

#### SUMMARY OF FINDINGS

PROPOSED TOWNHOUSE DEVELOPMENT
COUNTRYSIDE EXECUTIVE GOLF COURSE
PINELLAS COUNTY, FLORIDA

Beazer Homes 2630 S. Faulkenburg Road Riverview, Florida 33569

September 16, 2004

Attention: Mr. Steve Gamm

RE: Summary of Findings & Preliminary Recommendations **Proposed Townhouse Development** Countryside Executive Golf Course Pinellas County, Florida Our File: DES 045290

Dear Mr. Gamm:

In accordance with your request and authorization DRIGGERS ENGINEERING SERVICES, INC. has performed a program of preliminary exploratory borings within the planned development areas. The following presents the results of our preliminary findings.

#### SCOPE OF SERVICES

SOIL BORINGS - To investigate generalized subsurface conditions throughout the planned development area, a series of fifteen (15) Standard Penetration Test (SPT) borings was conducted. The borings were typically terminated at a depth of 30 feet with a few borings extended deeper due to soft conditions identified near the termination depth.

Seven (7) classification borings were also conducted within potential pond areas to complement the program of SPT borings. The shallow classification borings were advanced to a nominal depth of 8 feet below present grade.

#### GENERALIZED SUBSURFACE CONDITIONS

**SOIL CONDITIONS** - It appears from the soil borings conducted that the course has generally received about 3 to 4 feet of fill to create the current course grades. Several of the borings have identified shallow highly organic zones below the apparent fill materials which may represent the original ground surface prior to site filling. Laboratory testing and visual examination suggests organic contents ranging from about 2% which is considered minimal to greater than 10%, which is considered excessive.

Our exploratory borings, have also revealed the presence of buried debris to depths of up to 15 feet below present grade at the northern end of the subject site. Based on the small diameter boreholes, it appears that the debris consists of wood and vegetative material. Beneath the debris, where encountered, the borings identified sands with variable silt and clay fines content the surface of the limestone formation at 18 feet to greater than 30 feet below present grade. The borings which did not penetrate the debris, also revealed sands with variable silt and clay fines content to the surface of the limestone formation, where encountered.

It must be recognized, however, that the actual depth of the debris is often times difficult to assess utilizing the Standard Penetration Test (SPT) method of sampling due to the small diameter of the sampler. Furthermore, checking the general makeup and size of the debris constituents cannot be thoroughly assessed with this methodology. Accordingly, we recommend performing a series of test pits to allow a broader view of subsurface conditions. Test pits consist of excavating narrow trenches utilizing backhoe equipment.

GROUNDWATER CONDITIONS - Groundwater was encountered during the course of our investigation at depths ranging from 3.2 to 7.6 feet below present. We would expect that the primary differences in the depth to groundwater can be attributed to the variability of the surface topography. It is important to recognize that the current investigation took place during a period of increased rainfall. Thus, we would anticipate that the groundwater levels recorded would closely represent the expected normal seasonal high groundwater levels. However, refinement of these anticipated high groundwater levels could be achieved with more detailed topographic information coupled with specific elevations at the actual boring locations.

Notwithstanding the above, you will note that the majority of the proposed pond areas are adjacent to current wetland features. It is our understanding that seasonal high water tables have already been established within these wetlands. Accordingly, it would be prudent at this time to utilize those water levels for pond design purposes.

#### PRELIMINARY EVALUATION

It is our understanding that the planned development will include two to three-story residential structures. Although structural details and loading conditions have yet to be developed, we would anticipate the structures will be supported primarily by load bearing walls with the potential for some isolated columns.

AERIAL PHOTOGRAPHY REVIEW - Our review of historical aerial photography did not reveal excavation or dumping activities on the subject site. However, it should be noted that the available aerial photographs are typically spaced several years apart. Therefore, various activities that may have occurred on site may not have been detected by aerial photography.

Also, our review of historical aerials did not reveal the presence of any low-lying or wetland areas that do not currently exist. However, due to the poor quality of some of the older aerial photographs, it cannot visually be reliably verified whether or not the wetland or low-lying areas may have been modified historically.

FOUNDATION CONDITIONS - As mentioned previously, several of the borings have noted buried debris and/or shallow highly organic soils. Utilization of conventional footing and slab-on-grade construction would likely result in unacceptable total and differential settlements over the life of the structure, where the debris is present. Accordingly, supporting structures in those areas will necessitate either over-excavation and replacement of the debris, where present, or the use of a pile foundation system. Also, several of the borings have encountered shallow, variably organic soils, that could produce significant immediate and long-term settlement. The settlements associated with some of the shallower organic soils will be dependent on the organic content and thickness of the zone. Areas where a significant thickness of highly organic soils are present would also likely warrant an over-excavation and replacement alternative or pile foundations

OVER-EXCAVATION - Where debris is present, support of the structures on conventional shallow foundations would necessitate the removal of the rubble and debris followed by replacement with suitable structural fill compacted in lifts from the bottom of the excavation to the proposed grade. Of importance, however, is the fact that the over-excavation process will extend well below the current groundwater surface necessitating the use of dewatering equipment to maintain the excavation in a drained condition to facilitate backfilling and compaction. Another item to consider is the fact that the removed rubble and debris will require disposal. Your environmental consultant will be instrumental in determining whether the materials to be excavated has any environmental impacts. In this regard, we suggest you have your environmental consultant available when the supplemental test pit excavations are performed.

Shallow organic deposits may also require removal depending on the organic content and thickness of the zone. Given the relatively shallow depth to the organics, over-excavation and replacement, where necessary, would likely represent the most positive and economical alternative as compared to pile foundations.

<u>DEEP FOUNDATIONS</u> - Support of the structures (foundations and structural floor slab) can also be accomplished utilizing pile foundations. The most efficient pile type will depend on structural loading conditions. However, we would anticipate that treated timber piles with a nominal 8-inch diameter tip and 10-inch diameter butt should be capable of developing a 15 ton compression capacity when driven to an average depth of 25 feet below present grade. Also, 10-inch and 12-inch, square prestressed concrete piles should be capable of developing compression capacities of greater than 30 to 40 tons, respectively. Should the decision be made to utilize a pile foundation system, deeper test borings will be warranted during the design stage to evaluate deeper subsurface conditions in order to provide the most cost effective alternatives.

Your attention is directed to the fact that depending on the make-up of the debris, damage to the piles could occur while attempting to drive through the debris zone. Therefore, pending the results of the supplemental studies, it may be necessary for the contractor to plan for the potential need for excavation equipment such as a track-hoe to remove large debris where present or attempt pre-punching to bypass obstructions.

Augered cast-in-place (ACIP) piling was also considered. However, this foundation alternative would incur increased difficulty in the penetration of the auger through large buried debris and would probably result in significant grout overruns within nested debris, if present.

<u>PAVEMENTS</u> - Based on the limited number of soil borings conducted throughout the site, some of the areas planned for pavements are probably also underlain by debris. Accordingly, it would be expected that the pavements may also undergo long-term settlements in these areas where significant debris is encountered. Generally, it is not economically feasible to remove and replace extensive debris zones for pavement construction. Considering the anticipated traffic, installation of an appropriate geogrid reinforcement should be considered to minimize potholes and sharp discontinuities in pavement grades. It is generally advisable to remove debris from below utilities.

NEED FOR FURTHER INVESTIGATION - As previously mentioned, the northern portion of the site is underlain by apparent debris. Also, several of the borings have revealed variably organic soils within the upper 6 feet throughout the balance of the site. Therefore, at this time, we recommend performing a series of backhoe test pits throughout the site. Test pits involve excavation of a narrow trench in order to view, on a broader scale, the nature and limits of the debris and variably organic soils identified in several of the soil borings. The small diameter boreholes conducted to-date do not lend themselves to this qualitative assessment.

It should also be recognized that additional SPT borings will certainly be warranted within the structure areas to provide final foundation recommendations.

**DRIGGERS ENGINEERING SERVICES, INC.**, appreciates this opportunity to be of service to you on this project and we look forward to working with you in the future should you decide to further pursue this site.

Respectfully submitted,

DRIGGERS ENGINEERING SERVICES, INC.

Wayne S. Driggers, P.E.

