Supervisor/Administrative Professional Checklist

New Septic ☑ **New Well** ☐ **Use Existing** ☐ **Alteration** ☐ **Modified Plot Plan** ☐

New Septic Fees Paid:

IP ($250.00) VW 3/19/15 Initials/Date

CA ($200.00) VAW 8/20/15 Initials/Date

OP ($200.00) VAW 8/20/15 Initials/Date

(CA and OP fees need to be paid before a building permit can be issued)

New Well Fee Paid: $550.00 _____ Initials/Date

Use Existing Fee Paid: $100.00 _____ Initials/Date

Alteration Fee Paid: $300.00 (Total) $200 (If use existing was paid)_____ Initials/Date

Modified Plot Plan Fee Paid: $100.00 _____ Initials/Date

Floor plans need to be submitted and reviewed before CA can be issued. ☑ Reviewed ☑ SSB

This site is served by septic and well. Verify each is complete before final hold is released. ☐

Septic file completed. ☐ _____ Well file completed. ☐ _____

Send permit for signature. ☑ Signature received. ☑ _____

This septic system requires a certified operator contract before final hold is released. ☑

Certified operator contract is on file. ☐ _____

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 9141B WASPS App #: 7345

Primary ES assigned to project: Jeremy Michael

Secondary ES assigned to project: _____

Project Type: New System ☑ Alteration ☐ Repair ☐ Modified Plot Plan ☐

I. File Review:

Rule or Law	Permit Application			
.1937(d)	Is the Application complete	Yes ☑	No ☐	N/A ☐
.1937(d)	Is there a Site plan/Plat with application	Yes ☑	No ☐	N/A ☐
.1937(d)	Is the Facility shown?	Yes ☑	No ☐	N/A ☐
.1937(d)	Are appurtenances shown	Yes ☑	No ☐	N/A ☐
	Site Evaluation Information			
.1939 (a)(1)	Topography and Landscape Position Recorded?	Yes ☑	No ☐	N/A ☐
.1940 (a-g)	Slope % Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Texture Class Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Structure type Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Consistence Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Mineralogy Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(3)	Soil Wetness Condition Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(4)	Soil Depth to Rock or Parent Material Recorded When Encountered	Yes ☑	No ☐	N/A ☐
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?	Yes ☑	No ☐	N/A ☐
.1939 (a)(6)	Sufficient Available Space Recorded?	Yes ☑	No ☐	N/A ☐
.1937(m)	Are the Profile Locations Shown?			
.1939(a)	Are the S/PS Profiles in system & in repair area?	Yes ☑	No ☐	N/A ☐
& .1945(b)	Number of auger borings made: 8			
	Were sufficient auger borings made?	Yes ☑	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR 0.25	Yes ☑	No ☐	N/A ☐
	Improvement Permit/Construction Authorization			
.1937(g) 130A-336(a)	Proposed System Type stated-Initial	Yes ☑	No ☐	N/A ☐
.1945(b)	Proposed System Type stated-Repair	Yes ☑	No ☐	N/A ☐
130A-336 (a)(3)	System location identifiable by setbacks - Initial	Yes ☑	No ☐	N/A ☐
.1937(g) .1945(b)	System components shown – Initial	Yes ☑	No ☐	N/A ☐
.1945(b)	Repair area shown	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Does System design match facility, flow & WWcharacteristics?	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Is System design consistent with soil/site conditions?	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Is the System located in the approved area?	Yes ☑	No ☐	N/A ☐
130A-336(a)	Is the Design flow (gpd) indicated?	Yes ☑	No ☐	N/A ☐

130A-336(a)	Number of Bedrooms, employees, seats, etc. indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench depth indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench width indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench length indicated?	Yes ☑	No ☐	N/A ☐
130A-336(a)(1)	Proposed/existing well shown?	Yes ☐	No ☐	N/A ☑
130A-336(a)(1)	Property line lengths shown?	Yes ☑	No ☐	N/A ☐
130A-336(a)	Facility/appurtenance setbacks shown from fixed points?	Yes ☑	No ☐	N/A ☐
	Operation Permit			
.1937(i)	System type as described in table V(a) of rule .1961	Yes ☑	No ☐	N/A ☐
.1937(i)	Conditions for system performance, operation, maintenance, monitoring and reporting.	Yes ☑	No ☐	N/A ☐

II. WASPS Review:

Construction authorization issued	Yes ☑	No ☐	N/A ☐
Installation approval issued	Yes ☑	No ☐	N/A ☐
Operation permit issued	Yes ☑	No ☐	N/A ☐
Other related documentation	Yes ☐	No ☐	N/A ☐

Items requiring correction/modification: _____

Comments:

IA issued date: 5/12/16

OP issued date: 5/12/16

Review performed by: JAM 7SW Date performed: 6/14/16

PIEDMONT DESIGN ASSOCIATES, P.A.
125 East Plaza Drive | Suite #101
Mooresville, NC 28115
Phone: 704-664-7888 | Fax: 704-664-1778
Email: dmunday@pdapa.com

Engineering
Surveying
Planning

June 14, 2016

Mecklenburg County Health Department
Groundwater & Wastewater Services
700 North Tryon Street, Suite 211
Charlotte, NC 28202
Attn: Jacob Pressley

RE: LP-PPBPS Subsurface Sewage Effluent Disposal System
8145 Rolling Fields Road
Mecklenburg County, North Carolina

Dear Mr. Pressley:

ENGINEERS CERTIFICATION

I, **Donald L. Munday**, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe periodically the construction of the referenced project, a Low Pressure PPBPS Subsurface Sewage Effluent Disposal System; 8145 Rolling Fields Road, located in Mecklenburg County, NC, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the approved plans and specifications.

Sincerely,

PIEDMONT DESIGN ASSOCIATES, P.A.

Donald L. Munday, P.E.
N.C. Registration No. 17327



cc: Mr. Paul Penninger, LSS

Penninger Soil Consulting, PLLC
Ph: 704-996-6330 Email: pgpenninger@gmail.com

June 11, 2016

Harris Construction Group
9935D Rey Road, #210
Charlotte, North Carolina 28277

Attention: Mr. Bob Volles

Reference: **Review of LP T&J Panel System Installation**
Plantation Falls Subdivision – Lot 4
8145 Rolling Fields Road
MCHD File No.: 9141B
Mecklenburg County, North Carolina
Project No. 15-107

Dear Mr. Volles:

At the request of Piedmont Design Associates (PDAPA) and Harris Construction Group, Penninger Soil Consulting, PLLC reviewed the Low Pressure T&J Panel System installation at the referenced lot for the 4 bedroom system permitted by the Mecklenburg County Health Department (MCHD). The review was performed as an additional service and in general accordance with our written proposal dated July 2, 2015.

The following is a summary of the septic system installation review.

- Mr. Jacob Presley, L.S.S., R.S. with the MCHD evaluated the soils on the lot with hand auger borings on April 7, 2015 at the primary T&J Panel system area. Mr. Presley determined the soils on the front of the lot were provisionally suitable to 50 inches below the ground surface (bgs) at a 0.25 gpd/sqft LTAR.
- Based on the MCHD August 8, 2010 Engineer Policy, the proposed Low Pressure T&J Panel Primary System required a Professional Engineer design. PDAPA issued a PE review letter in conjunction with the Penninger Soil Consulting system proposal. The MCHD requires the engineer to field verify the proposed system has been installed as designed before an operation permit can be issued by the MCHD. PDAPA requested Penninger Soil consulting review the system installation.
- The Low Pressure T&J Panel System was installed, covered, and reviewed by the MCHD prior to our system review.
- On June 9, 2016 Mr. Paul Penninger met Stanley Environmental on the lot to review the system installation. The T&J Panel drainfield was generally installed in the area permitted and with the line lengths indicated in the permit. Stanley Environmental installed the system and we understand they will also be the required Certified Operator.
    - The attached table lists the relative rod reading elevations of the top of the panels at two locations on each line and lists the measured soil cover at each point. The top of the panels were generally within 0.1 ft. of level grade and the cover over the panels ranged from approximately 9 inches to 20 inches. We could not

determine the actual trench bottom from the original soil surface since the lines were covered during our site visit. With 20 inches of cover, the trench bottom depth is greater than the maximum indicated in Mr. Presley's MCHD soil report.
    - Since the panel lines were not exposed, line length measurements were made from turn-up to turn-up on the 48 and 50 ft. lines. The total of these measurements indicated the installed line lengths were generally as designed.
    - The drainfield and repair area has not been stabilized with grass and minor erosion was observed near the middle of the field.
    - Seven gate valves and white PVC check valves were located inside the central valve box.
    - Penninger Soil Consulting understands from previous phone conversations with the MCHD and Stanley Environmental that the gas company had installed the natural gas service to the house across the drainfield area prior to system installation. We understand the gas line was removed and relocated. It was not evident where the drainfield was trenched across.
- An AquaWorx control panel was mounted on the right, rear side of the house. An additional breaker box was located on the rear of the house (see attached photos).
    - An AquaWorx transducer in the pump tank controlled the pump and alarms. Separate circuit breakers were installed in the control panel for the pump and the alarm.
    - A rope was installed for pump removal.
    - The visible and audible alarm functioned when the control levels were manipulated with the handheld controller by Stanley.
    - Pump on was set at 7.1 inches above the top of pump.
    - Pump Run time set at 5 minutes (Dose volume of 207.5 gallons at delivery rate of 41.5 gpm indicated by Stanley).
    - Pump off time set at 60 minutes.
    - VETO set at 18 inches above top of pump with run time of 8 minutes.
    - High water alarm set at 21.3 inches above pump.
- The septic tank and pump tank were located at the rear of the house, less than five feet from the wood steps to the deck (see photo). Stanley Environmental indicated the steps were constructed after the tanks were installed. Stanley indicated a 1,500 gallon septic tank and 1,000 gallon pump tank were installed. The tanks were supplied by Dellinger Precast.
    - Goulds WE07HU effluent pump installed.
    - The septic tank outlet had a tee and effluent filter supplied by the manufacturer.
    - The trench with the electrical conduit from the pump tank to the control panel had not been backfilled and the pipe from the house to the septic tank was exposed.
    - The pump tank riser was not located 6 inches above grade.
- Stanley Environmental indicated that the holes in the laterals for each panel were 5/32 inch, but this could not be confirmed in the installed system.
- Stanley indicated the head pressure had been set at 3 feet for the MCHD review, but the head was not set at 3 ft. during initial pump run on June 9th.
    - A generator was used to operate the pump and control panel.
    - A water hose was used to fill the pump tank to operate the pump.
    - After being on-site for 2.5 hours and three attempts to set the head pressure at 3 ft., Mr. Penninger had to leave for another scheduled appointment. The head pressures were close to 3 ft. on the last observed attempt, and Stanley indicated by

phone to Mr. Penninger that the head pressure in each T&J Panel line was within 2 inches of 3 ft. of head and that the system was operating at 41.5 gpm (design was 37 gpm) before they left the site.

- Penninger Soil Consulting did not observe an actual on demand pump start and run of 5 minutes due to lack of water in the pump tank during testing and the installer not having the system ready for the inspection at the specified meeting time. If this or other information is required by PDPA for the system certification, another site visit must be scheduled with Stanley Environmental.

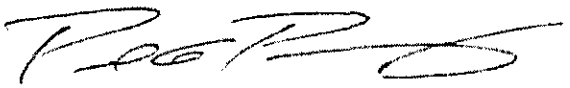
- While the system was not observed being installed and all components could not be observed due to being below the soil surface, it appeared the system was generally installed as designed and we understand the MCHD has approved the installation. The design recommended a small berm or swale along the south property line to divert any stormwater runoff from the adjoining lot around the drainfield. No berm or swale was installed. The owner and system operator should verify the concrete drive will divert stormwater away from the drainfield during rainfall events.

Penninger Soil Consulting, PLLC appreciates the opportunity to provide these services to you. The attached information is not an Operation Permit and is only to assist you and the MCHD with the system review. The MCHD should verify all soils and system specifications and components prior to issuing permits. Penninger Soil Consulting, PLLC did not provide any soil evaluations for this system layout or report. System layouts and reviews are done based on interpretations of the rules governing wastewater treatment and disposal systems and are not guarantees for site approval or future septic system performance.

If you have any questions or require additional information please contact us at your convenience.

Sincerely,

Penninger Soil Consulting, PLLC



Paul G. Penninger, L.S.S.

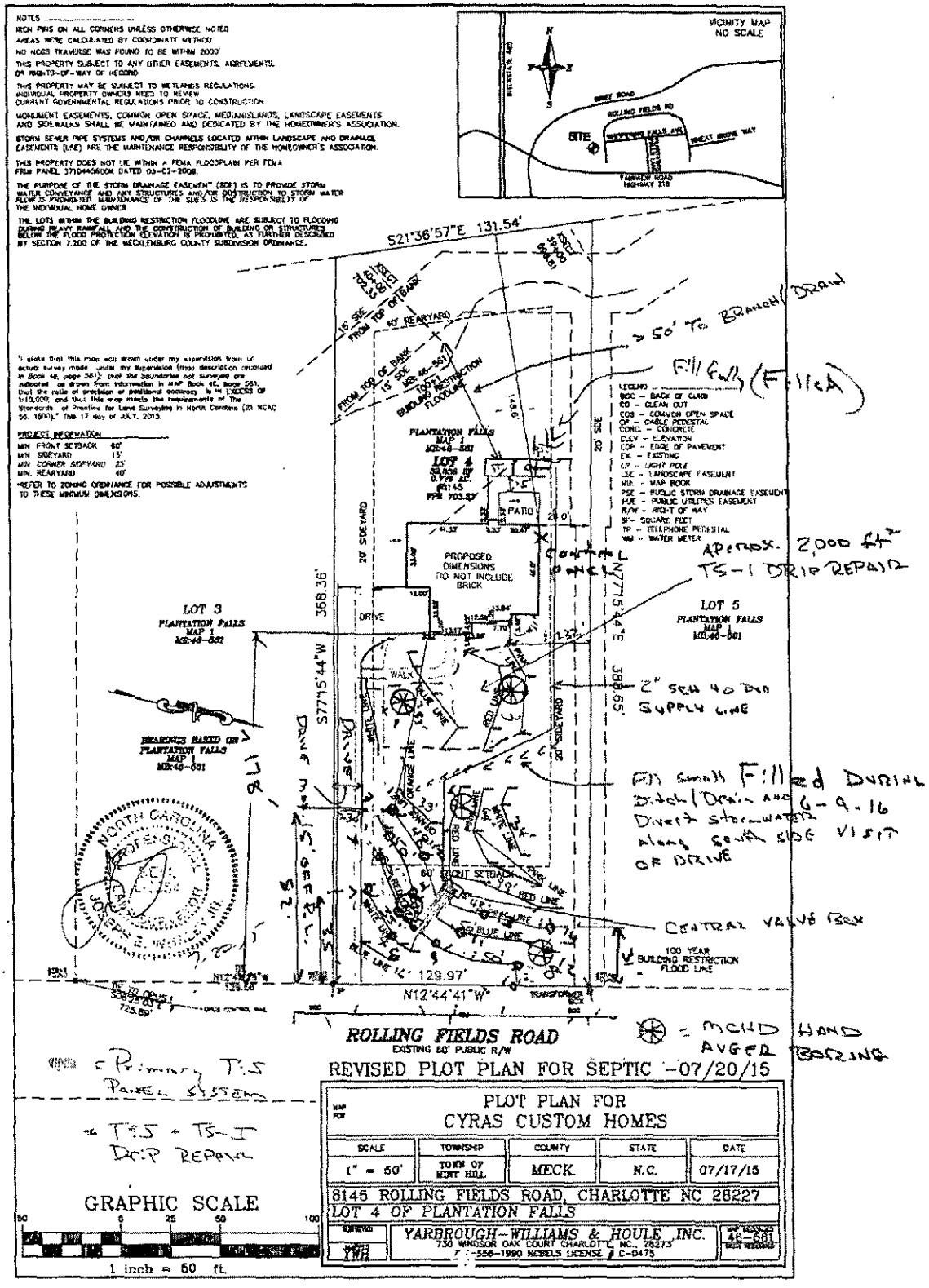
Attachments:

1. Site Plan with Approximate Line Elevation Points and Installed House and Drainfield Dimensions.
2. Site Photographs
3. Table of Relative Line Elevations and Soil Cover over Drainfield.

Copy: PDAPA

C:\Users\Paul G. Penninger\Documents\2015 Projects\15-107 Harris Construction Group - Farms 434 and 379\Plantation Falls Lot 4\Lot 4 Plantation Falls Summary Letter.doc

1. Site Plan with Approximate Line Elevation Points and Installed House and Drainfield Dimensions.



0 = Relative top of panel elevation
Point + soil cover in ft/cm
measured 6-9-16 by PPD.

Fill Evid (Fill A)

> 50' To Branch/Drain

Approx. 2,000 ft²
TS-1 Drip Repaid

2" SCH 40 PVC SUPPLY LINE

Fill small Filled Dugout Ditch/Drain and Divert storm water along south side visit of drive

Central Valve Box

= MCHD Hand Auger Boring

= Primary T.S Panel System

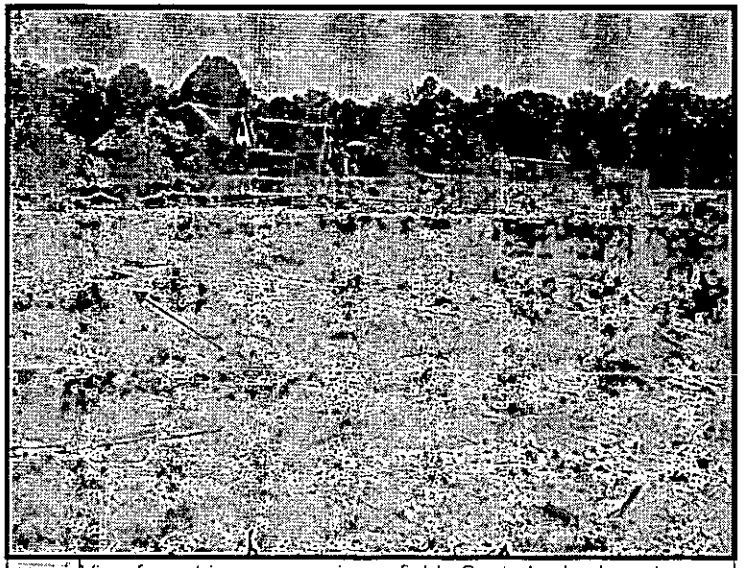
= T.S + TS-1 Drip Repair

Plantation Falls Subdivision Lot 4 Septic System Site Plan – MCHD File No. 9141B
Harris Construction Group, Inc.
July 20, 2015
*Site plan must accompany Penninger Soil Consulting, PLLC written report dated July 20, 2015

