North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION

PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

Marlin's Septic Service
Jeff Kerr
P.O. Box 865
West End, NC 27376

is hereby permitted to operate Septage Land and Application Site with permit # **SLAS-63-03** located on Hwy 211 in Moore County in approximate position 35.22434° N latitude and -79.54995° E longitude. This site is permitted only for operations that are conducted in accordance with the representations made in the approved application, with all conditions attached to this permit, and with all of the provisions of 15A NCAC 13B.0800 -- Septage Management. Failure to operate as permitted may result in the Department suspending or revoking this permit, initiating action to enjoin the unpermitted operation, imposing administrative penalties, or invoking any other remedy as provided in Chapter 130A, Article 1, Part 2 of the North Carolina General Statutes.

This permit shall be reviewed annually to determine if soil test results and management activities are in compliance with the Septage Management Rules and the conditions of this permit. Modifications, where necessary, shall be made in accordance with rules in effect at the time of review.

Date Issued 6/26/2014

Martin A. Gallagher, Branch Head
Composting & Land Application Branch

CONDITIONS OF OPERATING PERMIT

1. This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards both surface and ground waters.

2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Jeff Kerr and approved by the Division of Waste Management. **The 17-acre site is divided into Field 1 (5.3 acres), Field 2 (5.4 acres) and Field 3 (6.3 acres).** All three fields shall remain in established stands of bermudagrass. The 30-day waiting period between the last application of septage and the harvest of the crop shall be met by alternating septage applications, the waiting period and harvest between the three permitted fields. All discharges shall be at locations on the site consistent with the crop rotation in the approved plan.

3. This site shall be operated and maintained in accordance with the erosion and runoff control plan submitted by Jeff Kerr in such a manner as to prevent the migration of wastes off of the designated waste receiving site. Given that the slopes on this site do not exceed 5%, a 20 ft. buffer, planted in Bermuda/rye grasses should suffice to prevent septage waste from migrating off the fields. Any site improvements noted in the plan must be installed within 30 days of plan approval. The installation of groundwater monitoring wells shall be required as deemed necessary by the Division.

4. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other local, state, and federal government agencies which have jurisdiction. It is the responsibility of the Permittee to be in compliance with the Federal Regulations listed in the Code of Federal Regulations, 40 CFR Part 503.

5. This permit may be modified or reissued at any time to incorporate any conditions, limitations and/or monitoring requirements the Division deems necessary to adequately protect the environment and public health.

6. **This site is only permitted for the land application of domestic septage and grease trap pumpings.** Domestic septage pH shall be raised to 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 30 minutes prior to land application. Grease septage or grease septage mixed with domestic septage shall be raised to pH 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 2 hours prior to land application. **The land application of commercial/industrial septage shall only occur after a waste analysis has been performed and approval has been granted by the Division.**

7. **This site contains approximately 17 acres that are available for land application of septage.** The maximum annual application rate shall be 50,000 gallons per acre per year. At this application rate, a **maximum annual volume of 850,000 gallons may be applied to this site.** This application rate assumes equal septage distribution, on an annual basis, over the permitted area. Monthly septage applications shall not exceed the monthly relative application rates given in the approved nutrient management plan for the site.

8. An approved above ground septage detention system with a minimum design capacity of 16,346 gallons shall be available prior to operation of this site unless an approved wastewater treatment plant is available for use during periods of adverse weather. The storage capacity may be adjusted if it is demonstrated during the operation of the site that this volume of storage is inappropriate.

9. Only the area designated on the attached site map(s) shall be utilized for septage disposal. Each load of septage discharged at the site shall be distributed from a moving vehicle in such a manner that there is no standing water when the discharge is complete.

10. Septage shall not be applied during any precipitation event, or if there is standing water on the soil surface, if the soil surface is frozen, or if the soil surface is snow covered. The Permittee shall consider pending weather conditions when making the decision to land apply in order to prevent any discharge of septage outside of the permitted boundary.

11. Septage shall not be applied during periods of high soil moisture. Septage applications that will result in ruts greater than three inches in the soil surface are prohibited.

