

12300 MAYES RD

01123114

7/9/08

marliwr

Groundwater and Wastewater Services File Imaging Project
May 2007
Barcode Font = IDAutomationHC39M

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

NC DENR
Division of Environmental Health
On-Site Wastewater Section

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

Permit #: **30001301** GWS File #: **14263** Tax Parcel #: **011-231-14**

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

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 11/28/2011

Intallation Type: Commercail/Industrial - New System Business Type: Commercial

Facility Size (ft^2): 20000 # Employees/Shift: 110 # Shifts: 1

Wastewater Type: Sewage Water Supply: Community

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

Initial System Specifications:

Design Flow (gpd):	1100	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	2000	Pump Tank Size (gal):	2000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1833	Total Trench Length (ft):	611
Maximum Trench Depth (in):	42	Depth of Media (in):	N/A	Distribution Device:	Manifold (LPP Distri		

III. Repair System Type: PPBPS (pressurized) **System Classification:** IVa

Repair System Specifications:

Design Flow (gpd):	1100	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	2000	Pump Tank Size (gal):	2000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1833	Total Trench Length (ft):	611
Maximum Trench Depth (in):	42	Depth of Media (in):	N/A	Distribution Device:	Manifold (LPP Distri		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

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

- No work shall be conducted on the septic system until an INSTALLATION APPROVAL is granted by the Department.
- The septic system installer shall be a registered septic contractor with Mecklenburg County Health Department.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Trevor Thomason Owner/Legal Agent: _____
Print Name

Signature: _____ Signature: _____

Date Issued: 11/28/2006

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
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NC DENR
Division of Environmental Health
On-Site Wastewater Section

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

Permit #: **30001301** GWS File #: **14263**

IV. Permit Conditions/Comments:

- Owner agreement forms for site reclassification shall be on file prior to issuance of Construction Authorization.
- This type of septic system requires an inspection once every 3 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- This type of septic system requires a Certified Operator to maintain the system. A system maintenance contract with a Certified Operator must be on file prior to issuance of an Operation Permit.
- This type of repair system requires the property owner to obtain a contract with a Certified Operator to perform routine inspections and maintenance on the system.
- This type of repair system requires periodic inspections by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- The septic system shall be installed in accordance with the plans submitted by the wastewater system design consultant.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.
- Upon completion of the project the system designer shall provide Groundwater & Wastewater Services with a letter certifying that the system was installed in accordance with the approved design.
- The system must be water tested during the final inspection to verify proper operation and set system pressure.
- An effluent filter is required on the pump discharge pipe exiting the pump tank.
- All tanks (septic and/or dosing) must be water tested for 24 hours during the final inspection.
- "Traffic Rated" tank(s) is required due to tank installation depth(s) and/or location.
- A "Public Water Supply Well" will serve the school. All components of the septic system must be located at least 100 ft. from this well. Septic system desinged for a total occupancy of 110 persons (staff + children). No on-site food preparation permitted, bagged/boxed lunches brought in by children.

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

- No work shall be conducted on the septic system until an INSTALLATION APPROVAL is granted by the Department.
- The septic system installer shall be a registered septic contractor with Mecklenburg County Health Department.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: Trevor Thomason

Signature: _____

Date Issued: 11/28/2006

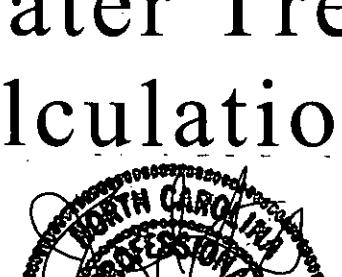
Owner/Legal Agent: _____
Print Name

Signature: _____

Phoenix Montessori School
12300 Mayes Road
Huntersville, NC

BSDE
BULLA SMITH
DESIGN ENGINEERING

Wastewater Treatment Calculations



August 25, 2006

APPROVED
ON 11-28-06
TREVOR

Prepared By:

Jeffrey I. Smith, PE

T 704.333.3122
F 704.333.8252
www.bullasmith.com
1347 Harding Place
Suite 201
Charlotte, NC 28204

Project: Phoenix Montessori
Huntersville, NC

Date: August 24, 2007

Low-Pressure Panel System Design

Design Flow Rate

Facility Type	Day School (no cafeteria or showers)
Design Flow (gal /day/unit)	10
# of Units	110
Design Rate (gal/day)	1,100

Area of Trench Bottom

Application Rate (gal/ft^2)	0.3
Area (ft^2) (flow rate / application rate)	3,667

Lineal Feet of Conventional System

Trench Width (ft)	3
Length (ft)	1,222

Absorption Field Area Required Conventional System

Trench Spacing (ft o.c.)	9
Drainage Area (sf)	11,000
Repair Area (sf)	11,000
Total Area (sf)	22,000

