DESIGN SPECIFICATIONS

The Point Lot 1133 – 106 Cape Code Way

Daily design flow	600 gpd.
Septic tank size	1500 gal. (2 compartments)
Pumping tank size	1500 gal.
Initial system	600' of 25% reduction
Effluent loading rate, Initial system	0.25 gpd/ft^2
Total length and diameter of supply pipe	approx. 170 ft. 2" SCH 40 PVC
Number and length of laterals	5 @ 120', end-fed
Flow rate through the system	35.5 gpm from 5 each ½" sch 40 taps from a 4" manifold
Elevation head	Approx. 16' (to be verified by installer)
Pressure head	2.0'
Friction head	5.7'
20% contingency	4.8'
Total head	28.5'
Pump requirements	35.5 gpm at 28.5' of head; use Orenco ½hp turbin pump, pump and panel MOP Orenco supplied by TCW (Tri-County Wastewater) as package. Reference Tim Bannister (704-201-7514)
Dosing volume	300 gal. – 2.0 doses/day at design flow
Depth 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	specified by TCW
Check valve	yes
Siphon break hole	no
Effluent loading rate, Repair system	0.25 gpd/ft^2
Repair system	400' of 50% reduction (T & J Panel)

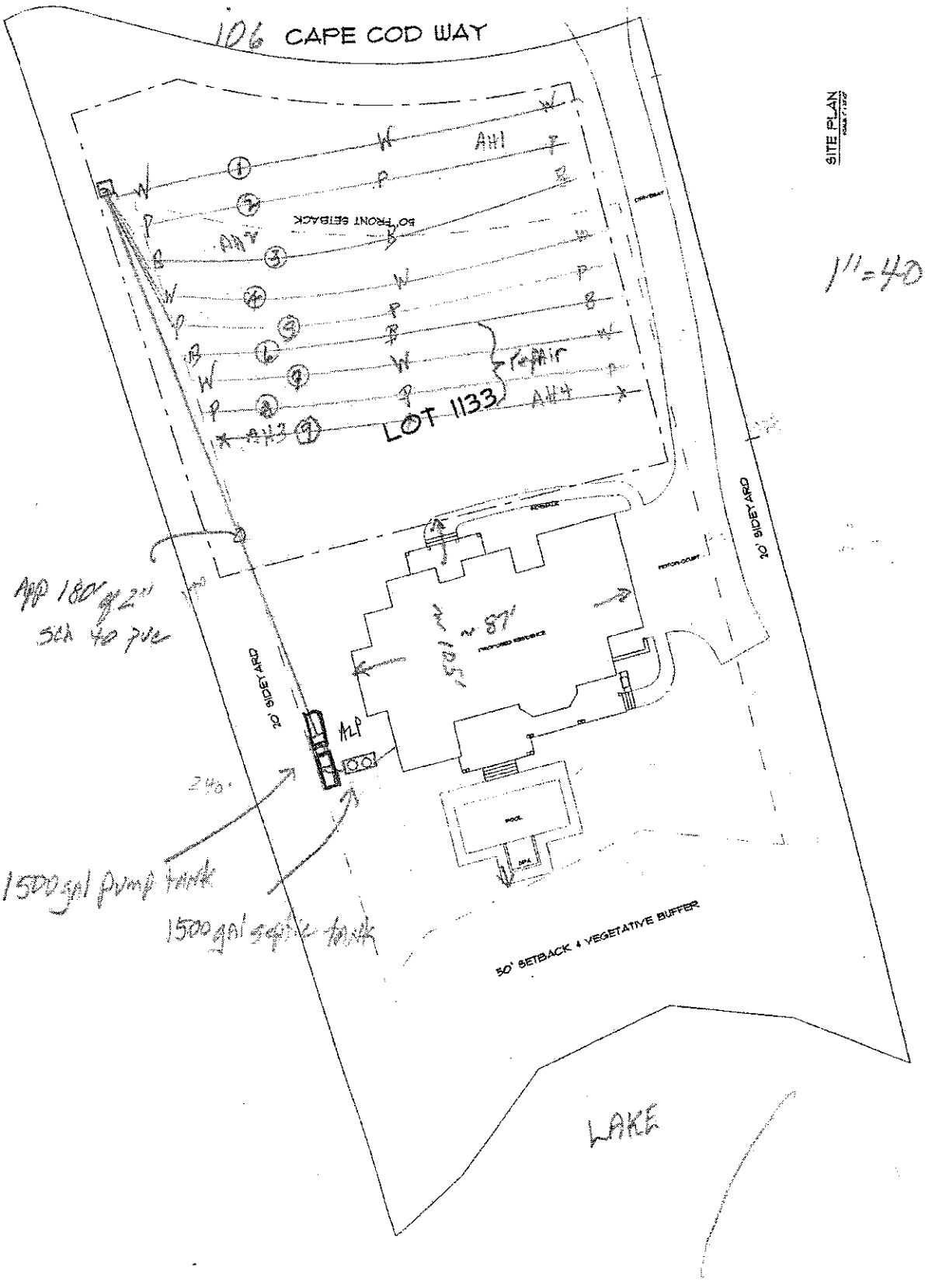

106 CAPE COD WAY
SITE PLAN
1" = 40'
50' FRONT SETBACK
LOT 1133
Repair
AH1
AH4
AH3
20' SIDE YARD
20' SIDE YARD
~ 87'
~ 123'
1500 gal pump tank
1500 gal septic tank
50' SETBACK & VEGETATIVE BUFFER
LAKE

Table: Summary of Primary and Repair Nitrification Line Specifications
