

# **Conservation Collier Karen Property Interim Management Plan**

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## **1.0 Purpose and Scope of the Interim Management Plan**

The Karen property was purchased by Collier County in June 2007 through funds from the Conservation Collier program. The property will be open to the public and will be managed only for the conservation, protection and enhancement of natural and historical resources and for public outdoor recreation that will be compatible with the conservation, protection and enhancement of the site and its surrounding lands. The Karen property will be an addition to the Otter Mound Preserve. No trails or public amenities are planned for the property during the interim management period. Public access has been made available through the northern section of Otter Mound Preserve.

This interim management plan is intended to identify the key management priorities and issues within the site and give direction for management until the Otter Mound Final Management Plan is complete.

### Key Interim Management Objectives

1. Increase native vegetation and wildlife habitat.
2. Protect, assess and maintain in good condition the historical and archeological resources of the site.
3. Protect and manage the threatened and/or endangered plants and wildlife.

### Action Plan

- 1a. Remove debris.
- 1b. Remove and manage invasive exotic vegetation.
- 2a. Survey, identify and monitor historical and archeological sites.
- 3a. Survey, identify and monitor threatened and/or endangered plant and wildlife locations.

## **2.0 Management Authority and Responsibilities**

Management authority and responsibility will rest with the Collier County Conservation Collier Program. Staff will explore the potential for limited partnerships with the Marco Island Historical Society, Southwest Florida Archeological Society, and other local organizations that may want to provide some limited management assistance. Written agreement(s) will be developed for any contemplated management partnerships and all necessary approvals sought before implementation.

## **3.0 Interim Site Plan**

### **3.1 Location and Site Description**

The Karen property is located within Section 21 Township 52 Range 26. It is adjacent to and south of Otter Mound Preserve, east of West Inlet Drive and north of Ocoola Ct. on the southeastern tip of Marco Island in Collier County, Florida. The 0.68-acre site contains a tropical hardwood plant community dominated by a mixture of native and non-native species. The property is an important archeological site as documented by the Marco Island Historical Society and the Archeological and Historical Conservancy, Inc.

It contains undisturbed shell middens and sections of the historic man-made shell wall that runs from the adjoining Otter Mound Preserve land. The Karen Property is within the City of Marco Island.

### **3.2 Signage**

A sign denoting the site as Otter Mound Preserve, identifying the prohibited activities within the preserve (citing ordinance 76-48) and stating the hours of operation will be installed near the edge of Osceola Ct. Any permits required for signage will be obtained from the City of Marco Island prior to installation.

The placement of the sign will be coordinated with an archeologist so that no archeological sites are disturbed during installation.

### **3.3 Easements, Concessions or Leases**

A 200' X 15' Ingress/Egress Easement passes through the property at the southern boundary (Exhibit 3). This easement is an extension of Osceola Ct. and is in place to allow access to the homes south and east of the parcel. Staff will obtain a copy of the easement language and any public records related to this easement.

### **3.4 Structures**

The Otter Mound Preserve whelk shell "walls" extend into the northwest section of the property. Ernest Otter created these walls in the 1930's and 1940's. The site also contains a large mound of significant deposits that represent prehistoric activity. This midden is comprised of 15 feet of shell deposits that represent periods dating back 1,500 years.

### **3.5 Surrounding and Adjacent Land Uses**

The property is surrounded on the east, west, and south by partially cleared Marco Estates residential lots with single family homes. Otter Mound Preserve is directly north of the site, and Osceola Court runs along the southern boundary of the site.

## **4.0 Interim Management Objectives**

### **4.1 Natural Resource Protection**

#### **Existing Vegetation:**

FLUCCS – 426 – Tropical Hardwoods/Shell mound, characterized by Gumbo Limbo (*Bursera simaruba*), Jamaica Dogwood (*Piscidia piscipula*), Blackbead (*Pithecellobium sp.*), Strangler fig (*Ficus aurea*), White indigoberry (*Randia aculeata*), Marlberry (*Ardisia escallonoidies*), Rouge-berry (*Rivina humilis*), Mulberry (*Morus alba*), Yellow Elder (*Tecoma stans*), and others.

All existing native vegetation shall be retained.

**Unique Natural Features:**

The Karen property represents an excellent example of a mature coastal hammock. Also known as a Tropical Hardwood Hammock, this plant community is dominated by tropical trees and shrubs, most of which are evergreen or semi-deciduous. Historically, tropical hardwood hammocks were found as far north as Cape Canaveral on Florida's east coast and up to the mouth of the Manatee River on the west coast. However, development pressure associated with growth of the South Florida population has resulted in the conversion of many of these forests to urban and agricultural uses. Today, tropical hardwood hammocks occur primarily as remnant habitats. Many native plants exist on the Karen property's mature coastal hammock including Gumbo limbo (*Bursera simaruba*), Jamaica caper (*Capparis cyanophallophora*), Sea grape (*Coccoloba uvifera*) and Paradise tree (*Simaruba glauca*).

**Possible Listed Species:**

Although no listed plant or animal species have been documented on the site, the observed habitat and location would support the presence of many species of migratory warblers and other migratory neo-tropical bird species. Listed plant species may also be present on the site. A qualified botanist will conduct a more thorough survey of the plants.

**4.2 Site Security**

Security shall be provided by the City of Marco Island Police via routine patrols in the area. Collier County staff, in performance of site management activities, and Marco Island Historical Society members shall periodically monitor the site for violations and security breaches.

**4.3 Exotic Vegetation Removal and Maintenance Plan**

All invasive exotic plant species that are prohibited under Collier County LDC Section 2.4.4.12 shall be cut, treated and removed from the site. All other Florida Exotic Pest Plant Council Category I exotic species shall be cut, treated and removed from the site unless they are deemed historically significant. Specific exotic trees and plants to be preserved will be identified in the final management plan. Great care will be taken when removing the exotic vegetation so as not to disturb archeological and historic artifacts. All exotic vegetation removal shall be coordinated with a professional archeologist. Nuisance vegetation, both native and exotic, growing in and over the whelk wall will also be carefully removed or treated in place. Any proposed plant removal from the vicinity of the shell walls should use herbicides with no pulling of plants to avoid subsequent erosion and disturbances to the walls. Removal of *Sansevaria* should rely on cutting and herbicides, as pulling these plants will disturb the soil. All vegetation clearing shall be coordinated with the City of Marco Island and an archeologist. A Vegetation Removal Permit, and any other required permit for site work, will be obtained from the City of Marco Island prior to the clearing of any vegetation.

**4.4 Debris Removal**

Collier County will coordinate the removal of any debris from the site. Although no debris has been observed to date, if debris is discovered, the Collier County Sheriff

community service workers may be enlisted to remove it. If this is not feasible, a contractor shall be contracted to remove the trash.

#### **4.5 Cultural, Historical and Archeological Resource Protection**

The Archaeological and Historical Conservancy (ACH) conducted a phase one archaeological survey on the Karen property in January 2000. They located historic midden features dating to 1,500 B.C. and sections of the historic shell wall extending from Otter Mound Preserve. ACH recommendations in April 2000 for the management of Otter Mound Preserve stipulate that “efforts should be made to minimize impacts to [the parcel’s shell mound] features and the historic shell walls created by Ernest Otter...”. Also, “the general clearing of the parcel and removal of exotic vegetation and trash will require coordination with an archeologist”, and “the Otter shell walls that terrace the ... parcel are historically significant and should be avoided during development.” The County will follow these recommendations for the Karen property and shall cooperate fully with any other direction from the Florida Division of Historical Resources on the protection and management of archaeological and historical resources, per provisions of the Land Development Code Section 2.2.25. The management of the resources present on the Karen property will comply with the provisions of Chapter 267, Florida Statutes, specifically Sections 267.061 2 (a) and (b).

The collection of artifacts or the disturbance of the archaeological and historic sites within the Karen property shall be prohibited unless prior authorization has been obtained from the Collier County Board of County Commissioners and the Department of State, Division of Historical Resources.

#### **4.6 Public Access**

No direct public access is planned for the Karen property. The Otter Mound Preserve, which currently includes public access amenities, sits adjacent to this property. The Karen property will be incorporated into the Otter Mound Preserve and will be accessible via Otter Mound Preserve. Collier County staff will coordinate with the neighbors to the south and east of the Karen property to ensure that vegetation does not block the existing easement.

#### **4.7 Site Maintenance Plan**

Maintenance of the site shall consist of invasive exotic/nuisance vegetation re-treatment and storm debris removal. The property will be monitored on a regular basis to ensure that all historical and archeological sites are sufficiently protected. Collier County shall be responsible for property maintenance with tasks delegated as deemed necessary. Collier County staff shall develop a schedule for routine maintenance activities. The Conservation Collier program will fund any materials or contracted services required for management. