IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 177743

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

PIN # 4740-62-1015

APPLICANT/OWNER: ELG Investments APPLICANT ADDRESS: 488 Pineville Rd. Statesville, NC 28677

SITE ADDRESS: 157 Hawks Landing Dr. Troutman, NC PHONE: ALT. PHONE 704-578-4951 (LSS)

SITE DIRECTIONS: 21 N → L on Flowerhouse Loop → L on Hawks Landing → lot on left SAP CONTROLLED: ☒ YES ☐ NO

SUBDIVISION: Hawks Landing SECTION: — LOT # 15 LOT AREA: 1.1 acres DESIGN FLOW: 480 GPD L.T.A.R.: 0.3

Septic Tank 1000 (gal) STB 760 Date 3/29/19

Pump Tank 1000 (gal) PT 363 Date 3/9/19

Pump Make — Model — Serial # —

Nitrification Fields 1 # Lines 4 Linear Ft 271

Trench Width 24" Trench Bottom Depth(Low side) 30" Gravel Depth —

☒ New System ☐ Repair ☐ Expansion System Type: I II III (IV) V VI

System Description: LP-PPBPS (50% Reduction)

Repair System Description: Drip + TS II

Maintenance Agreement Required: ☒ YES ☐ NO ☐ GRAVITY ☒ PRESSURE

☒ Residence ☐ Business ☐ Other ☐ Slab ☒ Basement w/plumbing

No. Bedrooms 4 No. Persons 8 No. Employees — ☒ Crawl Space

Water Supply: ☒ Private ☐ Public ☐ Community

☐ Basement w/o plumbing

Comments / Conditions: This proposal is being submitted pursuant to Session Law 2018-114.(c). Recommend setting control floats to dose system 180 gallons per pumping event.

* See attached floorplans (approved 11/5/2018)

INITIAL SITE SKETCH

See attached design information from The Oaks Group, PA

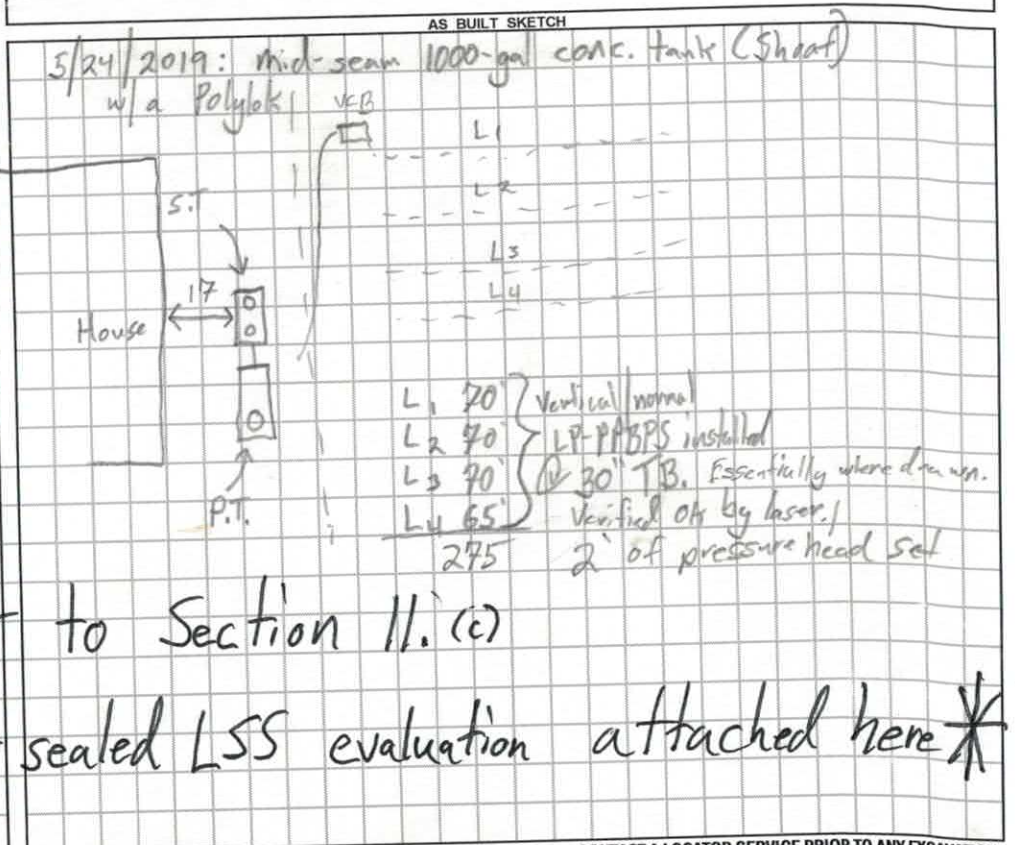
Kathleen Saunders LSS #1313

Dated: 4/17/2019

Revised: 4/22/2019 (site plan + design)

* This permit is issued pursuant to Section 11.(c) of SL 2018-114 using the signed + sealed LSS evaluation attached here *

AS BUILT SKETCH



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: Kathleen Saunders Date: 5/7/19

IMPROVEMENT PERMIT by: Tom Shuck Date: 5/7/2019

AUTHORIZATION TO CONSTRUCT by: Tom Shuck Date: 5/7/2019

Installed by: A-1 Backhoe

OPERATION PERMIT by: Maria Dotson Date: 7/5/19

Existing System Inspected by: Date:

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

	Date	Initials
Drain Lines Checked	5/24/19	SL
Tanks Checked	5/24/19	SL
Pressure Manifold or Valve Box Checked	7/1/19	MD
Pressure Head Set	5/24/19	SL
Electrical Checked	7/1/19	MD
Floats Set		
Alarm Checked		
Maintenance Contract (Y) / N	7/5/19	MD

