

**SOIL/SITE EVALUATION
 for ON-SITE WASTEWATER SYSTEM**

Owner:

Applicant:

Address:

Date Evaluated: 9/19/08

Proposed Facility: 3 Bedroom Home Design Flow (.1949): 360 gpd

Property Size:

Location of Site:

Property Recorded:

Water Supply: Public [] Individual [] 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 (IN.)	.1956 Sapro Class	.1944 Restr. Horiz.	
1	Ls 0-2%	0-24"	SBK C	FR S/P					PS .3
		24" x	PM						
2		0-36"	SBK C	FR S/P	10x2 7/2 @ 30"				PS -3
		#							

Description	Initial System	Repair System
Available Space (.1945)	✓	✓
System Type(s)	PUMP INNOV.	PUMP ULTRA SHALLOW INNOV
Site LTAR	.3	3

Other Factors (.1946): _____
 Site Classification (.1948): PS
 Evaluated By: OT
 Others Present:

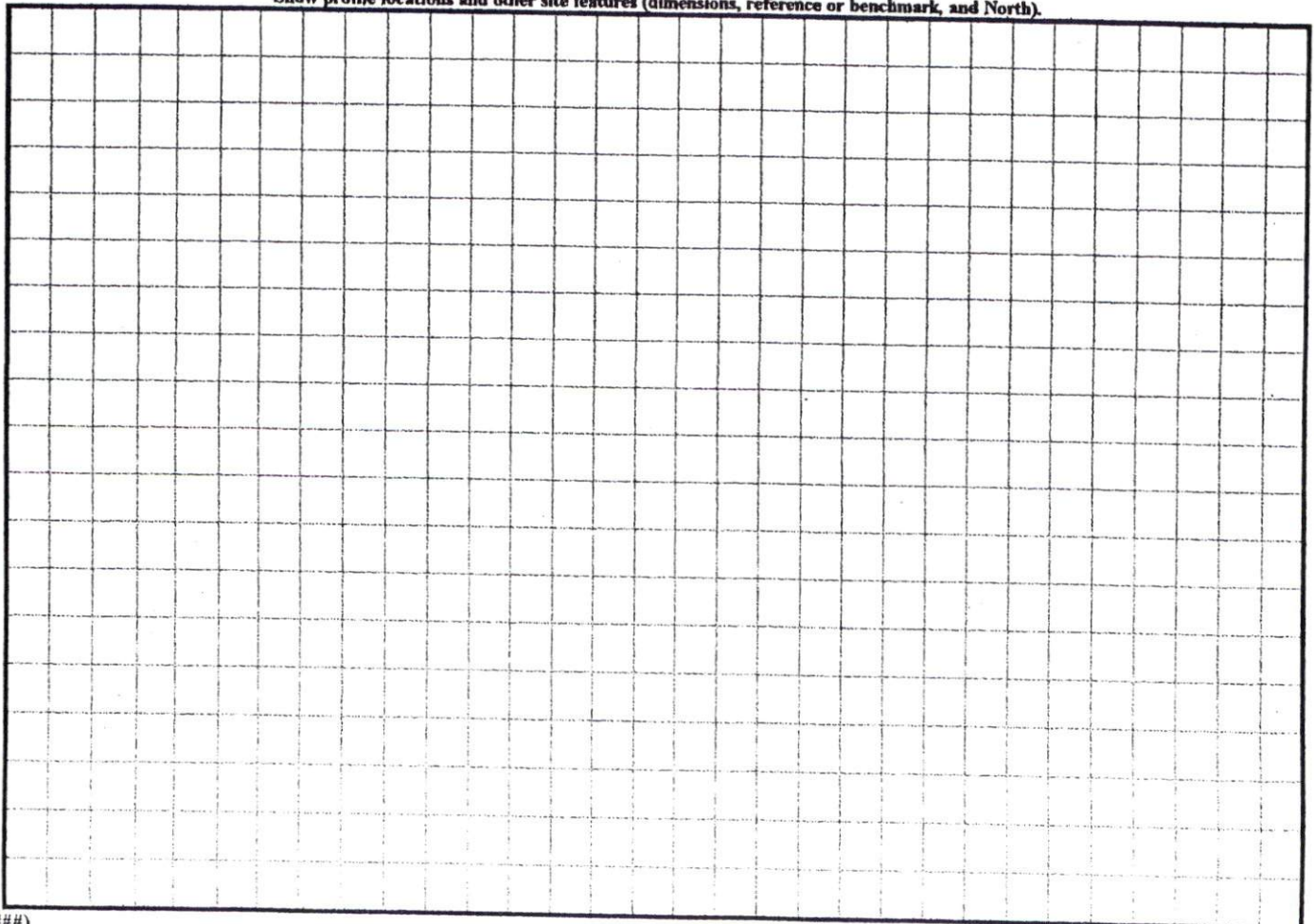
COMMENTS: _____

<u>LANDSCAPE POSITIONS</u>	<u>GROUP</u>	<u>TEXTURES</u>	<u>.1955 LTAR</u>	<u>CONSISTENCE MOIST</u>	<u>WET</u>