Lineal Feet of Panel System

Reduction for 16" high panel system	0.5
Length (ft)	611

Absorption Field Area Required Panel System

Trench Spacing (ft o.c.)	9
Drainage Area (sf)	5,500
Repair Area (sf)	5,500
Total Area (sf)	11,000

Number of Panels Required

Panel Length (in)	46
Panel Spacing (in)	6
Line Length (in)	7,333
Total # of panels required	141

Dosing Tank

Tank Length (ft)	10
Tank Width (ft)	6
Tank Depth (below inlet pipe) (ft)	4.5
Storage Volume (gal)	2020
Storage Volume (gal/in)	37.40

Project: **Phoenix Montessori**
Huntersville, NC

Date: **August 24, 2007**

Low-Pressure Panel System Design

Design Layout:

Laterals	Length (ft)	# Panels	Calculated
#1	43.33	10	10.00
#2	74.33	17	17.15
#3	87.33	20	20.15
#4	87.33	20	20.15
#5	87.33	20	20.15
#6	87.33	20	20.15
#7	87.33	20	20.15
#8	61.33	14	14.15
Totals	615.64	141	142.07

Absorption Area Provided:

Length (ft)	88
Width (ft)	66
Area (ft^2)	5,808

Repair Area Provided:

Length (ft)	87
Width (ft)	65
Area (ft^2)	5,655

Pump System Design: (1 orifice per panel)

System Pressure Head (ft)	2	Value selected by system designer (must be between 2-5 ft.)
Orifice Diameter (in)	0.156	Size selected by system designer (1/8 in. minimum)
Flow Rate per Orifice (gpm)	0.41	Determined from orifice flow design table
Total System Flow Rate (gpm)	60	Total number of panels required multiplied by the orifice flow rate
System Dose Volume (gal)	507.6	Total number of panels required multipled by 3.6 gal./panel
Pump Run Time (min)	8.46	System dose volume divided by the total system flow rate
Pump Tank Drawdown (in)	13.57	1,000 gal. Pump tank, volume is approximately 21 gallons per inch
		1,500 gal. Pump tank, volume is approximately 29 gallons per inch

Comments:

1. Install system using 3 ft. wide trenches.
2. Install drainlines on 9 ft. centers, level, and on contour.
3. System design requires effluent pump for distribution.
4. 100% repair area (PPBPS) required for property.

Project: Phoenix Montessori
Huntersville, NC

Date: August 24, 2007

Low-Pressure Panel System Design

Pump Sizing:

Pipe Material: Schedule 40 PVC	
Pipe Diameter (in)	2
Pipe Length to End of Highest Lateral	179
Friction Loss (per 100 ft from chart) (ft)	5.84
Total Friction Loss	10.5
Elevation Change (static lift) (ft)	8
System Pressure Head	2
Network Losses	0.6
Total Dynamic Head	22.0

Pump Selection:

Minimum Capacity (gpm)	60
Minimum Total Dynamic Head (ft)	22.0

Pump: Myers ME 50D Effluent Pump

Mecklenburg County

This page is left in the original file as a placeholder. The following item(s) were removed from the original file prior to scanning and returned post scanning:

↘ **Large-format Drawings**

Original File Number: 14263 / 12300 Mayes Road

Box Number: 12

Number of pages associated with file: 1 A

General Comments: 2 maps total this file

Imaging Solutions and Services, Inc.

Thomason, Trevor

From: Thomason, Trevor
Sent: Wednesday, August 30, 2006 8:13 AM
To: 'sdoe@bullasmith.com'
Subject: Agreement Form

http://charmeck.org/NR/rdonlyres/eelmhntueezhibhsyekyhg7mbkotndqaejx7kqmbrypjgo4jwmiiqg5mmcpa3jufobs5te5d4gkhriwvacayf

The form should be completed and recorded at the Register of Deeds before picking up the Improvement Permit. The applicant should bring a copy of the form showing that they have been recorded to our office.

I need a floor plan design for the new classroom building. This is required to verify that the building will not have a cafeteria or showers.

I will fax you a new application w/ the correct permitting information completed. Please have the applicant sign and return to me.

Call me if you have any questions.

