

11835 JUMPER DR

19724120

1/9/2008

duponbj

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

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

File #: 62368 Permit #: 62368 Tax Parcel #: 197-241-12

Property Owner: NUR INC

Job Location Address: 11835 JUMPER DR. LOT #30

City: MINT HILL State: NC Zip Code: 28227

Operation Permit Issuance Date: ~~12/31/07~~ 1/24/07 Contractor Name: RLS

Permitted Design Flow: 360 GPD

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1000 gallons

Effluent Pump Model:

Drainfield Installation ☐ N/A

Trench Depth: 30 inches INNOVATIVE

Trench Width: 3 feet 25% REDUCTION

Line Spacing: 9 feet (O.C.) E-Z Flow

Total line length: 360 feet 55',(2)50(2)57 2@45

# of Lines: 7 @ JAT feet

Depth of Media: N/A inches (Type) IIIa,b

Depth of Cover: 12 inches

Distribution Device: WasherBox-DropBox

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

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☑ Municipal ☐ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: >5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: >100 feet

Inspection Dates

Tank(s) Inspected: 1/19/07

Excavation Inspected: 1/19 & 1/24/07

Pump & Controls Inspected: 1/19/07

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)

INSTALLED ACCORDING TO PLANS ON FILE SUBMITTED BY LARRY THOMPSON & THE CATENA GROUP. 12/15/05

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

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

Comments: System Classification & Type: IIIb,g. Innovative, 25% Reduction, E-Z Flow. INSTALLED ACCORDING TO PLANS ON FILE.

DENR Authorized Agent: DAVID CORNELIUS, RS Signature: David Cornelius, RS

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

INSTALLATION APPROVAL for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 6236B Permit #: _____ Tax Parcel #: 197-241-12

Property Owner: NVR, INC.

Job Location Address: 11835 JUMPER DR. (LOT #30)

City: MINT HILL State: NC Zip Code: 28227

Installation Approval Issuance Date: 12/21/06

Permission is hereby given to ☑ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge, as specified herein at the described location. This approval is granted based upon the application information submitted to our office. All work shall be completed on or before 1/22/07, after which date this approval shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A. 1900 which are in effect on the date of granting this approval. An **Operation Permit** must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now of hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.

***NOTICE: This system shall not be installed while soils are in a wet condition.**

Permitted Design Flow: 360 GPD

Site LTAR: 0.25 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1000 gallons

Drainfield Design ☐ N/A

Trench Depth: 30 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 360 feet

# of Lines: 4 @ VAR feet

Depth of Media: 12 inches (Type) INNOVATIVE

Distribution Device: DROP BOXES

Bed Design *(For Repair Installations ONLY.)* ☑ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Distribution Device: _____

Water Supply Source

☑ Municipal ☐ Private Well ☐ Community Well

☐ Other _____

Minimum System Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 10 feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)

INSTALL IN ACCORDANCE

W/ PLANS ON FILE.

CMS

12-21-06

Comments: System Classification & Type: TYPE III b PUMP 25% REDUCTION

DENR Authorized Agent: Chris Sherrill, RS, LSS Signature: Chris Sherrill

FEE: 300.00 X33525
DATE: 12/21/05

AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION

LD

LD 20409

PERMIT NUMBER: 6236B
PARCEL NUMBER: 197-24-112

11835

JOB LOCATION ADDRESS: The Meadows - Jumper Dr. Lot #30
PROPERTY OWNER: NVR, Inc.
BUILDING CONTRACTOR:
SUBDIVISION NAME: The Meadows Of Mint Hill
AUTHORIZATION ISSUED BY: David Cornelius, RS DATE: 12/21/05

David Cornelius, RS
DENR/DEH AUTHORIZED AGENT

AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 6236B, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. AN *INSTALLATION, CONSTRUCTION, ALTERATION AND/OR REPAIR APPROVAL* MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A REGISTERED SEPTIC TANK CONTRACTOR WITH THE MECKLENBURG COUNTY HEALTH DEPARTMENT.

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

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

5. OTHER CONDITIONS:
   Install System according to plans on file submitted by Larry Thompson @ The Catena Group
   Install french drain. Install drop boxes. Agreement forms required to be on file before CO release

CONDITIONS OF IMPROVEMENT PERMIT / CONSTRUCTION AUTHORIZATON

Permit Number: **6236B** Tax Number: **197-24-112**

- The 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.

Basement: ☐ Yes ☒ No ☐ Partial Basement

Primary Wastewater System

Type: ☐ I ☐ II ☒ III ☐ IV ☐ V ☐ VI

☐ Conventional
☐ Prefabricated, permeable block panel system
☐ Shallow Placed Conventional
☐ Low Pressure Pipe
☐ Large Diameter Pipe
☐ Fill
☐ Other
☒ Innovative or Experimental:

0.25 Long-term acceptance rate (GPD/ft^2)	**360** Max gallons/day wastewater flow	**1080** Absorption Area (ft^2)	**9** Trench spacing (min. on centers) (ft)
Serviced by private well: ☐ Yes ☒ No	**1500** Gallon septic tank	**360** Total trench length (ft)	**30** Maximum trench depth (in) (At least 12" of provisionally suitable soil must remain between trench bottom and unsuitable soil conditions.)
3 Bedrooms in residence	**1000** Gallon pump tank	**na** Depth of stone (in)	

Any surface water present: **No** Type: Minimum separation distance (ft):

Additional conditions: **Install according to plans on file submitted by Larry Thompson @ The Catena Group, Inc. Install French Drain. Install drop boxes. Agreement forms required to be on file before CO release.**

Repair Area System

Type: ☐ I ☐ II ☐ III ☒ IV ☐ V ☐ VI

☐ Conventional
☐ Prefabricated, permeable block panel system
☐ Shallow Placed Conventional
☐ Low Pressure Pipe
☐ Large Diameter Pipe
☐ Fill
☒ Other Drip System
☐ Innovative or Experimental:

1440 Absorption Area (ft^2) ____ Total trench length (ft)	**na** Depth of stone (in)	__ Trench spacing (min. on centers) (ft)	**6** Maximum trench depth (in)

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the Request for the Job Location contained in this document. The approval is granted in accordance with the provisions of Laws and Rules For Sewage Treatment, and Disposal Systems in effect at the time of issuance of the permit and is subject to the following provisions:

*** No work shall be conducted on the septic tank system until an Installation, Construction, Alteration and/or Repair Approval is granted by this Department.

*** This Improvement permit is transferable.

DENR Authorized Agent — Date: 12/21/05

Owner/Agent Signature — Date: 12/21/05

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
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

MECKLENBURG COUNTY
Health Department

December 12, 2005

NVR, INC.
10815 David Taylor Dr., Suite 100
Charlotte, NC 28262

Re: Application for improvement permit for
Property Site: 11835 Jumper Dr., Mint Hill NC, 28227
Health Department file number: **6236B**

Dear Property Owner or Owner's Agent:

The Mecklenburg County Health Department, Environmental Health Division on **December 8, 2005** 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 five-bedroom residence, with a design wastewater flow of 600 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 **December 12, 2005**. 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,

David Cornelius, R.S.
Authorized Agent - DENR

Encl: (2)

MECKLENBURG COUNTY
Health Department

December 16, 2005

NVR, Inc.
10815 David Taylor Drive, Suite 100
Charlotte, NC 28262

Re: Application for improvement permit for
Property Site: Lot 30, Meadows of Mint Hill
Health Department file number: **6236B**

Dear Property Owner or Owner's Agent:

The Mecklenburg County Health Department, Environmental Health Division on **December 12, 2005** evaluated the above-referenced property at the site designated on the site plan that accompanied your improvement permit application. According to your application the site is to serve a 5-bedroom residence, with a design wastewater flow of 600 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)
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- ☐ 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) Fill

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.

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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 **December 16, 2005**. 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.

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

Sincerely,

Chris Sherrill, R.S, L.S.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: 197-241-12
Lot #: 30
File #: 6236B
Code: 3

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: NVR, INC
Applicant: KIM STANLEY
Address: 10815 DAVID TAYLOR DRIVE, SUITE 100 CHARLOTTE, NC 28262
Date Evaluated: 12/12/05
Proposed Facility: 5 BR
Design Flow (.1949): 600 GPD
Property Size: 1
Location of Site: 11835 JUMPER DRIVE, MINT HILL, NC 28227
Property Recorded: YES
Water Supply: [X] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [X] Auger Boring [X] 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, 10	0-7	SBK/SCL	FR SS SP SEXP	21"	21"	NA	NA	U, NA
		7-21	ABK/ C	FI S P SEXP	10YR 7/1				
		21-48	PL/C	FI S P SEXP					
2	"	0-4	SBK/SCL	FR SS SP SEXP	>48"	>48"	"	"	PS, IV
		4-40	ABK/ C	FI S P SEXP					.25
		40-48	SBK/CL	FR S P SEXP					
3	"	0-18	SBK/CL	FR SS SP SEXP	"	"	"	"	PS, IV
		18-48	SBK/ABK C	FI S P SEXP					.25
4	"	0-14	SBK/SCL	FR SS SP SEXP	"	"	"	NA	PS, IV
		14-36	SBK/ABK C	FI S P SEXP					.25
		36-48	PL/C	FI S P SEXP					
5	"	0-4	SBK/SCL	FR SS SP SEXP	22"	>27"	"	"	U, NA
		4-22	SBK/ABK C	FI S P SEXP	10YR 7/2				
		22-27	ABK/ C	VFI VS VP EXP					

