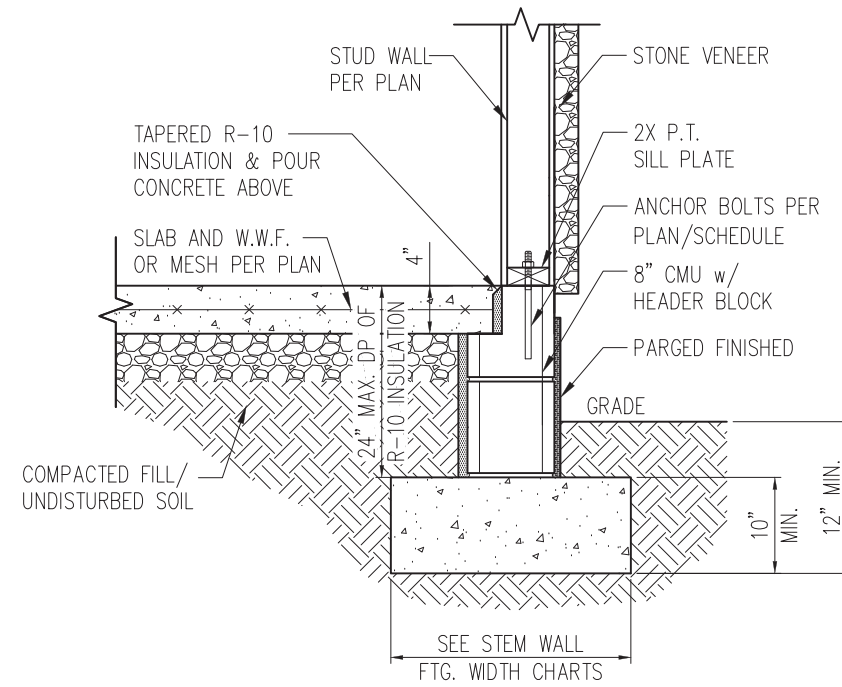


STANDARD - BRICK

1 TYP. STEM WALL DETAIL  
D1s 3/4" = 1'-0"



STANDARD - SIDING



STANDARD - STONE

1a STEM WALL DETAIL w/ PARGED FINISH  
D1s 3/4" = 1'-0"

STEM WALL FOOTING WIDTH

# OF STORIES	WIDTH BASED ON SOIL BEARING CAPACITY		
	1500 PSF	2000 PSF	2500 PSF
1 STORY - STD.	16"	16"	16"
1 STORY - BRICK VENEER	21"*	21"*	21"*
2 STORY - STD.	20"	16"	16"
2 STORY - BRICK VENEER	25"*	21"*	21"*

\*5" BRICK LEDGE HAS BEEN ADDED TO THE STEM WALL FOOTING WIDTH FOR BRICK SUPPORT

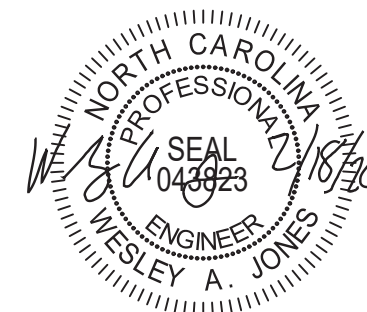
WALL ANCHOR SCHEDULE

TYPE OF ANCHOR	MIN. CONC. EMBEDMENT	SPACING EMBEDMENT	INTERIOR WALL	EXTERIOR WALL
1/2" A307 BOLTS w/ STD. 90° BEND	7"	6'-0"	YES	YES
SST - MAS	4"	5'-0"	NO	YES
HILTI KWIK BOLT KBI 1/2-2-3/4	2-1/4"	6'-0"	YES	NO
1/2" HILTI THREADED ROD w/ HIT HY150 ADHESIVE	7"	6'-0"	YES	YES

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

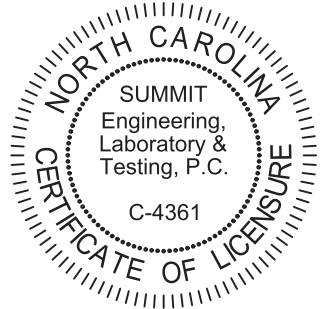
NOTES:

- REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET CS2 FOR ADDITIONAL INFORMATION.
- PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
- SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPS AND DEPRESSIONS.



STRUCTURAL MEMBERS ONLY

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



PROJECT  
**Standard Details**  
**Stemwall Details**  
CLIENT  
**Smith Douglas Homes**  
110 Village Trail, Suite 215  
Woodstock, GA 30188

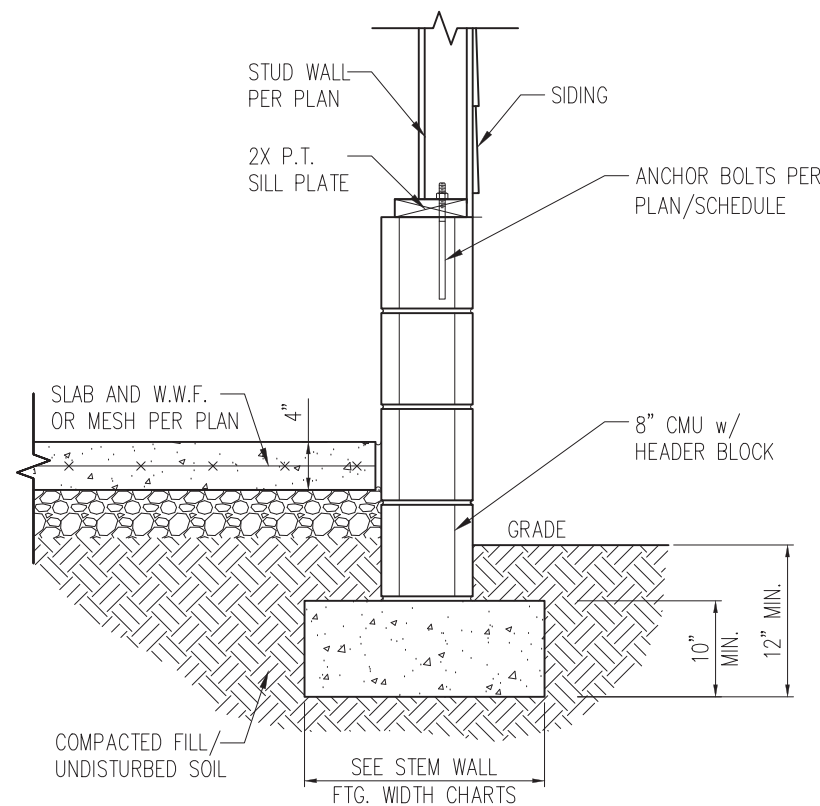
CURRENT DRAWING  
DATE: 2/18/20  
SCALE: NTS  
PROJECT #: 3832  
DRAWN BY: LBV  
CHECKED BY: WAJ

ORIGINAL DRAWING  
NO. DATE PROJECT #  
0 1/7/16 3832

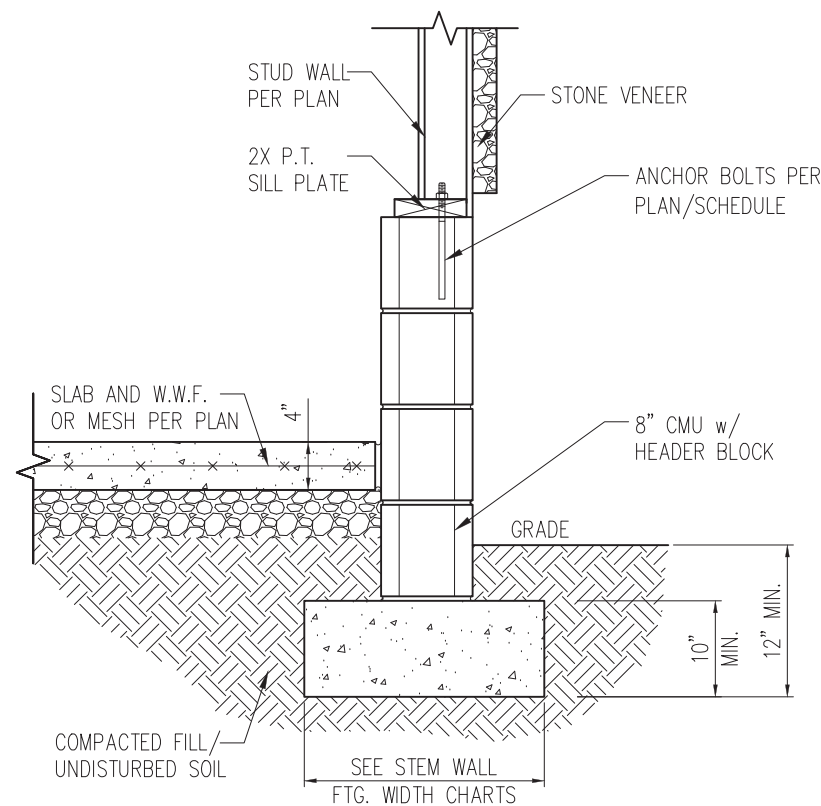
REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