Thanks,
Trevor Thomason, RS
Sr. Environmental Specialist
Mecklenburg County - LUESA
Groundwater & Wastewater Services
Office: (704) 336-5568
Cell: (704) 363-5447
Fax: (704) 336-6894
Trevor.Thomason@MecklenburgCountyNC.gov
http://groundwater.charmeck.org

DIEATRA BLACKBURN
704-370-0408
- MSG ON 11/20/06 10AM

STEVEN 9-27-06
10:45
① AGREEMENT FORMS
② BLDG. PLANS

Phoenix Montessori Academy
12300 Mayes Rd.
Huntersville, NC 28078

MCHD File # 14263

Date Received: 8/25/06
Reviewer: Trevor Thomason
Date Reviewed: 8/28/06

Design Review Comments:

1. Sheet C-2; A permit from our office will be required in order to abandon the existing well at the site. Abandonment must be performed by a licensed NC well contractor.
2. Sheet C-5;
    a. Maint. & Operation Notes item #2, A maintenance contract with a Certified Operator must be in force prior to the release of the CO for the project.
    b. General Notes item #3 should read Mecklenburg County Groundwater & Wastewater Services
    c. Once the new septic system is brought on-line the system for the existing house must be properly abandoned. Please include this requirement in your plan. Our office can provide more detail on proper abandonment if required.
    d. State rules require that the force main be sleeved where road crossings occur. The force main does not have to be sleeved if it is installed to a minimum depth of 30". I would recommend rerouting the force main to exit the tank a run straight across the drive using a 6" dia. Sch. 80 PVC pipe for sleeving.
    e. If possible I recommend moving the water line location for the new building so that it does not cross the sewer line exiting the building.
3. Sheet C-10;
    a. Control panel must be mounted adjacent to the pump tank riser. Control panel must be mounted a minimum of 12" above finished grade. For ease of service & accessibility I recommend installing the control panel 42" above finished grade.
    b. Please include an effluent filter on the force main inside the pump tank.
    c. Modify float installation & plumbing as shown on the pump tank detail attachment.
    d. Your plan specifies the use of "Traffic-Rated" tanks. Please indicate this classification in detail A1 and A3.

Please call me at (704) 336-5568 with any questions.

Thanks,
Trevor Thomason

August 29, 2006

BSdE
BULLA SMITH
DESIGN ENGINEERING

Mr. Trevor Thomason RS
Environmental Health Specialist
Mecklenburg County Health Department
700 North Tryon St.
Suite 211
Charlotte, NC 28202

Re: Phoenix Montessori Academy
12300 Mayes Road
Huntersville, NC

Subject: Septic Permit

Dear Trevor:

Enclosed are two sets of plans for the proposed Phoenix Montessori Academy project. Plans have been revised per your comments forwarded in an August 28, 2006 email correspondence. If there are any comments or questions concerning this submittal, we would greatly appreciate a phone call to help expedite any modifications or revisions that may be necessary.

Sincerely,

Steven H. Doe, EI

Cc:

T 704.333.3122
F 704.333.8252
www.bullasmith.com
1347 Harding Place
Suite 201
Charlotte, NC 28204

August 25, 2006

BSDE
BULLA SMITH
DESIGN ENGINEERING

Mr. Trevor Thomason RS
Environmental Health Specialist
Mecklenburg County Health Department
700 North Tryon St.
Suite 211
Charlotte, NC 28202

Re: Phoenix Montessori Academy
12300 Mayes Road
Huntersville, NC

Subject: Septic Permit

Dear Trevor:

Enclosed are two sets of plans and calculations for the proposed Phoenix Montessori Academy project. If there are any comments or questions concerning this submittal, we would greatly appreciate a phone call to help expedite any modifications or revisions that may be necessary.

Sincerely,

Steven H. Doe, EI

Cc:

SdoeQ bullasmith.com

T 704.333.3122
F 704.333.8252
www.bullasmith.com
1347 Harding Place
Suite 201
Charlotte, NC 28204

14263 ~~001-042-05~~ 011-042-05

VOID TCP

GWS-COM. APP 07/05

PERMIT APPLICATION FOR A COMMERCIAL SITE IMPROVEMENT PERMIT / CONSTRUCTION AUTHORIZATION FOR ON-SITE WASTEWATER SYSTEM NEW WELL INSTALLATION OR REPAIR OF EXISTING WELL MECKLENBURG COUNTY GROUNDWATER & WASTEWATER SERVICES

SEPTIC FEE: ~~400~~ 400
DATE: 3/9/06
CRT [ ] Check # 2733 JBM

FILE # 14263

WELL FEE: _____
DATE: _____
CRT [ ]

SEPTIC / TYPE APPLICATION: ☐ NONE ☒ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFY PLOT PLAN

WELL / TYPE APPLICATION: ☐ NONE ☒ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

