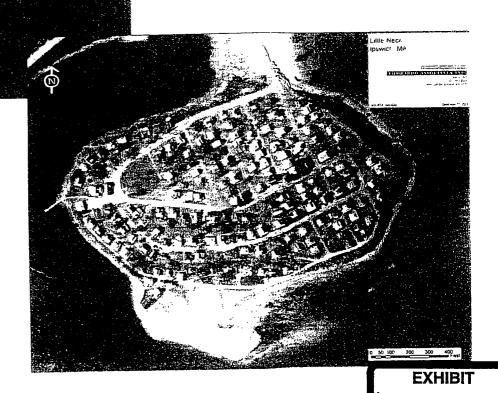
LITTLE NECK, IPSWICH, MA

Project Overview

for

Feoffees of the Grammarschool

hevised November 4,2004



Submitted to:

Feoffees of the Grammar School c/o Mr. Donald Whiston 2 Jeffrey's Neck Road Ipswich, MA 01938

Submitted by:

Environmental Engineers/Consultants

LOWRARDO ASSOCIATES INC.

49 Edge Hill Road

Newton, Massa, husert, 0246

NOTICE TO CONTRACTORS: AMENDMENT #1 TO INVITATION TO BID

Little Neck Wastewater Collection System

Ipswich, MA

November 4, 2004

In reference to the Invitation to Bid for Construction of the Little Neck Wastewater Collection System, the

pre-bid conference has been postponed to November 23, 2004 at 10:00 am at <u>The Little</u> Neck Community Center.

Prospective Bidders are invited to present their questions relative to their Bid at this meeting. Attendance at this meeting is not a requirement for submitting a Bid for the Work.

Contract Documents will be issued on November 15, 2004.

A Project Overview package will be sent to all contractors who request the Contract Documents prior to November 15, 2004 or sent with the Contract Documents for those requested after November 15, 2004.

Sealed Bids will be received by The Feoffees of the Grammar School (hereinafter referred to as the Owner), at the Offices of Attorney Donald Greenough, 2 Depot Square, Ipswich, MA 01938

until 2:00 p.m., local time, on December 21, 2004

for Construction of the Little Neck Wastewater Collection System.

For further information, contact Pio Lombardo, P.E. or Gary Rubenstein, Lombardo Associates, Inc. at 617-964-2924 or email, Pio@LombardoAssociates.com

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1. LITTLE NECK PROJECT OVERVIEW PACKAGE FOR PHASE I - CONSTRUCTION OF THE LITTLE NECK WASTEWATER COLLECTION SYSTEM

As described in the Invitation to Bid, attached as Appendix A, enclosed is a project overview to assist interested contractors to understand the scope and schedule of this project.

Due to MADEP imposed deadlines, the project will be fast-tracked as follows:

- 1. Plans and Specifications of the proposed design as of November 1, 2004 will be available after November 2, 2004 from the Engineer of Record, Lombardo Associates, Inc. (LAI)
- 2. Addenda to those plans may be issued and received by prospective bidder by December 1, 2004 from LAI
- 3. Bids to the November 1, 2004 plans and addenda will be the basis for Contractor Selection by the Feofees of the Grammar School (Owner)
- 4. Construction is expected to start on or about January 3, 2005

The following are enclosed herein for the Construction of the Little Neck Wastewater Collection System:

- Scope Description
- Proposed Layout
- Draft bid form
- Boring logs

1.1 SCOPE DESCRIPTION

This project (Little Neck Wastewater Collection System) is Phase I of a two-phase construction project that will ultimately include:

- Phase I Sewer Collection System
- Phase II Holding Tank/Transfer Facilities/Building

The Scope of Phase I of the Little Neck wastewater project consists of construction of gravity sewers house laterals, proper abandonment of existing cesspools-septic tanks, a pump station, and force main to serve the 167 houses.

As currently envisioned, the collection system is comprised of gravity piping and manholes that convey flows to the holding tank or pump station. The pumping system is comprised of one pump station at a low point on the south side of the island and one on the northeast side that will discharge via a force main to gravity sewers that flow to the future holding tank located near the playground (See Figure 1-1), along with grinder pumps as needed.

A general description of the work to be performed under this contract shall include but will not be limited to the following construction operations:

- Excavating, filling, backfilling, grading and compacting for pipe laying, wet well and for resurfacing.
- Furnish and install all sewer pipes and manholes with necessary appurtenances and fittings

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- Furnish and install wet wells complete with necessary appurtenances and service fittings.
- Furnish and install pump stations including drywell, motors, duplex pumps, and controls.
- Replace and restore disturbed pavement surfaces, curbing, utilities, grass, posts, signs, etc. along the line of work. Replace any disturbed bounds utilizing the services of a registered land surveyor.
- Do all testing of sewers and force main and start up of pump station and correct all failure and/or breaks.
- Dispose of excess material from excavation not required for fill or backfill at the expense of the Contractor, and to the satisfaction of the Owner.
- Installation of house laterals
- Proper abandonment of existing cesspools or septic tanks
- Replumbing of properties to redirect house wastewater discharge

The Phase II Contract will be awarded early in 2005 and will consist of the Holding Tank/Transfer Facilities/Building.

1.2 EXISTING BORING LOGS

Borings will be performed along the route of the proposed sewers, force main and at the pump stations. The data is anticipated to be provided as an addenda by December 1, 2004. Figure 1-2 illustrates the locations of boring and Appendix B presents the logs of the previous investigations performed at Little Neck.

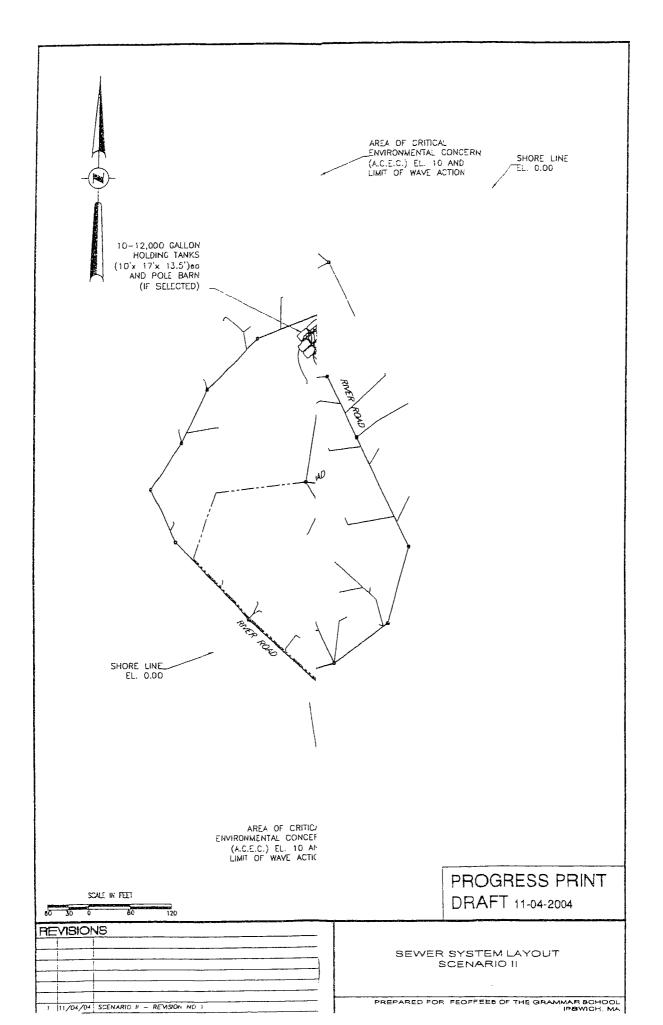


Table 1-1: Draft Bid Form

Little Neck Wastewater Collection System Foefees of the Grammer School, Ipswich, MA BID SCHEDULE A