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)		
Site LTAR	.25	.25

Other Factors (.1946): FRENCH DRAIN TO DIVERT SURFACE WATER
Site Classification (.1948): ~~UNSUITABLE~~ PROVISIONABLE
Evaluated By: CHRIS SHERRILL, RS, LSS 12-15-05
Others Present: BILL MARLIN, LSS, LARRY THOMPSON

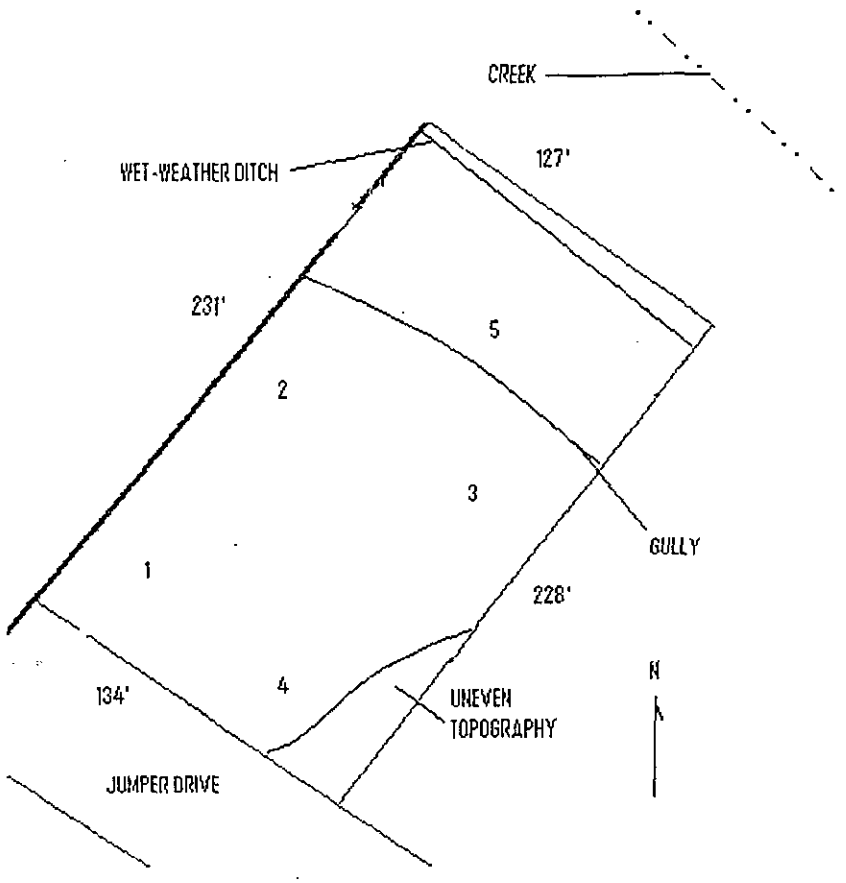
COMMENTS: 100% REPAIR REQUIRED

FILE #: 6236B

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	

Sketch of Soil Evaluation Locations



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

Sheet: 1 OF 2
Property ID: 197-241-~~12~~ 20 ACS
Lot #: 30
File #: 6236B
Code: 2

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: NVR, INC
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Property Recorded: YES
Water Supply: [X] Public [ ] Individual [ ] 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, 10	0-10	SBK SCL	FR SS SP SEXP	>34"	34"	NA	NA	PS, IV
		10-26	SBK C	FI S P SEXP					.3
		26-34	SBK CL	FR S P SEXP					
2	"	0-15	SBK SCL	FR SS SP SEXP	30"	>48"	"	"	PS, IV
		15-48	SBK/ABK C	FI S P SEXP	2.5Y 7/1				.075
3	LS, 6	0-3	SBK CL	FR SS SP SEXP	24"	"	"	"	PS, IV
		3-48	SBK/ABK C	FI S P SEXP	2.5Y 7/1				.075
4	"	0-14	SBK SCL	FR SS SP SEXP	43"	"	"	"	PS, IV
		14-48	SBK/ABK C	FI S P SEXP	2.5Y 7/2				.25
5	"	0-7	SBK SCL	FR SS SP SEXP	28"	>42"	"	"	PS, IV
		7-42	SBK/ABK C	FI S P SEXP	2.5Y 7/1				.075

Description	Initial System	Repair System
Available Space (.1945)	~~PS~~	PS
System Type(s)		
Site LTAR	.075	NA

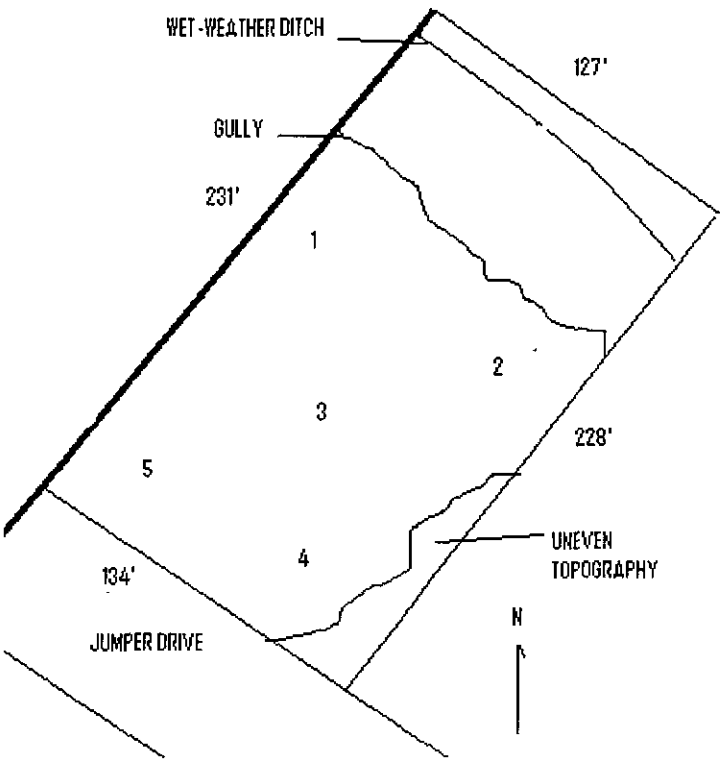
Other Factors (.1946): BACKHOE PITS REQUIRED FOR FURTHER EVALUA
Site Classification (.1948): ~~UNSUITABLE~~ PROV. SUITABLE
Evaluated By: CHRIS SHERRILL, RS, LSS 12/8/05
Others Present: NONE

COMMENTS:

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	

Sketch of Soil Evaluation Locations



X33575 #1592 $10 adtl'l pd 12/12/05 ACS

SEPTIC FEE: $200.00
DATE: 12/1/05
CRT [ ] X33575 V,W

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

GWS – RES. APP 12/04

WELL FEE: _____
DATE: _____
CRT [ ]

FILE # 62368

SEPTIC / TYPE APPLICATION: ☐ NONE ☒ NEW SYSTEM EXISTING SYSTEM: ☐ EXPANSION/ALTERATION ☐ REPAIR

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

JOB LOCATION INFORMATION:
TAX/PARCEL #: ~~19724110~~ 19724120
STREET ADDRESS: 11835 Jumper Dr.
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME: The Meadows of Mint Hill
LOT #: 30
TOWNSHIP:
☐ 0-MECKLENBURG ☐ 4-PINEVILLE
☐ 1-CHARLOTTE ☐ 5-MATTHEWS
☐ 2-DAVIDSON ☐ 6-HUNTERSVILLE
☐ 3-CORNELIUS ☒ 7-MINT HILL

BUILDING INFORMATION:
TYPE OF BUILDING:
☐ SINGLE MOBILE HOME (S) ☐ MODULAR HOME (M)
☐ DOUBLE WIDE (D) ☐ MULTIPLE FAMILY (U)
☒ HOUSE (H) ☐ OTHER
HEATED SQUARE FOOTAGE: 3,500
NUMBER OF BEDROOMS: 5
NUMBER OF OCCUPANTS: 4

FOUNDATION FOR RESIDENCE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☒ CRAWLSPACE ☐ BASEMENT WITH NO PLUMBING

IF PLANNING TO EXPAND/ALTER THE EXISTING SYSTEM INDICATE THE FOLLOWING CHANGES:
NUMBER OF BEDROOMS TO BE ADDED: NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE:
WILL THERE BE A HOME BUSINESS IN THE RESIDENCE? ☐ YES ☐ NO TYPE:

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: NVR, INC.
ADDRESS: 10815 David Taylor Dr., Ste 100
CITY: Charlotte
STATE: NC ZIP: 28262
HOME PHONE: WORK PHONE: 704-548-3534
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:
NAME: Kim Stanley
ADDRESS: PO Box 1176
CITY: Stanfield
STATE: NC ZIP: 28163
HOME PHONE: 704-782-9639 WORK PHONE:
MOBILE PHONE: 704-791-6852 FAX: 704-785-8721

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 10/5/05
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? Feb. 2006

*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.

