Permit/F	ile #:
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ROY COOPER • Governor KODY H. KINSLEY • Secretary MARK BENTON • Chief Deputy Secretary for Health SUSAN KANSAGRA • Assistant Secretary for Public Heal Division of Public Health	lth
Submittal Includes: 🗌 (a2) Improvement Permit 🗌 (a2) Construction Authorization 🗌 Fee \$	
IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)	
County:	
PIN/Lot Identifier:	
Issued To:	
Property Location:	
Subdivision (if applicable) Block: Section:	
LSS Report Provided: Yes 📃 No 🗌	
If yes, name and license number of LSS:	
New Expansion System Relocation Change of Use	
Facility Type:	
Number of bedrooms: Number of Occupants: Other:	
Design Wastewater Strength: Domestic High Strength Industrial Process Wastewater	
Proposed Design Daily Flow: GPD Proposed LTAR (Initial): Proposed LTAR (Repair):	
Proposed Wastewater System Type*: (Initial) Pump Required: 🗌 Yes 🗌 No 🗌 May b	e required
Proposed Wastewater System Type*: (Repair) Pump Required: 🗌 Yes 🗌 No 🗌 May b	e required
*Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII	
Effluent Standard: 🗌 DSE 🔄 HSE 🔄 NSF/ANSI 40 📄 TS-I 📄 TS-II 📄 RCW	
Saprolite System (Initial): Yes No Saprolite System (Repair): Yes No	
Fill System (Initial): 🗌 Yes 🔲 No If yes, specify: 🗌 New 📄 Existing (when adding more than 6 inches of fill to system area provi	de a fill plan)
Fill System (Repair): 🗌 Yes 📄 No If yes, specify: 📄 New 📄 Existing (when adding more than 6 inches of fill to system area prov	vide a fill plan)
Usable Depth to LC (Initial) <sup>x</sup> : Usable Depth to LC (Repair) <sup>x</sup> : <i>* Limiting Condition</i>	
Max. Trench Depth (Initial) <sup>‡</sup> : Max. Trench Depth (Repair) <sup>‡</sup> : <i><sup>‡</sup> Measured on the downhill side o</i>	f the trench
Artificial Drainage Required: 🗌 Yes 🔲 No If yes, please specify details:	
Type of Water Supply:  Private well  Public well  Shared well  Municipal Supply  Spring  Other:	
Drainfield location meets requirements of Rule .0508: Yes 🗌 No 🗌 Drainfield location meets requirements of Rule .0601: Yes	No
Permit valid for: 🗌 Five years [site plan submitted pursuant to GS 130A-334(13a)] 🗌 No expiration [plat submitted pursuant to GS	130A-334(7a)]
Permit conditions:	
Licensed Soil Scientist Print Name:	
Licensed Soil Scientist Signature: Alex Adamo Date: Date:	
The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2). *See attached site sketch*	

Permit/File #: \_\_



# This Section for Local Health Department Use Only

Initial submittal received: \_\_\_\_\_\_ by \_\_\_\_\_ Date Initials

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

Incomplete (If box is checked, information in this section is required.)						
The following items are missing:						
		121				
Copies of this were sent to the LSS and the Applicant on	Date					
State Authorized Agent:		Date:	_			
Complete						
State Authorized Agent:		Date:	_			

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. <u>This permit is subject to revocation if the site plan, plat, or the intended use changes</u>. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of 15A NCAC 18E and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: \_\_\_\_\_

\*See attached site sketch\*



Permit/File #: \_\_\_\_\_

### **Re-submittal of Improvement Permit**

LHD USE ONLY: This IP resubmittal received:		by	
	Date	Initials	

The following items are being resubmitted pursuant to G.S. 130A-335(a3) for issuance of the Improvement Permit:

I, \_\_\_\_\_\_\_hereby attest that the information required to be included with this re-submittal Licensed Soil Scientist (Print Name) is accurate and complete to the best of my knowledge and that the proposed Improvement Permit meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

Signature of Licensed Soil Scientist

Date

The section below is for Local Health Department use after submittal of items noted as missing above.