12. Any discharge of septage outside of the permitted boundaries via runoff, aerial drift, etc. is prohibited.

13. This permit shall become voidable unless the land application activities are carried out in accordance with the conditions of this permit and in the manner approved by this Division. No one other than the Permittee or an employee of the firm named in this permit shall discharge septage at this site without prior appropriate notification and written approval from the Division.

14. Prior to any transfer of this land, a notice shall be given to the new owner that gives full details of the materials applied or incorporated at this site. The Division shall be notified prior to site closure. This permit is non-transferable.

15. **This permit shall expire on April 15, 2018.** Modifications, when necessary, shall be made in accordance with the rules in effect at the time of renewal. An application for permit renewal shall be submitted at least ninety (90) days prior to the permit renewal date. A septage application log for the period of time this permit was valid shall be submitted along with an application for permit renewal or modification. The information required in the log is described in Rule 15A NCAC 13B .0838 (e)(1) of the NC Septage Management Rules and the Code of Federal Regulations, 40 CFR Part 503.17 (b).

16. Records shall be kept in accordance with 40 CFR 503.17(b). These records shall be made available to a representative of the Division upon request.

17. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the disposal site and facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the conditions of this permit; or may obtain samples of groundwater, surface water, or leachate.

18. Field separations in the nutrient management plan and all pertinent setbacks shall be clearly located on the site. Boundaries of the permitted septage land application fields shall be clearly marked on the ground.

19. The areas that can be used for land application of septage shall be maintained at least 500 feet from any existing wells, residences, places of business, or places of public assembly. Septage shall not be disposed of within 50 feet of any property line, within 100 feet of any ditch or within 200 feet of any surface water unless specified otherwise.

North Carolina Department of Environment and Natural Resources

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June 26, 2014

Mr. Jeff Kerr
Marlin's Septic Service
P.O. Box 865
West End, NC 27376

RE: SLAS permit renewal
Marlin's Septic Service
SLAS-63-03
Hwy 211 in Moore County

Dear Mr. Kerr:

The NC Division of Waste Management has reviewed your application to renew a Septage Land Application Site permit in Moore County. Your application has been approved and your permit, **# SLAS-63-03**, is enclosed. If you have any questions about your permit, we'll need the number in order to answer your questions.

Please read all of your permit conditions carefully. Your nutrient management and soil erosion and runoff control plans have been included in your permit's conditions. In particular, review Permit Condition 15, which states that you will need to submit septage application logs for your site in order to renew your permit. These logs need to cover the entire time your current permit is valid. For details on the information you should include, consult the NC Septage Management Rule 15A NCAC 13B .0838(e)(1) and the Federal register's 40CFR Part 503.17(b). This permit condition also states that this permit is valid until **April 15, 2018.** If you have any questions, please ask for assistance as rule violations could expose you to administrative penalties.

Please note that to land apply industrial or commercial septage at a permitted septage disposal site you must have **prior approval** from the NC Division of Waste Management. The waste must be sampled prior to being removed from the system. **Generally, the Division will request that you have a waste analysis run on septage from each commercial or industrial septage generator before that type of septage is approved for land application.**

Use of a land application site or septage detention or treatment facility that is not permitted may result in administrative penalties up to $15,000 per violation in accordance with NC General Statute 130A-22.

If you have any questions, please contact me at (910) 433-3352 or Martin Gallagher at (919) 707-8280.

Sincerely,

C S Wylie

Connie S. Wylie, Soil Scientist
Division of Waste Management, NCDENR

Enclosures
cc: Mike & Emma Wilson, landowners
Moore County Health Department

APPLICATION FOR A PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

North Carolina Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Section
1646 MAIL SERVICE CENTER, RALEIGH, NC 27699-1646

I. Site and Operator Information

1. Applicant MARLIN'S SEPTIC SERVICE
   Address P.O.BOX 865
   WEST END, NC 27376
   Phone 910-295-1899 ALSO 910-673-0599

2. Contact person for site operation (if different from applicant): JEFF KERR
   Title or position OWNER Phone 910-295-1899
   Address 348 PINECREST CT, ABERDEEN NC 28315

3. Landowner MIKE WILSON
   Address 333 HOFFMAN RD, WEST END NC 27376

4. Site Location: County MOORE State Road Number: HWY 211-1004
Directions to site: FROM CORNER OF HWY 211 AND HOFFMAN RD GO ½ MILE EAST TO DIRT DRIVE BEAR LEFT ACROSS RR TRACKS GO 700FT.

