KW 3:00 12:30

EDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 210112

PTIC IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4636-74-0264

APPLICANT/OWNER: Xavier Roussel APPLICANT ADDRESS: 261 Pintail Run Lane, Mooresville, NC 28117

SITE Directions: Canvasback Rd → R on Old Squaw → L on Billy Joe → R on Pintail Run Lane → on left PHONE: Unknown ALT. PHONE Unknown

SITE Address: 261 Pintail Run Lane, Mooresville, NC 28117 SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Neel Acres SECTION: LOT # 7 LOT AREA: 0.708 acres DESIGN FLOW: 480 GPD L.T.A.R.: 0.30

Septic Tank	1000 (gal)	STB	760	Date	11-27-17	☒ New System	☐ Repair	☐ Expansion	System Type: I II III (IV) V VI
Pump Tank	1000 (gal)	PT	363	Date	12-6-17	System Description:	50% Reduction (LP-PPBPS)		
Pump Make	Gunite	Model	We03121mm	Serial #		Repair System Description:	50% Reduction (LP-PPBPS)		
# Nitrification Fields	1	# Lines	5	Linear Ft	270	Maintenance Agreement Required:	☒ YES	☐ NO	
Trench Width	24"	Trench Bottom Depth(Low side)	34"	Gravel Depth	—		☐ GRAVITY	☒ PRESSURE	

☒ Residence No. Bedrooms 4 ☐ Business No. Persons 8 ☐ Other No. Employees ☐ Slab ☐ Crawl Space ☒ Basement w/plumbing ☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

Comments / Conditions: Recommend setting on/off float to dose system ≈ 161 gallons per pumping event (70% capacity of 64 total panels) ONLY BASEMENT FIXTURES MAY BE EJECTED. (If a whole-house ejection system is needed, a new permit must be applied for + issued.

INITIAL SITE SKETCH

See attached plans from Michael Athanas + Associates

Dated: 10/4/2017 Michael Athanas LSS #1252

AS BUILT SKETCH

2/6/18 Checked tanks & lines & supply line. JMP

	Date	Initials
Drain Lines Checked	2/6/18	MD
Tanks Checked	2/6/18	MD
Pressure Manifold or Valve Box Checked	3/22/18	SS
Pressure Head Set	3/22/18	SS
Electrical Checked	3/21	BB
Floats Set Transducer	3/22	SS
Alarm Checked	3/21	BB
Maintenance Contract (Y) N	3/22/18	SS
Comments:		

3/22/18: Breakers OK, 2' of pressure head set. Dosing ≈ 180 gallons/dose. Pressure transducer installed SS

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☒ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

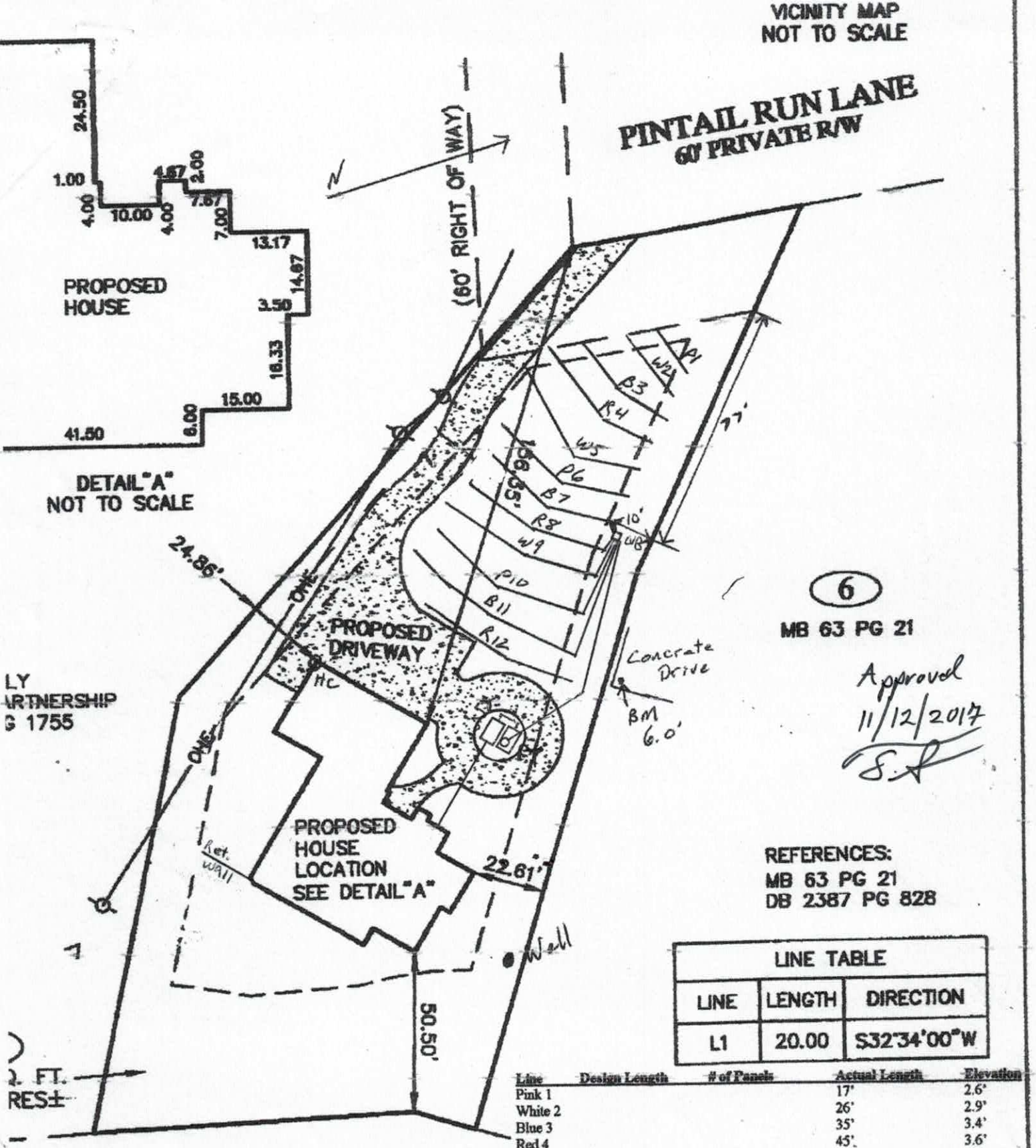
Owner / Applicant Signature: Roussel Xavier Date: 11-17-17 Installed by: Ground breakers

IMPROVEMENT PERMIT by: Tom Shuck Date: 11/12/2017 OPERATION PERMIT by: Tom Shuck Date: 3/22/18

AUTHORIZATION TO CONSTRUCT by: Tom Shuck Date: 11/12/2017 Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed. Be sure to speak with an inspector to confirm your inspection time.