<u>ltem</u>	Description	<u>Unit</u>	Quantity	Price	Extension
1.	8 inch PVC Gravity Sewers, 0–4 ft. deep	LF	500		
2.	8 inch PVC Gravity Sewers, 4–12 ft. deep	LF	7,800		
3.	Pavement Demo & Repair	SY	5,400		
4.	Manholes 0-4 ft. deep	Ea	5		
5.	Manholes 4-12 ft. deep	Ea	43		
6.	Clean Outs	Ea	6		
7.	4 inch PVC Force Main	LS	1,300		
8.	Pump Station, 100 gpm	LS	1		
9.	Utility Relocation, Water	LS	800		
10.	Utility Relocation, Electric	LS	600		
11.	Utility Relocation, Cable/Phone	LS	600		
12.	Dewatering	DAY	20		
13.	Boulder Excavation	CY	15		
14.	Bedrock Excavation	CY	5		
15.	House Laterals	Ea	167		
16.	House Plumbing Changes	Ea	167		
17.	Mobilization	Ls	1		
18.	Demobilization	Ls	1		
	TOTAL				
$T \cap T \wedge$	I (INI MADDO) DID SAHER	VIII E A -			
IUIA	L (IN WORDS) BID SCHED	JULE A:			

LITTLE NECK PROJECT OVERVIEW REVISED NOVEMBER 4, 2004

Little Neck, Ipswich, MA Deep Hole and Boring Locations TP-202 PHOG P 0 TP-203 TP-201 DOH4) DOHB DYON GOLD THE DOH 2 TP-204 DOH 3 RIVER ROAD

FIGURE 1-2: DEEP HOLE AND BORING LOCATION

LITTLE NECK PROJECT OVERVIEW REVISED NOVEMBER 4, 2004

Environmental Engineers/Consultants

APPENDIX A: INVITATION TO BID

Sealed Bids will be received by <u>The Feoffees of the Grammar School</u> (hereinafter referred to as the Owner), at the <u>Offices of Attorney Donald Greenough. 2 Depot Square</u>, <u>Ipswich</u>, <u>MA 01938</u> until 2:00 p.m., local time, on <u>December 7, 2004</u> for Construction of the <u>Little Neck Wastewater Collection System</u>.

At said place and time, and promptly thereafter, all Bids that have been duly received will be publicly opened and read aloud.

The Contract Agreement will provide for the <u>Construction of the Little Neck Wastewater Collection System</u>, as described in the following Description of Work, hereinafter referred to as the Work.

A Little Neck Project Overview package, complete with maps and all presently available data may be obtained after October 8, 2004 from Lombardo Associates, Inc., 49 Edge Hill Road, Newton, MA 02467 upon payment of a non-refundable fee of ten dollars (\$ 10.00). (Send an additional \$ 15.00 per set if overnight mailing is requested). Checks shall be made payable to Lombardo Associates, Inc.

Contract Documents, complete with Plans and Specifications may be obtained after November 2, 2004 from Lombardo Associates. Inc., 49 Edge Hill Road, Newton, MA 02467 upon payment of a non-refundable fee of Seventy-five dollars (\$ 75.00). (Send an additional \$ 15.00 per set if overnight mailing is requested). All parties who request a Little Neck Project Overview package will be notified when the Contract Documents are available. All Bids must be in accordance with the Contract Documents. Checks shall be made payable to Lombardo Associates, Inc. The contract will be awarded to the successful Bidder on or about December 15, 2004. The Owner reserves the right to select the successful Bidder based upon price and non-price considerations.

A pre-bid conference will be held at 10:00 a.m. on November 16, 2004 at The Little Neck Community Center located on Bay Road, Little Neck Ipswich, MA. Prospective Bidders are invited to present their questions relative to their Bid at this meeting. Attendance at this meeting is not a requirement for submitting a Bid for the Work.

The Work is expected to commence within ten (10) days after the Notice to Proceed is issued, with an estimated construction start date of January 2, 2005. The work shall be completed by April 15, 2004.

Bid Security in the amount of five (5) percent of the total Bid Price must accompany each Bid in the form specified in the Instructions to Bidders.

Within ten (10) days of the date of the Notice of Award, the successful Bidder will be required to furnish Performance Bond and a Payment Bond in the amount of one hundred (100) percent of the Contract Amount, guaranteeing faithful performance and the payment of all bills and obligations arising from the performance of the Agreement.

No Bid may be withdrawn within a period of sixty (60) days after the date fixed for opening Bids.

The OWNER reserves the right to reject any and all bids or to accept that bid or combination of bids, if any, which in its sole and absolute judgment will under all circumstances best serve the OWNER'S interest. No Bid will be accepted from any firm, person, or corporation, who is a defaulter as to surety or otherwise, or is deemed incompetent, irresponsible, or unreliable by the OWNER.

No Bids will be considered which are received after the time indicated, and any Bids so received after said time shall be returned to the Bidder unopened.

Description of work

The Work, as herein defined, will consist of the following Scope:

- Furnish and install 4,000 feet of 6-in. PVC house lateral sewers
- Furnish and install house plumbing discharge rerouting as needed for 167 houses
- Furnish and install 8,075 ft. of 8-in. SDR 35 PVC gravity sewer within private roads
- Furnish and install 37 manholes, () 8 feet deep
- Furnish and install six pressure sewer (6) cleanouts
- Furnish and install 1,300 ft. of 3-in. ductile iron force main
- Furnish and install 3 house grinder pump systems
- Furnish and install on 21 gpm pumping station

In addition, utility relocations, road restoration and landscape restoration shall be provided.

NOTICE TO CONTRACTORS: AMENDMENT TO INVITATION TO BID Little Neck Wastewater Collection System Ipswich, MA

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pre-bid conference has been postponed to November 23, 2004 at 10:00 am at The Little Neck Community Center.

