ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 HLS Mooresville Office (704) 660-3625 PERMIT # 311661

SEPTIC: IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4721 -41 -0239

APPLICANT/OWNER: Nest Homes. APPLICANT ADDRESS: 236 Rosemary Dr. Suite 7. Mooresville NC 28117.

SITE ADDRESS: 107 Spring View Lane Statesville NC 28677 PHONE: 704-202-1524 ALT. PHONE —

SITE DIRECTIONS: East Monbo Rd to Levi Lane Con Powder Spring Con Spring Valley Lane SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Powder Springs Creek SECTION: — LOT # 4 LOT AREA: .984 Ac DESIGN FLOW: 480. L.T.A.R.: .30

Septic Tank	1000 (gal)	STB	760	Date	1-14-2023	☑ New System	☐ Repair	☐ Expansion	System Type: I II III IV V VI	☑ Residence	No. Bedrooms 4	Water Supply
Pump Tank	1000 (gal)	PT	363	Date	1-3-2023	System Description: Conv. PM 25% Reduction				☐ Business	No. Persons 8	☑ Private
Pump Make		Model		Serial #		Repair System Description: Low Pressure HP BPS - 50% Reduction				☐ Other	No. Employees	☐ Public
# Nitrification Fields	1	# Lines	4	Linear Ft	400	Maintenance Agreement Required:	☐ YES	☒ NO		☐ Slab	☑ Crawl Space	☐ Community
Trench Width	36	Trench Bottom Depth(Low side)	24 in max	Gravel Depth	—		☑ GRAVITY	☐ PRESSURE		☐ Basement w/ plumbing		☐ Basement w/o plumbing

Comments / Conditions: * 6 inches of Fill Required for Repair install must be approved by ICHD *

INITIAL SITE SKETCH

This permit is issued pursuant to Section 11 . (C) of S.L. 2018-114 using the signed and sealed LSS Evaluation by:

Soil + Forestry Services of the Carolinas PA

LSS # 1231.

AS BUILT SKETCH

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 time.

- TANKS + DRAINLINES
- SUPPLY LINE - 2-23-2023 BCW

FLOATS
ALARM SW
ELECTRIC
MANIFOLD
PRESSURE

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: [signature] Date: 11/23/20 Installed by: PATRIOT SEPTIC

IMPROVEMENT PERMIT by: [signature] Date: 10/28/2020 OPERATION PERMIT by: Sarah Williams Date: 8/2/2023

AUTHORIZATION TO CONSTRUCT by: [signature] Date: 5/17/2022 Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed.

WDER SPRING DR.
S14°22'08"E
140.00'
88.69'
35' FRONT BLDG LINE
1 R 36'
2 □ 57'
3 Y 84'
4 □ 34'
5 B 116'
6 R 33'
7 P 134' (INSTALL 100')
8 R 121' (INSTALL 100')
9 □ 120' (INSTALL 100')
10 Y 120' (INSTALL 100')
4
0.984 Ac.
N75°37'52"E
107.00'
300.47'
25' SIDE AT STREET BLDG LINE
C5
C6
C7
C16
45' Private R/W
HOUSE
(60' X 60')
DRIVE
DRIVE
197.50'
N10°01'35"E
1 R 62' (INSTALL 60')
2 □ 82' (INSTALL 80')
3 Y 102' (INSTALL 80')
4 B 83' (INSTALL 80')
1"=40'
3
P100
P99
P98
P97
P96
P95
P94
P93
P92
P91
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P79
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P75
P74
P73
P72

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 20-0059
September 25th, 2020

NEST HOMES
Attn: *Michael Wetter*
Email: mwetter@nesthomes.com

RE: Soil & Site Evaluation for a 4 Bedroom Residence on Lot 4 Powder Spring Creek Subdivision,0.984 ac Parcel, PIN# 4721412167, Powder Spring Drive, Statesville, NC 28677.

Mr. Wetter:

At your request Soil & Forestry Services of the Carolinas (S&FS) has performed soil/site evaluations on parcel noted above. The Lot size is noted on the attached survey map & soil evaluation form. The purpose of our work was to identify soil areas with potential to support subsurface wastewater disposal systems and provide design details for Session Law submittal to Iredell County Health Department.

Site Conditions

At the time of our evaluation land cover on the property was mostly mixed pine/hardwood. Topography within the evaluated area was moderate slope near the house site and proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Patterson Land Surveying. The client provided an Autocad File of a survey as a basemap. The proposed septic layout was located via Trimble Submeter GPS/tape measures and used to produce the attached *Site Plan*. The house envelope was located via Survey by Patterson Land Surveying.

Methodology

We evaluated soil areas through the use of backhoe pits. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field with nine pit locations on the property flagged and located via GPS. Six of the backhoe pits are located in or adjacent to the proposed septic layout. Soil suitability was determined by referencing 15A NCAC 18A.1900 "Laws and Rules for Sewage Treatment and Disposal Systems". *Soil & Site Evaluation Forms* were utilized to record the soil morphological data for each pit. The house envelope was located via survey. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the layout were also located by GPS and tape measures. Detailed system & repair information is summarized in the following paragraph for this Lot.

Lot 5 (*See Attached Design*)
The septic layout for this lot (9' centers) yielded a total of 855 linear feet of line. The primary system is proposed as 400 linear feet of Accepted (25% Reduction) drainfield with pressure manifold distribution. Trench depth is specified at 24 inches. The repair system is proposed as 320 linear feet of HPPBPS (50% Reduction) drainfield with gravity distribution. There is 455 linear feet available for repair. Trench depth is specified at 20 inches.

Session Law Requirements

An LSS Evaluation may be submitted in conjunction with a complete application to the LHD. The application shall include all information described in 15A NCAC 18A .1937(d) and be accompanied by a signed and dated statement from the applicant (owner or owner's legal representative) that reads as follows:

"The LSS Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section 11.(c).".

Owner Date

Print Name M. WETTER
Signature _____ 10/16/20

The LSS Evaluation shall include a statement bearing the LSS seal and signature that reads as follows:

"The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c)."

Disclaimer
This report reflects the findings of S&FS, PA. *This LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).* Any site modifications that impact the proposed septic areas on Lot 4 of Powder Spring Creek Subdivision may nullify this design. System design requirements and site requirements shall be adhered to for installation and Operations Permits to be issued by the local Health Department. If you have questions regarding these requirements a Pre-Construction meeting should be scheduled to discuss. Please contact S&FS if you have any questions regarding this report or the attached information. S&FS also offers septic system inspection, wetland delineation and forestry services.

Sincerely,



S. Ashley Rollans, LSS
Attachment: *Septic Design*

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for an Accepted Septic System with Pressure Manifold distribution for a 4 bedroom single family residence on Lot 4 Powder Spring Creek Subdivision, Statesville 28677, Iredell County, NC. PIN#: 4721412167

Contents:

	Page
Information for the Installer	1
Design Information	
Design Specifications	2-3
Layout Specifications	4
System Tapsheet	5
Pressure Manifold Diagram	6
Site Plan/System Plan	7
Calculations	8
Profile Descriptions	9
Zoning Permit & Receipt	10-12
Application	13-14
Agent Authorization Form	15
Green Sheet	16

LICENSED SOIL SCIENTIST
Samuel A. Rollins
1291
STATE OF NORTH CAROLINA

September 23, 2020
Project No. 20-0059
Design By: Soil & Forestry Services of the Carolinas, PA

INFORMATION FOR THE INSTALLER:

- The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by DHHS, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Pumptank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as an Accepted 25% reduction installation w/Pressure Manifold.
- Repair is specified as a HPPBPS installation with Low Pressure Distribution.
- Rake trench walls, lime sidewalls, install trenches 36" wide and have no more than 1/4" fall in 10 feet.

PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant:	Nest Homes
Address:	236 Raceway Drive (Suite 7) Mooresville, NC 28117
Phone:	704.202.1524
County:	Iredell
Location:	Powder Spring Drive Lot 4
Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Daily Wastewater Production:	480 gpd
System Flow:	28.44

Design Specifications

Drainfield Size:	400
Loading Rate:	0.3
Depth of Gravel in Trench:	NA (25% reduction)
Gravel Size:	NA (25% reduction)
Trench Depth:	24 in. Repair Trench Depth 20 in.
Trench Width:	36 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	168
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	29.23
Dosing Volume:	182.84
Supply Manifold:	4 in. SCH 80 PVC
Supply Manifold Length:	4 ft. (minimum)
Supply Manifold Volume:	N/A
Recommended Float Controls:	SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel:	SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.
Pressure Head:	2 ft.
Friction Head:	2.99
Elevation Head:	15.50
Total Dynamic Head:	23.56
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 at Pressure Manifold
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Soil & Forestry Services of the Carolinas, PA.