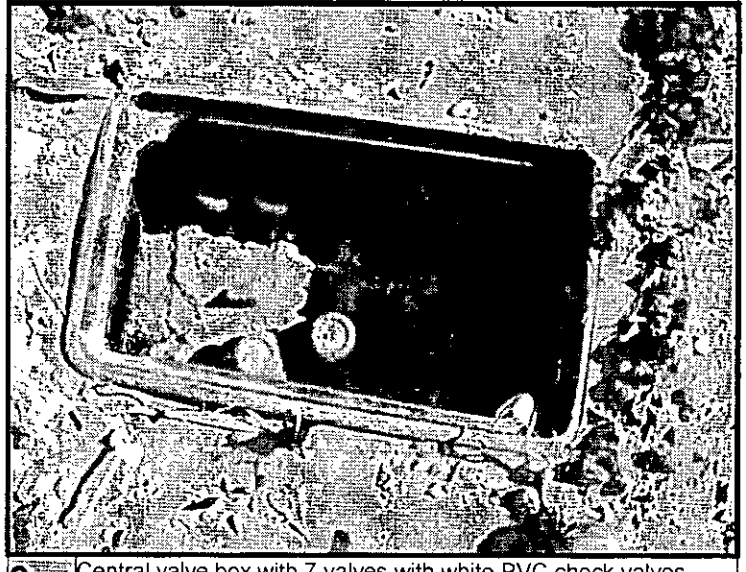
2. Site Photographs



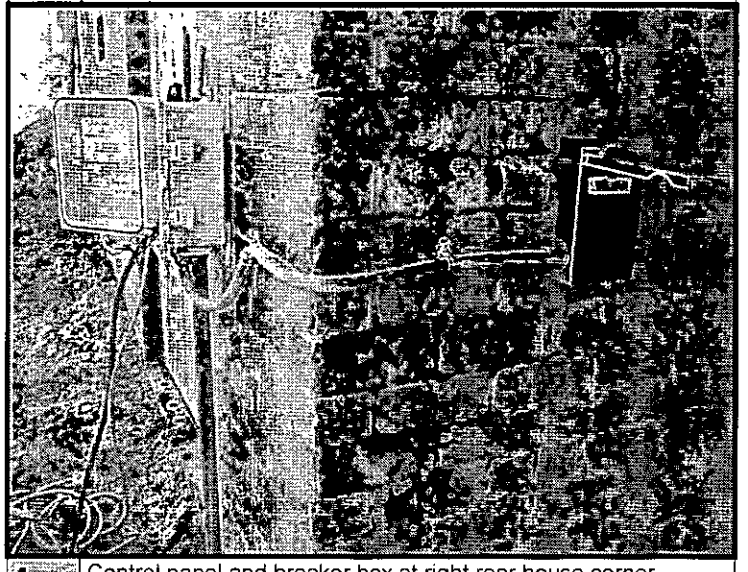
1 End of panel lines at drive with test tubes on turn-ups. Septic area not stabilized. Minor erosion across septic area.



2 View from drive across primary field. Central valve box at arrow. Septic area not stabilized. Minor erosion across septic area.

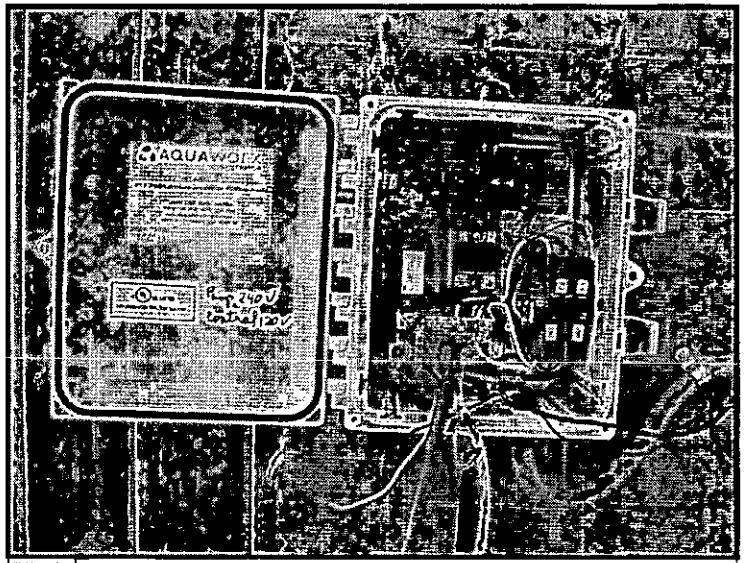


3 Central valve box with 7 valves with white PVC check valves.

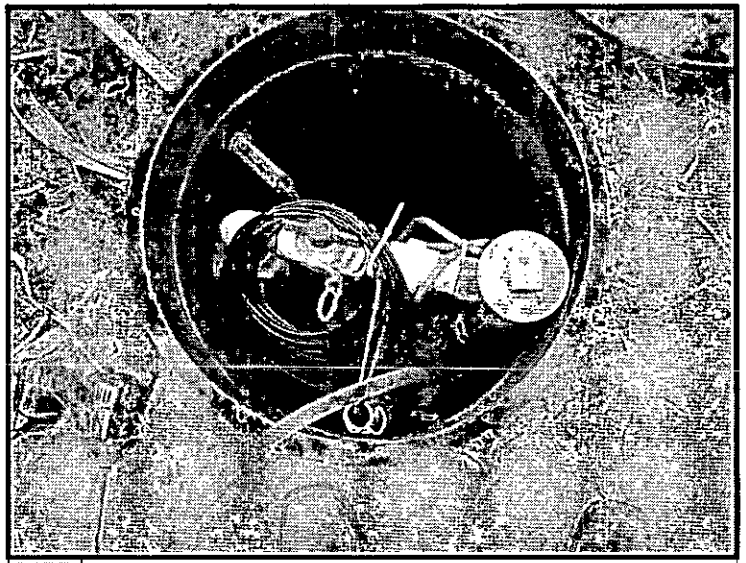


4 Control panel and breaker box at right rear house corner.

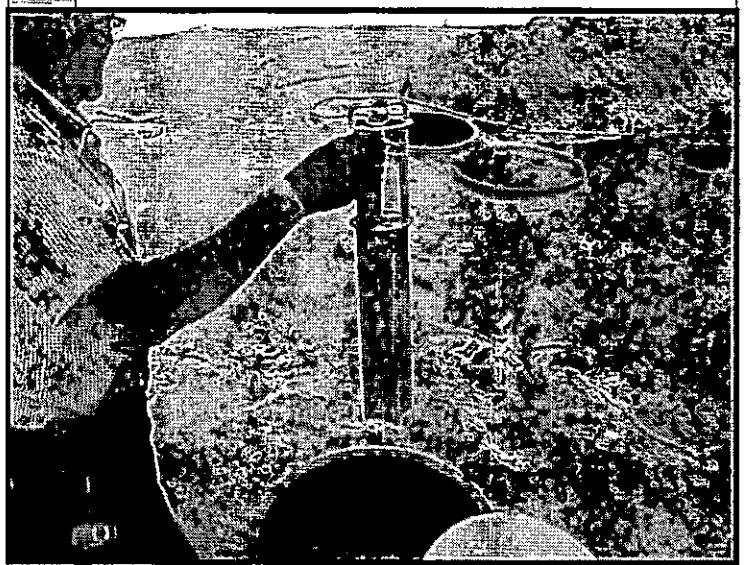
Harris Construction Group - PDAPA	**Plantation Falls Lot 4 Septic System Installation Review**		
		Taken by: PGP	Date Taken: 6-9-16