R-RIDGE	I	S-SAND	1.2 - 0.8	VFR-VERY FRIABLE	NS-NON-STICKY
S-SHOULDER SLOPE		LS-LOAMY SAND			
L-LINEAR SLOPE	II	SL-SANDY LOAM	0.8 - 0.6	FR-FRIABLE	SS-SLIGHTLY STICKY
FS-FOOT SLOPE		L-LOAM			
N-NOSE SLOPE	III	SI-SILT-	0.6 - 0.3	VFI-VERY FIRM	VS-VERY STICKY
H-HEAD SLOPE		SIL-SILT LOAM			
CC-CONCLAVE SLOPE		CL-CLAY LOAM			
CV-CONVEX SLOPE		SCL-SANDY CLAY LOAM			
T-TERRACE		SICL-SILTY CLAY LOAM			
FP-FLOOD PLAN	IV	SIC-SILTY CLAY	0.4 - 0.1	EFI-EXTREMELY FIRM	NP-NON-PLASTIC
		C-CLAY			SP-SLIGHTLY STICKY
		SC-SANDY CLAY			P-PLASTIC
					VP-VERY PLASTIC

STRUCTURE
 SG-SINGLE GRAIN
 M-MASSIVE
 CR-CRUMB
 GR-GRANULAR
 SBK-SUBANGULAR BLOCKY
 ABK-ANGULAR BLOCKY
 PL-PLATY
 PR-PRISMATIC

MINERALOGY
 SLIGHTLY EXPANSIVE
 EXPANSIVE

Show profile locations and other site features (dimensions, reference or benchmark, and North).