JOB LOCATION INFORMATION

PROJECT TRACKING #:
TAX/PARCEL #: ~~00423444~~ ~~00~~ 011-231-14
STREET ADDRESS: 12300 Mayes Road
CITY: Huntersville
STATE: NC **ZIP:** 28078
LOT #:
TOWNSHIP:

☐ 0-MECKLENBURG ☐ 4-PINEVILLE
☐ 1-CHARLOTTE ☐ 5-MATTHEWS
☐ 2-DAVIDSON ☒ 6-HUNTERSVILLE
☐ 3-CORNELIUS ☐ 7-MINT HILL

BUILDING INFORMATION:

DESCRIBE TYPE OF BUSINESS:

☒ COMMERCIAL ☐ INDUSTRIAL
SQUARE FOOTAGE OF FACILITY: 20,000 SF
NUMBER OF EMPLOYEES PER SHIFT: 160
NUMBER OF SHIFTS: 1
TYPE OF WASTEWATER:
☒ SEWAGE ☐ INDUSTRIAL PROCESS WASTEWATER
HOW WILL WATER BE USED IN THE FACILITY?:
☒ TOILETS/URINALS ☒ HANDSINKS ☒ SHOWERS
☒ FLOOR DRAINS ☐ OTHER

IF PLANNING TO EXPAND/ALTER THE EXISTING SYSTEM, INFORMATION DOCUMENTING THE INCREASED WASTEWATER FLOW AND/OR A JUSTIFICATION FOR SYSTEM ALTERATION WILL BE REQUIRED.

WATER SUPPLY:
☐ MUNICIPAL (M) ☐ PUBLIC (C) ☒ PRIVATE WELL (P) ☐ SHARED WELL (S) ☐ OTHER 'SPRINGS' (O)

PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☒ POTABLE ☐ GEOTHERMAL ☐ OTHER

ARE ANY OF THE FOLLOWING LOCATED ON THE PROPERTY? IF SO, PLEASE SHOW LOCATION ON SITE PLAN/PLAT.

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES ☒ NO	WELLS, SPRINGS, OR WATER LINES	☒ YES ☐ NO
EXISTING WASTEWATER SYSTEMS	☒ YES ☐ NO	DESIGNATED WETLANDS	☐ YES ☒ NO
EASEMENTS OR RIGHT-OF-WAYS	☐ YES ☒ NO	GRADING/SOIL REMOVAL PERFORMED	☒ YES ☐ NO

PROPERTY OWNER:
NAME: Phoenix Montessori Academy
ADDRESS: 12300 Mayes Road
CITY: Huntersville
STATE: NC ZIP: 28078
HOME PHONE: WORK PHONE:
MOBILE PHONE: FAX :

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:
NAME: Jim Thompson
ADDRESS: (same as left)
CITY:
STATE: ZIP:
HOME PHONE: WORK PHONE:
MOBILE PHONE: 704-644-3990 FAX :

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 6/30/78
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? 7/20/05

*An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Owner's/Agent's Signature 03.08.06 Date

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT & NATURAL RESOURCES DIVISION
OF ENVIRONMENTAL HEALTH ON-SITE
WASTEWATER SECTION

*A Well Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Owner's/Agent's Signature ~~03.08.06~~ Date

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

MECKLENBURG COUNTY
Health Department

March 29, 2006

Jim Thompson
12300 Mayes Road
Huntersville, NC 28078

Re: Application for improvement permit for
Property Site: 12300 Mayes Road, Huntersville, NC 28078
Health Department file number: **14263**

Dear Property Owner or Owner's Agent:

The Mecklenburg County Health Department, Environmental Health Division on March 16, 2006 evaluated the above-referenced property at the site designated on the plat that accompanied your improvement permit application. According to your application the site is to serve a Montessori Academy, with a daily design flow of 2400 gallons per day. The evaluation was done in accordance with the laws and rules governing wastewater systems in North Carolina General Statute 130A-333 and related statutes and Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rule .1900 and related rules.

Based on the criteria set out in Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rules .1940 through .1948, the evaluation indicated that the site is **UNSUITABLE for** a ground absorption sewage system. Therefore, your request for an improvement permit is **DENIED.** A copy of the site evaluation is enclosed. The site is unsuitable based on the following:

- ☐ Unsuitable soil topography and/or landscape position (Rule .1940)
- ☐ Unsuitable soil characteristics (structure or clay mineralogy) (Rule .1941)
- ☐ Unsuitable soil wetness condition (Rule .1942)
- ☐ Unsuitable soil depth (Rule .1943)
- ☐ Presence of restrictive horizon (Rule .1944)
- ☒ Insufficient space for septic system and repair area (Rule .1945)
- ☐ Unsuitable for meeting required setbacks (Rule .1950)
- ☐ Other (Rule .1946)

These severe soil or site limitations could cause premature system failure, leading to the discharge of untreated sewage on the ground surface, into surface waters, directly to ground water or inside your structure.

