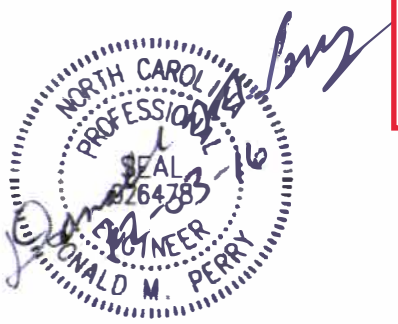
Herring-Sutton
& ASSOCIATES • P.A.
ENGINEERS • SURVEYORS • PLANNERS

D & D ORGANIC FARMING, LLC
COMPOST PERMIT APPLICATION
FINAL SUBMITTAL

APPROVED DOCUMENT
Division of Waste Management
Solid Waste Section
Approved December 16, 2016
By D. Wilson
Facility ID 9810-COMPOST-2016
Doc ID 26818 (permit)
Doc ID 26817 (applic)



December 3, 2016

PREPARED BY: HERRING-SUTTON & ASSOCIATES, PA
2201 NASH STREET NW
WILSON, NORTH CAROLINA

North Carolina Department of Environment and Natural Resources
Division of Waste Management
Solid Waste Section

DRAFT – DRAFT – DRAFT 3-6-14

COMPOST FACILITY
PERMIT APPLICATION GUIDANCE

The completion of an application is required for the permitting or approval of all compost facilities, with a few exceptions. Permits are not required for backyard composting, certain farming operations, and certain small school projects (see Rule .1402 (g) and Rule .1409(d), http://portal.ncdenr.org/web/wm/sw/compost).

For Small Type 1 facilities producing mulch or compost, a permit is not required but a notification form must be submitted annually, instead of an application (http://portal.ncdenr.org/web/wm/sw/yardwaste).

Other special cases of compost permitting are Residential and Summer Camps, Urban Farms, and Community gardens. Specific guidance for these sites can be found on our website: http://portal.ncdenr.org/web/wm/sw/compost .

If the majority (more than 50%) of the material to be composted, not including bulking material, is animal manure or sewage sludge, the permitting process is regulated through the Division of Water Resources (DWR), instead of DWM. John Risgaard, Unit Supervisor of the Land Application Unit of DWR, can be contacted at 919-807-6458.

For proposed new compost projects with new owners/operators, the Section recommends beginning the process as a compost demonstration, if the operation will initially be less than 2 acres. Application guidance for a compost demonstration is a separate document and can be found on our website, http://portal.ncdenr.org/web/wm/sw/compost.

The N.C. Compost Rules are located in 15A NCAC 13B .1400 et seq., and can be viewed online: http://portal.ncdenr.org/web/wm/sw/compost

Other Solid Waste Section Rules and related General Statutes are also linked on the website.

For compost facilities that require a permit, there are three types of permit actions:

A "new permit" means an application for a permit for a facility that has not been previously permitted by the Department.

A "permit amendment" means (1) an application for the five-year renewal of a permit for a permitted facility, or (2) an application that proposes a change in ownership or corporate structure of a permitted facility.

A "permit modification" means an application for a change to the plans approved in a permit for a compost facility, including an increase in facility capacity, or the addition of new feedstock materials.

A significant expansion or change in the boundaries of a permitted facility will be considered a new permit for permit fee purposes.

A complete application for a compost facility permit shall consist of drawings and other required information submitted in report format in a binder. Tabbed pages should separate the Sections in the report.

One paper copy and one electronic (pdf) copy of the application report should be submitted. The electronic copy can be sent by email, FTP, or on a CD. The drawings must be included in the electronic copy.

Permit fees are required for Large compost facilities, not for Small facilities (see Rule .1402 (f)(6) and (7) for definition). The permit fees for are as follows:

New Permit	$1,750
Permit Amendment	$1,250
Permit Modification	$500
Annual Fee	$500

An invoice will be mailed to the applicant when an application is received. A modification that involves only the addition of a new feedstock is considered a modification, but does not require a permit fee, unless that feedstock is unusual in nature and requires additional research as to its acceptability.

For a new permit application, or permit renewal application, a Compliance Review will be required of the owner and operator of the facility, in accordance with State statutes. After the application is submitted, the owner and operator will be sent a letter requesting compliance history information and parent, subsidiary, or other affiliate information, which is required in order to complete the application.

The Solid Waste Section reserves the right to ask for additional information as determined necessary.

Questions regarding an application should be directed to the Solid Waste Section, Phone 919-707-8200.

Applications should be sent or brought to the following address:

By Mail or Delivery Service:
NC DENR, Division of Waste Management
Solid Waste Section Permitting
1646 Mail Service Center
Raleigh, NC 27699-1646

In Person:
NC DENR, Division of Waste Management
Solid Waste Section Permitting
217 West Jones St.
Raleigh, NC 27603

An application for a new permit must address all Sections as listed below.

An application for a permit amendment (permit renewal) must address Sections 1, 3 (updated as necessary), 4, 6, and other Sections as applicable, in which any information contained in the original permit application is incomplete or has changed.

An application for a permit modification must address Sections 1, 3, 4, 6, and other Sections as applicable, in which any information contained in the original permit application has or will change due to the proposed modification.

Applications for a Large Type 3, Small Type 4, Large Type 4 facility, or a facility proposed to be located over a closed out disposal area, must be prepared and signed/sealed by a N.C. registered professional engineer.

For facilities not enclosed in a building, surface water run-off from the site will most likely require a stormwater and/or wastewater permit. It is important to contact Ken Pickle, Division of Energy, Mineral, and Land Resources (DEMLR), early in the permitting process to determine if a permit is required, and to begin the stormwater/wastewater permitting process. He can be reached at 919-807-6376 or ken.pickle@ncdenr.org. The main number for the DEMLR Permitting Unit is 919-807-6300.

Compost Facility Application Report Format and Contents

Letter of transmittal, which states desired Department action (including whether the request is for a new permit, permit amendment, or permit modification)

Title page

Table of Contents

Section 1 – General Information - Provide a narrative discussion, including the following:

1. The name of the facility or proposed facility. Street address of the facility. Include the facility type: large or small, and Type 1, 2, 3, or 4.
   - Facility Name: D&D Organic Farming, LLC
   - 7984 Pelt Road Stantonsburg, NC 27883
   - Large Type 3

2. Name, address, telephone number, and email address of the applicant/owner and contact person.
   - David Newsome
     D&D Organic Farming, LLC
     441 Buck Newsome Rd.
     Fremont, NC 27830
   - 252-206-6802 (c) 919-242-3751 (o)

3. Name, address, telephone number, and email address of the landowner, if not the applicant. A landowner authorization form must be signed and notarized if the facility owner/operator is not the landowner (see attached form).

   - Applicant is one of the landowners.
   - See attached sheet for additional owner.

4. Name, address, telephone number, and email address of the engineer and/or composting consultant (if applicable).
   - Herring-Sutton & Associates, PA
     Attn: Donald M. Perry, PE
     2201 Nash St. NW
     Wilson, NC 27896
   - 252-230-7937 (c) 252-291-8887 (o)
   - dmperryeng55@gmail.com

5. Name, address, telephone number, and email address of person to receive permit fee invoices and annual fee invoices.

   - David Newsome
     D&D Organic Farming, LLC
     441 Buck Newsome Rd.
     Fremont, NC 27830
   - 252-206-6802 (c) 919-242-3751 (o)

Section 2 – Siting Requirements – Provide a narrative discussion that includes the following items:

6. Location of the facility. If the property was previously used for solid waste management activities, provide a description of the operation including permit information and a map with boundaries. Describe the history of any solid waste permits and approvals issued.

   - The facility is located on Pelt Road (NCSR 1632), Wilson County. From Raleigh follow US 264 E to NC Hwy 58 E (Wilson). Take NC Hwy. 58 E from Wilson to NC Hwy 222 W. (Stantonsburg), Take NC Hwy 222 W. to Pelt Rd., Take Rt. Onto Pelt Rd and site is approximately 2.5 miles on right.
   - The facility is currently operating under a demonstration permit.

7. Total acreage of the property and the size of the actual area to be used for the compost operation, to include active areas and storage areas.

   - The total acreage of the property is 326 Acres, taken from Wilson County GIS.
   - The composting area is 7.7 Acres
   - See Appendix A

8. In an appendix, provide a legal description of the property and a complete copy of the current land deed. Also provide a copy of any available current plats or survey drawings of the property. Reference these items in the text of this section.

   - See Appendix B

9. Provide a copy of the USGS topographic quadrangle map of the area. The property boundaries of the site and the approximate composting and storage areas should be drawn

onto the map. The map may be a high quality color photocopy and should show at least 0.5 mile surrounding the property boundary.

- See Appendix C

10. In an appendix, provide a letter from the appropriate City or County official confirming that the siting of the facility will be in conformance with all zoning and local laws, regulations, and ordinances, or that no such zoning, laws, regulations, or ordinances are applicable. Reference the letter in the text of this section.

    - See Appendix D

11. Provide a copy of the FEMA Flood Insurance floodplains map for the area, with the site property marked on the map (appendix or within the section). Discuss compliance with Rule .1404 (a)(1).

    - See Appendix E

12. For sites that potentially contain wetlands, provide a letter from the Army Corps of Engineers that addresses the wetlands determination for the property, and compliance with requirements, if applicable. Include letter in an appendix and reference the letter in the text of the section.

    - The total property does possibly contain wetlands; however the composting area does not contain any wetlands.

13. Discuss compliance with the buffer requirements of the Compost Rules, Section .1404 (a)(2) – (5) and (8). Buffer requirements apply to unloading areas, composting and curing areas, mixing/processing areas, and feedstock storage areas. Final product may be stored within the buffer.

    - There is a 100 foot buffer for all unloading areas, composting and curing areas, mixing/processing areas, and feedstock storage areas.
    - Nearest residence is 1700’ +/- (See Appendix B)
    - There are no wells within 100 feet of the site.
    - There are no streams within 50’ of the site.
    - There is a 25’ buffer between the windrows and any man made swale or berm.

14. Address compliance with Rule .1404 (a)(7), concerning sites located over a closed out disposal area.

    - The site is not located over a closed disposal site.

15. Address compliance with the soil texture requirements or pad requirements of Rule .1404 (a)(10)(B)-(E).

    - This site is composed of sandy loam which is finer than loamy sand. See Appendix F

16. For outdoor facilities, provide a soil evaluation of the site conducted by a soil scientist down to a depth of four feet, or to bedrock or evidence of a seasonal high water table, to evaluate all chemical and physical soil properties and depth of the seasonal high water table. Include the report in an appendix, and reference the report in the text of the Section.

- The depth to water table is greater than 60". See Appendix F

Section 3 - Design Plan – Provide a narrative discussion that includes the following items:

17. List the types of feedstocks, residuals, bulking materials, and amendments to be accepted (for example, yard waste, land clearing debris, pre-consumer food waste, post-consumer food waste, grease trap waste, agricultural waste, etc.). Specify whether feedstocks and residuals will be accepted from the general public. Provide specific descriptions for all materials other than yard waste and land clearing debris. Provide the sources of all materials. If some materials are generated onsite, provide a description. Analytical data may be required for materials that could contain metals or other contaminants, such as commercial or industrial by-products.

    - D&D Organic Farming, LLC accepts these items as feedstocks for the process of turning waste into a usable product of compost material. Woodchips are brought to the facility by The City of Wilson and local landscaping/tree trimming companies. Land clearing debris and yard waste are brought to the facility by the Town of Fremont and sometimes by the general public such as local landscaping companies or an individual cleaning their yard. Hay is brought to the facility by local farmers. Tobacco dust, which is generated from the processing of tobacco, is brought to the facility by Craven Ag. Grease trap waste and septic waste is brought to the facility by various companies, mostly in the eastern part of the state. These companies pump grease trap waste from restaurants and schools, and septic waste from individual houses. The only residuals, made on site, come from the separation of septic and grease trap waste into a liquids and solid. This occurs through the process of mixing polymer, lime and feedstocks to insure proper protocol, so the outcome will be a clear liquid and a dry solid. Water and soil samples are taken periodically to the Raleigh lab at NCDENR. The analysis is sent back to our facility indicating the sample properties. For polymer data, see polymer data sheet

18. Provide an estimate of the total amount of materials to be received at the facility per day, week, or month, in tons or cubic yards. Provide a general amount for the types of feedstock, carbon or nitrogen, to be received, per day, week, or month. Describe any seasonal variation for any of the materials.

    - Maximum average feedstock is 8 tons/day. 212 +/- tons/month – all bulking material including wood chips, leaves, hay etc.

19. Design capacity of the facility. The site capacity is the incoming volume, or throughput, per year, and is based on the compost method, duration of the process, and the size of the facility. Show calculations for Large facilities.

    - Site capacity based on compost windrow area and removal of compost 3 times per year: 330 lb./CY Dry Weight*7300 CY*3= 3613.5 Tons/year of feedstock. The maximum incoming volume of grease trap and septage waste entering the site is 3,000,000 gallons. Grease trap waste accounts for approximately 95% of the 3,000,000 gallons.

20. For Type 1 and Type 2 operations, describe plan for balancing the carbon and nitrogen ratio ("browns" and "greens"). For Type 3 and Type 4 operations, provide carbon to nitrogen ratio (C:N) testing and calculations. Describe and provide compost recipes.

Raw Material	%N	C:N Ratio	% Moisture Content
Dewatered Septage	3	12:1	70
Dewatered FOG			
Gin Trash/Cotton Waste	0.24	442:1	40
Ground Yard Waste	0.9	60:1	38
Hardwood Sawdust	.09	560:1	10
Land Clearing Debris	.09	560:1	15
Sawdust Bedding	.09	640:1	25
Tobacco Dust	1.10	40:1	15

Information taken from "On-Farm Composting Handbook". Our goal is an initial 30:1 C:N ratio with a +/- 75% moisture content. The material is mixed at a 1:1 ratio.

21. A process flow diagram of the entire facility, including the type, size, and location of all major equipment, and feedstock flow streams. The flow streams should indicate the quantity of materials on a wet weight and volumetric basis.
    - See Appendix J
22. Design and testing of a constructed pad, if needed to meet alternative soil texture requirements or distance to groundwater, in accordance with Rule .1404 (a)(10)(B)-(E).
    - Not needed
23. Grading and sloping of site surface to prevent ponding of water.
    - Existing grading and sloping on site prevents ponding. Additionally, swales are used to convey runoff.
24. The means for measuring, shredding, mixing, and proportioning input materials.
    - This is a batch process for this site. There is a known mixing size for each batch placed on composting area.
25. Anticipated process duration, including receiving, preparation, composting, curing, and distribution.
    - +/- 120 days including curing time
26. Location of all temperature, air and any other type of monitoring points, probe depth, and the frequency of monitoring.
    - Long stem thermometer probe each day every 25' along the windrow length in each active windrow. The active compost windrows shall be maintained between 131°F and 160°F for at least 15 consecutive days with at least 5 turnings. The probe depth for temperature monitoring is 24-36".