Powder Spring Drive
PRESSURE MANIFOLD DESIGN

DESIGN FLOW:	480
SOIL APPLICATION RATE:	0.3
TOTAL AREA TRENCH BOTTOM:	1200
TOTAL LATERAL LENGTH:	400
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	400
SUPPLY LINE LENGTH:	168
TOTAL DYNAMIC HEAD:	23.56
MANIFOLD SIZE:	4 in.SCH 80 PVC
DOSING VOLUME:	182.84
PUMP TANK DRAW DOWN*:	8.7
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

Layout Specifications - Powder Spring Creek - Lot 4

Project #: 20-0059

LAYOUT FOR 4 BEDROOM HOME

September 23, 2020

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
PRESSURE	MANIFOLD				855.50		
HOUSE	Left Rear				844.40		
PUMP TANK					845.00		
INSTR. 1							
1	RED					36	36
2	ORANGE					57	57
3	YELLOW					84	84
4	ORANGE					34	34
5	BLUE					116	116
6	RED					33	33
7	***PINK***					***134***	***100***
8	***RED***					***121***	***100***
9	***ORANGE***					***120***	***100***
10	***YELLOW***					***120***	***100***
					Total	855	760

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION	TRENCH DEPTH
**** System***	***400***	***0.300***	***ACCEPT.***	***0.300***	***25% RED***	***GRAVITY***	24"
Repair	455	0.250	MOD. CONV.	0.250	HPPBPS	LOW PRESSURE	20"

Notes: **All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**Nitrification lines were located by GPS & Tape Measure.

PRESSURE MANIFOLD TAPSHEET - Powder Spring Creek - Lot 4

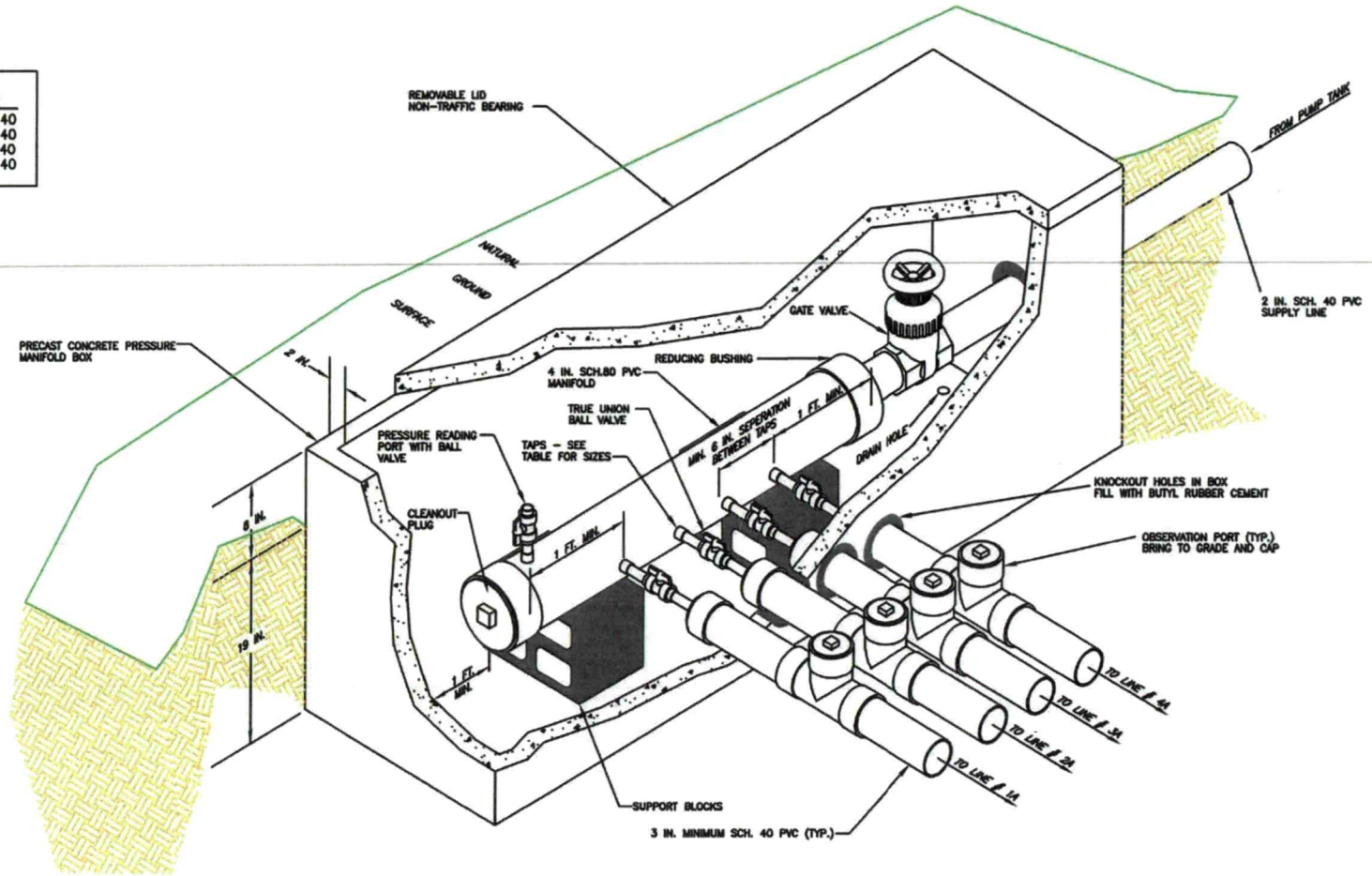
SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	Trench Area	Line LTAR
7	***PINK***		***100***	SCH 40 1/2	**7.11**	300	0.15
8	***RED***		***100***	SCH 40 1/2	**7.11**	300	0.15
9	***ORANGE***		***100***	SCH 40 1/2	**7.11**	300	0.15
10	***YELLOW***		***100***	SCH 40 1/2	**7.11**	300	0.15
	total	**feet =**	**400**	**gal/min =**	**28.44**		
			Des. Flow	**480**			
			Pump Run=	**6.43**			
			soil LTAR	**0.3**			
			LTAR +5%	**0.315**			
			LTAR with ACCEPTED	**0.4**			
			LTAR with ACCEPTED + 5%	**0.42**			

PRESSURE MANIFOLD DETAILS
FOR
POWDER SPRINGS CREEK LOT#4 SEPTIC SYSTEM

TAP SIZES

LINE No.	TAP SIZE
7	1/2" SCH. 40
8	1/2" SCH. 40
9	1/2' SCH. 40
10	1/2" SCH. 40



CALCULATIONS

Location	Powder Spring Creek Subdivision Off Levi Lane	
Project Number	20-0059	
Lot No:	4	
No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.300	$^{gpd/ft^2}$
25% RED.? (YES OR NO)	YES	
Supply Line Length	168	ft.
Supply Line Volume	29.232	gal.
Required Feet of Line	400	ft.
Amount of Line from Layout	400	ft.
Gallons per Minute	28.44	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Lateral Line Volume	261.2	gal.
Dosing Volume	182.84	gal.

Note: Dosing Volume based on 70% of lateral line volume

Tank Draw Down	8.7	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	6.43	minutes
Elevation Head	15.5	ft.
Pressure Head	2	ft.
Friction Factor	1.78	ft./100 ft. *(From the interpolater.)*
Friction Head	2.99	ft.
Total Dynamic Head (+15%)	23.56	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

RECEIVED OCT 1 6 2020

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

AP- 311661 $500.00

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.