5. Indicate whether request is: new _____ renewal ___X___ modification _____

   For a permit renewal or modification, provide the following information:
   Existing site permit number: SLAS 63-03_____ permit expiration date: 4-15-2013

6. Number of acres meeting the requirements of the N.C. Septage Management Rules: 17 acres.

7. Substances other than septage or grease trap pumpings previously disposed of on the site:
   (a) None _____, or (b) Attach a list indicating other substances, the amounts discharged, and the dates of discharge.

8. Attach written, notarized landowner authorization to operate a septage disposal site signed by the landowner (if the permit applicant does not own the property). ***If a corporation owns the land use a corporate landowner authorization form. If limited liability company owns the land, use a limited liability company landowner authorization form.***

9. Attach site evaluation report, including aerial photograph and soil analysis with metals results, unless the Division prepared the report.

10. Attach a vicinity map (county road map showing site location). **LAND APPLICATION # 63-03**

(over)

II. Site Management Information:

The following information shall be included with the application form:

1. Nutrient Management Plan
2. Soil Erosion and Runoff Control Plan

3. Alternative plan for disposal (detention facility permit number or wastewater treatment plant authorization): MOORE COUNTY WATER AND POLLUTION CONTROL PLANT

4. Types of septage proposed to be discharged at the site (check all that apply):
   (a) Domestic septage pumped from septic tanks X
   (b) Grease trap pumpings X
   (c) Portable toilet waste
   (d) Commercial / Industrial septage X

5. Proposed treatment method of each type of septage to be land applied (use additional paper to explain if necessary): LIME STABALIZE TO A MINIMUM PH OF 12 SEPTAGE 30 MINUTES, GREASE 2HRS BEFORE LAND APPLICATION
   The waste shall be at ph 12 for land application to occur

6. Proposed method of applying septage to land, including septage distribution plan if required * (use additional paper to explain if necessary): 2000/2500 GALLON VACUUM TRUCK/PUMP TRUCK WITH A DUCK BILL SPRAYER ATTACHMENT

7. Demonstration from the appropriate state or federal government agency that the land application site complies with the Endangered Species Law ** or if any part of the site specified is not agricultural land (use additional paper to explain if necessary): SITE IS AGRICULTURAL JK

III. Certification

I hereby certify that:

1. The information provided on this application is true, complete, and correct to the best of my knowledge.
2. I have read and understand the N.C. Septage Management Rules, and
3. I am aware of the potential consequences, including penalties and permit revocation, for failing to follow all applicable rules and the conditions of a Septage Land Application Site permit.

Signature***	12/1/2012 9-25-2013 Date
JEFF KERR Print name	OWNER Title

Note: This application will not be reviewed until all parts of the application are complete.
*** Refer to Section .0821(e) of the N.C. Septage Management Rules.**
**** Refer to Section .0821(g) of the N.C. Septage Management Rules.**
*****Signature of company official required.**

Landowner's Authorization to Operate a Septage Land Application Site

North Carolina Department of Environment and Natural Resources
Division of Waste Management - Solid Waste Section
1646 Mail Service Center, Raleigh, NC 27699-1646

Mike Wilson
I, DAVID M. WILSON (name of site owner) hereby certify that I am the owner of

17 acres of land located NWY 211-1004

and identified by 25, 13, 26 LAT 79, 32, 53 LONG (book and page of recorded deed

or tax map parcel) and that I agree to allow MARLIN'S Septic Service (JEFF KEER) (name of site

operator) to use said land for septage land application for a period of 5 yeares (length

of time), beginning April 15 2013 (month, day and year) and that I have read the

North Carolina Septage Management Rules *, and I understand and agree to maintain the restrictions on land use after septage land application ends **. I further understand that no septage may be land applied until the Division of Waste Management has issued a permit for a septage land application site. The above described property is owned solely by me or jointly with Emma L. Wilson

_____ (names of all co-owners, or state none).

Signature of landowner David M. Wilson Date July 22, 2013

Signature of landowner Emma L. Wilson Date July 22, 2013

Sworn to and subscribed before me this 22nd day of July, 2013.

Vonnie Kaye Helms
(Notary Public)

My Commission expires: 2-16-2014

(OFFICIAL SEAL)

VONNIE KAYE HELMS
Notary Public, North Carolina
Montgomery County
My Commission Expires
2-16-2014

* 15A N.C. Admin. Code 13B Section .0800

** As required by Rule .0843

However, NC rules allow no more than 50,000 gal/acre/year.

- Application rate on this site will not exceed the maximum level of 50,000 gallons/acre/year (850,000 gallons for the entire site each year).
- Monthly application schedule and guidelines are given on the attached "Application Calendar".

Key Notes:

- Soil samples are to be taken and analyzed at least every 4 months to monitor levels of nutrients and metals. This plan will be modified if any levels exceed maximum values.
- Each load of domestic septage will be lime stabilized to maintain a PH of 12 or greater for at least 30 minutes. Each load of grease tap pumps will be lime stabilized to maintain a PH of 12 or greater for 2 hours.
- Septage shall be uniformly applied over the entire permitted site via a 2000/2500 gallon capacity vacuum tanker truck equipped with a duck-bill sprayer on the rear.
- Should weather conditions (frozen ground, saturated ground, etc.) prevent land application of septage or excessive quantities of septage need to be hauled during certain periods, the septage will be disposed of at the Moore County Waste Treatment Plant. Permit # 2006 sp-07

Based upon the facts and representations of the submitting party, it is my belief that this plan will comply with the technical requirements for proper land application of septage. Marlin's Service is responsible for the preceding information in the plan and is responsible for carrying out any implementation procedures that are contained in the plan.

Submitted by: Jeff Kerr Date: 5/1/2013

(Site Operator)
Jeff Kerr
P.O. Box 865
West End, NC 27376

Preparation assistance by: Bert Coffer /Ag. Extension Agent

Fig. 1

Maximum Application Rate Calender

Crop	Field #	Acres	January	February	March	April	May	June	July	August	Septembe	October	November	Decembe
Bermuda	1	6.5	N	N	L	M	H	H	H	M	M	L	N	N
Rye	1	6.5	L	M	H	H	L	N	N	N	L	M	M	L
Bermuda	2	4	N	N	L	M	H	H	H	M	M	L	N	N
Rye	2	4	L	M	H	H	L	N	N	N	M	M	M	L
Bermuda	3	6.5	N	N	L	M	H	H	H	M	L	M	N	N
Rye	3	6.5	L	L	H	H	L	N	N	N	L	M	M	L

N = 0 gallons
L = 5,000 gallons
M = 10,000 gallons
H = 15,000 gallons

Fig. 2

Application Calender - gallons of septage/acre/year

does not exceed 50,000 gal/acre/year

crop	field #	acres	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec
Bermuda	1	6.5	0	0	5,000	10,000	15000	15,000	15000	10,000	10000	5000	0	0
Rye	1	6.5	5,000	10,000	15,000	15000	5000	0	0	0	5000	10000	10,000	5000
Bermuda	2	4	0	0	5000	15,000	15,000	15000	15,000	10000	10000	5000	0	0
Rye	2	4	5,000	10000	15,000	15000	5000	0	0	0	5000	10000	10,000	5000
Bermuda	3	6.5	0	0	5000	10,000	15000	15,000	15,000	10,000	10000	5000	0	0
Rye	3	6.5	5,000	5000	15,000	15000	5000	0	0	0	5000	10,000	10,000	5000

Application Scheduling

Fig. 1 Shows each month and the MAXIMUM amount of septage that can be applied in that month based on the growth rate of the grass. The maximum CANNOT be applied each month because of the 50,000 ga/acre/yr limitation by state law. Fig. 1 just represents the ability of the crop to utilize nutrients in a given month.