The site evaluation included consideration of possible site modifications, and modified, innovative or alternative systems. However, the Health Department has determined that none of the above options will overcome the severe conditions on this site. A possible option might be a system designed to dispose of sewage to another area of suitable soil or off-site to additional property.

For the reasons set out above, the property is currently classified **UNSUITABLE,** and an improvement permit shall not be issued for this site in accordance with Rule .1948 (c).

However, the site classified as **UNSUITABLE** may be classified as **PROVISIONALLY SUITABLE** if written documentation is provided that meets the requirements of Rule .1948(d). A copy of this rule is enclosed. You may hire a consultant to assist you if you wish to try to develop a plan under which your site could be reclassified as **PROVISIONALLY SUITABLE.**

You have a right to an informal review of this decision. You may request an informal review by the soil scientist or environmental health supervisor at the local health department. You may also request an informal review by the
N. C. Department of Environment and Natural Resources regional soil specialist. A request for informal review must be made in writing to the local health department.

You also have a right to a formal appeal of this decision. To pursue a formal appeal, you must file a petition for a contested case hearing with the Office of Administrative Hearings, 6714 Mail Center, Raleigh, NC 27699-6714. To get a copy of a petition form, you may write the Office of Administrative Hearings or call the office at (919) 733-0926 or from the OAH web site at www.oah.state.nc.us/form.htm. The petition for a contested case hearing must be filed in accordance with the provision of North Carolina General Statutes 130A-24 and 150B-23 and all other applicable provisions of Chapter 150B. N. C. General Statue 130A-335(g) provides that your hearing would be held in the county where your property is located.

Please note: If you wish to pursue a formal appeal, you must file the petition form with the Office of Administrative Hearings **WITHIN 30 DAYS OF THE DATE OF THIS LETTER.** The date of this letter is March 29, 2006. Meeting the 30-day deadline is critical to your right to a formal appeal. Beginning a formal appeal within 30 days will not interfere with any informal review that you might request. Do not wait for the outcome of any informal review if you wish to file a formal appeal.

If you file a petition for a contested case hearing with the Office of Administrative Hearings, you are required by law (N.C. General Statute 150B-23) to send a copy of your petition to the North Carolina Department of Environment and Natural Resources. Send the copy to: Office of General Counsel, N. C. Department of Environment and Natural Resources, 1601 Mail Service Center, Raleigh, NC. 27699-1601. Do **NOT** send the copy of the petition to your local health department. Sending a copy of your petition to the local health department will **NOT** satisfy the legal requirement in N.C. General Statute 150B-23 that you send a copy to the Office of General Counsel, NCDENR.

You may call or write the local health department if you need any additional information or assistance.

Sincerely,

Cina Buchanan, RS

Cina Buchanan, R.S.
Authorized Agent - DENR

Encl: (2)

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

Sheet: 1 of 2
Property ID: 011-231-14
Lot #:
File #: 14263
Code: 2

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Phoenix Montessori Academy
Applicant: Jim Thompson
Address: 12300 Mayes Road, Huntersville, N. C. 28078
Date Evaluated: 3/16/06
Proposed Facility: School
Design Flow (.1949): 1600gpd
Property Size: 4.04a
Location of Site: 12300 Mayes Road
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 6	0-8	GR/SCL	FR/SEXP/SS/SP	>48" TO SOIL WETNESS	48+	N/A	NONE	PS, IV
		8-48	SBK/C	FI/SEXP/S/P					.3GPD/FT^2
2	LS, 8	0-7	GR/SCL	FR/SEXP/SS/SP	"	"	"	"	"
		7-48	SBK/C	FI/SEXP/S/P					
3	"	0-6	GR/SCL	FR/SEXP/SS/SP	"	"	"	"	"
		6-28	SBK/C	FI/SEXP/S/P					
		28-48	SBK/CL	FR/SEXP/SS/SP					
4	"	0-4	GR/SCL	"	"	"	"	"	"
		4-48	SBK/C	FI/SEXP/S/P					
5	"	0-3	GR/SCL	FR/SEXP/SS/SP	"	"	"	"	"
		3-48	SBK/C	FI/SEXP/S/P					
6	"	0-5	GR/SCL	FR/SEXP/SS/SP	"	"	"	"	"
		5-48	SBK/C	FI/SEXP/S/P					

