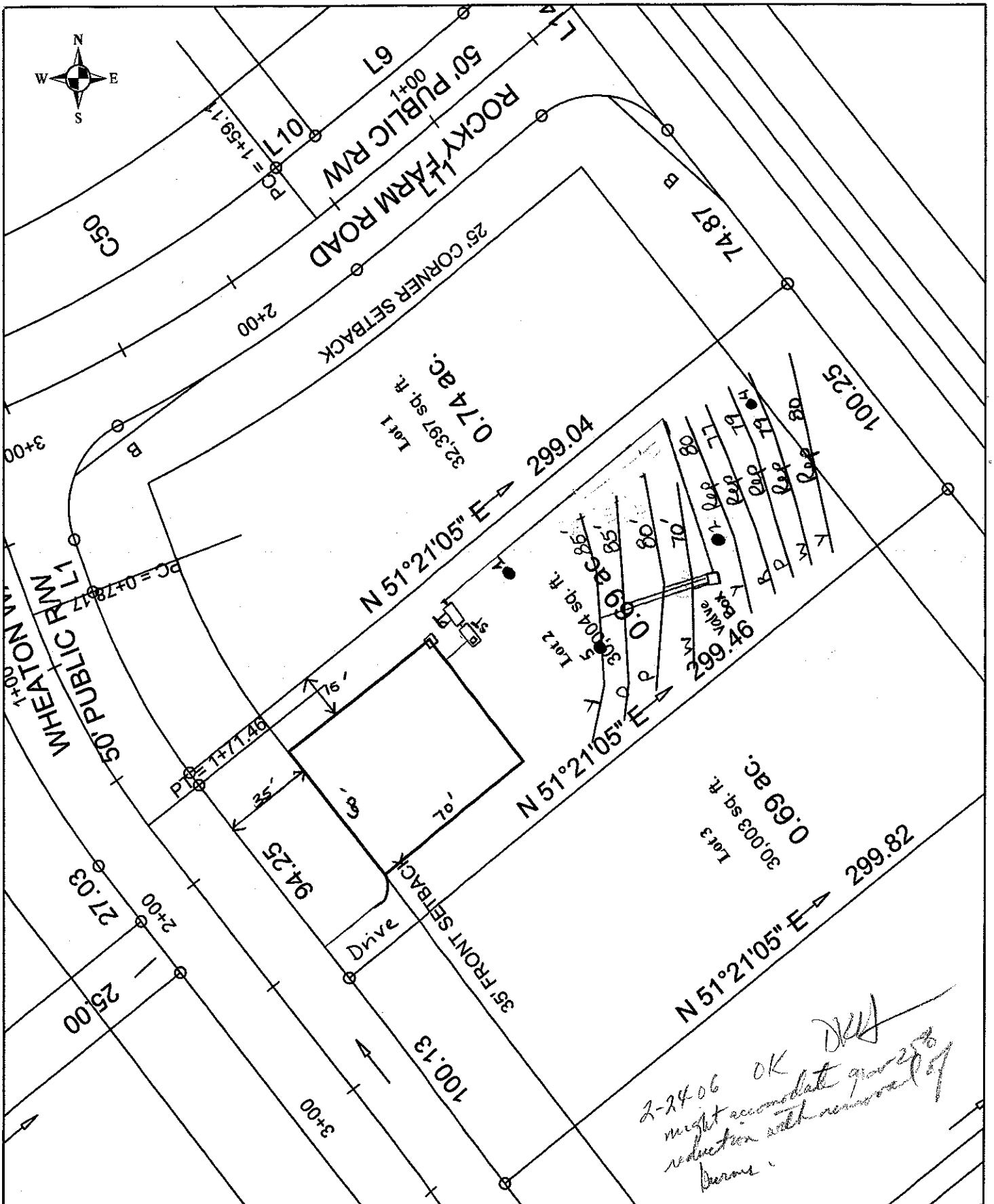


Scale: 1 inch equals 50 feet	S&ME	Rocky Ridge - Lot 2	FIGURE
Drawn by: JBP	ENVIRONMENTAL SERVICES • ENGINEERING • TESTING	Scaled, Detailed Site Plan	1
Reviewed by: PGP		Iredell County, NC	
Date: January, 2006		S&ME Project #1588-05-081	