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For further information, contact Pio Lombardo, P.E. or Gary Rubenstein, Lombardo Associates, Inc. at 617-964-2924 or email, Pio@LombardoAssociates.com

APPENDIX B: SOILS AND BORING LOGS

Graham Deep Hole Tests (May 19-20, 1999)

	<u> </u>					
-{		ASSOCI. B NAME: FE			GRAMMAR	SCHOOL
					JOB NO:	97-00309
			FOR M	11 - SOIL	. EVALUAT Pa	OR FORM
No					Date May	<u>21, 1999</u>
	Commonwea Ipswich	alth of Mass , Massachu		etts		
<u>Şoil Şuitability</u>	<u>Asseşşm</u>	ent for O	n-site	<u>Şewag</u>	e Dispo	sal
Performed by: Chris Dasch, P.E.	of H.L. Graham	Associates, Inc.		Date: May	19. 20. 1999	
Witnessed By:						
Location Address or Lot # Little Neck		Addres	ss and	Featlers of the 2 Jeffrey's Nect Ipswich, M (978) 356-	01938	!
New Construction Repa	air					
Office Review						
Published Soil Survey Avallab Year Published <u>May 1984</u> Drainage Class <u>3-Well Draine</u>	Pub	lication Scale <u>1</u>	:15.84Q	Soil Map	Unit <u>Paxton</u>	
Surlicial Geologic Report Avai Year Published Geologic Material (Map Unit) <u>Gla</u>	Publication !	Scale	_			·
Landlorm <u>Drumlin</u>						
Flood Insurance Rate Map: Above 500 year flood boundar Within 500 year flood boundar		Yes	<u> </u>			
Within 100 year flood boundar Wetland Area:		Yes _				
National Wetland Inventory Map Wetlands Conservancy Program						
Current Water Resource Conc	,					
Range: Above Normal Other References Reviewed:		ui <u>X</u> B				

RAHAM ASSOCIATES, INC.

Location Address of	rtatkla Li	nie Neck Inswich	MA		
Location Address of	I CO: 140.			iou	
D	OH 1	<u>UII-</u>	<u>site Revi</u>	<u>e î</u> a	
Deep Hole Number: _	OH 2	Date: <u>5/19/99</u>	Time A.M.		Weather 65°F Ran
ماسيدا وران	- Soo Attact	had Sketati			
LandUse Lawn		Slope (%) <u>З</u>	%-15% Surla	ca Sonae <u>None</u>	
vegetaron Jurlawn Gr	<u> </u>				
Landom <u>Ciudín</u>					
Postion on landscape (sku	etch on the bac	x) See Attached Ske)		
Distances from:			EO.	logi	
Open Water Bo			Drainage Way 50+ Property Line N/A		
Possible Well A					
Drinking Water	Well NA	_ leei	Other		
	r	EEP OBS	ERVATIO	N HOLE L	OG*
	.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Depth from Suriace	Soil Horizon	Soil Texture	Soil Color	Soil Mottling	Other (Structure, Stanes, Bou
(Inches)		(USDA)	(Munsell)	Houng	Consistency, % Grayer
50114					
DOH 1 0°-10"	A	Sandy Loam	10YR 3/2	•	
10"-24"	В	Sandy Loam	10YR 5/6 2.5Y 4/4	@ 54"	
24"-120"	С	Sill Loam	2.51 444		
DOH 2			1000 200		
1 5 .5	A	Sandy Loam Sandy Loam	10YR 3/2 10YR 5/6		
	B C	Sill Loam	2.5Y 4/4	@ 53"	
				1754	
O MUMINIM .	2 HOLES F	EQUIRED AT EVER	Y PROPOSED DISH	POSAL AREA	
	Clockel Till		_	Depth to	Bedrock: Not Encounter
Parent Material (geologic)					None
			None or in the Hole: <u>Qbs</u> t		ng from Prit Face: Observe
Depth to Groundwater		Community of Maria			

-GRAHAM ASSOCIATES, INC.

JOB NAME: FEOFFEES OF THE GRAMMAR SCHOOL JOB NO: 97-00309

FORM 11 - SOIL EVALUATOR FORM Page 3 of 7

		<u>On-</u> :	<u>site Revie</u>	<u>.</u> M	
Deep Hole Number:	OH 3 OOH 4 D	ale: <u>5/19/99</u>	Time: A.M.		Weather 65°F Rain
Deeb Hole while ou ere by		J (7) 1-4-			
_ncation (identity on step p	() I	Slope (%) 3%	-15% Surface	Stones Note	
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	<u> </u>				
Landorm DUTTO Position on landscape (si		Soo Attached Sket			
	LEACH ON THE DECP	1 - Aug - Steel - Aug - Carre			
Distances from:	50.	t	Drainage Way 50±	feet	
	∞y <u>50±</u>		Property Line N/A		
	4rea <u>50+</u>	. 1001	Otes		
Drinking Wate	AVARW IIeW				
		EEP OBS	ERVATION	HOLE L	OG*
	L	PEP OBSI		,,,	
		Soil Texture	Soil Color	Soil	Other
Depth from Surface (Inches)	Soil Horizon	(USDA)	(Munsell)	Mottling	(Structure, Stones, Bould Consistency, % Gravel)
(11,165)			+		
DOH 3					
0"-10"	Α	Sandy Loam	10YP 3/2		
10"-20"	В	Sandy Loam	10YR 5/6 2.5Y 4/4	@ 40"	
20"-120"	C	Silt Loam	2.51		
DOH 4			1.57(5) 0.10		
0"-10"	A	Sandy Loam	10YR 3/2 10YR 5/6	@ 14"	
10"-18"	В	Sandy Loam Silt Loam	2.5Y 4/4		Angular stones to 6"
18"-120"	C	1			<u> </u>
	DE 2 UOLES E	EQUIRED AT EVER	Y PROPOSED DISP	OSAL AREA	
MUMINIM.	JF Z HOLLUT	icaon /all / is			Bedrock: Not Encounter
Parent Material (neologi	e) Glacial TIL			Depth to	
1 20 1112222	-,		None		DOH 3: I
		Standing Water	er in the Hole: Obse		ng from Pin Face: DOH 4 @
Death to Groundwa					
F 4-4 P	Josh Controckers	er. <u>DOH 3 @ 40": Г</u>	XXH 4 @ 14"		_
Estimated Seasonal i	-iñu Giooinwa	··· <u></u>		•	

RAHAM ASSOCIATES, INC.

