



A M Engineering
6320 Tower Lane
Sarasota, Florida 34240

September 27, 2004

Attention: Mr. D. Shawn Leins, P.E.

RECEIVED SEP 29 2004

**RE: Report of the Shallow Geotechnical Exploration
Holland Property
Sarasota County, Florida
Our File: SAL 041966**

Dear Shawn:

Pursuant to your request, **DRIGGERS ENGINEERING SERVICES, INC.** has performed a shallow subsurface investigation at the referenced site. Results of our studies are included in this report, together with our evaluation of normal seasonal high groundwater levels.

Three (3) hand auger borings were advanced to depths of 5 to 8 feet below existing grade at the approximate locations illustrated on the attached Plate I. Note that the borings were positioned in the field by our geotechnician utilizing the plan provided to us and existing site features. Therefore, the depicted locations are considered approximate, since they were not surveyed.

The borings penetrated an upper unit of silty fine sand and organic slightly silty to silty fine sand. These surficial soils were underlain by interbedded silty to clayey sands, silty clays, fine sands and occasional highly organic silts.

Groundwater was recorded at depths ranging from 0.8 to 6.1 below existing grade at the time of our studies in late August, 2004. Review of the Sarasota County Soil Survey indicates that soils in the vicinity consist principally of the Floridana and Gator soil series which have normal seasonal high groundwater levels near to or above the ground surface.

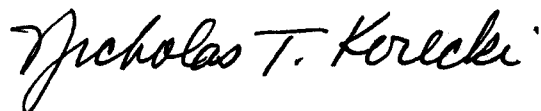
Data provided to us indicate that the ditch adjacent to the boring locations has a normal high water level at elevation El.+23.81 ft. at its downstream end. The deeper groundwater level at boring HA-3 may reflect some drawdown influence from the ditch. It is our opinion that water would tend to perch near to or at the ground surface during periods of more significant rainfall, unless the site were graded to drain. In that instance, surface water would generally run off and actual groundwater levels would be influenced by the ditch. Therefore, we feel that the normal seasonal high water level of the ditch would be appropriate for use in design of a pond adjacent to the ditch, provided to pond were excavated to or below the present ditch bottom elevation.

Further investigation of the site is suggested. Review of studies we have conducted in the site vicinity indicate that lakes excavated into a shelly sand layer which underlies much of the area typically had normal water levels around elevation El. +22.0 ft. Piezometers installed to depths of about 12 to 15 feet within this zone had water levels fairly consistent with the near-by lake levels during the study period. The additional investigation should include deeper Standard Penetration Test or auger borings into the underlying more permeable shelly zone together with piezometers installed into this zone to help provide data for use in establishing normal seasonal high lake levels. If desired, we can also collect samples for laboratory classification testing to help evaluate the suitability of the excavated soils for use as structural fill during site development.

DRIGGERS ENGINEERING SERVICES, INC. appreciates the opportunity to assist you on this project. Should you have any questions concerning the results of our studies to date, please do not hesitate to contact this office at your convenience.

Respectfully submitted,

DRIGGERS ENGINEERING SERVICES, INC.



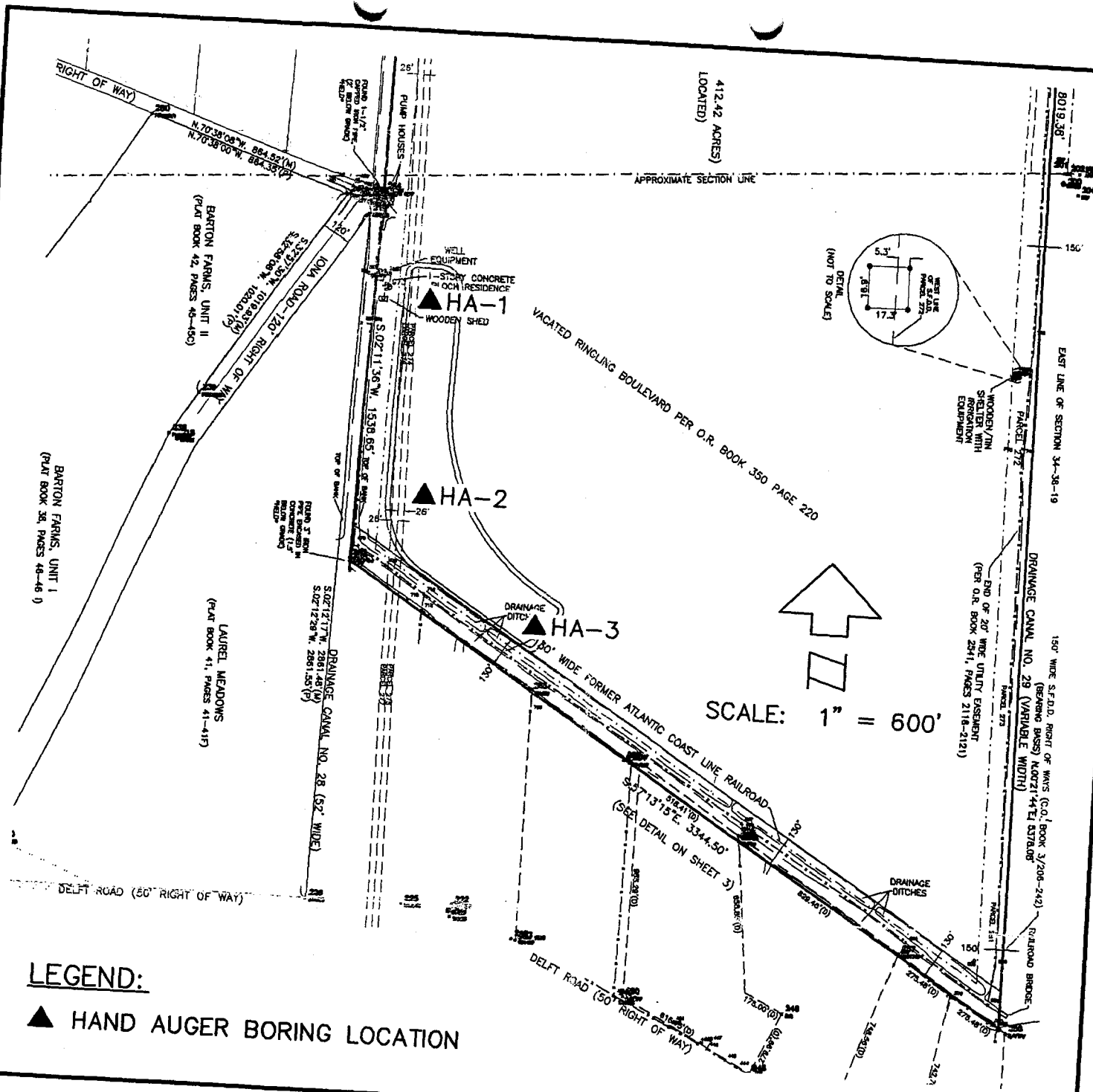
Nicholas T. Korecki, P.E.