General Information:

- Periodic sampling _____/year of the septage will be conducted for waste analysis.
- Field 1 contains approximately 6.5 acres Field 2 contains approximately 4.0 acres and Field 3 contains approximately 6.5 acres. wrong acres
- The dominant soil series on the site is Candor sand with a 4% (B) slope.
- Septic will not be applied where site is untrafficable in such case a septage storage tank located on site 63-03 of approximately 2000 gallons and disposal at the Moore County Waste Treatment Plant (permit # 2006sp-07) is in place.
- The entire area shaded in red is available for application of septage. The areas of the fields not shaded are the required buffers.
- Field # 2 has a twenty-foot buffer strip along the side running parallel with intermittent stream, and a small drainage way around which a twenty five foot buffer is to be maintained as called for in the Erosion and Runoff Control Plan.
- Field # 3 has a twenty-five foot setback between the perimeter of the field and adjacent land on the south, east and west sides of the field. There is also a five hundred foot setback established along the North West border between the field and a residence to the North East.
- All three fields will be planted in rye (no-till) each fall and managed according to the schedule below, to allow for septage application in the fall and winter.
- Field 1, 2 and 3 will be managed separately and harvested on a rotation, to allow for the proper 30-day waiting period prior to harvest.

Crop Management:

- Bermuda grass can receive daily applications of septage from April thru September (Not to exceed maximum application levels described below and in application calendar).
- Bermuda grass is to be cut and baled every 4-8 weeks, or when forage reaches approximately 12" in height, during the growing season.
- Annual Rye will be planted (100 -120 lbs per acre) , no till, in late September to early October each year on the entire permitted area.
- Rye can receive daily application of septage from October though May. However, applications during December, January and February should be kept to a minimum (Again, not to exceed maximum monthly and yearly application levels).
- Rye will be cut as hay and baled in late March to early May.
- The harvested Bermuda grass and annual rye hay will be removed from the site to be used for mulch, erosion prevention and/or cattle feed.

REALISTIC YEILD EXPECTATIONS AND NUTRIENT UPTAKE BY CROPS:

CROP	YEILD/ACRE/YEAR	NUTRIENT UPTAKE (n-p-k) (lbs. per acre per year)
Bermuda:	3.5 tons	200-50-175
Rye	1.5 tons	30-10-20

ANNUAL APPLICATION RATE:

Gallons/acre/year= N (lbs/acre/year)/0.0026

For this site: 200lbs. N/0.0026=76,923 gallons

Nutrient management plan

General Information

Septage will not be applied where the site is untrafficable, untrafficable is defined as soil that will allow a loaded truck to leave a depression in sod greater than 3 inches in depth

Soil erosion and runoff control plan

Given that the slopes on this site do not exceed 5%, a 20 ft. buffer, planted in bermuda/rye grasses
should suffice to prevent septage waste from migrating off the fields. (More severe site conditions could require that soil erosion structures be installed before septage can be applied.

Crop manegement plan

Areas that develop with less than 80 % groundcover by bermuda will be re-sprigged or re-seeded with bermuda at a rate of 15 lb/acre seed or 25 bushels/acre sprigs in May thru July