JOB NAME: FEOFFEES OF THE GRAMMAR SCHOOL JOB NO: 97-00309

FORM 11 - SOIL EVALUATOR FORM

		<u> </u>	<u>șite Revi</u>	<u>e w</u>	
(Jeep Hale Number: _DC	0H.5 D	ale: <u>5/19/99</u>	Time: P.M.		Weather: 65°F Rain
Location (toentily on site plan		Slope (%) 32		ca Sones <u>None</u>	
Vegezon Turlawo Gras	55				
Landorm Glacial Till John Position on landscape (sket	00 Score	Soo Attached Ske	ולמ		
	CH ON THE DECK) Late Office Control			
Distances from:	EO4	lael	Drainage Way 50+	feet	
Open Water Bod Possible Wet Are		. 160.	Property Line N/A		
Possible Wet Are Drinking Water V		1001	Other		
Drinking water in		. 10.5.			
	D	EEP OBS	ERVATION	M HOLE	LOG^
	D	EEP OBS			
Depth from Surface S		Soil Texture (USDA)	Soil Color (Munsell)	Soi Mattling	Other (Structure, Stones, Bo Consistency % Grav
(Inches)		Soil Texture	Soil Color	Soi	Other (Structure, Stones, Bo
(Inches) DOH 5	Sail Honzon	Soil Texture (USDA)	Soil Color (Munsell)	Soi	Other (Structure, Stones, Bo
(Inches) DOH 5 0"-15" A 10"-30" E	Soil Honzon	Soil Texture (USDA) Sandy Loam Loamy Sand	Soil Cotor (Munseil) 10YR 3/2 10YR 5/6	Soi Mottling	Other (Structure, Stones, Bo
DOH 5 0"-15" A 10"-30" E 30"-82"	Goil Honzon	Soil Texture (USDA) Sandy Loam Loamy Sand Sand	Soil Color (Munsell)	Soi	(Structure, Stones, Bo Consistency % Grav
DOH 5 0"-15" A 10"-30" E 30"-82" C 82"-130" C	Goil Honzon	Soil Texture (USDA) Sandy Loam Loamy Sand Sand Silt Loam	Soil Color (Munseil) 10YR 3/2 10YR 5/6 10YR 4/6 2.5Y 4/4	Soi Mottling	(Structure, Stones, Bo Consistency % Grav
DOH 5 0"-15" A 10"-30" E 30"-82" C 82"-130" C	Goil Honzon	Soil Texture (USDA) Sandy Loam Loamy Sand Sand	Soil Color (Munseil) 10YR 3/2 10YR 5/6 10YR 4/6 2.5Y 4/4	Soi Mottling	(Structure, Stones, Bo Consistency % Grav
DOH 5 0"-15" A 10"-30" E 30"-82" C 62"-130" C	Soil Honzon	Soil Texture (USDA) Sandy Loam Loamy Sand Sand Silt Loam	Soil Cobr (Munseil) 10YR 3/2 10YR 5/6 10YR 4/6 2.5Y 4/4	Soi Mattling @ 33"	Other (Structure, Stones, Bo Consistency, % Grav Very fine
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DOH 5 0"-15" A 10"-30" E 30"-82" C 62"-130" C	Glacial TII	Soil Texture (USDA) Sandy Loam Loamy Sand Sand Silt Loam EQUIRED AT EVERY	Soil Cobr (Munsell) 10YR 3/2 10YR 5/6 10YR 4/6 2.5Y 4/4	Soi Mattling @ 33" COSAL AREA Depth to	Other (Structure, Stones, Bo Consistency, % Grav Very fine

RAHAM ASSOCIATES, INC.

	-	tle Neck, loswich, M On-S	ite Revi	ew	
	OH 6			· 	Weather <u>65°F, Rai</u>
Deep Hole Number: _		Date: <u>5/20/99</u>	Time: A.M.		118021 RA001.1112
Location (identify on site p			150/ S.Ho	os Sones None	
Land Use LAMO					
	aes				
Landom <u>Diviéi</u>		. Coo Attached Skat			
Position on landscape (st	(each on the bac	X) SE MICHELLES	U		
Distances from:	. 501	tunt D	rainage Way 50+	ieel	
Open Water B		_ 100.	roperty Line N/A		
Possible Wet			ther		
Drinking Wate		_ 1001			
		EEP OBSE	RVATIO	A HOLE I	_OG*
	_				
Depth from Surface	Soil Horizon	Soil Texture	Soil Color (Mursell)	Soil Mottling	Other (Structure, Stones, B
(Inches)		(USDA)	(110.00.0)		Consistency, % Gra
50110		Candy Loom	10YR 3/2		
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0"- 8" 10"-24" 24"-58"	B C1	Sandy Loam Silty Clay Loam	10YR 5/6 5Y 5/2 2.5Y 4/4	@ 25"	
0"- 8" 10"-24"	В	Sandy Loam	5Y 5/2	@ 25"	
0"- 8" 10"-24" 24"-58" 58"-120"	B C1 C2	Sandy Loam Silty Clay Loam Silt Loam	5Y 5/2 2.5Y 4/4	@ 25"	
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0"- 8" 10"-24" 24"-58" 58"-120" DOH 7 0"- 5" 8"-12" 12"-39" 39"-120"	B C1 C2 A B C1 C2	Sandy Loam Silty Clay Loam Silt Loam Sandy Loam Sandy Loam Sandy Loam Silty Clay Loam	5Y 5/2 2.5Y 4/4 10YR 3/2 10YR 5/6 5Y 5/2 2.5Y 4/4	@ 33" POSAL AREA	
0"- 8" 10"-24" 24"-58" 58"-120" DOH 7 0"- 8" 8"-12" 12"-39" 39"-120"	B C1 C2 B C1 C2 DF 2 HOLES F	Sandy Loam Silty Clay Loam Silt Loam Sandy Loam Sandy Loam Sandy Loam Silty Clay Loam Silt Loam	5Y 5/2 2.5Y 4/4 10YR 3/2 10YR 5/6 5Y 5/2 2.5Y 4/4 PROPOSED DISI	@ 33" POSAL AREA	o Bedrock: <u>Nol Enco</u> u
0"- 8" 10"-24" 24"-58" 58"-120" DOH 7 0"- 8" 8"-12" 12"-39" 39"-120"	B C1 C2 B C1 C2 DF 2 HOLES F	Sandy Loam Silty Clay Loam Silt Loam Sandy Loam Sandy Loam Sandy Loam Silty Clay Loam Silty Clay	5Y 5/2 2.5Y 4/4 10YR 3/2 10YR 5/6 5Y 5/2 2.5Y 4/4 PROPOSED DISE	@ 33" POSAL AREA Depth is	o Bedrock: <u>Nat Encau</u> None
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LITTLE NECK PROJECT OVERVIEW REVISED NOVEMBER 4, 2004

FRAHAM ASSOCIATES, INC.

