S&ME

3-24-06

H.D. copy

To: Iredell County Environmental Health Department

From: Paul G. Penninger, LSS
Kathleen Haver, LSSIT

RE: Rocky Ridge Farm Subdivision – Dienst Enterprises – Lot 34 Fast Track

Date: February 22, 2006

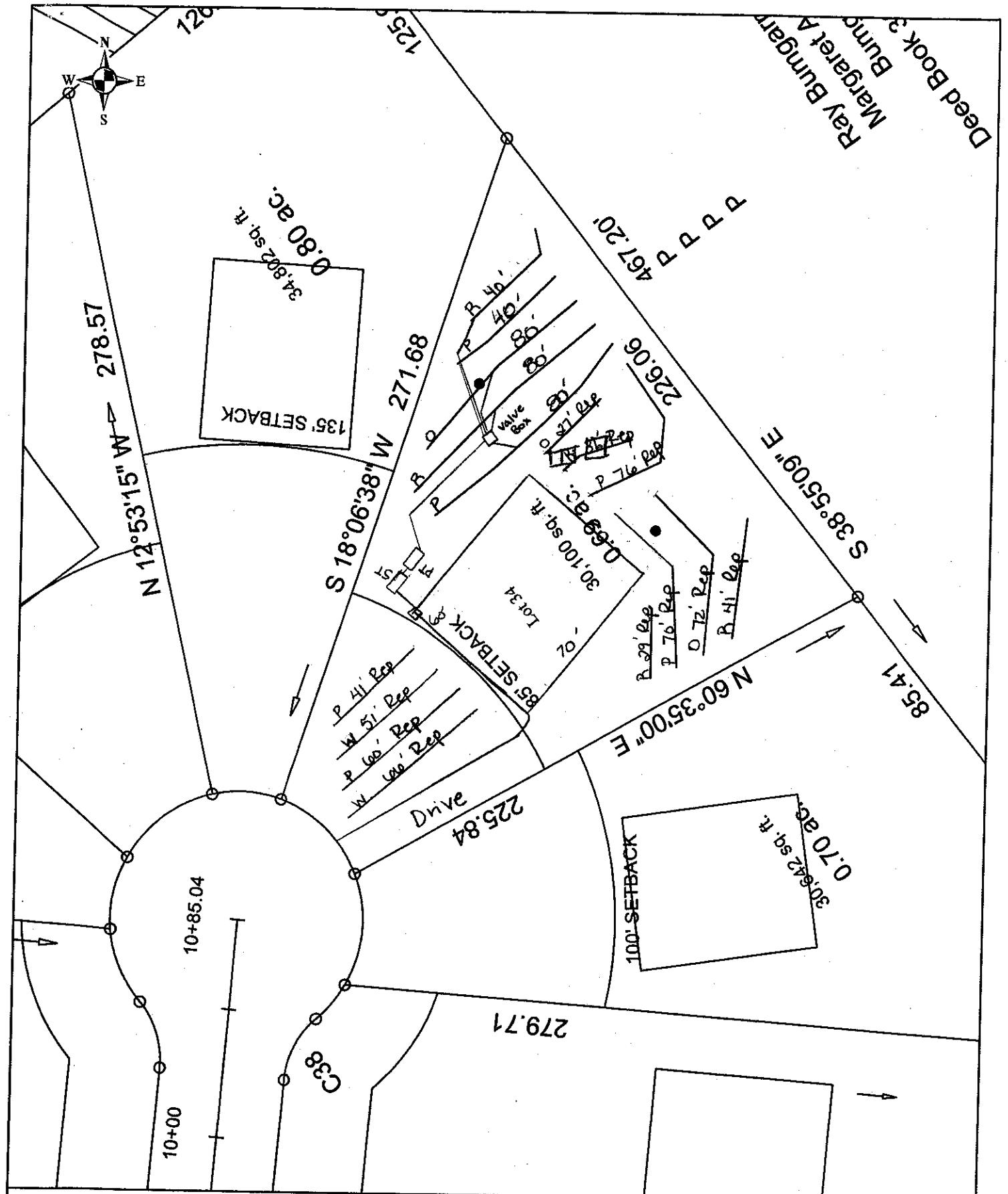
Attached is the Fast Track information required to place Lot 34 Rocky Ridge Farm on your developer work list to review the septic system layouts. Please call when you are ready to review the lot and we will meet you on the site.

