IREDELL COUNTY HEATLH DEPARTMENT

PAGE 2: *SITE PLAN WORKSHEET*

SEE THE SAMPLE SITE PLAN BELOW. INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!

Place an (X) beside each item as you complete the site plan:

- X Property Line measurements are clearly identified...
- X All proposed structures are indicated...
  SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site
- X Front and side setbacks from property line...
- X Preferred driveway location and configuration, preferred well location...
- X Area you prefer your septic system to be placed...
- X North arrow, or other sufficient indicator of direction...

Circle N/A on the following if appropriate:

- X Location of septic systems and wells within 100' of your property... N/A
- X Location of easements and rights of ways on your property... N/A
- X Location of any designated wetlands on the property... N/A

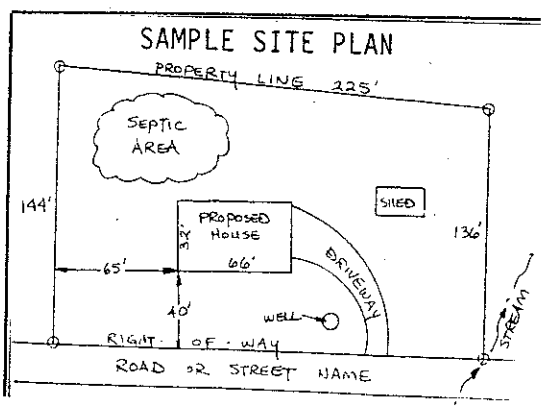
Signature: Samuel A Tollison

Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

3-13-08
DATE

USE THIS SPACE TO DRAW YOUR SITE PLAN

See Attached



ROLLANS *Soil & Environmental Services, Inc.*

470 N Broad Street, Suite D, Mooresville, NC 28115 Phone: (704) 658-1723 Fax: (704) 658-1724

Ashley Rollans, NC Licensed Soil Scientist
Mobile: (704) 746-5046
Email: rollans.ashley@yahoo.com

Brady Freeman, Registered Sanitarian
Mobile: (704) 746-6497
Email: bfree209@yahoo.com

Attached is a proposed design for an Accepted (25% reduction) Septic System with Gravity distribution for a 5 bedroom single family residence on Lot #148 Anniston Subdivision, Iredell County, North Carolina.

Contents:

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Information for the Installer	1
Design Information	
Design Specifications	2-3
Layout Specifications	4
Site Plan/System Plan	5
Calculations	6
Profile Descriptions	7

March 10, 2008
Project #: 01-1005
Design By: Rollans Soil and Environmental Services

Gravity 25% Reduction
FOR WASTEWATER TREATMENT

Owner: Anniston LLC

Address: 17824 Statesville Rd STE 112
Conover, NC 28031

Phone:
County: Iredell
Location: ANNISTON LOT 148

Source of Wastewater Flow: 5 Bedroom Single Family Residence
Estimated Gallons Per Day Flow: 600
System Flow: NA

Design Specifications

Drainfield Size: 500
Loading Rate (gpd/ft.^{2}): 0.3
Depth of Gravel in Trench: NA (25% reduction)
Gravel Size: NA (25% reduction)
Trench Depth: 36 in.
Trench Width: 36 in.
Septic Tank Size: 1500
Pump Tank Size: N/A

Estimated Supply Line Length: 31
Supply Line Diameter: 3 in. SCH 40 PVC
Supply Line Volume: 5.39
Dosing Volume: NA
Supply Manifold: DROP BOX
Supply Manifold Length: NA
Supply Manifold Volume: N/A

Recommended Float Controls: NA

Recommended Control Panel: NA

Pressure Head: NA
Friction Head: NA
Elevation Head: NA
Total Dynamic Head: NA

Threaded Union: NA
Gate Valves: NA
NA
Check Valves: NA
Anti-Siphon Hole: NA
Additional Comments: Soil suitability was performed by Rollans Soil & Environmental Services.