Location Address	or Lot No. L	Ittle Neck, loswic	h. MA		
			-site Rev	iew	
	DOH 8	9.1.	. 0,10 ,701	<u> </u>	
Deep Hole Number.		Date: <u>5/20/99</u>	Time. <u>A.M.</u>		Weather 65°F Ba
Location (identify on site	ptan) <u>See: Attac</u>				
Land Uso Lawn				ace Stones <u>None</u>	
Vegetaton <u>Turllawn</u> (} 2255				
Landom <u>Drumin</u>					
Position on landecape (s	ekatch on the bad	sk) <u>See Atteched S</u>	(eph		
Distances from:					
Open Water 6	Body <u>50+</u>	lee!	Drainago Way 50±	leel	
Possible Well	Area <u>50+</u>	1001	Property Line N/A	661	
Drinking Wate	Well MA_	_ 1001	Other		
		EEP OBS	CDV 6 TIO	N UOLE	1.00*
					1 1 11 7
	L	JEEF OBC	LITATIO	IN HOLL	
Denth from Surface			Soil Cobi	Soi	Other
Depth from Surface (Inches)		Soil Texture (USDA)			Other (Structure, Stones, B
(Inches)		Soil Texture	Soil Coloi	Soi	Other (Structure, Stones, B
(Inches) DOH 8	Soil Honzon	Soil Texture	Soil Coloi	Soi	Other (Structure, Stones, B
(Inches)		Soil Texture	Soil Coloi	Soi	Other (Structure, Stones, B
(Inches) DOH 8 0"-24" 24"-32" 32"-48"	Soil Horizon Fill A B	Soil Texture (USDA) Sandy Loam Loamy Sand	Soil Color (Munsell) 10YR 3/2 10YR 5/6	Soi	Other (Structure, Stones, B Consistency, % Gra
(Inches) <u>DOH 8</u> 0"-24" 24"-32"	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soi	Other (Structure, Stones, B
(Inches) DOH 8 0"-24" 24"-32" 32"-48"	Soil Horizon Fill A B	Soil Texture (USDA) Sandy Loam Loamy Sand	Soil Color (Munsell) 10YR 3/2 10YR 5/6	Soi	Other (Structure, Stones, B Consistency, % Gra
00H 8 0"-24" 24"-32" 32"-48" 48"-72" 00H 9 0"-8"	Fill A B C	Soil Texture (USDA) Sandy Loam Loamy Sand Loamy Sand Sandy Loam	50il Cobr (Munsell) 10YR 3/2 10YR 5/6 10YR 5/6	Soi	Other (Structure, Stones, B Consistency, % Gra
00H 8 0"-24" 24"-32" 32"-48" 48"-72" 00H 9 0"-8" 8"-26"	Fill A B C	Soil Texture (USDA) Sandy Loam Loamy Sand Loamy Sand Sandy Loam Loamy Sand	Soil Color (Munsell) 10YR 3/2 10YR 5/6 10YR 5/6	Soi Mattling	Other (Structure, Stones, B Consistency, % Gra
00H 8 0"-24" 24"-32" 32"-48" 48"-72" 00H 9 0"-8"	Fill A B C	Soil Texture (USDA) Sandy Loam Loamy Sand Loamy Sand Sandy Loam	50il Cobr (Munsell) 10YR 3/2 10YR 5/6 10YR 5/6	Soi	Other (Structure, Stones, B Consistency, % Gra
DOH 8 0"-24" 24"-32" 32"-48" 48"-72" DOH 9 0"- 8" 8"-26" 26"-110"	Fill A B C	Soil Texture (USDA) Sandy Loam Loamy Sand Loamy Sand Sandy Loam Loamy Sand	Soil Color (Munsell) 10YR 3/2 10YR 5/6 10YR 5/6 10YR 3/2 10YR 5/6 2.5Y 4/4	Soi Mattling	Other (Structure, Stones, B Consistency, % Gra
00H 8 0"-24" 24"-32" 32"-48" 48"-72" 00H 9 0"- 8" 8"-26" 26"-110"	Fill A B C	Soil Texture (USDA) Sandy Loam Loamy Sand Loamy Sand Loamy Sand Sandy Loam Loamy Sand Silt Loam	Soil Color (Munsell) 10YR 3/2 10YR 5/6 10YR 5/6 10YR 3/2 10YR 5/6 2.5Y 4/4	Soi Mattling @ 48*	Coner (Structure, Stones, B Consistency, % Gra Medium sand
DOH 8 0"-24" 24"-32" 32"-48" 48"-72" DOH 9 0"- 8" 8"-26" 26"-110"	Fill A B C	Soil Texture (USDA) Sandy Loam Loamy Sand Loamy Sand Loamy Sand Sandy Loam Loamy Sand Silt Loam	Soil Color (Munsell) 10YR 3/2 10YR 5/6 10YR 5/6 10YR 3/2 10YR 5/6 2.5Y 4/4	Soi Mattling @ 48*	Other (Structure, Stones, B Consistency, % Gra
(Inches) DOH 8 0"-24" 24"-32" 32"-48" 48"-72" DOH 9 0"- 8" 8"-26" 26"-110"	Fill A B C	Soil Texture (USDA) Sandy Loam Loamy Sand Loamy Sand Sandy Loam Loamy Sand Silt Loam	Soil Color (Munsell) 10YR 3/2 10YR 5/6 10YR 5/6 10YR 3/2 10YR 5/6 2.5Y 4/4	Sof Mattling @ 48" OSAL AREA Depth to	Other (Structure, Stones, B Consistency, % Gra Medium sand

-G-RAHAM ASSOCIATES, INC.

JOB NAME: FEOFFEES OF THE GRAMMAR SCHOOL JOB NO: 97-00309

	FORM 11 - SOIL EVALUATOR FORM
	Page 7 of 7
	Location Address or Lot No. Little Neck, Inswich, MA
	Determination for Seasonal High Water Table
	Method Used:
	Depth observed standing in observation holes inches
	Depth weeping from side of observation holes inches
	X Depth to soil mottles inches
	Ground water adjustmentleet
	Adjustment factor Adjusted ground water level
	Depth of Naturally Occurring Pervious Material
	Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?
	If not, what is the depth of naturally occurring pervious material?
	Certification
	certify that on 10/23/98 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me
ě	consistent with the required training, expertise and experience described in 310 CMR 15.017.
	Signature Charle L. Daal Date May 21, 1999

FINISHED PROT PLOOP. FIR MYCRET FEAD #20 MILTON ROAD

FIGURE B-1: LOT 115 DEEP HOLE LOCATION MAP

LITTLE NECK PROJECT OVERVIEW REVISED NOVEMBER 4, 2004

Environmental Engineers/Consultants

Lot 115 Little Neck Deep Hole Tests (April 22, 2004)

	FORM IT - SOIL EVALUATOR FOR Page I of
No	Date: 23-Apr-04
*	
Witnessed By: Not Witnessed	
Cocation Address of Let F. Lot 115 14 & 16 Kings Way Ipswich, MA New Construction Repair	Owner's Name Address & Phone No Foeffees of the Grammar School clo Mr. Donald Wilson 2 Jeffrey's Neck Road Ipswich, MA 01938
Office Review	
Year Published Publication Sc Drainage Class Well Drained Soil Limita	tions Moderate
Geologic Material (Map Unit) Landform Flood Insurance Rate Map	
Above 500 year flood boundary No 📋 Yes 🧱	
Within 500 year flood boundary. No Yes	
Within 100 year flood boundary. No. 🔞 Yes 🗌	
Welland Area National Welland Inventory Map (map unit) Wellands Conservancy Program Map (map unit)	
Current Water Resource Conditions (USGS) Month	Mai-04
Range Above Normal 🖁 Normal 🗍 Below N	iomal []
Other References Reviewed	