The attached information is not an Improvement Permit or Authorization to Construct, and is only to assist the Iredell County Environmental Health Department (ICHD) with the site evaluation. The ICHD has to approve each lot and only the ICHD can issue these permits. The system should be installed according to the ICHD permits, policies, and NC rules. If the ICHD wishes to change tank locations, distribution devices, etc., this can be shown on the Improvement Permit.

All information and specifications were prepared in conjunction with the Fast Track Program for Iredell County and are for the sole use of Bob Dienst of Dienst Enterprises in acquiring permits under the Fast Track Program. All soil work has been approved by David Hinson of the Iredell County Health Department. It is ultimately the Iredell County Health Department's responsibility to verify all specifications before permitting and/or septic system installation.

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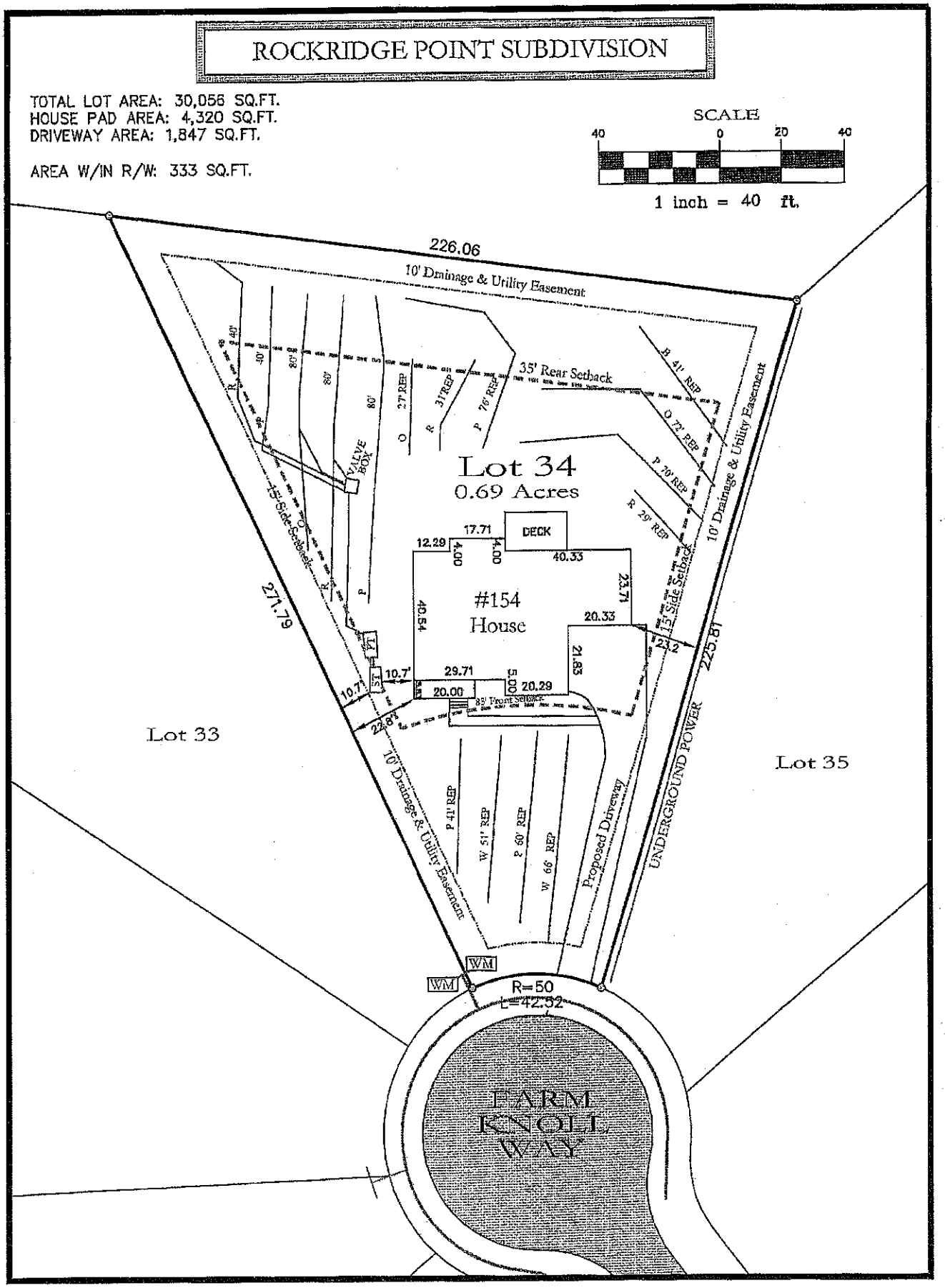
Scale: 1 inch equals 50 feet	S&ME	Rocky Ridge - Lot 34	FIGURE
Drawn by: JBP	ENVIRONMENTAL SERVICES • ENGINEERING • TESTING	Scaled Detailed Site Plan	1
Reviewed by: PGP		Iredell County, NC	
Date: February, 2006		S&ME Project #1588-05-081	