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 (X) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: Nest Homes **Address:** 236 Raceway Dr. Suite 7, Mooresville NC **Zip:** 28117
Applicant Email: mwetter@nesthomes.com **Phone:** 704.202.1524 **Alt. Phone:**
Owner Name: Nest Homes **Address:** 236 Raceway Dr. Suite 7, Mooresville NC **Zip:** 28117
Owner Email: mwetter@nesthomes.com **Phone:** 704.202.1524 **Alt. Phone:**

Property Information:

Street Address: 107 Spring View Lane, Statesville NC 28677
Subdivision Name: Powder Spring Creek Subdivision **Section/Phase:** **Lot Number:** 4
Driving Directions: East Monbo Rd to Levi Lane, Left on Powder Spring Dr., Left on Spring View Lane

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

CHECK FOUNDATION TYPE

(✓) New Single Family Residence — Maximum Number of Bedrooms: 4 — (✓) Crawl Space Foundation
( ) New Multi-Family Residence — Maximum Number of Occupants: 8 — ( ) Concrete Slab Foundation
( ) Accessory Building — ( ) Swimming Pool — ( ) Basement with Plumbing
( ) Bedroom(s) Addition — ( ) Other Addition/Structure: — ( ) Basement without Plumbing
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem:
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: Accepted

Please answer the following to the best of your ability:
( ) Yes (X) No Does the site contain any jurisdictional wetlands?
( ) Yes (X) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (X) 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: _____ 9/25/20
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

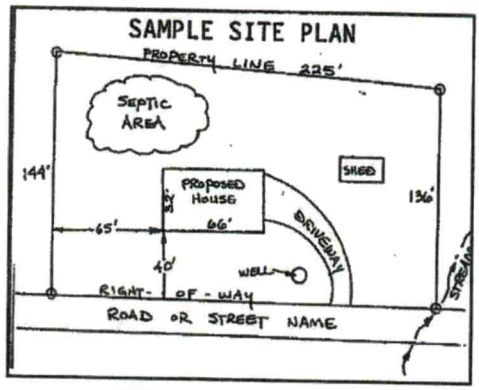
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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 OR WELL PERMIT!!!*

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

- (X) **Property Line measurements are clearly identified**
- (X) **All proposed structures are indicated**
- (X) **Front and side setbacks from property line**
- (X) **Preferred driveway location**
- (X) **Preferred well location**
- (X) **Preferred septic system location**
- (X) **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

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

See Attached

Signature: Leonard A Miller

Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

9/15/20

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, * Eric Woods, am the legal owner(s) of the property located at *, identified as PIN (Parcel Identification Number) 4762141267 Lot 4, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) Soil & Forestry, 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.

*	* 10/14/20		10/14/20
Signature of Owner(s)	Date	Signature of Witness	Date

Please return this signed form to the appropriate office:

Mooresville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

Statesville - Environmental Health
adrienne.shea@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

ENVIRONMENTAL HEALTH REQUIREMENTS for SEPTIC and WELL PERMITS

The following items must be completed *PRIOR* to the *SUBMITTAL* of any Environmental Health Application. Incomplete applications will be returned to the applicant and cannot be processed or placed on the work list.

***** Initial all lines below to indicate you have submitted each form and completed every site requirement *****

S.A.R. **Complete all Environmental Health forms:**
- ✓ Application
- ✓ Site Plan with dimensions of proposed structure, addition, pool etc.
- ✓ Documentation to Authorize Owner Agent (if the property owner is not the applicant)
- ✓ Copy of Zoning Permit when applicable
- ___ Sign this sheet after you have completed all items

S.A.R. **Lot must be cleared of heavy undergrowth.** In order to evaluate the lot, the footprint of the proposed structure must be visible. Adequate area for the septic drain field and repair area must be sufficiently cleared of heavy undergrowth, with **50 feet of visibility** in all directions. Inspectors must be able to evaluate the property, shoot laser level elevations, layout the drain field, do soils work, etc. **If the lot is not cleared sufficiently, then a $100 site revisit fee will be charged and the evaluation will be put on HOLD until the requirement is met.**

S.A.R. **Clearly mark all property corners by locating existing iron or concrete markers.** Flag all property lines every 25 feet if adjacent corners are not visible when standing on any given corner. Property lines must be flagged by a licensed NC surveyor & easily identified **prior to application submittal** (exception may apply for septic repair evaluations only). 'Mow lines' and/or fence lines do NOT constitute marked lines. **If the property lines are not properly marked when the lot is ready to be evaluated, then the application will be put on HOLD and a $100 site re-visit fee charged.**

S.A.R. **Stake or flag the footprint of the proposed structure, addition, pool etc. to match the site plan submitted.** The proposed structure, etc. **must be staked** out on the property as per the site plan.

S.A.R. If an **Authorization to Construct (AC) is desired,** submit a recorded copy of the plat for newly created or subdivided lot(s) and a LEGIBLE copy of the basic floor plan no larger than 8 ½" x 14" for each floor of the structure including decks, porches, etc. **The overall dimensions must be clearly noted & the rooms labeled.**

Any site not meeting the above requirements when staff arrives for the evaluation will result in a $100 site revisit fee being charged and the request being placed on HOLD. This will delay the processing of the application.
Once work by Environmental Health staff begins, the up-front fees paid toward securing any health department permit are non-refundable. Refunds for work not started, due to a customer changing their mind or plans, are subject to an administrative fee of $50 to defray a portion of the costs of processing the refund.

Backhoe pits are required for all applications that require a soils evaluation.
DO NOT DIG PITS UNTIL THE EH SPECIALIST HAS AUTHORIZED AND SCHEDULED YOUR EVALUATION TIME.
- **All utilities shall be marked before pits are dug. Call NC 811 for this service.**
- **The applicant/agent is responsible for securing these services**
- **Backhoe pits are to be dug at the locations and depths determined by the Environmental Health Specialist or a NC Licensed Soil Scientist. A minimum of four pits must be dug.**
- **The EH specialist will contact you when your application is ready to be processed for pit scheduling.**
- **Your backhoe operator must be on site during the EH Specialist's evaluation to prevent your operator from having to return to the property for additional work.**

By signing below I am acknowledging the above specifications have been met and the site is READY to be evaluated AND I understand the backhoe pit requirement and will secure those services (if applicable).

Signature Daniel A Tollison **Date** 9/10/20

Questions? Contact the Environmental Health Offices below:

Statesville Office
349 North Center Street (2nd Floor Building Standards)
Statesville, NC 28677-4063
Phone: (704)878-5305 ext. 3456

Mooresville Office
610 East Center Avenue (2nd Floor Govt. Center South)
Mooresville, NC 28115-2548
Phone: (704)660-3625

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

Sheet 1 of 3
PROPERTY ID #: 4724121607
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Nest Homes (Buyer)
ADDRESS: 236 Raceway Dr. Suite 7, Mooresville NC 28117 — APPLICATION DATE
PROPOSED FACILITY: 4BR — PROPOSED DESIGN FLOW (.1949): 480gpd — DATE EVALUATED: 2020
LOCATION OF SITE: Lot 4 Powder Spring Creek Subdivision — PROPERTY SIZE: 0.984 AC
WATER SUPPLY: ☒ Private ☐ Public ☒ Well ☐ Spring ☐ Other — PROPERTY RECORDED:
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut — TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
P 73	L/8%	0-5	BSCL wfsbk	Fr SS SP SEXP	- Schist Veins - C.SAP - Rock Veins	32	PS	32	PS - 32 .125 Drip
		5-10	BRC wmAbk	Fr SS SP SEXP					
		10-21	RBCL wfsbk	Fr SS SP					
		21-32	VAR SL MASS	Fr SS SP					
		32-	Rock						
P 74	L/10%	0-5	BSCL wmsbk	Fr SS SP SEXP	- C.SAP - Few Schist Veins	30	PS	-	PS .3-.325
		5-14	BRC wmsbk/Abk	Fr SS SP SEXP					
		14-30	RBSCL wfsbk	Fr SS SP					
		30-63	VAR SL MASS	Fr SS SP					
P 75	L/10%	0-5	BRCL wmsbk	Fr SS SP SEXP	- Few Schist Veins - C.SAP - C. Schist+	46	PS	-	PS .275-.3
		5-22	RC wmsbk/Abk	Fr SS SP SEXP					
		22-46	RBCL wmsbk	Fr SS SP					
		46-60	VAR L. MASS	Fr SS SP					
P 76	L/6%	0-5	RBCL wmsbk	Fr SS SP SEXP	- Few Wh. Rock - Few to C. SAP	55	PS	-	PS .3-.325
		5-27	BRC wmsbk/Abk	Fr SS SP SEXP					
		27-55	RBCL wfsbk	Fr SS SP					
		55-60	VAR L. MASS	Fr SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	Accepted 25%Rd	HPPBPS
Site LTAR	0.3	0.25

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: S. Ashley Rollans
OTHER(S) PRESENT: Wendell Overby, Chad Wagner

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 4721412167
DATE OF EVALUATION: 2020
COUNTY: Iredell