Design Specifications for Lot 2 Rock Ridge Point, Iredell, North Carolina

Daily Design Flow	480	gals
Number of Bedrooms	4	bedrooms
Basement or Crawspace	Craw Space	
Dellinger Septic Tank Size	1500	gals. Effluent Poly Lock PL68 Filter or equal.
Dellinger Pump Tank Size	1500	gals
Sim/Tech Effluent Filter on Pump Tank	Yes	Connection inside pump tank vault and on supply line.
Primary System Loading Rate (LTAR)	0.25	gpd/ft^2 LTAR including Soils Evaluations were determined by Iredell County. Soils Evaluations and LTAR were not Conducted by Septic Environmental Solutions, Inc.
Number of Lines	4	Total LP PPBPS, See Scaled Dwg.
Primary System	340	ft.
Trench Width	2	ft
Trench Spacing	8	ft
Trench Maximum Depth	36	inches
Pump required	Yes	
Distribution Device	Yes	Gate Valve Box with LPP Panel Distribution
Maintenance Agreement Required	Yes	Contracted by Septic Environmental Solutions, Inc.
Length and Diameter of Supply Line	50	2" SCH 40 PVC 1 1/4" SCH 40 PVC
Number of T&J Panels	76	Total panels for primary system
Flow Rate through System	38	gpm– use 5/32" holes with 3ft head
Elevation Head	3.84	ft.
Pressure Head	3	ft.
Friction Head	2.16	ft.
20% Contingency	2	ft.
Total Head	10.8	ft.
Pump Requirements	38	gpm. with 11-ft of Head; Use Goulds WE03L Pump or Equivelent with Compatible Electrical
Dosing Volume	274	gallon 1.8 does/day@design flow*
Pump run time per dose, approximate	7.2	min
Check Valve	Yes	
Siphon Break Hole	Yes	
Repair System Loading Rate	0.25	gpd/ft2
Repair System	Yes	LP PPBPS, See attached dwg.
Total foot of Repair	340	ft

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Before placement of cap block, one panel on each line near the center of the field should be observed filling to make certain that it does not overflow top chamber into air chambers of panel. If overflow occures, reduce floats by 25 gallons and reset until no overflow is observed.

System Requirements										
Number of bedrooms	4						Tax #:	4636233131.02		
Craw Space/Basement	Craw Space						Lot	2		
Daily Design Flow	480	gpd					Address:	Iredell County		
LTAR	0.25	gpd/ft.^2					Consultant:	Septic Environmental Solutions Inc.		
Linear footage	640.00	ft. (Conventional)					Phone:	704-502-5588, Fax 704-684-1469		
Linear footage	320.00	ft. (50% Reduction)								
Trench Maximum Depth	36	inches								