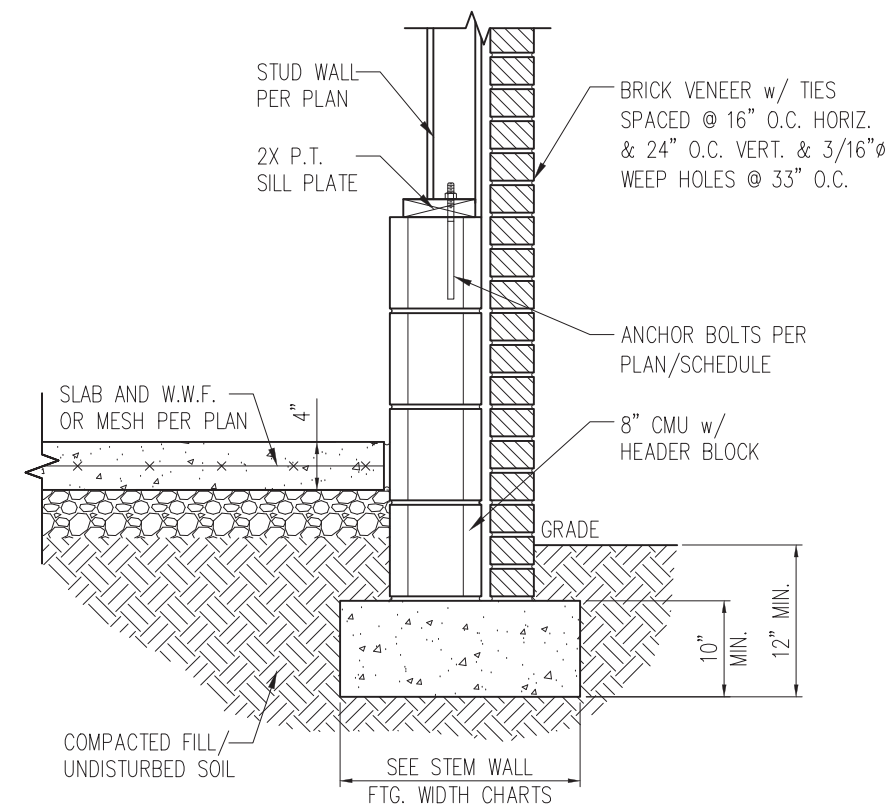
**D1s**



STANDARD - SIDING

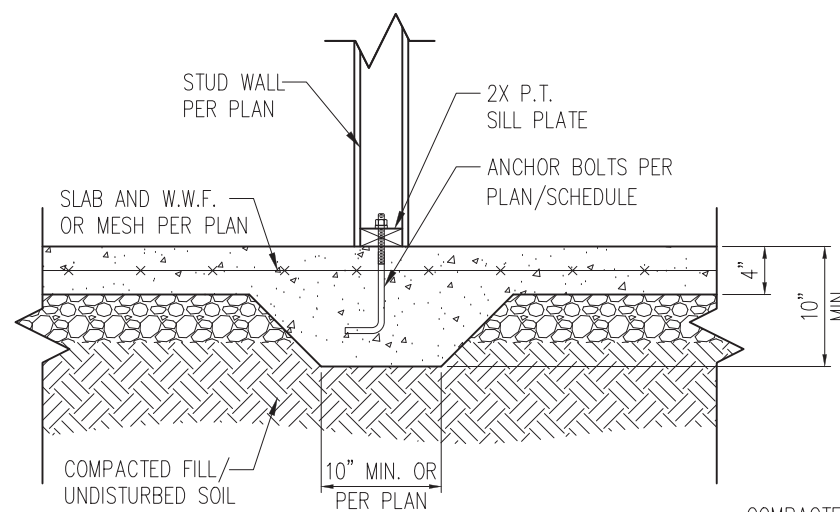


STANDARD - STONE

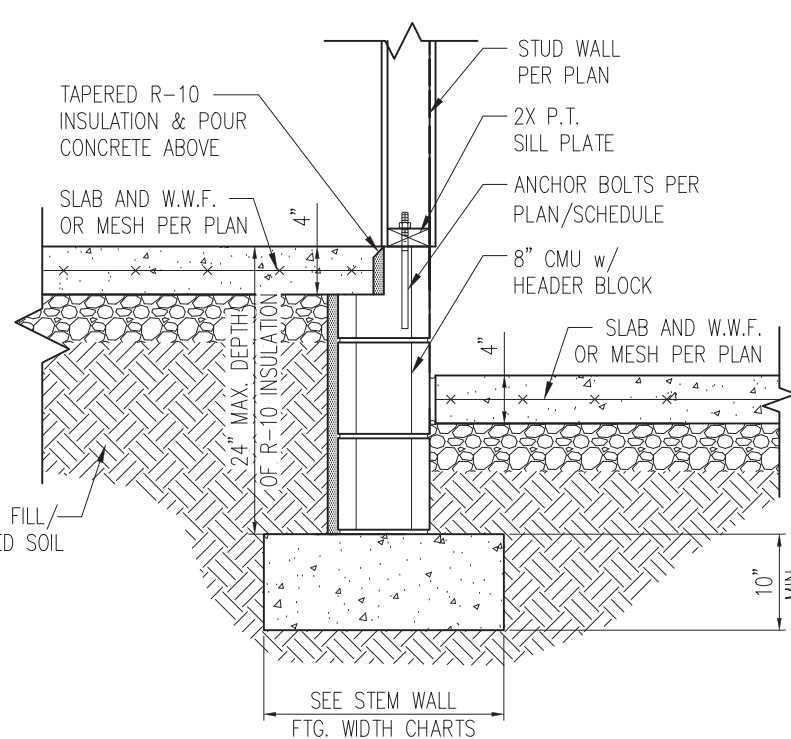


STANDARD - BRICK

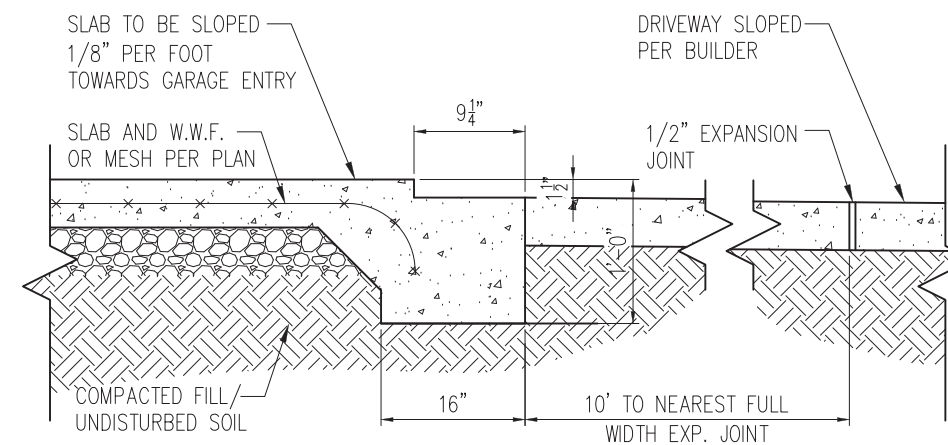
1 TYP. GARAGE CURB DETAIL  
D2s 3/4" = 1'-0"



2 TYP. THICKENED SLAB DETAIL  
D2s 3/4" = 1'-0"

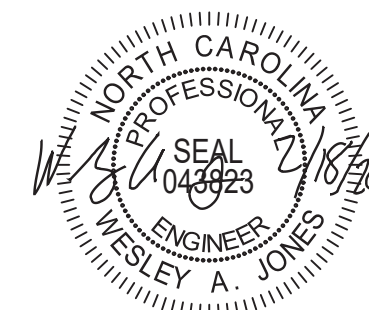


3 HOUSE/GARAGE WALL DETAIL  
D2s 3/4" = 1'-0"



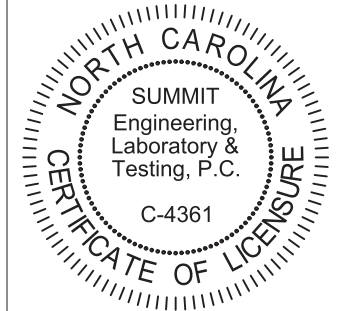
4 SLAB AT GARAGE DOOR  
D2s 3/4" = 1'-0"

- NOTES:
- REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET CS2 FOR ADDITIONAL INFORMATION.
  - PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
  - SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.



STRUCTURAL MEMBERS ONLY

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

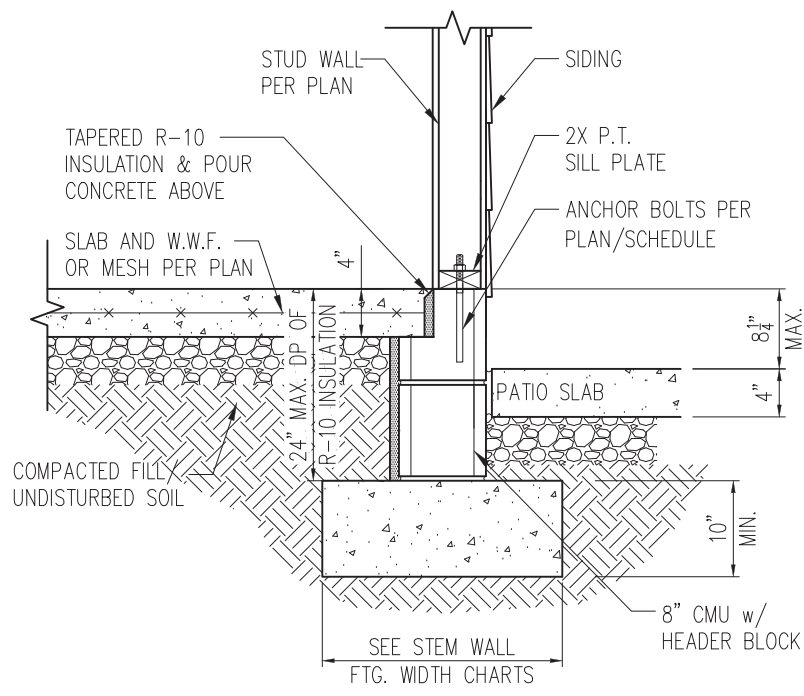


PROJECT  
**Standard Details**  
**Stemwall Details**  
CLIENT  
Smith Douglas Homes  
110 Village Trail, Suite 215  
Woodstock, GA 30188

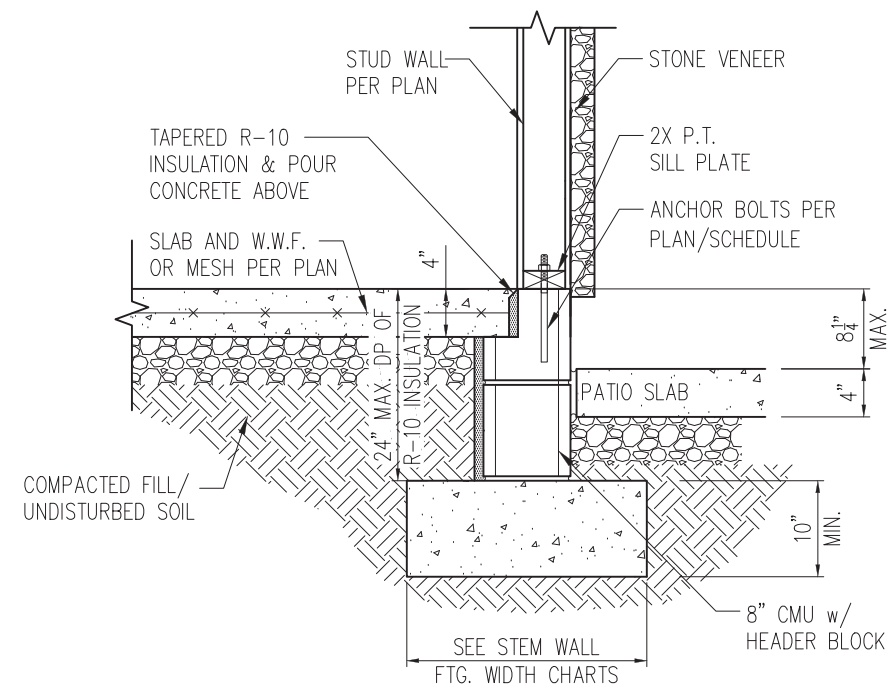
CURRENT DRAWING		
DATE: 2/18/20		
SCALE: NTS		
PROJECT #: 3832		
DRAWN BY: LBV		
CHECKED BY: WAJ		
ORIGINAL DRAWING		
NO.	DATE	PROJECT #
0	1/7/16	3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