Kim Stanley 11/28/05
Owner's/Agent's Signature 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 Date

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

Residential Subsurface Wastewater Treatment and Disposal System Design

for

Lot 30 – The Meadows of Mint Hill
11835 Jumper Drive
Mint Hill, North Carolina

Tax Parcel # 197-241-12
Mecklenburg County File # 6236B
December 15, 2005

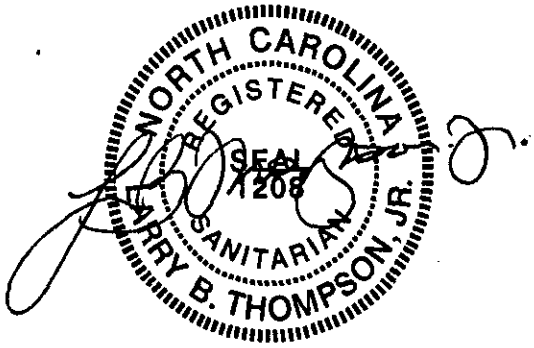
APPROVED ON
10-31-06
TREVOR

Prepared for:

NVR, Inc.
10815 David Taylor Drive, Ste. 100
Charlotte, NC 28262

Prepared by:

Larry Thompson, RS, PWS
The Catena Group, Inc.
410-B Millstone Drive
Hillsborough, NC 27278
Phone: 704-301-4881
Fax: 704-888-1496



CC: Mr. David Cornelius, RS
Mecklenburg County Environmental Health

Details

In an application for an Improvement Permit filed with the Mecklenburg County Health Department (MCHD) by NVR, Inc., the subject property was proposed to be developed with a single family 5-bedroom residence served by a municipal water supply. Based upon this information, a soil and site evaluation was conducted by the MCHD where the lot was determined to be "Unsuitable" for the installation of a subsurface wastewater treatment and disposal system in accordance with the *Laws and Rules for Sewage Treatment, and Disposal Systems* 15A NCAC 18A .1900 (North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section).

Upon further investigation by The Catena Group, Inc. (TCG), it was determined that a sufficient amount of "Suitable" Group IV soils are located on the property which would allow for the installation of a Type III innovative system for a 3-bedroom residence. Due to the limited area of suitable soils on the lot, it would be necessary that the repair system be designated as a drip irrigation system. It is the desire of the owner that the MCHD consider reclassifying this lot as "Suitable", allowing for the issuance of a Construction Authorization, based upon the following proposal.

Location

The subject property is located in The Meadows of Mint Hill (Lot 30 – 11835 Jumper Drive) in the town of Mint Hill, North Carolina. From NC 51, travel south on SR 1004 (Bain School Road) approximately 0.8 mile, turn left onto Gait Drive and right onto Canter Lane, left onto Filly Road, and left onto Jumper Drive. Lot 30 is the last lot on the right.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, February 1, 2005.

Onsite Wastewater Treatment and Disposal Systems; EPA 625/R-00/008 Design Manual, February 2002.

Innovative Wastewater System Approval: IWWS-95-3-R3; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, April 18, 2002.

Innovative Wastewater System Approval No: IWWS-2004-3; AdvanTex® Treatment Systems, April 6, 2005.

Innovative Wastewater System Approval No: IWWS-2000-2; Geoflow's Subsurface Drip System, August 29, 2000.

Plans and Specifications

Septic Tank

- The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and 1500 gallons in capacity.
- The septic tank will be fitted with an approved effluent filter and riser for easy access and periodic maintenance.
- It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

Pump Tank

- The pump tank shall be State approved, of one-piece construction, watertight, structurally sound and 1000 gallons in capacity. Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
- The pump tank shall have access risers that extend, at a minimum, 6 inches above finished grade and must have less than 36 inches of fill over its top once finished grade has been established (a reinforced concrete tank will be required if finished soil cover is 36 inches or greater in depth).
- The pump and alarm controls shall be provided with manual circuit disconnects within a watertight, corrosion resistant, Nema 4X rated control panel. The control panel must be securely mounted outside, adjacent to the pump tank riser and at a minimum of 12 inches above finished grade. Pump and float control wiring should be long enough to reach from the tank to the control panel without splicing, routed through wire conduit, and sealed at the openings within the pump tank as well as the control panel enclosure. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank. Furthermore, there must be two electrical circuits for the pump tank controls: one for the pump and one for the alarm controls.
- The pump tank shall have a properly functioning high water alarm incorporated into the control panel. The alarm circuit shall be supplied separate from any pump overload and short circuit devices. The alarm shall be both audible and visible by the system users.
- The float switch for the high water alarm should be mounted at a location slightly above the "pump on" elevation for the pump float control switch. The high water alarm float switch shall not be set more than 3 inches above this elevation.
- Pump float(s) shall be mounted so that the effluent at the end of a pump cycle is above the top of the effluent pump. The septic contractor must determine pump draw down and set the float switch accordingly.
- Float switch tie downs must be made of a corrosion resistant material (do not use electrical tape or metal hose clamps to secure these switches). Floats should be mounted on a separate "float tree" rather than the pump supply line (see pump tank detail).

- The pump must be placed on two 4-inch concrete blocks to allow for some settling of solid particulates within the pump tank.

Pump Tank Effluent

- The pump discharge piping shall be fitted with a pressure effluent filter. The filter must be equivalent to the GAG Sim Tech Filter, Boyne City, Michigan, 49712, and telephone: 1-888-999-3290. This device provides a very high degree of filtration and is highly recommended.

Pipe and Fittings

- All discharge piping, supply lines, valves and disconnects should be made of PVC.
- All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
- The supply line from the pump tank to the pressure manifold shall be 2 inch Schedule 40 PVC (approximate length of supply line is 80 feet).

Effluent Distribution

- The effluent will be distributed via a washer box and a series of drop boxes.

Drain Field Installation

- The drainfield has been previously laid out on-site utilizing metal stemmed flags. Once this area has been approved by the MCHD, the property owner/builder should mark this area and isolate it as much as possible from construction traffic. Prior to the system installation, the septic contractor shall contact the MCHD and the system designer for a preconstruction conference at which time the drainfield area will be re-verified.
- Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition. If the installer has doubts as to whether or not the drainfield area is dry enough to begin construction, the Mecklenburg County Health Department should be contacted for permission to proceed with the installation.
- The specified system is a Type III Innovative, specifically the **EZ*flow* 1203H**.
- The drain field consists of (4) lateral trenches of varying lengths and center fed with drop boxes. Trenches will be 3 feet wide with one at 50 feet, one at 100 feet, one at 115 feet, and one at 90 feet in length (center fed by drop boxes).
- The maximum trench depth for this system shall be 30 inches.
- The laterals are to be installed on contour with the land, keeping the individual trench bottoms level from beginning to end.
- The trenches should be left open for the final inspection by the MCHD.

French Drain

- Due to the platy soil structure on this lot, a French drain should be installed upslope from the drain field at 36 inches deep.
- **EZ*flow*** bundles can be used in the place of stone in the drain or, if preferred, place a 4 inch perforated corrugated pipe in the base of the drain and backfill with No. 5 or No. 57 washed stone.
- An engineer's level should be used to assure that the French drain is sloped to drain.

Proper Operation Check

- After all components of the waste water disposal system have been installed and connected, the system shall be checked for proper operation.
- With the electrical power turned off, fill the pump tank with water until the liquid rises to a level high enough to activate the high water alarm float. Turn on the electrical power. The alarm, alarm light and pump should activate at this time. Turn off the electrical power once these checks have been performed.

Final Landscaping

- The drainfield shall be shaped to shed rainwater and be free from low spots.
- The entire area of the drainfield should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

Utility Conflicts

- The builder and property owner must take special care in planning for water, power, gas, telephone and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage. If there are any questions regarding preferred routes, contact the MCHD as soon as possible.

Maintenance

In General

- The minimum inspection/maintenance frequency for a Type III system is once every 5 years by the local health department. However, it is recommended that the homeowner contract with a reputable subsurface system operator to perform an annual maintenance inspection to ensure that the system is operating properly.
- The septic and pump tanks shall be pumped every 4 years or when the solids within the septic tank reach an elevation that is equivalent to 1/3 of the volume of the tank. In some situations, the tanks may need to be pumped more frequently. If using a

garbage disposal, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.

- When it becomes necessary to clean the effluent filter, the filter should be removed and the accumulated debris washed back into the septic tank – not onto the lawn.
- All piping and valves should be inspected annually for damage and corrections/repairs made immediately.
- The pump and float controls/switches should be inspected annually to assure proper operation
- The drain field area should be maintained to prevent over growth of vegetation. Any damp areas, leakages or malfunctions should be addressed immediately.
- Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Suggestions to the Homeowner

- As previously mentioned, if you plan to use a garbage disposal in your home you should plan to have your septic and pump tanks cleaned out annually. The ground up garbage adds large amounts of solids into a septic tank that tend to degrade at a very slow rate.
- Grease, cooking oils, coffee grounds and non-degradable solids (disposable diapers, cigarettes and solid paper wastes) should never be put into a septic tank.
- Used motor oil or any oily liquids should not be disposed of in a septic tank.
- Be aware of the amount of water that you are using in your home. Water saving fixtures and devices can be installed on sinks, toilets and showers to reduce the volume of wastewater that you are sending to your drain field.
- Run dishwashers and washing machines only when you have a full load.
- Use liquid detergents. Powdered detergents have binding agents in them that tend to solidify in the wastewater disposal system.
- Repair leaky faucets and toilets. Small drips equal large volumes of water over time and can over burden your drain field.
- Do not use chemical additives in your system. Studies have indicated that they do not increase the biological activity that naturally occurs in the septic system and in some cases certain additives have been found to be detrimental to the life of a system.