Lot 4

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	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
P 77	L/8%	0-8	BCL wmsbk	Fr SS SP SEXP	+ Few Schist	44	PS	—	PS .3-.325
		8-23	RC wmsbk/AbK	Fr SS SP SEXP					
		23-44	RBCL wfsbk	Fr SS SP					
		44-48	VAR L. MASS	Fr SS SP					
P 78	L/12-14%	0-6	BCL wmsbk	Fr SS SP SEXP	+ Few to C SAP	46	PS	—	PS .325-.3
		6-20	RC wmsbk	Fr SS SP SEXP					
		20-46	RBCL wfsbk	Fr SS SP					
		46-66	VAR SL MASS	Fr SS SP					
P 79	L/8%	0-7	BCL wmsbk	Fr SS SP SEXP	+ Few to C SAP	53	PS	— 1	PS .325
		7-26	RC wmsbk	Fr SS SP SEXP					
		26-53	RBCL wfsbk	Fr SS SP					
		53-64	VAR L MASS	Fr SS SP					
P 91	L/15%	0-9	BCL wfsbk	Fr SS SP SEXP	+ Few SAP + C SAP / WH Rock + Schist Veins	44	Mars	44	PS to 44" .275-.3
		9-33	BRC wmsbk	Fr SS SP SEXP					
		33-44	RBCL wmsbk	Fr SS SP					
		44-65	VAR SL MASS	Fr SS SP					
P 92	L/17%	0-15	RBSCL wfsbk	Fr SS SP SEXP	+ C SAP + Few Schist	60	PS	—	PS .3
		15-38	BRC wmsbk/AbK	Fr SS P SEXP					
		38-60	RBCL wmsbk	Fr SS SP SEXP					
		60-74	VAR SL MASS	Fr SS SP					

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 4721412167
DATE OF EVALUATION: 2020
COUNTY: Iredell

Lot 4

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
P 100	L/4%	0-9	RBSCL wfsbk	Fr SS SP SEXP	C. SAP Schist Veins ~15-20%	38	Mary	38	PS .25-.275
		9-25	BRC wfsbk/Abk	Fr SS SP					
		25-38	RBSCL wfsbk	Fr SS SP					
		38-60	VAR SL/L	H SS SP	C. Schist Veins				

RECEIVED MAY 1 0 2022

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

Application For: (X) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
( ) Septic Improvement Permit (X) 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.

****

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 (X) Custom Site Plan, scaled no more than 1 inch = 60 feet

****

Applicant Information: **(PRINT CLEARLY)**

Applicant Name: Nest Homes LLC **Address:** PO Box 3965 , Mooresville NC **Zip:** 28117

Applicant Email: hposton@nesthomes.com **Phone:** 980-500-1238 **Alt. Phone:** _____

Owner Name: Sills Springs Development LLC **Address:** PO Box 3965 , Mooresville NC **Zip:** 28117

Owner Email: hposton@nesthomes.com **Phone:** 980-500-1238 **Alt. Phone:** _____

****

Property Information:

Street Address: 107 Spring View Lane, Statesville NC 28677

Subdivision Name: Powder Spring Creek **Section/Phase:** _____ **Lot Number:** 4

Driving Directions: Hwy 21/ 115 - West on Old Mountian Rd, left on East Monbo Rd, Right on Levi Ln,

Left on Powder Spring Dr; left on Spring View Ln- parcel is on left

****

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

CHECK FOUNDATION TYPE

(X) New Single Family Residence — Maximum Number of Bedrooms: 3 — (X) Crawl Space Foundation
( ) New Multi-Family Residence — Maximum Number of Occupants: 6 — ( ) Concrete Slab Foundation
( ) Accessory Building — ( ) Swimming Pool — ( ) Basement with Plumbing
( ) Bedroom(s) Addition — ( ) Other Addition/Structure: _____ — ( ) Basement without Plumbing
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem: _____
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: _____

(X) 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 (X) Modified Conventional ( ) Other: _____

****

Please answer the following to the best of your ability:

( ) Yes (X) No Does the site contain any jurisdictional wetlands?
( ) Yes (X) No Is any non-domestic sewage (i.e. industrial) to be generated?
(X) 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: Heather Poston — May 5, 2022

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) **DATE**

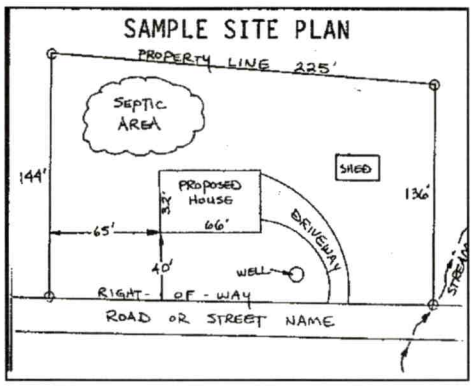
IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

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 OR WELL PERMIT!!!***

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

- **( ) Property Line measurements are clearly identified**
- **( ) All proposed structures are indicated**
- **( ) Front and side setbacks from property line**
- **( ) Preferred driveway location**
- **( ) Preferred well location**
- **( ) Preferred septic system location**
- **( ) 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

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

**** Please see attached plot plan ****

Signature: Heather Poston

Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

05/05/2022

DATE

DAS DON ALLEN & ASSOCIATES, P.A.
"Since 1971"
Commercial * Residential * Mortgage Surveys * Multi-Family
Construction Staking * Subdivision Design * Topographical
131 Crosslake Park Drive – Suite 102 * Mooresville * NC * 28117
(704) 664-7029 (704) 664-8041 Fax

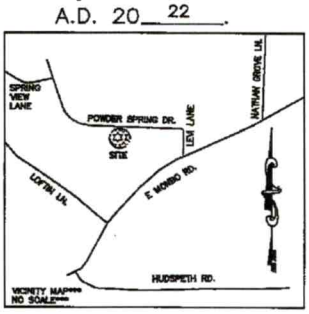
I, certify that this map was drawn under my supervision from an actual survey made under my supervision recorded in deed book 2788, page 1944, and/or plat book 72, page 108, that the ratio of precision is 1':10,000, that this map was prepared in accordance with the General Statutes of North Carolina Chapter 89C.

my hand and seal on the 26, day of APRIL, A.D. 20 22.

WILLIAM M. ALLEN, PLS

LAND SURVEYOR WILLIAM M. ALLEN

REVISED 4/29/22
ADDED SEPTIC





LOT 3
SILLS SPRINGS
DEV. LLC.
2788/1944

R/W

S75°37'52"W
300.47

35' REAR

58.7

S14°22'08"E
140.00

25' STREET SIDE

SEPTIC

SEPTIC

LOT 4
0.93 AC.

THE FINCH

27.5

15' SIDE

N10°07'35"E
197.50

35' FRONT

62.3

C1

C2

R/W N75°37'52"E
107.00

LOT 5
SILLS SPRINGS
DEV. LLC.
2788/1944

SPRING VIEW LN
(45' PRIV. R/W)

POWDER SPRING DR
(45' PRIV. R/W)

R/W

R/W

R/W

R/W

R/W

CONC. CALC.
DRIVE = 1,442 SQ. FT.
WALK = 67 SQ. FT.

CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD
C1	20.00'	31.41'	N 59°22'08" W	28.28'
C2	222.50'	94.73'	N 87°49'43" E	94.02'

LEGEND
P.P. = POWER POLE
I.P.S. = #4 REBAR SET
R/W = RIGHT-OF-WAY
CP = COMPUTED POINT

NOTES
1) THIS PROPERTY MAY BE SUBJECT TO ANY EASEMENTS AND/OR RIGHTS OF WAY OF RECORD.
2) ACREAGE COMPUTED BY THE COORDINATE METHOD.
3) UNDERGROUND POWER
4) NO GRID MONUMENT FOUND WITHIN 2000 FEET.

0' 25' 50' 100'
SCALE IN FEET

SCALE 1" = 50'

ACQUIRED BY: NEST HOMES

PLOT PLAN SURVEY

OF

107 SPRING VIEW LN
LOT 4 POWDER SPRINGS CREEK

FALLSTOWN TWSP., IREDELL CO., N.C.

FIELD BOOK:
FILE: POWDER SPRINGS CREEK 4
DC FILE:
TAX MAP NO: 4721410238.000

ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 311661

SEPTIC: IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4721 -41 -0239

APPLICANT/OWNER: Nest Homes. APPLICANT ADDRESS: 236 Gateway Dr. Suite 7. Mooresville NC. 28117.