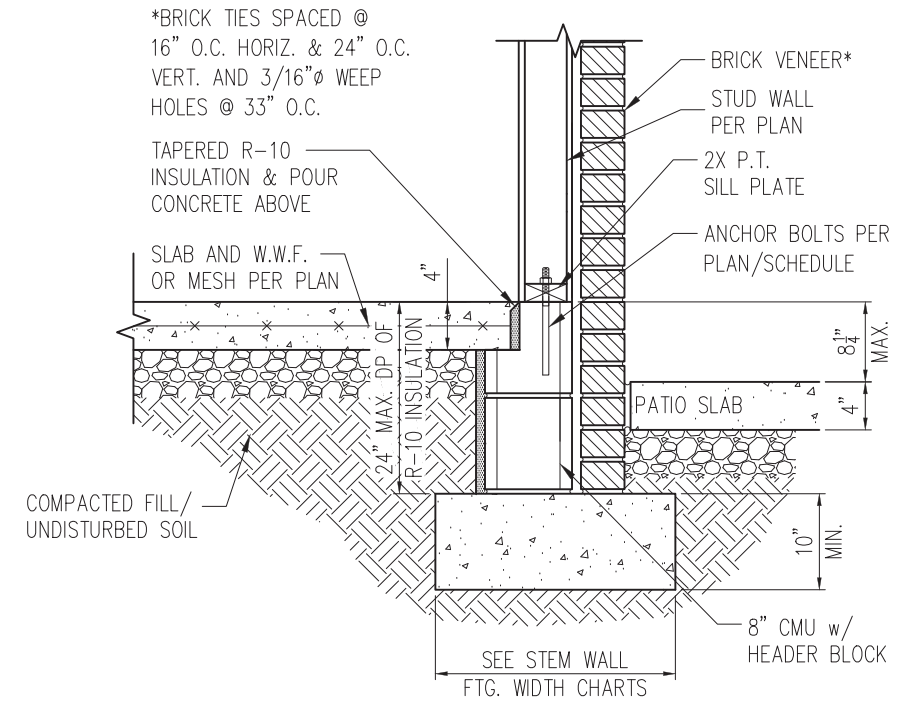
SHEET  
**D2s**



STANDARD - SIDING

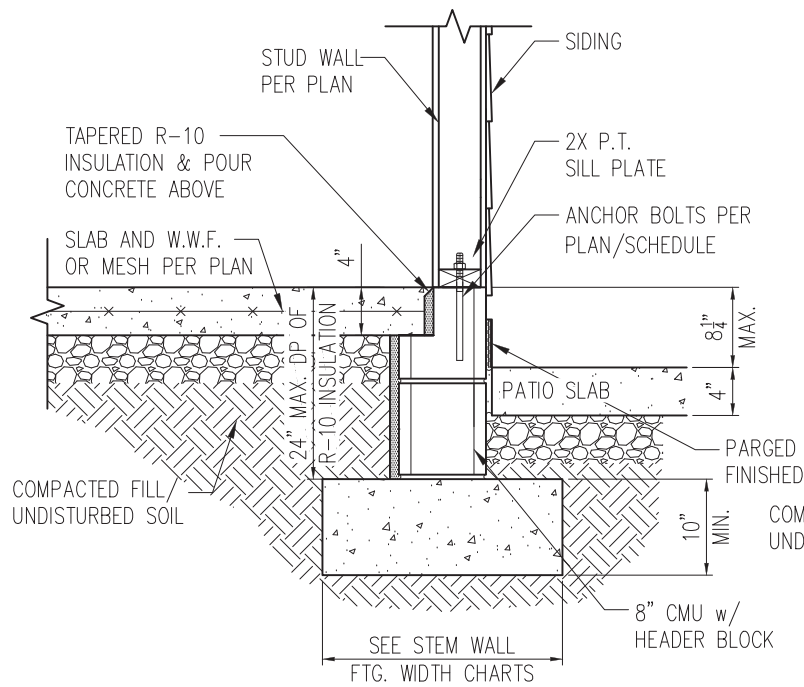


STANDARD - STONE

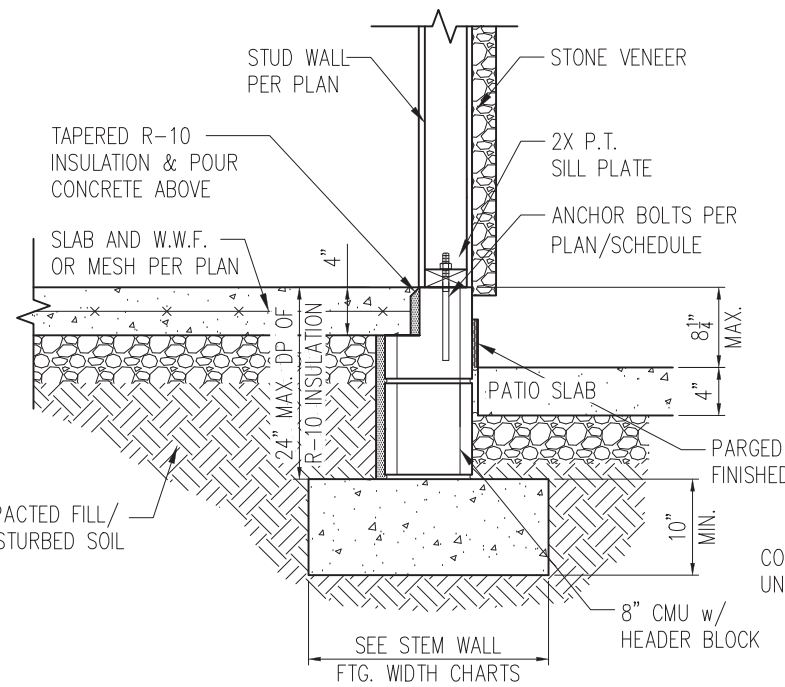


STANDARD - BRICK

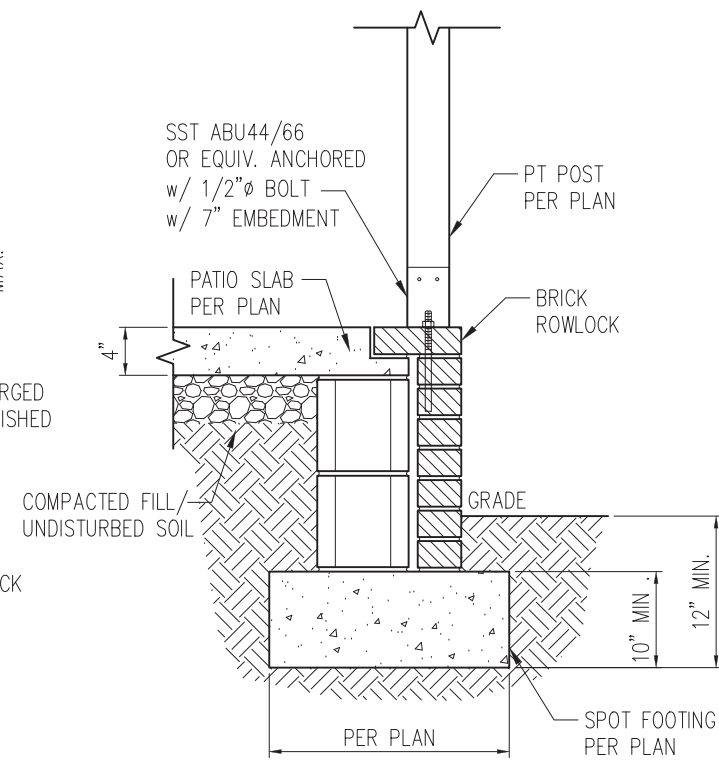
1 PORCH SLAB DETAIL  
D3s 3/4" = 1'-0"



STANDARD - SIDING

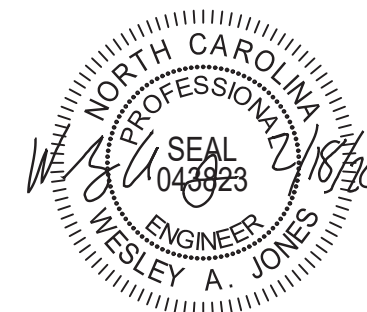


STANDARD - STONE



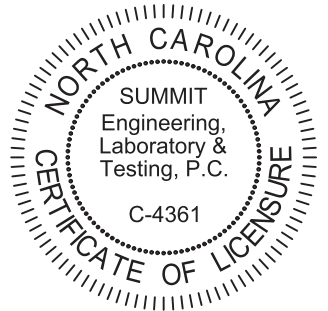
2 COVERED PORCH DETAIL  
D3s 3/4" = 1'-0"

- NOTES:
1. REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET CS2 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.



STRUCTURAL MEMBERS ONLY

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



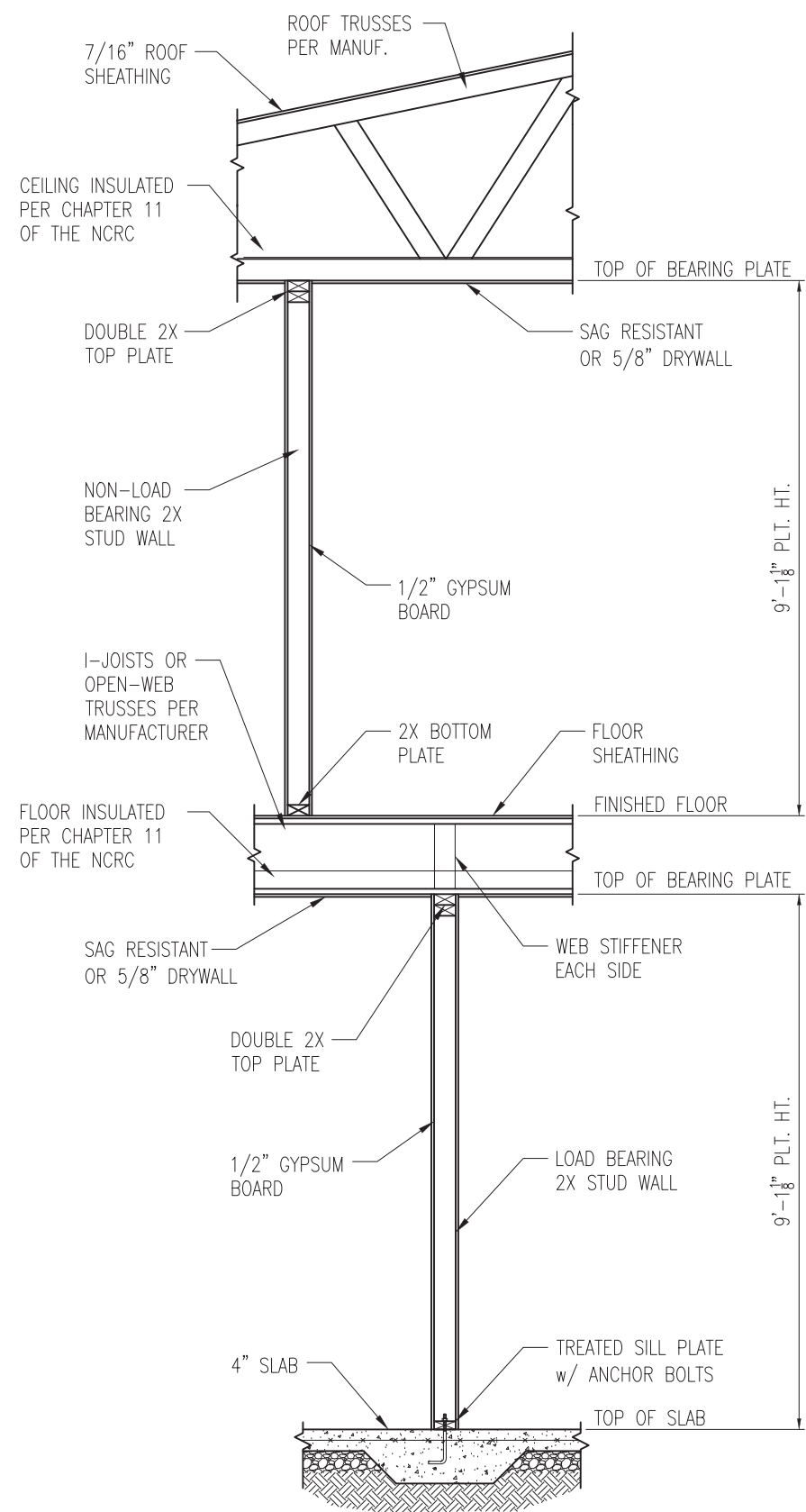
PROJECT  
**Standard Details**  
**Stemwall Details**  
CLIENT  
**Smith Douglas Homes**  
110 Village Trail, Suite 215  
Woodstock, GA 30188

CURRENT DRAWING  
DATE: 2/18/20  
SCALE: NTS  
PROJECT #: 3832  
DRAWN BY: LBV  
CHECKED BY: WAJ

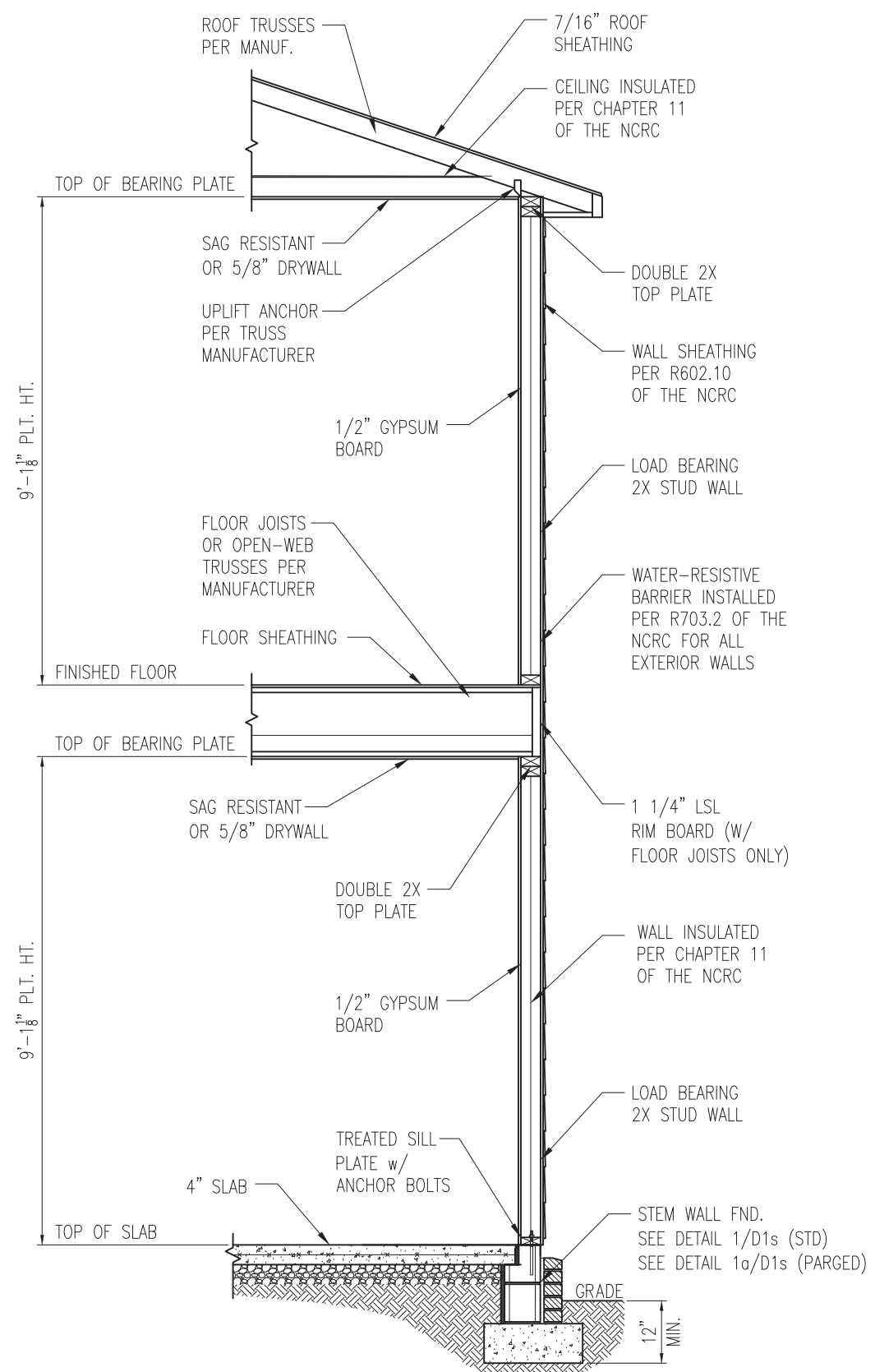
ORIGINAL DRAWING  
NO. DATE PROJECT #  
0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET  
**D3s**



1 TYP. INTERIOR LOAD BEARING WALL SECTION  
 D4s 3/4" = 1'-0"



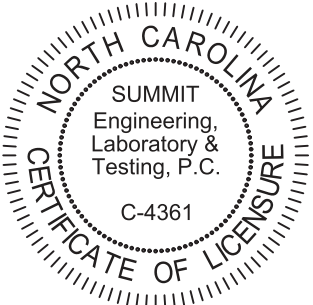
2 TYP. EXTERIOR LOAD BEARING WALL SECTION  
 D4s 3/4" = 1'-0" -SIMILAR w/ BRICK AND STONE  
 -BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT.  
 -MIN. 3/16" Ø WEEP HOLES @ 33" O.C.

- NOTES:
1. REFER TO GENERAL NOTES & SPECIFICATIONS ON SHEET CS2 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.