Project Engineer

FL Registration No. 58013

F. Jaime Driggers, P.E.

President

Registration No. 16989

WSD:wsd

WSD-REP\045290

Copies submitted: (4)

#### <u>APPENDIX</u>

PLATE I - BORING LOCATION PLAN

STANDARD PENETRATION TEST BORING LOGS

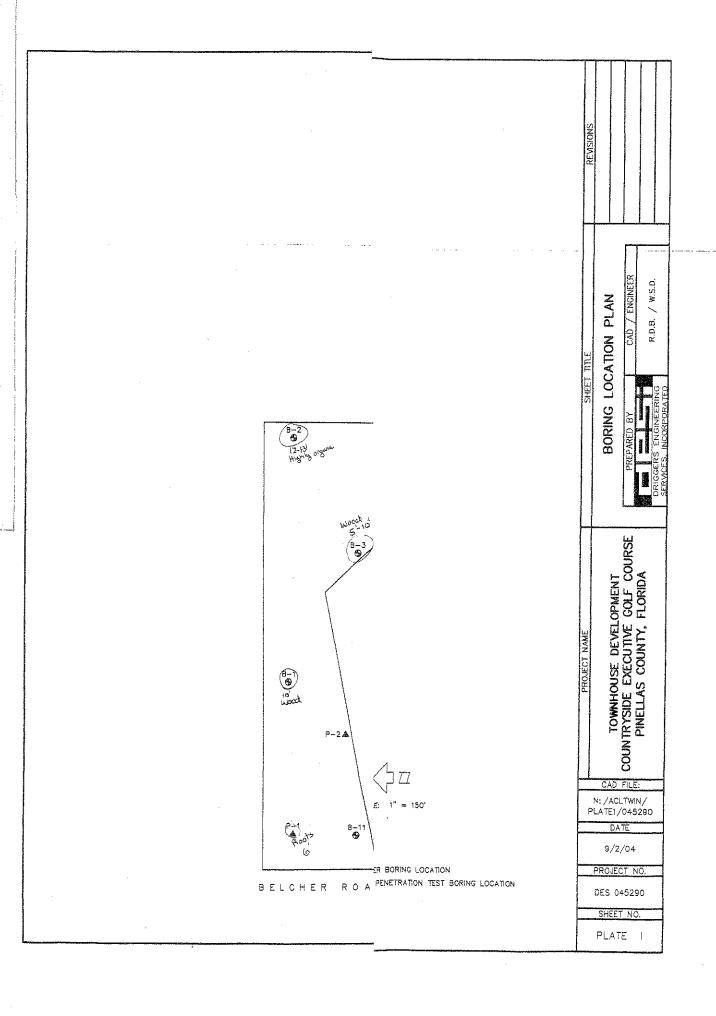
**CLASSIFICATION BORINGS** 

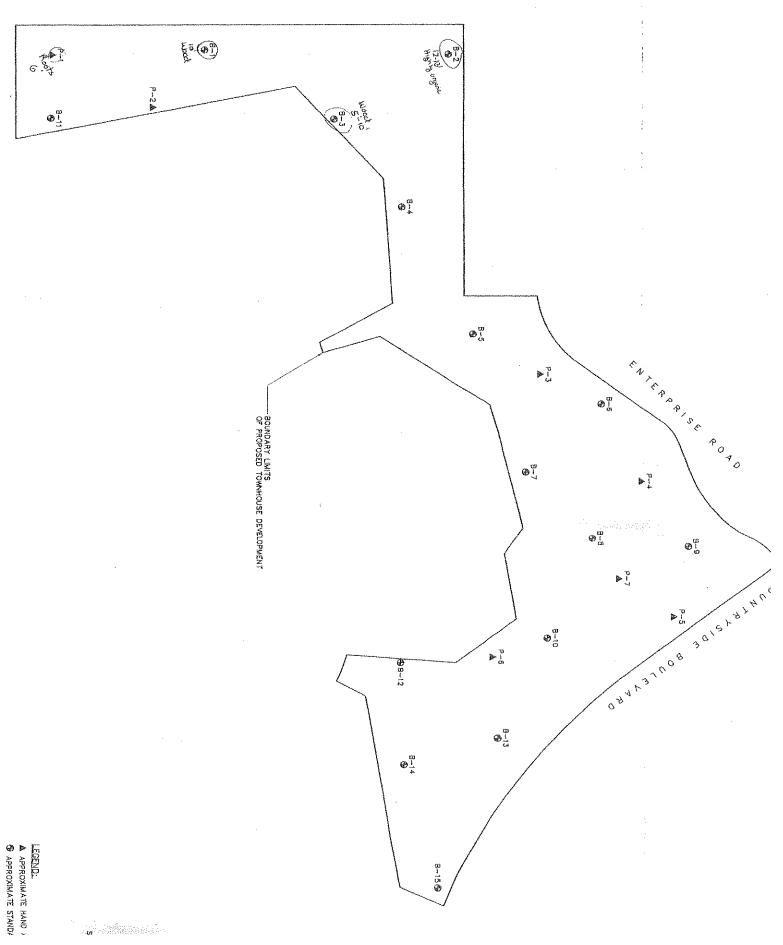
SUMMARY OF LABORATORY TEST RESULTS

**GRAINSIZE ANALYSES** 

METHOD OF TESTING

PLATE - I BORING LOCATION PLAN





STANDARD PENETRATION TEST BORING LOGS

			DES 045290 BORING NO. B-1				
Locat	ion (	See	house Development, Countryside Exec. Golf Course, le Plate I	Pinellas Cty., FL <b>Foreman</b>		A	
Comp	oletio	1	Depth To				
De	pth _	, <u> </u>	31.5' Date <u>8/24/04</u> Water <u>4.0'</u>	Time	Date	8/24/0	04
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDA PENETRATIO BLOWS/FT. O SAMPLER-1 HAMMER, 30	ON TES N 2" O. I 40 LB. O" DROI	D. P
0	7 <del>(                                   </del>		Dark grayish-brown Fine SAND with roots (SP)		10 20	40 (	60 80 
			Brown Fine SAND (SP)				+
			Dork heavenigh area Fine CAND (CD)				
			Dark brownish-gray Fine SAND (SP)				
- 5 -			Dark brown Fine SAND (SP)				
	A.		Loose dark brown Fine SAND with trace				
	, p=		of finely divided organic material (SP)	4/6/4	*		++++
	<b>T</b>		Wood		/		+ + +
4.0	and the			4/3/5			
- 10 -		7		5/3/3			
				0,0,0			
			•	3/3/5			
	- 180		Medium dense to loose dark gray Fine SAND (SP)				
- 15 -			Medidin dense to loose dark gray Fine SAND (SP)				
				6/8/10			
		1					
- 20 -							
				3/4/4			
	/ (11 / 1   (2 / 11 / 11   (4 / 11 / 11 / 11	-	Medium dense grayish-brown slightly silty	_			
	४ १७ सन्। १ ६२ मन्।		Fine SAND (SP-SM)				$\ \cdot\ _{1}$
25	1.66611 1.66611			8/12/15			
	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4		0/12/10			
			Medium dense dark green silty Fine SAND (SM)				
- 30 -							
		_		2/5/6	<u> </u>		
				The state of the s			
Ren	narks			Casing	Length		