27. How the temperature control and monitoring equipment will demonstrate that the facility meets the requirements in Rule .1406 (10), (11), or (12), as appropriate for the feedstock. Include frequency and locations of monitoring points.

    - Long stem thermometer probe each day every 25' along the windrow length in each active windrow. The active compost windrows shall be maintained between 131°F and 160°F for at least 15 consecutive days with at least 5 turnings.

28. The method of aeration provided and the capacity of aeration equipment.

    - Aeration is provided by an 11' width compost turner, The Aeromaster PT130-Series. See Appendix G

29. For outdoor facilities, surface water control features, including run-on and run-off. Describe plan for operation of the facility in wet weather. Surface water must be diverted from the operational, compost curing, and storage areas. For sites that will have run-off from the facility operation, a stormwater/wastewater permit will most likely be required (see page 2 for contact information).

    - Runoff will occur in heavy storm events and the vegetated swales and down gradient vegetated buffers are intended to treat this runoff. The site is located at the high point of the property with reasonably flat topography. In addition, the site is surrounded by swales which drain to level spreaders. When discernable rainfall is present, no loading, unloading or compost mixing operations will be active.

30. Process water or contact water (water and liquid that has come in contact with compost or feedstocks) may either be collected and disposed of separately, or for some facilities, it is possible that it may be combined with clean surface water run-off for discharge from the site with a stormwater/wastewater permit. Describe the collection, storage, and disposal of process water. Disposal could involve connection with a sanitary sewer line, or collection in a holding tank, with the liquid periodically pumped and removed from the site for proper disposal.

    - The vegetated swales and down gradient vegetated buffers are intended to treat this runoff. A more detailed plan is being developed to submit to Mr. Ken Pickle.

31. Plans and specifications for the facility, including manufacturer's performance data for all equipment selected.

    - The equipment used is either used for processing or monitoring the compost process. The piece most used in the compost operation is a loader as a compost windrow turner and mixer, to make sure feedstocks are mixed properly prior to being put in the windrow. A rubber tire loader and a mixer wagon will be used to make the raw compost mix for the windrow. Windrow turning is achieved by lifting and turning compost to allow for re-aeration. A long stem probe-type dial, stainless steel thermometer, is used to measure the temperature in the windrows. Equipment may be replaced with like equipment over time and will be reported to NCDWM when it is replaced. D & D, LLC Design of Hydraulic Type Dewatering Box with approximately 24,000 lb. capacity.

    - See Appendix G

32. Describe any amendments to be added to the finished compost, if applicable, including the amount. For ash, provide analytical data. Describe storage of the amendments, maximum pile size, and methods to prevent surface water run-on and run-off, if applicable. It should be stated that samples for required compost metals analysis will be taken from the compost with the amendments added.

    - Do not have any public finished compost.

33. For Large Type 2, Large Type 3, and Type 4 facilities:

    a. description and sizing of the storage facilities for amendment, bulking agent, solid waste, recyclables, household hazardous waste and finished compost.

    - Bulking material including wood chips, leaves, hay etc. located between the windrow area and the loading/unloading/tank area. Constitutes approximately 0.3 acres surface area and is less than 25' high. See site plan.

    b. A description of the air emission and control technologies. Examples include an air mist or the application of 3 to 6 inches of cover over piles. For indoor facilities, describe how particulates are minimized.

    - The water wagon behind the compost windrow turner is used

    c. A description of any recycling or other material handling processes used at the facility.

    - There are none.

<u>Section 4 - Operation Plan</u> – Provide a narrative discussion that includes the following items:

34. A list and description of the equipment, scales, structures, tipping floor, water source for cleaning, hopper, and any other feedstock or compost management devices. Also describe equipment maintenance.

    - Equipment list:
        - Compost turner- mixes and turns compost for aeration and to maintain a constant temperature
        - Path Drag- Keeps paths between windrows clean of excess debris
        - Backhoe- Loads, moves and maintains feedstocks
        - Rubber tired wheel loader- takes the raw compost to the windrows
        - Mixer- Blends feedstocks, solid waste and wet solids
        - Mixer wagon- Combines feedstocks
        - Honey wagon tank- water source for windrows
        - Spreader wagon- spreads finished compost product for agricultural use.
        - Tractors-
            - Pulls compost turner
            - Turns mixer wagon

- Pulls honey wagon for water source

- General maintenance of equipment will be a regular daily service as specified by the manufacturer, such as lubricating, maintaining fluid levels and adding fuel as needed.

35. Site security and access control. Large sites must be secured by gates, chains, berms, fences, or other measures to prevent unauthorized entry.

    - Access will be controlled by cable and posts with locked ingress/egress.

36. Confirm that an operator will be on duty at the site at all times while the facility is open for public use to ensure compliance with operational requirements.

    - An operator will be on duty at the site at all times while the facility is open for public use to ensure compliance with operational requirements.

37. Confirm that access roads will be of all-weather construction and maintained in good condition.

    - The access road is an all-weather gravel drive.

38. Days and hours of operation, preparations before opening, and procedures to be followed after closing for the day.

    - D&D Organic Farming, LLC will be open on Monday-Friday, from 7:00 am-5:00 pm and on some Saturdays from 7:00 am to 12:00 pm. Any one of the three operators will be on-site to check the site for any problems, service customers, perform daily duties, complete maintenance jobs and lock up at 5:00 pm.

39. Signs to be posted at the entrance. Signs must provide a description of the types of feedstocks and residuals received, the types of waste prohibited, operating hours, permit number, and emergency contact phone numbers. The sign should state that no hazardous waste, asbestos containing waste, or medical waste can be received at the site. State whether the site will receive feedstocks or residuals from the general public.

    - See Appendix H

40. List of personnel required and the responsibilities of each position. For Large Type 2, Large Type 3, and Type 4 facilities, describe personnel training (site specific safety, remedial, and corrective action procedures) and recordkeeping of training records.

    - David l. Newsome and Daniel L. Newsome are co-owners and co-managers of this site. They have mat and exceeded training qualifications to operate this site in a safe and productive manner. The third employee has been trained by David and Daniel and has access to the manual to check on proper procedures at all times.

    - Daily duties include: receiving feedstocks, receiving solids, Applying solids, turning compost, monitoring temperature, dragging paths, equipment maintenance, and general cleaning of the site.

41. A narrative description of all operational activities, including but not limited to:

d. Arrival of materials onsite, unloading, processing, mixing, storage, composting to meet PFRP and VAR, curing, testing, and final product storage. Describe the location that each of the activities take place, and the estimated time for composting and curing.

- As materials arrive on site by truck, they are directed to the designated storage area to unload in- depending on what feedstock they are carrying. The rubber tired wheel loader is used to put the materials in with the residual as needed for mixing to proper consistency. To make the compost meet PFRP & VAR standards, testing of temperature, moisture and odor, is done consistently to ensure a quality product in the final stage. Feedstocks are delivered intermittently via a dump truck and are unloaded in the feed stock area.
- In addition, the following are the walk through steps involved for this site:
  - Unload grease trap waste into septage dewatering facility.
  - Septage Dewatering Facility Tanks are decanted.
  - Processed through bar screens.
  - Septage moves to holding tank, decanted at a later date.
  - After decant, sludge goes through a dewatering process.
  - Effluent is irrigated on designated fields.
  - Solids from decant process are mixed in mixer with wood chips/ rarely other feed stock with a known ratio.
  - Mixed material is then placed on windrow for curing.
  - After curing, material sits on site for a minimum of 90-120 days.
  - Material is then spread onto agricultural (non-food chain) fields.

e. Method for screening loads for unacceptable waste. Describe plan for handling incoming loads that contain unacceptable waste. Describe storage of the unacceptable waste, the frequency of removal of the waste (at least weekly), and final disposition.

- Each load is visually inspected and if contains unacceptable waste, the load is not accepted and the contents leave the premises without unloading. D&D Organic Farming, LLC does not accept any unacceptable waste so there is no need for a plan to handle unacceptable waste.

f. Any special feedstock or residual handling (e.g., odorous residuals, liquid residuals, etc.).

- No special feedstock is received. Septage and grease are unloaded into one of two vats that enter into the decant process within one day of arrival. Therefore, exposure to air is minimized prior to entering the decanted process and the subsequent mixing process.

g. Any amendment to be added to the compost, how it will be stored, when it will be added, testing of the amendment, and testing of the compost after amendment.

- Only air and water are added as an amendment to the compost. It is regulated by sight.

h. Non-composting activities, such as grinding to make mulch, or to prepare materials for composting.

- There are none on site.

i. Pile sizes for feedstock, composting, curing, and final product storage (width and height). Length is unlimited within the permitted boundary of each area. Describe distance between rows, to provide access in the event of a fire.

- The compost lays in windrows that are 6 feet high by 11 feet wide and are 25 feet apart-center to center. There is 18' between compost windrows for fire access. The feedstock pile is approximately 10 feet tall by 22 feet wide. This site does not do any mulching.

j. Frequency of turning, for both composting and curing.

- The compost windrows are turned at least once every three days.

k. Moisture control monitoring, carbon to nitrogen ratio testing, porosity.

- The carbon to nitrogen test stays at a 30:1 ratio. The compost is turned every third day for 15 days and a temperature of 131 degrees is maintained. The ultimate use for this compost is personal agricultural use only.

l. The ultimate use for the finished compost, method for removal from the site, and a contingency plan for disposal or alternative usage of residues or finished compost that cannot be used in the expected manner due to poor quality or change in market conditions.

- Agricultural Farm Use for owner's use only. Spreader wagons are used for this purpose. Compost will produce Class A compost. Any compost not meeting Class A standard will be run back through the process and as a last resort carried to a landfill.

m. For Type 4 facilities receiving mixed waste, a plan for removal and disposal of household hazardous waste from the waste stream.

- N/A

n. A quality assurance plan for the process and final product which lists the procedures used in inspecting incoming material, monitoring, sampling and analyzing the compost process and final product, testing schedule, and recordkeeping requirements.

- Quality assurance is guaranteed by the protocol used every day from when this site is opened at 7:00 until it closes at 5:00.

42. Plan for maintaining facility property in a sanitary condition and actions to be taken to minimize noise, vectors, and air borne particulates. At the end of each operating day, the unloading area should be clean and all feedstocks should be processed/mixed or properly stored.

- The site will be maintained in a sanitary condition at all times by addressing vector and odor control as needed. Precautions will be made by having proper covering to prevent vector and odor attraction.
- Noise associated with equipment operations will be controlled by operating only during said hours if at all possible.
- Areas that store and mix septage and mix septage will be maintained in a sanitary condition by cleaning these areas with a hot water pressure washer. Some areas are cleaned daily while others are cleaned weekly with water being returned to holding tanks of septage facility.

43. Contingency plans for wind, heavy rain, snow, freezing weather and other extreme weather events, air pollution, equipment breakdown, spills, unusual traffic patterns, long-term power outages, cracks in concrete pads, etc.
    - During inclement weather this site will not mix or blend incoming feedstock materials. Compost windrow turning may continue if soil conditions permit access to the area and the process can be done safely without generating runoff or endangering the operator. During a breakdown or spill, all processing will stop and site will be closed until repairs are made.
44. Describe odor control measures and steps to be taken in the event of unexpected offsite odors.
    - The site will be maintained in a sanitary condition at all times by addressing vector and odor control as needed. Precautions will be made by having proper covering to prevent vector and odor attraction. Good and open communication with neighbors located over 1700' from the site is part of the odor management. In addition, material could be added to the wind rows. Also, row buffer of trees could be planted if an odor issue consistently existed.
45. Describe operational activities for surface water and process water control features. For onsite tanks, frequency of pumping and removal.
    - Existing and proposed swales are to be used. See Site Plan
46. Plan for litter and dust control. Procedures to prevent blowing litter and dust from leaving the onsite management areas and from leaving the property.
    - Litter fence between swale and buffer along Pelt Road and site is to be installed
47. Plan for fire prevention and actions to be taken in the event of an accidental fire. Describe equipment provided to control accidental fires and arrangements made with the local fire protection agency to provide services when needed.
    - In case of an accidental fore, there are fire extinguishers on site and the local fire department has, on record, the chemicals that are used on-site.
48. Describe compost testing, in accordance with Rule .1408(a).
    - The facility shall comply with the following. Metals testing – A sample will be collected every two weeks and placed in a barrel and mixed with previous samples collected

since last test. A representative sample will be taken from the barrel and tested by NCDA once every six months (less than 20,000 tons produced every six months). A grab sample will be collected to test pathogen levels once every six months. A certified lab will perform this test. Inerts will be tested on-site with the use of a ¼" screen.

.1408 METHODS FOR TESTING AND REPORTING REQUIREMENTS

(a) The compost product from Type 2, 3, and 4 facilities shall be sampled and analyzed as follows:

(1) A composite sample of the compost produced at each compost facility shall be analyzed at intervals of every 20,000 tons of compost produced or every six months, whichever comes first, for test parameters for each Type of facility as designated in Table 3 of this Rule. Standard methods equivalent to those in Table 3 may be approved by the Division.

Table 3

Parameter	Unit	Facility	Test Method
Foreign Matter	%	all	see Subparagraph (5) of this Rule
Arsenic	mg/kg dry wt.	Type 4	See Appendix A
Cadmium	mg/kg dry wt.	all	
Chromium	mg/kg dry wt.	Type 4	
Copper	mg/kg dry wt.	all	
Lead	mg/kg dry wt.	all	
Mercury	mg/kg dry wt.	Type 4	
Nickel	mg/kg dry wt.	all	
Selenium	mg/kg dry wt.	Type 4	
Zinc	mg/kg dry wt.	all	
Pathogens	See Appendix B	all	See Appendix B
Total N	%	see *	Kjeldahl

* Total N required for products containing sludge subject to 40 CFR 503.

The parameters listed in Table 3 of this Rule may also be determined by methods accepted by the North Carolina Department of Agriculture.

(2) Sample collection, preservation, and analysis shall assure valid and representative results pursuant to a Division-approved quality assurance plan. At least three individual samples (of equal volume) shall be taken from each batch produced in separate areas along the side of the batch. Each sampling point shall be at a depth of two to six feet into the pile from the outside surface of the pile. Samples that have been analyzed for metals shall be composited and accumulated over a six month period or at intervals of every 20,000 tons of product produced, whichever comes first. Any sample collected for testing for pathogens and nutrients shall be a representative composite sample of the compost and shall be processed within a period of time required by the testing procedure.