STRUCTURAL MEMBERS ONLY

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



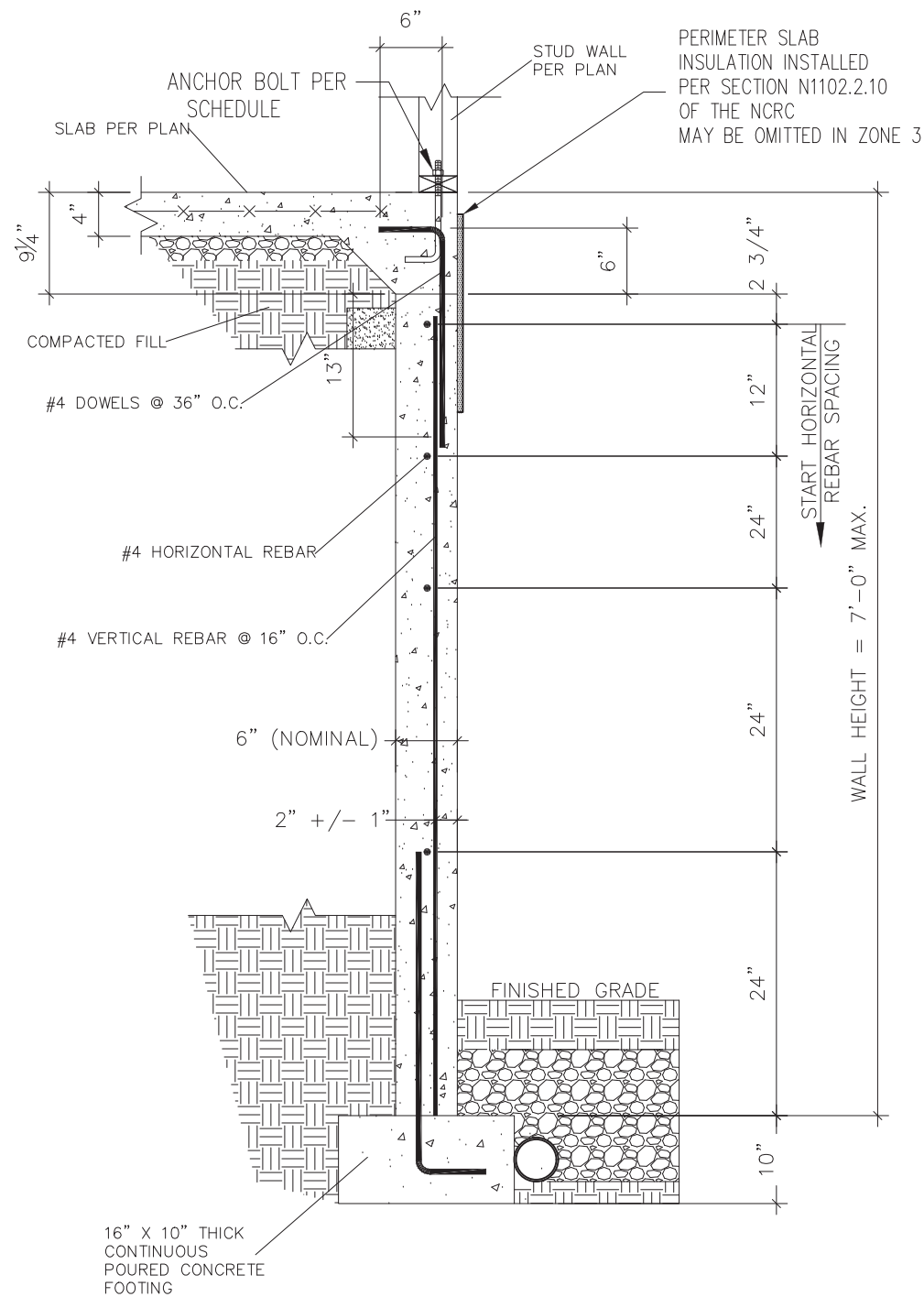
PROJECT  
**Standard Details**  
**Stemwall Details**  
 CLIENT  
**Smith Douglas Homes**  
 110 Village Trail, Suite 215  
 Woodstock, GA 30188

CURRENT DRAWING  
 DATE: 2/18/20  
 SCALE: NTS  
 PROJECT #: 3832  
 DRAWN BY: LBV  
 CHECKED BY: WAJ

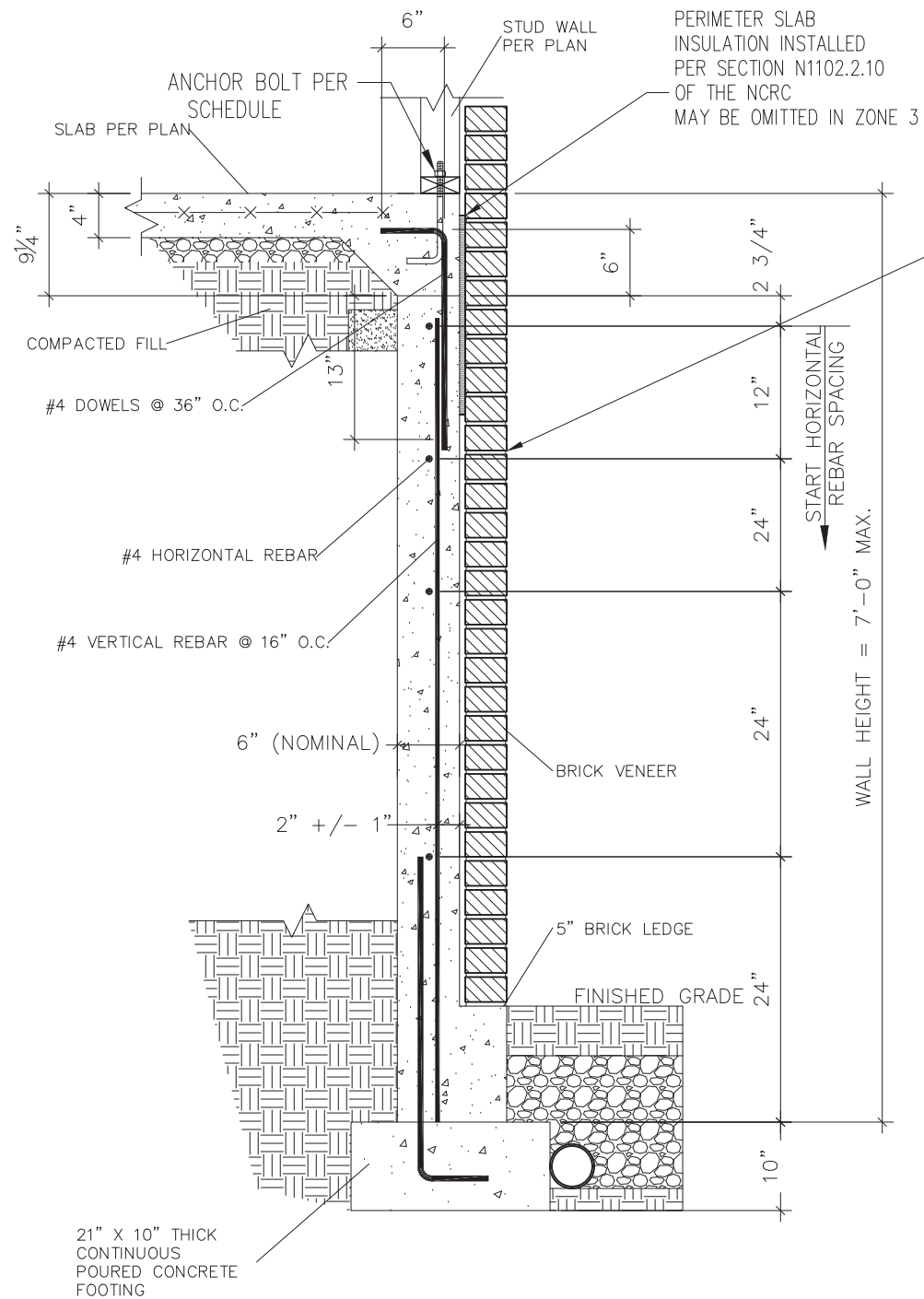
ORIGINAL DRAWING  
 NO. DATE PROJECT #  
 0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET  
**D4s**



1 SUBWALL FOUNDATION  
 D5s 3/4" = 1'-0"

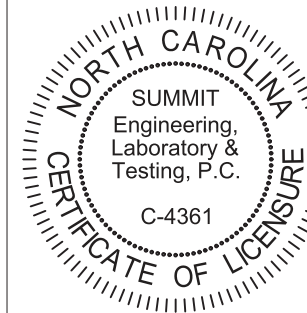


2 SUBWALL FOUNDATION W/ BRICK VENEER  
 D5s 3/4" = 1'-0"

PROVIDE LADDER WIRE OR METAL TIES, INSTALLED PER R608.1.2 OF THE 2012 NCRC, AND FULLY GROUT BETWEEN BRICK AND CONCRETE.



STRUCTURAL MEMBERS ONLY



PROJECT  
**Standard Details**  
**Stemwall Details**  
 CLIENT  
 Smith Douglas Homes  
 110 Village Trail, Suite 215  
 Woodstock, GA 30188

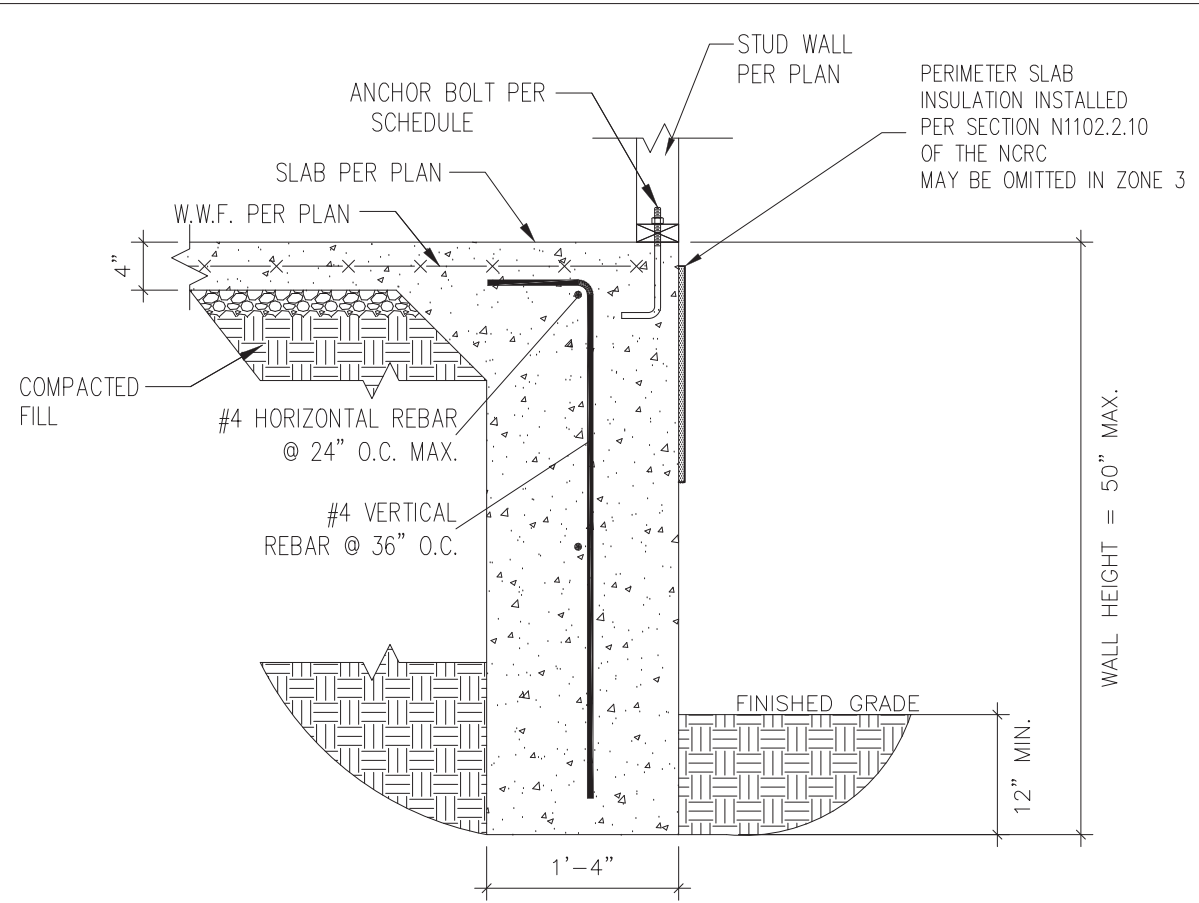
CURRENT DRAWING  
 DATE: 2/18/20  
 SCALE: NTS  
 PROJECT #: 3832  
 DRAWN BY: LBV  
 CHECKED BY: WAJ