2018 As of 7/1/19 Still need Maint Contract

	Date	Initials
Drain Lines Checked	5/24/19	SL
Tanks Checked	5/24/19	SL
Pressure Manifold or Valve Box Checked	7/1/19	MD
Pressure Head Set	5/24/19	SL
Electrical Checked	7/1/19	MD
Floats Set		
Alarm Checked		
Maintenance Contract (Y) / N	7/5/19	MD

2018 As of 7/1/19 Still need Maint Contract

THE OAKS GROUP, PA

To: Iredell County Environmental Health Department (ICHD)

From: Kathleen Saunders, LSS

RE: 157 Hawks Landing Dr

Date: April 17, 2019

Attached is the septic specification information required to permit 157 Hawks Landing Drive for an Improvement Permit and/or Construction Authorization Permit in Iredell County via the Session Law 14 permitting process.

The attached information is not an Improvement Permit or an Authorization to Construct, and is only to assist the Iredell with permitting. The ICHD has to approve each lot and only the ICHD can issue these permits. The system should be installed according to the ICHD permits, policies, and NC Rules, which these specifications are in accordance with. If the ICHD wishes to change tank locations, distribution devices, etc they may do so at their discretion.

All information and specifications have been prepared in conjunction with ICHD permitting guidelines for the current lot owners to acquire an Improvement Permit and/or Authorization to Construct on this lot. It is ultimately the ICHD's responsibility to verify all specifications, **excluding** soil descriptions, before permitting and/or septic system installation.

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). The LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 11.(c). The LSS Evaluation contains sufficient information to produce design and construction features for an IP/CA, and the LSS contains the proper insurance with the proper coverage.

LICENSED SOIL SCIENTIST
KATHLEEN M. SAUNDERS
1313
STATE OF NORTH CAROLINA

Kathleen Saunders

Hawks Landing Lot 15 Fast Track Septic System Information

Horizontal Install

Number of Bedrooms	4
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	480
LTAR (gpd/ft2)	0.3
Primary System Type	**LP PPBPS**
No. Lines	4 (See Table)
Minimum Linear Feet	267
Total Linear Feet	271
Trench Width	3' min.
Trench Spacing	9' min.
Trench Depth (low side)	30"
Pump Required	Yes
Distribution Device	Gate Valve Box w/ LPP Distribution
Maintenance Agreement Required	Yes
Length and Diameter of Supply Pipe	120' of 2" SCH 40 PVC
Size of laterals	1 1/4" SCH 40 PVC
Flow Rate through the system	31.5 gpm
Elevation head	Approx: 21.8 ft
Pressure head	3 ft
Friction head	2.1 ft
20% Contingency	5.38 ft
Total Head	32.28 ft
Pump Requirements	31.5 gpm @ 32.3' of head To be designed by installer.
Maximum Dosing Volume	226.8 gal -2.1 doses/day @ design flow*
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	approx. 7.2 min.
Check Valve	Yes
Siphon Break hole	no
Repair System	**Subsurface Drip with TS II**
Total Linear Feet	3200 sqft
Repair LTAR	0.15

***Before placement of cap block, one panel on each line near the center of the field should be observed filling to make certain that it does not overflow top chamber into air chambers of panel. If overflow occurs, reduce floats by 25 gallons and reset until no overflow is observed.**

APPROVED MAY X 7 2019

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 2
PROPERTY ID #:
COUNTY: Iredell

SOIL/SITE EVALUATION
for **ON-SITE WASTEWATER SYSTEM**
(Complete all fields in full)

OWNER: ELG Investments — APPLICATION DATE
ADDRESS: 488 Stillwater Rd — DATE EVALUATED: 3/14/13-4/17/13
PROPOSED FACILITY: SFR — PROPOSED DESIGN FLOW (.1949): 480 — PROPERTY SIZE: 1.10 Ac
LOCATION OF SITE: Hawks Landing ls — PROPERTY RECORDED: yes
WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other
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
1	L pit 10-12%	0-5	Mo GR SL	FR ns/np	Br	38"	PS	N/A	0.3
		5-18	Mo SBK C	FR SS/SP	R				
		18-28	WK SBK C	↓	R; Fsap				
		28-38	WK SBK CL	↓	R; Csap				
		38-55	MA L Sap	↓	yel Rd				
2	L pit 10%	0-3	Mo GR SL	FR ns/np	Br	24+	N/A	24"	Drip 0.15 0.2 if TS I/II used
		3-24	WK ABK C	FR SS/SP	R				
		24"	2 Chroma						
3	L pit 10%	0-3	Mo GR SL	FR ns/np	Br	48+	N/A	40"	Drip 0.15 0.2 if TS I/II used
		3-25	WK ABK C	FR S/P	R				
		25-40	WK SBK C	↓	R; C yel Br				
		40-48	WK SBK C	↓	yel Br; 2chroma/Red				
4	L 11%	0-3	Mo GR SL	FR ns/np	Br	48+	N/A	N/A	0.3
		3-24	Mo SBK C	FR SS/SP	R				
		24-48	WK SBK CL	FR SS/SP	R; Fsap				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	LP PPBPS	Subdrip w/ TSI
Site LTAR	0.3	0.2

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: KMS
OTHER(S) PRESENT:

COMMEN The LSS evaluation attached is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).
Updated Fe