106 Cape Code Way

Line No.	*Use*	*Line Color*	*System Type*	*Line Length(ft)*	*Elevation (ft)*
1	System	white	25% reduction	120 end fed	App. 775
2	System	pink	25% reduction	120 end fed	
3	System	blue	25% reduction	120 end fed	
4	System	white	25% reduction	120 end fed	
5	System	pink	25% reduction	120 end fed	
6	Repair	blue	50% reduction	120 center fed	
7	Repair	white	50% reduction	120 center fed	
8	Repair	pink	50% reduction	120 center fed	
9	Repair	blue	50% reduction	120 center fed	
				Total system: 600'	
				Total repair: 400'	

Tank		1500 gal. (2 compartment)	
Pump tank		1500 gal.	approx. 767'
House		right rear	approx. 770'

Manifold Information	
Tap size (inches)	½
Tap material	SCH 40 PVC
No. taps	4
Barrel size (inches)	4
Barrel Material	SCH 80 PVC
Flow (gpm) tap	7.1

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

Sheet: 1 of 1
Property ID:
Lot #: 1133 The Point
File #:
AppID:

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Hosea
Address: 1124 Cape Codd Way
Proposed Facility: 4BRSF
Location of Site: 1133 Point
Water Supply: [✓] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [✓] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [✓] Sewage [ ] Industrial Process [ ] Mixed

Design Flow (.1949) 460 gpd 4BR

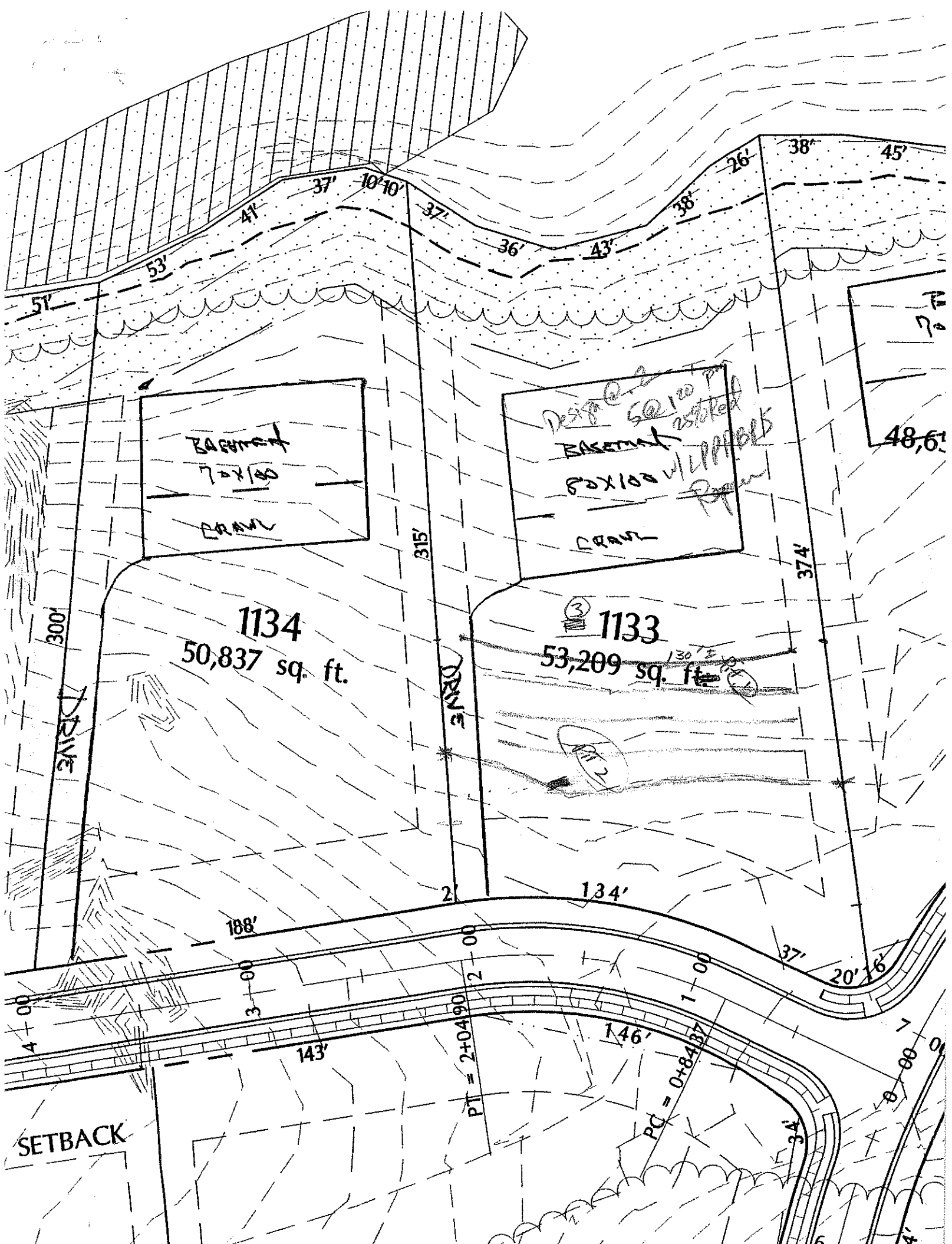
Applicant:
Date Evaluated: 5/20/13
Property Size: 5.3 acres
Property Recorded: 02