ORIGINAL DRAWING  
 NO. DATE PROJECT #  
 0 1/7/16 3832

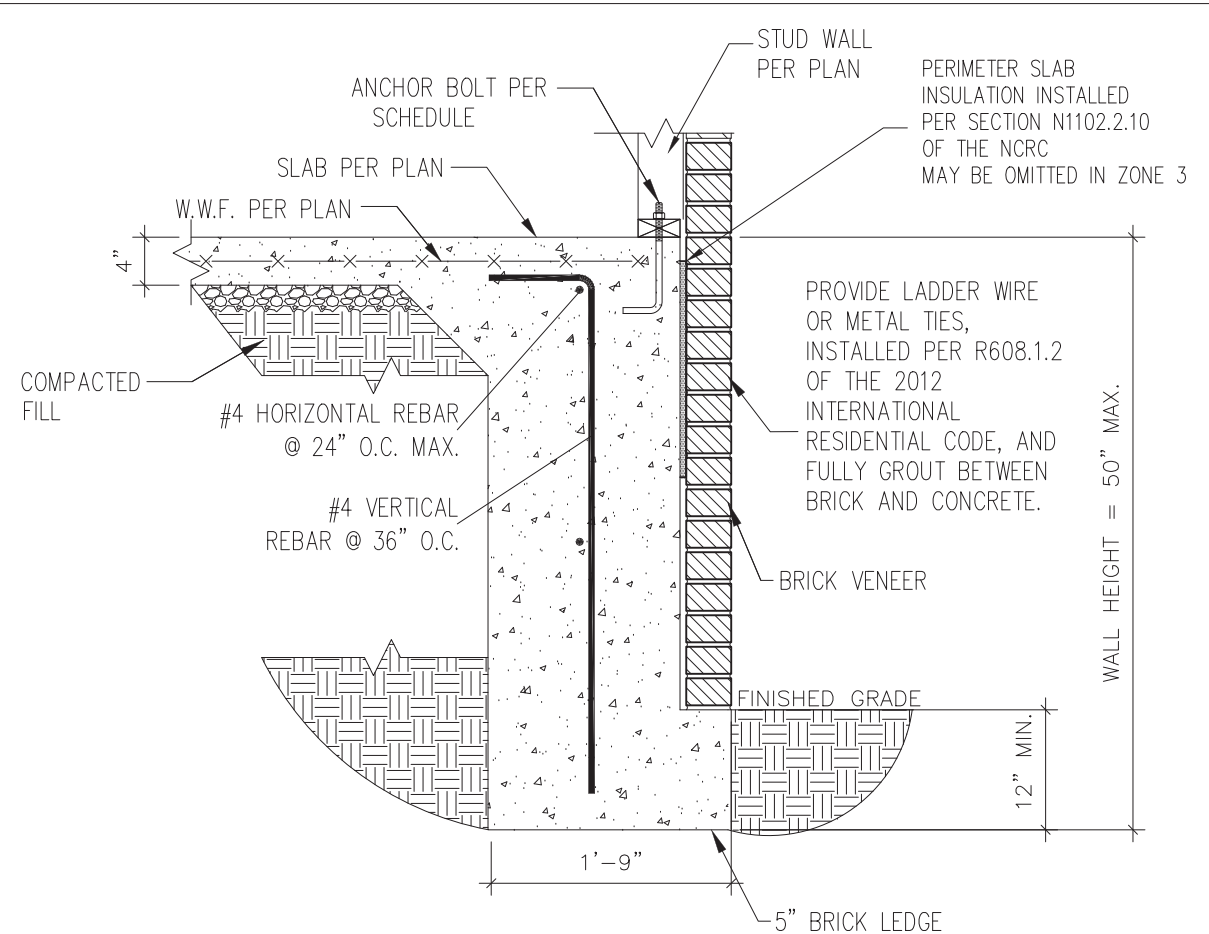
REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

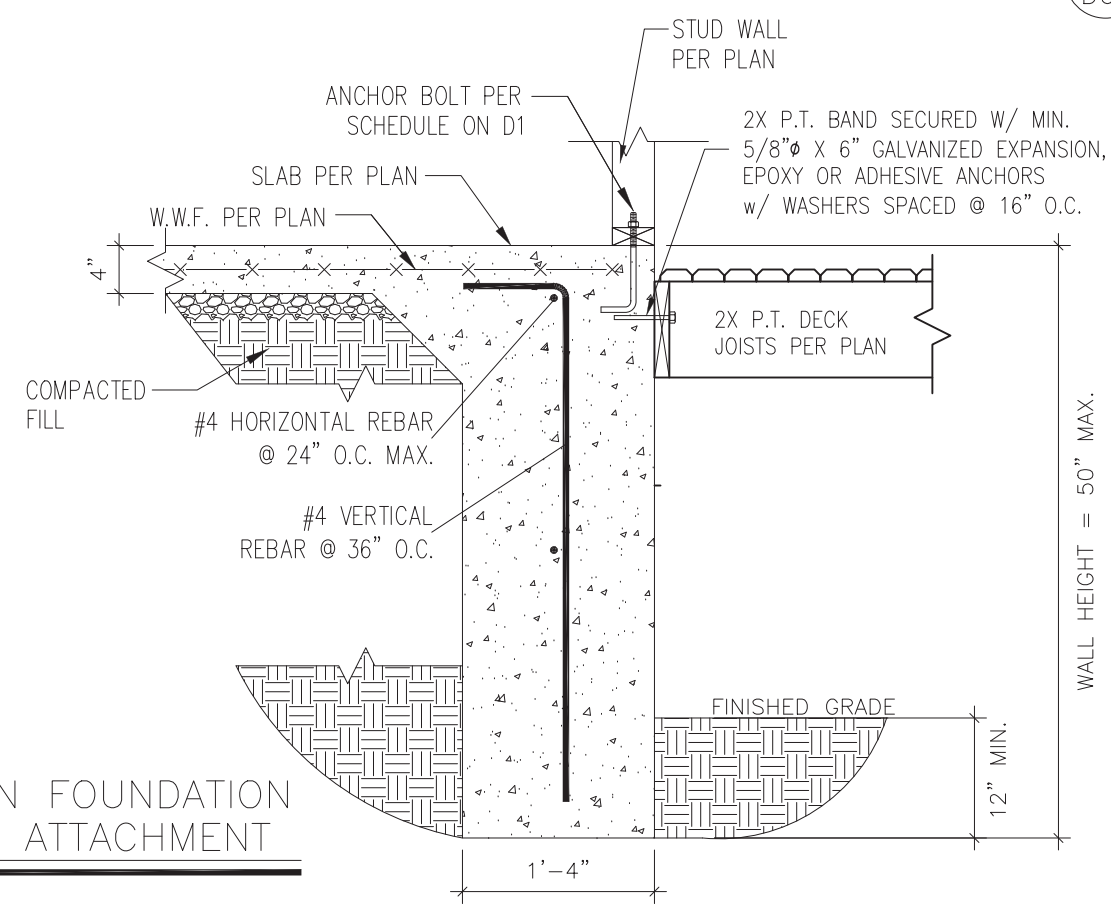
**D5s**



1 TURNDOWN FOUNDATION  
 D6s 3/4" = 1'-0"



2 TURNDOWN FOUNDATION W/ BRICK VENEER  
 D6s 3/4" = 1'-0"

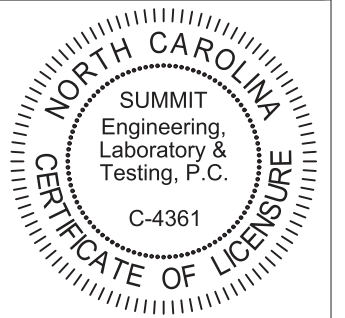


3 TURNDOWN FOUNDATION W/ DECK ATTACHMENT  
 D6s 3/4" = 1'-0"



STRUCTURAL MEMBERS ONLY

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



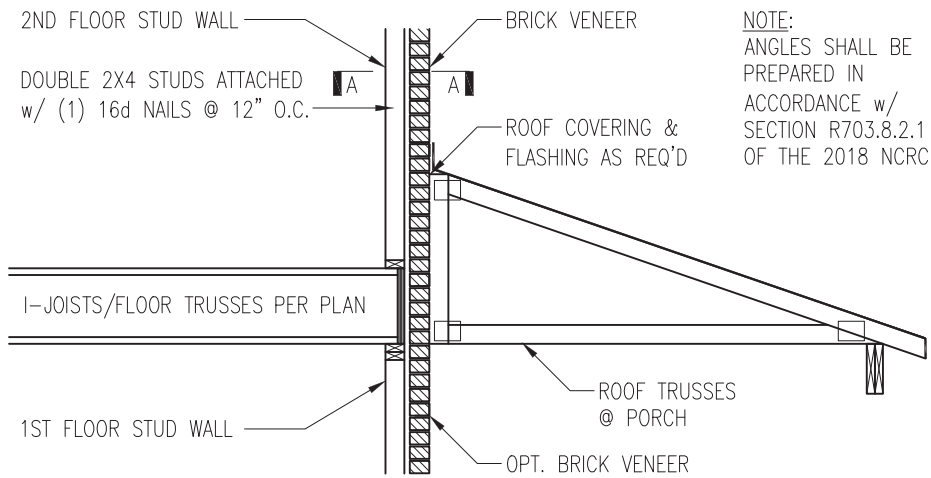
PROJECT  
**Standard Details**  
**Stemwall Details**  
 CLIENT  
**Smith Douglas Homes**  
 110 Village Trail, Suite 215  
 Woodstock, GA 30188

CURRENT DRAWING  
 DATE: 2/18/20  
 SCALE: NTS  
 PROJECT #: 3832  
 DRAWN BY: LBV  
 CHECKED BY: WAJ

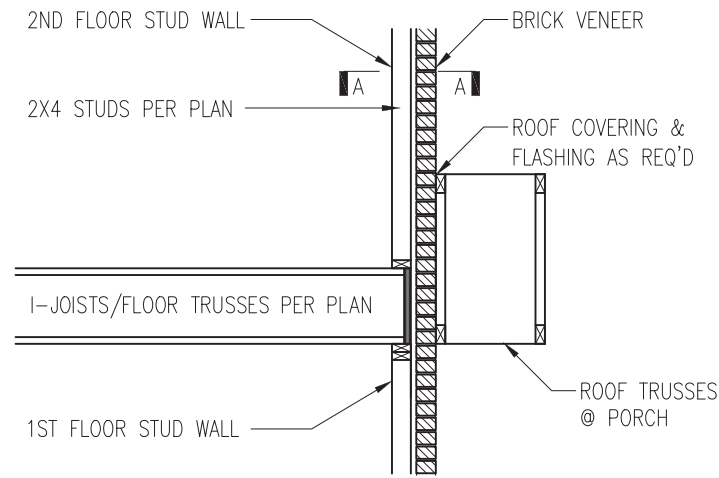
NO.	DATE	PROJECT #
0	1/7/16	3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET  
**D6s**



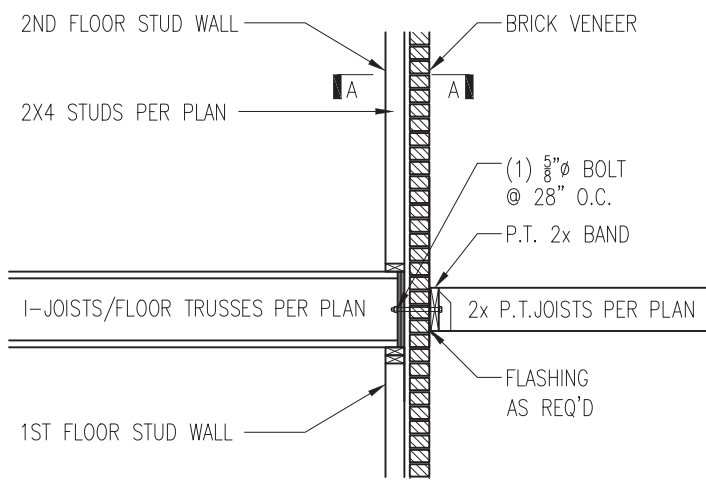
NOTE:  
ANGLES SHALL BE  
PREPARED IN  
ACCORDANCE w/  
SECTION R703.8.2.1  
OF THE 2018 NCR