Design Specifics

Lot 30 – The Meadows of Mint Hill

Daily Design Flow:	360 GPD – 3 bedroom house
Septic Tank Size:	1500 gallons (2 compartments)
Pump Tank Size:	1000 gallons (one piece)
Effluent Loading Rate:	Design = 0.25 GPD per sq. ft.
Supply Length and Diameter:	Approx. 80 feet of 2 inch Sch. 40 PVC (please see note at the bottom of this page.)
Distribution Method:	Washer Box to Drop Boxes
Number and Length of Drain Lines:	(4) lines – 1 at 55', 1 at 100', 1 at 115' and 1 at 90' 360 L.F. ✓
Maximum Trench Depth:	30 inches
Dosing Volume:	180 gallons per dose ✓
Flow Rate Through System:	25.0 gallons per minute min.
Elevation Head:	15.0 feet (may vary, please see note at the bottom of this page)
Pump Requirements:	25.0 GPM at 15.0 feet of head
Depth of Water Pumped:	8.57" (J&S STB-97-1000 used) check with individual tank manufacturer (1 cu. Ft. of water equals 7.5 gal.)
Pump Run:	7.2 minutes
Check Valve:	Yes
Vapor Lock Hole:	Yes (A vapor lock hole can reduce vibrations in the discharge pipe upon start up and shut down)

* Please note that supply line and elevation head measurements are approximate. It is the contractor's responsibility to confirm these values based upon the actual house and plumbing location. If there is a discrepancy, contact the system designer prior to beginning construction.

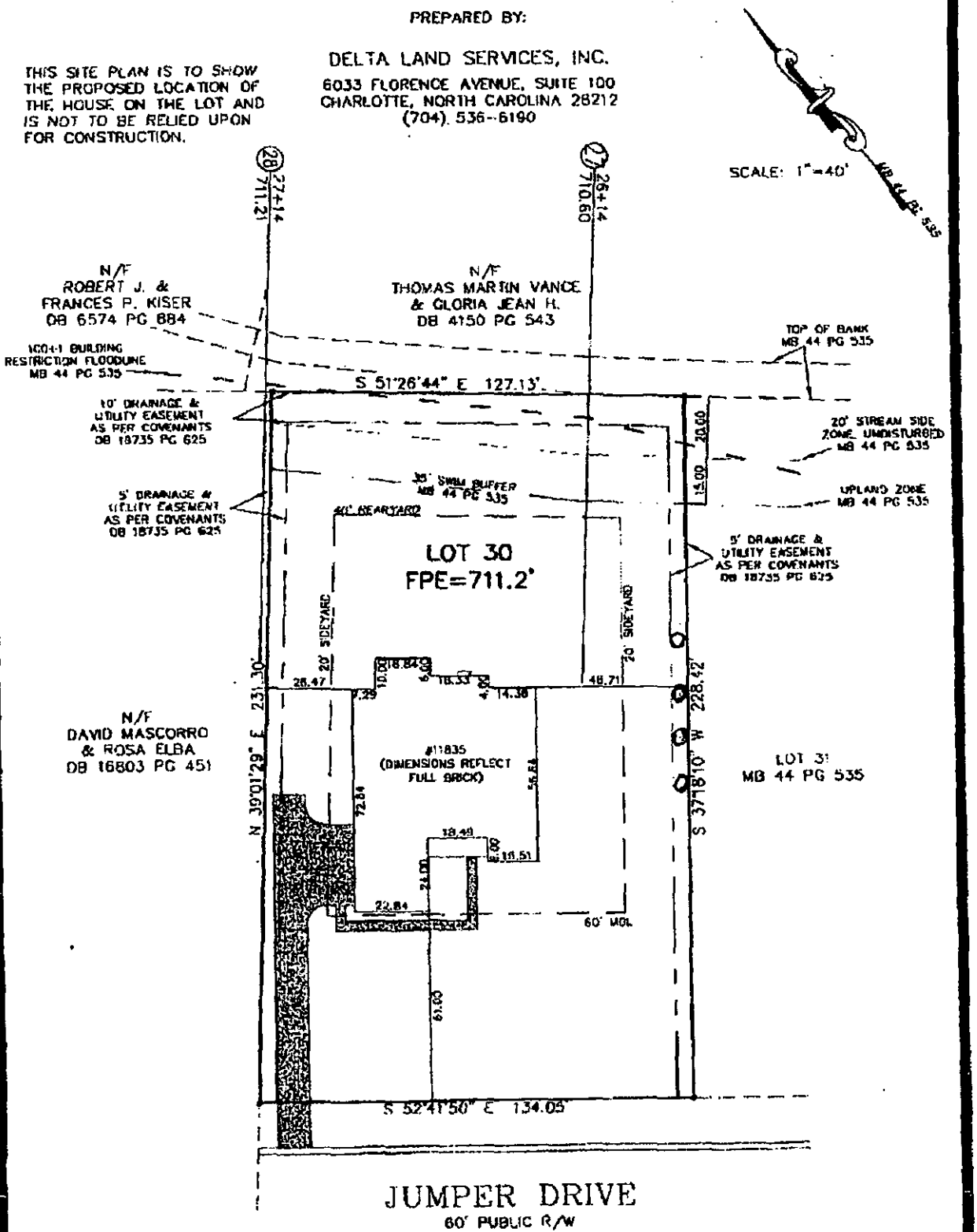
SITE DEVELOPMENT PLAN

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190

THIS SITE PLAN IS TO SHOW THE PROPOSED LOCATION OF THE HOUSE ON THE LOT AND IS NOT TO BE RELIED UPON FOR CONSTRUCTION.

SCALE: 1"=40'



JUMPER DRIVE
60' PUBLIC R/W

ESTIMATED DRIVEWAY AREA = 1564.4 SQ.FT.±

STAKEOUT

NOT FOR RECORDATION, CONVEYANCES OR SALES

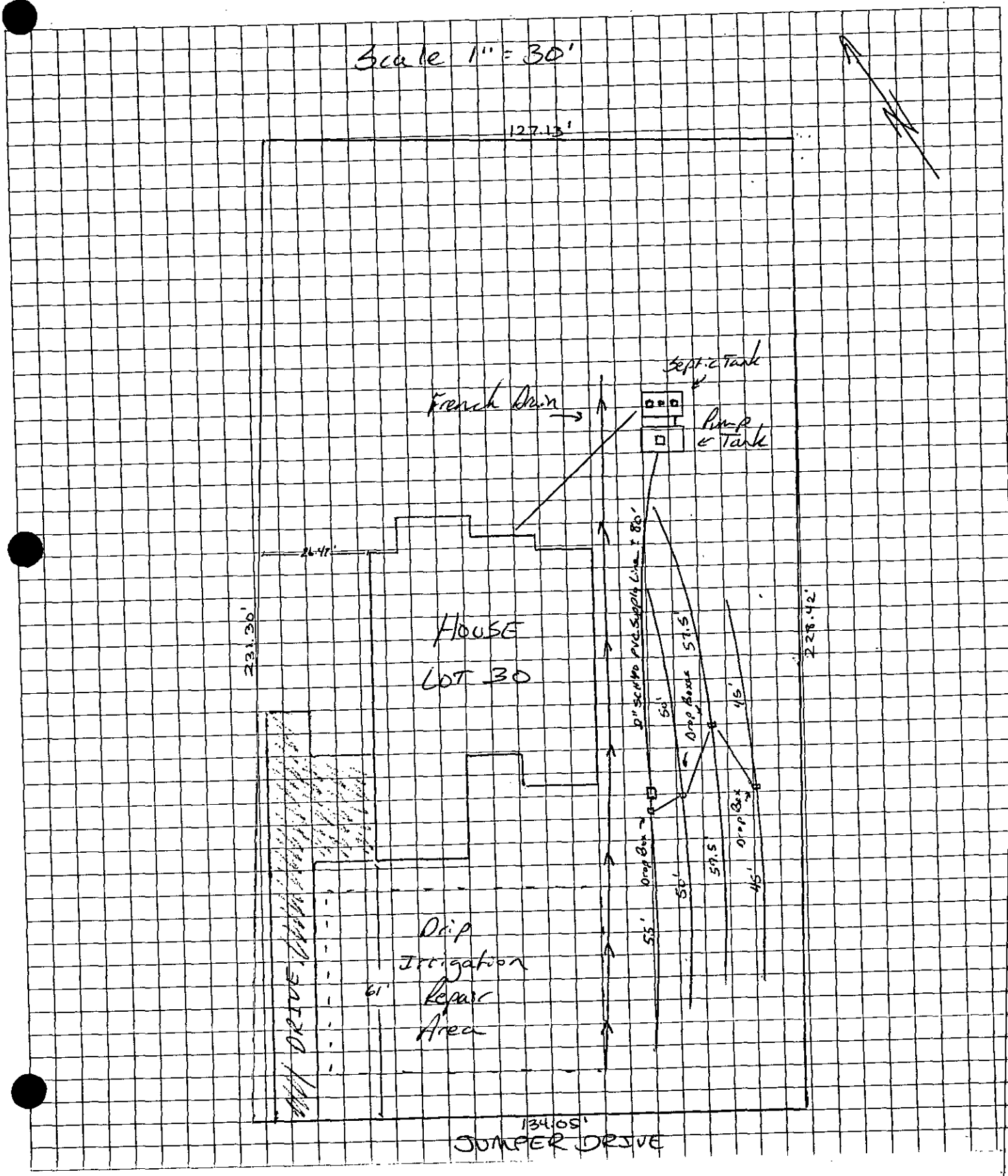
Subdivision THE MEADOWS OF MINT HILL, MAP 3 County MECKLENBURG
Address 11835 JUMPER DRIVE Owner RYAN HOMES
Plan SOMERSET Elevation B Drive (Left) SIDE (Right) (Courtyard) Deck