Location Address or Lot No Lot 115 Little Neck leswich MA

Deep Hote Numb				ne <u>900</u>	AM Weather Sunny 50's
Location (identify Land Use Resid		Slope (%) 3-18	Surface Sto	nes Stone wall
Vegetation Law		Siope (70 10 10 10 10 10 10 10 10 10 10 10 10 10		***************************************
Landlonn Diu					
Position on lands		on the back)		,-	
Distances from	3.36 3 (t.a. 616.				
	ater Body	10()+ feel	Draina	ge way	50+ <u>ieet</u>
	Wel Area	100+ fee!	Proper	ty Line	NIA
Drinking	Water Well	NIA	Other		
			·		
	V.D	EP OBSE	RVATIO	DN-HOLE:	LOG - 201
					Cune:
Deptirition: Surface	į	Soil Texture	Soit Color	Reduximorphic	(Structure Stones Boulders, Consistency, %
Inches	Soil Horizon	(US[/A)	(Munseli)	Features	Graveli
0" - 6"	FILL	Sandy Loam			
20 20.	۸.	Lanani Caad	10 VE 2/2	NONE	Inaple
6" - 17"	Ab	Loamy Sand	10 17 313	70112	indo.c
17" - 21"	B	Sanay Loam	10 YR 5/4		fnable, so cobbles & graivel
17 - 21		January 200			
21" - 45"	C1	Sandy Loam	25 Y 5:4		so gravel
45" - 75"	C2d	Sandy Loam	2.5 Y 5/6		v firm so stones cobbles & gravel
1 43.73	020	00.7.0	2.0		
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1					
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	l	1			
					204/2004
	ed By Paul				Soil Evaluation Date 4/21/2004
	ed By Not V				rier Sedrock. N/A
Parsol Material (960					
Depth to Groundwat			None		Westing from Pd Finds 755
Estimated Seas	onal High Gr	ound Water	75" - Weer	oing	
Segue L'Artes	IV EN HERY			Taki dan Pelan	。在一个人的人们是一个人们的人们的人们是一个人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人

Location Address or Lot No

Lot 115 Little Neck Ipswich MA

Deep Hole Num				me 10 00	O AM Vvealher Sunny 50's
Lucation (identif					Circum
Land Use <u>Resid</u>		Slope ((%) 3.18	Surface Sto	ries Stone wall
Vegelation I HV					
	imlii:	b on the trade			
Position on land:	ясаре (якекс	n on the back)			
Distances from	ater Body	100+ fee!	Orama	ide way	Str feet
	e Wel Area	100+ fee!		Ty Line	NiA
	Water Well		Other		
Diriking	, rrater tren		• • • • • • • • • • • • • • • • • • • •		
	W.	EP OBS	RVATI	ON HOLE	LOG-202 (All parts of the state
					Otner
Decin Iron Surface	1	Scal Taxture	Scrii Colox	Reduximorrais	(Structure, Stones, Boulders, Consistence, %
Inches	Soil Housen	(USDA)	(Munsell:	Features	Gravet:
			40.45.00		tt-t-
0" - 10"	Аb	Sandy Loam	10 YR 3/3	ŀ	Inable
10" - 16"	В	Sandy Loam	10 TR 5/4	NONE	Inable so cobbles & gravel
10 - 10	L L	Sandy Loan	10 17 314	NONE	That is dobble it if give to
16" - 25"	C1	Sandy Loani	25 Y 514		so gravel
25" - 81"	C2d	Sandy Loam	2 5 Y 5/6		v firm so stones cobbles & gravel
		İ			
		ľ			
		ļ			
1]			
]			
Codem	ed By Fraul (Corou D E		1	Soil Evaluation Date: 4/21/2004
	ed By Pauli ed By Not Vi				Con Cyaraman Date, 312 ii 2003
Parent Moterial (geo:	•			ಧಿಕ್ಷವಾಗಿ	to Secreto. NIA
Depth to Groungwate	N. P		79"		Weeding from Pit Face 45
Estimated Seaso	onal High Gro	ound Water	48" - Wcon	unq	
villadit jarger	And the state of t	4. 10. W. Gray	Than Spirit in a second		

Location Address or Lot No Lot 115 Little Neck Ipswich MA

Deep Flole Num Location (identif				Trie: 170	0 PM Weather Sunny 50's
Land Use Hesic		Slope		Surface Sto	ones Stone wall
Vegetation Law			177		Cite () Can
	ımlır.				
Position on land	scape (sketc	h on the back)		-	
Distances from		,			
OpenW	ater Body	100+ feel	Draina	ig÷ way	50+ feet
Possible	e Wel Area	100+ Isel	Proper	ty Line	NA
Danking	Water Well	NIA	Olher		
na lighar sa shining Lighar sa shining	ום	EP OBS	RVATI	ONHOLE	LOGE208:
Ì	Ì	}	1	1	Olher
Depth from Surface	ĺ	Soil Terline	Snat Color	Reducinonyhir	(Structure Stones Boulders, Consistency %
Inches	Sof Hairos	(ACISUI)	(Munsell)	Features	(Gravel)
01. (01.	Ę",				
0" - 10"	FILL				
10" - 24"	ΑĿ	Loamy Sand	10 45 3/3	NONE	Inable
10 - 24	~	LOGIN'S SOM	10 11 313	NONE	In able
24" - 30"	B	Sandy Loam	10 YR 5/4		Inable so cobbles & gravel
2. 0.		Carrey Comm			3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
30" - 48"	G1	Sandy Loam	25 Y 5i4		so gravel
	į				
48" - 120"	C2d	Sandy Loam	25 Y 5/6		v firm so slones cobbles & gravel
!					
1					
ĺ					
į					
Podeme	ed By Paul (`arev DF			Soil Evaluation Date 4/21/2004
	ed By Not W				Son Evendential Date 472 172004
Forest Maleral (geol	•			Дерл і	to Bedroo. N/A
Depth to Groundwate	-		1151		Vvesping from Pit Face 7-7
Estimated Seaso	nal High Gro	und Water	74" - Weep	ing	
	Library Titles and Communication	Crist aleeds of E. S.	market Transit	ing intimo North Art	and the second of the second o

Location Address or Lot No

Lot 115 Little Neck Inswich MA

Deep Hole Num Location (identif				me <u>200</u>	OPM Weather Swiny 50's
Land Use Resid		Slope		Surface Sto	ones Stone wall
Vegelation Lui		- Sitops	1797 17-761	56.1200 510	Stone will
	ımlır:			·	
Position on land		n on the back)			
Distances from	soppe (swere	ir on the Bhan		· · · · · · · · · · · · · · · · · · ·	
	ater Body	100+ leel	Draina	ige way	50+ leet
•	e Wel Area	100+ 1001		Ty Line	NA
	Water Well	NiA	Other		
Dankari	, winter real	1171			
	, DI	EP OBSE	RVATIO	N'HOLE	LOG-204
	T				Otner
Docth from Surface	!	Soil Texture	Soil Colo	Redoximorphic	(Structure Stones, Boulders, Consistency, %
inches	Sof House	(USDA)	flaunseli;	Features	Graven
0" - 5"	FILL				
5" - 12"	Ab	Loamy Sand	10 YR 3/3	NONE	Inable
12" 16"	В	Sandy Loam	10 YR 5:4		Inable, so cobbles & gravel
1					
1€* - 32*	C1	Sandy Loam	25 Y 5i4		so gravel
		_			
32" - 103"	C2d	Sandy Loam	25 Y 5/6		v firm, so stones, cobbles & gravel
j i					
	-				
				·	
	ed By Paul (Soil Evaluation Date 4/21/2004
	ed By: Not W	itnessed			
Farent Material (040)	оріс: <u>Сотен</u>	ut bit			to Bedrocr N/A
Depth to Groundwate	Standing W.	ate: in the Figle	961		Vresping Irom Pil Fede 70"
Estimated Seaso	nal High Gro	und Water	70" - Weep	mg	

