

# BIOLOGICAL RESEARCH ASSOCIATES, INC.

19 February 1987

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Ms. Sue Ann Murphey  
Greenhorne & O'Mara  
4902 Eisenhower Boulevard, Suite 200  
Tampa, Florida 33614

RE: Environmental Assessment of 472-acre Shadow Run Tract of Southeast Bank  
(SOT01BRG.LT1)

Dear Sue,

At your request Rosanne Clementi and I of Biological Research Associates, Inc. (BRA) performed an environmental assessment on the above referenced 472-acre tract to determine the potential constraints and opportunities this site poses for development. On the attached 1" = 200' Hillsborough County aerials, I have indicated the approximate boundaries of the various parcels comprising this tract as supplied to BRA by Greenhorne & O'Mara, as well as an interpretation of all environmentally sensitive areas on the tract under current environmental regulations. The following summarizes the results of our field reviews conducted on 19-20 February 1987:

## WETLANDS

Ten wetlands totaling approximately 38.5 acres are present on the currently defined boundaries of the property. The following table summarizes for each wetland, its approximate size, jurisdictional status, and the potential use as a stormwater treatment facility and an estimate of the probability of obtaining permits to alter an individual wetland based on its habitat quality and current regulatory attitudes concerning such activities:

Wetland #	Size (Acres)	Jurisdictional Agency				Stormwater Treatment <sup>1</sup>	Permit Probability <sup>2</sup>
		DER	COE	SWFWMD	EPC		
1	0.7	X	X	X	X	N	H
2	0.3		X	X	X	Y	H
3	3.0		X	X	X	Y	L
4	1.6		X	X	X	Y	L
5	17.3	X	X	X	X	M	L
6	3.0		X	X	X	Y	H
7	9.2	X	X	X	X	M	L
8	0.1		X	X	X	Y	H
9	2.7	X	X	X	X	N	M
10	0.6	X	X	X	X	N	L

<sup>1</sup> N = No, M = Maybe, Y = Yes; <sup>2</sup> H = High, M = Moderate, L = Low



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As can be seen from the above table, wetlands # 1,5,7,9, and 10 are DER systems which ultimately connect to Bell Creek. Wetland #1 represents the ditched portion of a former creek system and could potentially be piped to develop the uplands along the southwest property boundary. Wetlands # 5 and 7 are headwater systems that eventually outfall into the Bell Creek system. Under Chapter 17-25.042 (Regulation of the Stormwater Discharge) the larger portions of these wetland systems could be used for the direct treatment of stormwater with proper design. I note that portions of wetland # 5 south of Rhodine Road have been ditched and hence probably could be altered if necessary. The two remaining DER wetlands (9,10) are directly associated with Bell Creek. All the other wetlands on the tract (2,3,4,6,and 8) are isolated systems that fall only under the jurisdiction of COE, SWFWMD and EPC. All of these isolated wetlands could be used for stormwater treatments. Permits to alter a number of these wetlands would be relatively easy to obtain since they are either very small ephemeral systems (# 3), have previously been altered by man's activities (#6), or are manmade (8). Regarding alteration, it must be realized that the agencies will evaluate the entire package and not each wetland individually as is necessary for an environmental assessment. To summarize, considering the size of the tract, wetlands pose a relatively minor constraint to development. Bell Creek, which borders much of the property, will provide an amenity to the site.

#### UPLANDS

Our analysis of the property indicates that the tract contains environmentally sensitive uplands and protective species which will pose a constraint to development. On the enclosed aerial I have indicated the approximate limits of five patches of sand pine scrub (labelled A-E) that total approximately 66.2 acres. All of these sand pine scrub islands are underlain by St. Lucie fine sands. I have enclosed relevant portions of the Hillsborough County Land Alteration and Landscape (LAL) Ordinance pertaining to scrub habitats and certain listed species.

The sand pine scrub on the Shadow Run tract contain almost all of the plant species expected in this community type. These endemic species include such forms as the sand pine (Pinus clausa), sand live oak (Quercus geminata), myrtle oak (Q. myrtifolia), chapman's oak (Q. chapmanii), wild olive (Osmanthus americana), scrub bay (Persea humilus), rusty lyonia (Lyonia ferruginea), garberia (Garberia heterophylla), reindeer moss (Cladonia sp.), scrub liverwort (Segellia sp.) and the endangered Florida golden astor (Chrysopsis floridana). In fact, the only typical scrub endemic not found on this site is rosemary (Ceratiola ericoides).