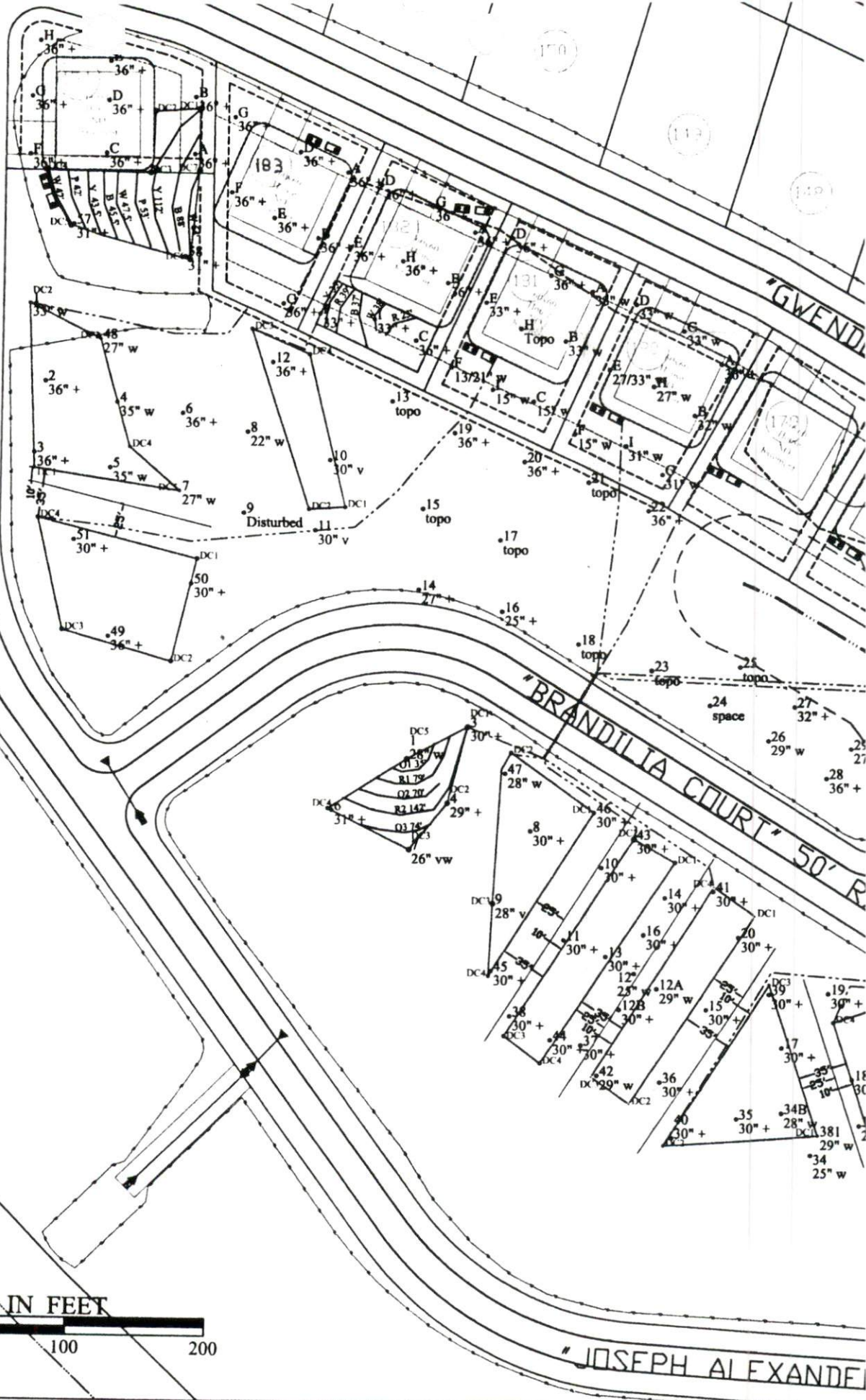
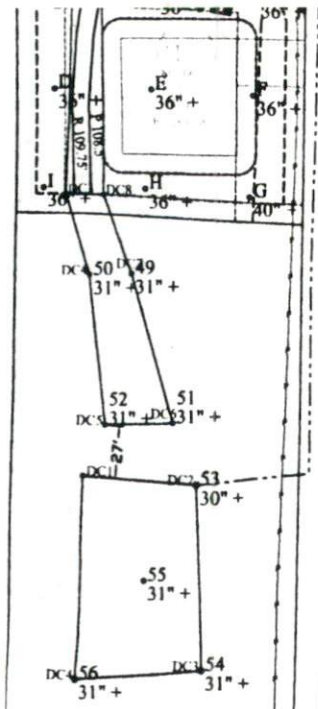


PH ALEXANDER DR. 50' R/W

"GWENDOLINE COURT" 50' R/W

"BRANDILIA COURT" 50' R/W

"JOSEPH ALEXANDER DR."



SCALE IN FEET



Ballard Woods Subdivision - Phase 4, Lot 183

Site Plan & Evaluation for On-Site Wastewater Treatment & Disposal March 13, 2008

Recommended System:

3-bedroom (6 residents maximum)

Initial and Repair: Off Site Innovative Gravelless Trench.