LICENSED SOIL SCIENTIST
KATHLEEN M. SAUNDERS
THE CERTIFICATE OF THE STATE OF NORTH CAROLINA
1313
STATE OF NORTH CAROLINA

Kathleen Saunders

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

PROPERTY ID #:
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

OWNER: ELG Investments
ADDRESS:
APPLICATION DATE
DATE EVALUATED: 3/13 - 4/19
PROPOSED FACILITY: SFR
PROPOSED DESIGN FLOW (.1949): 480
PROPERTY SIZE: 1.1 Ac
LOCATION OF SITE: Hawks Landing 15
PROPERTY RECORDED: yes
WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other
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
5	L 10-12%	0-3	MO GR SL	FR NS/NP	Br	46+	N/A	N/A	0.3
		3-22	MO SBK C	FR SS/SP	R				
		22-46	WK SBK C	↓	R				

LICENSED SOIL SCIENTIST
KATHLEEN M. SAUNDERS
STATE OF NORTH CAROLINA
1313
Kathleen Saunders

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	IV	Sub drip w/ TSI
Site LTAR	0.3	0.2

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: KMS
OTHER(S) PRESENT:

COMMENTS:

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

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet ___ of ___
PROPERTY ID #: ___
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

OWNER: ELG Investments (Michael Gandy) APPLICATION DATE: ___
ADDRESS: 16108 North Point Rd (Huntersville) DATE EVALUATED: 11/5/18
PROPOSED FACILITY: 3 BR SFR PROPOSED DESIGN FLOW (.1949): 360 GPD PROPERTY SIZE: 1.1 acres
LOCATION OF SITE: 157 Hawks Landing Drive Troutman, NC PROPERTY RECORDED: Yes
WATER SUPPLY: ☒ Private ☐ Public ☐ Well ☐ Spring ☐ Other ___
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	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
1	Adjacent pit #1 [Primary System Area]	0-9	SCL some gravel V.W. SBK	SI Friable, SS, SP, SeaP		42"	—	—	0.30 PS
		9-28	Clay W-M SBK	SI Firm, Sticky, SP, SeaP					
		28-42	Clay Loam W. SBK common mica	SI Friable, SS, SP, SeaP					
		42-49	MA Loamy, Saprolite	Very Friable + Well Drained					
2									
3									
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): ___
SITE CLASSIFICATION (.1948): PS [Checking soil on 5 year old IP]
EVALUATED BY: Tom Shuck
OTHER(S) PRESENT: ___

COMMENTS: ___

Project #:
Property ID #:
County: Iredell

SOIL/SITE EVALUATION

Date Evaluated: 3/14/13

Owner or Client: ELG. Investments
Proposed Facility: House — Design Flow: 360
Location of Site: Lot 15 Hawks Landing
Soil Described By: KMS — Others Present:
Antecedent Moisture: — Weather:

Pfoperty Size: 1.10 Ac
Site LTAR: Int. 0.3 Rep. 0.15
Site Classification: PS

Water Supply: [ ] Public [ ] Community [X] On-Site Well [ ] Spring [ ] Other
Evaluation Method: [X] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY: Structure/ Texture	SOIL MORPHOLOGY: Consistence Mineralogy	PROFILE FACTORS: Inclusions	Matrix Color	Mottles	Profile Notes (Restr Horiz, Soil Depth, Coarse Frag, etc...)	Profile Class & LTAR
1	L pit	0-5	Mo GR SL	FR ns/np		Br			0.3
		5-18	Mo SBK C	FR ss/sp		Red			
		18-28	WK SBK C	FR ss/sp	F sap	Red			
		28-38	WK SBK CL	FR ss/sp	C sap	Red			
		38-55	MA L sap	FR ss/sp		4 Red			
2	L pit	0-3	Mo GR SL	FR ns/np		Br			Dnp 0.15
		3-24	WK ABK C	FR ss/sp		Red			
		24"	2 chroma						
3	L pit	0-3	Mo GR SL	FR ns/np		Br			Dnp 0.15
		3-25	WK ABK C	FR s/p		Red			
		25-40	WK SBK C	FR s/p		Red	C yel Br		
		40-48	WK SBK C	FR s/p		yel Br		C 2 chroma, Red	
4	L 11%	0-3	Mo GR SL	FR ns/np		Br			0.3
		3-24	Mo SBK C	FR ss/sp		Red			
		24-48	WK SBK CL	FR ss/sp	F sap	Red			
5	L	0-3	Mo GR SL	FR ns/np		Br			0.3
		3-22	Mo SBK C	FR ss/sp		Red			
		22-46	WK SBK CL	FR ss/sp		Red			
6									

COMMENTS:

Approved ICHD
4-26-13

EOP EK Redraw 177743 pd $100 well & $200 pd $1200

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

Application For: (X) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
(X) 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: ELG Investments Address: 488 Pineville Rd Statesville Zip: 28677
Applicant Email: _____ Phone: _____ Alt. Phone: _____
Owner Name: Same Address: _____ Zip: _____
Owner Email: _____ Phone: _____ Alt. Phone: 704-578-4951 (LSS)

Property Information:

Street Address: 157 Hawks Landing Dr Troutman
Subdivision Name: Hawks Landing Section/Phase: _____ Lot Number: 15
Driving Directions: HWY 115 to Flower House Loop to Hawks Landing Dr, at end

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

(X) 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: 8
( ) 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: _____
(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 ( ) 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?
( ) 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: Kathleen Saunders 4-10-19
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

AC (177743)

Email AC to (see below)

IREDELL COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

APPLICATION FORM

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

Place an (X) *beside whichever is submitted if applicable*

Applicant Information: (PRINT CLEARLY)

Applicant Name: ELG Investments Address: 16108 NorthPoint Rd Huntersville Zip: 28078
Applicant Email: Michaelgandy@bellsouth Phone: 704 506 5148 Alt. Phone: _____
Owner Name: SAME Address: _____ Zip: _____
Owner Email: _____ Phone: _____ Alt. Phone: _____

Property Information:

Street Address: 157 Hawks Landing Dr Troutman NC 28166
Subdivision Name: Hawks Landing Section/Phase: _____ Lot Number: 15
Driving Directions: Exit 42 to Flower House Loop / right on Hawks Landing Dr.