Senior Geotechnical Engineer

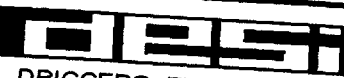
FL Registration No. 45529

NTK-REP/SAL041966

Copies submitted: (3)



LEGEND:
 ▲ HAND AUGER BORING LOCATION

SHEET TITLE		PREPARED BY	
BORING LOCATION PLAN			
PROJECT NAME		DRIGGERS ENGINEERING SERVICES, INCORPORATED	
HOLLAND PROPERTIES		SHEET NO.	
SARASOTA COUNTY, FLORIDA		PLATE 1	

DATE: 9/27/04



DRIGGERS ENGINEERING SERVICES INCORPORATED

HAND AUGER BORING LOG

PROJECT: Holland Properties Sarasota County, Florida Project No.: SAL 041966	CLIENT: AM Engineering, Inc.	
	WATER TABLE: 1.0'	DATE: 8/27/04
TECHNICIAN: B.N./P.T.	DATE: 8/27/04	COMPLETION DEPTH: 5.0'
LOCATION: See Plate I	TEST NUMBER: HA-1	

ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL	REMARKS
	Dark gray slightly silty Fine SAND with finely divided organic material and roots (SP-SM)	0		
	Brownish-gray Fine SAND (SP)			
		2		
	Brown silty Fine SAND (SM)			
	Brown clayey Fine SAND (SC)			
		4		
		6		
		8		
		10		
		12		
		14		



DRIGGERS ENGINEERING SERVICES INCORPORATED

HAND AUGER BORING LOG

PROJECT: Holland Properties Sarasota County, Florida Project No.: SAL 041966	CLIENT: AM Engineering, Inc.	
	WATER TABLE: 0.8'	DATE: 8/27/04
TECHNICIAN: B.N./P.T.	DATE: 8/27/04	COMPLETION DEPTH: 5.0'
LOCATION: See Plate I	TEST NUMBER: HA-2	

ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL	REMARKS
	Dark gray to black highly organic, silty Fine SAND (Pt)	0		
	Dark gray Fine SAND (SP)			
	Light brown and light gray Fine SAND (SP)			
	Brown clayey Fine SAND (SC)	2		
	Light brown slightly silty Fine SAND (SP-SM)			
		4		
		6		
		8		
		10		
		12		
		14		



DRIGGERS ENGINEERING SERVICES INCORPORATED

HAND AUGER BORING LOG

PROJECT: Holland Properties Sarasota County, Florida Project No.: SAL 041966	CLIENT: AM Engineering, Inc.	
	WATER TABLE: 6.1'	DATE: 8/27/04
TECHNICIAN: B.N./P.T.	DATE: 8/27/04	COMPLETION DEPTH: 8.0'
LOCATION: See Plate I	TEST NUMBER: HA-3	

ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL	REMARKS
	Dark gray silty Fine SAND (SM)	0		
	Light brown slightly silty Fine SAND (SP-SM)			
		2		
	Black highly organic, silty Fine SAND (Pt)			
	Brown and light brown slightly silty Fine SAND (SP-SM)			
		4		
	Light brown silty CLAY (CH)			
		6		
		8		
		10		
		12		
		14		