The Catena Group
410-B Millstone Drive
Hillsborough, NC 27278

Permit Number: 6236B

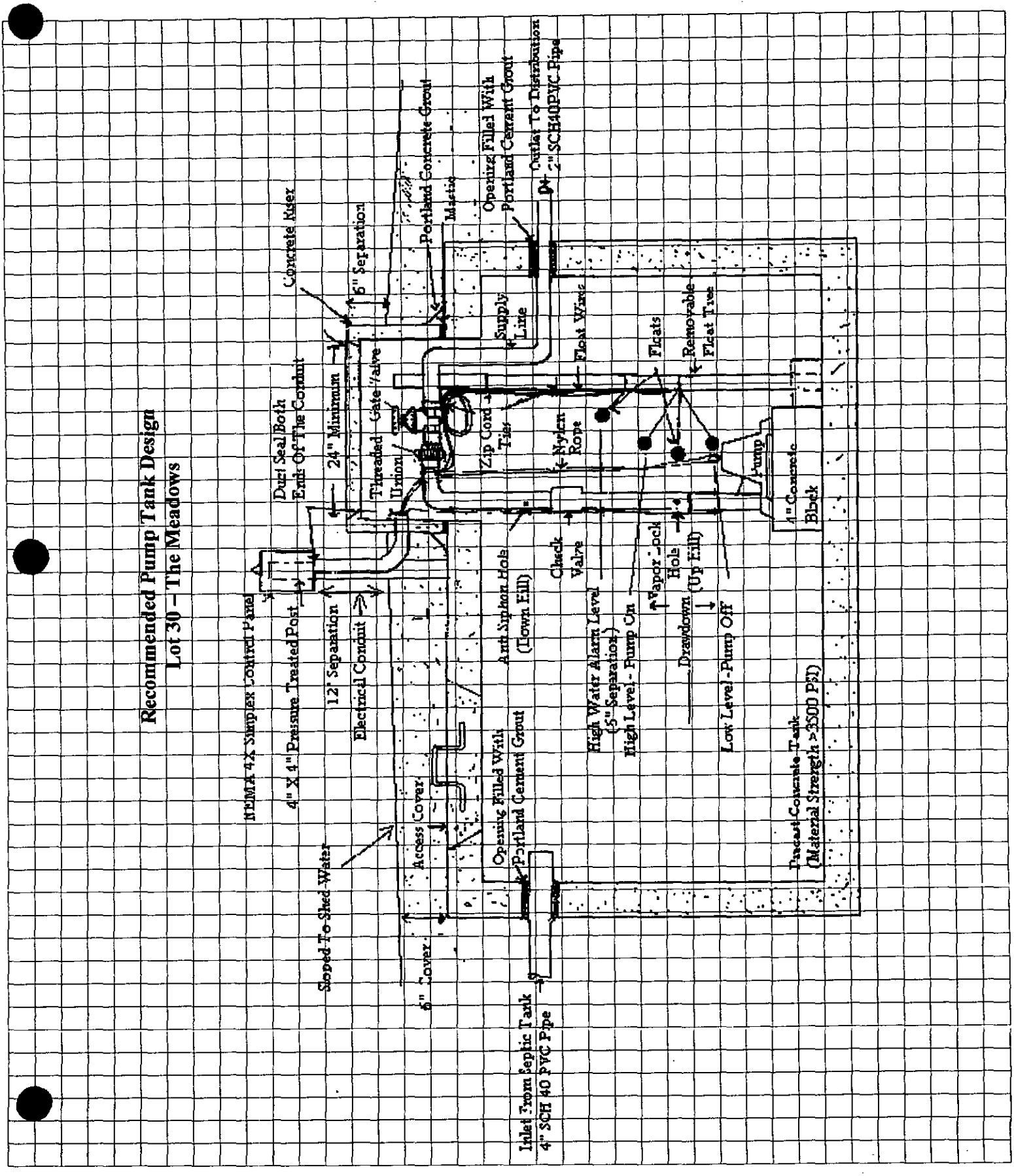
Location: Lot 30 - The Meadows

Date: December 15, 2005



The Catena Group
410-B Millstone Drive
Hillsborough, NC 27278

Permit Number: 6236B
Location: Lot 30 – The Meadows
Date: December 15, 2005



TOTAL P.01

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

Sheet: 1 OF 2
Property ID: 197-241-12 PO
Lot #: 30
File #: 62368
Code: 3

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: NVR, INC
Applicant: KIM STANLEY
Address: 10815 DAVID TAYLOR DRIVE, SUITE 100 CHARLOTTE, NC 28262
Date Evaluated: 12/12/05
Proposed Facility: 5 BR
Design Flow (.1949): 600 GPD
Property Size: 1
Location of Site: 11835 JUMPER DRIVE, MINT HILL, NC 28227
Property Recorded: YES
Water Supply: [X] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [X] Auger Boring [X] 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, 10	0-7	SBK/SCL	FR SS SP SEXP	21"	21"	NA	NA	U, NA
		7-21	ABK/ C	FI S P SEXP	10YR 7/1				
		21-48	PL/C	FI S P SEXP					
2	"	0-4	SBK/SCL	FR SS SP SEXP	>48"	>48"	"	"	PS, IV
		4-40	ABK/ C	FI S P SEXP					.25
		40-48	SBK/CL	FR S P SEXP					
3	"	0-18	SBK/CL	FR SS SP SEXP	"	"	"	"	PS, IV
		18-48	SBK/ABK C	FI S P SEXP					.25
4	"	0-14	SBK/SCL	FR SS SP SEXP	"	"	"	NA	PS, IV
		14-36	SBK/ABK C	FI S P SEXP					.25
		36-48	PL/C	FI S P SEXP					
5	"	0-4	SBK/SCL	FR SS SP SEXP	22"	>27"	"	"	U, NA
		4-22	SBK/ABK C	FI S P SEXP	10YR 7/2				
		22-27	ABK/ C	VFI VS VP EXP					

Description	Initial System	Repair System
Available Space (.1945)	U	U
System Type(s)		
Site LTAR	.25	.25

Other Factors (.1946): FRENCH DRAIN TO DIVERT SURFACE WATER
Site Classification (.1948): UNSUITABLE
Evaluated By: CHRIS SHERRILL, RS, LSS 12-15-05
Others Present: BILL MARLIN, LSS, LARRY THOMPSON

DEC-16-2005 17:22 MECKLENBURG CO GWS 704 336 8994 P.01/01

Sheet: 2 OF 2
FILE #: 5236B

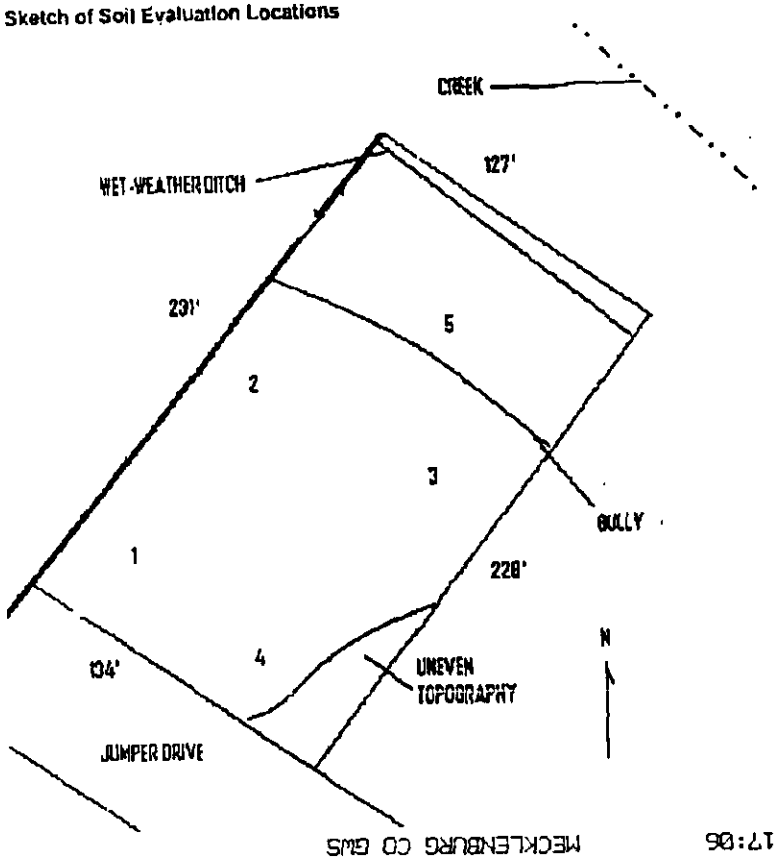
COMMENTS: 100% REPAIR REQUIRED

Landscape Position	Group	Texture	.1955 LTAR
R-Ridge	I	S-Sand	1.2 - 0.8
SS-Shoulder Slope		LS-Loamy Sand	
LS-Linear Slope			
FS-Food Slope	II	SL-Sandy Loam	0.8 - 0.6
NS-Nose Slope		L-Loam	
HS-Head Slope			
CC-Concave Slope	III	SI-Silt	0.6 - 0.3
CV-Convex Slope		SICL-Silty Clay Loam	
T-Terrace		CL-Clay Loam	
FP-Flood Plain		SCL-Sandy Clay Loam	
	IV	SC-Sandy Clay	0.4 - 0.1
		SIC-Silty Clay	
		C-Clay	

Structure
SG-Single Grain
M-Massive
CR-Crumb
GR-Granular
SBK-Subangular Blocky
ABK-Angular Blocky
PL-Platy
PR-Prismatic