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

TYPE

(✓) New Single Family Residence Maximum Number of Bedrooms: 3 ( ) New Multi-Family Residence Maximum Number of Occupants: _____
( ) Accessory Building ( ) Swimming Pool
( ) Bedroom(s) Addition ( ) Other Addition/Structure: _____
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem: _____
Non-Residential Site Development: Type of Business: _____
Square Footage of Building: 3800 Max. Number of Employees: _____ Max. Number of Seats/Beds/Other: _____

CHECK FOUNDATION

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

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?

IREDELL COUNTY HEALTH DEPARTMENT

Application For Improvement Permit and/or Authorization To Construct, Existing System Inspection

(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)

1. APPLICATION FOR: X Improvement Permit ___Authorization To Construct ___BOTH ___Existing System Inspection

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application
   The following optional attachments may also be submitted: X Survey Plat, Scaled no more than 1 Inch = 60 Feet
   Place check ( ) beside whichever is submitted if applicable ___ Custom Site Plan, Scaled no more than 1 Inch = 60 Feet
   Non-Expiring

3. **Applicant Information:**

Applicant Name	Mailing Address	Home Phone	Work Phone
ELG Investments, LLC	16108 North Point Rd Huntersville 28078		
same	contact Kathleen Saunders, LSS	704-578-4951	
Owner Name	Mailing Address	Home Phone	Work Phone

4. **Property Information:**

Street Address	Subdivision Name	Section/Phase and Lot Number
	Hawks Landing	Lot 15

Driving Directions: NC Hwy 115, L Flower House Loop, L Hawks Landing, at end

****

5. **RESIDENTIAL Site Development Information:** *(Check or Complete ALL that apply)*

(X) New, Single Family Residence
( ) New, Multi-Family Residence
( ) Expansion of Existing Septic System
( ) Repair To Failing Septic System

Maximum Number of Bedrooms 3
Maximum Number of Occupants 6
If Expansion, Current Number of Bedrooms ___

(X) Crawl Space Foundation?
( ) Concrete Slab Foundation?
( ) Basement w/Plumbing?
( ) Basement w/out Plumbing?

IF Non-Residential Site Development:
Type of Business ___
Square Footage of Building ___
Maximum Number of Employees ___
Maximum Number of Seats ___

****

6. **Proposed Water Supply:**

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

****

7. **Desired Septic System Type:** *(You may rank in order of preference, if any)*

( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other___ ( ) No Preference

****

8. **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. industry) 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.

9. Signature: Kathleen Saunders — 3/18/13
   Property owner or owner's legal representative signature (SIGNATURE REQUIRED) — DATE

AUTHORIZATION TO ACT AS AGENT FOR OWNER

Any application/document/permit requiring a signature must be signed by the property owner or their authorized agent. This form shall be provided by the owner to allow specified individuals to act as agents for the owner. This form allows the specified individuals to sign or receive any application/document/permit on behalf of the owner. This form allows the authorized agent to make decisions on behalf of the owner pertaining to modifications of permits in the field. It is the responsibility of the owner to assure that any/all permit conditions specified on permits issued by this Division are followed.

I, 4G Design Build, am the legal owner of the property located at 157 Hawk Landing Dr, identified as PIN(Parcel Identification Number) 4740 62 1015, located in Iredell County, North Carolina.

I do hereby authorize (print authorized agent/company name) The Oaks Group, _____, _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

1. Improvement Permit (IP)/ Authorization to Construct (AC).
2. Application for soil-site evaluation (new/repair).
3. Application/permit for water well/well abandonment.
4. Application for existing system.
5. Application for Improvement Permit (IP)/ Authorization to Construct (AC).

I agree to abide by any and all decisions and/or conditions between the agent acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division. This form must be fully executed before the individual's specified above will be recognized as the authorized agent.