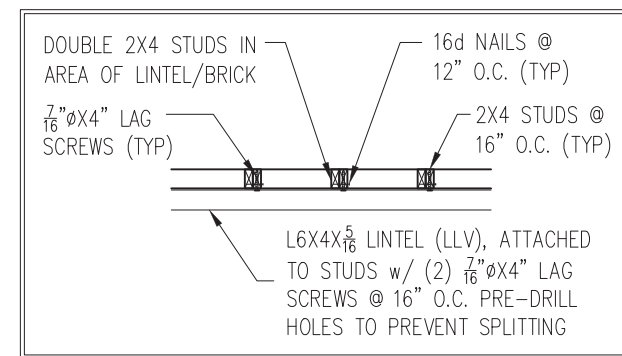
TRUSSES PERPENDICULAR TO STUD WALL

TRUSSES PARALLEL TO STUD WALL  
w/ CONTINUOUS BRICK VENEER

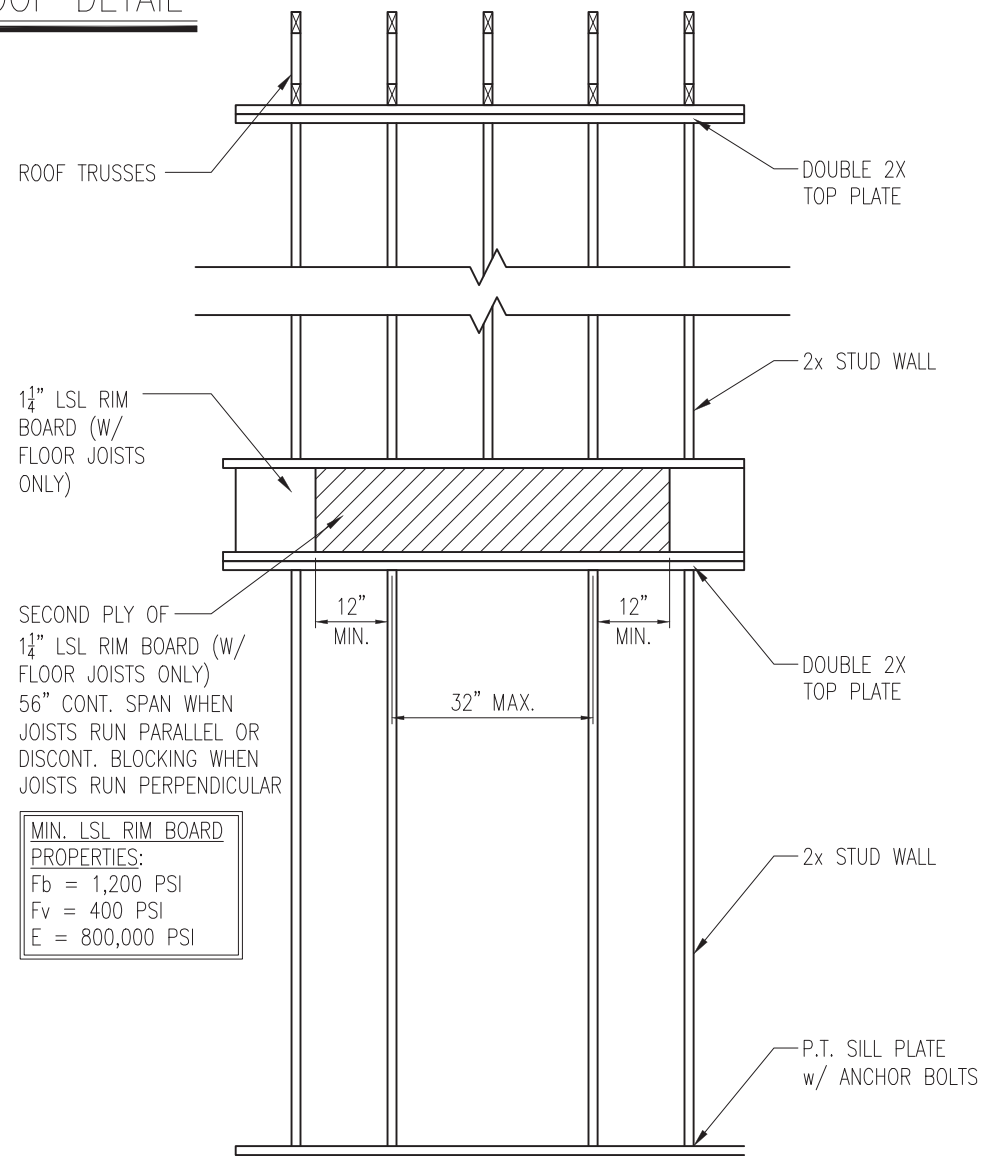
1 BRICK SUPPORT ABOVE STORAGE/PORCH ROOF DETAIL  
D5f NTS



3 BALCONY JOIST ATTACHMENT  
D5f NTS



SECTION A-A  
NTS



SECOND PLY OF  
1 1/4\"/>

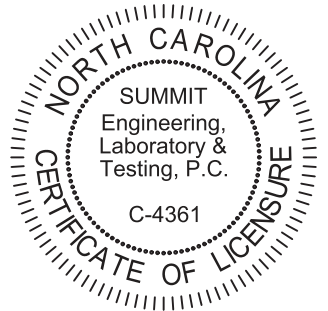
MIN. LSL RIM BOARD  
PROPERTIES:  
Fb = 1,200 PSI  
Fv = 400 PSI  
E = 800,000 PSI

4 TYP. RANGE VENT FRAMING  
D5f VENTED TO EXTERIOR WALL



STRUCTURAL MEMBERS ONLY

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



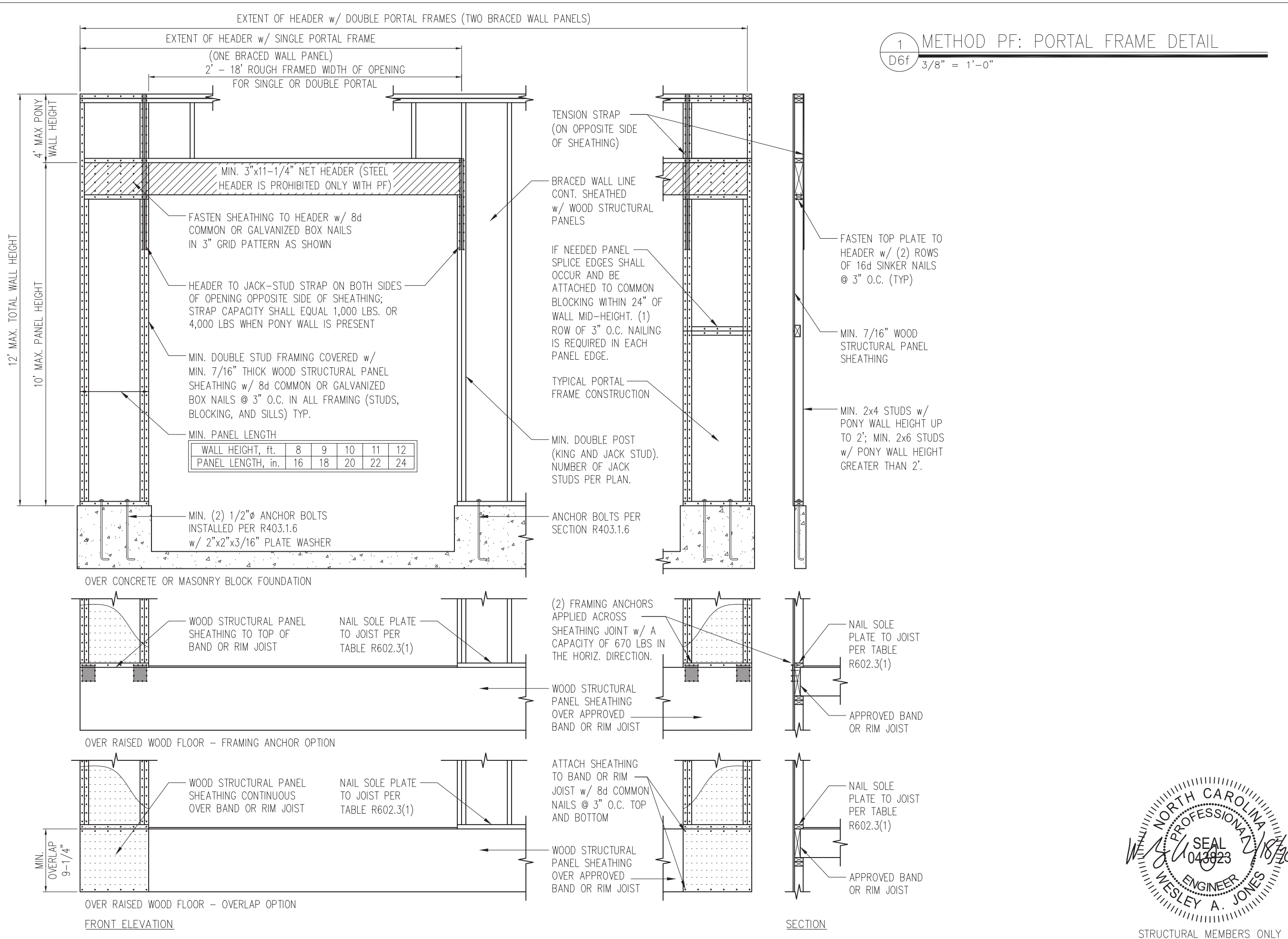
PROJECT  
Standard Details  
Framing Details  
CLIENT  
Smith Douglas Homes  
110 Village Trail, Suite 215  
Woodstock, GA 30188

CURRENT DRAWING  
DATE: 2/18/20  
SCALE: NTS  
PROJECT #: 3832  
DRAWN BY: LBV  
CHECKED BY: WAJ

ORIGINAL DRAWING  
NO. DATE PROJECT #  
0 1/7/16 3832

REFER TO COVER SHEET FOR A  
COMPLETE LIST OF REVISIONS

SHEET  
**D5f**



1 METHOD PF: PORTAL FRAME DETAIL  
 D6f 3/8" = 1'-0"

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

NORTH CAROLINA  
 SUMMIT  
 Engineering,  
 Laboratory &  
 Testing, P.C.  
 C-4361  
 CERTIFICATE OF LICENSURE

PROJECT  
**Standard Details**  
**Framing Details - Bracing**

CLIENT  
**Smith Douglas Homes**  
**110 Village Trail, Suite 215**  
**Woodstock, GA 30188**

CURRENT DRAWING  
 DATE: 2/18/20  
 SCALE: NTS  
 PROJECT #: 3832  
 DRAWN BY: LBV  
 CHECKED BY: WAJ

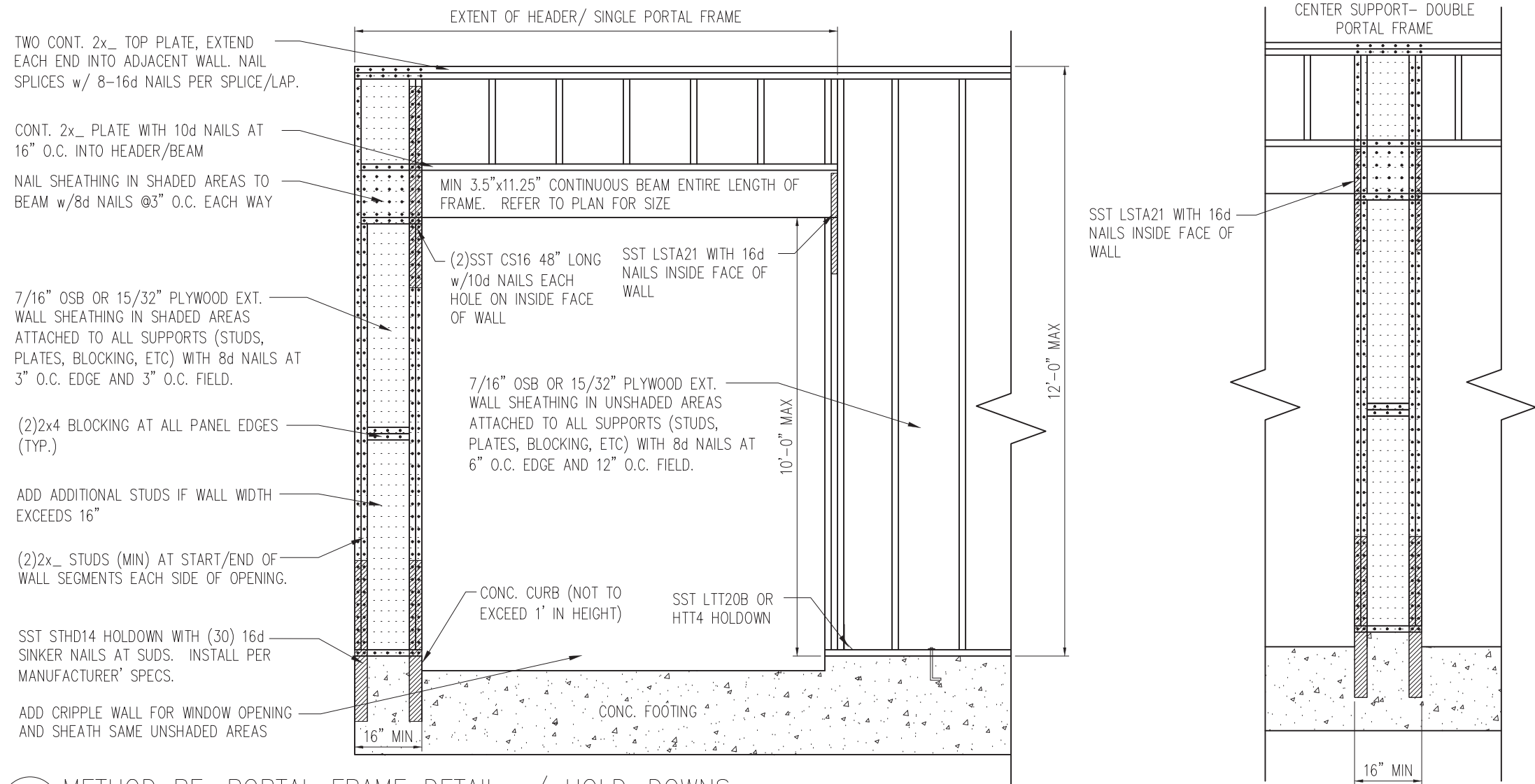
ORIGINAL DRAWING  
 NO. DATE PROJECT #  
 0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

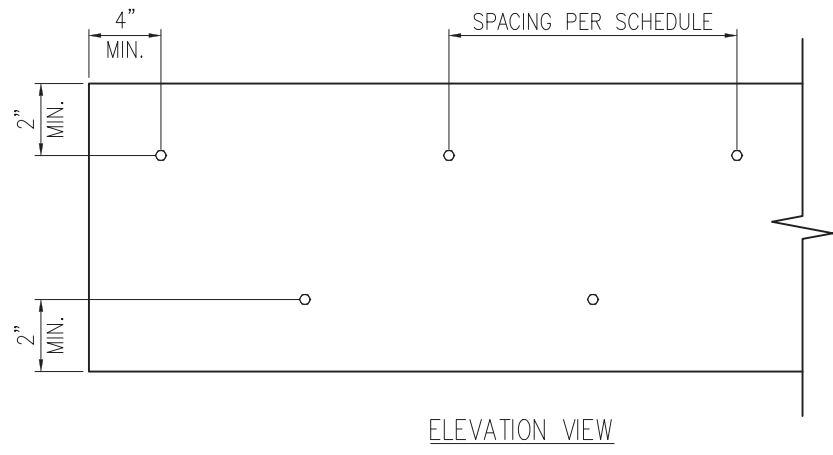
NORTH CAROLINA  
 PROFESSIONAL ENGINEER  
 SEAL  
 043823  
 WESLEY A. JONES