(3) Compost containing sewage sludge shall be tested in accordance with 40 CFR 503, Subpart B.

(4) The Division may decrease or increase the parameters to be analyzed or the frequency of analysis based upon monitoring data, changes in the waste stream

or processing, or information regarding the potential for presence of toxic substances that are not on the list of monitoring parameters.

(5) Foreign matter content shall be determined by passing a dried, weighed sample of the compost product through a one-quarter inch screen. EPA Method 160.3 shall be used to dry the sample. The material remaining on the screen shall be visually inspected, and the foreign matter that can be clearly identified shall be separated and weighed. The weight of the separated foreign matter divided by the weight of the total sample shall be determined and multiplied by 100. This shall be the percent dry weight of the foreign matter content.

49. Describe compliance with the classification requirements in Rule .1407.

- Class A requirements will be met.

.1407 CLASSIFICATION/DISTRIBUTION OF SOLID WASTE COMPOST PRODUCTS

(a) Compost shall not be applied to the land or sold or given away if the concentration of any metal exceeds the concentration in 40 CFR 503.13(b)(3) [See Table 1 below], unless the concentration of all metals are less than the values in 40 CFR 503.13(b)(1) and records are maintained to show compliance with the cumulative and annual metal levels in 40 CFR 503.13(b)(2) and (4).

Table 1

Metals	Concentration mg per kg
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	36
Zinc	2800

(b) Solid waste compost shall be classified based on Table 2:

Table 2

Grade	Manmade Inerts % dry wt. of inerts	Pathogen Reduction	Metal Concentration
A	≤ 6	PFRP	Table 1 40 CFR 503.13(b)(1)
B	> 6	NA	

(c) Man made inerts shall not exceed 1 inch in size.

(d) Distribution of the defined grades shall be as follows:

(1) Grade A compost shall have unlimited, unrestricted distribution. This product may be distributed directly to the public;

(2) Grade B compost shall be restricted to distribution for land and mine reclamation, silviculture, and agriculture (on non-food chain crops) projects; and

(3) Compost or mulch that is produced at a Type 1 facility and that contains minimal pathogenic organisms, is free from offensive odor, and contains no sharp particles that would cause injury to persons handling the compost, shall have unrestricted applications and distributions if directions are provided with the compost product.

(e) Solid waste compost products may not be distributed or marketed until the permittee has provided adequate test data to the Division as outlined in Rule .1408 of this Section. Within 30 days of receipt of the test data, the Division shall approve or deny the distribution and marketing of the product

based upon the compost classification and distribution scheme. As long as the test data required in Rule .1408 of this Section continues to verify that compost is produced to the specifications of this Rule, the Division's approval to distribute the compost shall be ongoing.

(f) The applicant is responsible for meeting any applicable requirements of the North Carolina Department of Agriculture, Fertilizer Section concerning the distribution of this product.

(g) If the owner intends to distribute the product, the owner shall provide instructions to the user on any restrictions on use and recommended safe uses and application rates. The following information shall be provided on a label or an information sheet and a copy of the label or information sheet shall be submitted to the Solid Waste Section:

(1) Classification grade as outlined in Paragraph (d) of this Rule;
(2) Recommended uses;
(3) Application rates;
(4) Restrictions on usage; and
(5) Total N (for products containing sludge).

History Note: *Authority G.S. 130A-309.11; Eff. December 1, 1991;*
RRC objection Eff. April 18, 1996 due to lack of statutory authority;
Amended Eff. June 1, 1996.

50. Describe recordkeeping in accordance with Rule .1408 (b), (c), and (d). Recordkeeping should also include personnel training, inspection reports, and odor complaints and actions taken. The facility should also keep a copy of the permit, operations plan, and site drawings on site at all times.

- The facility shall follow the below record keeping rules:
- In addition, the daily (six days per week) monitoring form (see appendix x) should be completed. Once a windrow meets the time and temperature requirements, it stays in place for curing.
- A copy of the permit, operation plan, and site drawings will be kept on-site at all times.

(b) Record Keeping: All facility owners or operators shall record and maintain records for a minimum of five years. Records shall be available for inspection by Division personnel during normal business hours and shall be sent to the Division upon request:

(1) Daily operational records must be maintained, which include, at a minimum, temperature data (length of the composting period) and quantity of material processed;
(2) Analytical results on compost testing;
(3) The quantity, type and source of waste received;
(4) The quantity and type of waste processed into compost;
(5) The quantity and type of compost produced by product classification; and
(6) The quantity and type of compost removed for use or disposal, by product classification, and the market or permitted disposal facility.

(c) Annual Reporting: An annual report for the period July 1 to June 30 shall be submitted by all facility owners or operators to the Division by August 1, 1996 and every August 1 thereafter and shall contain:

(1) The facility name, address, and permit number;
(2) The total quantity in tons, with sludge values expressed in dry weight, and type of waste received at the facility during the year covered by the report, including tons of waste received from local governments of origin;
(3) The total quantity in tons, with sludge values expressed in dry weight, and type of waste processed into compost during the year covered by the report;
(4) The total quantity in tons and type of compost produced at the facility, by product classification, during the year covered by the report;
(5) The total quantity in tons and type of compost removed for use or disposal from the facility, by product classification, along with a general description of the market if for use during the year covered by the report;
(6) Monthly temperature monitoring to support Rule .1406 of this Section; and
(7) Results of tests required in Table 3 of this Rule.

(d) Yearly totals of solid waste received and composted shall be reported back to the local government of origin for annual recycling reporting.

History Note: *Authority G.S. 130A-294; 130A-309.03; 130A-309.11; 130A-309.29; Eff. December 1, 1991; RRC objection Eff. April 18, 1996 due to lack of statutory authority; Amended Eff. June 1, 1996.*

51. An outline of reports to be submitted in compliance with the Rules.
    - All NCAC report rules will be followed.
52. A description of the label or other information source that meets the requirements of Rule .1407(g).
    - Owner will not distribute the product.
53. Safety instructions.
    - See Appendix I

Section 5 – Sedimentation and Erosion Control Plan

54. For new facilities or existing facilities with proposed construction modifications, provide a copy of the sedimentation and erosion control plan as required by local governments and/or the NC Division of Land Resources. If the plan is voluminous, provide an electronic copy only.
    - The new/future windrow areas will be in an existing well drained farm field and there will be essentially no grading. Any new disturbance outside of the windrow areas for the swales will be less than 1 acre. We will verify that this is acceptable with Joe Dupree of NCDENR.

Section 6 – Signature Pages

55. Applicant signature page (see attached).
    - See Pre Guidance Material
56. If the landowner of the property is not the applicant, the attached certification form by the land owner is required.
    - See Pre Guidance Material

Section 7 –Drawings

For a new facility or an existing facility with proposed modifications that would change the previously submitted drawing, provide drawings showing the compost facility. For Large Type 3, Small Type 4, and Large Type 4 facilities, engineering drawings should be prepared and sealed by a NC professional engineer. Drawings should be drawn to scale and include:

1. An aerial photograph, where one inch is less than or equal to 400 feet, accurately showing the area within one-fourth mile of the proposed site's boundaries with the following specifically identified. It may be included in the Siting Requirements Section, if it can be appropriately sized 11x17. The following should be drawn onto the map: See Site Plan.
    a. Boundaries of entire property owned or leased by the person proposing the facility;
    b. Location of all homes, wells, industrial buildings, public or private utilities, roads, streams, water bodies, intermittent streams/ditches, and other applicable information regarding the general topography within 500 feet of the proposed facility.
2. Site plan drawing where one inch is less than or equal to 100 feet that delineates the following: In addition, The collected water discharges into an established earthern level spreader to create diffuse flow across the entire west side of the site. Beyond the site is established grass vegetation, which serves as a vegetated buffer. The established earthern level spreader provides a mechanism for the concentrated flow from the swales to be converted to diffuse flow. The active composting and curing areas are labeled on the site map.
    a. Buffers to property lines, residences, wells, and perennial streams/rivers .
    b. gates/fences or other access control features.
    c. Existing and proposed contours, at intervals appropriate to the topography.
    d. Location and elevations of dikes, trenches, basins, and other water control devices and structures for the diversion and controlled removal of surface water and process water.
    e. Labeled areas for unloading, mixing, processing, composting, curing, storage, and final product storage. Illustrate the location of all piles onsite, including feedstocks, active compost, finished compost, and amendments.
    f. Proposed utilities and structures/buildings, existing and proposed.
    g. Areas for unloading, processing, active composting, curing, and storing of material.
    h. Other physical characteristics of the site, as applicable.

3. For Large Type 2, Large Type 3, and Type 4 facilities, the site plan drawing should also show:
    a. Access roads existing and proposed, details on traffic patterns.
    b. Areas for unloading, processing, and storing recyclables, household hazardous waste, and other materials, where applicable.
    c. Proposed surface and groundwater monitoring locations, if applicable.
    d. Flood plains and wetlands located on the property.
    e. Benchmarks.
    f. Label ground cover, including any concrete pads.

All sides of storage areas for flammable feedstocks and residuals should be clear and drivable, to provide vehicular access in the event of a fire.

Signature page of applicant –

Name of facility D & D SEPTIC L.L.C.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision and that the information provided in this application is true, accurate, and complete to the best of my knowledge.

I understand that North Carolina General Statute 130A-22 provides for administrative penalties of up to fifteen thousand dollars ($15,000.00) per day per each violation of the Solid Waste Management Rules. I further understand that the Solid Waste Management Rules may be revised or amended in the future and that the facility siting and operations of this solid waste management facility will be required to comply with all such revisions or amendments.

David L Newsome DAVID L NEWSOME 7/7/14

Signature Print Name Date

PRES (MAN)

Title

D & D SEPTIC L.L.C.

Business or organization name

Certification by Land Owner (if different from Applicant):

I hereby certify that I have read and understand the application submitted by D and D Septic, LLC for a permit to operate a compost facility on land owned by the undersigned located at (address) Pelt Road; (city) Stantonsburg, NC, in Wilson County, and described in Deed Book and Page(s) 2508/955-957.

I specifically grant permission for the proposed compost facility planned for operation within the confines of the land, as indicated in the permit application. I understand that any permit will be issued in the names of both the operator and the owner of the facility/property. I acknowledge that ownership of land on which a solid waste management facility is located may subject me to cleanup of said property in the event that the operator defaults as well as to liability under the federal Comprehensive Environmental Responsibility, Compensation and Liability Act ("CERCLA"). Without accepting any fault or liability, I recognize that ownership of land on which a solid waste management facility is located may subject me to claims from persons who may be harmed in their persons or property caused by the solid waste management facility.

I am informed that North Carolina General Statute 130A-22 provides for administrative penalties of up to fifteen thousand dollars ($15,000) per day per each violation of the Solid Waste Management Rules. I understand that the Solid Waste Management Rules may be revised or amended in the future, and that the siting and operation of the facility will be required to comply with any such revisions or amendments.

N. Paul Newsome — 6-30-14

Signature — Date

N. Paul Newsome

Print name

NORTH CAROLINA

Wayne County

I, Debbie G. Lassiter, Notary Public for said County and State, do hereby certify that N. Paul Newsome personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 7 day of July, 2014

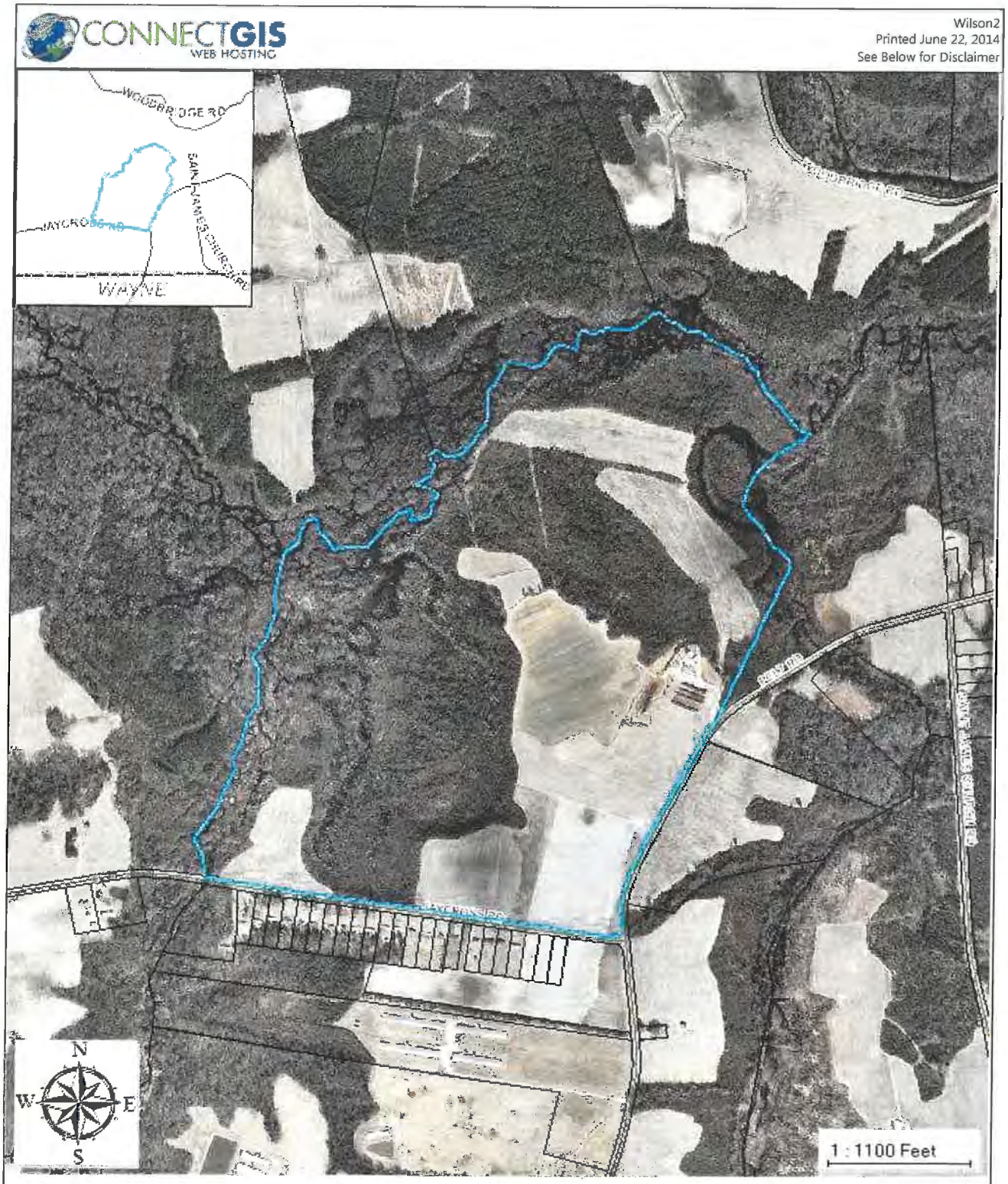
(Official Seal)