			BORING NO. B-2				*****************	***************************************	***************************************	Matterson	and selection of the se
Loca	tion S	See	house Development, Countryside Exec. Golf Course, P	inellas Cty., <b>Forem</b>			N.W	A			
Com	pletio	n	Depth To		aii		VV.1\	/1.			·
De	pth _		30.2' Date <u>8/24/04</u> Water 4.0'	Γime	·	Dat	te	8/	/24/	04	
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	B	PENETR LOWS/F SAMPL IAMMER	T. O ER- R, 30	ON 7 N 2' 140 0" D	TES " O LB. RO	.D. )P	00
0	7	ſ	Dark grayish-brown Fine SAND with trace of roots		<b>———</b>	10 .	20	-44	Ĭ	60	<u>80</u>
			(SP)					+	H		+
			Gray Fine SAND (SP)				<del> </del>			$\forall$	+
							İ			11	$\dagger \dagger$
- 5				_							$\top$
			Medium dense to loose dark grayish-brown Fine SAND (SP)								
		7	THE SAND (SF)	5/7/8		<u></u>					
			- trace of brown clayey Fine SAND at depth 8.0'			1/					
			trace of brown dayey? The OMND at depth 6.0	3/5/4		<b>S</b>	ļ		_		
10			Loose dark gray Fine SAND with finely divided		<u> </u>		ļ	-		$\bot\!\!\!\!\bot$	
			organic material and trace of roots (SP)	2/2/3		1			_	$\perp \downarrow$	-
			Loose dark brown highly organic,				-	-		$\dashv \downarrow$	$\bot$
	· .		silty Fine SAND with roots (Pt)	6/3/4	8	<del> </del>	-	$\ \cdot\ $	-	$+\!\!\!+$	+
		-	Loose to dense light brown to brown Fine SAND					$\ \cdot\ $		+	+
15			(SP)	0/0/4				$\vdash$	+	$+\!\!+$	+
***************************************				2/3/4	-		ļ	$\vdash$	+	++	+
		nesososeano							+	+	
					<b></b>			$\vdash$	+	+	+H
00								$\vdash$	_	++	++
- 20 -		7		13/17/21					+	++	Ħ
		$\mathbb{H}$		10/11/21					$\top$	11	
*									1	1.	
			Grayish-brown LIMESTONE				/		T	$\prod$	Ш
- 25 -											PAGE 250
				7/10/12							
											Tariff Pullbridge
		document		:					1	$\coprod$	Ш
										¥	
- 30 -		4		50*	* 0.2' F	l Penetrati	วก		4	1	N
		Section 2		00					$\bot$	$\vdash$	CO
								_	+	oxdapprox	Н
		***************************************							+	$\vdash$	$\mathbb{H}$
D	00-1	<u>_</u>	zahala Casatad						<u></u>	$\perp$	Щ
Ken	narks	<u>ರ</u> ಂ	rehole Grouted	~	ina ! -						
	***************************************			cas	ing Ler	ıgın	Participant Statement				

			BORING NO. B-3		The state of the s	the misses and the same
Proje	ect <u>lo</u>	Wr.	house Development, Countryside Exec. Golf Course, F			
	pletion	3		Forema	an <u>W.M.</u>	
De	pth _	1	Depth To 31.5' Date 8/24/04 Water 3.4'	Time	Date8/24/0	4
рертн, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.E SAMPLER-140 LB. HAMMER, 30" DROP	D. •
0			Dark brown Fine SAND with roots (SP)			
5	J. Marie Constitution of the Constitution of t		Brown Fine SAND (SP)  Dark brown slightly organic Fine SAND with large roots and wood (SP/Pt)  Wood or Large Roots			
			Wood of Earge Roots	4/2/3		$\perp \downarrow \downarrow \downarrow$
10	A BO		Dense grayish-brown slightly silty Fine SAND	4/7/6		
	- 1.01101. (4.131.4)	7	(SP-SM)	12/15/17		
			Very dense to dense grayish-brown to dark grayish-brown Fine SAND (SP)	21/23/33		
15				20/50*	* 0.4' Penetration	
- 20 -				16/24/20		
25			Medium dense dark grayish-green slightly silty Fine SAND (SP-SM)	11/8/6		
- 30 -	7// 7//		Medium dense greenish-brown dolomitic, clayey Fine SAND with trace of shell fragments (SC)	2/3/24		
Ren	narks	The state of the s		Casir	ng Length	
				VaSii	119 FELIAII	

			DES 045290 BORING NO. B-4		The second secon									
Proje	Project Townhouse Development, Countryside Exec. Golf Course, Pinellas Cty., FL  Location See Plate   Foreman W.M.  Completion Depth To  Depth 31.5' Date 8/24/04 Water 3.9' Time Date 8/24/04													
Comp	oletio	7	Depth To		VV,IVI.									
De	pth _	· · · · · · · · · · · · · · · · · · ·	31.5' Date 8/24/04 Water 3.9'	Time	Date 8/24/04									
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP									
0		ĺ	Dark grayish-brown Fine SAND (SP)		10 20 40 60 80									
			Dark brown highly organic Fine SAND (Pt)  Brown Fine SAND (SP)											
- 5 -														
			Medium dense light brown to light grayish-brown Fine SAND (SP)	2/4/8										
- 10 -	r ())(() (())(()) (())(())(() (())(())(()		Dense to very dense light grayish-brown to light brownish-gray slightly silty Fine SAND (SP-SM)	3/15/17										
	666446 864466 144466 864466		(OI - SIW)	15/28/29										
	makkasi Paranasi Paranasi Paranasi			25/50*	* 0.5' Penetration									
- 15 -			Very dense dark grayish-brown Fine SAND (SP)	24/43/31	36									
- 20 -			Loose dark gray and brown silty Fine SAND (SM)  Grayish-brown LIMESTONE	6/3/6										
- 25 -				9/17/15										
- 30 -	<b>7</b> // <b>7</b> // <b>7</b> // <b>7</b> ///  <b>7</b> //// <b>7</b> ///// <b>7</b> ////////		Loose greenish-brown dolomitic, clayey Fine SAND with trace of shell fragments (SC)	3/4/5	8									
		TOTAL DESIGNATION OF THE PERSONS ASSESSED.												
Ren	narks	<u>B</u>	prehole Grouted	Casí	ng Length									

			DES 045290 BORING NO. B-5	5							
Loca	tion	See	house Development, Countryside Exec. Golf Course, Plate I	, Pinellas Cty., Forema		W.N	A				-
Com	oletio pth	n	Depth To								•
	hm _	<u> </u>	30.8' Date 8/24/04 Water 3.6'	Time		ate _	8/	24/	04		
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENET BLOWS SAMI HAMM	/FT. O PLER- ER, 30	ON T N 2' 140   O" D	TES " O LB RO	.D. )P		
0	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Dark grayish-brown Fine SAND with roots (SP)		10	20_	4	0_	<u>60</u>	80	_
								$\vdash$	+	+	L
			Brown Fine SAND (SP)						+	+H	-
									+		-
- 5 -									1		_
	+ 13 200		Madi and a second secon						$oxed{oxed}$		
	UKISH UKISA ACMAN	/	Medium dense grayish-brown slightly silty Fine SAND (SP-SM)	6/10/11				_	_		
	3 7 1		Very dense to dense grayish-brown Fine SAND					$\downarrow$	$\bot$	Ш	_
			(SP)	14/31/37			+	_	1		4
10 -			- brown at depth 10.0'	24/46/22			$\vdash$	-	+	$\mathbb{H}$	-
				24/46/32					+		-
				38/50*	* 0.5' Penetr	ation		$\top$	+		
								$\top$		1	WOMEN CO.
- 15 -									1		-
		7	·	19/18/21				4			PROPERTY
							$\mathbb{A}$	_	$\perp \mid$	$\perp \downarrow$	and a sure
		-	Grayish-brown LIMESTONE			+		_	44	- -	STREET
			•	11700		$-\!$		+	+	+	
- 20 -		7		6/5/11		/	$\vdash$	+	+	+	1
				0,0,7,				$\top$	$\Box$	$\dagger$	
									Ŀ		CONTRACTOR SAN
						<u> </u>			Ш		The state of the s
- 25 -		<b>5</b>		Table to the second sec		1		_	$\bot\!$		ACTION AND ADDRESS OF
				18/12/10		•	+	+	$\dashv$	+	No. of Concession, Name of Street, or other Persons, or other Pers
							$\forall$	+	╫	-	toto Garage of Page
	4	-	Very dense greenish-brown dolomitic,	<b> </b>			$\neg$	$\checkmark$	$\prod$	+	DOWNERS OF THE PERSON
30 -	Þ	Notice of the last	silty Fine SAND with trace of shell fragments (SM)					+	14	$\downarrow \downarrow$	distributions and a
	₹	7	(314)	28/50*	* 0.3' Penetra	ation		$\dagger$	$\prod$	TY	
		COMPANSATION OF THE PERSONS ASSESSMENT							П		-
								_	$\prod$	$\prod$	
									Ц	Ш	
Ren	narks	Bo	rehole Grouted		· · · · · · · · · · · · · · · · · · ·					_	
				Casi	ing Length						İ