VICINITY MAP
NOT TO SCALE



LINE TABLE		
LINE	LENGTH	DIRECTION
L1	20.00	S32°34'00"W

Line	Design Length	# of Panels	Actual Length	Elevation
Pink 1			17'	2.6'
White 2			26'	2.9'
Blue 3			35'	3.4'
Red 4			45'	3.6'
White 5			50'	4.1'
Pink 6			50'	4.6'
Blue 7	**50'**	**12**	**52'**	**4.8'**
Red 8	**50'**	**12**	**54'**	**5.2'**
White 9	**55'**	**13**	**58'**	**5.5'**
Pink 10	**55'**	**13**	**60'**	**5.7'**
Blue 11	**60'**	**14**	**65'**	**6.1'**
Red 12			52'	6.4'

Initial System: 270' **Repair System:** 275'
Pump Tank: 9.4' **House Corner:** 8.4.
Benchmark: 6.0' (corner of neighbor's concrete drive)

LY
ARTNERSHIP
G 1755

. FT.
RES±

R POLE
MRE
RHEAD ELECTRIC LINE

ATED WITHIN THE
D PER FEMA FLOOD



MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
561 Ennis Rd.
Weddington, NC 28173
(704) 576-3887

Reference: Data Sheet for 261 Pintail Run Ln, Neel Acres Lot 7
House Footprint: See attached
Building Setbacks: 35' front, 15' side, 50' lake
Water Source: Private well
Number of Bedrooms: 4/480 GPD
Proposed LTAR: 0.3 GPD/FT2
Proposed System Type: PPBPS
Proposed Repair System Type: PPBPS
Distribution: Low Pressure-CVB
Flow per Orifice: 0.59 GPM
Orifice Size: 3/16"
System Flow: 37.8 GPM
Dosing Volume: 230.4 gallons
Pump Run Time: 6.1 minutes
Elevation Head: 9.6'
Friction Head: 2.5'
Pressure Head: 2'
Total Dynamic Head: 14.1'
Supply Line Length: 80' of 2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 36"
Proposed Trench Width: 24"



Approved
11/12/17

Line	Design Length	# of Panels	Actual Length	Elevation
Pink 1			17'	2.6'
White 2			26'	2.9'
Blue 3			35'	3.4'
Red 4			45'	3.6'
White 5			50'	4.1'
Pink 6			50'	4.6'
Blue 7	**50'**	**12**	**52'**	**4.8'**
Red 8	**50'**	**12**	**54'**	**5.2'**
White 9	**55'**	**13**	**58'**	**5.5'**
Pink 10	**55'**	**13**	**60'**	**5.7'**
Blue 11	**60'**	**14**	**65'**	**6.1'**
Red 12			52'	6.4'

Initial System: 270' **Repair System:** 275'
Pump Tank: 9.4' **House Corner:** 8.4.
Benchmark: 6.0' (corner of neighbor's concrete drive)

Comments:
All septic line are laid out on 8' centers. The supply line must be 30" below the driveway. The main level of the plumbing must be gravity fed to the septic tank and the basement plumbing will be lifted to the main level.



MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
561 Ennis Rd.
Weddington, NC 28173
(704) 576-3887

Reference: Data Sheet for 261 Pintail Run Ln, Neel Acres Lot 7
House Footprint: See attached
Building Setbacks: 35' front, 15' side, 50' lake
Water Source: Private well
Number of Bedrooms: 4/480 GPD
Proposed LTAR: 0.3 GPD/FT2
Proposed System Type: PPBPS
Proposed Repair System Type: PPBPS
Distribution: Low Pressure-CVB
Flow per Orifice: 0.59 GPM
Orifice Size: 3/16"
System Flow: 37.8 GPM
Dosing Volume: 230.4 gallons
Pump Run Time: 6.1 minutes
Elevation Head: 14.6'
Friction Head: 6.0'
Pressure Head: 2'
Total Dynamic Head: 22.6'
Supply Line Length: 190' of 2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 36"
Proposed Trench Width: 24"

Approved
5-17-17

Line	Design Length	# of Panels	Actual Length	Elevation
Pink 1			17'	2.6'
White 2			26'	2.9'
Blue 3			35'	3.4'
Red 4			45'	3.6'
White 5			50'	4.1'
Pink 6			50'	4.6'
Blue 7	**50'**	**12**	**52'**	**4.8'**
Red 8	**50'**	**12**	**54'**	**5.2'**
White 9	**55'**	**13**	**58'**	**5.5'**
Pink 10	**55'**	**13**	**60'**	**5.7'**
Blue 11	**60'**	**14**	**65'**	**6.1'**
Red 12			52'	6.4'

Initial System: 270' **Repair System:** 275'
Pump Tank: 14.4' **House Corner:** 8.4.
Benchmark: 6.0' (corner of neighbor's concrete drive)

Comments:
All septic line are laid out on 8' centers. The supply line must be 30" below the driveway.



Approved 5/17/17

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

PROPERTY ID #: Lot 7; Neel Acres
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

BA APPROVED JUN 0 3 2015

OWNER: Neal Skeen
ADDRESS: 259 Pin Tail Run Lane Mooresville, NC 28117
PROPOSED FACILITY: 4-Bedroom Residence PROPOSED DESIGN FLOW (.1949): 480 GPD
LOCATION OF SITE: Lot 7; Neel Acres Subdivision; Pin Tail Run Lane

APPLICATION DATE
DATE EVALUATED: 3/10/2015
PROPERTY SIZE: .71 Acres
PROPERTY RECORDED: 11/09/2004

WATER SUPPLY: ☐Private ☐ Public ☒ Well ☐ Spring ☐ Other
EVALUATION METHOD: x Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE / MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
AB 1	L 3-4%	0"-3"	Br CL WSBK	SS SP FR SEXP		48"		None	.3
		3"-38"	R C SBK	SS SP FR SEXP					
		38"-48"	R CL WSBK	SS SP FR SEXP					
AB 2	L 3-4%	0"-8"	Br CL WSBK	SS SP FR SEXP		48"		None	.3
		8"-45"	R C SBK	SS SP FR SEXP					
		45"-48"	R CL WSBK	SS SP FR SEXP					
AB 3	L 3-4%	0"-3"	Br CL WSBK	SS SP FR SEXP		48"		None	.3
		3"-25"	R C SBK	SS SP FR SEXP					
		25"-48"	R CL WSBK	SS SP FR SEXP					
AB 4	L 3-4%	0"-15"	Br SCL WSBK	SS SP FR SEXP		36"	Few to common Saporlite inclusions 15"-36"	None	.3
		15"-36"	R CL WSBK	SS SP FR SEXP					
		36"-48"	Ver. SL Saporlite M	SS SP FR SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	801 FT2	894 FT2
System Type(s)	PPBPS	PPBPS
Site LTAR	.3	.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):

EVALUATED BY: Michael Athanas and Associates
OTHER(S) PRESENT:

COMMENTS

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

APPROVED JUN 0 3 2015

PROPERTY ID #: Lot 7; Neel Acres
DATE OF EVALUATION: 3/10/2015
COUNTY: Iredell

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
AB 5	L 3-4%	0"-3"	Br CL WSBK	SS SP FR SEXP		48"		None	.3
		3"-27"	R C SBK	SS SP FR SEXP					
		27"-48"	R CL WSBK	SS SP FR SEXP					
AB 6	L 3-4%	0"-6"	Br CL WSBK	SS SP FR SEXP		48"		None	.3
		6"-27"	R C SBK	SS SP FR SEXP					
		27"-48"	R CL WSBK	SS SP FR SEXP					
AB 7	L 3-4%	0"-4"	Br CL WSBK	SS SP FR SEXP		48"		None	.3
		4"-36"	R C SBK	SS SP FR SEXP					
		36"-48"	R CL WSBK	SS SP FR SEXP					

COMMENTS: _____

RECEIVED OCT -4 2017

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

#210112

Application For: ( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(✓) Septic Improvement Permit (✓) Authorization to Construct ( ) Existing System Inspection ( ) Septic System Repair

THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED. APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS.