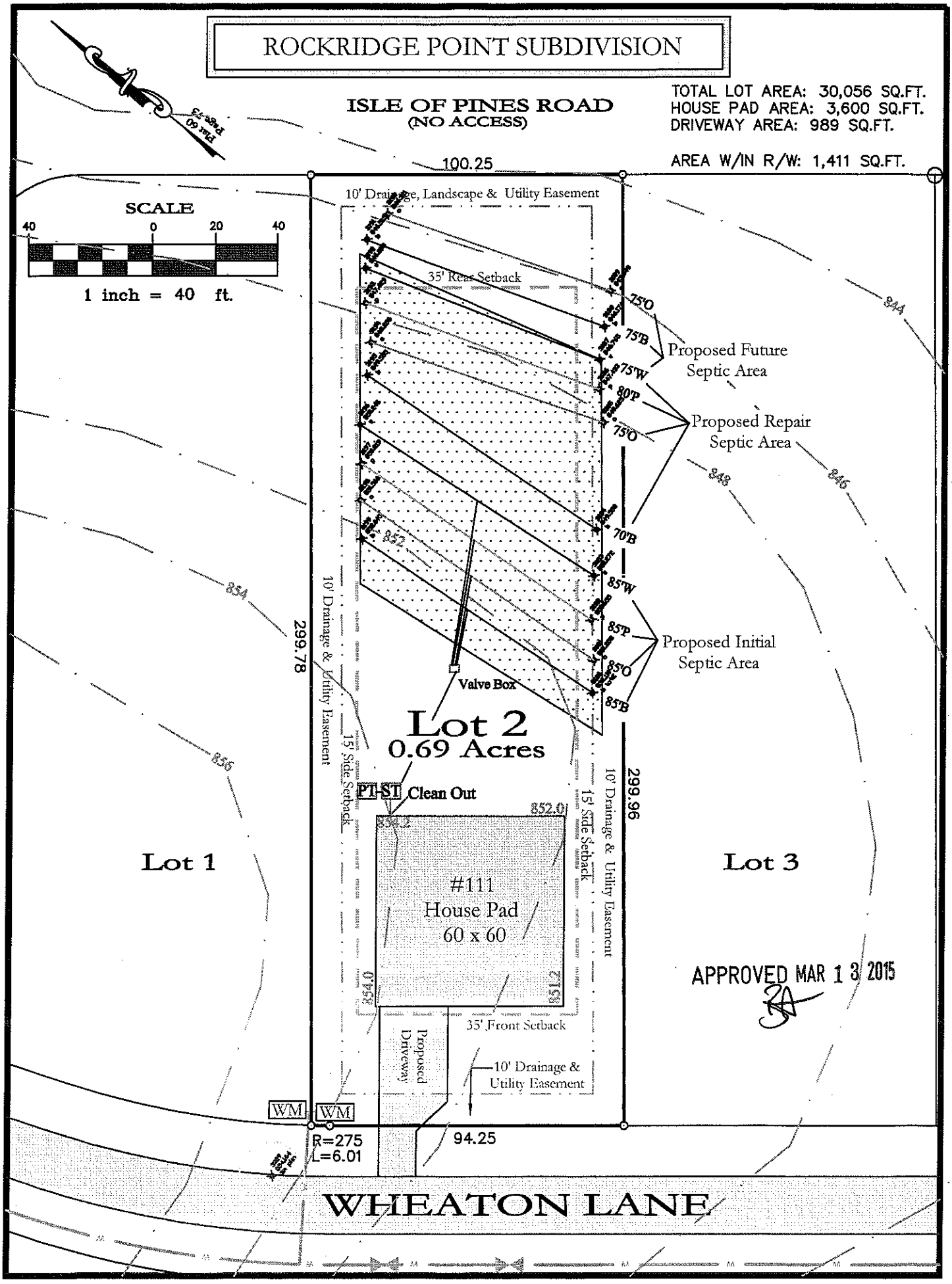
Laterals	Length (ft)	# Panels	Calculated
Line # 1	85	19	19
Line # 2	85	19	19
Line # 3	85	19	19
Line # 4	85	19	19
Line # 5		0	0
Line # 6		0	0
Line # 7		0	0
Line # 8		0	0
Line # 9		0	0
Line # 10		0	0
Line # 11		0	0
Line # 12		0	0
Totals	340	76	76