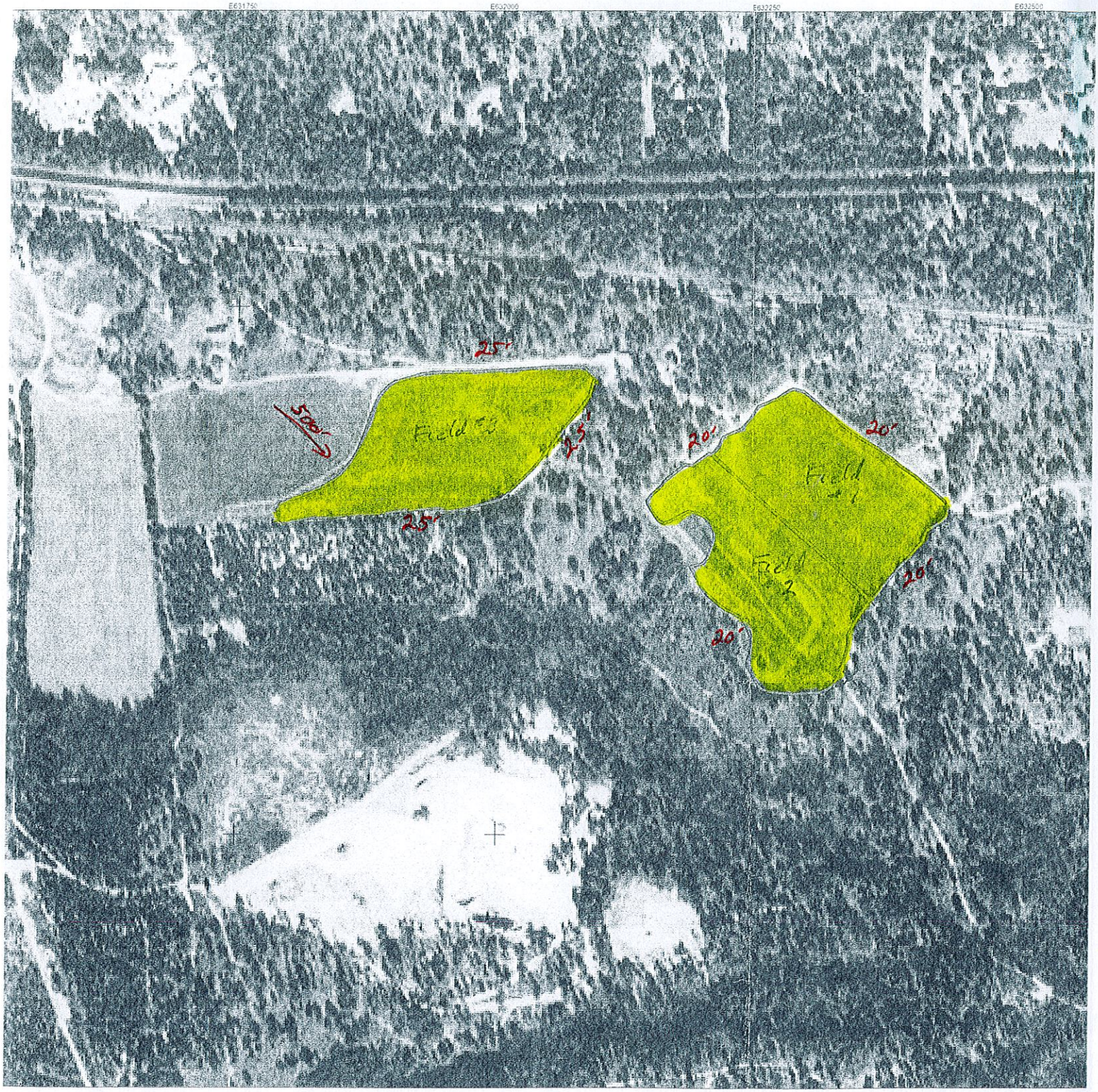
G. Rotation of the fields for land application, harvest of the crops and their use.

1.The bermuda grass will be cut and removed from the site whenever it reaches approximately 12 inches in height, or roughly every 4 to 6 weeks beginning in june. At least three harvests will be made from each feild each year