ROCKRIDGE POINT SUBDIVISION

TOTAL LOT AREA: 30,056 SQ.FT.
HOUSE PAD AREA: 4,320 SQ.FT.
DRIVEWAY AREA: 1,847 SQ.FT.

AREA W/IN R/W: 333 SQ.FT.

SCALE
40 0 20 40
1 inch = 40 ft.



Lot 34 Rocky Ridge Farms Fast Track Septic System Information

Number of Bedrooms	4
Basement or Crawl	Crawl Space
Design Flow (gpd)	480
LTAR (gpd/ft2)	0.25
Primary System Type	**LP PPBPS**
No. Lines	5 (See Table)
Total Linear Feet	320
Trench Width	2' min.
Trench Spacing	8' min.
Pump Required	Yes
Distribution Device	Gate Valve Box w/ LPP Distribution
Maintenance Agreement Required	Yes
Length and Diameter of Supply Pipe	55' of 2" SCH 40 PVC
Size of laterals	1 1/4" SCH 40 PVC
Flow Rate through the system	36 gpm
Elevation head	Approx. 8.3'
Pressure head	3.0'
Friction head	1.2'
20% Contingency	2.5'
Total Head	15'
Pump Requirements	36 gpm @ 15' of head; use Goulds WE03L pump or equivelent with compatible electrical
Dosing Volume	259.2 gal -1.9 doses/day @ design flow*
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	approx. 7.2 min.
Check Valve	No
Siphon Break hole	Yes
Repair System	**LP PPBPS**
Total Linear Feet	564

***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 occurs, reduce floats by 25 gallons and reset until no overflow is observed.**

Table 1: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading Elev. (Ft.)	Panels	Holes	Hole Spacing	Hole Size (In.)
1	Repair	Red	LPPPBPS	40 endfed	8.6	9	9	1 per panel	5/32"
2	System	Pink	LPPPBPS	40 endfed		9	9	1 per panel	5/32"
3	System	Orange	LPPPBPS	80 centerfed		18	18	1 per panel	5/32"
4	System	Red	LPPPBPS	80 centerfed		18	18	1 per panel	5/32"
5	System	Pink	LPPPBPS	80 centerfed		18	18	1 per panel	5/32"
6	Repair	Orange	LPPPBPS	27					
7	Repair	Red	LPPPBPS	31					
8	Repair	Pink	LPPPBPS	76					
9	Repair	Red	LPPPBPS	29	4.6				
10	Repair	Pink	LPPPBPS	70					
11	Repair	Orange	LPPPBPS	72					
12	Repair	Red	LPPPBPS	41					
13	Repair (F)	Pink	LPPPBPS	41	4.8				
14	Repair (F)	Orange	LPPPBPS	51					
15	Repair (F)	Pink	LPPPBPS	60					
16	Repair (F)	White	LPPPBPS	66	3.5	Total: 72	Total: 72 (1 in each panel turned up)		
				Total System: 320'					
				Total Repair: 564'					

Tank	Red	1500 gal (2 compartment)	5.8
Pump Tank	Red	1500 gal.	5.8
House	Blue		5.7