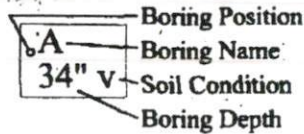
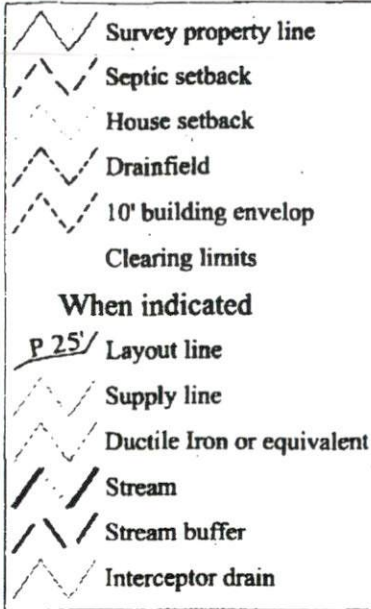
Recommended LTAR: 0.45 gallons/day/square feet.

Most restrictive texture in treatment zone: Soil Group III: Clay Loam.

Recommended trench bottom placement: 18 inches downhill side.

Line length needed = 400 feet.

Minimum total area needed = 3,600 square feet, area designated 7,124± square feet.



Soil Conditions
 + = Likely favorable below
 w = Soil wetness
 v = Plinthite

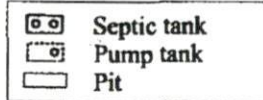
Layout Colors

P = Pink
 R = Red
 O = Orange
 Y = Yellow
 B = Blue
 W = White

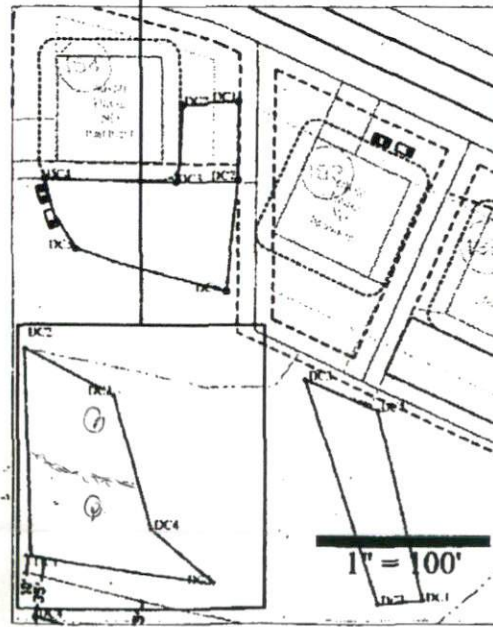
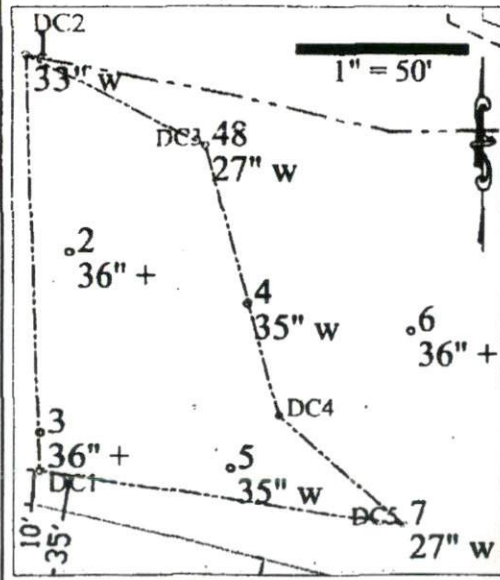
Area flagged in yellow "caution" tape.



Phase 4 location



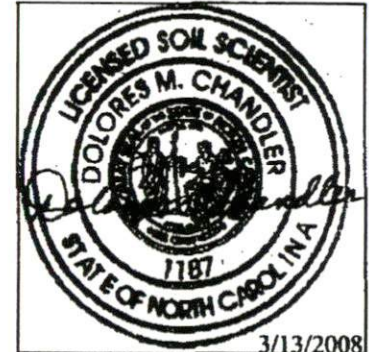
Area enlarged at left



Locations and specifications for tanks, supply lines, and stream crossings are suggestions. Due to topographic irregularities and other considerations, actual locations or material specifications may be changed at time of permitting or installation, at the discretion of the permitting authority.