Description	Initial System	Repair System
Available Space (.1945)	US	US
System Type(s)		
Site LTAR	.3GPD/FT^2	.3GPD/FT^2

Other Factors (.1946):
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 3/16/2006, W. R. Marlin
Others Present: E. Ringhofer, P. Judge

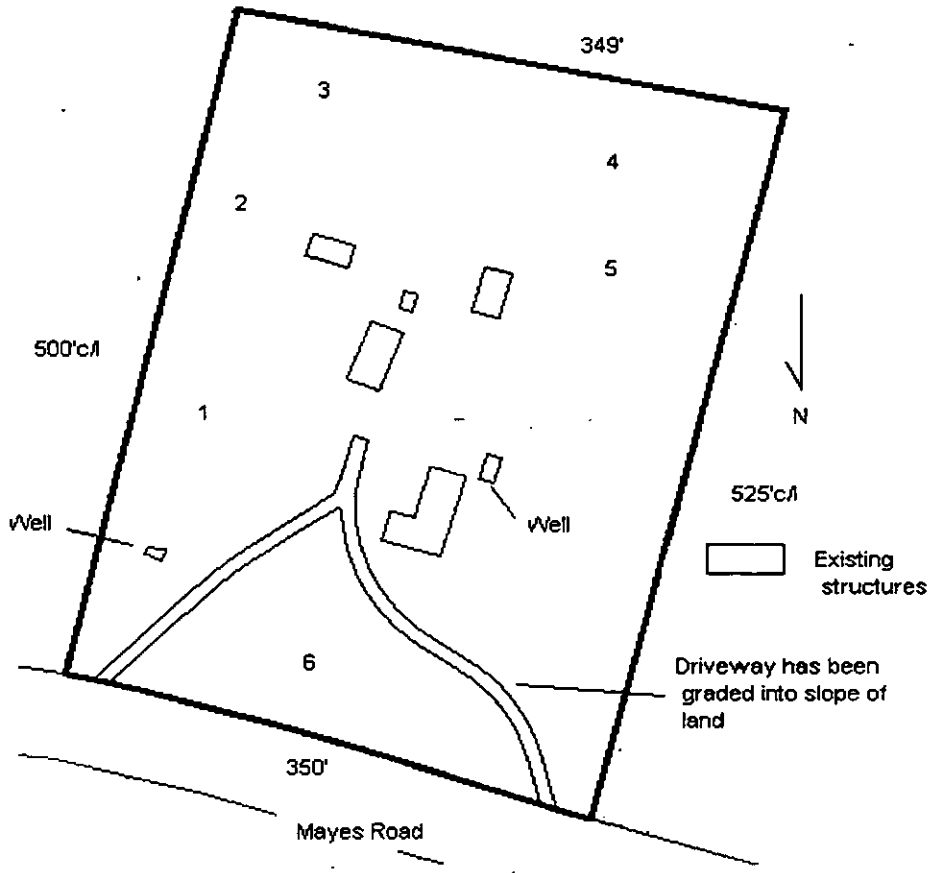
Sheet: 2 of 2
File: 14263

COMMENTS:
100% repair, well to supply water would require a 100 foot clear radius

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Food Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Soil Investigation Locations



PANEL SYSTEM CALCUALTIONS (as drawn)

- 101 People at 10 gal usage/day = 1010 gal.
- Loading of 0.30 gal. per sq. ft
- 1010 gal./ .30 gal./sf = 3366 sf
- 3366 sf./3 sf trench = 1122 lf of conventional trench
- Conventional trench= 3' wide, 9' O.C.
- 9' (1122 lf trench) = 10,100 s.f. + 100% repair = 20,200 total s.f. conventional (.463 ac.)

- Panel system, 50% reduction, 0.50(20,200 s.f.) = 10,100 s.f.
  - 5,050 s.f. field+ 5,050 s.f. repair
  - 0.50 (1122 l.f. trench) = 560 lf of panel trench

Summary:
101 people
10,100 total square footage (5,050 field, 5,050 repair)