Debbie G. Lassiter

Notary Public

My commission expires Feb 19, 2015

Appendix A


CONNECTGIS
WEB HOSTING
Wilson2
Printed June 22, 2014
See Below for Disclaimer
WOODBRIDGE RD
WAYNE
N
W
E
S
1 : 1100 Feet

PIN 3637-35-1432.000	**CAcres** 325.59	**platBk_Pg**
GISPIN 3637-35-1432.000	**ParcelNumber** 3637351432.000	**Owner Name** D & P LAND COMPANY LLC
Name2	**Physical Street Number** 7155	**Physical Street Direction**
Physical Street Name JAYCROSS	**Physical Street Type** RD	**PhysLcDirSuffix**
TaypayerAddress1 441 BUCK NEWSOME RD	**TaxpayerAddress2**	**TaxpayerAddress3**
TaxpayerAddress4	**TaxpayerCity** FREMONT	**State** NC
ZIPCode 27830	**Land Value** 111951	**Improvement Value** 6817
Total Assessed Value 118768	**Deed Book** 2508	**Deed Page** 955
Date Sold 0	**Sales Amount** 0	**DeedAcres** 325
YearActuallyBuilt 0	**FinishedArea** 0	**TaxYear** 2014
NeighborhoodCode 8031	**Deed Year** 2012	**Subdivision** BLACK_CREEK_TWP
SHAPE.fid 112048		

Appendix B

Doc ID: 003997260003 Type: CRP
Recorded: 11/21/2012 at 03:34:06 PM
Fee Amt: $26.00 Page 1 of 3
Revenue Tax: $0.00
WILSON, NC
Audrey R. Neal Register of Deeds
BK 2508 PG 955-957

This instrument prepared by Stephen L. Beaman, Box 1907, Wilson, NC 27894-1907 (252) 237-9020, who is a licensed North Carolina attorney. Delinquent taxes, if any, are to be paid by the closing attorney to the county Tax Collector upon disbursement of closing proceedings. Return to Stephen L. Beaman

WARRANTY DEED

NORTH CAROLINA **WILSON COUNTY**

THIS WARRANTY DEED is made as of the 21st day of November, 2012 by and between **DAVID LEONIDAS NEWSOME AND WIFE, LAURA DIANNE NEWSOME, Grantors**, whose address is 441 Buck Newsome Road, Fremont, NC 27830 and **D & P LAND COMPANY, LLC, Grantee,** whose address is 6441 Jaycross Road, Fremont, NC 27830 (the designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context);

WITNESSETH:

The Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell, and convey unto the Grantee in fee simple, a one-fourth (1/4) undivided interest in that real estate situated in **WILSON COUNTY, NORTH CAROLINA,** and more particularly described as follows:

DESCRIPTION SET FORTH in Exhibit or Schedule A attached hereto.

TO HAVE AND TO HOLD the aforesaid one-fourth (1/4) undivided interest in said real estate and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

AND the Grantor covenants with the Grantee that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever, except:

1. County ad valorem taxes for the current year.

2. Easements for roads, public rights of way, utilities, drainage, sight distances or other easements shown on the public records.

IN TESTIMONY WHEREOF, each individual Grantor has hereunto set his or her hand and adopted as his or her seal the word "SEAL" appearing beside or near his or her signature, this sealed instrument being executed as of the date first above written.

David L Newsome (SEAL)
David Leonidas Newsome

Laura Dianne Newsome (SEAL)
Laura Dianne Newsome

NORTH CAROLINA
COUNTY OF Wilson

I, Kristen C. Hayes, Notary Public of the County and State aforesaid, certify that DAVID LEONIDAS NEWSOME personally appeared before me this day and acknowledged the execution of the foregoing instrument.

Witness my hand and official stamp or seal, this 21st day of November 2012

Kristen C Hayes
Notary Public

My Commission Expires: 5-23-14
(SEAL)

KRISTEN C HAYES NOTARY PUBLIC WILSON COUNTY, N. C.

NORTH CAROLINA
COUNTY OF Wilson

I, Kristen C Hayes, Notary Public of the County and State aforesaid, certify that LAURA DIANNE NEWSOME personally appeared before me this day and acknowledged the execution of the foregoing instrument.

Witness my hand and official stamp or seal, this 21st day of November 2012

Kristen C Hayes
Notary Public

My Commission Expires: 5.23-14
(SEAL)

KRISTEN C HAYES NOTARY PUBLIC WILSON COUNTY, N. C.

SCHEDULE A

Being all of that certain tract or parcel of land lying and being in **Wilson County, North Carolina** and more particularly described as follows:

that certain lot or parcel of land situated in Black Creek Township, Wilson County,

North Carolina, and more particularly described as follows:

BEGINNING at a stake with pointers, at John Jones corner in the road (agreed corner between L. L. Newsome and W. F. & Mary L. Yelverton), thence, with the path, N. 7 1-2 W. 21 4-5 R., thence N. 25 1-2 E. 172 1-4 R. to pointers, on Turner Swamp, thence with said swamp to Black Creek to the mouth of Aycock's Swamp; thence up Aycock's Swamp to an Ash, at John Jones' corner, thence S. 83 3-8 E. 200 R., with Jones' line to the beginning, containing 325 acres more or less, and being the very same land covered by the survey made by R. E. Beaman, on December 17th, 1906, as shown by the map of that date.

BEING the identical property conveyed to W. F. & Mary L. Yelverton by L. L. Newsome and wife, in deed dated May 5, 1909 and recorded in Book 81, Page 543 of the Wilson County Registry.

CONNECTGIS WEB HOSTING

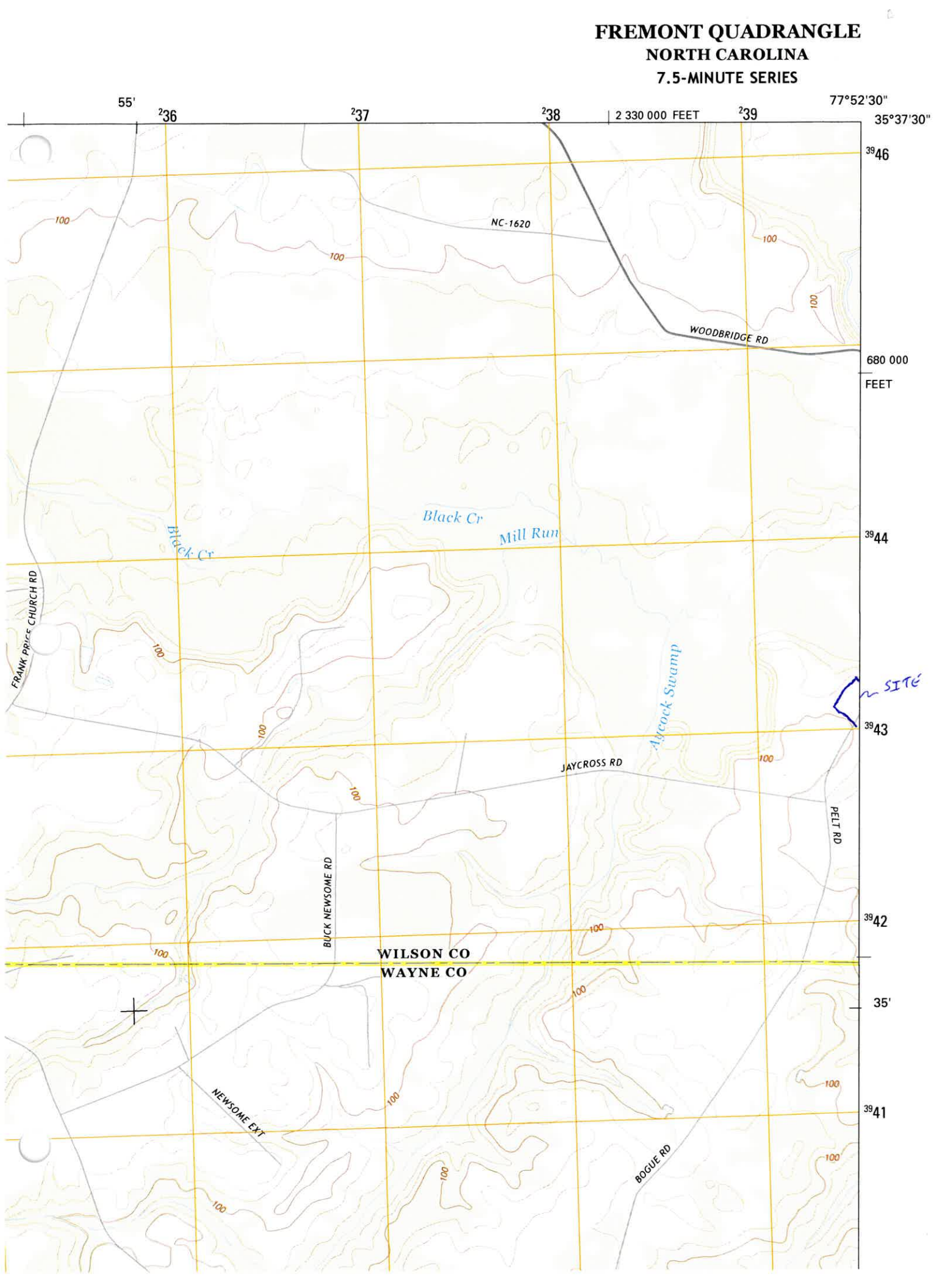
Wilson2
Printed April 02, 2016
See Below for Disclaimer

DISCLAIMER: WILSON COUNTY shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused; or any decision made or action taken or not taken by user in reliance upon any information or data furnished hereunder. The user knowingly waives any and all claims for damages against any and all of the entities comprising the WILSON COUNTY GIS System that may arise from the mapping data.

CONNECTGIS WEB HOSTING

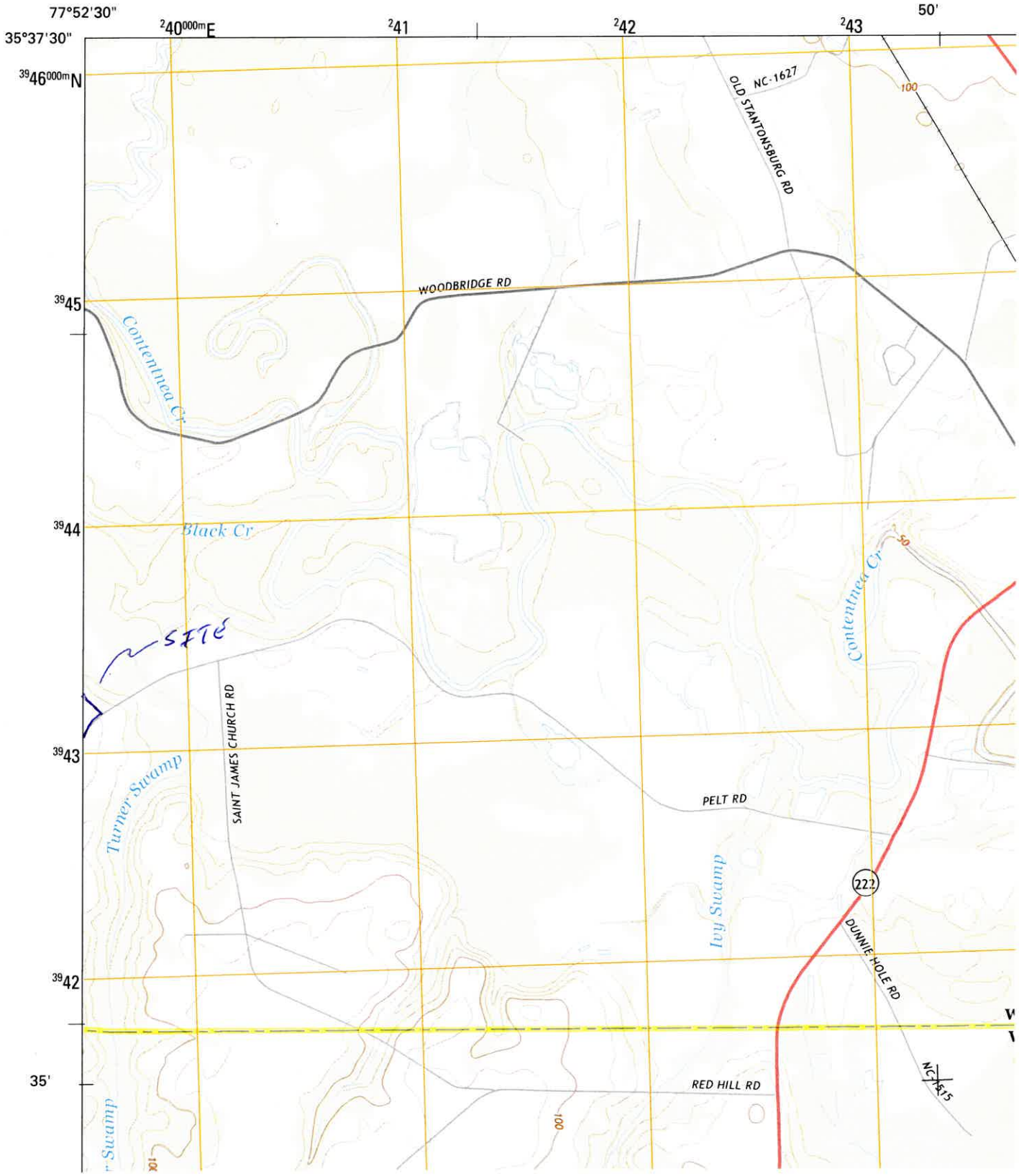
Wilson2
Printed April 02, 2016
See Below for Disclaimer