			ES 045290 BORING NO. B-6					******	***************************************	and a
Proje	ct To	Wn See	nouse Development, Countryside Exec. Golf Course, F Plate I	Pinellas Cty., FL <b>Foreman</b>		W.M				-
Comp	_	۰ ۱	Depth To	roreman		VV.IVI				-
De	pth _			Time		Date	8/2	4/04	ŀ	_
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENE BLOW SAN	STANDA TRATIC S/FT. OI IPLER-1 MER, 30	N TE N 2" (   40 LI	O.D. 3. OP		
0	21212		Dark brown Fine SAND (SP)				T 1	100	TOU	ľ
			Dark brownish-gray Fine SAND (SP)					+	++-	1
		Ť	Dark brown Fine SAND (SP)	_   -				+	+	-
			Brown Fine SAND (SP)					+	+	l
								+	+	ŀ
- 5 -	10 (10 (10 ) 10 (10 (10 ) 14 (10 )	X	Grayish-brown slightly silty Fine SAND (SP-SM)					+	+++	H
	6 (33)30 1.03333 (433)34		Loose dark brown slightly silty Fine SAND (SP-SM)	2/4/4						
		7	Medium dense to dense dark brown	-		<del>\</del>		+	++-	-
			to reddish-brown Fine SAND (SP)	8/10/12		<del>-                                     </del>		+	+H	ŀ
- 10 -					1		$\vdash$	╁┼	+++	F
				7/10/10		*	-	+	+	-
				_				$\vdash$	+++	_
				8/10/14		*		+	+ + +	
						-+	$\vdash$	-	++	
- 15 -							<del>                                     </del>	$\vdash$	$\square$	_
			•	12/19/22			-	$\vdash$	H	_
· · · · · · · · · · · · · · · · · ·							<del>                                     </del>	-	+	
				-				$\vdash$	$\square$	
,,							$\vdash \vdash$	$\vdash$	$\square$	
- 20 -									$\coprod$	-
		7		7/14/18		·	99	-	$+\!\!+\!\!\!+\!\!\!\!+$	_
									$\coprod$	_
		-	Grayish-green to green dolomitic LIMESTONE	-  -		4-	<del>                                      </del>	<del>                                     </del>	1	
		THEORETES	Grayist-green to green dolonitic LIMESTONE		/				$\square$	,
- 25 -				_	_/_				#	7
			•	5/2/2					$\coprod$	
							<u> </u>		Ш	-
·····									Ш	-
					\				Ш	
- 30 -									Ш	-
		7		3/7/8		<b>3</b>				_
		$\vdash$	A	1				Ш	Ш	_
										-
									Ш	-
Rer	narks	Bo	rehole Grouted							-
				Casin	g Length					The second
ilooning and a second		Market Market			The state of the s	Account to the latest and the latest				4

			ES 04					BOF	RING	VO.	B-7			***************************************				POWER PROPERTY.	-		entarc:
Proje	ct <u>lo</u>	Wn See	house Plate	<u>Deve</u> ı	lopme	nt, Co	untrys	side E	ixec. Go	olf Cou	irse, P	inellas Ct						·····			
Comp	oletion	1		***************************************	·····		<del></del>	Dep	ith To			Fore	mar	٦			V.M.				
De	pth _		31.5'	_ Da	te	8/24	/04	<u>'</u>	Vater _	3.6	<u>'</u> 7	Γime				Date		8/2	4/0	4	
DEPTH, FT	SYMBOL	SAMPLES	SURF	EL:	SC	) L D	ESCI	RIPT	ΠΟΝ			BLOWS ON SAMPLER PER 6" OP PEN STP	G (11) E19. G118.	BI I-	PENE LOW SAN IAMN	STAN STRA S/FT S/FT IPLE VER,	TION . ON R-14 30"	2" ( 20 LI DR	0.E 3. OP	).	
0		ĺ	Dark b	orown	Fine :	SAND	(SP)		<del></del>					erenomina, na	10	<u> 20</u>	1	40	9	8 0	Ŭ
- 5 -	<b>101</b>		Dark of Fine S Brown Gray F Brown	gray s SAND Fine Fine S	lightly (SP-SANE SAND tly silty	organ SM) (SP) (SP) / Fine	ic, slig	htly s													
		7	Mediu	m der	nse lig	ht brov	wn to	brown	n Fine S	SAND		5/5/7									
·			(SP)		*								-						$\coprod$		
												5/6/7	-		<b>*</b>	-		_	-		$\vdash$
10 -			- loose	e sear	m at de	epth 10	0.0'					3/4/6	-					+			
												4/6/7									_
15 -												5/8/9				•					
20 -	700000000000000000000000000000000000000		- grayi						ghtly silt			6/5/9									
25			Fine S	AND	(SP-S	SM)	, 510	vii Gii	gridy One	. y	т фесур үч саласында файдагаласында арады дара	3/2/2									
30 -	T T		Loose with tra						ty Fine	SAND		3/3/5									
		<u></u>		••••••••••											<u> </u>						
Kem	arks					····									×						POSTOR PROPERTY.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					**************************************		~~~~					C	asın	g Ler	ngth	**************					

			DES 045290 BORING NO. B-8						more and a
Loca	ct ic	See	house Development, Countryside Exec. Golf Course,	Pinellas Cty., FL Foreman		W.M.			
Com	oletio	n	Depth To			<u> </u>			
De	pth _		31.5' Date 8/23/04 Water 5.4'	Time	Date	38	/23/	04	
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENETRA BLOWS/FT SAMPLE HAMMER	T. ON 2 ER-140 I, 30" D	TES " O. LB. RO	D. P	
0			Dark gray Fine SAND with roots (SP)		10 2	0 4	0	<u>60</u>	80
			· '					+	+
			Dark brown Fine SAND (SP)				$\vdash$	+	+
	300		- wood below depth 3.0'					$\dashv$	+
5			Brown Fine SAND (SP)					$\dagger \dagger$	+
			Light brownish-gray silty Fine SAND (SM) Light brown silty Fine SAND (SM)				H	$\dagger \dagger$	#
		7	Dense to medium dense brown Fine SAND (SP)	8/14/32			<b>B</b>	$\prod$	$\parallel$
			,					$\prod$	
		7		14/14/16					
10 -									
		7		6/6/6					
		1		6/6/8				Ш	Ш
								$\coprod$	
15 -			<u> </u>			$\rightarrow$	$\downarrow$	$\coprod$	Ш
			Very dense to loose brown to dark gray	14/27/28			<u></u>	4	
			slightly silty Fine SAND (SP-SM)	ļ		-4	4	$\coprod$	$\bot \bot$
	1° ( ) 11.91.					$\mathcal{A}$		┼┼-	44
	(didi Faidi	- Address of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the S			- $+$ $ 4$			$\dashv \vdash$	$+\!\!+\!\!\!+\!\!\!\!+$
- 20 -	(11)1111 (11)1111			1			-	$\dashv$	++4
				11/5/3				H	+
	V C 1 3 12		•		<del></del>		-	+	++
			Cream colored LIMESTONE				$\dashv$	$\vdash$	H
- 25 -		- Carlo March					+	++	$\forall \mathbf{H}$
23				4/5/15			$\top$	H	$\prod$
		4		1 7/5/15			$\top$	什	H
							$\top$	$\parallel$	Ш
	₹.	//Lindowski	Medium dense brownish-green dolomitic,						П
- 30	⊽		silty Fine SAND with trace of shell fragments (SM)						Ш
	Ψ.	7	()	4/3/8					
	12121212121	1		<u> </u>				Ц	Ш
	***************************************								
		_							Ш
Ren	narks	Bo	rehole Grouted						
	-			Casing	Length				