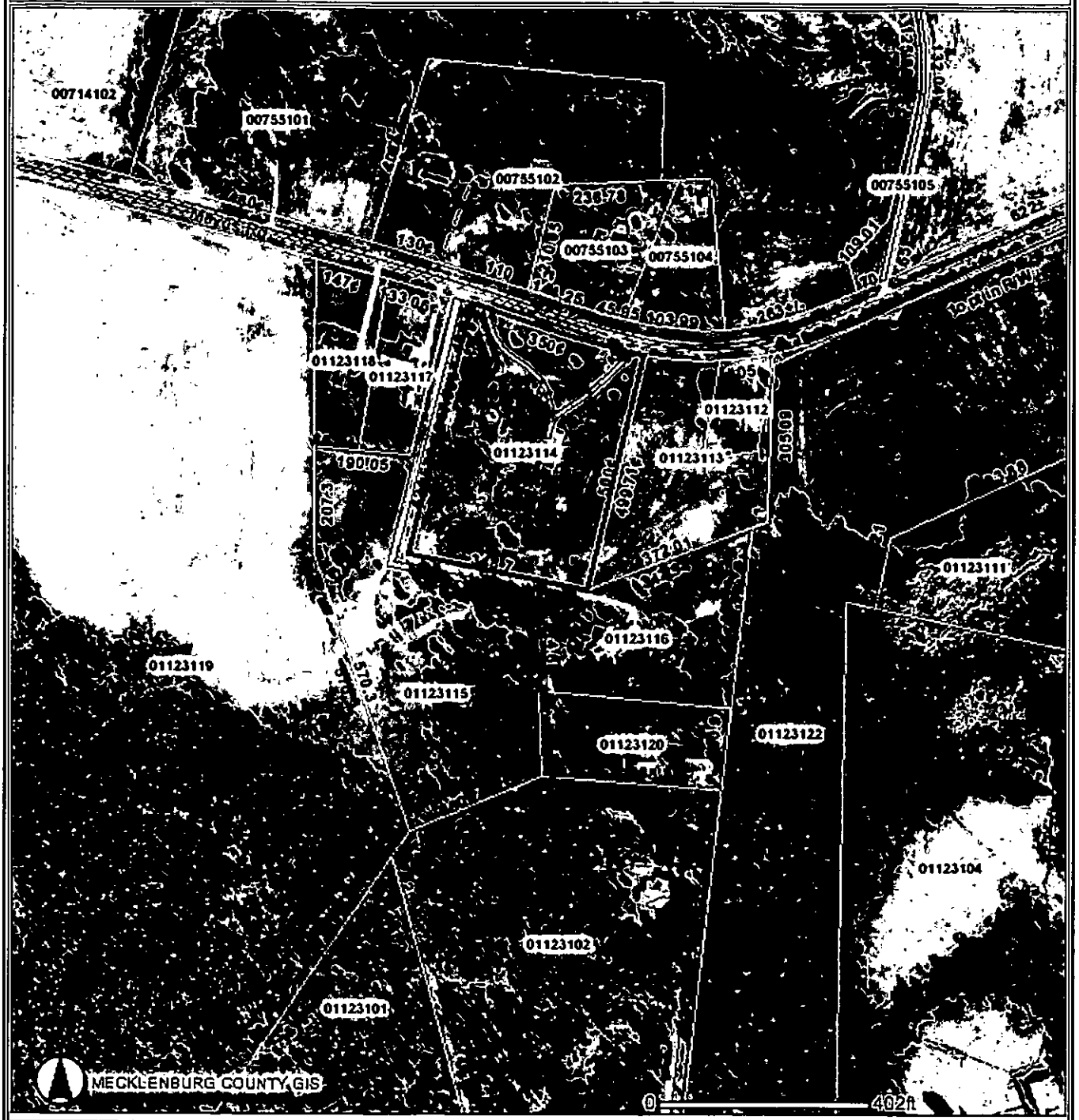
REQUIRED TANK VOLUME: 1,680 GAL → 2,000 GAL

Mecklenburg County, North Carolina

POLARIS

Property Ownership Land Records Information System

Date Printed: Wed Jun 14 15:16:22 EDT 2006



This map is prepared for the inventory of real property within Mecklenburg County and is compiled from recorded deeds, plats, tax maps, surveys, planimetric maps, and other public records and data. Users of this map are hereby notified that the aforementioned public primary information sources should be consulted for verification. Mecklenburg County and its mapping contractors assume no legal responsibility for the information contained herein.