ANNISTON LOT 148

DESIGN FLOW (gpd):	600
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	1500
TOTAL LATERAL LENGTH:	500
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	500
SUPPLY LINE LENGTH:	31
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	NA
DOSING VOLUME:	NA
PUMP TANK DRAW DOWN*:	NA
SEPTIC TANK SIZE:	1500
PUMP TANK SIZE:	N/A

ANNISTON LOT #148

Project #: 01-1005

LAYOUT FOR 5 BEDROOM HOME

March 10, 2008

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		N/A			100.00		
TANK			N/A	N/A			
HOUSE			N/A	N/A			
INSTR. 1				N/A			
1	RED			N/A	N/A	79	79
2	***ORANGE***			*N/A*	*N/A*	***120***	***100***
3	***BLUE***			*N/A*	*N/A*	***149***	***100***
4	***PINK***			*N/A*	*N/A*	***156***	***100***
5	***RED***			*N/A*	*N/A*	***161***	***100***
6	ORANGE			N/A	N/A	61	60
7	***ORANGE***			*N/A*	*N/A*	***101***	***100***
8	BLUE			N/A	N/A	169	169
9	PINK			N/A	N/A	83	83
					Total	**1079**	**891**

* *System*	LINE LENGTH *500*	LTAR GPD/FT² *0.30*	SYSTEM TYPE *ACCEPT.*	SOIL LTAR GPD/FT² *0.30*	TRENCH SYSTEM *25% RED.*	DISTRIBUTION **GRAVITY**
Repair	391	0.30	*MOD.*	0.30	PPBPS	**DISTRIBUTION** LOW PRESSURE

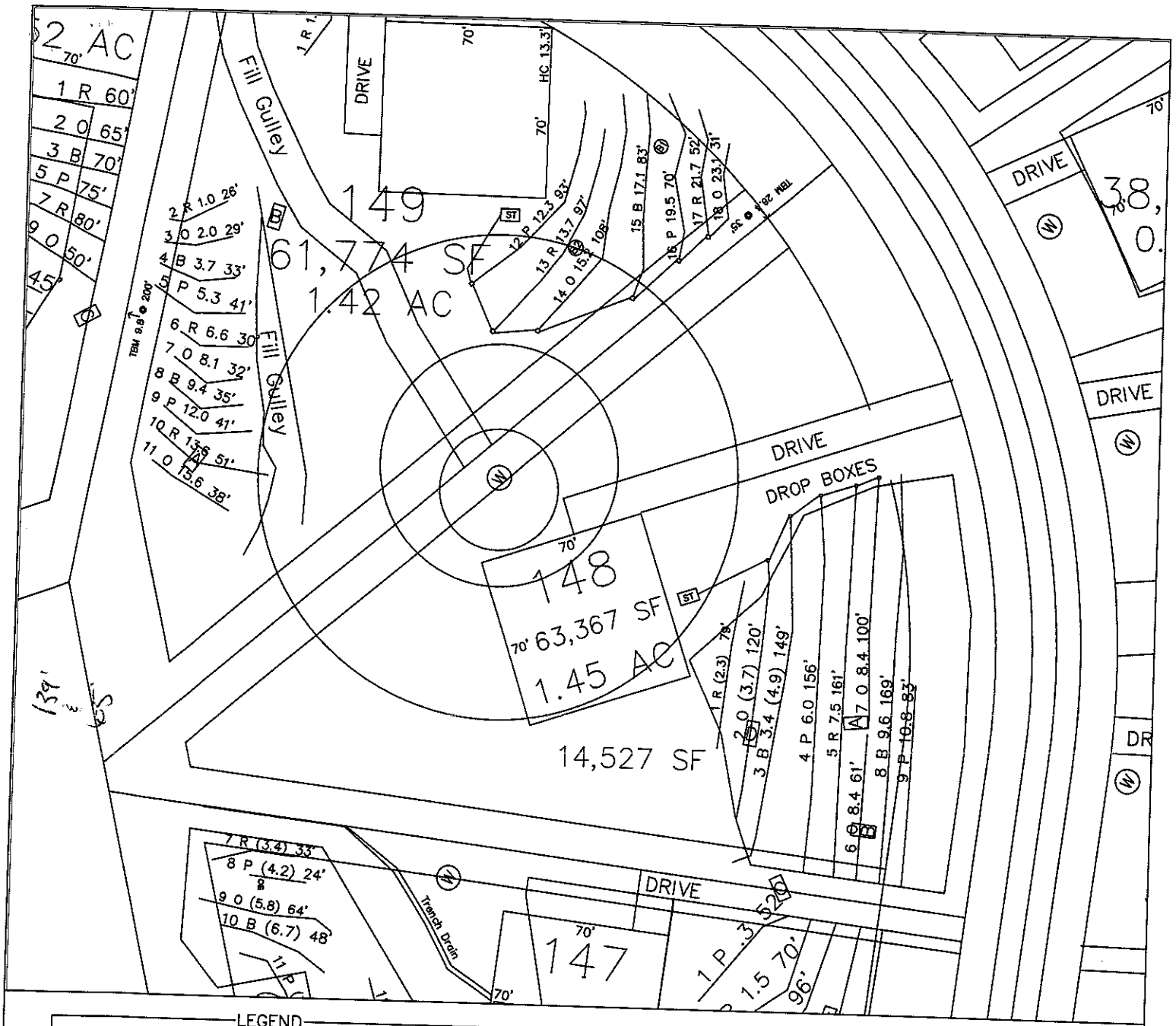
Notes:

** TBM NOT REQUIRED

**All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings



LEGEND

- Areas contain soils with 24 inches or more of useable material and have potential for conventional, modified conventional and low-pressure pipe (lpp) septic systems.
- House Footprint
- System lines.
- Repair lines.
- Temporary Bench Mark (TBM)
- Well Location.
- (25) Pit Location.

GRAPHIC SCALE
1" = 60'

60 0 60 120

FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE FINAL APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND COMPLEX TOPOGRAPHIC FEATURES. THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS.

PLEASE REFER TO ATTACHED SOIL REPORT FOR ADDITIONAL SITE SPECIFIC INFORMATION

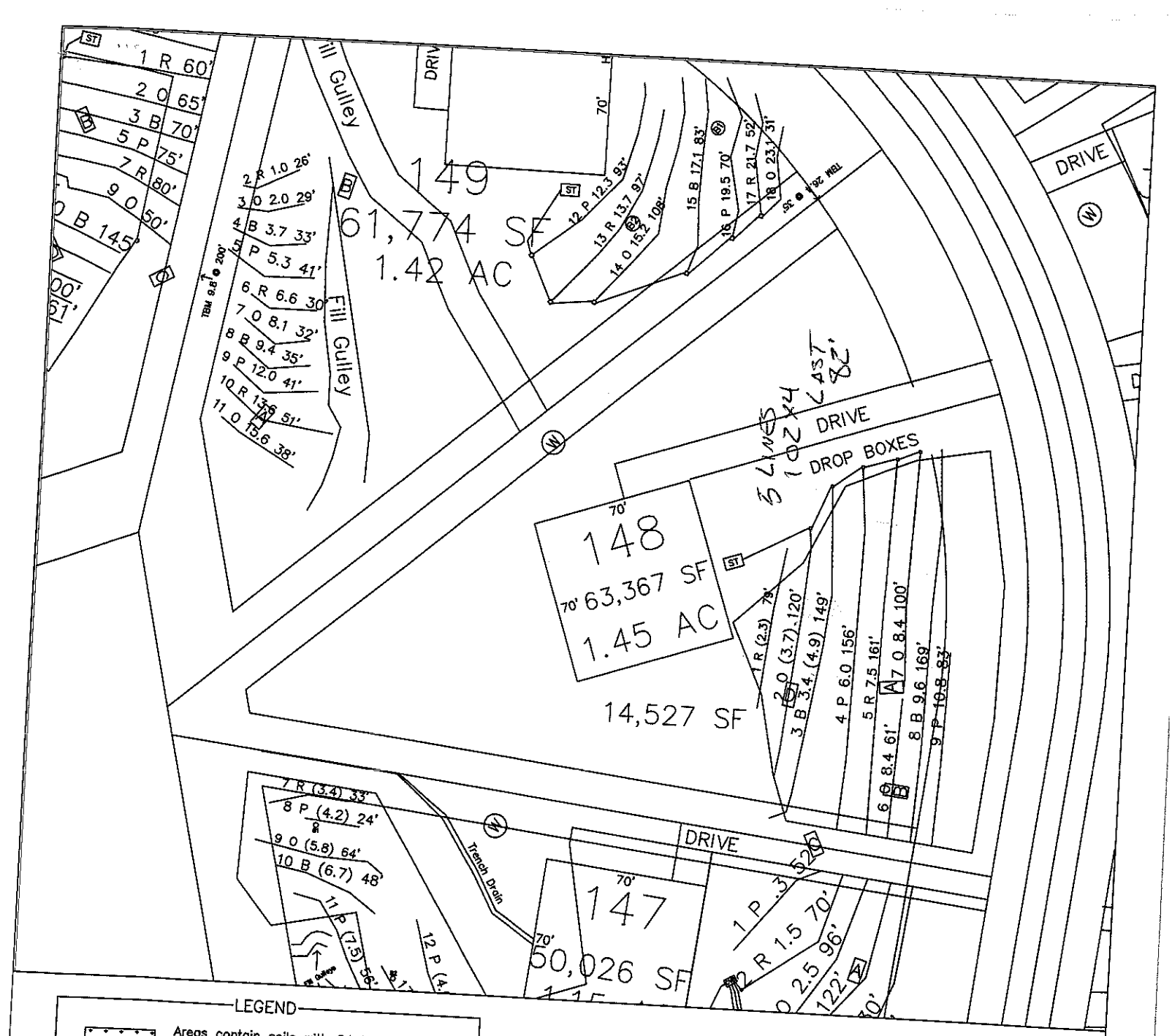
ROLLANS SOIL & ENVIRONMENTAL SERVICES
2120 GRAHAM ROAD
MOUNT ULLA, NC 28125
PHONE/FAX: (704) 278 - 0989
ASHLEY ROLLANS, NC LICENSED SOIL SCIENTIST
MOBILE: (704) 746 - 5046
EMAIL: ROLLANSFORTCJ@AOL.COM

MAP TITLE: SITE PLAN & DRAINFIELD AREAS

PROJECT NAME: ANNISTON, LLC. / ANNISTON PHASE II