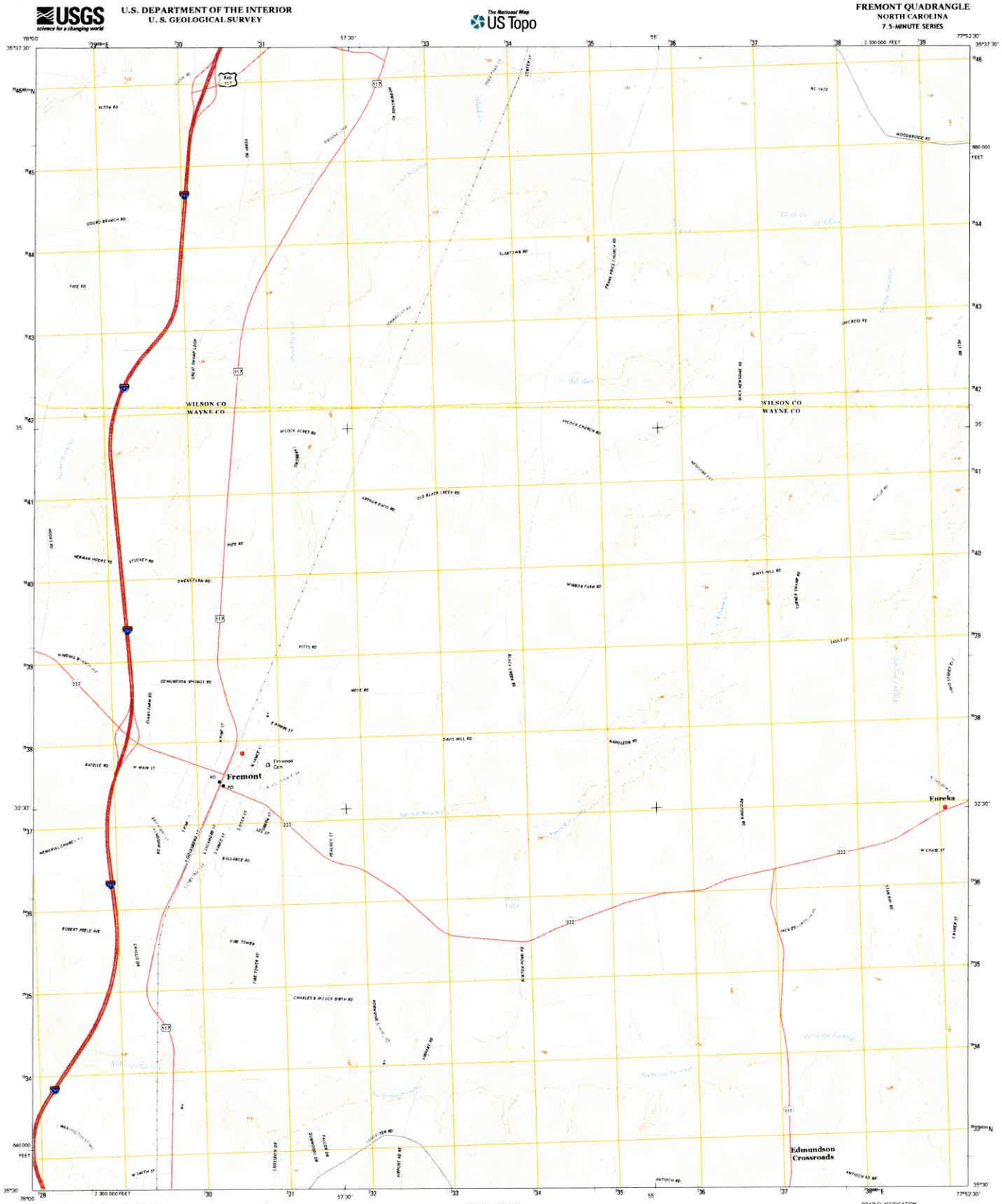
Appendix C


FREMONT QUADRANGLE
NORTH CAROLINA
7.5-MINUTE SERIES
55'
2 36
2 37
2 38
2 330 000 FEET
2 39
77°52'30"
35°37'30"
39 46
NC-1620
WOODBRIDGE RD
680 000
FEET
Black Cr
Mill Run
Black Cr
Aycock Swamp
FRANK PRICE CHURCH RD
SITE
39 44
39 43
JAYCROSS RD
PELT RD
BUCK NEWSOME RD
39 42
WILSON CO
WAYNE CO
35'
NEWSOME EXT
BOGUE RD
39 41
100

USGS
science for a changing world

U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

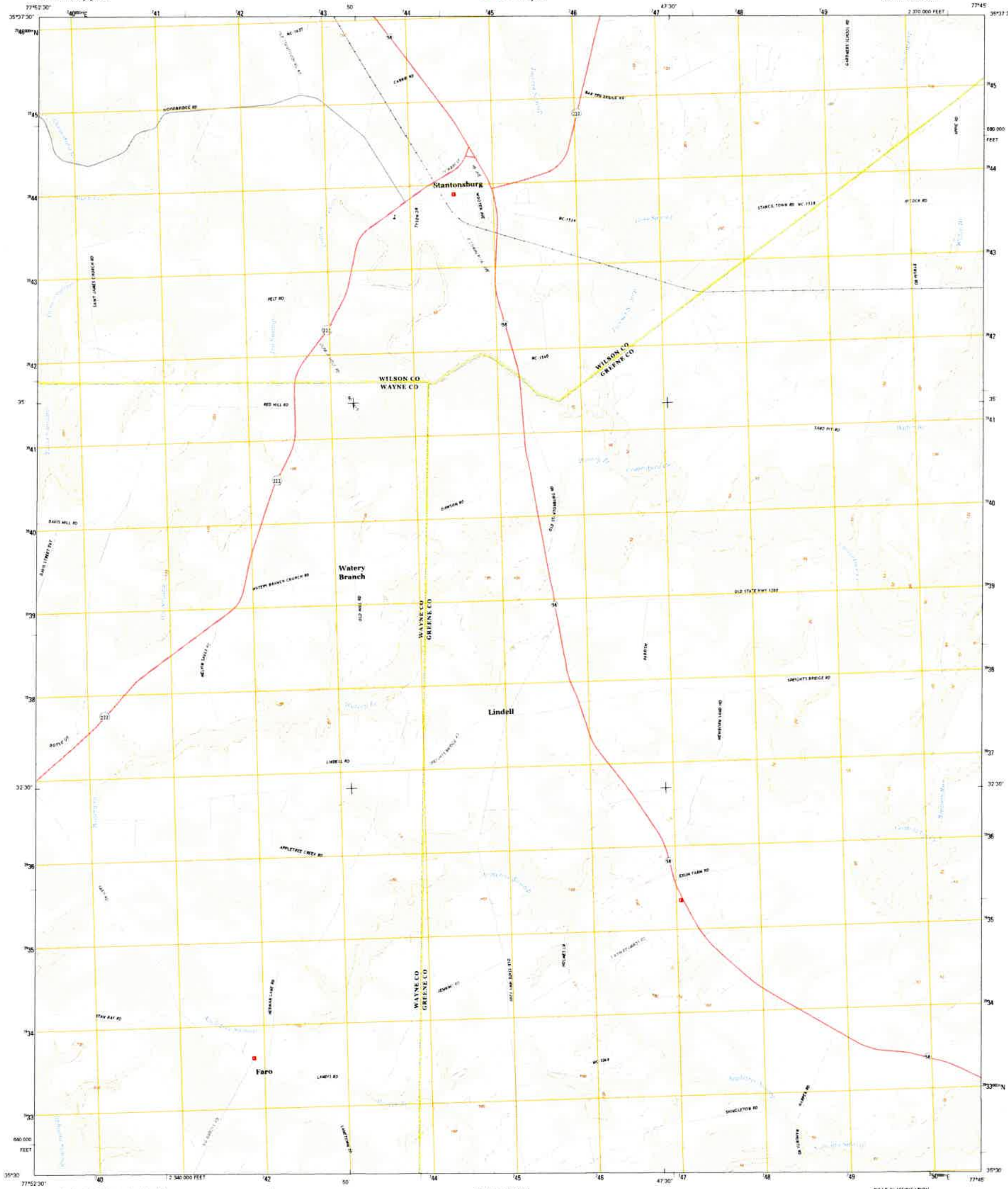



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY
The National Map
US Topo
FREMONT QUADRANGLE
NORTH CAROLINA
7.5-MINUTE SERIES
WILSON CO
WAYNE CO
Fremont
Enreka
Edmundson Crossroads
Produced by the United States Geological Survey
SCALE 1:24 000
ROAD CLASSIFICATION
FREMONT, NC
2013

U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

The National Map
US Topo

STANTONSBURG QUADRANGLE
NORTH CAROLINA
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid: Universal Transverse Mercator, Zone 18S
10 000-foot ticks: North Carolina Coordinate System of 1983

Imagery .... NAIP, May 2012
Roads .... ©2006-2012 TomTom
Names .... GNIS, 2012
Hydrography .... National Hydrography Dataset, 2012
Contours .... National Elevation Dataset, 2008
Boundaries .... Census, IBWC, IBC, USGS, 1972 - 2012

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.11

Wilson	Saratoga	Fountain
Fremont	Stantonsburg	Walstonburg
Northeast Goldsboro	Jason	Snow Hill

ADJOINING 7.5' QUADRANGLES

STANTONSBURG, NC
2013

Appendix D

Wilson County
Planning Department

Mark M. Johnson, AICP, CZO, CFM
Director

2201 Miller Road, South • PO Box 1728 • Wilson, NC 27894-1728 • Fax: (252) 399-2770

Planning/Inspections
252-399-2965

Mapping/GIS
252-399-2846

Wilson County Transportation Services
252-399-2817

June 5, 2014

David L. Newsome
441 Buck Newsome Rd.
Fremont, NC 27830

To Whom It May Concern:

This letter is in response to a request that was received by the Wilson County Planning Office, from D & D Septic, LLC for a Septic Treatment Facility and Compost Operation site located on Pelt Road, having PIN number 3637-35-1432. This farm is zoned Agricultural-Residential and because the finished compost product will be used for agricultural purposes, this will be a permitted use within the A-R zoning district.

Wilson County wants you to know that if you begin to sell the compost, then you must come into our office and apply for a Special Use Permit. If you should have any questions or need any other information please contact me at (252-399-2782) or you may email me at dwjones@wilson-co.com.

Sincerely,

Dwayne Jones

Dwayne Jones,
Planner I, CZO

Appendix E

D&D Septic, LLC

7/6/2014

Legend

- Panels
- Political Areas
- Stream Centerline
- Cross Sections
- Levee

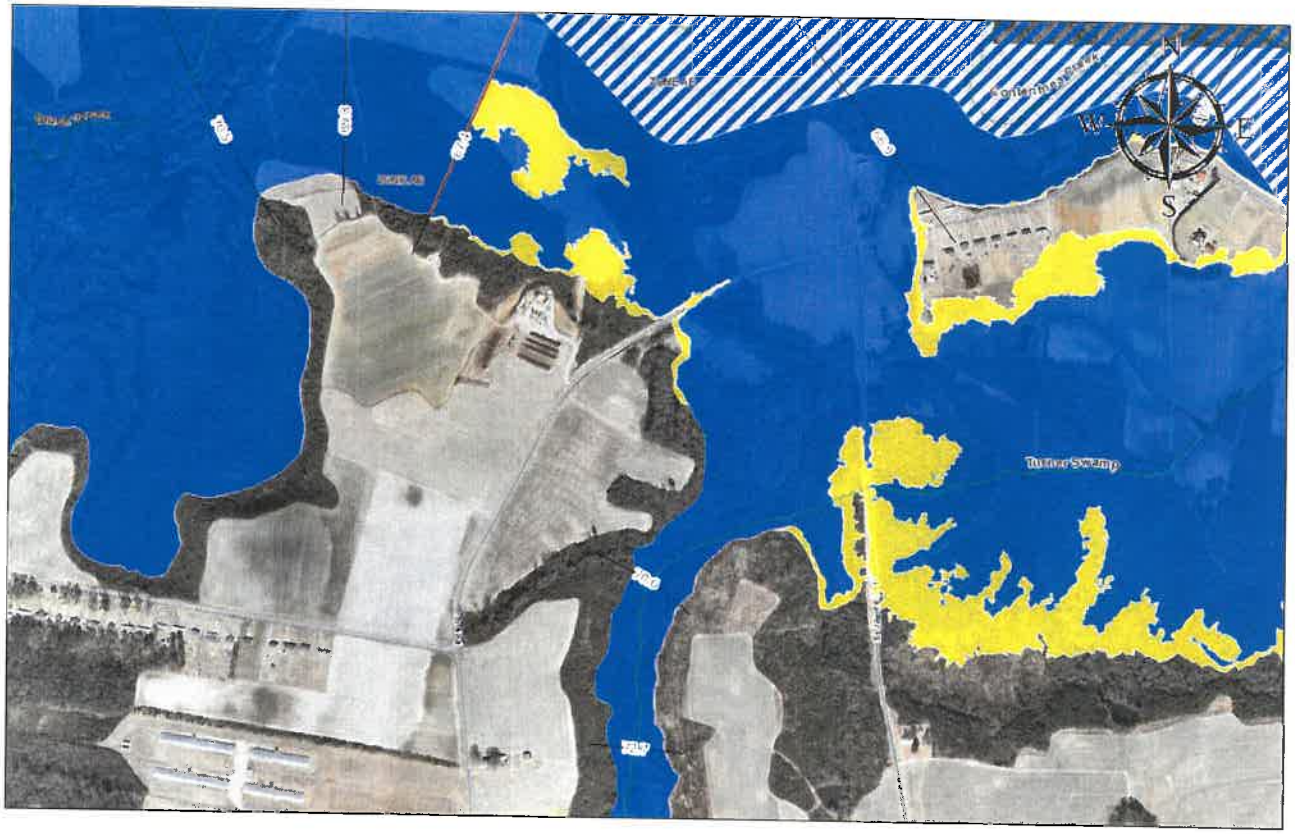
Flood Hazard Areas

- AE
- Floodway (AE)
- 0.2 % Chance Annual Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard

North Carolina
Floodplain Mapping Program

D&D Septic, LLC

7/6/2014



Legend

- Panels
- Political Areas
- Stream Centerline
- Cross Sections
- Levee

Flood Hazard Areas

- AE
- Floodway (AE)
- 0.2 % Chance Annual Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard

North Carolina
Floodplain Mapping Program

Appendix F

Environmental and Soil Service, Inc

P.O. Box 82
Pinetops, N.C 27864
Ph (252) 827-4348
Fax (252) 827-1382

ESS

August 2, 2007

David Newsome
477 Buck Newsome Road
Freemont, NC 27830

Subject: Soil Description and Nutrient Management Plan for +/- 16 acre site located on Pelt Road, Wilson County, North Carolina.

Enclosed is the necessary information for the permitting of a septage application site as required by the NC Division of Solid Waste. A copy of this information will also be sent to the Division of Solid Waste.