SITE ADDRESS: 107 Spring Wings Ln. Statesville NC 28677. PHONE: 704-202 1524 ALT. PHONE —

SITE DIRECTIONS: East Monbo Rd to Levi Ln @ on Powder Spring @ on Spring Valley Lane SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Powder Springs Crossing SECTION: — LOT # 4 LOT AREA: .984 Ac DESIGN FLOW: 480 · L.T.A.R.: .30

Septic Tank	1000	(gal)	STB		Date		☒ New System	☐ Repair	☐ Expansion	System Type: I II (III) IV V VI	
Pump Tank	1000	(gal)	PT		Date		System Description:	Conventional 25% Reduction			
Pump Make			Model		Serial #		Repair System Description:	Low Pressure HP 625 - 50% Reduction			
# Nitrification Fields	1	# Lines	4	Linear Ft:	900		Maintenance Agreement Required:	☐ YES	☒ NO		
Trench Width	36	Trench Bottom Depth(Low side)	24 in max	Gravel Depth	—		☒ GRAVITY	☐ PRESSURE			

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

Comments / Conditions: # 6 inches of Fill Required for Repair install must be approved by ICHD #

INITIAL SITE SKETCH

This permit is issued pursuant to Section 11 . (C) of S.L. 2018-114 using the signed and sealed LSS Evaluation by:

Soil + Forestry Services of the Carolinas PA

LSS # 1231.

AS BUILT SKETCH

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 time.

---IMPROVEMENT PERMIT ONLY---

DO NOT ISSUE BUILDING PERMIT!

FLOOR PLAN STILL NEEDED!

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: [signature] Date: 11/23/2020 Installed by: _____

IMPROVEMENT PERMIT by: [signature] Date: 10/28/2020 OPERATION PERMIT by: _____ Date: _____

AUTHORIZATION TO CONSTRUCT by: _____ Date: _____ Existing System Inspected by: _____ Date: _____

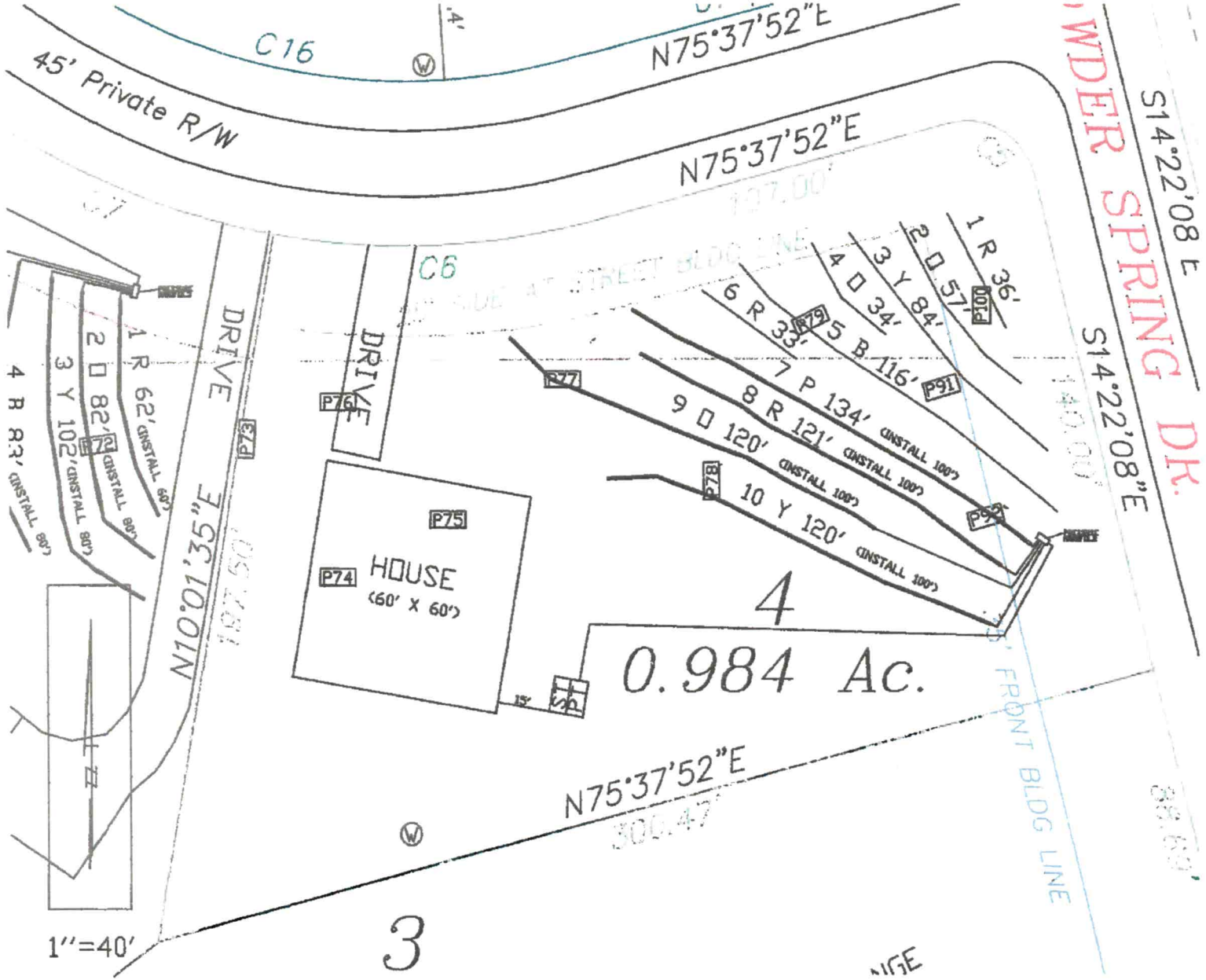
FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed.

PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner/Applicant:	Nest Homes
Address:	236 Raceway Drive (Suite 7) Mooresville, NC 28117
Phone:	704.202.1524
County:	Iredell
Location:	Powder Spring Drive Lot 4
Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Daily Wastewater Production:	480 gpd
System Flow:	28.44

Design Specifications

Drainfield Size:	400
Loading Rate:	0.3
Depth of Gravel in Trench:	NA (25% reduction)
Gravel Size:	NA (25% reduction)
Trench Depth:	24 in. Repair Trench Depth 20 in.
Trench Width:	36 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	168
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	29.23
Dosing Volume:	182.84
Supply Manifold:	4 in. SCH 80 PVC
Supply Manifold Length:	4 ft. (minimum)
Supply Manifold Volume:	N/A
Recommended Float Controls:	SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel:	SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.
Pressure Head:	2 ft.
Friction Head:	2.99
Elevation Head:	15.50
Total Dynamic Head:	23.56
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 at Pressure Manifold
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Soil & Forestry Services of the Carolinas, PA.


C16
45' Private R/W
N75°37'52"E
S14°22'08"E
WDER SPRING DR.
C7
C6
DRIVE
DRIVE
N10°01'35"E
1 R 36'
2 D 57'
3 Y 84'
4 D 34'
5 B 116'
6 R 33'
7 P 134' (INSTALL 100')
8 R 121' (INSTALL 100')
9 D 120' (INSTALL 100')
10 Y 120' (INSTALL 100')
1 R 62' (INSTALL 60')
2 D 82' (INSTALL 80')
3 Y 102' (INSTALL 80')
4 R R.R. (INSTALL 60')
P71
P72
P73
P74
P75
P76
P77
P78
P79
P91
P92
HOUSE
(60' X 60')
4
0.984 Ac.
3
N75°37'52"E
300.47'
140.00'
137.00'
FRONT BLDG LINE
1"=40'

CALCULATIONS

Location	Powder Spring Creek Subdivision Off Levi Lane	
Project Number	20-0059	
Lot No:	4	
No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.300	gpd/ft²
25% RED.? (YES OR NO)	YES	
Supply Line Length	168	ft.
Supply Line Volume	29.232	gal.
Required Feet of Line	400	ft.
Amount of Line from Layout	400	ft.
Gallons per Minute	28.44	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Lateral Line Volume	261.2	gal.
Dosing Volume	182.84	gal.
	Note: Dosing Volume based on 70% of lateral line volume	
Tank Draw Down	8.7	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	6.43	minutes
Elevation Head	15.5	ft.
Pressure Head	2	ft.
Friction Factor	1.78	ft./100 ft. *(From the interpolater.)*
Friction Head	2.99	ft.
Total Dynamic Head (+15%)	23.56	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Project#: 20-0059
September 25th, 2020

NEST HOMES
Attn: *Michael Wetter*
Email: mwetter@nesthomes.com

RE: Soil & Site Evaluation for a 4 Bedroom Residence on Lot 4 Powder Spring Creek Subdivision,0.984 ac Parcel, PIN# 4721412167, Powder Spring Drive, Statesville, NC 28677.