Paid $75.00 Ltd Relayout

Page 2: *Site Plan Worksheet* form MUST accompany this application

The following optional attachments may also be submitted: (✓) Survey Plat, scaled no more than 1 inch = 60 feet
Place an (X) beside whichever is submitted if applicable ( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: Xavier Roussel **Address:** 261 Pintail Run Ln, Mooresville, NC **Zip:** 28117

Applicant Email: xavier.roussel@dole.com **Phone:** _____ **Alt. Phone:** _____

Owner Name: Same **Address:** _____ **Zip:** _____

Owner Email: _____ **Phone:** _____ **Alt. Phone:** _____

Property Information:

Street Address: 261 Pintail Run Ln

Subdivision Name: Neel Acres **Section/Phase:** _____ **Lot Number:** 7

Driving Directions: _____

Site Development Information: *(check or complete ALL that apply*

(✓) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem: _____

Maximum Number of Bedrooms: 4
Maximum Number of Occupants: _____
( ) Swimming Pool
( ) Other Addition/Structure: _____

CHECK FOUNDATION TYPE
( ) Crawl Space Foundation
( ) Concrete Slab Foundation
(✓) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development: Type of Business: _____
Square Footage of Building: _____ **Max. Number of Employees:** _____ **Max. Number of Seats/Beds/Other:** _____

Water Supply: ( ) Replacement Well – Reason: _____
( ) Multi-connection Well **Number of Houses:** _____ **Number of Persons:** _____

(✓) New Well ( ) Existing Well ( ) Community Well ( ) City Water ( ) Other Public Water

Desired Septic System Type: *(you may rank in order of preference)* **Year existing system installed:** _____
( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative (✓) Modified Conventional ( ) Other: _____

Please answer the following to the best of your ability:

( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
( ) Yes (✓) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (✓) No Is the site subject to approval by any other public agency?

I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

Signature: _____ 10/4/2017
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative:

Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship

In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:

Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form.

If there are multiple property owners, then all property owners must sign the form that designates a legal representative.

By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

I, **Xavier/Minh-Hao Roussel**, are the legal owners of the property located at **261Pintail Run Ln, Mooresville, NC 28117** , identified as PIN (Parcel Identification Number) **4636 74 0264**, located in Iredell County, North Carolina.

We do hereby authorize (**print legal representative/company name**) Michael Alvarado & Assoc., to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

- Application for Improvement Permit (IP) / Authorization to Construct (AC)
- Improvement Permit (IP) / Authorization to Construct (AC)
- Application for soil-site evaluation (new/repair)
- Application/permit for private drinking water well/well abandonment
- Application for Compliance Inspection

I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division.

Signature of Owner(s)	Date	Signature of Witness	Date
	10/02/2017		

Please return this signed form to the appropriate office:

Mooresville - Environmental Health

Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

Statesville - Environmental Health

Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION:*

SITE PLAN WORKSHEET

SEE THE "SAMPLE SITE PLAN" BELOW. ***INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!***

Place an (X) beside each item as you complete the site plan:

_____ Property Line measurements are clearly identified… **_____ All proposed structures are indicated…**

SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

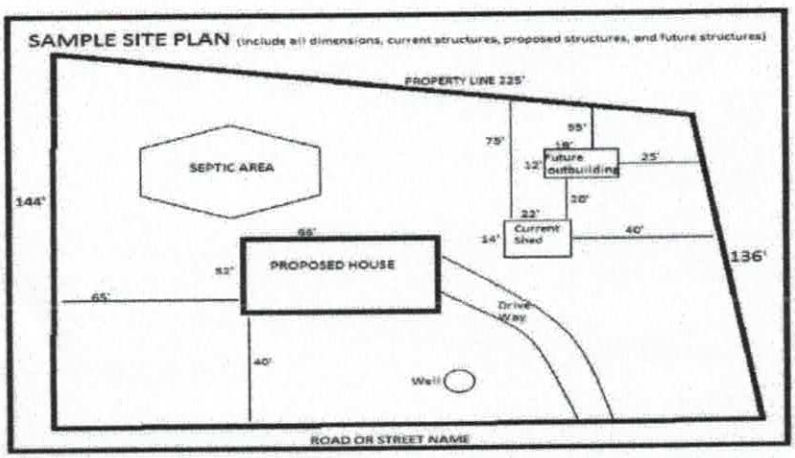
_____ Front and side setbacks from property line… **_____ Preferred driveway location and configuration, preferred well location…**

_____ Area you prefer your septic system to be placed… **_____ North arrow, or other sufficient indicator of direction…**

Circle N/A on the following if appropriate:

_____ Location of septic systems and wells within 100' of your property… N/A

_____ Location of easements and rights of ways on your property… N/A **_____ Location of any designated wetlands on the property… N/A**