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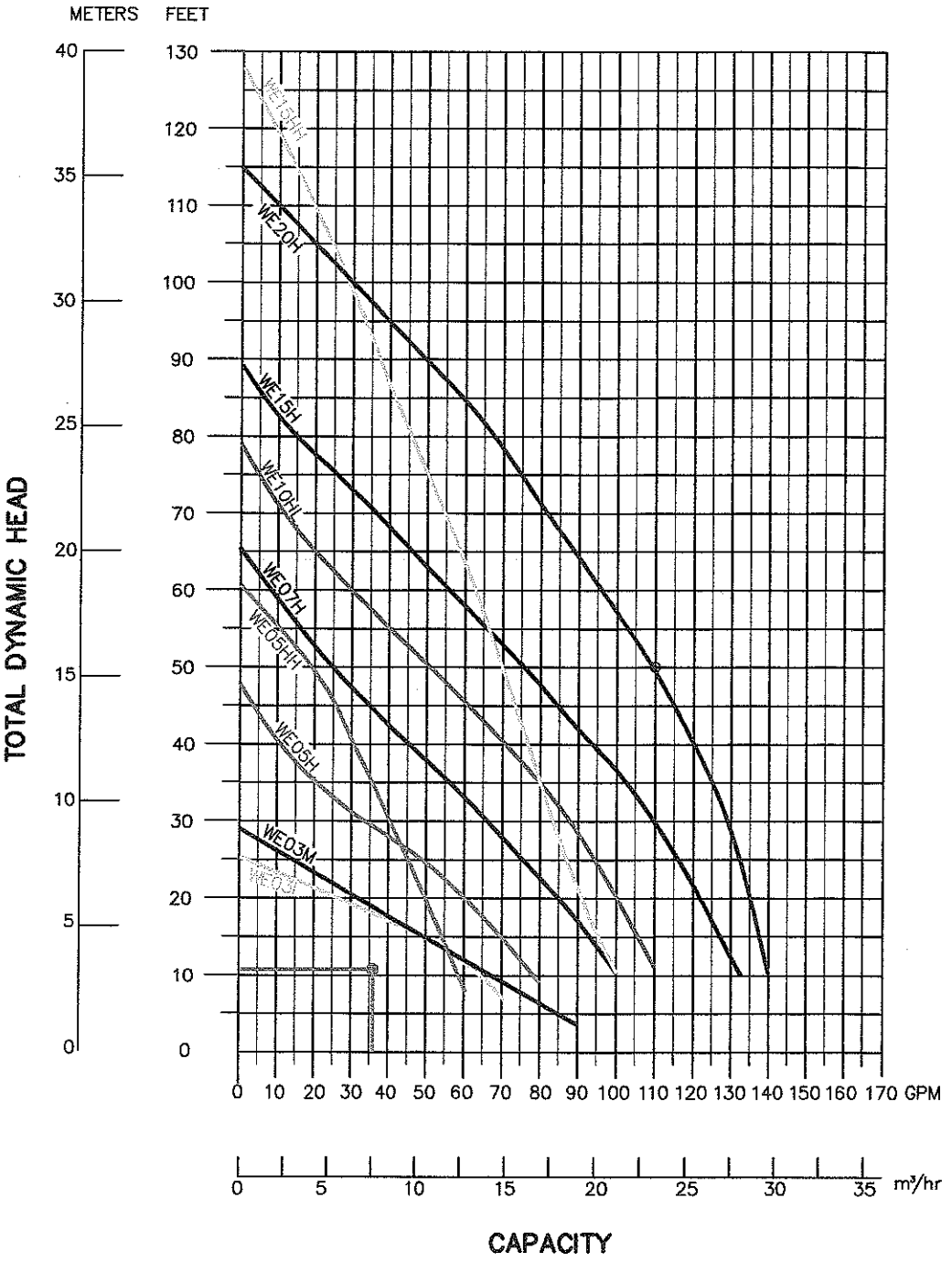
*Lines longer than 70 ft. must be center-fed to comply with sewage rules.

Absorption Area				
Length (ft)	Width (ft)	Spacing	Area (ft^2)	
340	2	8	3000+	
System Pressure Head	3	ft.	Value selected by system designer (must be between 2-5 ft.)	
Orifice Diameter	5/32	in.	Size selected by system designer (1/8 in. minimum)	
Flow Rate per Orifice/Panel	0.5	gpm	Determined from orifice flow design table (use table from Flow Rate tab)	
Total System Flow Rate	38	gpm	Total number of panels required multiplied by the orifice flow rate	
System Dose Volume	274	gal.	Total number of panels required multiplied by 3.6 gal./panel	
Doses Per Day	1.8	cycles	Number of dose cycles per day based on daily design flow. Daily design flow divided by system dose volume.	
Pump Run Time	7.21	min.	System dose volume divided by the total system flow rate	
Pump Tank Volume / Inch	29	gal./in.	1,000 gal. Pump tank, volume is approximately 21 gallons per inch. 1,500 gal. pump tank, volume is approximately	
			29 gallons per inch. Contractor is responsible in verifying tank gallons per inch.	
Pump Tank Drawdown	9.45	in.	System Dose Volume divided by gallons per inch for the designed tank size.	
Supply Line Length	50.00	ft		
Elevation head+pump height	3.84	ft.		
Friction Head	2.16	ft.		
20% Contingency	1.80	ft.		
Total Head	10.8			
Comments:				
1. Install system using 2 ft. wide trenches.				
2. Install drainlines on 8 ft. centers (to be specified by the designer) and must be level and on contour.				
3. System design requires effluent pump for distribution.			Yes	
4. Requires repair septic system.	Yes		Cells with blue shading require user input.	
5. Maintanance Agreement Required	Yes		Cells with yellow shading are automatically calculated.	