Pit/boring locations marked with numbers and/or letters. DC1, etc. = drainfield corners, where corner is not marked with pit/boring. Lot will require health department approval. Some adjustments may be necessary at that time due to soil variability and topographic irregularities. House and drainfield areas not survey accurate.

Recommendations for house location and/or size, and septic system type, size, and/or location may be invalidated if site alterations (including road cut/fill, drainage, and other grading) occur.



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Chapel Hill, NC 27516
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Owner/ Buyer: Ballard Woods Date Evaluated 2007/2008 Location: Lot 183-A Ballard Woods Phase IV

Proposed Facility: SFD Proposed Design Flow (.1949): up to 360 gal/day/sq ft

Co: Harnett Well Supply: Community Evaluation Method: Pit, Auger

PROFILE	FLAG COLOR	Landscape Slope	HORIZON	Depth (in)	TEXTURE	SOIL STRUCTURE			MINEROLOGY CONSISTENCE MOIST/WET			SOIL COLOR MATRIX		SOIL COLOR MOTTLES		NOTES/ LTAR
						GRADE	CLASS	TYPE								
183-1	R	0-2%	Bt	0-9	CL-C	2-1	F-M	SBK	FI	S	P	10YR	5/8			
			BC	9-22	CL	1-2	F-M	SBK	FR	SS	SP	10YR	5/8	5YR 4/8		
			BC	22-33	CL	1	F-M	SBK	FR	SO	PO	10YR	5/8	5YR 4/8		
				33										2.5Y 6/2	0.45	33w
183-2	R	0-2%	AO	0-4	SL	1	F	GR	VFR			10YR	4/2			
			Bt	4-18	CL-SCL	2-1	F-M	SBK	FI	S	P	7.5YR	5/8			
			BC	18-36+	L	1	F-M	SBK	FR	SO	PO	7.5YR	5/8	5YR 4/8		45 36+
183-3	R	0-2%	A	0-9	SL	1	F	GR	VFR			10YR	4/2			
			Bt	9-30	CL	1-2	F-M	SBK	FR	SS	SP	7.5YR	5/8			
			BC	30-36+	CL	1	F-M	SBK	FR	SO	PO	7.5YR	5/8	5YR 4/8		45 36+
183-4	R	2-4%	Bt	1-3	SL	2-3	M-F	SBK	FI	S	P	10YR	5/8			
			BC	3-19	CL	1-2	F-M	SBK	FR	SS	SP	7.5YR	5/6	5YR 5/8		
			BC	19-35	CL-L	1	F-M	SBK	FR	SO	PO	7.5YR	5/6	5YR 5/8		
			BC	35	CL-L	1	F-M	SBK	FR	SO	PO	7.5YR	5/6	5YR 5/8, 2.5Y 6/2		45 35w

Texture				Structure				Mineralogy			
				GRADE	TYPE			MOIST			
Coarse Sand	COS	Very Fine Sandy Loam	VFSL	Structureless	0	Granular	GR	Loose		L	
Sand	S	Loam	L	Weak	1	Angular Blocky	ABK	Very Friable		VFR	
Fine Sand	FS	Silt Loam	SIL	Moderate	2	Subangular Blocky	SBK	Friable		FR	
Very Fine Sand	VFS	Silt	SI	Strong	3	Platy	PL	Firm		FI	
Loamy Coarse Sand	LCOS	Sandy Clay Loam	SCL	CLASS		Wedge	WEG	Very Firm		VFI	
Loamy Sand	LS	Clay Loam	CL	Very fine	VF	Prismatic	PR	Extr. Firm		EF	
Loamy Fine Sand	LFS	Silty Clay Loam	SICL	Fine	F	Columnar	COL	WET			
Loamy Very Fine Sand	LVFS	Sandy Clay	SC	Medium	M			Non-Sticky		SO	
Coarse Sandy Loam	COSL	Silty Clay	SIC	Coarse	CO	Single Grain	SGR	Slightly Sticky		SS	
Sandy Loam	SL	Clay	C	Thick (PL)	TK	Massive	MA	Moderately Sticky		MS	
Fine Sandy Loam	FSL			Very Coarse	VC			Very Sticky		VS	
				Very Thick (PL)	VK	Cloddy	CDY	Non-Plastic		PO	
				Extremely Coarse	EC			Slightly Plastic		SP	
								Moderately Plastic		MP	
								Very Plastic		VP	