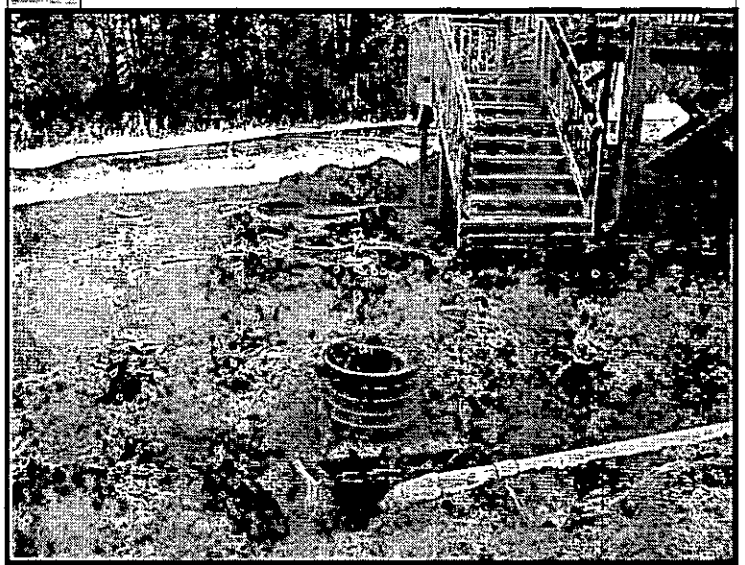
5 Interior of control panel.



6 Pump tank access riser with AquaWorx pressure transducer pump controls.



7 Effluent filter supplied by Dellinger Precast with tank.



8 Steps less than 5 ft. from tanks. Pump tank riser lid less than 6 inches above grade. Pipe to septic tank not covered in foreground.

Harris Construction Group - PDAPA	**Plantation Falls Lot 4 Septic System Installation Review**		
		Taken by: PGP	Date Taken: 6-9-16

3. Table of Relative Line Elevations and Soil Cover over Drainfield.

Plantation Falls Lot 4 T&J Primary System Installation Review
Penninger Soil Consulting Project 15-107
11-Jun-16

Evaluation Point on Attached Site Plan	Rod Reading (Relative Elevation, ft)	Soil Cover on Top of T&J Panel (in)
1	4.1	12
2	4	15
3	3.9	12
4	3.85	19
5	3.6	19
6	3.6	20
7	2.5	12
8	2.3	12
9	3.5	16
10	3.6	12
11	3.8	14
12	3.75	9
13	4.1	10
14	4.1	9

Table must accompany Penninger Soil Consulting Letter Report dated 6-11-16.

Stanley Environmental Solutions

Septic System Maintenance Agreement

THIS AGREEMENT is made as of May 17, 2016 between Stanley Environmental Solutions Inc, a North Carolina Corporation with offices located at 131 Mariposa Road, Stanley North Carolina (Hereby known as contractor) and Whalen Clark Jr. located at 8145 Rolling Fields Road, Mint Hill NC 28227 (Hereby known as customer) with phone of 704-764-3690 and email address of whalen.clark@att.net.

For and in consideration of the mutual covenants and agreements set forth herein and other good and valuable consideration, contractor and customer hereby covenant and agree as follows:
The term of this agreement shall begin on 5/17/16 and shall automatically renew for successive terms, subject to the termination by either party with 30 day written notice upon approval of Stanley Environmental Solutions.

Service Types *(Type IV Low Pressure Panel)*:
The scopes of work provided by contractor are as fo

1. Wash the septic tank filter, 2 times a year
2. Wash the pump tank filter, 2 times a year
3. Check for any leaks, 2 times a year
4. Inspect pump, floats, control panel and alarm
5. Inspect the drain field, 2 times a year
6. Flush system and verify head pressures, 1 tir
7. The total cost per year is $250.00.

Type IV
- c/o - certife opeartor
paid per
... an letter from
Need contractors installed letter
call again about letter
Spoke with Mr. Monday again on 5/25/16 asking for contractors letter. gave him my email and fax

Schedule: It will be the responsibility of the contra irst.
inspection will be scheduled as soon as the signed c ier and
the annual invoice is paid or six months after the hc
scheduled six months after the 1st inspection is com

Fees for Services:
The contractor will submit invoice to the customer ted
inspection. Such invoicing shall state the necessar d in the
applicable service agreement. For approved custor charge
for all invoices not paid beyond 15 days. Custom
8145 Rolling Fields Road, Mint Hi

Your contact for this agreement is Amanda Morri eturn this
agreement via email: Amanda.morrison@stanley 1.

Customer

By: Whalen Clark Jr. By: Amanda M. Morrison

Print Name: Whalen Clark Jr. Print Name: Amanda M. Morrison

Title: Homeowner ✓ Title: Inspection Mgr

Date: 5/17/16 Date: 5/17/16

S

FEE: 200.00
DATE:8/21/2015

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 9141B

PERMIT NUMBER: 30007345

PARCEL NUMBER: 19722119

JOB LOCATION INFORMATION

ADDRESS: 8145 ROLLING FIELDS RD

CITY: CHARLOTTE **STATE: NC** **ZIP:** 28227

ISSUED TO: LJW LAND LLC

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 8/21/2015

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30007345, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. A PRE-CONSTRUCTION MEETING MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A LICENSED SEPTIC TANK CONTRACTOR WITH THE NORTH CAROLINA ONSITE WASTEWATER CONTRACTOR INSPECTOR CERTIFICATION BOARD.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS CONSTRUCTION AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. THIS CONSTRUCTION AUTHORIZATION AS PROVIDED IN G.S. 130A-335(f) AND G.S. 130A-336(b) SHALL BE VALID FOR A PERIOD EQUAL TO THE VALIDITY OF THE IMPROVEMENT PERMIT, NOT TO EXCEED 60 MONTHS.