Signature of Owner — Date: 4-10-19

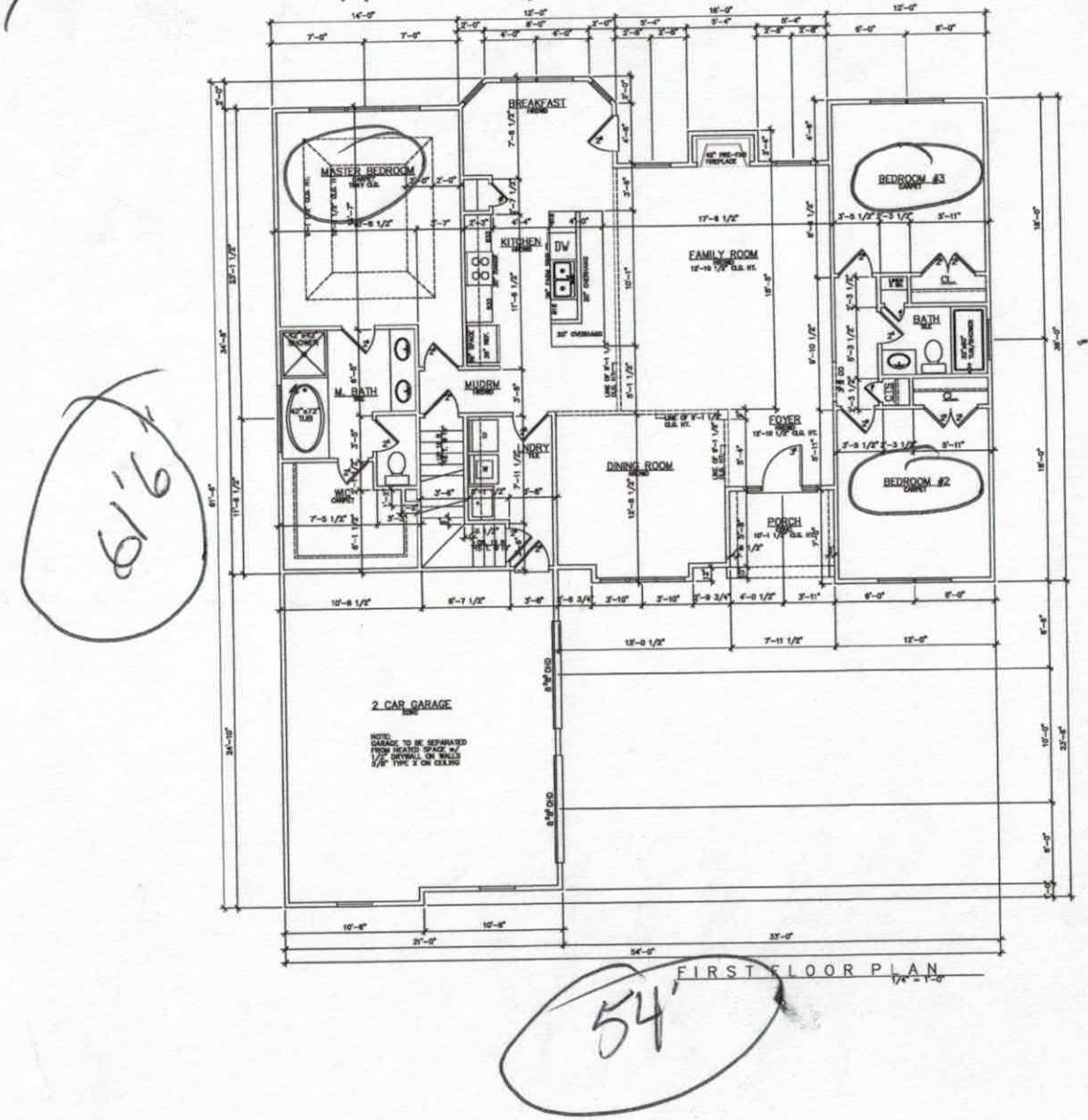
Signature of Witness — Date

Acknowledgement of
Plans Submittal ONLY!

Date 10/26/18

Date 11/5/18

14' 12' 16' 12'



Drafting & Design Inc.
Charlotte, N.C.
704-542-8858

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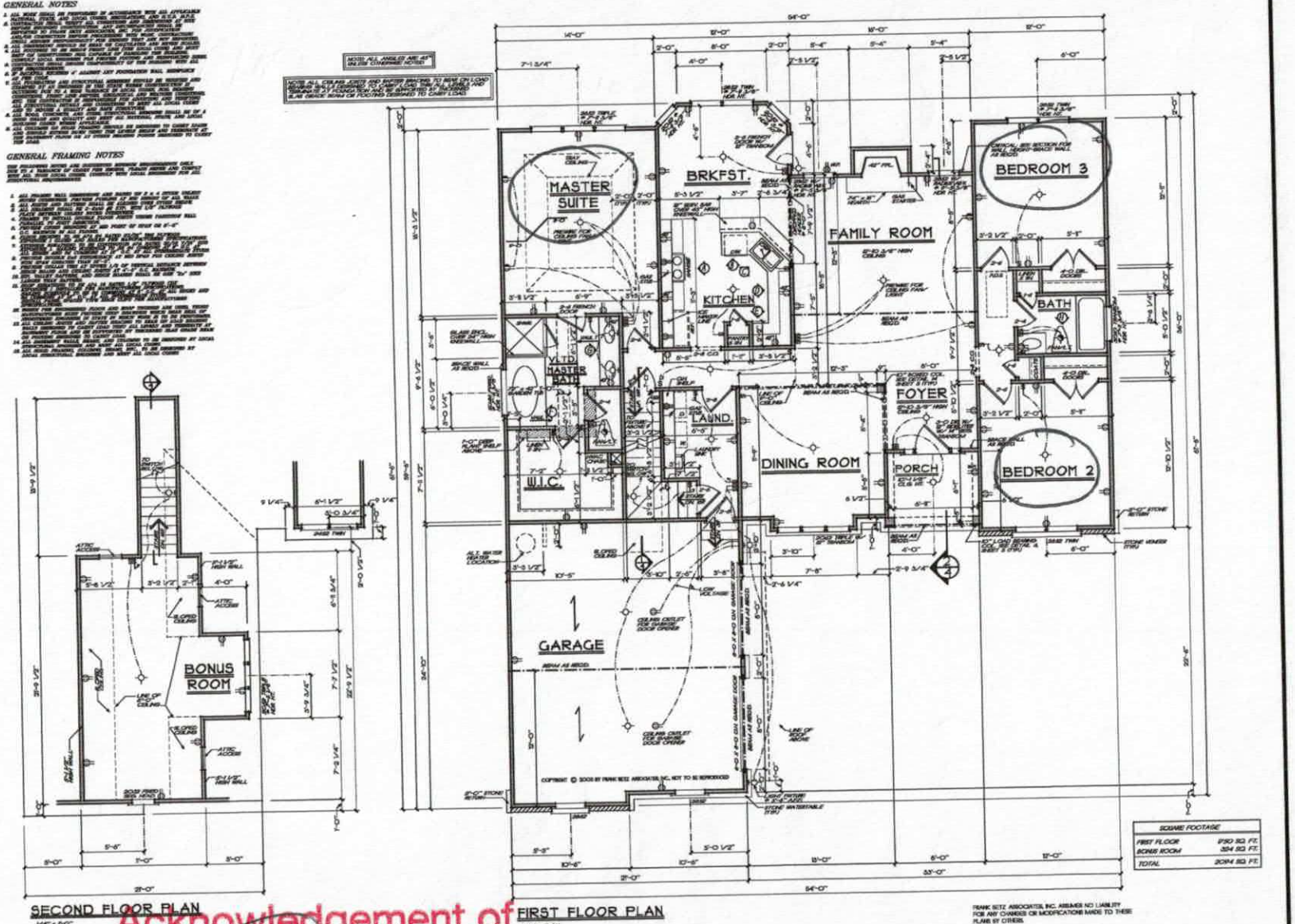
Project: THE STONEHEATH PLAN
BY ELG INVESTMENTS