LOCATION/DATE: SHEARER CHAPEL ROAD, IREDELL COUNTY, NORTH CAROLINA, JULY 2006

JOB # : 01-1005
FILE: C:\JOBS\01-1005
PROJECT MGR.: S.A.R.
FIELD WORK: S.A.R.
DRAWN BY: S.A.R.



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CALCULATIONS

Location ANNISTON

Project Number 01-1005

Lot No: LOT 148

No. of Bedrooms 5

Design Flow 600 $^{gal}/_{day}$

LTAR 0.30 $^{gal}/_{ft^2\ day}$

25% RED.? (YES OR NO) YES

Supply Line Length 31 ft.

Supply Line Volume 5.394 gal.

Required Feet of Line 500 ft.
Amount of Line from Layout 500 ft.

Gallons per Minute NA $^{gal}/_{min}$

Required Septic Tank Capacity 1500 gal.
Minimum Standard Tank Size 1500 gal.

Lateral Line Volume 326.5 gal.

Dosing Volume NA gal.

Note: Dosing Volume based on70% of lateral line volume

Tank Draw Down NA *Generic Draw Down of 21 gal.per in.*

Pump Run Time NA minutes

Elevation Head NA ft.
Pressure Head NA ft.
Friction Factor NA ft./100 ft. *(From the interpolater.)*
Friction Head NA ft.

Total Dynamic Head (+15%) NA ft.

FRICTION FACTOR
INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42