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: 30007345 GWS File #: 9141B Tax Parcel #: 197-221-19

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be NO grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is NOT transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 8/14/2020

Type of Installation: Residential - New System Lot Number: 0

Structure Type: HOUSE Size (ft^2): 4000 # Bedrooms: 4 # Occupants: 6

Building Foundation: Crawl Space Water Supply: Municipal

II. Initial System Type: PPBPS (pressurized) **System Classification:** IVa

Initial System Specifications:

Design Flow (gpd):	480	LTAR (gpd/ft^2):	0.25	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	1000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	960	Total Trench Length (ft):	320
Maximum Trench Depth (in):	*36*	*Depth of Media (in):*	*22*	Distribution Device:	Manifold (LPP Distri		

III. Repair System Type: Drip Irrigation **System Classification:** Va

Repair System Specifications:

Design Flow (gpd):	120	LTAR (gpd/ft^2):	0.1	Septic Tank Size (gal):	1000	Pump Tank Size (gal):	1000
Trench Width (ft):	1	Trench Spacing (ft):	2	Absorption Area (ft^2):	1200	Total Trench Length (ft):	1200
Maximum Trench Depth (in):	8	Depth of Media (in):	12	Distribution Device:	Headworks (Drip Irr.		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The repair area is split between 1 Bedroom Drip Irrigation & 3 Bedroom T&J Panel. See engineers plan.

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

Authorized Agent: Jeremy Michael Owner/Legal Agent: Robert A Vollers
Print Name

Signature: Jeremy Michael Signature:

Date Issued: 8/14/2015

S

FEE: 200.00
DATE:4/18/2016

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 9141B

PERMIT NUMBER: 30007345

PARCEL NUMBER: 19722119

JOB LOCATION INFORMATION

ADDRESS: 8145 ROLLING FIELDS RD

CITY: CHARLOTTE **STATE: NC** **ZIP:** 28227

ISSUED TO: LJW LAND LLC

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 8/21/2015

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30007345, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. A PRE-CONSTRUCTION MEETING MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A LICENSED SEPTIC TANK CONTRACTOR WITH THE NORTH CAROLINA ONSITE WASTEWATER CONTRACTOR INSPECTOR CERTIFICATION BOARD.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS CONSTRUCTION AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. THIS CONSTRUCTION AUTHORIZATION AS PROVIDED IN G.S. 130A-335(f) AND G.S. 130A-336(b) SHALL BE VALID FOR A PERIOD EQUAL TO THE VALIDITY OF THE IMPROVEMENT PERMIT, NOT TO EXCEED 60 MONTHS.

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: 30007345 GWS File #: 9141B

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 3 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- This type of septic system requires a Certified Operator to maintain the system. A system maintenance contract with a Certified Operator must be on file prior to issuance of an Operation Permit.
- All drainage improvements (swales, interceptor drains, etc.) noted on the plot plan must be inspected and approved prior to issuance of an Operation Permit.
- This type of repair system requires the property owner to obtain a contract with a Certified Operator to perform routine inspections and maintenance on the system.
- This type of repair system requires periodic inspections by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.
- All waterlines must be located a minimum of 10 ft. from any part of the septic system.
- All components of the septic system must be located a minimum distance from the normal pool elevation or mean high water mark for the nearby body of water. See plot plan for minimum setback requirements.
- Upon completion of the project the system designer shall provide Groundwater & Wastewater Services with a letter certifying that the system was installed in accordance with the approved design.
- Flow from all gutters and downspouts shall be directed not to discharge water onto or across any part of the septic system.
- Foundation drains shall be constructed not to discharge water onto or across any part of the septic system.

The undersigned, an authorized agent of the STATE OF NORTH CAROLINA, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until a Pre-Construction meeting has been completed by the Department.
- The septic system installer shall be a licensed septic contractor with the North Carolina Wastewater Contractor Inspector Certification Board.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- *This IMPROVEMENT PERMIT is transferable.*

Authorized Agent: Jeremy Michael

Signature: Jeremy Michael

Date Issued: 8/14/2015

Owner/Legal Agent: Robert A. Voller
Print Name

Signature:

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet: 1 of 3
Property ID: 197-221-19
Lot #: 4
File #: 9141B
AppID: 7345

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Property Owner: LJW Land LLC
Address: 7620 Baltusrol Ln, Charlotte, NC 28210
Proposed Facility: 5 Bedroom House
Design Flow (.1949): ~~600~~ 480 GPD
Location: 8145 Rollings Fields Rd, Charlotte, NC 28227
Water Supply: [ ] Public [ ] Individual [ ] Well [ ] Spring [X] Municipal
Evaluation Method: [X] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Bob Jacobs
Date Evaluated: 4/7/15
Property Size: 1.1 ac
Property Recorded: Unknown

PROFILE #	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY 1941 Structure/ Texture	SOIL MORPHOLOGY 1941 Consistence Mineralogy	PROFILE FACTORS[b] 1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Sapro Class	1944 Restr Horiz	General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
Boring #1	LS 10%	0 - 7	gr SIL	SS SP FR SEXP	2 chroma @ 14"	20	NA	NA		US	NA
		7 - 20	wfsbk SIC	S P FI SEXP							
Boring #2	LS 10%	0 - 14	wfsbk CL	SS SP FR SEXP	>30"	20	NA	NA	manganese 20 - 30"	US (Drip 0.1)	NA
		14 - 20	wfabk C	S P FI SEXP							
		20 - 30	mass C								
Boring #3	LS 8%	0 - 10	wfsbk CL	SS SP FR SEXP	2 chroma @ 23"	23	NA	NA		US (Drip 0.1)	NA
		10 - 23	wfsbk C	S P FI SEXP							
		23 - 30	mass C								
Boring #4	LS 3%	0 - 4	wfsbk CL	SS SP FR SEXP	>33"	31	NA	NA		PS IV 0.225	18"
		4 - 31	wfsbk C	S P FI SEXP							
		31 - 33	Weathered Rock with Saprolite								
Boring #5	LS 5%	0 - 4	wfsbk CL	SS SP FR SEXP	>35"	32	NA	NA		PS IV 0.225	18"
		4 - 26	wfsbk C	S P FI SEXP							
		26 - 32	wfsbk CL	SS SP FR SEXP							
		32 - 35	mass Sap								
Boring #6	LS 5%	0 - 8	wfsbk CL	SS SP FR SEXP	>50"	50	NA	NA	few 3 chroma mottles around root channels 33 - 40"	PS IV 0.25	36"
		8 - 50	wfsbk C	S P FI SEXP							

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	IVa	V
Site LTAR (gpd/sq ft)	0.25*	0.25*

*LTAR only valid in area of borings 6, 7, & 8.