### LHD Follow-up Completeness Review of Improvement Permit

The review for completeness of this Improvement Permit re-submittal was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

Date

Incomplete (If box is checked, information in this section is required.)

The following items are missing:

Copies of this were sent to the LSS and the Applicant on

State Authorized Agent: \_\_\_\_\_

Complete

State Authorized Agent: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



Permit/File #: \_\_\_\_\_

### CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County:	Pre-Construction Conference Required: Yes No
PIN/Lot Identifier:	
Issued To:	
Property Location	:
AOWE/PE Plans/E	valuations Provided: Yes 🗌 No 🗌 If yes, name and license number of AOWE/PE:
Facility Type:	
Number of bedroo	oms: Number of Occupants: Other:
New	Expansion Repair System Relocation Change of Use
Basement?	Yes No Basement Fixtures? Yes No
Crawl Space?	Yes No Slab Foundation? Yes No
Type of Wastewat	er System* (Initial) (Repair)
*Please include sy	stem classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII
Design Daily Flow:	GPD Wastewater Strength: Domestic High Strength Industrial Process WW
	120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? [] Yes [] No vide engineering documentation)
Effluent Standard:	🗌 DSE 🔄 HSE 🔄 NSF/ANSI 40 🗌 TS-I 🗌 TS-II 📄 RCW
Type of Water Sup	pply:  Private well  Public well  Shared well  Municipal Supply  Spring  Other:
Installation Requi	rements/Conditions
Septic Tank Size: _	gallons Total Trench/Bed Length:feet Trench/Bed Spacing:feet on center
Trench/Bed Width	a: inches LTAR: gpd/ft <sup>2</sup> Usable Depth to LC (Initial) <sup>x</sup> : <sup>x</sup> Limiting condition
Soil Cover:	inches Slope Corrected Maximum Trench/Bed Depth <sup>‡</sup> : inches <sup>‡</sup> Measured on the downhill side of the trench
Pump Tank Size (if	applicable):gallons Requires more than 1 pump? 🗌 Yes 🗌 No
Pump Requiremen	nts: ft. TDH vs GPM Grease Trap Size (if applicable): gallons
Distribution Meth	od: 🗌 Serial 🔄 D-Box or Parallel 🔄 Pressure Manifold(s) 🔛 LPP 🔄 Other:
Artificial Drainage	Required: Yes 🗌 No 🗌 If yes, please specify details:
Legal Agreements	(If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)
Multi-party Agree	ment Required [.0204(g)]: Yes No Declaration of Restrictive Covenants: Yes No
Easement, Right-o	f-Way, or Encroachment Agreement Required [.0301(b)]: 🗌 Yes 🔲 No
Management Enti	ty Required: 🗌 Yes 🗌 No Minimum O&M Requirements:
Permit conditio	ns:

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. <u>This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes.</u> The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print Name:			
AOWE/PE Signature:	Alex Adamo	Date:	
	This AOWE/PE submittal is pursuant to ar	nd meets the requirements of G.S. 130A-335(a2) and (a5).	

#### \*See attached site sketch\*



# This Section for Local Health Department Use Only

Initial submittal received: \_\_\_\_\_\_ by \_\_\_\_\_ by \_\_\_\_\_

Date

Initials

G.S. 130A-335(a5) states the following:

When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This

Construction Authorization is determined to be:

Incomplete	(If box is checked,	information in this section	is required.)
------------	---------------------	-----------------------------	---------------

The following items are missing:

Complete

State Authorized Agent: \_\_\_\_

Date of Issuance:

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: \_\_\_\_\_\_

\*See attached site sketch\*



# **Re-submittal of Construction Authorization**

	LHD USE ONLY: This CA resubmittal received:		by	
		Date	Dy Initials	
The following i	L items are being resubmitted pursuant to G.S. 130A-33	35(a5) for issuance	of the Construction Authori	zation:
1		at the information .	conviced to be included with	this to submitted
Authorized O	Dosite Wastewater Evaluator (Print Name)	at the mornation r	required to be included with	
	I complete to the best of my knowledge and that the and local laws, regulations, rules, and ordinances.	proposed Construc	tion Authorization meets a	ll applicable
Signatu	re of Authorized On-Site Wastewater Evaluator		Date	
	The section below is for Local Health Department us	e after submittal of i	tems noted as missing above.	
LHD Follow-	up Completeness Review of Construction A	uthorization		
	completeness of this Construction Authorization re-s ion Authorization is determined to be:	ubmittal was cond	ucted in accordance with G	.S. 130A-335(a5).
Incomplete	(If box is checked, information in this section is requi	ired.)		
The following it	tems are missing:			
	SSSE QUA	M VIDERO	-ff	
Copies of this v	were sent to the AOWE/PE and the Applicant on	Date	_	
State Authorize	ed Agent:		Date:	
Complete				
State Authorize	ed Agent:		Date:	



Permit/File #: \_\_\_\_\_

# ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County:
PIN/Lot Identifier:
Issued To:
Additional Improvement Permit Conditions:
CT ATA
ANE SIME OF SE
Additional Construction Authorization Conditions:
1PRIL 12 VTI6
10330 T 19300 T 1923 T 11
- QUAM VIP

# Adams Soil Consulting, PLLC 1676 Mitchell Road Angier, NC 27501 919-414-6761 alexadams@bcsoil.com

May 29, 2025 Project #2151

"The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335 (a2), (a5), and (a6)"

RE: 79Fern Ridge Drive – Cameron, NC (Harnett County) -Lot #3 – Carolina Season Phase 3 for Glenwood Homes, LLC (PIN# 9557-80-8085)

To whom it may concern:

Adams Soil Consulting (ASC) conducted a preliminary soil evaluation on the above referenced parcel to determine the areas of soils which are suitable for subsurface wastewater disposal systems (conventional & LPP). The soil/site evaluation was performed using hand auger borings during moist soil conditions based on the criteria found in the State Subsurface Rules, State Subsurface Rules, 15ANCAC 18E. From this evaluation, ASC is providing the attached 4-bedroom (480 gallon/day) septic design.

The suitable soils found on the subject property were relatively consistent in the initial and repair areas. The area designated for the initial/primary septic system (see attached septic plan) was found to contain soils with greater than 24 inches in depth before a restrictive horizon was encountered.

Please find the attached wastewater soil/site evaluation forms for specific soil properties found in the initial and repair areas as well as assigned soil long term acceptance rate (LTAR). Numerous soil borings were made throughout the property and representative soil profile descriptions for the primary septic field and repair area are provided. A location sketch for profile descriptions is also attached. The initial and primary septic fields were sized based on a flow rate of 480 gallons/day and utilizing an Accepted Status or PPBPS system. Any unauthorized site disturbance, filling, soil removal, or layout changes may result in the permit being revoked.

The septic installer contractor shall install the primary and repair (if needed) system on contour, see attached site plan for the primary system and repair locations. No underground utilities, water lines, or sprinkler systems shall be placed into the initial or repair septic areas. Installation must meet all state and local county regulations for septic system installation. The trenches must be installed in the same location as the site plan. If the installation is in question at the time of installation call me (Alex Adams) at 919-414-6761.

This report discusses the location of provisionally suitable soils identified on the property and does not guarantee the future function of any waste water disposal system installed.