			ES 045290		BORING N			-trinakudik amuunnya purus sa racuk	CONTRACTOR OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE		оварите зацья <b>2</b> (ж)	POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULATION AND ADDRESS OF THE POPULA	<del>D-A-T</del>
Proje Locat	ct lo	<u>wn</u> See	nouse Develo Plate I	pment, Country:	side Exec. Gol	t Course, F	inellas Cty., f' Forema		W.				
Comp	letio	1			Depth To	······································	r Grenia	191	٧٧.	VI.			
De	pth _		31.5' Date	8/23/04	Water	5.2'	Time		_ Date _	3	3/23/	04	
DEPTH, FT	SYMBOL	SAMPLES	SURF. EL:	SOIL DESC	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLC S.	STAND NETRATI DWS/FT. ( AMPLER MMER, 3	ON ON 2 ·140 :0" [	TES ?" O LB	.D. P	80
0	46 G			ine SAND with i	roots (SP)					- T	Ĭ		Ĭ
- 5 -	7: X		Brown Fine S	AND (SP)  hly organic, silty  AND with trace  ine SAND with I	of roots (SP)								
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			se light brown to ine SAND (SP-			3/3/5						
	i minitu Filipaan						10/14/29			+	0		+
10 -			Very dense to Fine SAND(	o dense brown to SP)	o light brown		26/50*	* 0.5' Pe	netration				
	र के अंको किया						14/16/18						
15	1.633.616 1.633.616 1.633.616 1.633.616 1.633.616 2.633.616		Medium dens Fine SAND(	e dark grayish-t SP-SM)	prown slightly s	silty	10/12/13			1			
- 20 -			Loose dark gi Gray LIMEST	rayish-green silt ONE	y Fine SAND	(SM)	3/4/12						
- 25 -							40/25/20				•		
30 -				- II		***************************************	15/17/21						
Ren	narks	Bo	rehole Groute	ed			Casi	ing Leng	th				

			DES 045290 BORING NO. B-10		
Proje	ect <u>ic</u> tion (	wn See	house Development, Countryside Exec. Golf Course, P	inellas Cty., Fl Foremar	
Com	pletio	า	Depth To	Foreinai	1 VV,IVI.
De	pth _	· · · · · · ·	31.5' Date <u>8/23/04</u> Water <u>3.7'</u>	Гіте	Date 8/23/04
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP
0			Dark grayish-brown Fine SAND (SP)		
- 5			Brown Fine SAND (SP)		
			Loose to dense light brown to brown Fine SAND (SP)	2/3/3	•
		7		6/9/10	
- 10				7/11/10	
		Н		//1//10  -	
			•	10/16/31	•
- 15	/ 2000 (0 / 2000 (0 / 2000 (0 / 2000 (0 / 2000 (0 / 2000 (0 / 2000 (0		Medium dense light brown to brown slightly silty Fine SAND (SP-SM)	13/9/7	***************************************
- 20	AINTEONEACH HAPEGUNEACH CHIPEGUNEACH		Loose dark brown slightly organic, slightly silty Fine SAND (SP-SM)	2/3/3	
- 25 -			Medium dense dark greenish-brown slightly silty Fine SAND (SP-SM)	7/12/8	
- 30 -			Loose light green dolomitic, clayey Fine SAND with trace of shell fragments (SC)	4/3/7	
				<b></b>	
Ren	l <u>l</u> narks				
- gazztonius produktor zami ramaz	Wannier and State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State			Casin	g Length

			DES 045290 BORING NO. B-1						
Proje	ct To	NVN See	house Development, Countryside Exec. Golf Course, Plate I			14/9			
Comp			Depth To	Forema	ın	W.N	1		
	pth _		35.5' Date <u>8/24/04</u> Water <u>5.9'</u>	Time		Date _	8/2	4/04	1
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PEN BLOV SAI	STANDA ETRATIO VS/FT. O MPLER-1 IMER, 30	N TE N 2"  40 L )" DR	O.D B. OP	
0			Dark grayish-brown Fine SAND (SP)		10	20	40	TI	08 (
- 5	1		Brown slightly silty Fine SAND (SP-SM)  Gray and brown Fine SAND (SP)  Dark brownish-gray Fine SAND (SP)						
	7		Gray Fine SAND with trace of roots (SP)						
			Medium dense to very dense brown to dark brown Fine SAND (SP)	5/7/12					
- 10 -				6/9/8				++	
10			- loose seam at depth 10.0'	3/4/4				$\prod$	
	) ear		- trace of finely divided organic material below depth 12.0'	4/6/10					
15 -	, and			19/34/48					
- 20 -	(ma) (ma) (ma)			31/40/50*	* 0.4' Pene	etration_			
25 -	albakoabarah albakoabarah enropabarah		Dense dark brown slightly silty Fine SAND with finely divided organic material (SP-SM)	15/26/23					
- 30 -			Very soft dark greenish-brown sandy SILT with trace of shell fragments (MH)	0/0/0					
			Very dense greenish-brown dolomitic, (1)				1		
Ren	narks	(1)	) clayey Fine SAND (SC)	Casi	ing Length	1			
					_		-		

Proje	ct No	. <u>[</u>	DES 045	290		Č	BORING	NO. <u>B-1</u>	1	,		***************************************			Yorkus manager	***********	energy (registry)
Loca	tion	Sec	inouse L Plate I	Jeveic	pment, Coul	ntrys	ide Exec. G	olf Course,	Pinellas Cty. Forem				W.N	ń			
Com	pletio				0 (0 4)		Depth To						*				
De	pth_	ī	35.5'	Date	8/24/0	14	Water	5.9'	Time			Dat	e	8,	24/	04	
DEPTH, FT	SYMBOL	SAMPLES	SURF.	EL:	SOIL DE	SCF	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.		SLO' SA HAN	STA VETR WS/F WPL MMEF	ATIO T. O ER- R, 30	ON 7 N 2 I 40 O" D	TES " O LB RO	D. P	
35		I			reenish-brov	vn do	olomitic.				10		20	1	0	6 <u>0</u>	80
33		ħ.			SAND (SC)	.,,			50*	* 0.5'	Per	netrat	ion	1			
	-													-			
														-		-	
- 40 -										<u> </u>	+				$\dashv$	-	
													<del>                                     </del>				
***************************************																	
										ļ							
45 -										ļ	_	<del> </del>			_		11
*. *															-	$\left\  \cdot \right\ $	+
											-				+	H	+
									100 E							$\parallel$	+
- 50 -		шоторысти					4		i								
									-		_						
											_				-	$\parallel$	$\bot \bot$
		CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRACTOR OF THE PERSON NAMED IN CONTRA									-				-	$\parallel$	+
- 55 -									-						+	H	
															$\top$	H	$\dagger \dagger$
		VVIII (1000)															
											+			_	_	$\parallel$	
											-					H	+
60											+-				-	H	
											1				+	$\parallel$	
65									***************************************		-			_	-	4	
		THE SAME									-			-	+	+	+
		200							and the second		+			$\dashv$	-	+	
Rem	I narks						······································		*	<u> </u>				土		士	Щ
	—								Cas	ing Le	ngtl	<u> </u>					-
	41111111111111111111111111111111111111	Charles on the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the las			**************************************	***********				_	_						

	Project No. DES 045290 BORING NO. B-12									
Loca	ition (	See	house Development, Countryside Exec. Golf Course,	Pinellas Cty., Forema		/.M.				
Com	pletio	า	Death To							
F 26	1		31.5' Date <u>8/23/04</u> Water <u>3.2'</u>	Time	Date		8/23,	<u>/04</u>		
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANI PENETRAT BLOWS/FT. SAMPLEF HAMMER, 10 20	FION TEST ON 2" O.D R-140 LB.				
0		NAME OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNE	Dark grayish-brown Fine SAND (SP)		10 20		70	00	Ĭ.	
		and the second second second	Brown Fine SAND (SP)							
- 5			Light brown Fine SAND (SP)							
			Very light grayish-brown Fine SAND (SP) Medium dense to very dense light grayish-brown to light brown Fine SAND (SP)	10/13/10						
				11/14/21		-	$\downarrow \downarrow$	+		
10		7	- light brown and light gray at depth 11.0'	18/17/38			1			
		7	•	30/50*	* 0.5' Penetration					
15			Very dense dark brown Fine SAND (SP)	25/38/17				<b>S</b>		
- 20	# (# 2 ) (# (# 2 ) (# (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (# 2 ) (		Loose dark brown slightly silty Fine SAND (SP-SM)	5/5/5						
25			Light gray to cream colored LIMESTONE  Cream colored clayey LIMESTONE	4/1/2						
- 30 -		Medicara and Application of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Cont	Cream colored to light brown LIMESTONE	3/3/5						
Ren										