Mr. Wetter:

At your request Soil & Forestry Services of the Carolinas (S&FS) has performed soil/site evaluations on parcel noted above. The Lot size is noted on the attached survey map & soil evaluation form. The purpose of our work was to identify soil areas with potential to support subsurface wastewater disposal systems and provide design details for Session Law submittal to Iredell County Health Department.

Site Conditions

At the time of our evaluation land cover on the property was mostly mixed pine/hardwood. Topography within the evaluated area was moderate slope near the house site and proposed drainfield area. Property lines and corners were marked at the time of the evaluation by Patterson Land Surveying. The client provided an Autocad File of a survey as a basemap. The proposed septic layout was located via Trimble Submeter GPS/tape measures and used to produce the attached *Site Plan*. The house envelope was located via Survey by Patterson Land Surveying.

Methodology

We evaluated soil areas through the use of backhoe pits. Soil morphological conditions including color, texture, structure, etc. were reviewed in the field with nine pit locations on the property flagged and located via GPS. Six of the backhoe pits are located in or adjacent to the proposed septic layout. Soil suitability was determined by referencing 15A NCAC 18A.1900 "Laws and Rules for Sewage Treatment and Disposal Systems". *Soil & Site Evaluation Forms* were utilized to record the soil morphological data for each pit. The house envelope was located via survey. An on-ground layout of system and repair was performed using a laser level. Pin flag locations of the layout were also located by GPS and tape measures. Detailed system & repair information is summarized in the following paragraph for this Lot.

Lot 5 *(See Attached Design)*
The septic layout for this lot (9' centers) yielded a total of 855 linear feet of line. The primary system is proposed as 400 linear feet of Accepted (25% Reduction) drainfield with pressure manifold distribution. Trench depth is specified at 24 inches. The repair system is proposed as 320 linear feet of HPPBPS (50% Reduction) drainfield with gravity distribution. There is 455 linear feet available for repair. Trench depth is specified at 20 inches.

Session Law Requirements

An LSS Evaluation may be submitted in conjunction with a complete application to the LHD. The application shall include all information described in 15A NCAC 18A .1937(d) and be accompanied by a signed and dated statement from the applicant (owner or owner's legal representative) that reads as follows:

"The LSS Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section 11.(c).".

Owner Date

Print Name M. WSTTGR
Signature _____ 12/16/20

The LSS Evaluation shall include a statement bearing the LSS seal and signature that reads as follows:

"The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c)."

Disclaimer
This report reflects the findings of S&FS, PA. *This LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).* Any site modifications that impact the proposed septic areas on Lot 4 of Powder Spring Creek Subdivision may nullify this design. System design requirements and site requirements shall be adhered to for installation and Operations Permits to be issued by the local Health Department. If you have questions regarding these requirements a Pre-Construction meeting should be scheduled to discuss. Please contact S&FS if you have any questions regarding this report or the attached information. S&FS also offers septic system inspection, wetland delineation and forestry services.

Sincerely,

S. Ashley Rollans, LSS
Attachment: *Septic Design*

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for an Accepted Septic System with Pressure Manifold distribution for a 4 bedroom single family residence on Lot 4 Powder Spring Creek Subdivision, Statesville 28677, Iredell County, NC. PIN#: 4721412167

Contents:

	Page
Information for the Installer	1
Design Information	
Design Specifications	2-3
Layout Specifications	4
System Tapsheet	5
Pressure Manifold Diagram	6
Site Plan/System Plan	7
Calculations	8
Profile Descriptions	9
Zoning Permit & Receipt	10-12
Application	13-14
Agent Authorization Form	15
Green Sheet	16

September 23, 2020
Project No. 20-0059
Design By: Soil & Forestry Services of the Carolinas, PA

SOIL & FORESTRY SERVICES
OF THE CAROLINAS, PA

www.soilandforestryservices.com

Attached is a proposed design for an Accepted Septic System with Pressure Manifold distribution for a 4 bedroom single family residence on Lot 4 Powder Spring Creek Subdivision, Statesville 28677, Iredell County, NC. PIN#: 4721412167

Contents:

	Page
Information for the Installer	1
Design Information	
Design Specifications	2-3
Layout Specifications	4
System Tapsheet	5
Pressure Manifold Diagram	6
Site Plan/System Plan	7
Calculations	8
Profile Descriptions	9
Zoning Permit & Receipt	10-12
Application	13-14
Agent Authorization Form	15
Green Sheet	16

September 23, 2020
Project No. 20-0059
Design By: Soil & Forestry Services of the Carolinas, PA

Powder Spring Drive
PRESSURE MANIFOLD DESIGN

DESIGN FLOW:	480
SOIL APPLICATION RATE:	0.3
TOTAL AREA TRENCH BOTTOM:	1200
TOTAL LATERAL LENGTH:	400
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	400
SUPPLY LINE LENGTH:	168
TOTAL DYNAMIC HEAD:	23.56
MANIFOLD SIZE:	4 in.SCH 80 PVC
DOSING VOLUME:	182.84
PUMP TANK DRAW DOWN*:	8.7
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufecturers.*

Layout Specifications - Powder Spring Creek - Lot 4

Project #: 20-0059

LAYOUT FOR 4 BEDROOM HOME

September 23, 2020

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
PRESSURE	MANIFOLD				855.50		
HOUSE	Left Rear				844.40		
PUMP TANK					845.00		
INSTR. 1							
1	RED					36	36
2	ORANGE					57	57
3	YELLOW					84	84
4	ORANGE					34	34
5	BLUE					116	116
6	RED					33	33
7	*PINK*					*134*	*100*
8	*RED*					*121*	*100*
9	*ORANGE*					*120*	*100*
10	*YELLOW*					*120*	*100*
					Total	855	760

	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION	TRENCH DEPTH
** System*	*400*	*0.300*	*ACCEPT.*	*0.300*	*25% RED*	*GRAVITY*	24"
Repair	455	0.250	MOD. CONV.	0.250	HPPBPS	LOW PRESSURE	20"

Notes: **All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**Nitrification lines were located by GPS & Tape Measure.