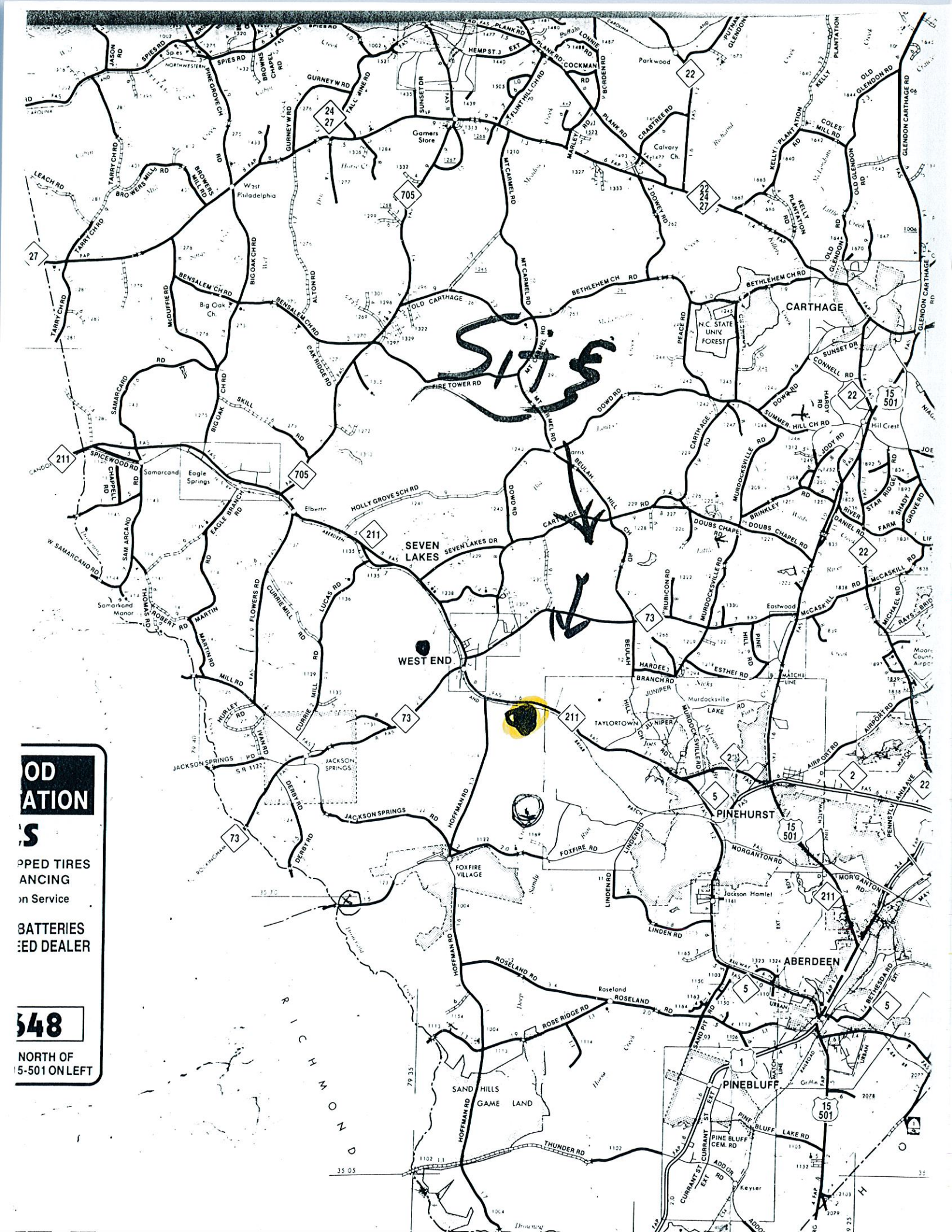
2.The rye grass will be cut and removed from the site in march and april of each year from fields 1, 2 and 3, respectively.

3.A 30-day waiting period must be observed between the last application of septage and harvest. Beginning about the first of march each year, septage will be applied strictly to field 1 while the rye on fields 2 and 3 is undisturbed for 30 days.After 30 days the rye in fields 2 and 3 will be harvested and septage application will be switched to field 2.after an additional 30 days, in late April to early May, the rye will be harvested from field 1. By early may, a rotation will be established which can cycle every 25 to 45 days between bermuda grass harvests. By the end of October, rye will have been planted and the entire site will available for septage application until the end of February the following year.Having 3 fields to rotate thru allows the flexability to rotate to the next field due to high appilication rates, abnormal plant growth, weather conditions and site appearance, while still adhearing to the 30 day waiting period before harvest.

4.the hay will be used by marlins service and local contracters for erosion control



35.224340° N latitude
-79.54995° W longitude



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