Sheet Title: FIRST FLOOR PLAN

Drawn By: M. GANDY
Date: 07-12-18
Rev:
Rev:

STONEHEATH-1F

Sheet: 4



Acknowledgement of Plans Submittal ONLY!

Date 10/26/18

Date 11/5/18

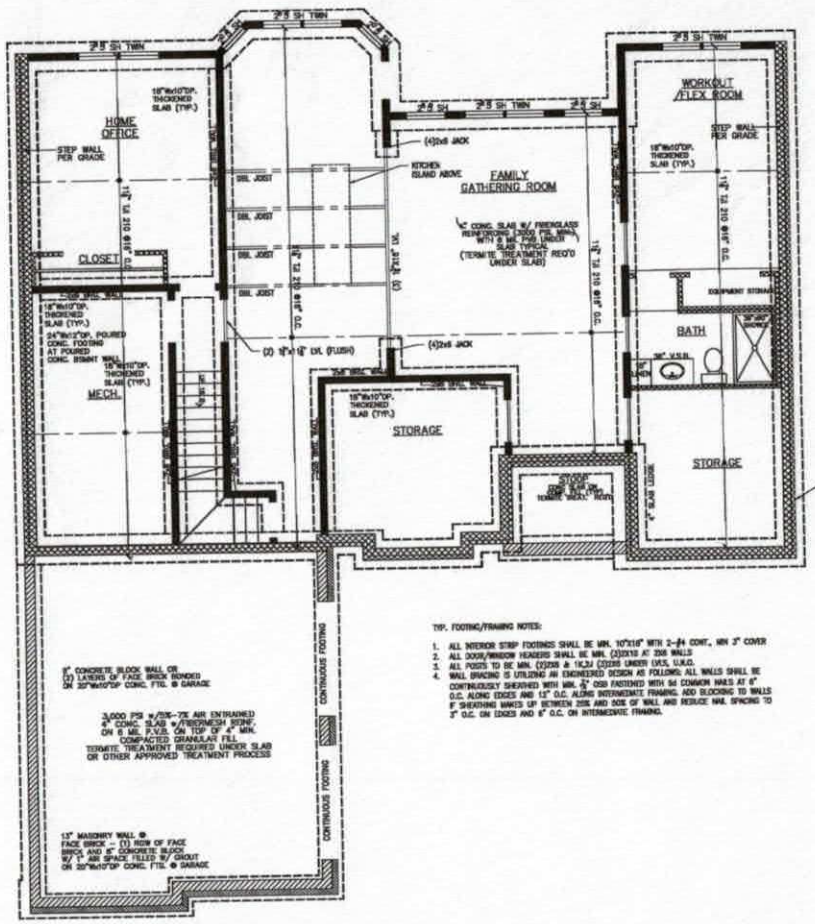
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FIRST & SECOND FLOOR PLANS

THE STONEHEATH

FRANK BETZ ASSOCIATES, INC.
DESIGNERS OF CUSTOM AND STOCK HOMEPLANS
3350 GEORGE BUSBEE PARKWAY
SUITE 190
KENNESAW, GEORGIA 30144
770-431-0886 888-717-3003

SHEET: 3
OF: 5



TYP. FOOTING/FRAMING NOTES:

1. ALL INTERIOR STRIP FOOTINGS SHALL BE MIN. 10"X16" WITH 2-#4 CONT., MIN 3" COVER
2. ALL DOOR/WINDOW HEADERS SHALL BE MIN. (2)2X10 AT 2X6 WALLS
3. ALL POSTS TO BE MIN. (2)2X8 @ 1K/LF (3)2X6 UNDER LVLS, U.N.O.
4. WALL BRACING IS UTILIZING AN ENGINEERED DESIGN AS FOLLOWS: ALL WALLS SHALL BE CONTINUOUSLY SHEATHED WITH MIN. 7/16" OSB FASTENED WITH 8d COMMON NAILS AT 6" O.C. ALONG EDGES AND 12" O.C. ALONG INTERMEDIATE FRAMING. ADD BLOCKING TO WALLS IF SHEATHING MAKES UP BETWEEN 25% AND 50% OF WALL AND REDUCE NAIL SPACING TO 3" O.C. ON EDGES AND 6" O.C. ON INTERMEDIATE FRAMING.

BASEMENT FOUNDATION & FIRST FLOOR FRAMING PLAN

1/4"=1'-0"

Acknowledgement of Plans Submittal ONLY!