T&J Panel Summary Table	
Linear Feet	# Panels
20	5
30	7
40	9
50	11
60	14
70	16
80	18
90	21
100	23
110	25
120	17
130	30
140	32
150	34
160	37
170	39
180	41
190	43
200	46

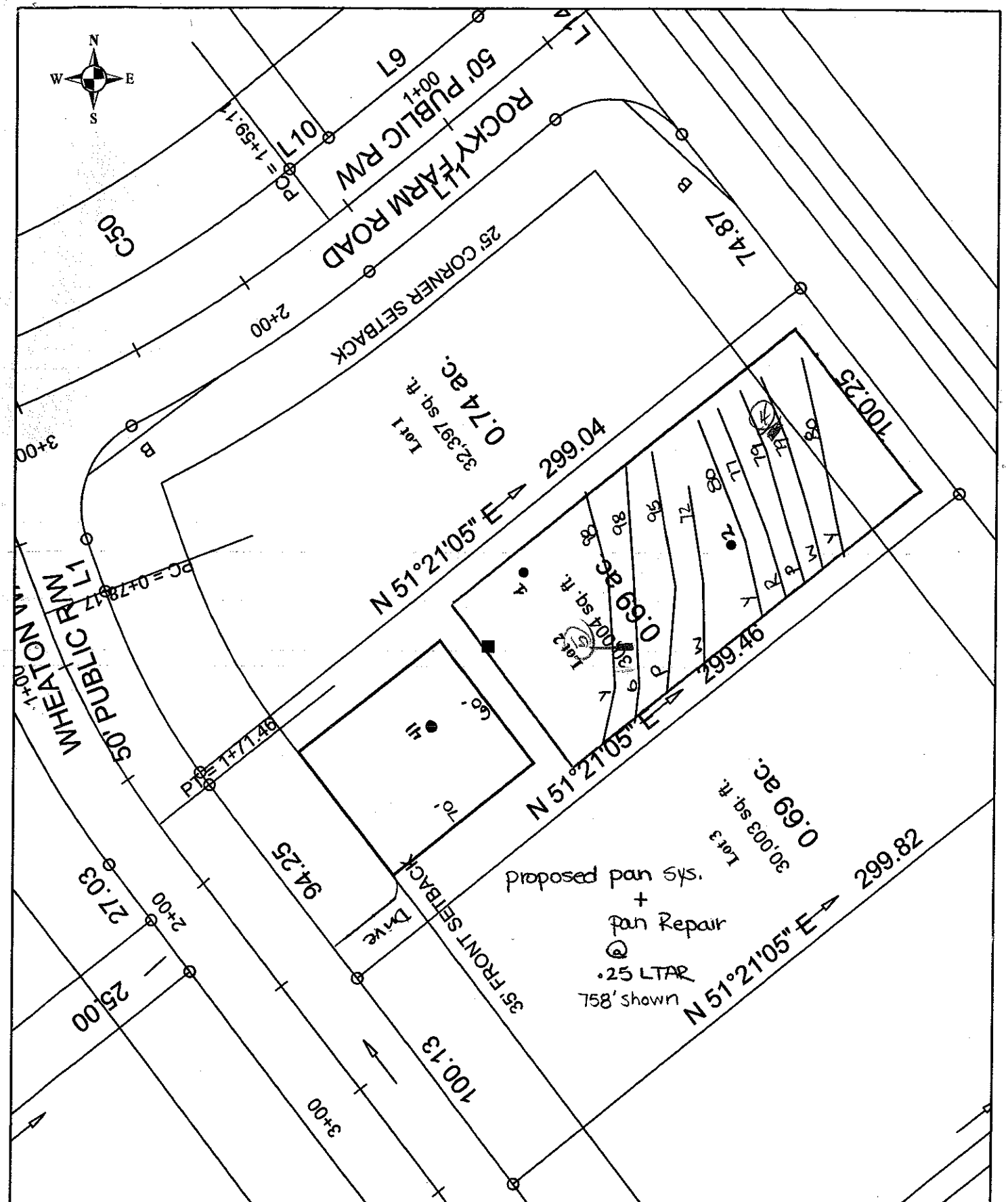

ROCKRIDGE POINT SUBDIVISION
ISLE OF PINES ROAD
(NO ACCESS)
TOTAL LOT AREA: 30,056 SQ.FT.
HOUSE PAD AREA: 3,600 SQ.FT.
DRIVEWAY AREA: 989 SQ.FT.
AREA W/IN R/W: 1,411 SQ.FT.
SCALE
40 0 20 40
1 inch = 40 ft.
100.25
10' Drainage, Landscape & Utility Easement
35' Rear Setback
75'O
75'B
75'W
80'P
75'O
Proposed Future Septic Area
Proposed Repair Septic Area
70'B
85'W
85'P
85'O
85'B
Proposed Initial Septic Area
Valve Box
Lot 2
0.69 Acres
PI-ST Clean Out
852.0
852.2
#111
House Pad
60 x 60
854.0
851.2
35' Front Setback
Proposed Driveway
10' Drainage & Utility Easement
10' Drainage & Utility Easement
15' Side Setback
15' Side Setback
10' Drainage & Utility Easement
299.78
299.96
Lot 1
Lot 3
WM
WM
R=275
L=6.01
94.25
WHEATON LANE
844
846
848
852
854
856
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PUMP CURVE
LOT 2



GOULDS PUMP PERFORANCE CURVES

Submersible Effluent Pump WE Series



Scale: 1 inch equals 50 feet	S&ME	Rocky Ridge - Lot 2	FIGURE
Drawn by: JBP		Scaled, Detailed Site Plan	1
Reviewed by: PGP		Iredell County, NC	
Date: January, 2006	ENVIRONMENTAL SERVICES · ENGINEERING · TESTING	S&ME Project #1588-05-081	