Other Factors (.1946):
Soil Evaluation By: Jacob Presley, REHS, LSS
Others Present:
Site Classification (.1948): PS
Site Evaluation By: Jeremy Michael
Others Present: Paul Penniger

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
CONTINUED

PROFILE #	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY 1941		PROFILE FACTORS b				General Comments	Profile Class & L-TAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
			1941 Structure/ Texture	1941 Consistence Mineralogy	1942 Soil Wetness/ Color	1943 Soil Depth (IN)	1956 Sapro Class	1944 Restr Horiz			
Boring #7	LS 5%	0 - 15	wfsbk CL	SS SP FR SEXP	>50"	50	NA	NA		PS IV 0.25	36"
		15 - 50	wfsbk C	S P FI SEXP							
Boring #8	LS 6%	0 - 7	Fill		>50"	50	NA	NA		PS IV 0.275	36"
		7 - 16	wfsbk CL	SS SP FR SEXP							
		16 - 36	mfsbk C	S P FI SEXP							
		36 - 50	wfsbk CL	S P FR SEXP							

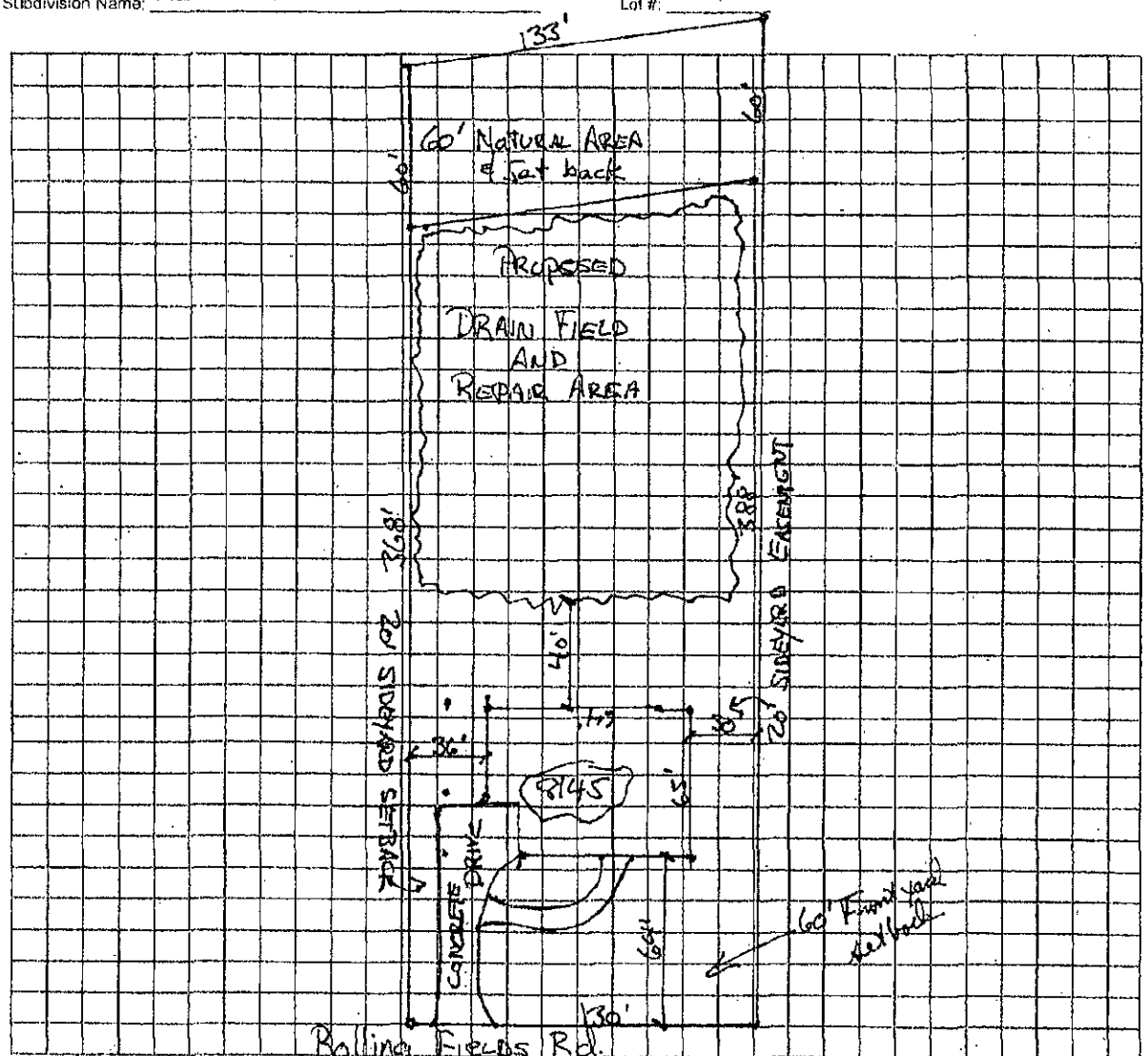
File #: _____

PROPOSED PLOT PLAN

A drawing showing the locations of the following items is required: existing and proposed property lines with dimensions, easements or right-of-ways, proposed building pad(s) or existing building footprint(s), all appurtenances (garage, driveway, deck, pool, etc.), location of existing or proposed well(s), location of existing or proposed sewer lines and sewage disposal systems, surface water bodies, and any aboveground or underground storage tanks. Provide names for all roads that adjoin the property.

Street Address: 8145 Rolling Fields Rd Tax Parcel #: 19722119

Subdivision Name: Plantation Falls Lot #: 4



Property Owner's or Owner's Legal Representative Signature Date

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6894

Revised on: 12/15/10

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DHHS
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 9141B Permit #: 7345 Tax Parcel #: 197-221-19

Property Owner: LJW Land LLC

Job Location Address: 8145 Rolling Fields Rd

City: Charlotte State: NC Zip Code: 28227

Operation Permit Issuance Date: 5/12/16 Contractor Name: Stanley Enviromental

Permitted Design Flow: 480 GPD Liquid Capacity of Dosing Tank: 1000 gallons

Liquid Capacity of Septic Tank: 1500 gallons Manufacture Dellinger Effluent Pump Model: WE0712HU

ST - STB-338-1500 11/13/15 PT - Dellinger PF283-100 3/18/1

Drainfield Installation ☐ N/A

Trench Depth: 36 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 320 feet

# of Lines: 7 @ various feet lengths

Depth of Media: 22 inches (Type) LPP/PPBPS

Depth of Cover: 14 inches

Distribution Device: LPP Manifold

Bed Installation *(For Repair Installations ONLY.)* ☐ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☑ Municipal ☐ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 18 feet