PRECOLA	ditte dia selectioni se	V.(1.0,4) D.O.(0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
LOCATION ADDRESS OR LOT NO	LOT 115 BAYCRE	STROAD IPSWIC	H MA
			L
COMMONWE	ALTH OF MASS	ACHUSEIIS	,
	PAUL CARFY P.E.		
WITNESSED BY	NOT WITNESSED		,
DATE	4/22/2004	TIME	10 00 AM
OBSERVATION HOLE ID	201	202	203
DEPTH OF TEST	25" + 18"	30" + 18"	52" + 18"
START PRE-SUAK	10 48 AM	12 27 PM	3 04 PM
END PRE-SOAK	11 03 AM	12 42 PM	3 19 PM
TIME AT 12-INCHES	11 03 AM	12 42 PM	3:19 PM
TIME AT 9-INCHES	11 33 AM	1 46 PM	4 20 PM
TIME AT 6-INCHES	12 53 PM	4 19 PM	@110°
ELAPSED TIME MIN (9"-6")	80	153	61
RATE, MIN /IN	27	51	31
SITE PASSED	YES	SITE FAILED	NO
COMMENTS	INSUFFICIENT TIN	IE TO COMPLETE	P-203

	HONNESH	September 1 (1)	Artelia del como esta de constante de la const
OCATION ADDRESS OR LOT NO	LOT 115 BAYCRE	ST ROAD, IPSWIC	7 MA
COMMONWE	ALTH OF MASS	ACHUSETTS	
	PAUL CAREY, P.E.		
WITNESSED BY	NOT WITNESSED		
DATE	4/22/2004	TIME	10 00 AM
OBSERVATION HOLE ID:	SSDI-1	SSDI-2	SSDI-3
DEPTH OF TEST	8"	8"	8*
START PRE-SOAK	11 18 AM	1 46 PM	2 34 PM
END PRE-SOAK	11 33 AM	2 01 PM	2 49 PM
TIME AT 6-INCHES	11 33 AM	2 01 PM	2 49 PM
TIME AT 5-INCHES	11 35 AM	2 10 PM	MISSED
TIME AT 4-INCHES		2 23 PM	2 53 PM
TIME AT 3 INCHES		2 30 PM	2 55 PM
ELAPSED TIME MIN (6"-3")	12	38	6
RATE, MIN/IN	4	13	3
SITE PASSED	YES	SITE FAILED	NO
COMMENTS		L	

Location Address or Ed No. Lot 115 Little Neck, loswich, MA.

Determination for Seasonal High Water Table

Melhod ():	<u> </u>					
	Depth observed st				inches	
	Depth weeping from	m side of obser	vaqtion	hole	48 inches	
	Depth to soil molling					
	Ground water adju	stment		feet		
Estima	ated Seasonal High Gr	roundwaler Varie	s by We	eping @ -	18" - 75" Below Grade	
	Number					
Adjustmer	nt factor	Adjusted gro	und wa	ler level		
Depth of N	Vaturally Occurring F	Pervious Materi	<u>al</u>			
Doe: obse	s at least four feet of cryed throughout the	finaturally occur area proposed	rring pe for the	rvious ma soil abso	aterial exist in all areas protion system? YES	
If no	t, what is the depth o	of naturally occ	nuing b	eryious m	naterial?	_
Certifica	<u>tion</u>					
by th was	tify that in <u>JULY 19</u> he Department of En performed by me co crience described in	ivironmetal Prol posistent with th	e nednis	and that ti		
	Signature:	Part Ou	4ê{	Date Ap	nii 23, 2004	

Lot 115 Little Neck Deep Hole Tests (May 27, 2004)

	Page 1 of 5
No	Date: <u>2 <i>6-</i>IMay-04</u>
	ociales Date: 27-May-04
Witnessed By. AOH Write, Massacriusetts i	JL.
Location Address or Location Address or 14 & 16 Kirigs Way Ipswich, IMA New Construction Repair	Owner's Name Address 8 Phone No. Footfoos of the Grammar School clo Mr. Donald Wilsom 2 Jeffrey's Neck Road Ipswich, MA 01938
Office Review	
	ale Sol Map Unit PbD bons Moderate es
National Welland Inventory Map (map unit) Wellands Conservancy Program Map (map unit) Current Water Resource Conditions (USGS) Month	Apr-Qtd
Range Above Normal Normal Below N	lomal []
Other References Reviewed	

Location Address or Lot No Lot 115, Little Neck, Ipswich, MA

Deep Hole Num Location (identify	ber <u>1P-30</u>	1 Date 52 See Site Plac	<i>7i2004</i> In	ne <u>10 30</u>	DAM Weather Sunny 70's
Land Use Resid		Slope !	%) 3-18	Surface Sto	nes Stone wall
Vegetation Law					
Landlorm Dru					
Position on lands		on the back)		-	
Distances from	acabe (anoto.	, 0., 5 Deres,			
	ater Body	100+ leel	Oraina	ge way	50+ lee!
	: Wei Area	100+ leat	Proper		NIA
	; Water Well	N/A	Other	, <u> </u>	······································
Dintang	, vvalor vvon				
	ÓΕ	EP OBS	FRVATIO	DNHOLE	E0G-20 (20)
August James Landers Control	Agreement of the Control of the Cont	A STATE OF THE PARTY OF THE PAR	March Add	, you we have a factor of the	Oine:
	İ			_	(Structure Stones Boulders, Consisting, %
Display from Sudace		Soil Taylore	Sor Color (Munseli)	Features Features	Graveli
inne:	Son horizon	(USEA)	(Munser)	remines	Glaveil
	cu:	C. safe Language			
0" - 10"	FILL	Sandy Loam			
601			40.000.000	NONE	Inable
10" - 29"	Αb	Loamy Sand	10 14 313	NONE	mable:
			וט אט בוא		linable, so cobbles & gravel
29" - 33"	₽	Sandy Loan:	10 17 5 5		mable, se cobles & graver
	C1	Sandy Loam	25 V 5/4		so gravei
33" - 44"	U.	Sandy Loan	2 0 1 314		SO Graver
44" - 108"	C2d	Sandy Loam	25 Y 5/6		v firm, so slones, coboles & gravel
		-	'		
j					
					1
					ļ
}					
			i i		
! [
	ຍປຣັy Paul(Soil Evaluation Date 5/27/2004
Witness	ed By Ron V	Vhile, Massad	nusetts DEF)	
ก็ชายทำMaterial (geo)	logici <u>Comus</u>	st till		Dedh.	le Sedroch MIA
Could be Groundwate	<u>sr</u> Standing W	ater in the Hole	None		Weeping from Pit Face 65."
Estimated Seaso	onal High Gro	und Water	60" - Weep	ing	
	eri Halistiyan			प्रमुख्याम् । स्टब्स्यान्यस्य	

Location Address or Lot No.