PRESSURE MANIFOLD TAPSHEET - Powder Spring Creek - Lot 4

SYSTEM

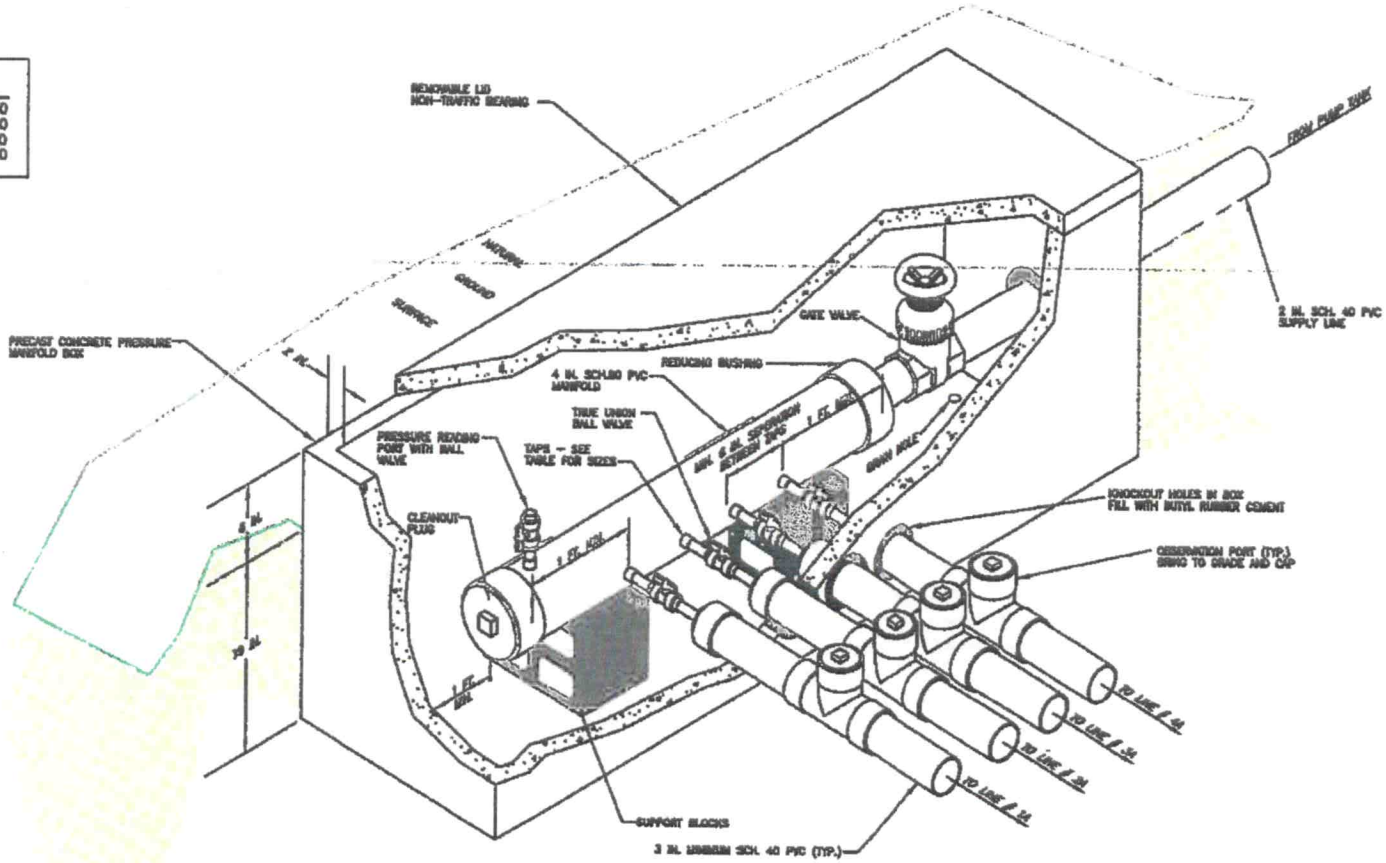
Line #	Color	Elevation	Length	Hole Size	Flow/Tap	Trench Area	Line LTAR
7	***PINK***		***100***	SCH 40 1/2	7.11	300	0.15
8	***RED***		***100***	SCH 40 1/2	7.11	300	0.15
9	***ORANGE***		***100***	SCH 40 1/2	7.11	300	0.15
10	***YELLOW***		***100***	SCH 40 1/2	7.11	300	0.15

total	**feet =**	**400**	**gal/min =**	**28.44**
		Des. Flow	**480**
		Pump Run=	**6.43**
		soil LTAR	**0.3**
		LTAR +5%	**0.315**
		LTAR with ACCEPTED	**0.4**
		LTAR with ACCEPTED + 5%	**0.42**

PRESSURE MANIFOLD DETAILS
FOR
POWDER SPRINGS CREEK LOT#4 SEPTIC SYSTEM

TAP SIZES

LINE No.	TAP SIZE
7	1/2" SCH. 40
8	1/2" SCH. 40
9	1/2" SCH. 40
10	1/2" SCH. 40



IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

(Check and sign only ONE of the options below)

1. * APPLICANT AND OWNER ARE THE SAME. * (*Sign here*) _____

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.

2. I, Eric Wood of Sills Springs Development LLC, am the legal owner(s) of the property located at 107 Spring View Lane, Statesville NC 28677, identified as

PIN (Parcel Identification Number) 4721410239.000, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) Heather Poston, Nest Homes LLC, 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.

Heather Poston
Signature of Owner(s)

05/05/2022
Date

Mooresville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

Statesville - Environmental Health
adrienne.shea@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677

ENVIRONMENTAL HEALTH REQUIREMENTS for SEPTIC and WELL PERMITS

The following items must be completed *PRIOR* to the *SUBMITTAL* of any Environmental Health Application. Incomplete applications will be returned to the applicant and cannot be processed or placed on the work list.

***** Initial all lines below to indicate you have submitted each form and completed every site requirement *****

HP **Complete all Environmental Health forms**:
- ✓ Application
- ✓ Site Plan with dimensions of proposed structure, addition, pool etc.
- ✓ Documentation to Authorize Owner Agent (if the property owner is not the applicant)
- ✓ Copy of Zoning Permit when applicable
- ✓ Sign this sheet after you have completed all items

HP **Lot must be cleared of heavy undergrowth.** In order to evaluate the lot, the footprint of the proposed structure must be visible. Adequate area for the septic drain field and repair area must be sufficiently cleared of heavy undergrowth, with **50 feet of visibility** in all directions. Inspectors must be able to evaluate the property, shoot laser level elevations, layout the drain field, do soils work, etc. **If the lot is not cleared sufficiently, then a $100 site revisit fee will be charged and the evaluation will be put on HOLD until the requirement is met.**

HP **Clearly mark all property corners by locating existing iron or concrete markers**. Flag all property lines every 25 feet if adjacent corners are not visible when standing on any given corner. Property lines must be flagged by a licensed NC surveyor & easily identified **prior to application submittal** (exception may apply for septic repair evaluations only).
'Mow lines' and/or fence lines do NOT constitute marked lines. **If the property lines are not properly marked when the lot is ready to be evaluated, then the application will be put on HOLD and a $100 site re-visit fee charged**.

HP **Stake or flag the footprint of the proposed structure, addition, pool etc. to match the site plan submitted.** The proposed structure, etc. **must be staked** out on the property as per the site plan.

HP If an **Authorization to Construct (AC) is desired**, submit a recorded copy of the plat for newly created or subdivided lot(s) and a LEGIBLE copy of the basic floor plan no larger than 8 ½" x 14" for each floor of the structure including decks, porches, etc. **The overall dimensions must be clearly noted & the rooms labeled.**

Any site not meeting the above requirements when staff arrives for the evaluation will result in a $100 site revisit fee being charged and the request being placed on HOLD. This will delay the processing of the application.
Once work by Environmental Health staff begins, the up-front fees paid toward securing any health department permit are non-refundable. Refunds for work not started, due to a customer changing their mind or plans, are subject to an administrative fee of $50 to defray a portion of the costs of processing the refund.

Backhoe pits are required for all applications that require a soils evaluation.
DO NOT DIG PITS UNTIL THE EH SPECIALIST HAS AUTHORIZED AND SCHEDULED YOUR EVALUATION TIME.
- **All utilities shall be marked before pits are dug. Call NC 811 for this service.**
- **The applicant/agent is responsible for securing these services**
- **Backhoe pits are to be dug at the locations and depths determined by the Environmental Health Specialist or a NC Licensed Soil Scientist. A minimum of four pits must be dug.**
- **The EH specialist will contact you when your application is ready to be processed for pit scheduling.**
- **Your backhoe operator must be on site during the EH Specialist's evaluation to prevent your operator from having to return to the property for additional work**.

By signing below I am acknowledging the above specifications have been met and the site is READY to be evaluated AND I understand the backhoe pit requirement and will secure those services (if applicable).

Signature Heather Poston **Date** 05/05/2022

Questions? Contact the Environmental Health Offices below:

Statesville Office
349 North Center Street (2nd Floor Building Standards)
Statesville, NC 28677-4063
Phone: (704)878-5305 ext. 3456

Mooresville Office
610 East Center Avenue (2nd Floor Govt. Center South)
Mooresville, NC 28115-2548
Phone: (704)660-3625

IREDELL COUNTY · NC

IREDELL COUNTY
PO Box 788
349 North Center St.
Statesville, NC 28677

APPLICATION NUMBER
311661 Issue Date:

Permit Type: ZONING

Parcel Number	Street Address	Jurisdiction
4721410239.000	107 SPRING VIEW LN	Iredell County

Owner Information		Applicant Information	
Name:	RH FUND XII LLC	Name:	NEST HOMES LLC
Address:	2250 NW FLANDERS ST STE G02	Address:	PO BOX 3965
	PORTLAND, OR 97210		MOORESVILLE, NC 28117
Phone:		Phone:	(704)808-1064

Use Requested	Zone Code
Single Family Dwelling	R20 CUD

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
0.984	35	35	25	15	WSIV-PA Catawba/Lake Norman	NO

Remarks
sfd/

The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. The applicant further acknowledges that enforcement of deed restrictions, plat conditions and other contractual agreements will not be undertaken by Iredell County and is the sole responsibility of the affected parties.