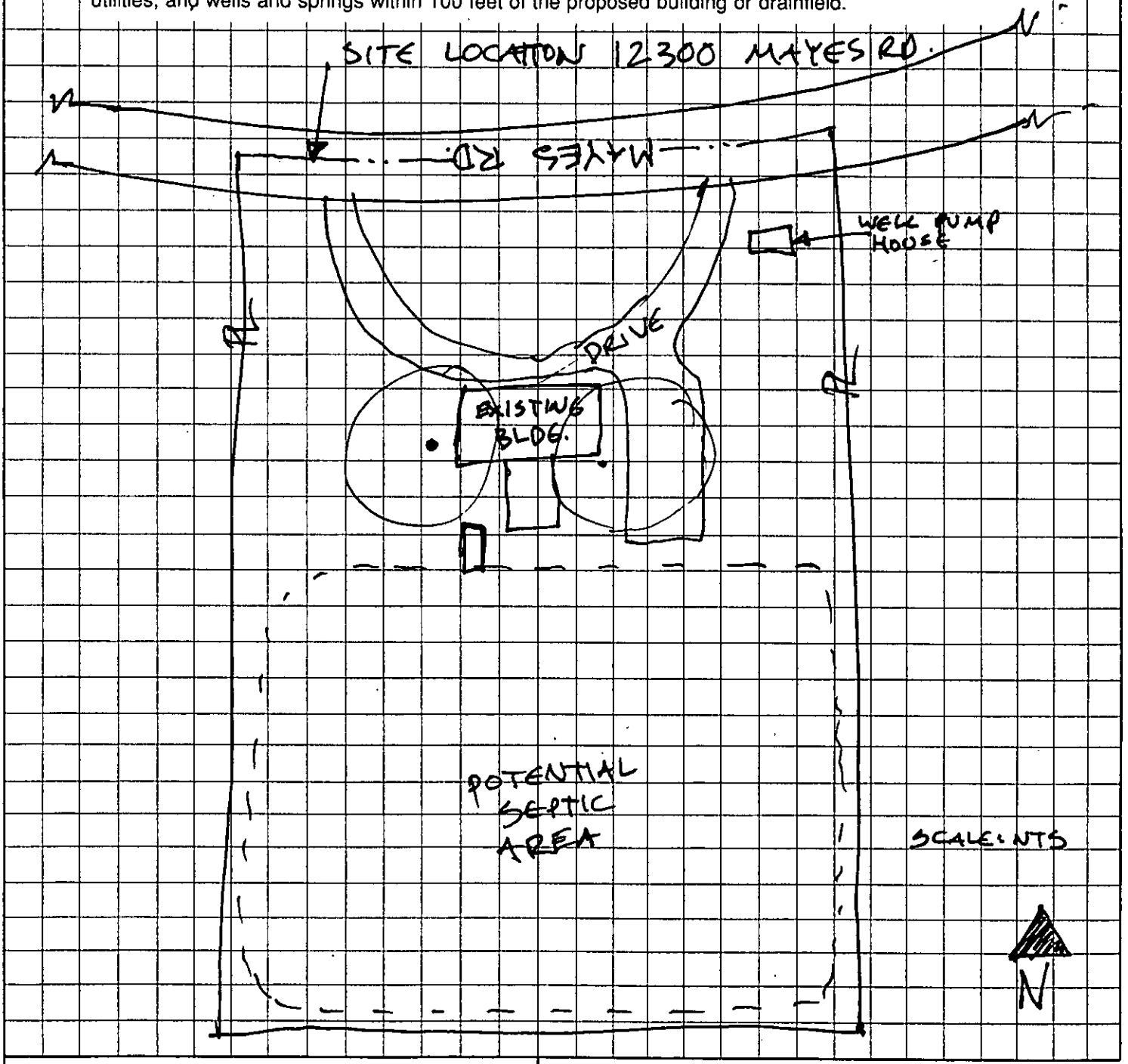
PROPOSED PLOT PLAN

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5103

FILE: 14263

TC: 011-231-14

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.



ERIC RINGHOFER / BULLA SMITH DESIGN ENGINEERING
OWNER/AGENT SIGNATURE

DATE 3/8/06

APPROVAL DATE _____

White - Health Department's Copy Canary - E.H.S. Copy Pink - Owner's Copy

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	03/08/06	**Amount:**	400.00
Receipt #:	42430	**Tendered:**	400.00
Check / Auth #:	CHECK 2733	**Returned:**	0.00
Received By:	AIDOOJK		

Account Information

Account #: 200000
Contractor: BULLA SMITH DESIGN ENGINEERIN
Attn:
Address: 1347 HARDING PLACE SUITE 201
Address:
City/State/Zip: CHARLOTTE, NC 28204

Item	Description	Permit#	Quantity	Unit Price	Total Price
0735	Improv Permit Appl-Comm 12300 MAYES ROAD		1	400.00	400.00

Outstanding Balances

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
80.00					

Mecklenburg County

This page is left in the original file as a placeholder. The following item(s) were removed from the original file prior to scanning and returned post scanning:

↘ **Large-format Drawings**

Original File Number: 14263/12300 Mayes Road

Box Number: 12

Number of pages associated with file: 1 B

General Comments: total 2 maps for this file

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