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS <5%	0-12	g sl	vfi	1:1	>49	mod PS	NA	0.25-0.3 Hum Ult/Ent
		12-30	gr sl	fri	1:1				
		30-49	wf gr SK sl	fri	1:1				
2	LS <5%	0-5	g sl	vfi	1:1	>49	NA	NA	0.25-0.3 Hum Ult/Ent
		5-28	wf gr SK sl	fri	1:1				
		28-49	wf gr SK sl	fri	1:1				
3	LS <5%	0-9	g sl	vfi	1:1	>50	NA	NA	0.25-0.3 Hum Ult/Ent
		9-22	wf gr SK sl	fri	1:1				
		22-50	wf gr SK sl	fri	1:1				
4	LS <5%	0-16	g sl	vfi	1:1	>46	NA	NA	0.25-0.3
		16-46	g sl	fri mod 38"	1:1				

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	25% red	25% red
Site LTAR	0.25	0.25

Other Factors (.1946): NA
Soil Evaluation By: TLJ
Others Present: MA
Site Classification (.1948): PS
Site Evaluation By: TLJ
Others Present: MA

LICENSED SOIL SCIENTIST — TODD L. JOHNSON — STATE OF NORTH CAROLINA


1134
50,837 sq. ft.
1133
53,209 sq. ft.
3 AVE
3 AVE
300'
315'
374'
188'
134'
143'
146'
SETBACK
PT = 2+04.90
PC = 0+84.37
51'
53'
41'
37'
10'
10'
37'
36'
43'
38'
26'
38'
45'
37'
20'
16'
24'

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

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

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: _____ APPLICATION DATE _____
ADDRESS: _____
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): _____ DATE EVALUATED: 9-16-02
LOCATION OF SITE: Lot 1133 Phase II The Pt. PROPERTY SIZE: _____
WATER SUPPLY: ☐ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____ PROPERTY RECORDED: _____
EVALUATION METHOD: ☐ Auger Boring ☐ Pit ☐ Cut Install Laterals at 36"/6
TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed Design @ .2 due to compaction/damage to upper 12"

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	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1		0-15	compacted s/c	fri					.3 @ 36"/6
		15-35	mf SBK/GR	RC fri SP					
		35-53	(BC) wk SBK	RC fri SP	few-common in SP				
		53-67	massive PW	SP FRSSP					
			10/11" injection	PVC pipe		~13" deep to be removed			
2		0-11	Somewhat compacted	loamy SL fri SSP					.25
		11-37	mm SBK RC	FR SP					
		37-64	WK f-m AB	yPCL common in SP					
				common to many					
3		0-16	compacted s/c						.25
		16-47	m SBK/GR	RC fri SP	few brown mottles				
		47-65	WK SBK	yPCL FRSSP	few in SP				
						36"/6			
4									

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: _____