Date 10/25/18

Date 11/5/18

DESIGN NOTES

I. WOOD

A. ALL JOISTS, BEAMS AND POSTS TO BE SPRUCE-PINE-FIR NO.1/NO.2 PER "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", NFPA. ALL STUDS SHALL BE SPRUCE-PINE-FIR STUD-GRADE. ALL WOOD MEMBERS SHALL BE MANUFACTURED TO COMPLY WITH PS20 OF "AMERICAN SOFTWOOD LUMBER STANDARDS" AND SHALL HAVE 15% MAXIMUM MOISTURE CONTENT.

MINIMUM MEMBER PROPERTIES SHALL BE AS FOLLOWS:

1. WOOD LINTELS, JOISTS AND BEAMS
   a) FLEXURE: Fb = 875 PSI
   b) SHEAR: Fv = 70 PSI
   c) MODULUS OF ELASTICITY= 1,400,000 PSI
2. POSTS
   a) COMPRESSION PARALLEL: Fc'= 1150 PSI
   b) MODULUS OF ELASTICITY= 1,400,000 PSI
3. WALL STUDS: STUD GRADE
   a) FLEXURE: Fb = 675 PSI
   b) COMPRESSION PARALLEL: Fc' = 725 PSI
   c) MODULUS OF ELASTICITY = 1,200,000 PSI

B. ALL FRAMING EXPOSED TO WEATHER IS TO BE PRESSURE TREATED SOUTHERN PINE NO.2 PER "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", NFPA. ALL WOOD MEMBERS SHALL BE MANUFACTURED TO COMPLY WITH PS20 OF "AMERICAN SOFTWOOD LUMBER STANDARDS". MINIMUM MEMBER PROPERTIES SHALL BE IN ACCORDANCE WITH TABLE 4D IN THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION".

C. ALL INTERIOR BEARING WALL STUDS ARE TO BE 2x6'S SPACED AT 16" O.C. (U.N.O.). PLACE DOUBLE STUDS AT END OF WALLS AND TRIPLE STUDS AT INTERSECTIONS AND CORNERS. ALL MULTIPLE STUD POSTS SHALL BE FASTENED WITH 16d NAILS AT 8-INCHES ON CENTER STAGGERED ON EACH SIDE, FOR (4) STUD POSTS, USE 20d NAILS AT 8-INCHES ON CENTER.

D. PROVIDE SIMPSON STRONG-TIE (OR APPROVED EQUAL) POST CAPS AT ALL BEAM-ON-POST BEARING LOCATIONS, U.N.O.

E. ALL ROOF AND WALL SHEATHING SHALL BE 1/2-INCH, CDX, APA STRUCTURAL 1 RATED SHEATHING, EXPOSURE 1, PER THE "AMERICAN PLYWOOD ASSOCIATION." SHEATHING SHALL BE FASTENED WITH 8d NAILS AT 3-INCHES ON CENTER AT PANEL EDGES AND AT 6-INCHES ON CENTER AT ALL INTERMEDIATE SUPPORTS.

F. ALL PLYWOOD SUBFLOORING SHALL BE 3/4-INCH THICK T&G, APA RATED 32/16 SHEATHING OR STURD-I-FLOOR 20 OC RATED.

G. LAMINATED VENEER LUMBER (LVL) SHALL BE INSTALLED AND FASTENED PER THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM MEMBER PROPERTIES SHALL BE AS FOLLOWS:

1. FLEXURE: Fb = 3,100 PSI
2. SHEAR: Fv = 285 PSI
3. MODULUS OF ELASTICITY: E = 2,000,000 PSI

H. PROVIDE MIN. 3" BEARING FOR ALL LAMINATED VENEER AND PARALLEL STRAND BEAMS, 2" BEARING FOR STANDARD LUMBER BEAMS.

I. ALL WOOD TOP PLATE SPLICES SHALL BE STAGGERED 6'-0" MINIMUM.

J. ALL WALL SHEATHING SHALL BE CONTINUOUS BETWEEN TOP PLATES AND BOTTOM PLATE OF WALL ABOVE.

K. ALL MULTIPLE MEMBERS ARE TO BE FASTENED TOGETHER WITH 10d NAILS AT 12" O.C. TWO (2) ROWS FOR BEAMS 9"-12" DEEP, THREE (3) ROWS FOR BEAMS 14"-16" DEEP (STAGGERED).

L. PROVIDE SOLID BLOCKING BETWEEN JOISTS AND RAFTERS AT ALL BEARING POINTS.

M. ALL MISCELLANEOUS WOOD CONNECTIONS SHALL BE FASTENED PER 2003 IRC, TABLE 2304.9.1 "FASTENING SCHEDULE."

N. DOUBLE JOISTS SHALL BE LOCATED BENEATH ALL PARTITIONS WHEN THE LENGTH OF THE PARTITION EXCEEDS ONE HALF THE SPAN.

O. DOUBLE STUDS SHALL BE NAILED TOGETHER WITH 10d AT 8" O.C. TRIPLE STUDS SHALL BE NAILED TOGETHER WITH 16d AT 8" O.C. EACH SIDE.