Distance from Property Line: 14 feet

Distance from Water Supply Source: 28 feet

Inspection Dates

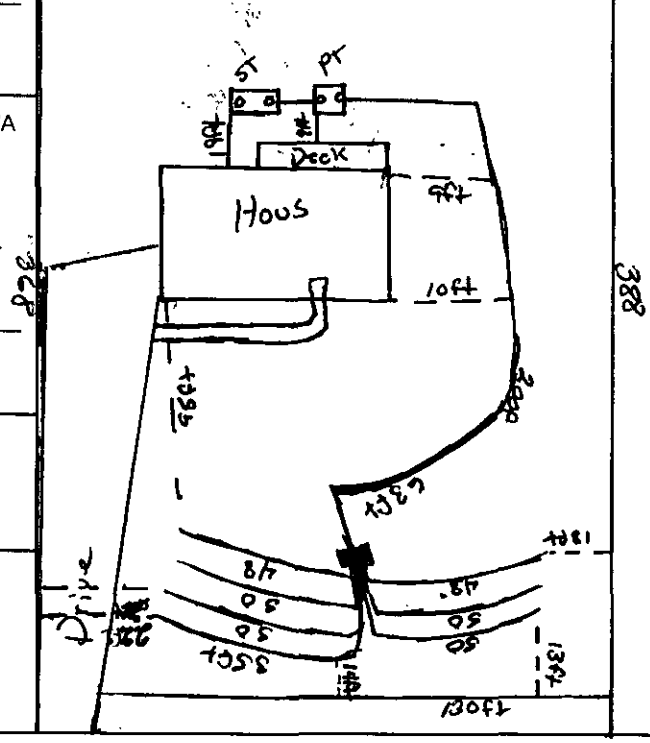
Tank(s) Inspected: 5/10/16

Excavation Inspected: 5/10/16

Pump & Controls Inspected: 5/12/16

401

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)



Pump 6 gpm
3/4 hp 1/60/2
model
WE0712HU
84 2gallons
Min

The undersigned has inspected the Septic Tank System described above, and certifies it has been ☑ installed ☐ altered ☐ repaired ☐ as detailed in the plot above ☑ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: IV / PPBPS / P / Na / Na

install Drive Way 10 feet off property line head pressure 84 gallo

DENR Authorized Agent: Bryan Davenport Signature: Bryan Davenport 2mins

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 9141B Permit #: 7345 Tax Parcel #: 197-221-19

Property Owner: _____

Job Location Address: 8145 Rolling Fields Rd

City: Charlotte State: NC Zip Code: 28227

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: IVG

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) months prior to expiration for permit renewal.

Subsurface system operator required: Yes ☐ No ☐

☐ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☐ System does not require inspection by GWS on a routine frequency.

☐ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☑ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other:

install Drive way 10 feet off property line
pump 3/4 hp model WE0712HU - 84 gallons in
2 mins

DENR Authorized Agent: Bryan Davenport Date: 5/12/16

Signature: Bryan Davenport

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

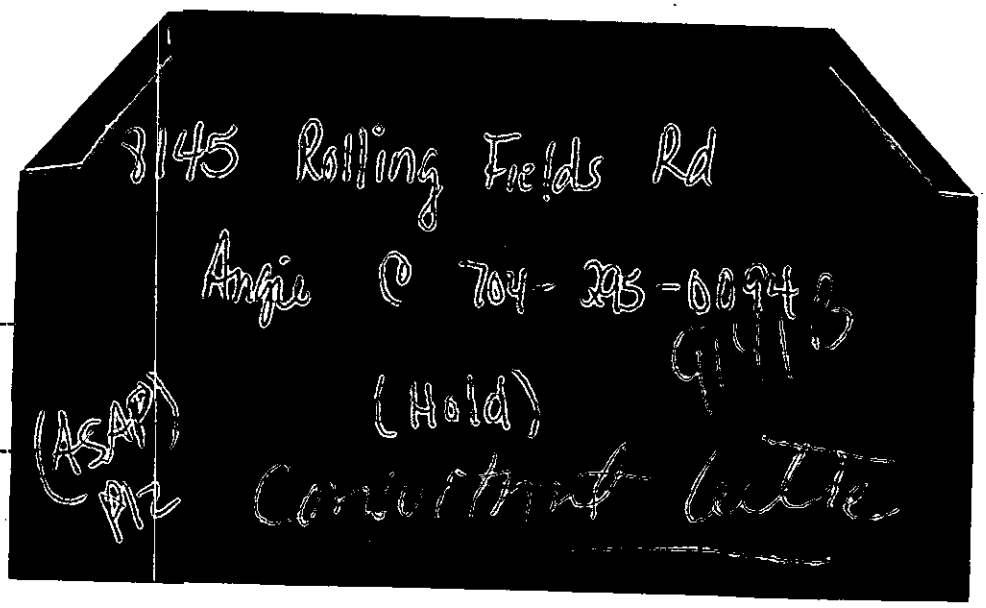
Date:	08/20/15	**Amount:**	200.00
Receipt #:	95828	**Tendered:**	200.00
Check / Auth #:	VISA 00697G	**Returned:**	0.00
Received By:	WALKEVA		

Account Information

Account #: 200000
Contractor: KUMAR, KOKILA
Attn:
Address: 9935 D REA ROAD, SUITE 210
Address:
City/State/Zip: CHARLOTTE, NC 28277

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Septic Operational Permit 8145 ROLLING FIELDS ROAD		1	200.00	200.00

-To-Date



Month

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

Septic System Pre-Construction Meeting Checklist

File # 91413 App # 7345 Tax Parcel # 197-22-19

Property Owner: LJW Land LLC

Job Location Address: 8145 Rolling Fields Rd

City: Charlotte State: NC Zip Code: 28227

1. **Does System design match facility, flow & wastewater characteristics?**

   ☑ YES ☐ NO

   Comments: _____

2. **Is there sufficient available space for the septic systems initial and repair areas?**

   ☑ YES ☐ NO

   Comments: _____

3. **Can the septic system be installed per the permit conditions and drawing on file?**

   ☑ YES ☐ NO

   Comments: _____

* If "NO" is checked for any of the above the existing permit may need to be revoked.

Permission is hereby given to ☑ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge meeting all of the construction requirements of 15A NCAC 18A .1900 which are in effect on the date of granting this approval. **System shall not be installed while soils are in wet condition.**

Byron Daigle
Authorized Agent

5/12/14
Date

Others Present