SHEET  
**D6f**  
 STRUCTURAL MEMBERS ONLY





1 METHOD PF: PORTAL FRAME DETAIL w/ HOLD-DOWNS  
 D7f 3/4" = 1'-0"



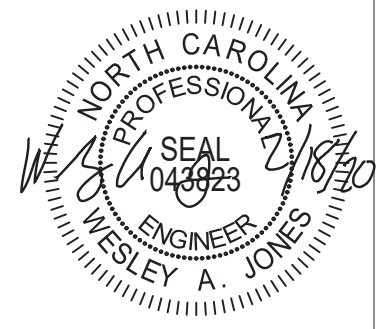
2 MULTI-PLY BEAM CONNECTION DETAIL  
 D7f N.T.S

**MINIMUM FASTENING REQUIREMENTS FOR TOP- AND SIDE-LOADED MEMBERS**

FASTENER TYPE	LVL DEPTH	3/4" WIDE		5/4" WIDE		7" WIDE	
		2-Ply 1 3/4"	3-Ply 1 3/4"	1 3/4" + 3 1/2"	4-Ply 1 3/4"	2-Ply 1 3/4" + 3 1/2"	2-Ply 3 1/2"
10d (0.128" x 3") Nails	7/4" ≤ d < 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
	d ≥ 14"	4 rows @ 12" o.c.	4 rows @ 12" o.c. (ES)	4 rows @ 12" o.c.	-	4 rows @ 12" o.c. (ES)	-
16d (0.162" x 3 1/2") Nails	7/4" ≤ d < 14"	2 rows @ 12" o.c.	2 rows @ 12" o.c. (ES)	2 rows @ 12" o.c.	-	2 rows @ 12" o.c. (ES)	-
	d ≥ 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
1/2" Through Bolts	d ≥ 7/4"	2 rows @ 24" o.c.	2 rows @ 24" o.c.		2 rows @ 24" o.c.		
SDS 1/4" x 3 1/2", WS35, 3 3/8" TrussLok		2 rows @ 24" o.c.	2 rows @ 24" o.c. (ES)	2 rows @ 24" o.c.	-	2 rows @ 24" o.c. (ES)	-
SDS 1/4" x 6", WS6		-	-	-	2 rows @ 24" o.c. (ES)		
5" TrussLok		-	2 rows @ 24" o.c.		-		
6 3/4" TrussLok		-	-	-	2 rows @ 24" o.c.		

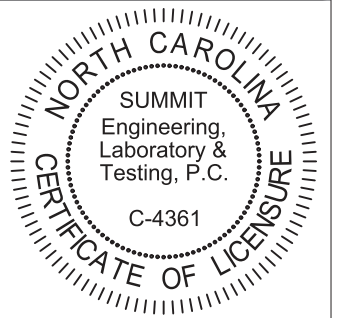
**NOTES:**

- All fasteners must meet the minimum requirements in the table above. Side-loaded multiple-ply members must meet the minimum fastening and side-loading capacity requirements given on page 48.
- Minimum fastening requirements for depths less than 7/4" require special consideration. Please contact your technical representative.
- Three general rules for staggering or offsetting for a certain fastener schedule:
  - If staggering or offsetting is not referenced, then none is required;
  - If staggering is referenced, then fasteners installed in adjacent rows on the front side are to be staggered up to one-half the o.c. spacing, but maintaining the fastener clearances above; and
  - If "ES" is referenced, then the fastener schedule must be repeated on each side, with the fasteners on the back side offset up to one-half the o.c. spacing of the front side (whether or not it is staggered).



STRUCTURAL MEMBERS ONLY

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

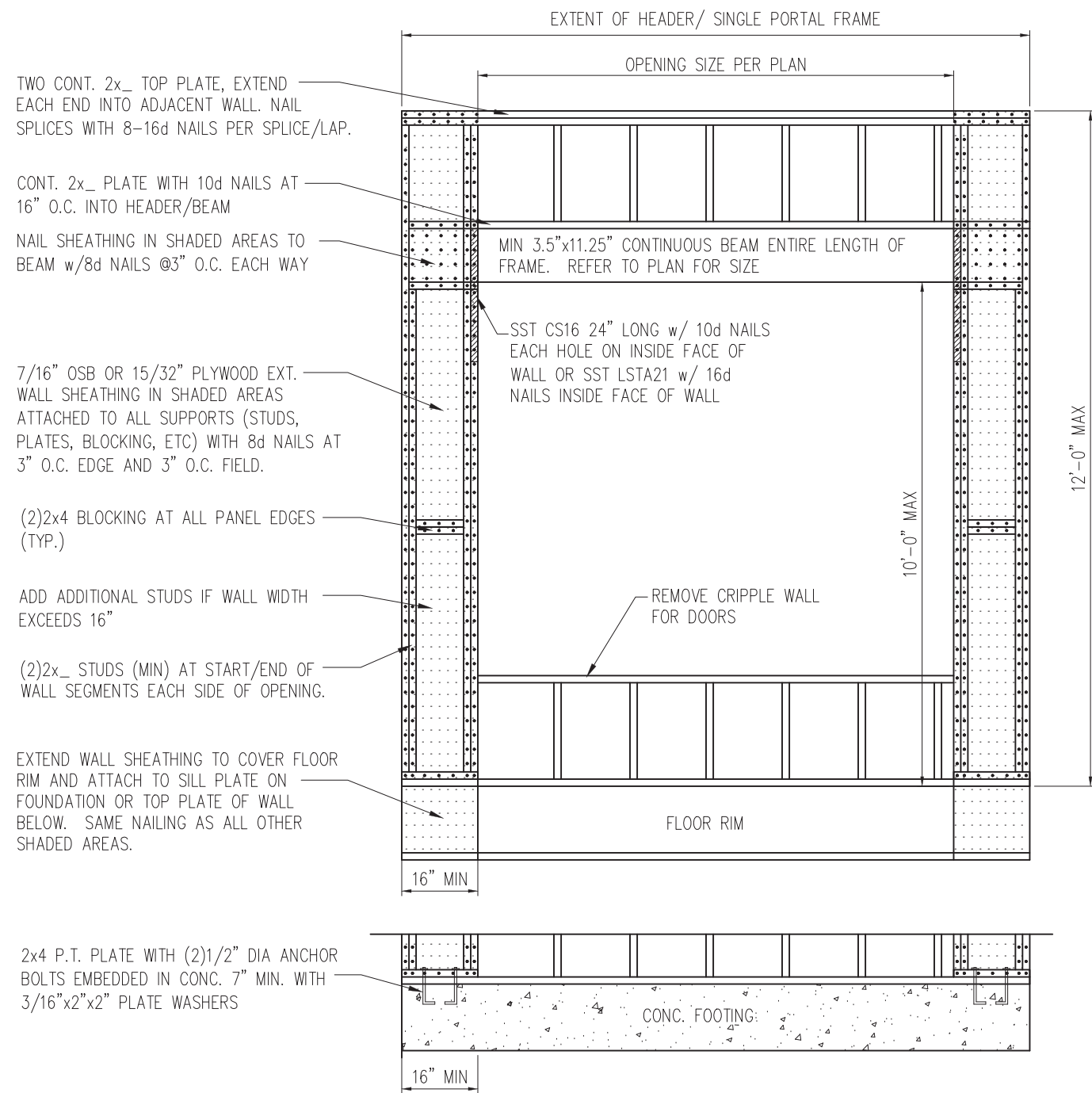


PROJECT  
 Standard Details  
 Framing Details - Bracing  
 CLIENT  
 Smith Douglas Homes  
 110 Village Trail, Suite 215  
 Woodstock, GA 30188

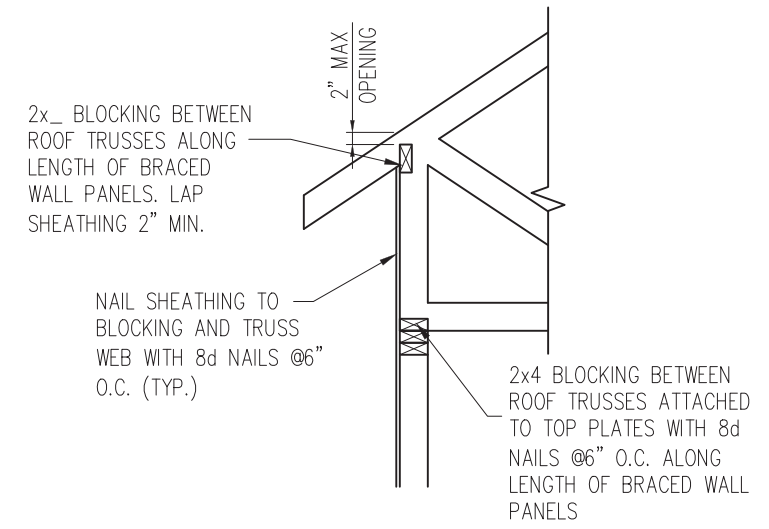
CURRENT DRAWING  
 DATE: 2/18/20  
 SCALE: NTS  
 PROJECT #: 3832  
 DRAWN BY: LBV  
 CHECKED BY: WAJ  
 ORIGINAL DRAWING  
 NO. DATE PROJECT #  
 0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

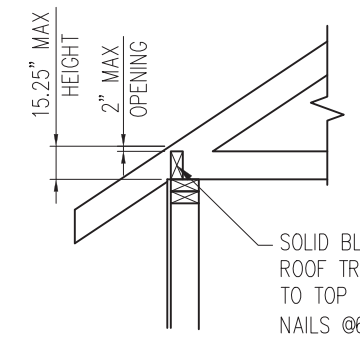
SHEET  
**D7f**



1 METHOD PF: PORTAL FRAME DETAIL  
 D8f 3/4" = 1'-0" OPENINGS UNDER 8'-0"



HEEL HEIGHT GREATER THAN 15.25"



HEEL HEIGHT LESS THAN 15.25" \*

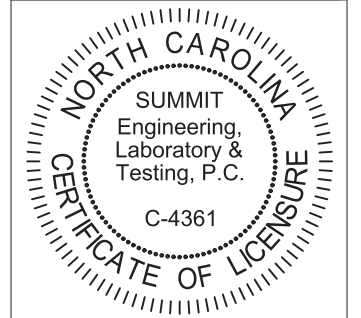
\*BLOCKING IS NOT REQUIRED WITH HEEL HEIGHTS LESS THAN 9.25"

2 TYP. WALL PANEL TO ROOF TRUSS CONNECTION  
 D8f 1" = 1'-0"



STRUCTURAL MEMBERS ONLY

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



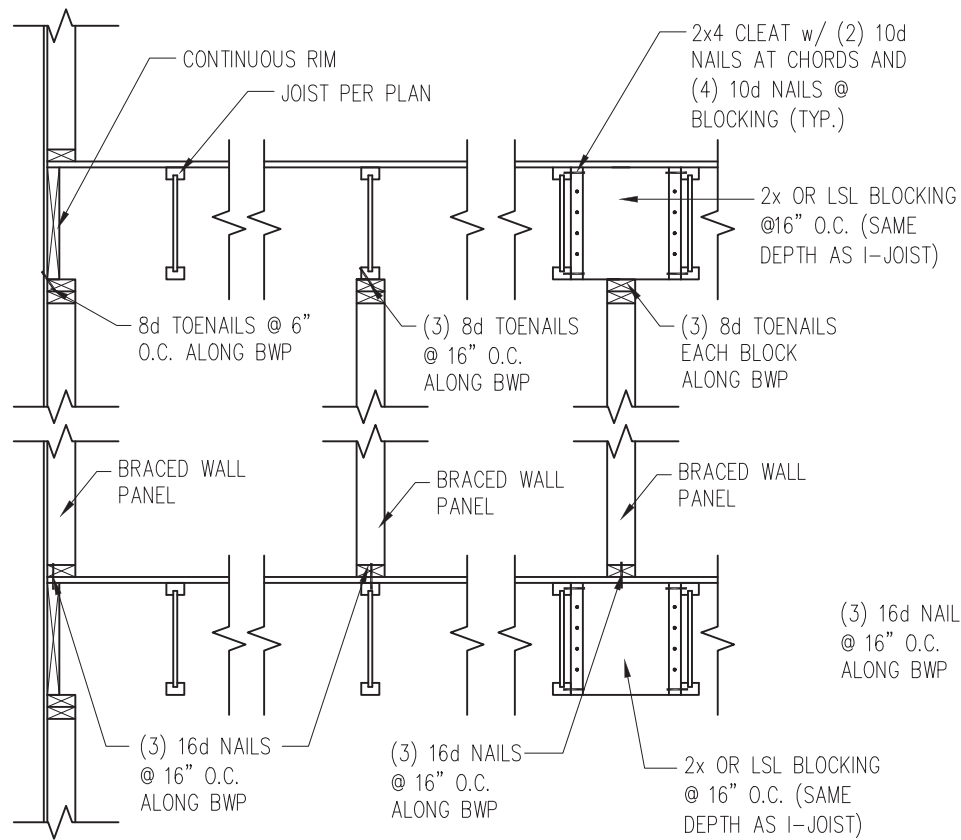
PROJECT  
**Standard Details - Bracing**  
**Framing Details - Bracing**  
 CLIENT  
**Smith Douglas Homes**  
 110 Village Trail, Suite 215  
 Woodstock, GA 30188