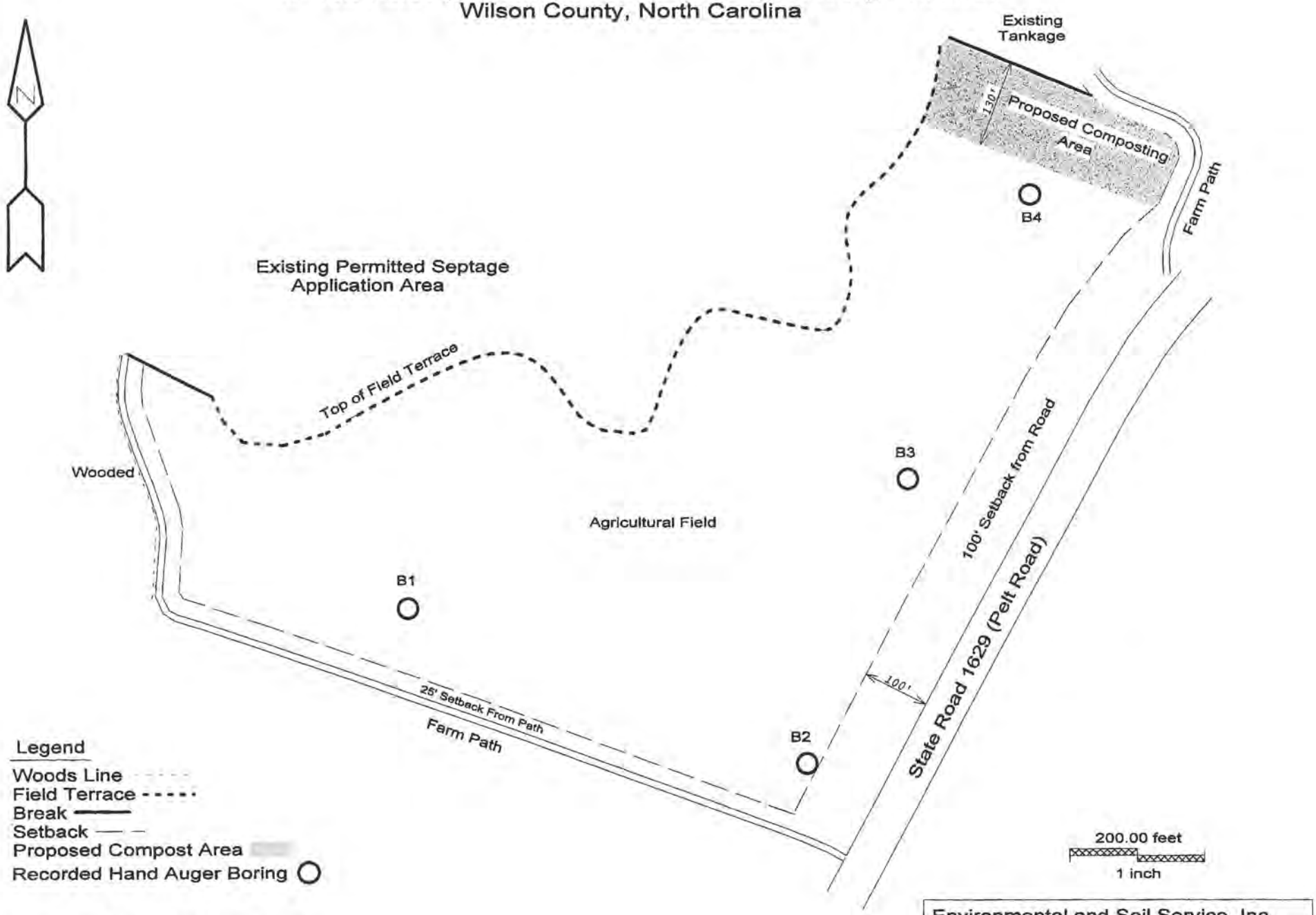
If you have any questions or need further assistance please call me at 252-827-4348.

Respectfully Submitted,

Scott Stone
Licensed Soil Scientist
Registered Sanitarian

TO DONALD PERRY
FROM DAVID NEWSOME
D+D SEPTIC L.L.C.

Proposed Septage Suitability M For D & D Septic, LLC
+/- 16.0 Acres (Excluding Setbacks & Compost Area), Pelt Road
Wilson County, North Carolina



Note: See Report for More Detail

Environmental and Soil Service, Inc.
P.O. Box 82
Pinetops, NC 27864

Soil Description
D & D Septic, LLC Septage Application

B 1

Ap 0-7 inches; Brown (10YR 4/4) sandy loam; granular structure, very friable
E 7-21 inches; yellowish brown (10YR 5/8) sandy loam; granular structure, very friable
B 21-41 inches; yellowish brown (10YR 5/8) sandy loam; granular structure, friable
Bt 41-44 inches; yellowish brown (10YR 5/8) sandy clay loam; weak subgranular blocky structure
Bt2 44-60 inches; yellowish red (5YR 5/8); sandy clay loam; weak subgranular blocky structure

Note: Water Table > 60 inches

B2

Ap 0-6 inches; yellowish brown (10YR 5/4) sandy loam; granular structure, very friable
E 6-27 inches; light yellowish brown (10YR 6/4) sandy loam; weak granular structure, very friable
B 27 -30 inches; yellowish brown (10YR 5/6) sandy loam; weak granular structure, friable
Bt 30-38 inches; brownish yellow (10YR 6/8) sandy clay loam; weak granular structure, friable
Bt2 38-42 inches; brownish yellow (10YR 6/8) sandy clay loam; common medium distinct red (2.5YR 4/8) mottles; weak medium subangular blocky structure
Bt3 42-52 inches; brownish yellow (10YR 6/8) sandy clay loam; common medium distinct red (2.5YR 4/8) mottles with few faint gray (10YR 6/1) mottles; weak medium subangular blocky structure
Bt4 52-60 inches; brownish yellow (10YR 6/8) sandy clay loam; common medium distinct red (2.5YR 4/8) mottles with common medium distinct gray (10YR 6/1) mottles; medium subangular blocky structure

Note: Water Table > 60 inches

B3

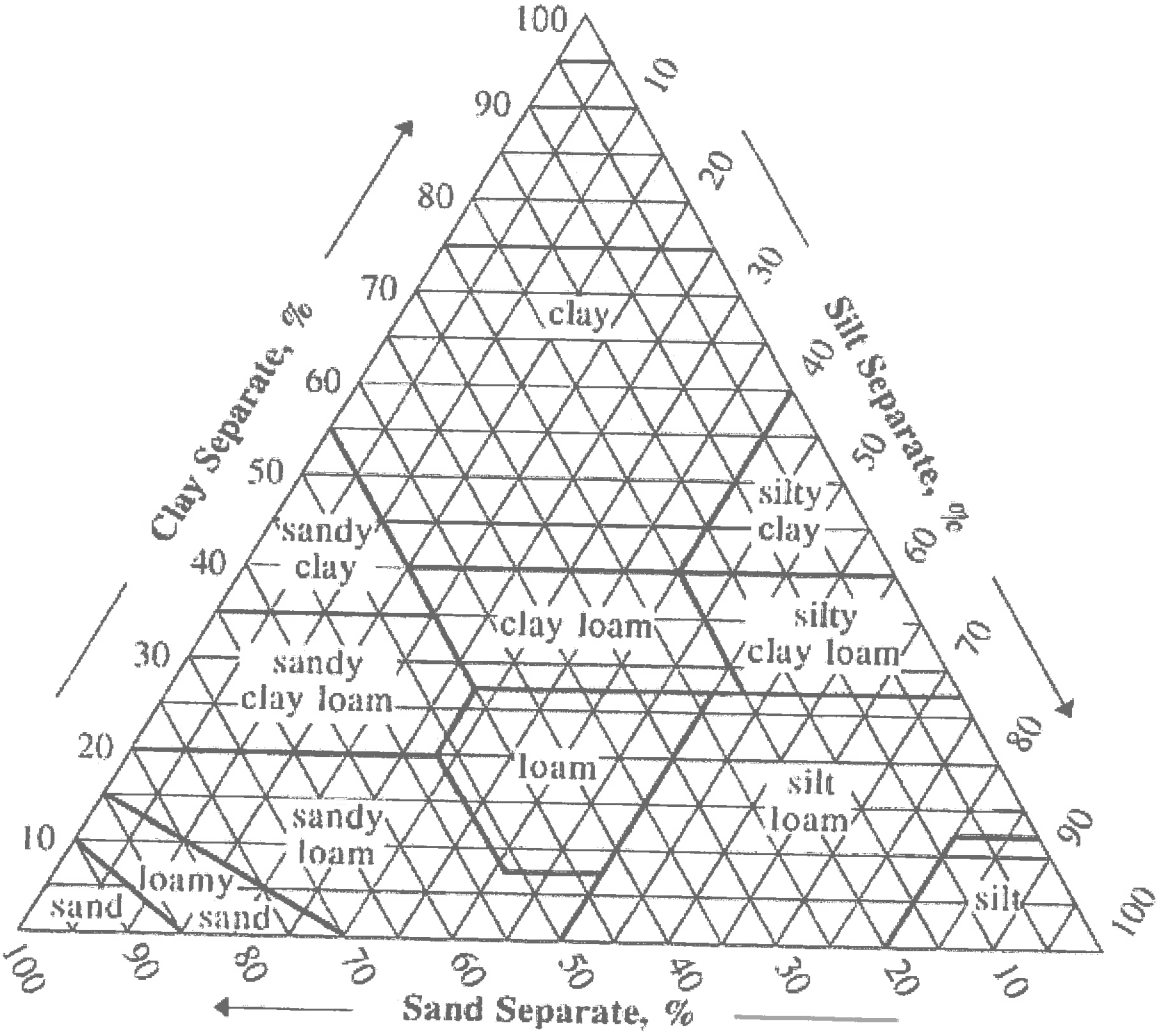
Ap 0-8 inches; brown (10YR 5/3) sandy loam; weak granular structure, very friable
E 8-18 inches; brownish yellow (10YR 6/8) sandy loam; weak medium granular structure, very friable
B 18-42 inches; strong brown (7.5YR 5/8) sandy loam; granular structure, friable
Bt 42-52 inches; strong brown (7.5 YR 5/8) sandy clay loam; weak subangular blocky structure
Bt2 52-60 inches; yellowish red (5YR 5/8) sandy clay loam; few medium light red (2.5YR 4/8) streaks; subangular blocky structure

Note: Water Table > 52 inches

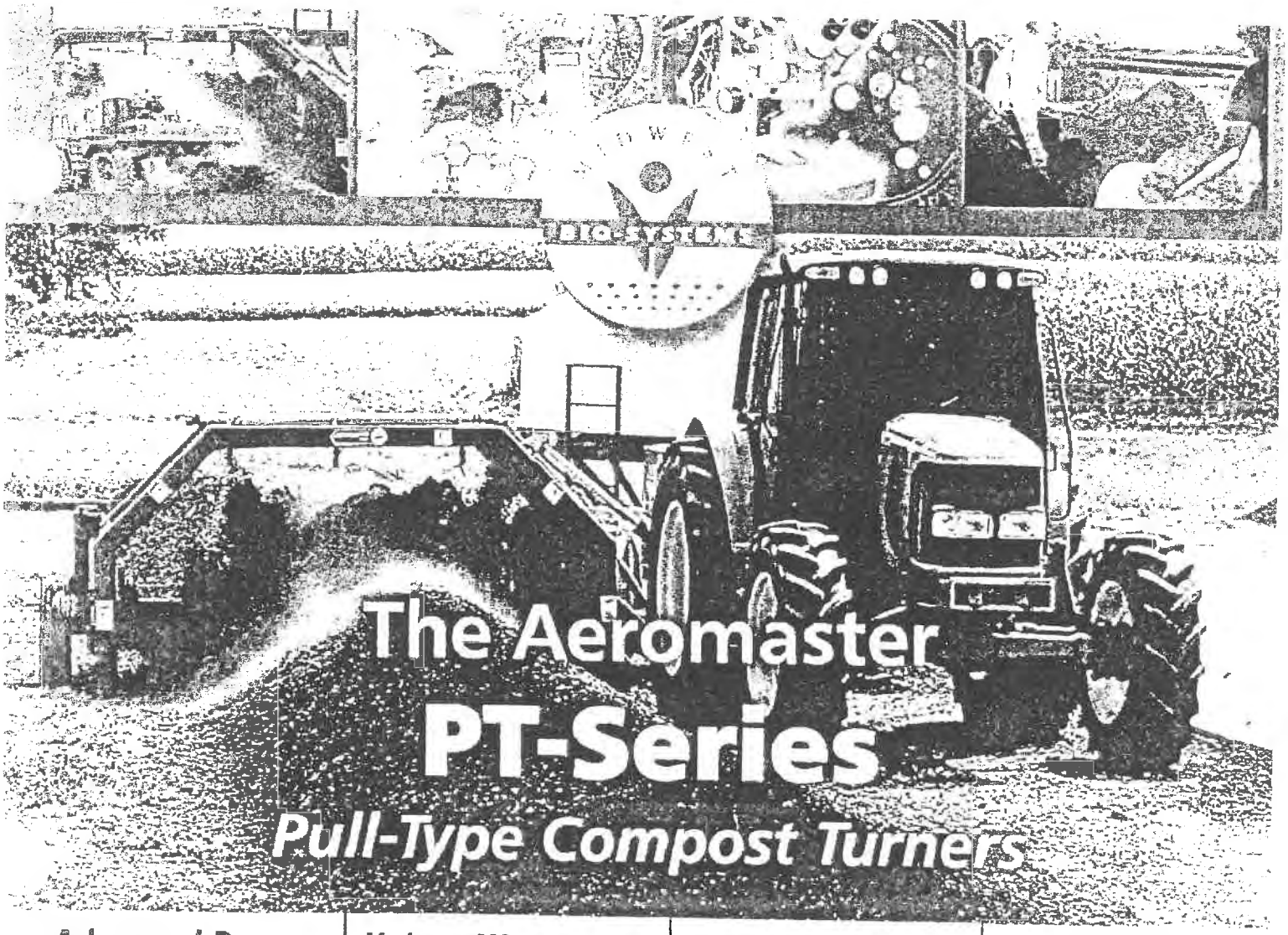
B4

Ap 0-8 inches; brown (10YR 5/3) sandy loam; granular structure, very friable
E 8-24 inches; light yellowish brown (10YR 6/4) sandy loam; granular structure, very friable
B 24-38 inches; brownish yellow (10YR 6/8) sandy loam; granular structure, friable
B2 38-44 inches; yellowish brown (10YR 5/8) sandy loam; granular structure, friable
Bt 44-50 inches; reddish yellow (7.5YR 6/8) sandy clay loam; weak subangular blocky structure
Bt2 50-60 inches; reddish yellow (7.5YR 6/8) sand clay loam; few medium light red (2.5yr 4/8) mottles; weak subangular blocky structure

Note: Water table > 60 inches


Clay Separate, %
Silt Separate, %
Sand Separate, %
clay
silty clay
sandy clay
clay loam
silty clay loam
sandy clay loam
loam
silt loam
sandy loam
loamy sand
sand
silt

Appendix G



The Aeromaster PT-Series

Pull-Type Compost Turners

Advanced Drum Design

- Variable drum speed
- Maximum aeration, CO_2 release
- Peaks windrow naturally
- Superior blending

Unique Watering/ Inoculant System

- Moisten and inoculate as you turn
- Even and thorough application
- Prevents water runoff and pooling

Hydraulically Retractable Drum

- Lifts completely out of the row in seconds
- Locks in place for safe transport
- Allows windrow inspection
- Easy exit from windrow

Exceptional Reliability, Low Maintenance

- Simple design requires little daily maintenance
- Heavy-duty tubular steel construction
- Expert craftsmanship

Models include: PT-120 (10-foot), PT-130 (11-foot) and PT-170 (14-foot)

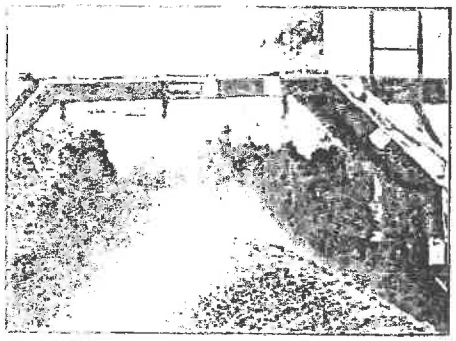
Designed to Produce High Quality Compost

Midwest Bio-Systems • 28933–35 E St. • Tampico, IL 61283
(815) 438-7200 • www.midwestbiosystems.com

Aeromaster PT Series Pull Type Compost Turners

The Competitive Edge...