3/12/2008

Owner/ Buyer: Ballard Woods Date Evaluated 2007/2008 Location: Lot 183-B Ballard Woods Phase IV

Proposed Facility: SFD Proposed Design Flow (.1949): up to 360 gal/day/sq ft

Co: Harnett Well Supply: Community Evaluation Method: Pit, Auger

PROFILE	FLAG COLOR	Landscape Slope	HORIZON	Depth (in)	TEXTURE	SOIL STRUCTURE			MINEROLOGY CONSISTENCE MOIST/WET			SOIL COLOR MATRIX		SOIL COLOR MOTTLES	NOTES/ LTAR	
						GRADE	CLASS	TYPE								
183-5	R	0-2%	Bt	1-9	SC	2-3	F	SBK	FI	S	P	10YR	5/8		little compacted	
			BC	9-14	CL	2	F-M	SBK	FR-FI	SS	SP	7.5YR	5/6	5YR 5/8		
			BC	14-35	CL-L	1	F-M	SBK	FR	SO	PO	7.5YR	5/6	5YR 5/8		
			BC	35	CL-L	1	F-M	SBK	FR	SO	PO	7.5YR	5/6	5YR 5/8, 2.5Y 6/2	0.45	35w
183-7	R	2%	Bt	0-6	SC	3-2	M-C	SBK	FI	S	P	10YR	5/8		little compacted	
			BC	6-14	CL	1-2	F-M	SBK	FR	SS	SP	7.5YR	5/6	5YR 5/8		
			BC	14-27	CL-L	1	F-M	SBK	FR	SO	PO	7.5YR	5/6	5YR 5/8		
			BC	27										2.5Y 6/2	0.45	27w
183-48	R	2-4%	AO	0-3	SL	1	F	GR	VFR							
			Bt	3-9	SCL-SC	2-1	F-M	SBK	FI					[FE] 5YR 5/8		
			Bt	9-23	SCL	2-1	F-M	SBK	FI-FR							
			BC	23-27	SCL	1-2	F-M								2.5Y 6/2	0.45

Texture			Structure			Mineralogy			
			GRADE	TYPE		MOIST			
Coarse Sand	COS	Very Fine Sandy Loam	VFSL	Structureless	0	Granular	GR	Loose	L
Sand	S	Loam	L	Weak	1	Angular Blocky	ABK	Very Friable	VFR
Fine Sand	FS	Silt Loam	SIL	Moderate	2	Subangular Blocky	SBK	Friable	FR
Very Fine Sand	VFS	Silt	SI	Strong	3	Platy	PL	Firm	FI
Loamy Coarse Sand	LCOS	Sandy Clay Loam	SCL	CLASS		Wedge	WEG	Very Firm	VFI
Loamy Sand	LS	Clay Loam	CL	Very fine	VF	Prismatic	PR	Extr. Firm	EF
Loamy Fine Sand	LFS	Silty Clay Loam	SICL	Fine	F	Columnar	COL	WEI	
Loamy Very Fine Sand	LVFS	Sandy Clay	SC	Medium	M			Non-Sticky	SO
Coarse Sandy Loam	COSL	Silty Clay	SIC	Coarse	CO	Single Grain	SQR	Slightly Sticky	SS
Sandy Loam	SL	Clay	C	Thick (PL)	TK	Massive	MA	Moderately Sticky	MS
Fine Sandy Loam	FSL			Very Coarse	VC			Very Sticky	VS
				Very Thick (PL)	VK	Cloddy	CDY	Non-Plastic	PO
				Extremely Coarse	EC			Slightly Plastic	SP
								Moderately Plastic	MP
								Very Plastic	VP



3/12/2008