USE THIS SPACE TO DRAW YOUR SITE PLAN

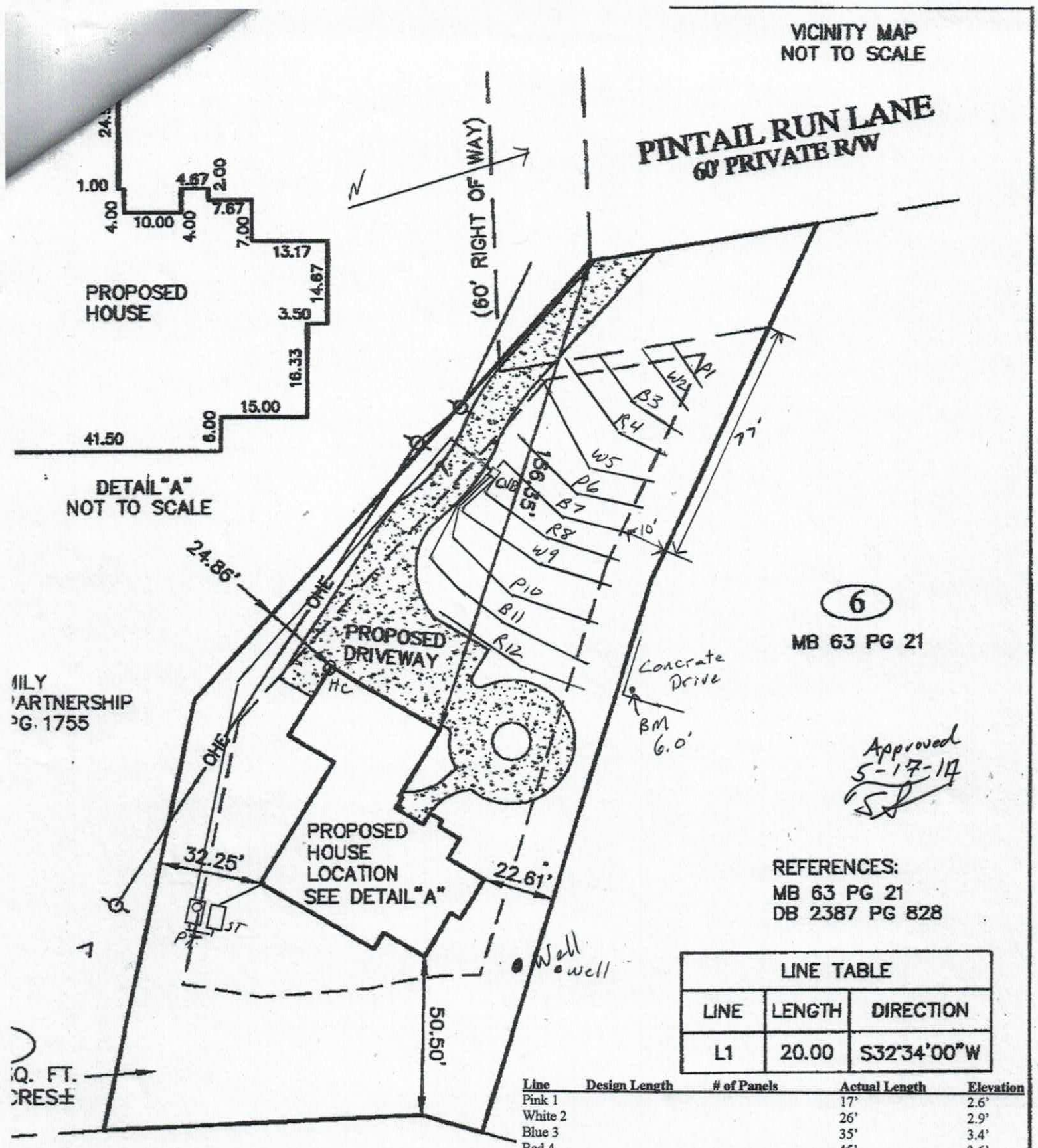
See Attached Site Plan

Signature: _____

REQUIRED **property owner or owner's legal representative signature.**

10/4/2017

DATE



REFERENCES:
MB 63 PG 21
DB 2387 PG 828

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	20.00	S32°34'00"W

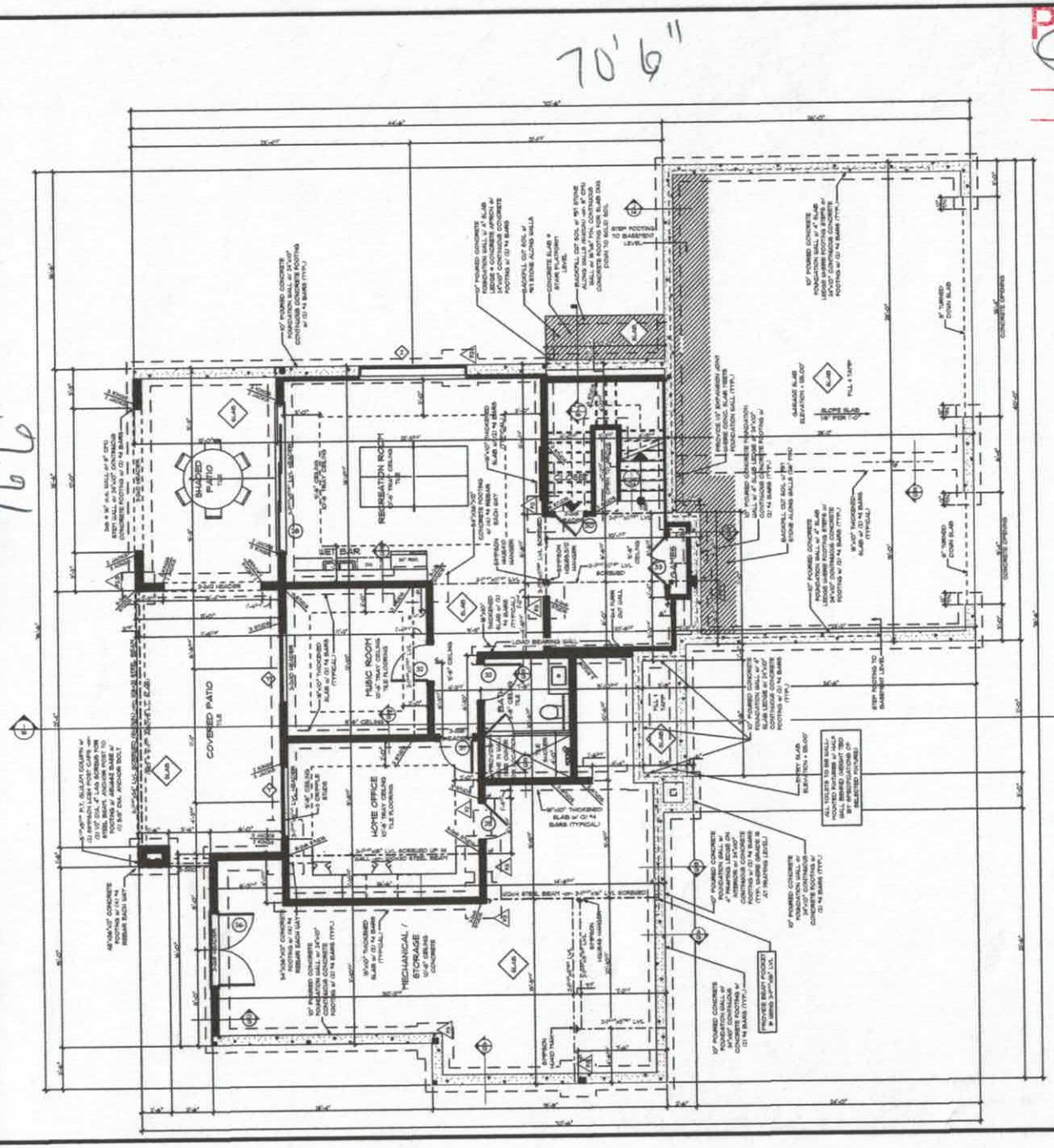
Line	Design Length	# of Panels	Actual Length	Elevation
Pink 1			17'	2.6'
White 2			26'	2.9'
Blue 3			35'	3.4'
Red 4			45'	3.6'
White 5			50'	4.1'
Pink 6			50'	4.6'
Blue 7	**50'**	**12**	**52'**	**4.8'**
Red 8	**50'**	**12**	**54'**	**5.2'**
White 9	**55'**	**13**	**58'**	**5.5'**
Pink 10	**55'**	**13**	**60'**	**5.7'**
Blue 11	**60'**	**14**	**65'**	**6.1'**
Red 12			52'	6.4'

Initial System: 270' **Repair System:** 275'
Pump Tank: 14.4' **House Corner:** 8.4.
Benchmark: 6.0' (corner of neighbor's concrete drive)

Acknowledgement of
Plans Submittal ONLY!

Date 3-17-17

Date 5/17/17



LOWER LEVEL TO FIRST FLOOR STAIR DETAIL

1 SCALE:

LOWER LEVEL WINDOW SCHEDULE				
ID	QUANTITY	SIZE WIDTH	SIZE HEIGHT	NOTES
Y	2	6'-0"	5'-0"	TWIN 36" CASEMENT WINDOW UNIT
Z	1	5'-0"	1'-6"	TWIN 84" FIXED GLASS WINDOW UNIT

* VERIFY ROUGH OPENING REQUIREMENTS WITH WINDOW MANUFACTURER

LOWER LEVEL DOOR SCHEDULE					
ID	QUANTITY	DOOR W	DOOR HT	DOOR GLZ	NOTES
03	1	3'-0"	8'-0"		SINGLE EXTERIOR TWO PANEL DOOR
36	1	6'-0"	8'-0"		TWIN 36" EXTERIOR TWO PANEL DOOR
28	1	12'-0"	8'-0"	TEMP	GLASS 120" SLIDING GLASS DOORS (TEMP.)
26	1	3'-0"	8'-0"		SINGLE INTERIOR TWO PANEL DOOR LEATHER STRIPPED WITH THRESHOLD
30	1	2'-6"	8'-0"		SINGLE INTERIOR TWO PANEL DOOR
31	1	2'-8"	8'-0"		SINGLE INTERIOR TWO PANEL DOOR
32	2	3'-0"	8'-0"		SINGLE INTERIOR TWO PANEL DOOR
33	1	4'-0"	8'-0"		TWIN 24" INTERIOR TWO PANEL DOOR