			DES 045290 BORING NO. B-13		THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT OF THE CONTRACT O				
Proje	ct To	Wr	house Development, Countryside Exec. Golf Course, P						
Comp	oletio	1	Denth To	Forem	an W.M.				
De	pth _		36.5' Date <u>8/23/04</u> Water <u>3.2'</u>	Time	Date 8/23/04				
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL:	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP				
0	47-34		Dark brown Fine SAND with roots (SP)		10 20 40 60 80				
- 5 -			Dark gray Fine SAND (SP) Brown Fine SAND (SP) Light brown Fine SAND (SP) Grayish-brown silty, slightly clayey Fine SAND						
	richia.		(SM)	7/15/34					
		200	Very dense light brown Fine SAND (SP)						
				50*	* 0.5' Penetration				
10 -				43/50*	* 0.3' Penetration				
			,	29/34/41					
15	Diggiogyida Diggiography Diggiography		Medium dense dark brown organic Fine SAND (SP-SM/Pt)	5/7/8					
- 20 -	Harring Constitution of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the sta		Loose dark brown slightly organic, slightly silty Fine SAND (SP-SM)	2/2/4					
- 25 -			Medium dense dark grayish-brown silty Fine SAND (SM)	9/7/5					
- 30 -			Very soft green clayey SILT with shell fragments (MH)  Very soft green clayey SILT with trops of shell fragments (MH)	0/0/1	6				
		<u></u>	with trace of shell fragments (MH)  Very loose green dolomitic, silty Fine SAND (1)						
Rem	Remarks (1) (SM)  Casing Length								

Project No. DES 045290 BORING NO. B-13 Project Townhouse Development, Countryside Exec. Golf Course, Pinellas Cty., FL																	
Proje	ct To	owr	house le Plate l	Develor	oment,	Country	side Exec. G	olf Course,									
			e Flate I		***************************************		Depth To		Forem	an	***************************************	W.N	<u>/1.</u>				
Comp De	pth		36.5'	Date	8	/23/04	Water	3.2'	Time		Da	te _	88	/23	/04	<u> </u>	
ОЕРТН, FT	SYMBOL	SAMPLES	SURF.	. EL:	SOIL	DESC	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BI	PENETR LOWS/F SAMPL IAMME!	FT. O	ON 2 140 0" E	TES " O LB	).D )P	•	<u> </u>
- 35 -		Ц	Very lo	ose gre	en dol	omitic, s	ilty Fine SAN	ND				<u> </u>	T				Ĭ
- 35 -		7	√(SM)	Joes gre	2011 (101	Ommo, 5	my i mo ora	41.5	2/6/10				1	$\prod$	$\top$	$\dagger$	-
			Very s	tiff gree	n dolor	nitic CL/	AY (CH)		2,0/10				1	T	+	T	+
													1	$\Box$		$\forall$	+
	1											1	1	$\Box$		$\dagger \dagger$	+
													1	T	-	H	$\dagger$
40 -												1	+	++	$\dashv$	$\forall$	+
											1		+	+	$\pm$	$\dagger$	+
													+	+	$\dashv$	+	+
													-	H	+	H	+
										ļ		-	-	$\vdash \vdash$	-	$\mathbb{H}$	+
45 -											<del> </del>	ļ	-	-	+	otag	+
										ļ		-	-	<b> </b>	-	4	1
																$\coprod$	
												1					
															$\perp$		
- 50 -																	T
30									A10							П	П
																П	
																$\parallel$	П
									7		1				$\top$	H	Ħ
									A-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0-			1		$\vdash$	$\top$	H	Н
55 -												<del> </del>		H	+	H	+
										<b></b>		-			+	$\vdash$	+
												-	$\vdash$	$\vdash \vdash$	+	H	Н
											-	<del> </del>	$\vdash$	$\dashv$	+	$\vdash$	H
		200223042										-	$\vdash$	_	-	+	H
- 60 -		-										-	$\vdash$	+	-	+	$\coprod$
												ļ	$\vdash$	-	_	$\vdash$	Н
												-	$\vdash$	$\perp$	-	$\perp$	
										.,		<u> </u>	$\square$		1	ot	Ц
																$\perp$	
- 65 -																	
									1							T	П
										***************************************				T		1	
		<u> </u>		······································			······································	**************************************						上		土	H
Ken	narks				<del></del>				<u> </u>		4						
									cas	ing Ler	ngtn						

Project No. DES 045290 BORING NO. B-14									
Proje	ct To	nhouse Development, Countryside Exe e Plate I	c. Golf Course, Pinellas Cty., Forem						
Comp	letion	Depth	То	dii					
De	pth	36.5' Date 8/23/04 Wat	er <u>4.0'</u> Time	Date 8/23/04					
ОЕРТН, FT	SYMBOL	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP 10 20 40 60 80					
0	7E5	Dark gray Fine SAND with roots (SP)	)	1 1 1 1 1 1 1					
5 -		Dark gray Fine SAND with trace of roo Gray Fine SAND (SP) Dark brown slightly silty Fine SAND w of finely divided organic material (SP- Brown slightly silty Fine SAND (SP-S	vith trace -SM)						
		Medium dense to very dense light bro to light grayish-brown Fine SAND (SF							
- 10 -			6/12/17						
			10/16/23						
	100		19/31/47						
15 -		Dense brown slightly silty Fine SAND	(SP-SM) 23/28/17	<b>8</b>					
- 20 -	######################################	Loose dark brown slightly organic, silty Fine SAND (SM)	5/3/3						
- 25 -		Loose dark greenish-brown slightly sil Fine SAND (SP-SM)	4/3/2						
- 30 -	4 4 4	Very loose green silty Fine SAND with trace of shell fragments (SM)	0/0/0						
Ren	Remarks Casing Length								

			DES 04			. ~		BORING	VO. В-	14				<del></del>	***********	<del></del>			eleterania.
Loca	ect <u>lo</u> tion	See	nouse Plate	<u>Develo</u>	pme	nt, Cour	itrys	side Exec. Go	olf Course	, Pi	nellas Cty., <b>Forem</b>			W.I	. A				
Com	pletio	n						Depth To			Forem	all		1, VV	VI.				
De	pth _		36.5'	_ Date	·	8/23/0	4	Water _	4.0'	_ T	ime			Date _	8	/23	/04	1	
DEPTH, FT	SYMBOL	SAMPLES	SURF	. EL:	sc	)IL DES	SC	RIPTION			BLOWS ON SAMPLER PER 6" OR PEN. STR.	BI	PENE LOWS SAM	TAND, TRATIONS/FT. COPLER- IER, 3	ON )N 2 140 O" [	TE: LB )R(	).D 3. )P		_
- 35	V V		Very lo	oose gr	een	silty Fine	s S/	AND		Ì			Ĭ			7.5	Ĭ	Ĭ	Ť
- 40 - 45 - 50 - 55 - 60			Stiff gr	ace of s	sheii indy	fragmer CLAY (0	CH)	(SIM)			2/3/7								
															-	$\vdash$	+	$\dagger \dagger$	H
																$\dashv$	$\dagger$	$\vdash$	
65	definencial descriptions of the second																1		de franchisco
														_			$\bot$	$\vdash$	- the Control
***																		H	
Rer	narks	<u> </u>			· · · · · · · · · · · · · · · · · · ·		······	·····		<u> </u>			L				工		4
	Remarks Casing Length										Cas	ing Ler	ngth						

**CLASSIFICATION BORINGS** 

HAND AUGER BORING LOG								
PROJEC <sup>*</sup>	Townhouse Development	CLIENT	• •	800	zer Homes			
A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100 A 100	Countryside Executive Golf Course Pinellas County, Florida	WATER	TABLE	6.3'	ter nomes	DATE: 8/24/04		
TECHNIC	IAN: W.M.	DATE:	8./	24/04	COMPLET	TON DEPTH:		
LOCATIO	N: See Plate I	TEST N	UMBEF	<u> </u>		8.0'		
	030110201		P-1					
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMARKS			
	Dark grayish-brown Fine SAND (SP)	- 2						
	Brown Fine SAND (SP)	4 -						
	Gray Fine SAND (SP)							
	,							
	Dark brown highly organic Fine SAND with roots (Pt)	- 6						
	Brown Fine SAND (SP)							
		8 +						
A STATE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PAR								
		10						
		12	derror alexandra					
***************************************		14				Manual property for the second		