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	

Sketch of Soil Evaluation Locations



MA1030
11-8-05

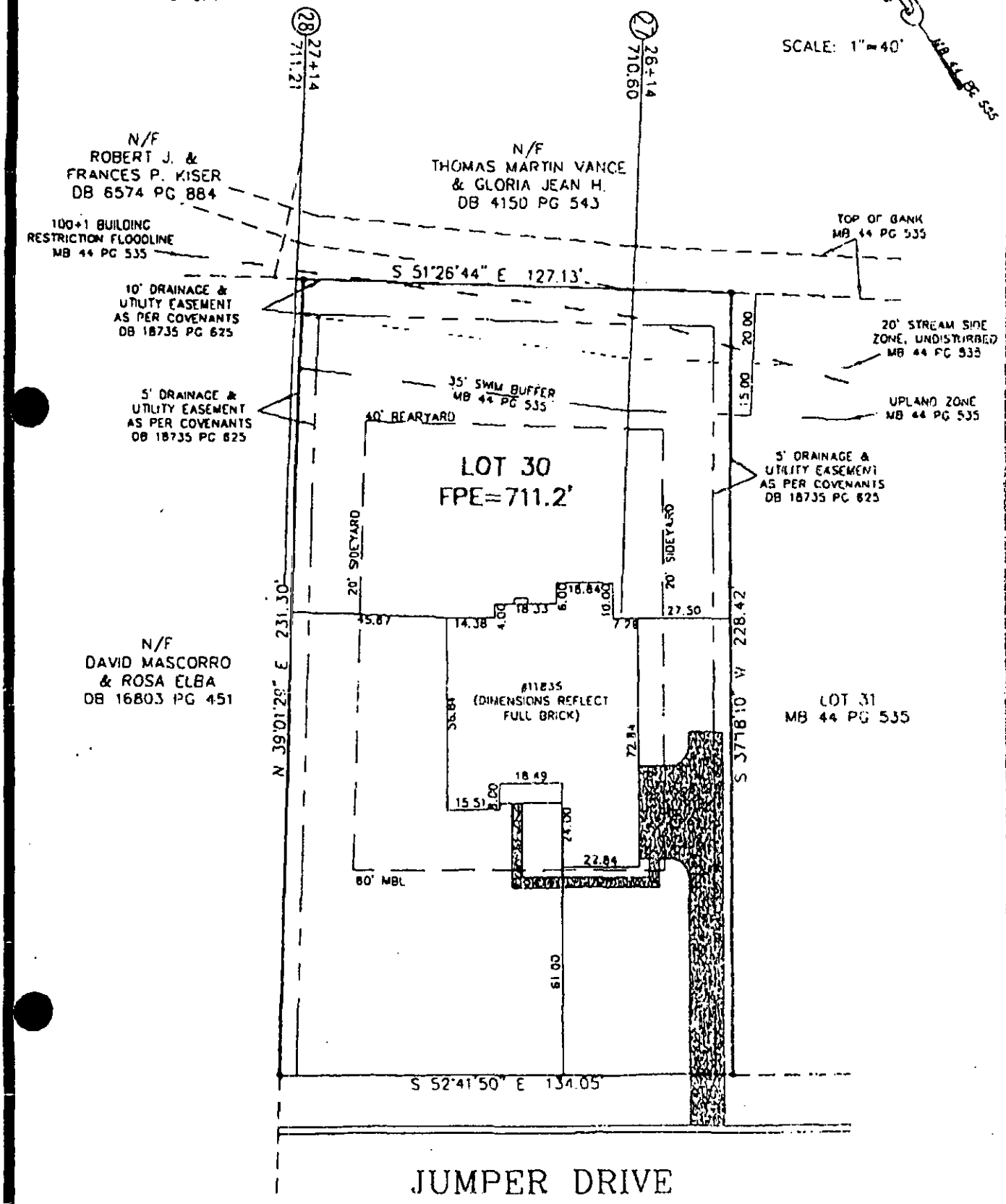
SITE DEVELOPMENT PLAN

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190

THIS SITE PLAN IS TO SHOW THE PROPOSED LOCATION OF THE HOUSE ON THE LOT AND IS NOT TO BE RELIED UPON FOR CONSTRUCTION.

SCALE: 1"=40'



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

Sheet: 1 OF 2
Property ID: 197-241-12 PC
Lot #: 30
File #: 6236B
Code: 3

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: NVR, INC
Address: 10815 DAVID TAYLOR DRIVE, SUITE 100 CHARLOTTE, NC 28262
Proposed Facility: 5 BR Design Flow (.1949): 600 GPD
Location of Site: 11835 JUMPER DRIVE, MINT HILL, NC 28227
Water Supply: [X] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [X] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

Applicant: KIM STANLEY
Date Evaluated: 12/12/05
Property Size: 1
Property Recorded: YES

PROFILE	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY 1941		OTHER PROFILE FACTORS				
			1941 Structure/ Texture	1941 Consistence Mineralogy	1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Saprq Class	1944 Restr Horiz	1944 Restr Type/ Class/ LTAR
1	LS, 10	0-7	SBK/SCL	FR SS SP SEXP	21"	21"	NA	NA	U, NA
		7-21	ABK/ C	FI S P SEXP	10YR 7/1				
		21-48	PL/C	FI S P SEXP					
2	"	0-4	SBK/SCL	FR SS SP SEXP	>48"	>48"	"	"	PS, IV
		4-40	ABK/ C	FI S P SEXP					.25
		40-48	SBK/CL	FR S P SEXP					
3	"	0-18	SBK/CL	FR SS SP SEXP	"	"	"	"	PS, IV
		18-48	SBK/ABK C	FI S P SEXP					.25
4	"	0-14	SBK/SCL	FR SS SP SEXP	"	"	"	NA	PS, IV
		14-36	SBK/ABK C	FI S P SEXP					.25
		36-48	PL/C	FI S P SEXP					
5	"	0-4	SBK/SCL	FR SS SP SEXP	22"	>27"	"	"	U, NA
		4-22	SBK/ABK C	FI S P SEXP	10YR 7/2				
		22-27	ABK/ C	VFI VS VP EXP					

Description	Initial System	Repair System
Available Space (.1945)	U	U
System Type(s)		
Site LTAR	.25	.25

Other Factors (.1946): FRENCH DRAIN TO DIVERT SURFACE WATER
Site Classification (.1948): UNSUITABLE
Evaluated By: CHRIS SHERRILL, RS, LSS
Others Present: BILL MARLIN, LSS, LARRY THOMPSON

12-16

DEC-16-2005 17:06 MECKLENBURG CO EHS 704 336 8934

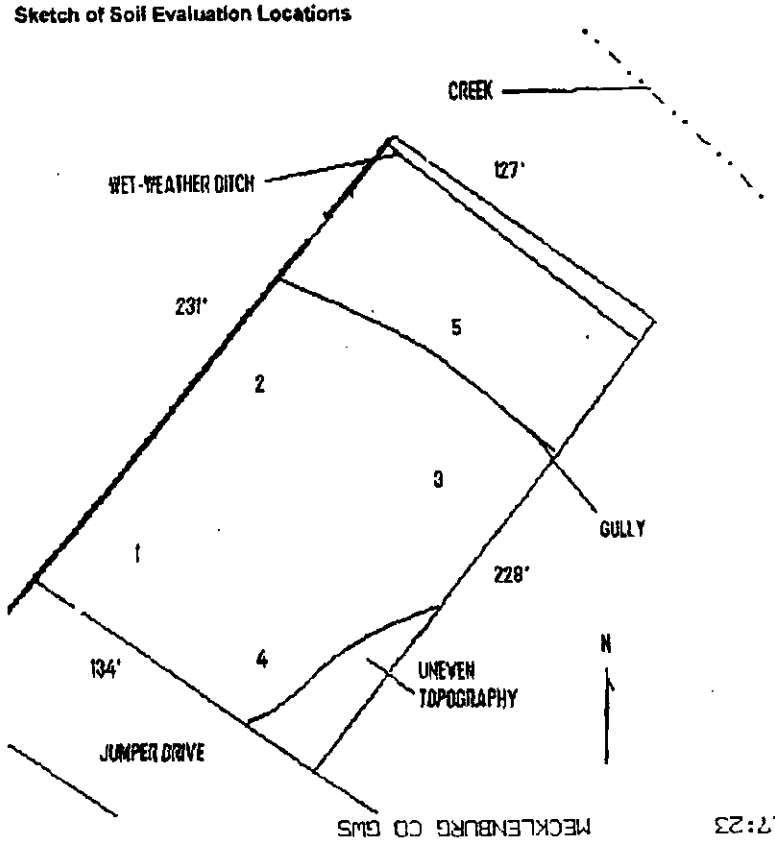
Sheet: 2 OF 2
FILE #: 62368

COMMENTS: 100% REPAIR REQUIRED

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		CL-Clay Loam		
FP-Flood Plain		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	