* VERIFY ROUGH OPENING REQUIREMENTS WITH DOOR MANUFACTURER

STAIR SPECS.
10 RISERS @ 7 1/8" EACH
9 TREADS @ 10" EACH
w/ 1" NOSING
TOTAL RISE: 5' - 10 1/8"
NOTE: VERIFY ACTUAL CONDITIONS & FLOOR FINISH MATERIALS PRIOR TO STAIR FABRICATION
NOTE: GUARD RAILS & HANDRAILS SHALL BE IN COMPLIANCE w/ 2015 RESIDENTIAL CODE

LOWER LEVEL NOTES

(SEE SHEET 3 FOR ADDITIONAL NOTES.)

1. ALL PERIMETER WALL FOOTINGS SHALL BE CONTINUOUS 24"x10" TRENCH WITH (3) # 4 REBAR, 3000 PSI CONCRETE U.N.O.
2. ALL INTERIOR THICKENED SLABS SHALL BE 10"(MIN)@ U.N.O.)
3. LOWER LEVEL FOUNDATION WALLS TO BE 10" THICK POURED IN PLACE REINFORCED PER PLAN DETAILS. TOP OF BASEMENT WALL IS NOT TO BE BACKFILLED DOWN UNLESS UNBALANCED BACKFILL IS LESS THAN 48".
4. "SLAB ON GRADE" SHALL CONSIST OF 4" THICK, 3000 PSI CONCRETE WITH FIBERMESH REINFORCEMENT OR #3@ 12"OC BOTH WAYS OVER 6 MIL VAPOR BARRIER OVER 4" CLEAN STONE OVER COMPACTED FILL. IN GARAGES AND WHERE INSTALL TOOTHED CONTROL JOINTS NO GREATER THAN 15 FEET IN EACH DIRECTION. ALL SLABS TO HAVE 1/2" EXPANSION JOINT BETWEEN SLAB AND FOUNDATION WALLS.
5. ALL SOILS AND FILL UNDER FLOORS WITHIN AND/OR UNDER BUILDINGS SHALL HAVE PRECONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST TERMITES. CERTIFICATION OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY A LICENSED PEST CONTROL COMPANY.
6. RETAINING WALLS TO BE 10" THICK POURED IN PLACE CONCRETE REINFORCED PER PLAN DETAILS BASED ON RETAINED SOIL HEIGHT.
7. ● INDICATES CONCENTRATED POINT LOADS (SEE SHEET 3) INSTALL SOLID BLOCKING EQUAL TO THE NUMBER OF STUDS ABOVE, RETURN DROPPED GIRDERS o/n FOUNDATION WALL + THE SUBFLOOR SHEATHING. FILL JOIST CELLS w/ SOLID BLOCKING WHERE REQUIRED.
8. ALL INTERIOR PIERS ARE 8"x16" CMU WITH 24"x36"x10" FOOTINGS U.N.O. FILLY GROUT PIERS 100" TALL, UNLESS NOTED OTHERWISE.
9. ALL DROPPED GIRDERS SHALL BE (3) 3x20's BTP @ U.N.O.
10. GROUTED MASONRY CELLS + BOND BEAM FILL SHALL HAVE A min. COMPRESSIVE STRENGTH (f'c) OF 3000 psi.
11. IN CONC. USE 1/2"x BOLTS @ 6' min. + 6" FROM EACH CORNER w/ 7" min. EMBEDMENT o/n IN MASONRY PERFORATED STEEL 18 GAUGE METAL STRAPPING @ 4' o.c. EMBEDMENT 36" min. IN MASONRY FILLED SOLID w/ 3000 psi PEA GRAVEL CONC. w/ (4) 10d x 1½" NAILS TO TOP OF PLATE AND (2) 10d x 3" NAILS IN SIDE OF PLATE. BOLTS CAN BE USED IN BLOCK FOUNDATION FILLED w/ CONCRETE
12. PROVIDE 4" min. BRICK LEDGE FOR ALL SLAB EDGES

FOOTING SCHEDULE:

F1:	24"x10"x18"
F2.5:	30"x10"x10"
F3:	36"x36"x10" WITH 4 #4 BARS EACH WAY
F3.5:	42"x42"x10" WITH 5 #4 BARS EACH WAY.
F4:	48"x48"x10" WITH 7 #4 BARS EACH WAY.

SCALE: 1/4" = 1'-0"

K&H RESIDENTIAL DESIGN
KHRESIDENTIAL DESIGNS.COM
704-728-0505
N·C·B·D·C
ENGINEER
IDE INTELLIGENT DESIGN

THE ROUSSEL RESIDENCE
LOT 7 PINTAIL RUN LANE
MOORESVILLE, NORTH CAROLINA

MEMBER A I B D

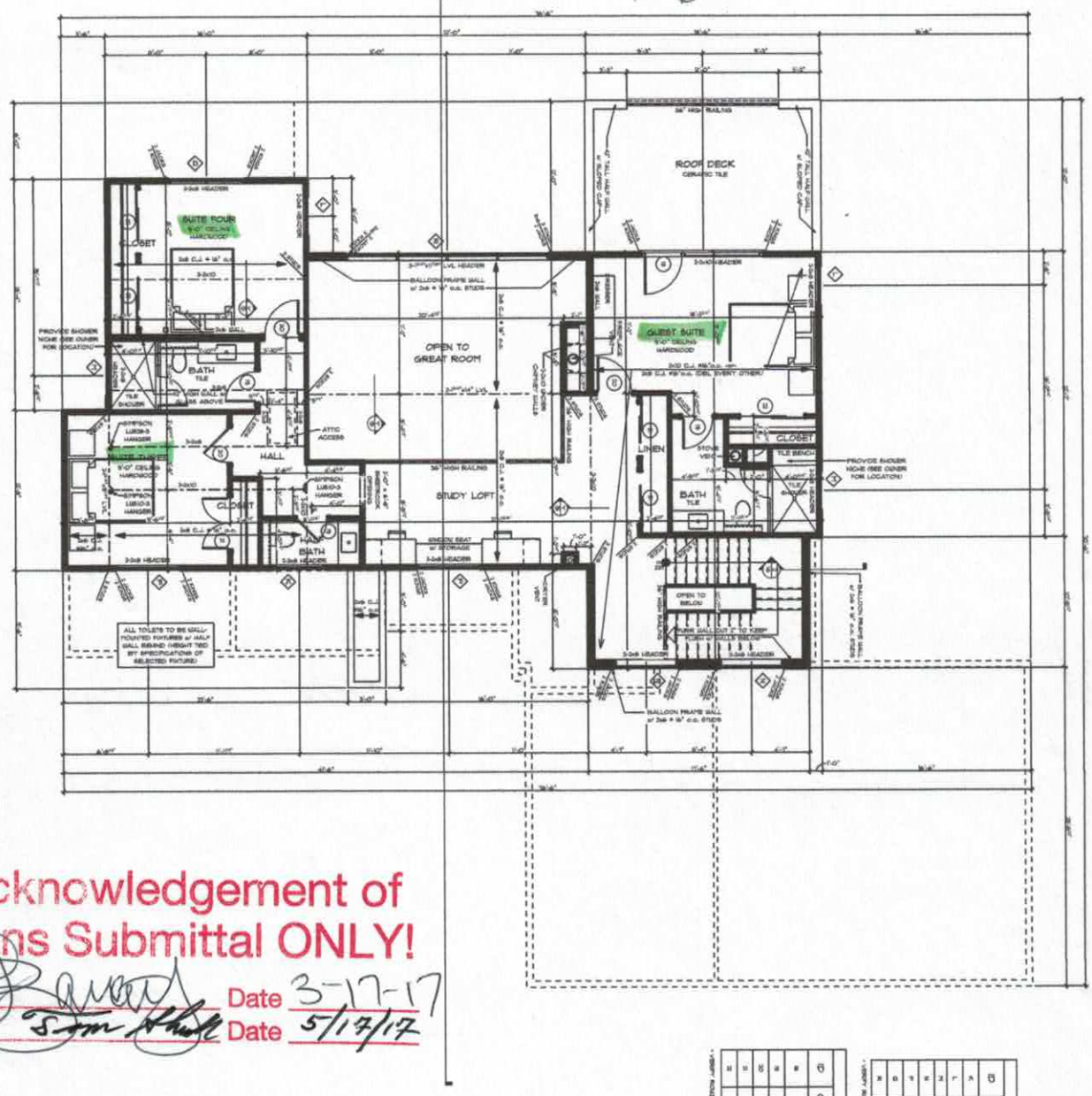
PROJECT NO: 2016-149
DATE: 11/14/2016
REVISIONS:

DRAWN BY: K.WILSON

COPYRIGHT
K&H RESIDENTIAL DESIGNS
AUTHORIZES THIS PLAN TO BE BUILT ONE TIME BY THE ORIGINAL PURCHASER — MODIFICATIONS OR REUSE OF THIS PLAN IS PROHIBITED

SHEET TITLE
LOWER LEVEL FLOOR PLAN

04
SHEET 04 OF 19



Acknowledgement of Plans Submittal ONLY!

Date 3-17-17

Date 5/17/17

ID	QUANTITY	SIZE WIDTH	SIZE HEIGHT	NOTES
K	1	4'-0"	7'-0"	SINGLE CASEMENT UNIT WITH FALL PROTECTION
L	1	3'-0"	6'-0"	SINGLE CASEMENT UNIT WITH FALL PROTECTION
M	2	3'-0"	5'-0"	SINGLE AWNING WINDOW UNIT
N	2	3'-0"	3'-0"	SINGLE FIXED GLASS UNIT
O	1	3'-0"	3'-0"	SINGLE CASEMENT WINDOW
P	1	8'-0"	8'-0"	SLIDING GLASS DOOR W/ CASEMENT WINDOW
Q	1	8'-0"	8'-0"	SLIDING GLASS DOOR W/ CASEMENT WINDOW WITH FALL PROTECTION
R	1	16'-0"	8'-0"	SLIDING GLASS DOOR WITH FALL PROTECTION

SECOND FLOOR WINDOW SCHEDULE

ID	QUANTITY	DOOR WIDTH	DOOR HT	DOOR GLZ	NOTES
S	1	4'-0"	8'-0"	TRIPLE 8' SLIDING DOOR SET W/ FIXED SIDELITES	
T	1	3'-0"	8'-0"	SINGLE FIXED GLASS DOOR	
U	2	3'-0"	8'-0"	SINGLE ENTRY DOOR W/ FIXED SIDELITE	
V	2	3'-0"	8'-0"	SINGLE ENTRY DOOR	
W	1	3'-0"	8'-0"	SINGLE ENTRY DOOR	
X	1	3'-0"	8'-0"	SINGLE ENTRY DOOR	
Y	1	3'-0"	8'-0"	SINGLE ENTRY DOOR	
Z	1	3'-0"	8'-0"	SINGLE ENTRY DOOR	

SECOND FLOOR DOOR SCHEDULE

FLOOR PLAN CONSTRUCTION NOTES

(SEE SHEET 2 FOR ADDITIONAL NOTES)

SQUARE FOOTAGE

ALL FOOTAGE CALCULATED TO EXT.

1. FIRST FLOOR HEATED	2,171
2. SECOND FLOOR HEATED	1,128
3. GUEST LEVEL HEATED	1,171
TOTAL HEATED	4,469
COVERED ENTRY	88
PORCH	72
SCREENED PORCH	72
REAR PORCH	72
GARAGE	1,003
GARAGE LOWER LEVEL	72
TOTAL UNDER ROOF	5,828

CHIMNEY CHASE FRAMING (TYP.)

SCALE: 1/4" = 1'-0"

NOTE: EXTERIOR DIMENSIONS GO TO OUTSIDE OF SHEATHING/COLUMN/WALL

THE ROUSSEL RESIDENCE

LOT 7 PINTAIL RUN LANE

MOORESVILLE, NORTH CAROLINA

NOTE!! OWNER/GC CONTRACTOR TO VERIFY ALL DIMENSIONS AND ANGLES IN FIELD -- NOTIFY DESIGNER OF ANY DISCREPANCIES IMMEDIATELY