The **advanced drum design** turns materials outside in and inside out to provide superior blending, aeration and CO_2 release. The variable 150-270 RPM drum speed ensures flexibility in blending new rows and building crumb structure. With an open hood the drum design naturally forms a peaked windrow.



The unique water and inoculation system assures even moisture to every particle as the turner moves through the windrow.

Windrow size varies with turner model. Aeromaster models process from 1,000 to 2,300 cubic yards per hour. The hydraulically adjustable rear axle adjusts on-the-go 6" up or down for optimum drum height when moving through the windrow. Contact Midwest Bio-Systems or your authorized dealer for assistance in choosing the model that is the best fit your operation.

Other Features:

- Heavy-duty construction — Tubular steel frame means low maintenance coupled with exceptional reliability.
- Driveline safety — Automatic clutch PTO driveline protection.
- One-man operation — Aerate, blend, water and inoculate all in one pass.

The **mechanical watering and inoculation system** with water manifold and spray nozzles assures even moisture to every particle as the turner moves through the row. Turner water system with cam-lock hose fitting is ready for quick attachment to the Aeromaster Water Tank and Trailer unit of your choice. The convenience of adding water as the row is turned assures sufficient moisture for maximum biological activity and material breakdown.

This process also reduces water waste, minimizing runoff and pooling. The system includes four sets of nozzle inserts for maximum control over the quantity of water applied.

The ***retractable drum assembly*** hydraulically lifts out of the windrow in seconds at any time. This unique feature allows the operator to view the windrow stratification and inspect the profile of windrow. Should windrow conditions or other priorities require an early exit from the windrow, the vertical lift feature makes it quick and easy. The hydraulic ram safety valve provides protection from hood movement and safety latches lock the hood in vertical position for transport

The operator can ***adjust the drum height,*** with the hydraulically controlled trailer axle and the outrigger jack to minimize the anaerobic layer at the bottom of the windrow.

Tractor Requirements

- 80 - 120 horsepower
- 540 power takeoff (PTO)
- Creeper gear or hydrostatic drive (to allow for 0.2 mph or 20 feet per minute of travel at rated PTO speed)
- Two sets of remote hydraulic outlets
- A third set of hydraulic outlets with free return required for optional hydraulic water pump

Also from Midwest Bio-Systems...

Advanced Composting Products and Services

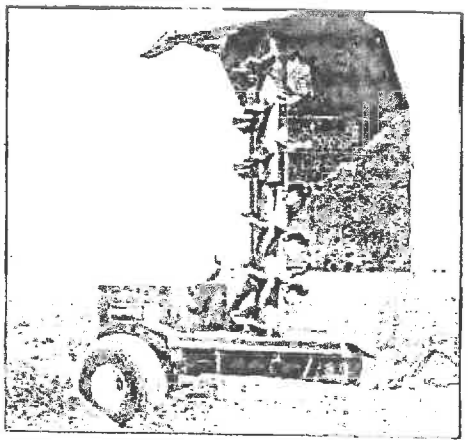
- ACS Compost Workshops
- Compost Microbial Inoculants
- Compost Quality & Feedstock Laboratory Analysis
- Test Instruments
- Fabric Covers

Aeromaster Compost Production Equipment

- Self-Propelled
- Tractor Pulled

Sustainable Balanced Soil Fertility System

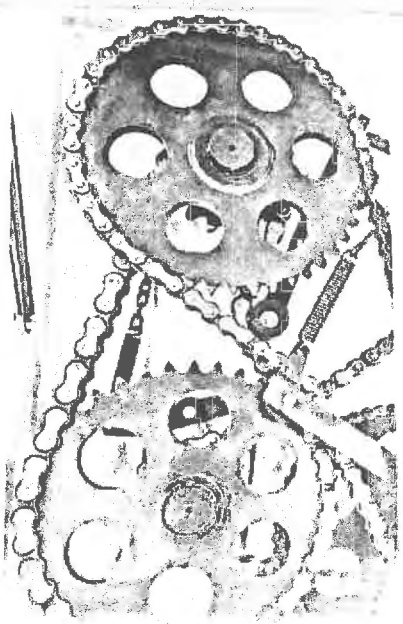
- Chemical and microbiological laboratory analysis
- Interpretation of lab analysis
- Fertility programming
- Liquid microbial inoculants, food sources, and nutrients
- Tea Power Products – For the production of high quality agriculturally effective compost tea



The drum assembly can be lifted completely out of the windrow.

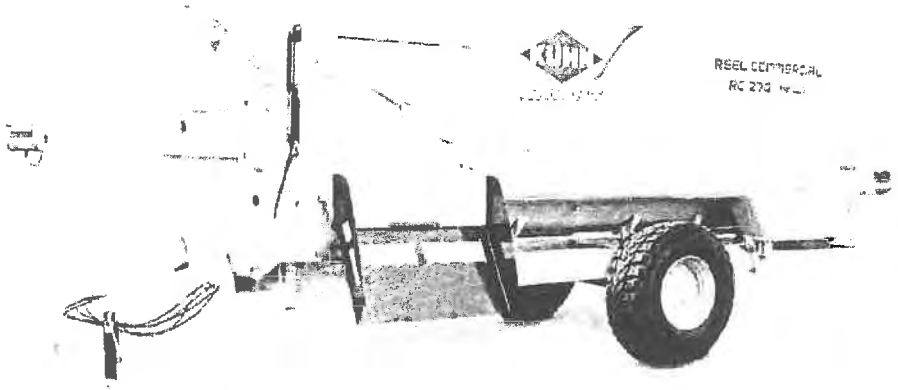
Midwest Bio-Systems • 28933-35 E St. • Tampico, IL 61283
(815) 438-7200 • www.midwestbiosystems.com

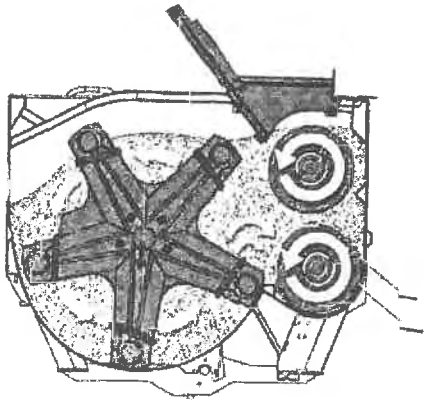
KUHN



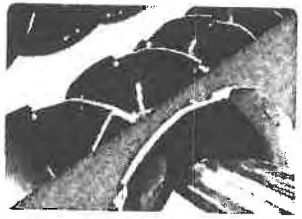
Rugged and Durable

HD DRIVE

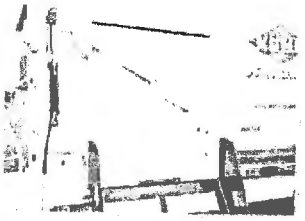




Low Fuel Consumption!



Flexible for Roughage and Grains



Improved Discharge

Secure, but Accessible

Appendix H

D&D Septic, LLC

Permit (98-08) (00953)

Hours of Operation

Monday-Friday 7am-5pm

(Some) Saturdays 7am-12pm

EMERGENCY NUMBERS

David Newsome 252-206-6802

Daniel Newsome 919-920-0368

Office 919-242-3751

Feedstocks Accepted are:

Land clearing/yard waste

(**only** feedstock accepted from general public)

Woodchips

Hay

Tobacco dust

Grease trap waste

Septic waste

<u>ONLY</u> Residuals Accepted are:

Clear liquid/dry solid from D&D Septic

No hazardous, asbestos or medical waste will be accepted on this site!

Appendix I

FARM SAFETY ASSOCIATION
Growing Safety

AGRICULTURAL MACHINERY HAZARDS

FACT SHEET

The very fact that agricultural machinery uses tremendous power to do work makes its operation a potential hazard for both the operator and bystanders. Even though manufacturers try to ensure that their machinery is as safe as possible, the nature of some work creates inherent hazards, which cannot be removed. Most accidents with agricultural machinery can be attributed to human error.

In many cases the operator forgot something, took a shortcut or a risk, ignored a warning, wasn't paying close attention or failed to follow safety rules. Accidents with farm machinery can be crippling or even fatal. It is important to recognize and be alert to possible hazards and to take precautions to avoid injury.

There are many different kinds of agricultural machinery--mowers, tractors, shredders, harvesters, grinders, blowers, augers, balers, etc.--but they all have similar characteristics and similar hazards. You can be cut, crushed, pulled in or struck by an object thrown by these machines.

They can have cutting edges, gears, and chains, revolving shafts, rotating blades, levers and similar hazards. You can also be injured if you fall while working on or near any of these machines.

Some machine parts cannot be completely shielded in order to do their job. For instance, a cutting blade cannot be totally enclosed, or it could not cut. Operators remove guards for maintenance and often they don't get replaced. This creates a potentially dangerous situation.

Most agricultural machines have similar or common components to do their work. A basic understanding of these and the hazards they pose will heighten your safety awareness and prevent injury.

SHEAR POINTS

Shear points are created when the edges of two objects are moved closely enough together to cut a soft material, as in the case of a pair of shears or an auger.

Cutting points are created when a single object moves forcefully or rapidly enough to cut, as in the case of a sickle blade.

Both shear and cutting points are created on machinery designed to cut, as in harvesters, and on those that are not designed to cut, as in an auger. They are hazards because of their cutting force, and because they often move so rapidly that they may not be visible. It can be easy to forget that they are operating.

Because some cutting and shearing points cannot be guarded, it is important to be aware of the hazard and to be especially alert when they are operating. It is also important to warn others and to look out for their safety, because of the danger of thrown objects while using cutting-type equipment.

PINCH POINTS

Pinch points are formed when two rotating objects move together and at least one of them moves in a circle. For example, the point at which a belt runs onto a pulley is a pinch point.

Belt drives, chain drives and gear drives are other sources of pinch points in power transmission devices. Feed rolls, gathering chains and similar equipment to draw crops into the machine also create pinch points.

Fingers, hands and feet can be caught directly in pinch points, or they may be drawn into the pinch points by loose clothing that becomes entangled. Contact may be made by just brushing against unshielded parts or by falling against them.

You can become entangled in pinch points if you take chances and reach over or work near rotating parts. Machines move too fast to get out of a pinch point once you become caught in it.

To avoid injury from pinch points, be aware of the areas where pinch points occur and avoid them. Wear clothing that fits well and is not loose or floppy. Never reach over or work near rotating parts. Turn off machinery to work on it. Always replace shields if you must remove them for maintenance.

WRAP POINTS

Rotating shafts are the most common source of wrap point accidents, although any exposed machine part that rotates can be a wrap point. A cuff, sleeve, pant leg or just a thread can catch on a rotating part and result in serious injury. Entanglement with a wrap point can pull you into the machine, or clothing may become so tightly wrapped that you are crushed or suffocated. In other cases, you could be thrown off balance and fall into other machine parts.

Even a perfectly round shaft can be a hazard if there is enough pressure to hold clothing against the shaft. Shafts that are not round increase the hazard significantly. Clothing is more likely to catch if there is a little mud or dried manure, or a nick on the shaft. Ends of shafts that protrude beyond bearings are also dangerous. Universal joints, keys and fastening devices can also snag clothing.

Check all equipment for potential wrap points, and shield those that can be shielded. Place warnings on those that cannot be covered, or paint them a bright color, perhaps with wide stripes. Be aware of wrap points and be alert to their danger.

CRUSH POINTS

Crush points are created when two objects move toward each other or one object moves toward a stationary one. For example, hitching tractors to implements may create a potential crush point.

Failure to block up equipment safely can result in a fatal crushing injury. A jack may slip, a hose or overhead support may break, or the equipment may roll. Be sure to take extra precautions when working with machinery that is raised for any reason.

Crushing injuries most commonly occur to fingers that are crushed at the hitching point. Wait until the tractor has stopped before stepping into the hitching position.

If possible arrange the hitch point so that the tractor can be backed into position without anyone between. Always know what the other person is doing.

The head or chest of an operator may be crushed between the equipment and a low beam or other part of a building. Usually, these accidents occur when operating the machine in reverse Tree limbs are also potential hazards when working with tractors and other machinery.

To prevent being crushed or pinned, first, recognize the potentially dangerous situations, then, avoid them whenever possible.

Block all machinery securely if you must work under it. If an implement can roll freely, block its wheels so it cannot roll.

FREE-WHEELING PARTS

Many machine parts continue to spin after the power is shut off. Examples of this are cutter heads of forage harvesters, hammer mills of feed grinders, rotary mower blades, fans, flywheels, etc.

Never touch these parts until they have stopped moving completely. This may take as long as several minutes.

SPRINGS

Springs are commonly used to help lift equipment such as shock absorbers, and to keep belts tight and may harbour potentially dangerous stored energy. Springs under compression will expand with great force when released, and springs that are stretched will contract rapidly when released.

Know what direction a spring will move and how it might affect other machine parts when released, and stay out of its path.

HYDRAULIC SYSTEMS

Hydraulic systems store considerable energy. They lift implements, such as plows, change the position of implement components, such as a combine header or bulldozer blade, operate hydraulic motors and assist in steering and braking.

Careless servicing, adjustment or replacement of parts can result in serious injury. High-pressure blasts of hydraulic oil can injure eyes or other body parts by burning or penetrating the tissue due to the liquid being hot. Leaks are a serious hazard.