	HAND AUGI	ER BORII	NG LO	<u> </u>		and an extension of the plant of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second			
PROJEC	Townhouse Development	CLIENT:  Beazer Homes							
	Countryside Executive Golf Course Pinellas County, Florida	WATE	R TABLE	4.6'	ALC: HOMES	DATE: 8/24/04			
TECHNIC	CIAN: W.M.	DATE:	8/2	24/04	COMPLE	TION DEPTH: 8.0'			
LOCATIO	DN: See Plate I	TEST	NUMBER	:	P-2				
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMAI	RKS			
	Dark brown Fine SAND (SP)	0							
	Grayish-brown Fine SAND with roots and gravel (SP)	- 2	000						
	Dark gray organic Fine SAND with trace of roots (SP-SM/Pt)								
	Grayish-green Fine SAND with pockets of dark grayish-brown clayey Fine SAND (SP/SC)	- 4							
	Gray Fine SAND (SP)								
	Dark brown slightly organic Fine SAND (SP)	- 6							
		8	A						
		10							
		12							
		14				To the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second se			

	HAND AUG	ER BORIN	G LO	G	Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie Marie	Market and Market (Market and Anna and Anna and Anna and Anna and Anna and Anna and Anna and Anna and Anna and
PROJEC	Ι ownhouse Development	CLIENT	r:	Beazer	- Homes	
	Countryside Executive Golf Course Pinellas County, Florida	WATER	RTABLE	3.6'	·	DATE: 8/24/04
TECHNIC	CIAN: W.M.	DATE:	8/2	24/04	COMPLET	1 8/24/04 TON DEPTH: 8.0'
LOCATIO	DN: See Plate I	TEST	JUMBER	₹:	·-3	0.0
ELEV.	DESCRIPTION	DEPTH	BOL			_
(FT)		(FT)	SYMBOL		REMAR	KS
	Dark grayish-brown Fine SAND with trace of roots (SP)	0				
		- 2 -	. X			
	Dark gray highly organic SILT (Pt)					
	Dark gray organic, silty Fine SAND (SM/Pt)	4 -	(1111111111111111111111111111111111111			
	Grayish-brown Fine SAND (SP)	- 6	FIRST			
		8				
		- 10 -				
		- 12 -				
		- 14 -				

	HAND AUGER BORING LOG										
PROJEC	CT: Townhouse Development	CLIENT		Bazzar	· Homes						
	Countryside Executive Golf Course Pinellas County, Florida	WATER	TABLE	: 6.4'	DATE:	8/24/04					
TECHNIC	W.M.	DATE:	8/2	4/04	COMPLETION DEP 8.0'	TH:					
LOCATION	ON: See Plate I	TEST N	JMBER		-4						
			거		_ <del>_</del>						
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMARKS						
	Light brown slightly silty Fine SAND (SP-SM)  Tannish-brown slightly silty Fine SAND (SP-SM)	- 6									

	HAND AUG	ER BORI	4G LO	G	CATALOGUE CONTRACTOR CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATALOGUE CATAL		
PROJEC	T: Townhouse Development	CLIENT: Beazer Homes					
	Countryside Executive Golf Course Pinellas County, Florida	WATE	R TABLE	Beazer E: 7.6'	r Homes	DATE: 8/24/04	
TECHNIC	CIAN: W.M.	DATE:	8/	24/04	COMPLET	TON DEPTH: 8.0'	
LOCATIO	DN: See Plate I	TEST	8.0				
	See Flate I		T	<u> </u>	P-5		
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMAR	KS	
	Dark brown Fine SAND with roots and trace of finely divided organic material (SP)	2					
	Dark grayish-brown Fine SAND(SP)	- 4					
	Dark brown slightly organic, slightly silty Fine SAND (SP-SM)	- 6					
	Brown Fine SAND (SP)			- trace of	froots bel	ow depth 6.6'	
	Dark gray Fine SAND with finely divided organic material (SP)	- 8 -	See and per land				
		- 10 -					
			1				
		- 12 -	A to the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second				
		- 14 -					

	HAND AUGE	R BORL	G LO	J					
PROJEC	T: Townhouse Development	CLIENT: Beazer Homes							
	Countryside Executive Golf Course Pinellas County, Florida		RTABLE	3.1'	i nomes	DATE: 8/24/04			
TECHNIC	CIAN: W.M.	DATE:	ION DEPTH: 8.0'						
LOCATIO	DN: See Plate I	8/24/04 8.0° TEST NUMBER:							
			٦	1	-0				
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMAR	KS			
	Brown Fine SAND (SP)	0							
	Dark gray slightly organic Fine SAND (SP)								
	Dark brown organic Fine SAND with trace of roots (SP-SM/Pt)	2							
	Dark brown Fine SAND (SP)								
	Brown Fine SAND (SP)								
		4 -							
	,								
	Light brown Fine SAND (SP)								
	Light brown slightly silty Fine SAND (SP-SM)	6							
	Light grayish-brown slightly silty Fine SAND (SP-SM)	8 -							
						-			
		10 -							
		- 12 -							
		- 14 -							

	HAND AUGE	R BORIN	G LOG		The second second second second second second second second second second second second second second second se	
PROJECT:	Townhouse Development Countryside Executive Golf Course	CLIENT	: R TABLE	;	r Homes	DATE:
TECHNICI	Pinellas County, Florida  AN:  W.M.	DATE:		3.5' 4/04	COMPLET	8/24/04 ION DEPTH:
LOCATION	i: See Plate I	TEST	UMBER:		·-7	8.0'
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMAR	KS
	Grayish-brown Fine SAND (SP)	- 2 -				
	Brown Fine SAND (SP)	4 -		-		
	Grayish-brown silty, slightly clayey Fine SAND (SM)	- 6	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
	Grayish-brown Fine SAND (SP)	10 -				