P. JOIST HANGERS SHALL BE SIZED ACCORDING TO THE FOLLOWING SCHEDULE, EXCEPT AT SLOPED MEMBER CONDITIONS:

SUPPORTED MEMBER	REQ'D HANGER CAPACITY (#)	HANGER
2x8	575	LUS26
2-2x8	1050	LUS28-2
2x10	770	LUS28
2-2x10	1485	LUS210-2
2x12	890	LUS210
2-2x12	1485	LUS210-2
9 1/2" TJI-110	935	IUS1.81/9.5
9 1/2" TJI-210	935	IUS2.06/9.5
11 7/8" TJI-110	950	IUS1.81/11.88
11 7/8" TJI-210	1045	IUS2.06/11.88
11 7/8" TJI-360	1140	IUS2.37/11.88
11 7/8" TJI-560	1330	IUS3.56/11.88
14" TJI-110	950	IUS1.81/14
14" TJI-210	1045	IUS2.06/14
14" TJI-360	1140	IUS2.37/14
14" TJI-560	1330	IUS3.56/14
16" TJI-110	950	IUS1.81/16
16" TJI-210	1045	IUS2.06/16
16" TJI-360	1140	IUS2.37/16
16" TJI-560	1330	IUS3.56/16

TABLE VALUES SHALL BE MULTIPLIED BY THE NUMBER OF MEMBERS FASTENED TOGETHER FOR ALL MULTIPLE MEMBERS, AND ARE PERMITTED TO BE INCREASED BY A FACTOR OF 1.15 FOR ROOF MEMBERS SUBJECTED TO SNOW LOAD. SOME HANGERS MAY REQUIRE 16d NAILS – REFER TO THE SIMPSON STRONG-TIE CATALOG FOR REQUIREMENTS. AT SLOPED CONDITIONS, SUBSTITUTE COMPARABLE SLOPED-DOOMABLE HANGER (EXT. SIMPSON LSSU TYPE HANGERS). CONTRACTOR SHALL PROVIDE MANUFACTURER'S CUT SHEETS FOR ALL HANGER SUBSTITUTIONS.

Q. ALL TRUSS JOISTS SHALL BE DESIGNED, FABRICATED, ERECTED AND INSTALLED PER THE MANUFACTURER'S REQUIREMENTS; PERMANENT LATERAL BRACING AND TEMPORARY BRACING SHALL BE PROVIDED DURING CONSTRUCTION PER TRUSS JOIST RECOMMENDATIONS.

R. TRUSS JOISTS SHALL HAVE THE FOLLOWING MINIMUM EI PROPERTIES:

9 1/2" TJI 110	= 140 x 106
9 1/2" TJI 210	= 187 x 106
11 7/8" TJI 110	= 335 x 106
11 7/8" TJI 210	= 383 x 106
11 7/8" TJI 360	= 419 x 106
11 7/8" TJI 560	= 535 x 106
14" TJI 110	= 351 x 106
14" TJI 210	= 415 x 106
14" TJI 360	= 812 x 106
14" TJI 560	= 929 x 106
16" TJI 210	= 586 x 106
16" TJI 360	= 830 x 106
16" TJI 560	= 1202 x 106

II. CONCRETE

A. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301, ACI 318 AND ACI 302.

B. CEMENT SHALL COMPLY WITH ASTM C150, TYPE I OR II.

C. REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615 GRADE 60. ALL REINFORCEMENT SPLICES SHALL BE A MINIMUM OF 40 BAR DIAMETERS.

D. CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'c AS FOLLOWS:
   1. SLAB-ON-GRADE AND FOOTINGS = 3000 PSI.

E. PROVIDE WWF 6x6 – W1.4xW1.4 IN ALL SLAB-ON-GRADE. ALL WWF FABRIC SHALL CONFORM TO ASTM A185. ALL MESH EDGES SHALL LAP A MINIMUM OF TWO (2) SQUARES.

F. CONCRETE SLUMP SHALL = 4" ± 1".

G. MINIMUM CONCRETE COVER BETWEEN FACE OF REINFORCING BAR AND FACE OF CONCRETE SHALL BE AS FOLLOWS:
   1. CONCRETE CAST AGAINST EARTH = 3"
   2. FORMED CONCRETE EXPOSED TO WEATHER OR EARTH = 2"
   3. FORMED CONCRETE NOT EXPOSED TO WEATHER:
      a) SLABS = 3/4"
      b) BEAMS, COLUMNS = 1-1/2"

H. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE A MINIMUM AIR ENTRAINMENT OF 6% ± 1.5% PER ACI- 318 4.2.1.

DARDEN ENGINEERING SERVICES, PLLC #P-1443
HOME NO. 704-453-7729
EMAIL: bdarden@carolina.rr.com

DESIGN NO.
PROJECT NO. 18-321
DRAWN BY JCD
CHECKED BY
9-27-18

NORTH CAROLINA PROFESSIONAL SEAL 029883 ENGINEER BRIAN C. DARDEN, III

NO.	DATE	DESCRIPTION REVISIONS	BY	CHKD.

HAWK'S LANDING - LOT 15
N/C

FOUNDATION & FRAMING PLAN

SCALE: AS NOTED

S-1

1 of 5

Iredell County
Planning & Enforcement
349 N. Center St. PO Box 788
Statesville, NC 28687
704-878-3113

Zoning Permit

Permit Number: 177743ZO

Master #: 177743

Associated Permits:
177743ZO Zoning

Applicant

Name: Kathleen Saunders
Address: 227 GRAYLAND RD
MOORESVILLE, NC 28115
Phone: 704-578-4951

Parcel

Parcel Number: 4740621015.000
Address: 157 HAWKS LANDING DR
Troutman, NC 28116
Subdivision: Hawks Landing
Zoning: RA
Township: 1600
Area:
Lot(s): 15
Directions to Parcel: FLOWER HOUSE LOOP TO HAWKS LANDING

Owners

Name: ELG INVESTMENTS LLC
Address: 16108 NORTH POINT ROAD
HUNTERSVILLE, NC 28078

Contractors

Contractor Type: Not Liscensed
Name: Kathleen Saunders
Address: 227 GRAYLAND RD
MOORESVILLE, NC 28115
Phone: 704-578-4951

Fees and Receipts:

Number	Description	Amount
FEE-279085-07	Zoning - Permit Application	$75.00
FEE-279086-07	Technology Fee - Planning	$2.25
FEE-279087-07	Environmental Health - Gravity - Fast Track	$350.00