NT OF ENVIRONMENT AND NATURAL RESOURCES
OF ENVIRONMENTAL HEALTH
E WASTEWATER SECTION

Sheet ___ of ___
PROPERTY ID #: _____
COUNTY: _____

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Rocky Ridge APPLICATION DATE _____
ADDRESS: _____ DATE EVALUATED: _____
PROPOSED FACILITY: Lot 2 PROPOSED DESIGN FLOW (.1949): 480 PROPERTY SIZE: _____
LOCATION OF SITE: _____ PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Private ☒ Public ☒ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
1	L 0-2%	0-6	wsbk scl	SS SP Fr	Br				.25-.3 to 50"
		6-34	msbk C	SS SP Fr	R F YB retic mottles				
		34-50	wsbk cl	SS SP Fr	R				
2	L 1-3%	0-11	wsbk scl	SS SP Fr	Br				.25 to 48"
		11-35	msbk C	SS SP Fr	R F YB mottles (drain)				
		35-48	wsbk scl	SS SP Fr	R F YB mottles				
41 2	L	0-17	WK SBK CL	FR SS/SP	Red Br				.3 to 51"
		17-43	Mo SBK C	FR SS/SP	Red				
		43-51	WK SBK CL	FR SS/SP	Yel Red; C sap				
4	2-7%	0-6	gr brn sl	fr ss sp	common yellow mottles			36"46	.25
		6-37	ABK red c	fr SS SP					
		37-53	wsbk red cl	fr ss sp					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: _____
OTHER(S) PRESENT: _____

COMMENTS: _____

(5)

0-10	gn	brn sL	fr sso	
10-25	wk ss k	red scL	fr sso	
25-37	wk sbk	red cL	fr sso sqp	.3
37-51	wk sbk	red cl	fr sso sqp	

.81 .28 .28 .28 .95