MEMBER

ENGINEER

IDE

N·C·B·D·C

704.728.0505

KHRESIDENTIALDESIGNS.COM

COPYRIGHT KARLSON

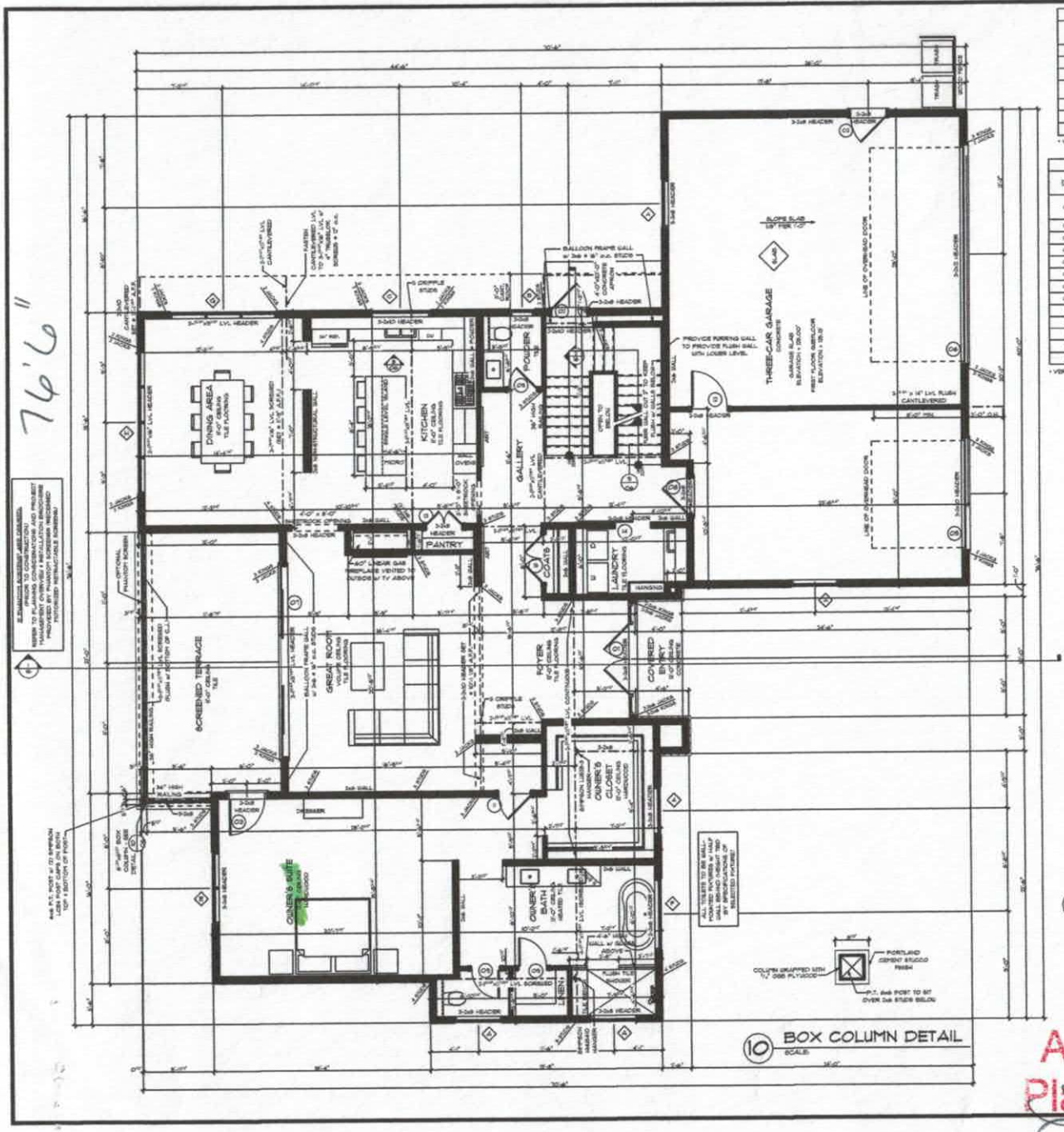
SHEET TITLE

SECOND FLOOR PLAN

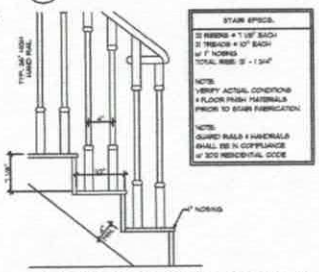
SHEET 08 OF 19

70'6"

76'6"



8 KITCHEN ELEVATION
SCALE: 1/4" = 1'-0"



9 FIRST FLOOR TO SECOND FLOOR STAIR DETAIL
SCALE:

STAIR SPECS.
11 RISERS @ 7 1/8" EACH
10 TREADS @ 10" EACH
@ 1" NOSING
TOTAL RISE: 11' - 1 3/4"
NOTE:
VERIFY ACTUAL CONDITIONS & FLOOR FINISH MATERIALS PRIOR TO STAIR FABRICATION
NOTE:
GUARD RAILS & HANDRAILS SHALL BE IN COMPLIANCE W/ 2012 RESIDENTIAL CODE

10 BOX COLUMN DETAIL
SCALE:

FIRST FLOOR WINDOW SCHEDULE

ID	QUANTITY	SIZE WIDTH	SIZE HEIGHT	NOTES
A	5	3'-0"	5'-0"	SINGLE AWNING WINDOW UNIT
B	1	3'-0"	5'-0"	SINGLE CASEMENT WINDOW UNIT
C	1	3'-0"	5'-0"	SINGLE AWNING WINDOW UNIT
D	1	6'-0"	5'-0"	TWIN 36" CASEMENT WINDOW UNIT w/ 7" TRANSOM ABOVE
E	1	5'-0"	5'-0"	TWIN 36" WINDOW UNIT FIXED BY CASEMENT WINDOW UNIT
F	1	5'-0"	5'-0"	TRIPLE 36" CASEMENT WINDOW UNIT w/ 7" TRANSOM ABOVE
G	1	5'-0"	5'-0"	DOUBLE 36" CASEMENT WINDOW UNIT w/ 7" TRANSOM ABOVE
H	1	5'-0"	5'-0"	

* VERIFY ROUGH OPENING REQUIREMENTS WITH WINDOW MANUFACTURER

FIRST FLOOR DOOR SCHEDULE

ID	QUANTITY	DOOR W	DOOR HT	DOOR GLZ	NOTES
01	1	8'-0"	8'-0"	TEMP	ENTRANCE 36" TWIN SOLID WOOD ENTRY DOORS w/ 36" SIDELITES (TEMP.) TEMPERED GLASS
02	1	5'-0"	8'-0"		DOUBLE INTERIOR FRENCH DOOR
03	1	5'-0"	8'-0"	TEMP	SINGLE INTERIOR GLASS DOOR (TEMP.) w/ 24" TRANSOM
04	1	9'-0"	8'-0"		DOUBLE OVERHEAD GARAGE DOOR
05	1	16'-0"	8'-0"		SINGLE OVERHEAD GARAGE DOOR
06	1	16'-0"	8'-0"		SINGLE OVERHEAD GARAGE DOOR
07	1	6'-0"	8'-0"	TEMP	SLIDE 3/4" TEMPERED GLASS DOORS (TEMP.) w/ 24" TRANSOM ABOVE
08	1	3'-0"	8'-0"		SINGLE EXTERIOR 12 PANEL FIRE RATED DOOR
09	2	2'-6"	8'-0"		DOUBLE INTERIOR TWO PANEL DOORS
10	1	3'-0"	8'-0"		SINGLE INTERIOR TWO PANEL DOOR
11	1	5'-0"	8'-0"		DOUBLE INTERIOR TWO PANEL DOORS
12	1	5'-0"	8'-0"		TWIN INTERIOR TWO PANEL DOORS
13	1	5'-0"	8'-0"		SINGLE INTERIOR SLIDING DOOR w/ HARDWARE
14	1	2'-6"	8'-0"		SINGLE INTERIOR TWO PANEL DOOR
15	1	4'-0"	8'-0"		

* VERIFY ROUGH OPENING REQUIREMENTS WITH DOOR MANUFACTURER

NOTE: EXTERIOR DIMENSIONS GO TO OUTSIDE OF SHEATHING ON FLOOR PLANS

SLAB — 4" CONCRETE SLAB (3000 psi) w/ 6x6 10/10 W.W.M. on 6 MIL POLY VAPOR BARRIER on 4" GRAVEL. PROVIDE TERMITE TREATMENT BELOW ALL CONCRETE SLABS OR BOARDS ON THE GOOD FRAMING (TYP.)

FLOOR PLAN CONSTRUCTION NOTES
(SEE SHEET 5 FOR ADDITIONAL NOTES)

BRACED WALL LINE NOTES:

THIS STRUCTURE HAS BEEN ANALYZED FOR LATERAL LOADING USING CONTINUOUSLY SHEATHED WALL SHEATHING AS INDICATED IN THE GENERAL NOTES. WHERE BRACED WALLS DO NOT MEET THE PRESCRIPTIVE REQUIREMENTS OF SECTION R602.10 OF THE CODE, IT HAS BEEN ANALYZED BY ENGINEERING ANALYSIS INCORPORATING ENGINEERED LATERAL BRACING ELEMENTS WHERE NEEDED TO MEET THE INTENT OF THE CODE.