Lot 115 Little Neck Ipswich MA

Position on land Distances from OpenW. Possible	y on site plan dentral yn yn milin scape (sketc ater Body e Wet Area j Water Well	Slope (Slope (n on the back) 100+ teet 100+ teet N/A	Oraina Proper	Surface Sto	50+ ieol NIA
A CONTRACTOR OF THE CONTRACTOR	and the sales		TO A TO A SECTION	THE PARTY OF THE P	Qiner
Deplo Book Sudace, Inches	Soft Hexizon	Sed Tecture (AGRU)	Sov Calco (Munselli	Redriximonylus Features	(Structure Stones Boulders Considency % Gravel)
Q" - 11"	Ab	Sandy Loam	10 YR 3/3		Inable
111 - 241	C.1	Sandy Loam	2 5 Y 5/4		so giavel
24" · 67"	G2d	Sandy Loam	2.5 Y 5/6		v firm so stones, cobbles & gravel
	ed By Paul (ed By Ron V	Jarey, P.E. Vhite, Massach	iusetts DEP		Soil Evaluation Date 5/27/2004
Parent Material (goo)			 	Crepth	to Secretor NIA
<u>Creath is Geographic</u>	ii∟ Stanoing V/	ster in the Hote	W.3.		Assistand man Br. Effen (33).
Estimated Seaso	nal High Gro	und Water	33" - Ween	ino	

OCATION ADDRESS OR LOT NO	LOT HE BAYODE	STROAD IDSMIC	`H M6
OCATION ADDRESS OR LOT NO	(11 : 13) BATGAR	OF ROMP TEMPLE	
COMMONWE	ALTH OF MASS	ACHUSETTS	
DEDLOVED DV	PAUL CAREY P.E.		<u>L</u>
WITNESSED BY	RON WHITE, MASA	ACHUSETTS DEP	
DATE	5/27/2004	TIME	11 00 AM
OBSERVATION HOLE ID	301	302	
DEPTH OF TEST	54" + 18"	3" + 18"	
START PRE-SOAK	11 32 AM	12 13 PM	
END PRE-SOAK:	11 47 AM	12 28 PM	
TIME AT 12-INCHES		12 28 PM	
TIME AT 8-INCHES	Abandoned -	12 36 PM	
TIME AT 6-INCHES	dropped only 1/4"	12 45 PM	
ELAPSED TIME, MIN (9"-6")	- in 10 Min	9	l
RATE, MIN /IN .		5	
SITE PASSED	YES	SITE FAILED:	NO
COMMENTS	302 rate calculated o	over last 2 mins (é	a from (1" - 6")

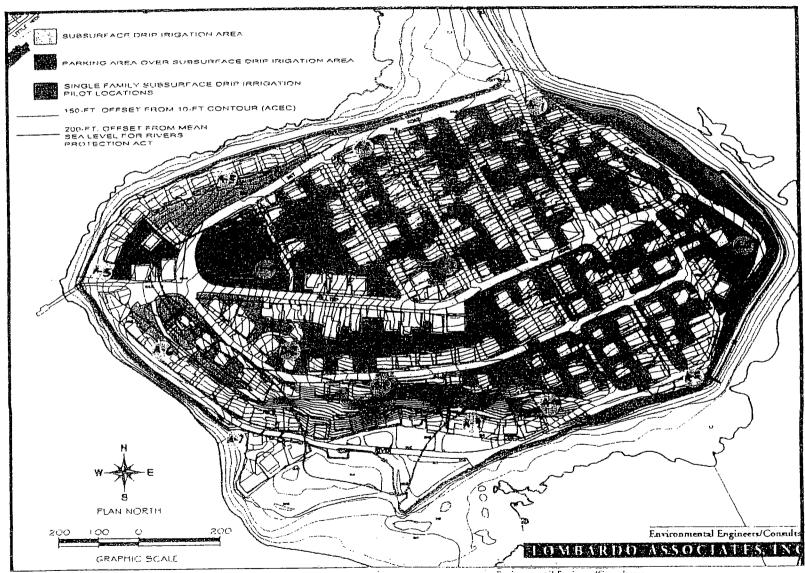
: ERECQEN	THONGRESIA	ATA LOG	
LOCATION ADDRESS OR LOT NO :	LOT 115 RAYORS	STROAD IPSWIC	H M4
COMMONWE	L ALTH OF MASS	ACHUSETTS	
PERFOMED BY:	PAUL GAREY, P.E.		
	PON WHITE, MAS.		
DATE:		JIME.	11 00 AM
OBSERVATION HOLE ID:	SSDI-301		
DEPTH OF TEST	grade + 9"		
START PRE-SOAK	11:11 AM		
END PRE-SOAK	11 26 AM		
TIME AT 6-INCHES	11 26 AM		
TIME AT 3-INCHES	11 30 AM		
TIME AT () INCHES	11 45 AM		
ELAPSED TIME MIN (3"-0")	15		
RATE MIN (IN	5		
SITE PASSED	YES	SITE FAILED	NO
COMMENTS			l

Location Address or Lot No. Lot 115 Little Neck, Ipswich, MA

Determination for Seasonal High Water Table

Melhod Us	ea			
П	Depth observed sta	anding in observ	ation hole	inches
H	Depth weeping from			33_ inches
n	Depth to soil mottle			· · · · ·
H	Ground water adjust			
المسا				: 33" - 65" Below Grade
Index Well	Number	_ Reading Date		Index well level
Adjustmen	t factor	Adjusted grou	nd water level	
Adjustinen	. 1800)	_ / (4)00.00 9		
Denth of N	aturally Occurring P	ervious <u>Material</u>		
<u> </u>				
	al least four feet of rved throughout the			naterial exist in all areas sorption system? <u>YES</u>
if net	, what is the depth o	of naturally occur	ring pervious	material?
Cenificat	10 <u>1</u>			
! cert	ity that in JULY 199	27 I passed the	soil evaluator	examination approved
				the above analysis
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	Signature:	Part Sura	⊱ Date N	May 28, 2004

FIGURE B-2: BORING LOGS (MAY 11, 2004)



LITTLE NECK PROJECT OVERVIEW REVISED NOVEMBER 4, 2004

Environmental Engineers/Consultants
LOMBARDO ASSOCIATES INC.

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