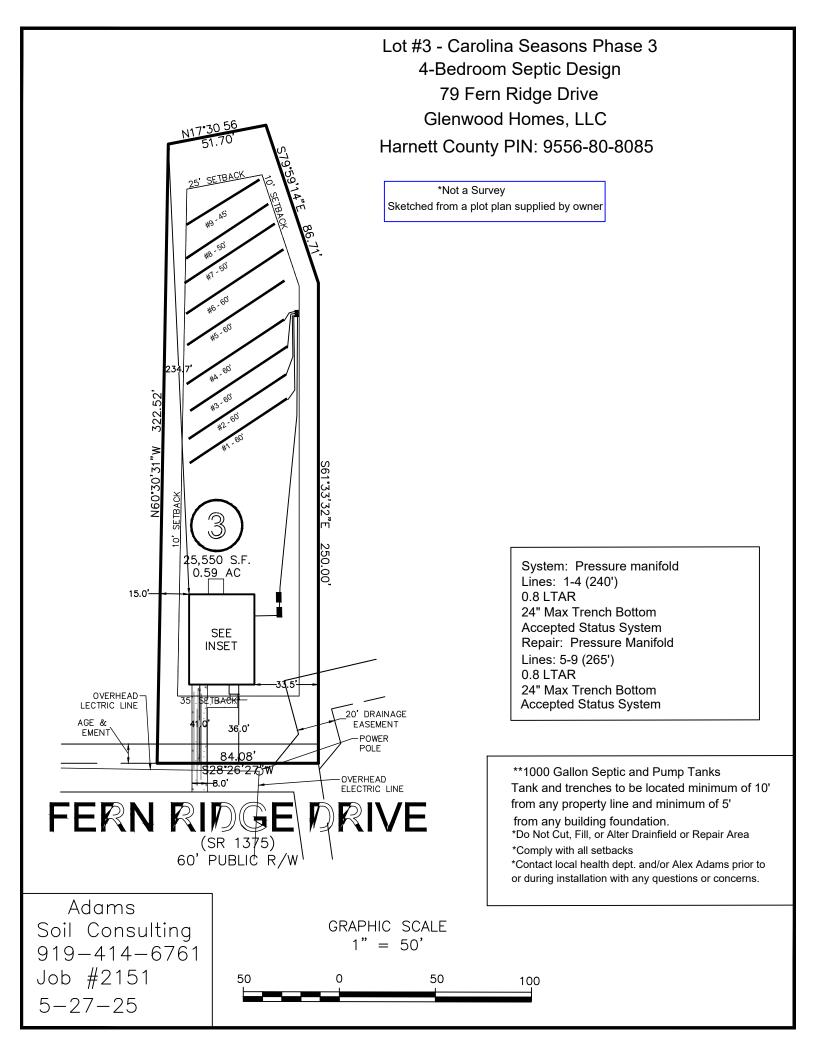
If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me anytime.

Sincerely,

Alex Adams NC Licensed Soil Scientist #1247 AOWE Certification: 10021E







### **RESIDENTIAL PRESSURE MANIFOLD DESIGN**

Permit # <u>Carolina</u>	<mark>a Seasons P</mark> ł	nase 3 - Lot #3						
<u>79 Fern Ridge</u>								
# of BDR: <u>4</u>	Daily Flow	: <u>480</u>	gal/day	L.T.A.R.:	<u>0.8000</u>	gal/day/sq.ft		
Septic Tank: 1000	gals	Pump Tank	<u>1000</u>	gals	Sq. Foot:	<u>720</u>	System Type:	Accepted
Number of Taps:	<u>4</u>	Length o	of Trenches	: <u>240</u> 1	ft(See Ta	p Chart for Det	ails)	
Depth of Trenches:	<u>24</u>	in	Ма	nifold Length:	<u>42</u>	in		
Manifold Diameter:	<u>4in sch 80p</u>	VC	Tap Config	guration: 6 in sp	bacing	<u>1</u>	side(s) of man	ifold
Supply Line: length:	<u>75</u>	ft		Diameter:	<u>2</u>	in sch 40pvc		
Friction Loss + Fitting L	.oss:	<u>2.74</u>	ft(supply li	ine length + 70'	for fitting	gs in pump tan	k)	
Design Head:	<u>2</u>	ft	Elevation I	Head:	<u>16.00</u>	ft		
Total Head:	<u>20.74</u>	ft	Pu	mp to Deliver:	<u>28.44</u>	gals/min at	<u>20.74</u>	ft head
Dosing Volume:	<u>117</u>	gals,						
Drawdown: 117	_gals divide	d by	<u>20</u>	gals/in =	<u>5.9</u>	inches		

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required.