1. "T.E.N." INDICATES "TOE (CEILING JOIST) TO RAFTER WITH FOUR 3" x 0.131" NAILS"
2. ALL LOAD- BEARING HEADERS SHALL BE G1216 SPFN UNLESS OTHERWISE NOTED ON THE PLAN.
3. WHERE DIMENSIONS ARE NOT INDICATED, BEAMS THAT RUN PARALLEL TO FLOOR JOISTS ARE INTENDED TO ALIGN UNDER LOAD BEARING WALLS. SEE PLANS FOR DIMENSIONS TO WALLS.
4. ALL WALLS UP TO 10 FT. TALL SHALL BE 2X4 SPF@ 16" O.C. UNLESS NOTED OTHERWISE ON THE PLAN. TALLER WALLS SHALL COMPLY WITH TABLE R602.3 (4) OF THE CODE OR AS NOTED ON THE PLAN.
5. WOOD BEAMS SHALL BE SUPPORTED BY "METAL HANGERS OF ADEQUATE CAPACITY (WHERE FRAMING TOO BEAMS OR LEDGERS. THE FOLLOWING HANGER SCHEDULE MAY BE USED UNLESS NOTED OTHERWISE ON THE PLAN.

HANGER SIZE	SIMPSON HANGERS
(1) 2x6	LUS 26-2
(1) 2x10	LUS 210-2
(1) 2x12	LUS 212-2
(2) 1¾" x 9¼" LVL	HUS 410
(2) 1¾" x 11¾" LVL	HUS 412
(2) 1¾" x 14" LVL	HUS 414
ALL TRIPLE LVLs	HHUS 5.50/10

6. NOTE: FILL ALL OF THE HOLES IN HANGERS WITH 8d x 1½" COMMON NAILS (0.131" DIA) OR 10d x 1½" (3" x 0.162") NAILS UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. DO NOT BEND OR MODIFY THE HANGERS OR USE INAPPROPRIATE FASTENERS. DO NOT USE 10d x 1½" "HANGER NAILS" UNLESS OTHERWISE NOTED ON THE PLANS OR, IN SITUATIONS WHERE ONLY 7/8" OR LESS OF WOOD IS PROVIDED TO NAIL INTO.
7. "LVL" AND GLULAM BEAMS MUST HAVE ENOUGH STUDS TO SUPPORT ALL PLIES AT EACH END WITH A MINIMUM OF (3) 2x4 OR (2) 2x6 STUDS UNDER EACH END UNLESS NOTED OTHERWISE.
8. ■ INDICATES POINT LOADS. ALL POINT LOADS FROM ROOF BRACES, JACK STUDS, BEAM SUPPORTS (LIGHTWEIGHT WOOD OR STEEL) AT MIDDLE BEAM ON SHEATHING ALONE. BLOCKING EQUAL TO OR BETTER THAN THE POINT LOAD SUPPORTS ABOVE MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION. INSTALL 2X4 SOLID BLOCKS OF EQUAL HEIGHT TO COLUMN ABOVE BETWEEN SUBFLOOR AND FOUNDATION WALL OR LOWER PLATE. WHERE BOARDS AND JOIST BLOCKING SHALL NOT BE CONSIDERED AS AN ACCEPTABLE MEANS OF SUPPORT WHERE CONCENTRATE POINT LOADS FROM LVL AND STEEL BEAMS OR WHERE SOLID BLOCKS ARE INDICATED ON THE PLAN.
9. "SCREWED": FASTEN ALL TRIPLE PLY LVLs TOGETHER WITH TWO ROWS OF 3" LONG TRUSSLOK OR SIMPSON SDS SCREWS @ 16" O.C. AND FOUR PLY LVLs WITH TWO ROWS OF 4" TRUSSLOK SCREWS @ 16" O.C. UNLESS NOTED OTHERWISE ON THE PLANS. THE SCREWS SHALL BE LOCATED A MINIMUM OF 2" AND A MAXIMUM OF 3" FROM THE TOP OR BOTTOM OF THE BEAM.

MASONRY LINTELS:
1) FOR SPANS UP TO 6 FT. USE L3½"X3½" STEEL LINTEL.
2) FOR SPANS UP TO 10 FT. USE L6X3½"X5/16" STEEL LINTEL.
3) FOR SPANS GREATER THAN 10' (OR WHERE SHOWN ON PLANS) FASTEN L6"X3½"X5/16" STEEL ANGLE TO WOOD HEADERS WITH (5)"x4" LAG SCREWS @ 16" O.C. EXTEND ALL ANGLES 6" PAST OPENING TO BEAR ON MASONRY VENEER AT ENDS.

12. FASTEN FIRST KING STUD TO LUMBER HEADER WITH AT LEAST THREE 16d (3½"X0.162") IN EACH PLY.
14. JACK AND KING STUD SCHEDULE AT WALL OPENINGS:
(TO BE INSTALLED AT EACH END OF OPENING UNLESS OTHERWISE NOTED AS "K" OR "NK" ON PLAN)
SPANS UP TO 4'-0" ..... 1 JACK, 1 KING
SPANS 4'-1" TO 8'-0" ..... 2 JACK, 2 KINGS
SPANS 8'-1" TO 12'-0" ..... 3 JACK, 3 KINGS
SPANS 12'-1" TO 16'-0" ..... 4 JACKS, 4 KINGS
SPANS 16'-1" TO 20'-0" ..... 5 JACKS, 5 KINGS
SPANS 20'-0" ..... SEE PLAN

15. CONTRACTOR TO PROVIDE 2'X30" MIN. ACCESS TO ATTIC.
16. PROVIDE 1/2" DRYWALL SEPARATION BETWEEN GALL + 5/8" TYPE X DRYWALL AT CEILING OF HOUSE + GARAGE
17. ALL ANGLES ARE 45° (U.N.O.)
18. INSTALL DOUBLE JOIST UNDER ALL PARALLEL PARTITION WALLS (U.N.O.)
19. ALL EXTERIOR WALLS TO BE 7/16" OSB SHEATHING NAILED @ 6" o.c. EDGE AND 12" o.c. FIELD

SQUARE FOOTAGE
ALL FOOTAGE CALCULATED TO STUD

1. FIRST FLOOR HEATED	1,206
2. SECOND FLOOR HEATED	498
3. LOWER LEVEL HEATED	1,201
TOTAL HEATED	4,885
COVERED ENTRY	55
PORCH	350
SCREENED TERRACE	370
TOTAL UNHEATED	775

Acknowledgement of Plans Submittal ONLY!

Date 3-17-17

Date 5/17/17

K&H RESIDENTIAL DESIGN
KHRESIDENTIAL DESIGNS.COM
704-728-0505
N·C·B·D·C
ENGINEER:
IDE INTELLIGENT DESIGN

THE ROUSSEL RESIDENCE
LOT 7 PINTAIL RUN LANE
MOORESVILLE, NORTH CAROLINA

HOME BUILDERS BBB MEMBER A I B D AMERICAN INSTITUTE OF BUILDING DESIGN

PROJECT NO: 2016-148
STARTED: 11/14/2016
REVISIONS:

DRAWN BY: K.WILSON

COPYRIGHT
K&H RESIDENTIAL DESIGNS AUTHORIZES THIS PLAN TO BE BUILT ONE TIME BY THE ORIGINAL PURCHASER. — MODIFICATIONS OR REUSE OF THIS PLAN IS PROHIBITED

SHEET TITLE
FIRST FLOOR PLAN

06
SHEET 06 OF 19