Note: Soils in front of house approved at 0.3 LTAR

...MENT OF ENVIRONMENT AND NATURAL RESOURCES
...SION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

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

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Rocky Ridge
ADDRESS: _____ APPLICATION DATE _____
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): _____ DATE EVALUATED: _____
LOCATION OF SITE: Lot 34 PROPERTY SIZE: _____
WATER SUPPLY: ☐ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____ PROPERTY RECORDED: _____
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 3-4% 6% L	0-10	vsbk scl	SS SP Fr	Br				.25
		10-41	msbk c	SS SP Fr	R c YB mottles (drainage)				
		41-53	vsbk cl	SS SP Fr	R				
2	L 1-3%	0-8	vsbk scl	SS SP Fr	Br				.3
		8-28	msbk c	SS SP Fr	R few YB mottles (relic)				
		28-52	vsbk cl	SS SP Fr	R				
3	L	0-7	WK SBK scl	FR SS/SP	Br				.25-.3
		7-24	mo SBK c	Fi S/P	Red; FF Mel Br				
		24-48	mo SBK c-cl	FR SS/SP	Red; F Sap				
4	3% S	0-11	gr fine sandy	friable	fairly broad mottles				.25-.3
		11-33	mod fine sbk red c	FR SP SAP					
		33-52	wk fine gr sbk	friable 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:

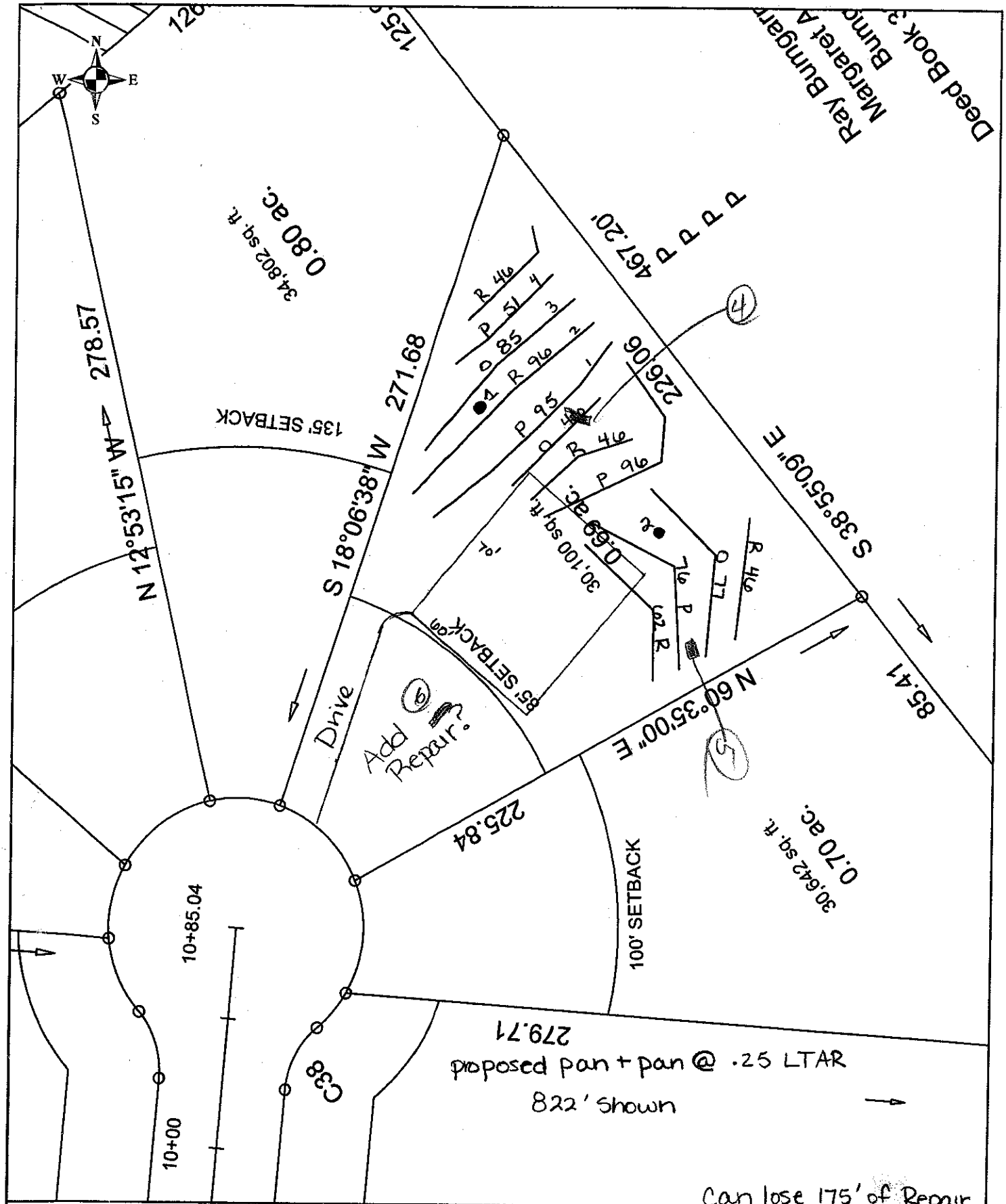
2-6-06

(5)