SUMMARY OF LABORATORY TEST RESULTS

# SUMMARY OF LABORATORY TEST RESULTS

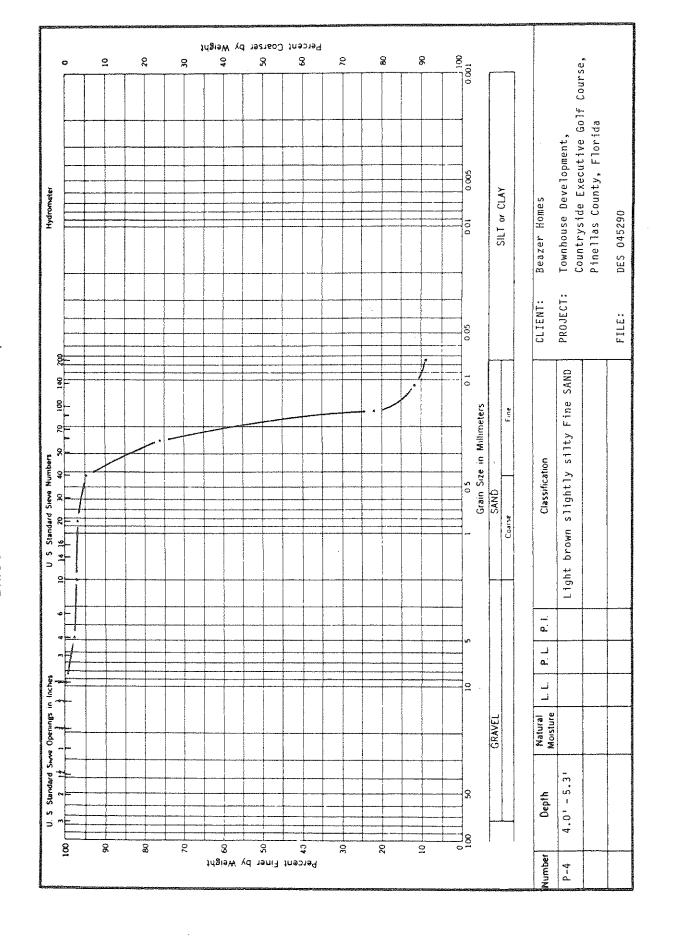
BORING NO.	ОЕРТН	DESCRIPTION	% *	Y d	5	ATTERBERG LIMITS	P.P.		U.C. CON	N G.S.	S. ORG	Hd	5 3		RES.
	E			<u>.</u>		TT   LT   ST		í.			<u>(</u> )		(mdd)	(mdd)	(Omm-cm)
B-2	12.0-13.5	Dark brown highly organic, silty Fine SAND									8.9				
B-4	1.8-3.4	Dark brown highly organic Fine SAND					,				12.8				
9-G	6.0-7.5	Dark brown slightly silty Fine SAND								7.5					
B-8	20.0-21.5	Dark gray slightly silty Fine SAND								6.3	_				
B-10	20.0-21.5	Dark brown slightly organic, slightly silty Fine SAND									3.7				
B-10	25.0-26.5	Dark grayish-brown slightly silty Fine SAMD								\$.5					and the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of th
B-11	12.0-13.5	Dark brown Fine SAND with trace of finely divided organic material			Trock-theministration and tracking the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state						2.0				
B-13	15.0-16.5	Dark brown organic Fine SAND									5.1				The throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the throat and the th
B-13	20.0-21.5	Dark brown slightly organic, slightly silty Fine SAND								* <del>*</del> *	2.7				The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
B-14	20.0-21.5	Dark brown slightly organic, slightly silty Fine SAND									3,9				**************************************
B-14	25.0-26.5	Dark greenish-brown slightly silty Fine SAND								##	5				
P-1	6.1-7.0	Dark brown highly organic Fine SAND with roots					<u></u>				10.1				Mark and a state of the state of the state of the state of the state of the state of the state of the state of
P-2	2.8-3.5	Dark gray organic Fine SAND with trace of roots									7.8				
P-2	5.6-8.0	Dark brown slightly organic Fine SAND									3.5				
P-3	3.9-5.2	Dark gray organic, silty Fine SAMD									7,6				
P.4	4,0-5.3	Light brown slightly silty Fine SAND								*					
= %M	·	at	11	0	Consolidation Test	on Test									
(pct)			Įį.	G	irainsize A	Grainsize Analysis (Hydrometer)	eter)								
G <sub>S</sub>		Specific Gravity ORG. (%) Liquid Limit CI. (ppm)		0 F	Organic Content Total Chloride	ntent ide		0	CLIENT:		Beazer Homes	Homes			
				₽ •	Total Sulfate	<u>ئ</u> .		2	PROJECT:	Ξ:	Townho	use Deve	lopment,	Countrysid	Townhouse Development, Countryside Executive
			!!		Lab Resistivity	vity					Golf Co	urse, Pine	ellas Coun	Golf Course, Pinellas County, Florida	
P.P. (tsf) =	Pocke	Pocket Penetrometer * Unconfined Commercian **	11 17	co o	See Test Curves	irvės «ing Mo 200 Siav	;	II.	FILE:		DES 045290	5290			
	Carco		1	4	ercent ras	rercent rassing tvo, 200 Steve	e >								

## SUMMARY OF LABORATORY TEST RESULTS

						ATTE	ATTERBERG				-	-					
BOKING NO.	DEPTH (ft)	DESCRIPTION	% ≱	y d (pct)	ບ້	LI	LIMITS	E : 2	P. U.C.	C. CON	N. G.S.		ORG pH	H Ct.		SO <sub>4</sub>	RES.
						TT	PL SL	<del></del>	,				······································	<del>-</del>		 ì	
P-5	4.9-6,3	Dark brown slightly organic, slightly silty Fine SAND										*	4.3				
P.5	7.4-8.0	Dark gray Fine SAND with finely divided organic material										2.	2.5	A A A A A A A A A A A A A A A A A A A			
P-6	7.1-9.0	Dark gray slightly organic Fine SAND										3.0	0.				de dan territoria de la companya de
P.6	1.7-2.9	Dark brown organic Fine SAND										8:9					
P.7	4,0-6.5	Grayish-brown silty, slightly clayey Fine SAND			,						15.5	\$				***************************************	T. A. T. A. D.
															verace common control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control		
	,					:									***************************************		
	1000							- Andrews									
M %	Water	Water Content Con.	H	İ	Consolidation Test	ion Test							<b>-</b>				
y = (pcf) =	Dry D		l		Grainsize Analysis (Hydrometer)	Analysis (	Hydrome	ter)									
G <sub>s</sub> =	Specif Liquid	Specific Gravity ORG. (%) Liquid Limit CI. (ppm)	11 11		Organic Content Total Chloride	ontent ride			ວ	CLIENT:	••	Beazer	Beazer Homes				
H IS	Plastic Shrink	Plastic Limit $SO_{4}$ (ppm) Shrinkage Limit RES. (ohn-cm)			Total Sulfate Lab Resistivity	ite ivify			Z	PROJECT:	÷	Townh Golf Co	Townhouse Development, Countrysid Golf Course. Pinellas County, Florida	relopmen:	t, Country	Townhouse Development, Countryside Executive Golf Course, Pinellas Country, Florida	cutive
P.P. (tsf) =	Pocket				See Test Curves	urves				FILE:		DES 045290	15290	1		Į	
U.C. =	Uncon	Unconfined Compression **	31		Percent Passing No. 200 Sieve	ssing No.	200 Sieve	63					:				

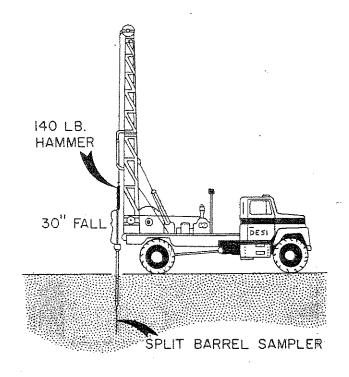
GRAINSIZE ANALYSES

## DRIGGERS ENGINEERING SERVICES, INC.



METHOD OF TESTING

#### STANDARD PENETRATION TEST AND SOIL CLASSIFICATION

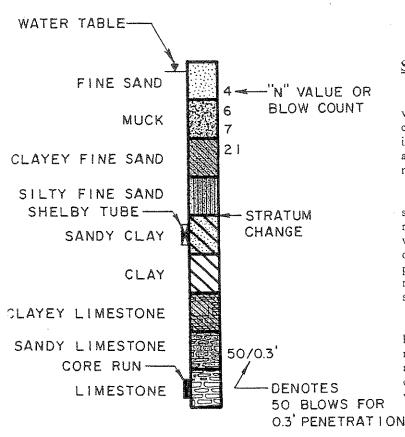


#### STANDARD PENETRATION TEST (ASTM D-1586)

In the Standard Penetration Test borings, a rotary drilling rig is used to advance the borehole to the desired test depth. A viscous drilling fluid is circulated through the drill rods and bit to stabilize the borehole and to assist in removal of soil and rock cuttings up and out of the borehole.

Upon reaching the desired test depth, the 2 inch O.D. split-barrel sampler or "split-spoon", as it is sometimes called, is attached to an N-size drill rod and lowered to the bottom of the borehole. A 140 pound harmer, attached to the drill string at the ground surface, is then used to drive the sampler into the formation. The hammer is successively raised and dropped for a distance of 30 inches using a rope and "cathead" assembly. The number of blows is recorded for each 6 inch interval of penetration or until virtual refusal is achieved. In the above manner, the samples are ideally advanced a total of 18 inches. The sum of the blows required to effect the final 12 inches of penetration is called the blowcount, penetration resistance of "N" value of the particular material at the sample depth.

After penetration, the rods and sampler are retracted to the ground surface where the core sample is removed, sealed in a glass jar and transported to the laboratory for verification of field classification and storage.



#### SOIL SYMBOLS AND CLASSIFICATION

Soil and rock samples secured in the field sampling operation were visually classified as to texture, color and consistency. Soil classifications are presented descriptively and symbolically for ease of interpretation. The stratum identification lines represent the approximate boundary between soil types. In many cases, this transition may be gradual.

Consistency of the soil as to relative density or undrained shear strength, unless otherwise noted, is based upon Standard Penetration resistance values of "N" values and industry-accepted standards. "N" values, or blowcounts, are presented in both tabular and graphical form on each respective boring log at each sample interval. The graphical plot of blowcount versus depth is for illustration purposes only and does not warrant continuity in soil consistency or linear variation between sample intervals.

The borings represent subsurface conditions at respective boring locations and sample intervals only. Variations in subsurface conditions may occur between boring locations. Groundwater depths shown represent water depths at the dates and time shown only. The absence of water table information does not necessarily imply that groundwater was not encountered.