Sketch of Soil Evaluation Locations



Division of Environmental Health
On-site Wastewater Section

Property ID: 197-241-12
Lot #: 30
File #: 6236B
Code: 2

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: NVR, INC
Applicant: KIM STANLEY
Address: 10815 DAVID TAYLOR DRIVE, SUITE 100 CHARLOTTE, NC 28262
Date Evaluated: 12/8/05
Proposed Facility: 5 BR
Design Flow (.1949): 600 GPD
Property Size: 1
Location of Site: 11835 JUMPER DR MINT HILL NC 28227
Property Recorded: YES
Water Supply: [X] Public [ ] Individual [ ] 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, 10	0-10	SBK SCL	FR SS SP SEXP	>34"	34"	NA	NA	PS, IV
		10-26	SBK C	FI S P SEXP					.3
		26-34	SBK CL	FR S P SEXP					
2	"	0-15	SBK SCL	FR SS SP SEXP	30"	>48"	"	"	PS, IV
		15-48	SBK/ABK C	FI S P SEXP	2.5Y 7/1				.075
3	LS, 6	0-3	SBK CL	FR SS SP SEXP	24"	"	"	"	PS, IV
		3-48	SBK/ABK C	FI S P SEXP	2.5Y 7/1				.075
4	"	0-14	SBK SCL	FR SS SP SEXP	43"	"	"	"	PS, IV
		14-48	SBK/ABK C	FI S P SEXP	2.5Y 7/2				.25
5	"	0-7	SBK SCL	FR SS SP SEXP	28"	>42"	"	"	PS, IV
		7-42	SBK/ABK C	FI S P SEXP	2.5Y 7/1				.075

Description	Initial System	Repair System
Available Space (.1945)	U	U
System Type(s)		
Site LTAR	.075	NA

Other Factors (.1946): BACKHOE PITS REQUIRED FOR FURTHER EVALUA
Site Classification (.1948): UNSUITABLE
Evaluated By: CHRIS SHERRILL, RS, LSS 12/8/05
Others Present: NONE

TOTAL P.01

Project No. 159834

FILE COPY

FILED FOR REGISTRATION	DOC. # 910539
DATE 12/14/05	TIME 9:55 am
BOOK 19766	PAGE 986
STAMPS	REC FEE 20.00

JUDITH A. GIBSON, REGISTER OF DEEDS
MECKLENBURG COUNTY, NC

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

WASTEWATER TREATMENT AND DISPOSAL SYSTEM DESIGN AGREEMENT: 15A NCAC 18A .1948 AND ANY OF THE FOLLOWING RULES: .1956; .1957(a); .1957(b); or .1957(c); OR .1969

MA1030

FILE # 62368

PARCEL # 197-241-20

The undersigned, NUR, INC DBA Ryan Homes, owner of property located at 11835 Jumper Dr, (the "site") and described in an instrument recorded in Book 44 at Page 535, Mecklenburg Public Registry, hereby acknowledges that the undersigned applied to the Mecklenburg County Health Department (the 'Department") for a permit to install a septic tank sewage disposal system on the site; that the Department evaluated the site for suitability for such a system in accordance with the regulations promulgated by the North Carolina Commission for Health Services as 15A NCAC 18A .1900 et seq.; that the Department originally classified the site as "unsuitable" pursuant to the standards set forth in the regulations; that the undersigned requested that the Department reclassify the site as "provisionally suitable" in light of the particular septic tank system proposed by the undersigned; that the Department considered various studies, data, and other information which indicate to the Department that the septic tank system proposed by the undersigned is allowed by the rules; and that the Department therefore reclassified the site as "provisionally suitable" and issued an appropriate permit for such proposed septic tank system.

The undersigned further acknowledges that the proper design, construction, operation and maintenance of such septic tank system is the responsibility of the designer, owner, developer, installer, or user of the system, as applicable, and that neither the Department nor its officials, employees, or agents warrant or guarantee that the said system installed pursuant to the permit issued by the Department will function in a satisfactory manner for any given period of time or that the Department, its officials, employees or agents assume any liability for any damages of any kind which are caused, or which may be caused, by a malfunction of such system.

The undersigned further acknowledges that the following conditions will apply to the site:

This instrument was prepared by: NUR, INC DBA Ryan Homes

Mail after recording to: 10815 David Taylor Dr
Charlotte, NC 28262

File
62360
10/20/06

MA1030

COPY

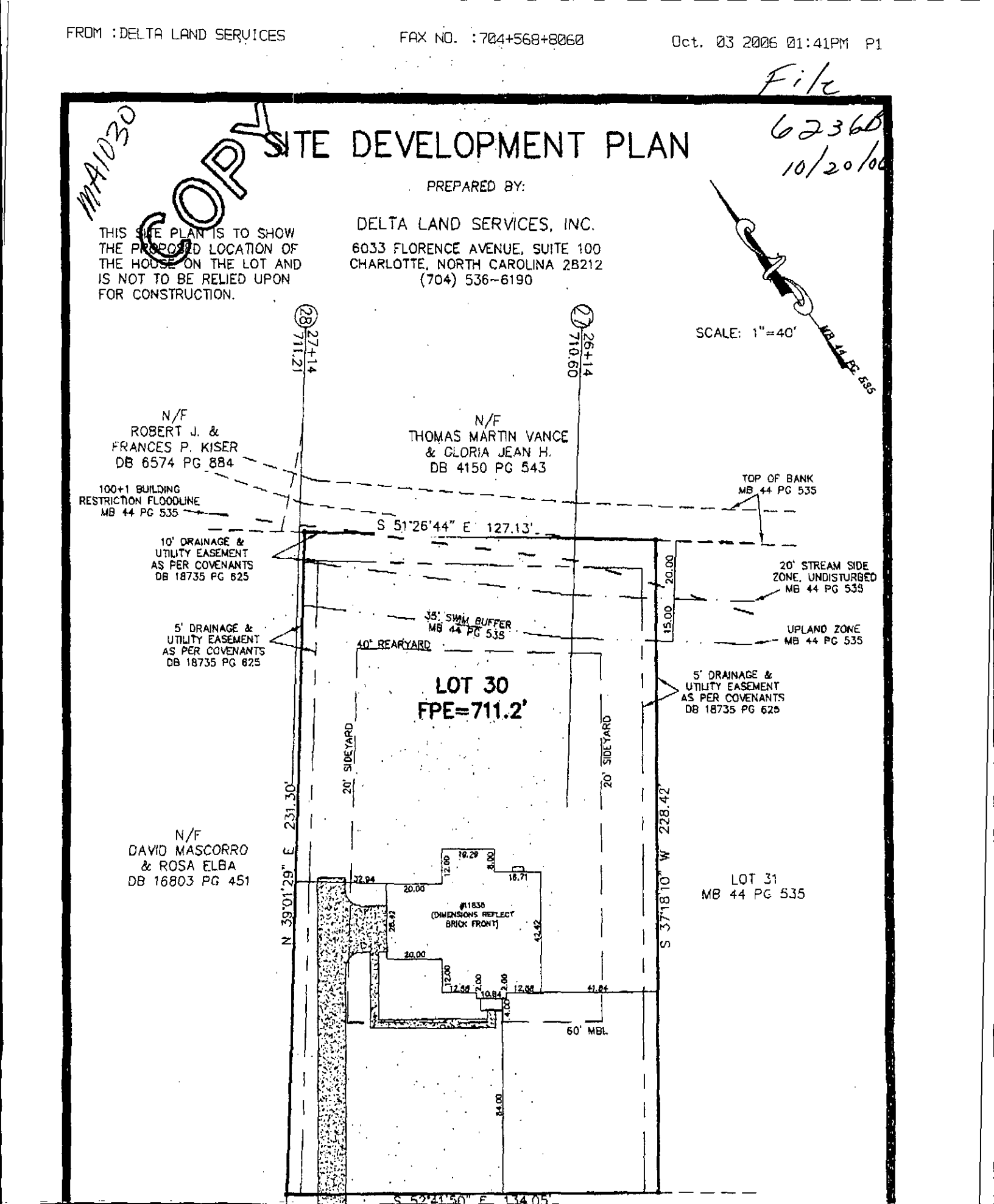
SITE DEVELOPMENT PLAN

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190

THIS SITE PLAN IS TO SHOW THE PROPOSED LOCATION OF THE HOUSE ON THE LOT AND IS NOT TO BE RELIED UPON FOR CONSTRUCTION.

SCALE: 1"=40'





JUMPER DRIVE

60' PUBLIC R/W

ESTIMATED DRIVEWAY
AREA = 1512.05 SQ.FT.±

STAKEOUT ☐

NOT FOR RECORDATION, CONVEYANCES OR SALES

Subdivision THE MEADOWS OF MINT HILL, MAP 3 County MECKLENBURG
Address 11835 JUMPER DRIVE Owner RYAN HOMES
Lot 30 Block ___ Plan DORCHESTER Elevation A Drive (Left) SIDE (Right) ___ (Courtyard) ___ Deck ___
Patio ___ Fireplace REAR Garage (1 Car) ___ (2 Car) X (3 Car) ___ Brick FRONT Basement ___ Curtain Wall X
Crawl ___ Slab ___ Other MORNING ROOM

REVISED: MODEL CHANGE DWN: JDA CKD: MMB DATE: 09/ 29/ 06

MEADOWS\MM-0030.DWG - JDA

COPY

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	12/12/05	**Amount:**	100.00
Receipt #:	38786	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	CRAIGGY		

Account Information

Account #: X33575
Contractor: NVR INC (EAST)
Attn:
Address: 10815 DAVID TAYLOR DR 100
Address:
City/State/Zip: CHARLOTTE, NC 28262

Item	Description	Permit#	Quantity	Unit Price	Total Price
0702	Optional Site Evaluations 11835 Jumper Dr./file 6236B		1	100.00	100.00