0-7 wk fssp
7-36 mfssp fssp-sp sexp
36-52 wfssp

(6)

0-10 wfssp
10-29 mfssp
29-48 wfssp



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Reviewed by: PGP		Iredell County, NC	
Date: February, 2006		S&ME Project #1588-05-081	

GOULDS PUMPS



Submersible Effluent Pump

MODEL 3885

WE Series

PROSURANCE AVAILABLE FOR RESIDENTIAL APPLICATIONS.

APPLICATIONS

Specifically designed for the following uses:

- Homes
- Farms
- Trailer courts
- Motels
- Schools
- Hospitals
- Industry
- Effluent systems

SPECIFICATIONS

Pump

- Solids handling capabilities: ¾" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM.
- Total heads: up to 128 feet TDH.
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

FEATURES

■ **Impeller:** Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

■ **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge.

■ **Mechanical Seal:** SILICON CARBIDE VS. SILICON CARBIDE sealing faces. Stainless steel metal parts, BUNA-N elastomers.

■ **Shaft:** Corrosion-resistant, stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.

■ **Fasteners:** 300 series stainless steel.

■ Capable of running dry without damage to components.

■ Designed for continuous operation when fully submerged.

MOTORS

■ Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.

■ Class B insulation on ⅓-1½ HP models.

■ Class F insulation on 2 HP models.

Single phase (60 Hz):

- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- SJTOW or STOW severe duty oil and water resistant power cords.
- ⅓ and ½ HP models have NEMA three prong grounding plugs.
- ¾ HP and larger units have bare lead cord ends.

Three phase (60 Hz):

- Class 10 overload protection must be provided in separately ordered starter unit.
- STOW power cords all have bare lead cord ends.

■ **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.

■ **Bearings:** Upper and lower heavy duty ball bearing construction.

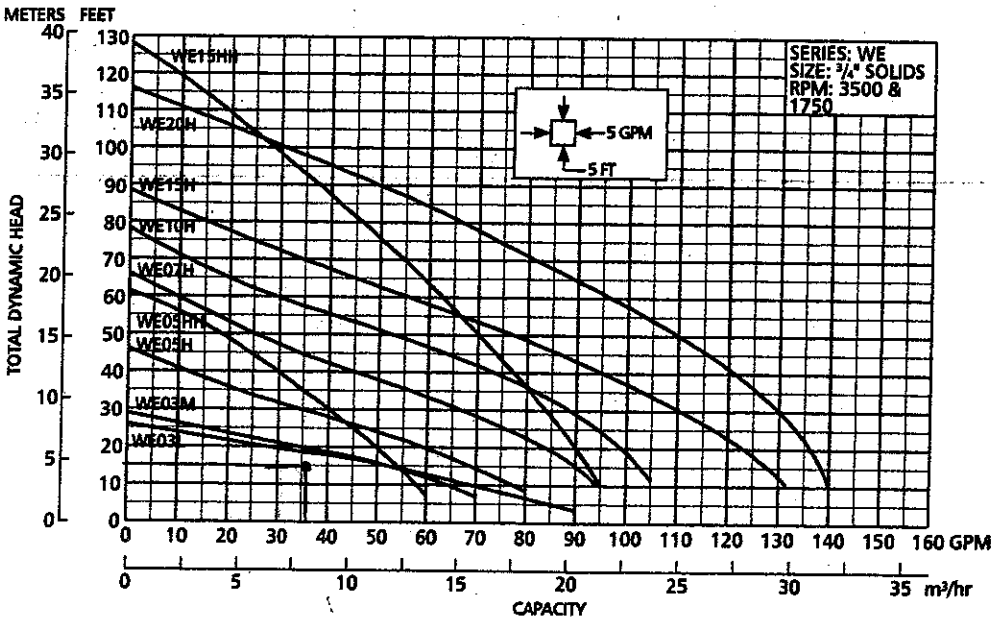
■ **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.

■ **O-ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

C SP US — Tested to UL 778 and CSA 22.2 108 Standards By Canadian Standards Association File #LR38549

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