	TAP CHART										
	Benchmark		is = 100.00	set at				Design Head:	2		
Ρ	ump tank elev.			100.00	Pump elev.	95.00		Manifold elev.	111.00		
											# of Panels
	line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	(PPBPS)
	1			110.00	60	1/2in SCH 40	7.11	120.00	180	0.6667	
	2			111.00	60	1/2in SCH 40	7.11	120.00	180	0.6667	
	3			112.00	60	1/2in SCH 40	7.11	120.00	180	0.6667	
	4				60	1/2in SCH 40	7.11	120.00	180	0.6667	
				100.00			0	0.00	0	#DIV/0!	
				100.00			0	0.00	0	#DIV/0!	
				100.00			0	0.00	0	#DIV/0!	
				100.00			0	0.00	0	#DIV/0!	
				100.00			0	0.00	0	#DIV/0!	
				Total Feet =	240	gal/min =	28.44		LTAR =	0.8000	
				Feet Required =	150	Velocity =	2.72		(ltar + 5%)	0.8400	
Т	otal # of Panels (P	PBPS)			Des. Flow	480			(Itar w/25% red)	1.0667	
%	of Dose Vol.		75		Pump Run=	16.88			(Itar + 5%)	1.1200	
D	ose Volume		117		Tank Gal/IN	20					
D	ose Pump Time		4.11		Elev. Head	16.00					
D	rawdown in Inche	s	5.9								
С	omments:										

OWNER: Glenwood Homes, LLC

# SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM (Complete all fields in full)

DATE EVALUATED: 5-27-25\_

ADDRESS: 79 Fern Ridge Drive – Cameron, N	C		
PROPOSED FACILITY: SFH	PROPOSED DESIG	N FLLOW (.0400): 360 gpd	PROPERTY SIZE: ~0.59 ac
LOCATION OF SITE: _79 Fern Ridge Drive -	Cameron, NC		PROPERTY RECORDED:
WATER SUPPLY: $\underline{X}$ Public $\Box$ Single Family	y Well 🗌 Shared Well	□ Spring □ Other	_ WATER SUPPLY SETBACK:
EVALUATION METHOD: $\underline{X}$ Auger Borin	g 🗌 Pit 🗌 Cut	TYPE OF WASTEWATER:	X Domestic  High Strength  IPWW

P R O F I L E #			SOIL MORPHOLOGY		OTHER PROFILE FACTORS					
	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ	.0509 PROFILE CLASS & LTAR*	.0502(d) SLOPE CORRE CTION
1	L/10%	0-48	Gr/LS	VFR, NS,NP	N/A	48"	N/A	N/A	S/0.8	4"
		10-40	SBK/CL	FI/SEXP,S						
										-
	L/10%	0-48	Gr/LS	VFR, NS,NP	N/A	48"	N/A	N/A	S/0.8	4"
2										
	L/10%	0-48	Gr/LS	VFR, NS,NP	N/A	48"	N/A	N/A	S/0.8	4"
	L/10%					40	IV/A	11/11		
3										
4										
ـــــ										

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM							
Available Space (.0508)	S         S           III(b)         III(b)           .8         0.8		SITE CLASSIFICATION (.0509):						
System Type(s)			EVALUATED BY:						
Site LTAR			OTHER(S) PRESENT:						
Maximum Trench Depth	24	24							
Comments:									