Outstanding Balances

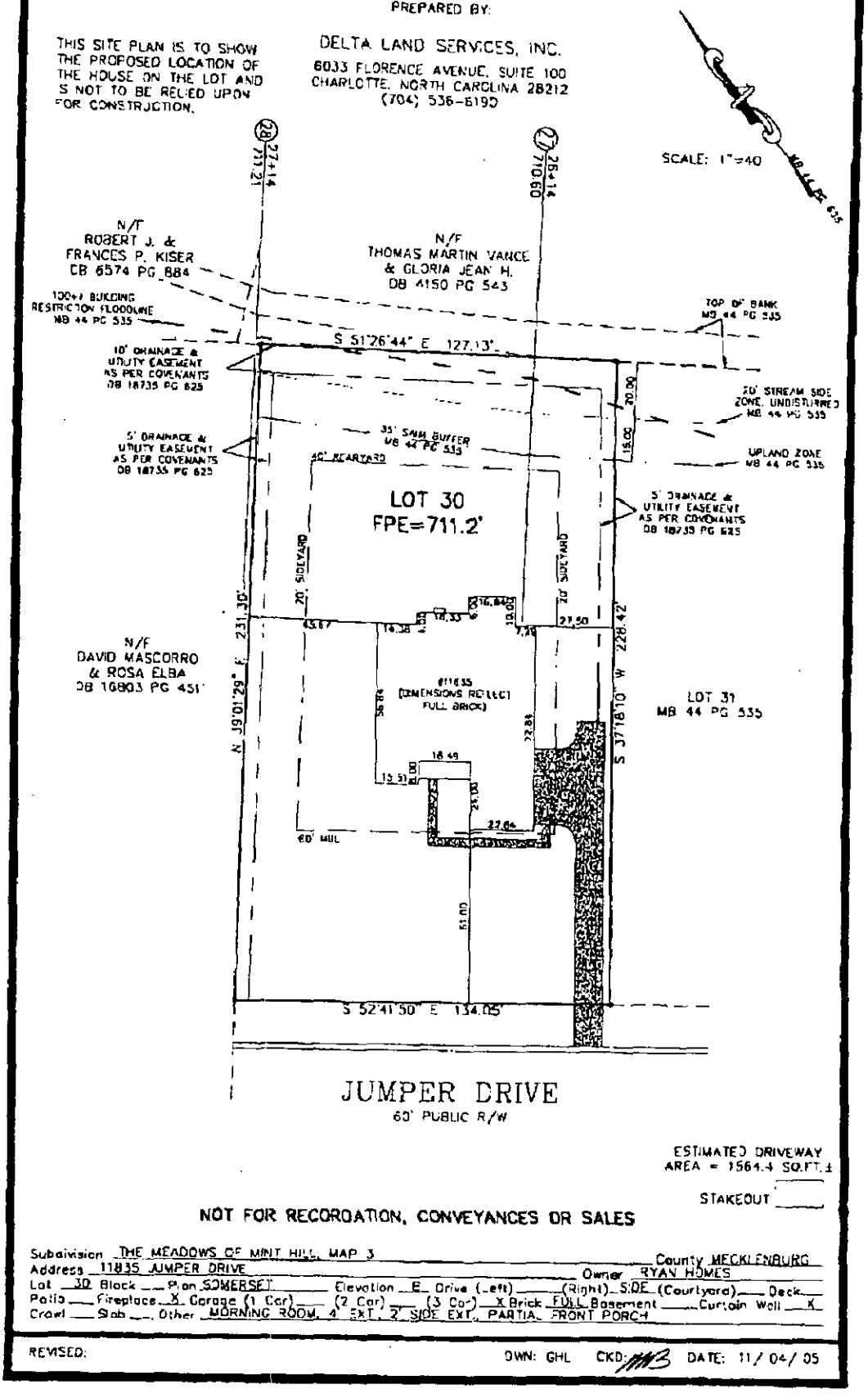
Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
11,120.27	9,023.87				

SITE DEVELOPMENT PLAN

PREPARED BY:

DELTA LAND SERVICES, INC.
6033 FLORENCE AVENUE, SUITE 100
CHARLOTTE, NORTH CAROLINA 28212
(704) 536-6190

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ESTIMATED DRIVEWAY AREA = 1564.4 SQ.FT.±

STAKEOUT ____

NOT FOR RECORDATION, CONVEYANCES OR SALES

Subdivision THE MEADOWS OF MINT HILL, MAP 3 County MECKLENBURG
Address 11835 JUMPER DRIVE Owner RYAN HOMES
Lot 30 Block ___ Plan SOMERSET Elevation E Drive (Left) ___ (Right) S.SIDE (Courtyard) ___ Deck ___
Patio ___ Fireplace X Garage (1 Car) ___ (2 Car) ___ (3 Car) X Brick FULL Basement ___ Curtain Wall X
Crawl ___ Slab ___ Other MORNING ROOM, 4' EXT., 2' SIDE EXT., PARTIAL FRONT PORCH

REVISED: DWN: GHL CKD: MB DATE: 11/04/05

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	12/01/05	**Amount:**	200.00
Receipt #:	38414	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	WALKEVA		

Account Information

Account #: X33575
Contractor: NVR INC (EAST)
Attn:
Address: 10815 DAVID TAYLOR DR 100
Address:
City/State/Zip: CHARLOTTE, NC 28262

Item	Description	Permit#	Quantity	Unit Price	Total Price
0701	Improvment Permit App-Residen 11835 JUMPER DRIVE LOT #30		1	200.00	200.00

Outstanding Balances

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
2,400.00	16,651.99	2,639.61			

File 62360 10/20/06

MA1030

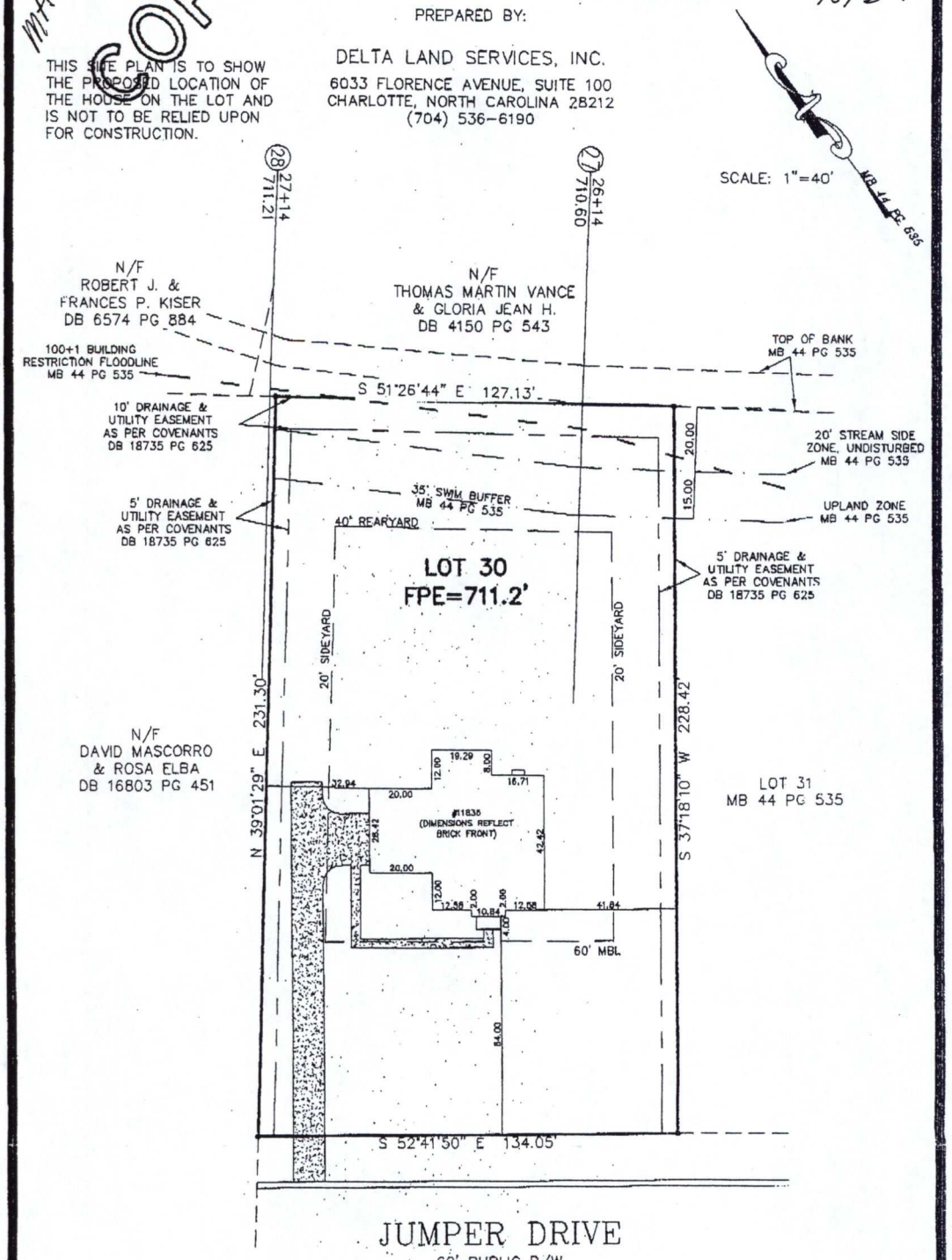
COPY

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STAKEOUT ☐

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Address 11835 JUMPER DRIVE Owner RYAN HOMES
Lot 30 Block ___ Plan DORCHESTER Elevation A Drive (Left) SIDE (Right) ___ (Courtyard) ___ Deck ___
Patio ___ Fireplace REAR Garage (1 Car) ___ (2 Car) X (3 Car) ___ Brick FRONT Basement ___ Curtain Wall X
Crawl ___ Slab ___ Other MORNING ROOM

REVISED: MODEL CHANGE DWN: JDA CKD: MM DATE: 09/29/06

MEADOWS\MM-0030.DWG - JDA