The attached provisions of the LAL ordinance indicate development restrictions sought by Hillsborough County for the protection of sand pine scrub and the Florida golden astor. In general, the ordinance requires protection of a



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maximum of 50 percent of all sand pine scrub habitats and protection and/or relocation of populations of the endangered Florida golden astor. Recent revisions of the LAL redefine sand pine scrub to include only those scrub associations found growing on Lakewood, Pomello and St. Lucie fine sands. Of these soil types on the Southeast Bank tract true scrub is limited to St. Lucie fine sands although the Florida Golden astor occurs on St. Lucie, Pomello and Lakeland fine sands. In fact, on this property, some of the best scrub containing all of the endemic species occurs on various phases of the Lakeland fine sands which are no longer protected under the LAL ordinance (see also below).

On the Southeast Bank site the protected scrubs (underlain by St. Lucie fine sands) vary considerably in quality and species composition. The following table summarizes their size and ecological condition.

<u>Scrub #</u>	<u>Size (Acres)</u>	<u>Plant Species Diversity</u>	<u>Disturbance</u>
A	3.9	low	low
B	7.4	high	moderate
C	30.4	moderate	high
D	19.5	moderate	high
E	5.0	high	low

Although suffering from relatively little disturbance, scrub A has extremely low plant species diversity being composed chiefly of sand live oak and saw palmetto with a few sand pines. Golden astor is present around the perimeter of this scrub. Recently on the Summertime Lake Estates to the immediate north, BRA was able to convince the county that an almost identical St. Lucie fine sand island was in fact not a scrub and hence not worthy of protection. Scrub B is of high quality even though it is transected by several road cuts. Scrub C, which totals over 30 acres, has been severely disrupted by previous farming activities including land clearing and planting with bahia grass. The same applies for scrub D. However, an extension of this same scrub island on the south side of Rhodine Road (scrub E) is in excellent ecological condition. Almost none of the area occurring on Pomello fine sands is true scrub and hence should not be subject to protection. Because of the extreme degree of alteration of scrubs C and D the county may rule that large portions of these scrubs no longer serve as viable habitat and hence not in need of protection. It is likely however that the county will want some form of trade-off in order to adopt this position.

The worse case scenario would require preservation of 50 percent (30 acres) of the scrub found on St. Lucie fine sands, even though only about 15 acres (25 percent) of the total scrub on the property is of high quality. As mentioned previously, some of the scrub found growing on Lakeland fine sands west of the radio tower property and wetland #7 is of exceptional quality even though this particular soil type is not included in the definition of sand pine scrub and hence not protected. This area also supports the densest populations of the Florida golden astor occurring on the site. It may be possible to get the



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county to agree to preservation of a portion of this habitat in exchange for some of the poor quality scrubs currently under their protection.

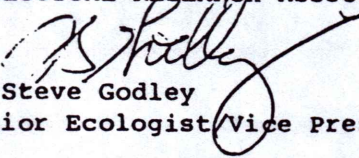
The Florida golden astor occurs in all the identified scrubs as well as adjacent areas underlain by Pomello or Lakeland fine sands. The total plant population numbers in the thousands. The only scrubby areas where the aster apparently does not occur is to the east of the radio tower tract along Bell Creek. We would anticipate that an extensive mitigation plan supported by Hillsborough County and the U.S. Fish and Wildlife Service would be required for development of the property. I currently am involved in a similar situation on the Summertime Lake Estates tract.

In addition to the presence of sand pine scrub and the endangered Florida golden astor, the site also supports or is likely to support a number of other species considered either Threatened or Species of Special Concern by the Florida Game and Freshwater Fish Commission (FGFWFC). Gopher tortoises, a Species of Special Concern are common on the property, especially on scrubs underlain by Lakeland fine sands. Although not observed during our field reviews we strongly suspect that the Florida mouse, Eastern indigo snake and perhaps the Florida Scrub Jay also are present on the site. These species are protected by various activities under Section 37.003-005, F.A.C. Recently, the FGFWFC has adopted the position that the land development constitutes the taking of these species and hence is subject to regulation and permitting. Biological Research Associates currently is awaiting a formal response from the Commission regarding their position on this issue. This will be forwarded when available. Until now, mitigative actions for protected wildlife were only required for DRI-sized projects. A change in the Commission's policy and position could have a far reaching impact to development in Florida.

To summarize, the Southeast Bank (Shadow Run) tract has environmentally sensitive uplands and wildlife which will require extensive consultation and perhaps mitigation prior to land development. To my knowledge the taking of land as a result of sensitive upland habitats, plants or wildlife has not been legally challenged to a significant extent and remains one option on this property. If you have any questions and/or comments please give me a call. I look forward to assisting on this project in the future.

Sincerely,

BIOLOGICAL RESEARCH ASSOCIATES, INC.

  
J. Steve Godley  
Senior Ecologist/Vice President

cc: Mr. Robert A. Vale/Southeast Bank  
Ms. Ethel Hammer/Taub & Williams  
Ms. Rosanne Clementi/BRA

Enclosure: 1 aerial