Never inspect hydraulic hoses with your hands because a fine jet of hydraulic fluid can pierce the skin. Jet streams from even pinhole leaks can penetrate flesh. Get medical attention quickly, or you could lose that part of the body that was injected.

Use a piece of cardboard to test the hose for leaks. Before attempting any service on hydraulic systems, shut off the engine, which powers the hydraulic pump.

Lower the implement to the ground and relieve the pressure. Follow the instructions in your operator's manual, because the specific procedures for servicing the systems are very important to your safety.

PULL-IN POINTS

Pull-in points usually occur when someone tries to remove plant material or other obstacles that have become stuck in feed rolls or other machinery parts. Always shut off the power before attempting to clear plugged equipment.

101-75 Farquhar Street, Guelph, Ontario N1H 3N4
(519) 823-5600

Appendix J

D & D Compost, LLC

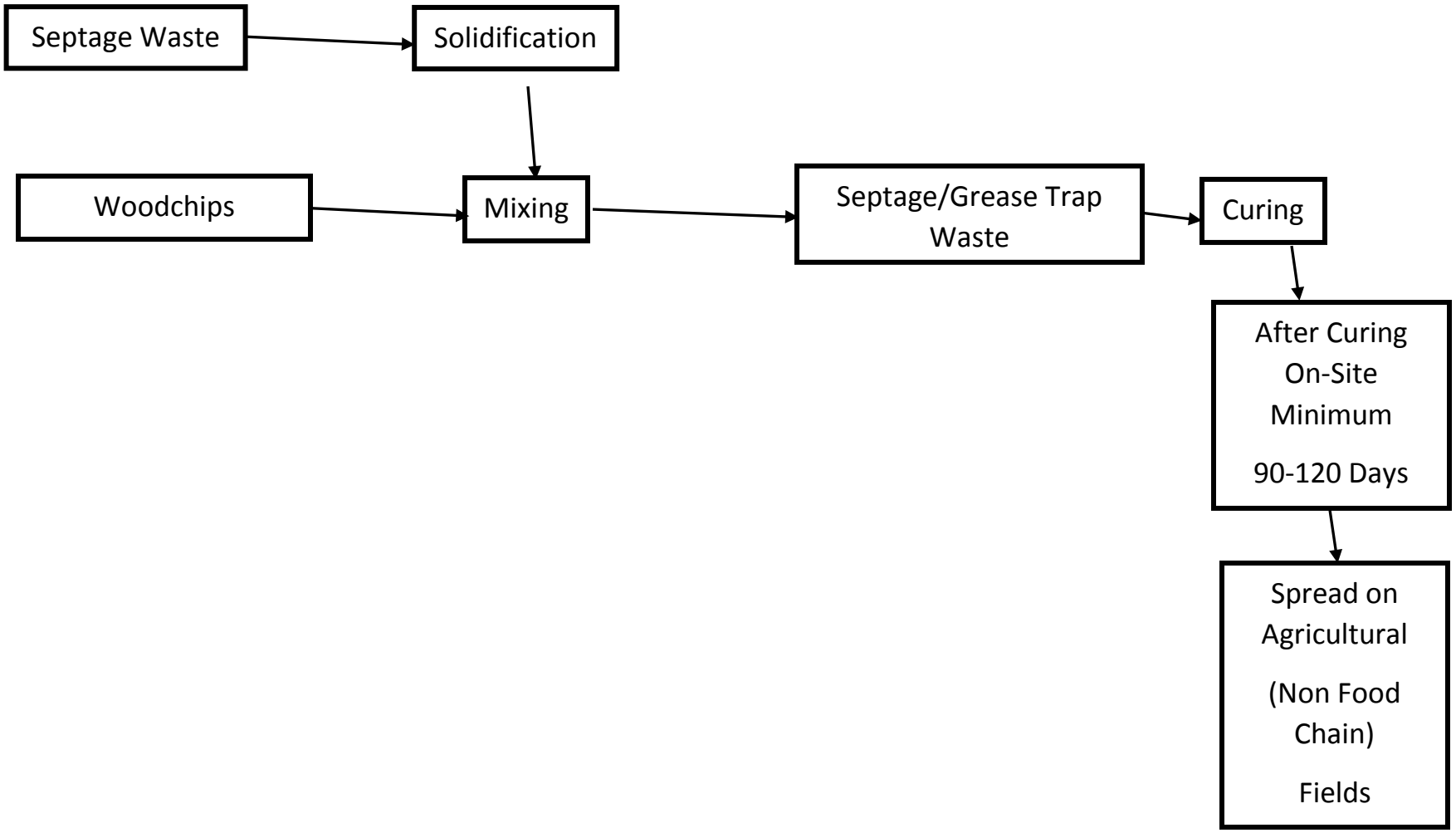
Temperature Monitoring Record

Month																	
Sample Location Windrow #	Date Windrow Started Curing	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

D & D Compost, LLC

Temperature Monitoring Record

Month																	
Sample Location Windrow #	Date Windrow Started Curing	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32



D & D Organic Farming – Operational Flow Chart

45411

kemira

SUPERFLOC SD-2081

Cationic polyacrylamide

WARNING!
CAUSES SKIN IRRITATION
MAY CAUSE EYE IRRITATION

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

First Aid
Ingestion: Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person. If swallowed, call a physician immediately.
Skin contact: Do not reuse contaminated clothing without laundering. Wash immediately with plenty of water. Remove contaminated clothing and shoes without delay. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.
Eye contact: Rinse immediately with plenty of water for at least 15 minutes.
Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

IMPORTANT! Spills of this product are very slippery.
Spills should be scooped up or wiped up immediately, and the spill area flushed with water.

D&D Septic
441 Buck Newsome Road

FREMONT NC 27830 US

ORDER#: 1001690384

PO#: 2582

Label ID: 629843
Template: 35

BATCH: 1N00053322

NET WEIGHT: 465 LB / 211 KG

The following components of this product are listed in accordance with right-to-know laws:

CAS No. / Component		
64742-47-8	Petroleum distillate hydrotreated light	Modified polyacrylamide
7732-18-5	Water	Modified polyacrylamide
68439-50-9	C12-C14 Alcohol ethoxylated	Component name witheld
68002-97-1	Alcohols (C10-16), ethoxylated	Component name witheld
68551-12-2	Alcohols (C12-16), ethoxylated	

Before handling this material, read Material Safety Data Sheet for more detailed safety, health and environmental information.

ATTENTION - Container headspace may contain hazardous gas or vapor. Open container with care, using adequate ventilation and avoiding ignition sources. Do not use air pressure or apply heat with open flame to remove contents of container. After emptied, container may retain solid, liquid, and/or vapor residues. Continue to observe all precautions, if any, on label. Do not cut, puncture, torch, or weld on or near emptied container. Do not use for other purposes.

KEMIRA CHEMICALS INC. - 1000 PARKWOOD CIRCLE, SUITE 500 - ATLANTA, GA 30339 USA
800-347-1542 (For product information) : 1-800-424-9300 or 1-703-527-3887 (CHEMTREC) : 1-613-996-6666 (CANUTEC)

Wilson, Donna

From: Georgoulias, Bethany
Sent: Monday, December 05, 2016 8:39 AM
To: Wilson, Donna
Cc: Bennett, Bradley; Riddle, Rick L; Gallagher, Tony
Subject: RE: D&D Organic Farming compost facility, Fremont, Wilson County

Hi, Donna,

Rick Riddle is handling the application conclusion for this one (we will be returning it to the applicant), since our site visit before Thanksgiving did confirm no potential point sources, and therefore **no need for an NPDES discharge permit**. We have been waiting to close the loop with Nathaniel Thornburg in Land Application permitting before sending out official correspondence on this one (since D&D has a Land App permit for this site as well), and that's been the hold up on our end for getting a letter out/application returned. Nathaniel was out of the office for a week around the holiday.

I just wanted to touch base about it. If you have any further questions about it, just let Rick or me know.

Thanks,
Bethany

Bethany Georgoulias
Environmental Engineer
Stormwater Program, Division of Energy, Mineral, and Land Resources
N.C. Department of Environmental Quality

919 807 6372 office
bethany.georgoulias@ncdenr.gov

1612 Mail Service Center, Raleigh, NC 27699-1612 (mailing)
512 N. Salisbury Street, Raleigh, NC 27604 (location)
Website: http://deq.nc.gov/about/divisions/energy-mineral-land-resources/stormwater

From: Wilson, Donna
Sent: Friday, December 02, 2016 5:54 PM
To: Donald Perry (dmperryeng55@gmail.com) <dmperryeng55@gmail.com>
Cc: College, John H <john.college@ncdenr.gov>; Georgoulias, Bethany <bethany.georgoulias@ncdenr.gov>; David Newsome (memanew30@yahoo.com) <memanew30@yahoo.com>
Subject: RE: D&D Organic Farming compost facility, Fremont, Wilson County

D&D Organic Farming, LLC

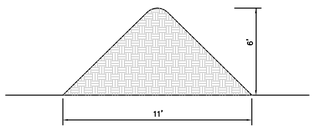
COMPOST FACILITY

7984 PELT ROAD STANTONSBURG, NC 27883

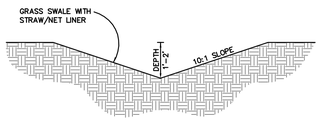
BUSINESS OFFICE ADDRESS:
441 BUCK NEWSOME ROAD
FREMONT, NC 27830

Herring-Sutton & ASSOCIATES • P.A.
ENGINEERS • SURVEYORS • PLANNERS
2201 NASH STREET NW – WILSON, NC 27896
TEL (252)291-8887 FAX (252)291-5900 EMAIL:HSA2002@earthlink.net

PROJECT NUMBER	10-4867A
DATE	August 2016
SURVEYED BY	DP
DESIGNED BY	DMP
DRAFTED BY	DMP
CHECKED BY	DMP

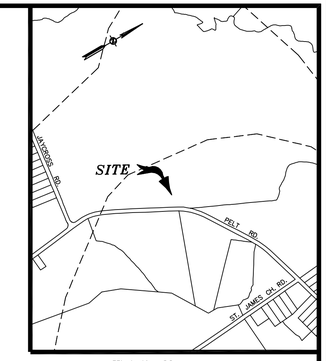


WINDROW DETAIL (Max.)
NO SCALE



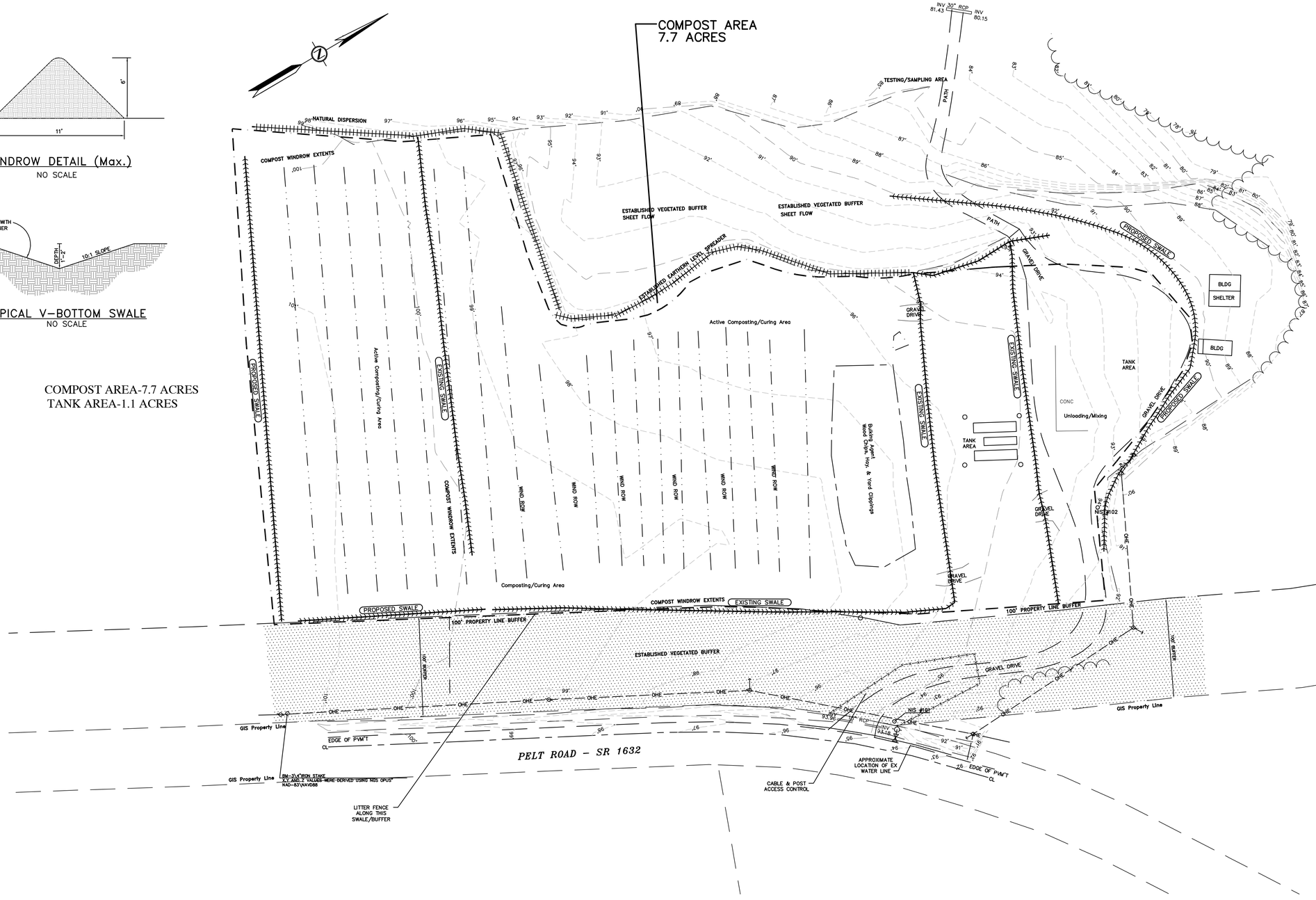
TYPICAL V-BOTTOM SWALE
NO SCALE

COMPOST AREA-7.7 ACRES
TANK AREA-1.1 ACRES



Vicinity Map
Not to Scale

A COY OF THE PERMIT, OPERATION PLAN, AND SITE DRAWINGS WILL BE KEPT ON-SITE AT ALL TIMES.TOR.



Revision	Date	By
NCDEQ	06-06-16	DMP

Herring-Sutton & Associates, P.A.
Engineers - Surveyors - Planners
2201 Nash Street NW, Wilson, North Carolina 27896 (252) 291-8887

D & D Organic Farming, LLC
Wilson County, N.C.

Site Plan

Date: June 2014
Scale: 1" = 50'
Map No. 2010-4867A
Drawn by: dmp
Sheet No. of