CURRENT DRAWING  
 DATE: 2/18/20  
 SCALE: NTS  
 PROJECT #: 3832  
 DRAWN BY: LBV  
 CHECKED BY: WAJ

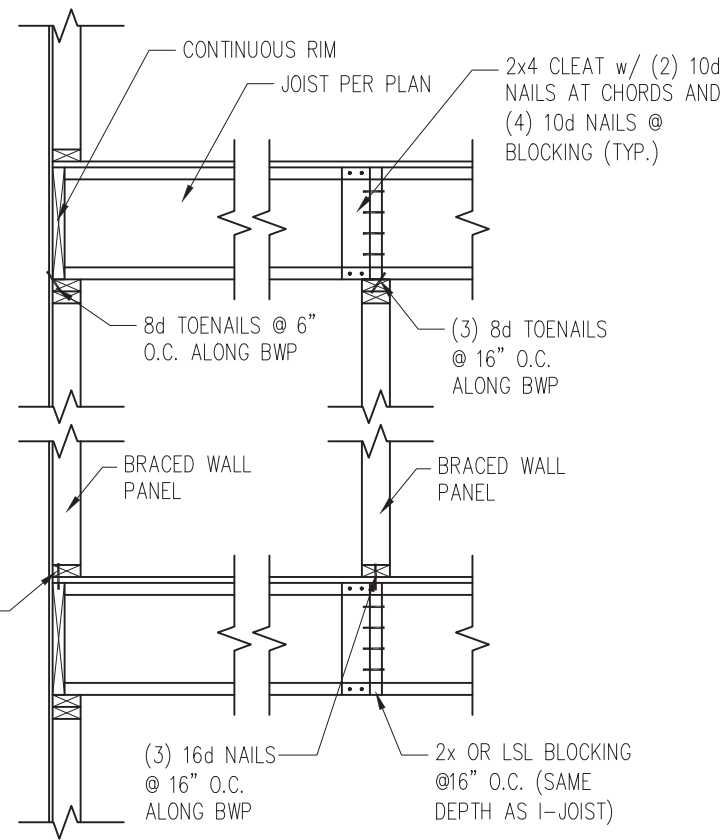
ORIGINAL DRAWING  
 NO. DATE PROJECT #  
 0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET  
**D8f**

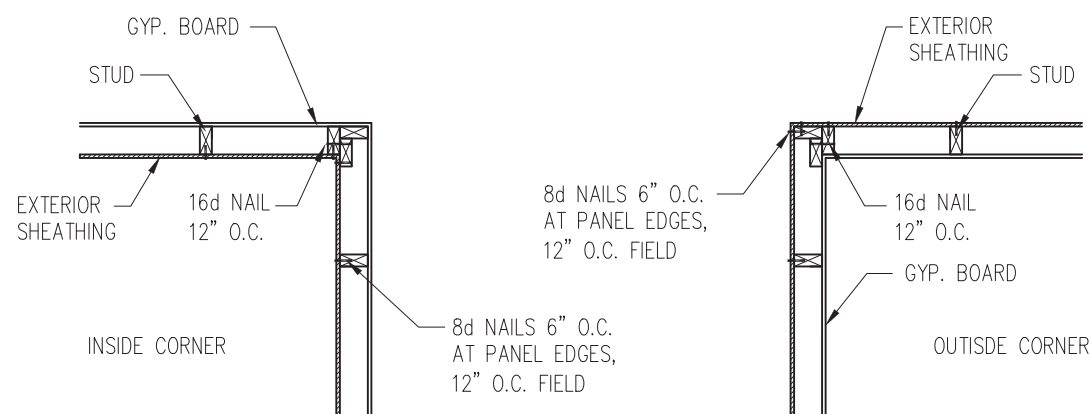


JOISTS PARALLEL TO BRACED WALLS

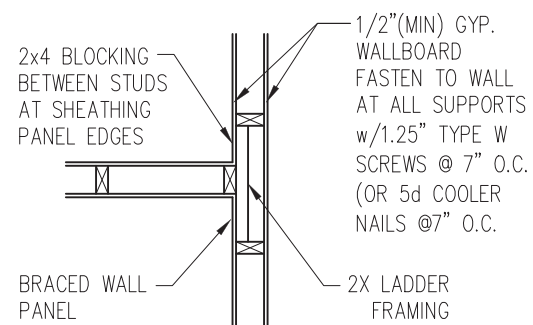


JOISTS PERPENDICULAR TO BRACED WALLS

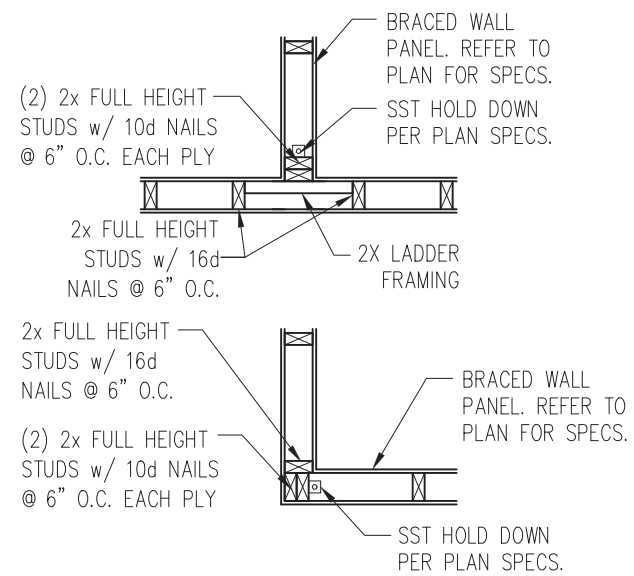
1 TYP. WALL PANEL TO FLOOR/CEILING CONNECTION  
D9f 1" = 1'-0"



2 TYP. EXTERIOR CORNER FRAMING  
D9f 1" = 1'-0"



3 INTERIOR 3-STUD WALL INTERSECTION  
D9f 1" = 1'-0"

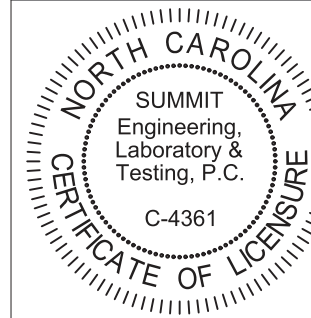


4 TYP. HOLD DOWN DETAIL  
D9f 1" = 1'-0"



STRUCTURAL MEMBERS ONLY

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



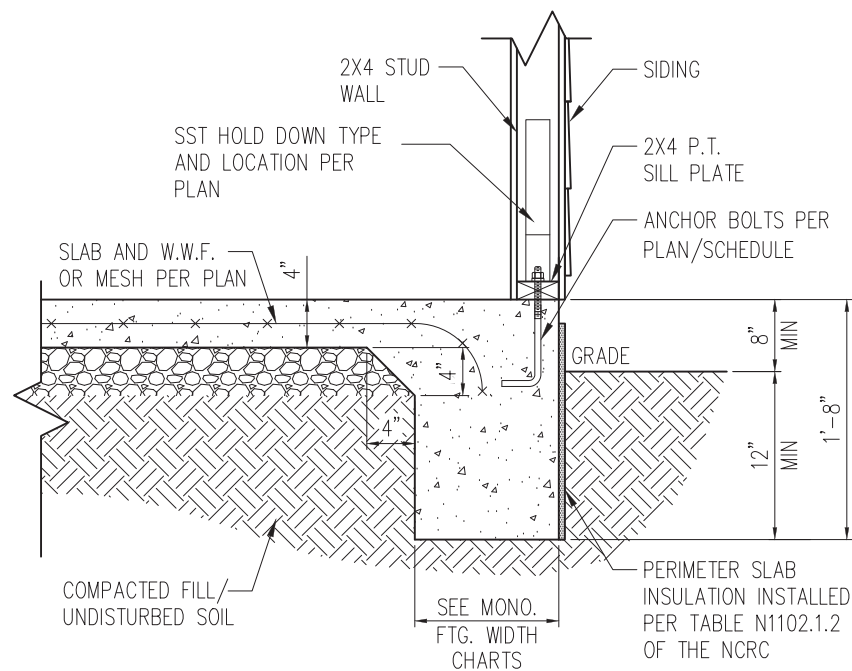
PROJECT  
**Standard Details**  
**Framing Details - Bracing**  
CLIENT  
**Smith Douglas Homes**  
110 Village Trail, Suite 215  
Woodstock, GA 30188

CURRENT DRAWING  
DATE: 2/18/20  
SCALE: NTS  
PROJECT #: 3832  
DRAWN BY: LBV  
CHECKED BY: WAJ

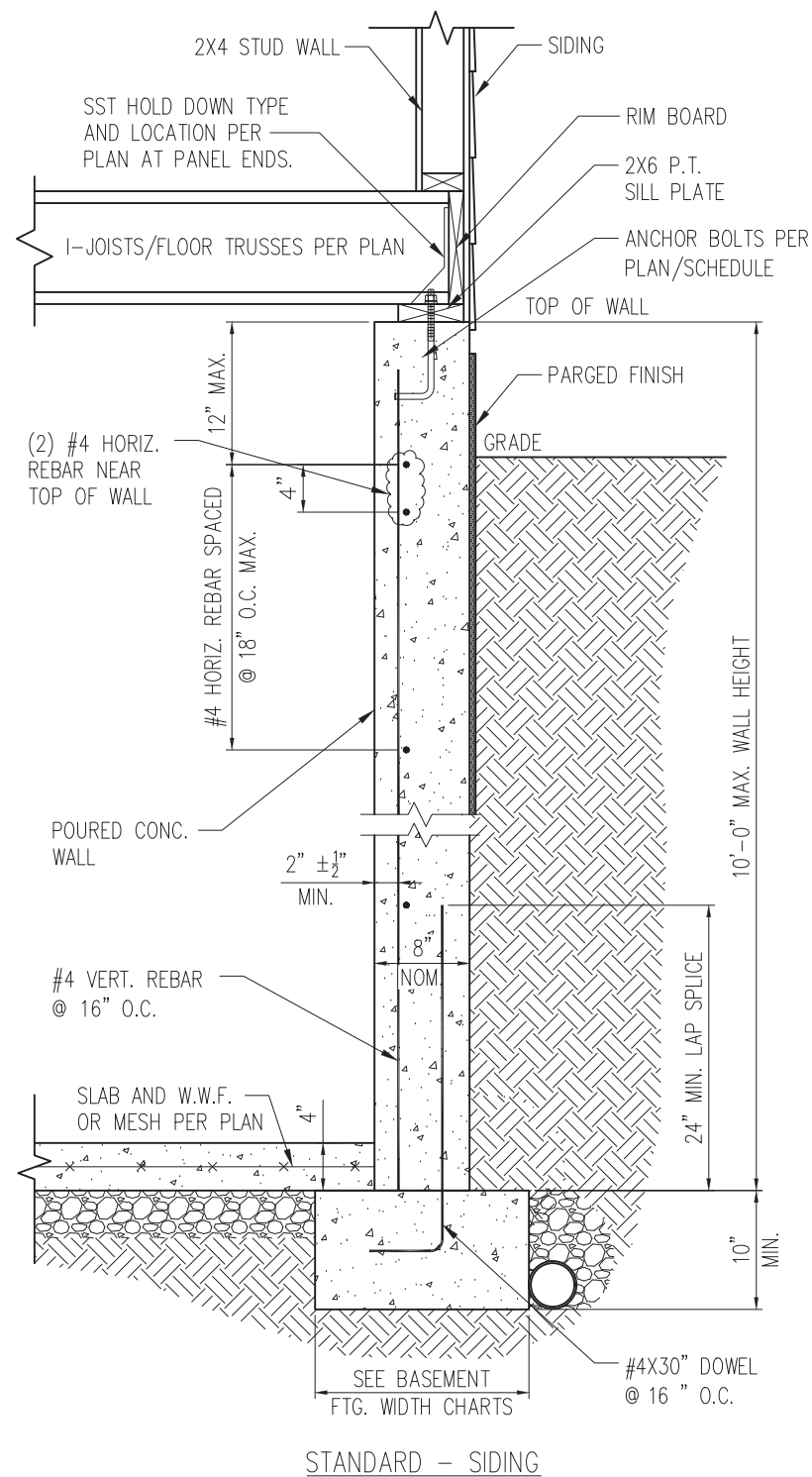
ORIGINAL DRAWING  
NO. DATE PROJECT #  
0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET  
**D9f**



1 SLAB DETAIL w/ HOLD-DOWN  
 D10f 3/4" = 1'-0"

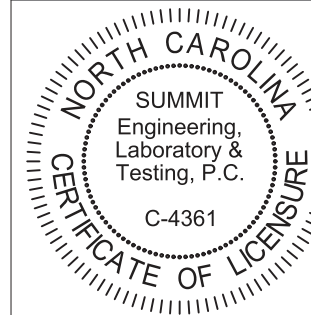


2 BASEMENT FOUNDATION WALL DETAIL W/ HOLD-DOWN  
 D10f 3/4" = 1'-0"



STRUCTURAL MEMBERS ONLY

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



PROJECT  
**Standard Details**  
**Framing Details - Bracing**  
 CLIENT  
**Smith Douglas Homes**  
 110 Village Trail, Suite 215  
 Woodstock, GA 30188

CURRENT DRAWING  
 DATE: 2/18/20  
 SCALE: NTS  
 PROJECT #: 3832  
 DRAWN BY: LBV  
 CHECKED BY: WAJ

ORIGINAL DRAWING  
 NO. DATE PROJECT #  
 0 1/7/16 3832

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

**D10f**