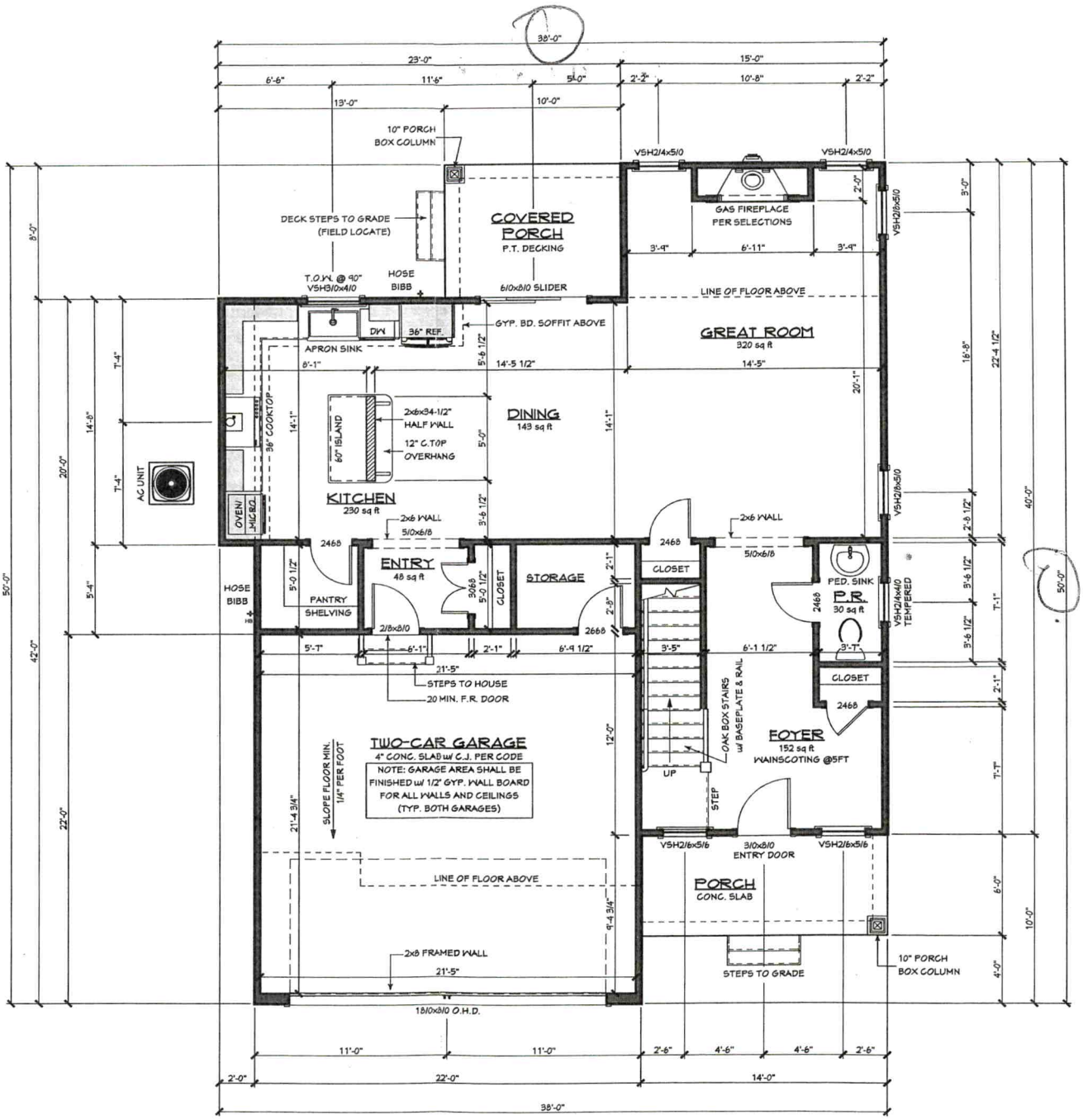
Date: 05/04/2022

Signature of Owner/Contractor

Permit Number	311661	TOTAL FEES:	$154.50

PAID
1420
5-10-22

UCLA



ROOM SQ. FT. CALLOUT:
PLEASE NOTE THAT THE INTERIOR ROOM SQUARE FOOTAGE CALLOUT IS CALCULATED FROM FINISHED SURFACE(S). PLEASE ADJUST ACCORDINGLY FOR ADDITIONAL AND WASTE REQUIRED FOR FLOORING MATERIALS.

1 / A2.0 FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"
WALL HEIGHT: 9'-1 1/8" U.N.O.
WINDOW HEADERS: 8'-0" U.N.O.

G:\REST HOMES\1_JOBS\POWDER SPRINGS (FS)\LOT 4\FS4_THE FINCH_LR_CS.layout plot scale: 11"x17": 1/8" = 1'-0" 24"x36": 1/4" = 1'-0" plot date: Monday, May 2, 20229:05:11 AM

Acknowledgement Of
Plans Submittal ONLY!
BAB Date 5-17-2022
Heather Poole Date 5/19/22

TYPICAL HANGERS

MEMBER	HANGER
2x8	LUS28
2x10	LUS210
2x12	LUS212
(2) 2x8	HUS28-2
(2) 2x10	HUS210-2
(2) 2x12	HUS212-2
(3) 2x8	LUS28-3
(3) 2x10	LUS210-3
(3) 2x12	HU212-3
(2) 9-1/4" - (2) 11-7/8" LVL	HGUS410
(2) 14" - (2) 18" LVL	HGUS414
(3) 9-1/4" - (3) 11-7/8"	HGUS5.50/10
(3) 14" - (3) 18" LVL	HGUS5.50/14
(4) 9-1/4" - (4) 11-7/8" LVL	HGUST.25/10
(4) 14" - (4) 18" LVL	HGUST.25/14

EXTERIOR WALL HGT. (H)	STUD SIZE/SPACING
H ≤ 10'-0"	2x4 @ 16" O.C.
10'-1" ≤ H ≤ 11'-0"	2x4 @ 12" O.C.
11'-1" ≤ H ≤ 18'-0"	2x6 @ 16" O.C.
H ≥ 18'-0"	CONSULT ENGINEER

WALL BRACING NOTE:

DESIGN LATERAL LOAD: WIND 115 MPH EXPOSURE B
THIS STRUCTURE HAS BEEN DESIGNED USING CONTINUOUSLY SHEATHED (CS-WSP METHOD) 3/8" APA RATED OSB SHEATHING FASTENED w/ 6d NAILS SPACED AT 6" O.C. ALONG EDGES AND 12" O.C. ALONG THE INTERIOR SUPPORTS. ALL SHEATHING EDGES SHALL HAVE CONTINUOUS SUPPORT.
FOR MORE INFO. REFER TO THE 2018 NC RESIDENTIAL BUILDING CODE SECTION 602.10.3.

FRAMING NOTES:

- FRAMING AS GENERAL NOTES
- ALL INT. & EXT. LOAD BEARING HEADERS TO BE (2) 2x10 U.N.O. w/ (1) JACK AND (1) KING STUD AT EACH END U.N.O.
- INSTALL AN EXTRA TRUSS UNDER ALL PARALLEL PARTITION WALLS GREAT THAN 5'-0" LONG.
- TRANSFER ALL POINT LOADS FROM ABOVE TO THE FOUNDATION BELOW w/ EQUAL # OF STUDS.
- ALL EXTERIOR WALLS TO BE SHEATHED w/ 7/16" OSB ATTACHED TO FRAMING w/ 8d NAILS AT 6" O.C. EDGE AND 12" O.C. FIELD. PROVIDE BLOCKING AT ALL PANEL SPLICES
- ALL ANGLED WALLS ARE 45° U.N.O.

nest HOMES
236 RACEWAY DRIVE
SUITE 7
MOORESVILLE, NC 28117
704-208-4251
www.nesthomes.com

Township/County
TOWNSHIP
COUNTY

Engineer

IDE INTELLIGENT DESIGN ENGINEERING
INTELLIGENT DESIGN ENGINEERING
1945 J N PEASE PLACE
#204
CHARLOTTE, NC 28262
CHAD RITTER, P.E.
CORPORATE LIC. #C-3118
704-335-7200

Stamp/Seal

PRELIMINARY
NOT FOR CONSTRUCTION
FOR PRICING ONLY

Project Name/Owner

THE FINCH
POWDER SPRINGS
LOT 4
SPEC HOME

107 SPRING VIEW LANE
STATESVILLE, NC 28677

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Date
5/2/2022

Drawn By

Reviewed By

Plan Set Scale
24x36 sheet
1/4" = 1'-0"
11x17 sheet
1/8" = 1'-0"

Sheet Title Description
SECOND FLOOR PLAN

Sheet Number
A3.0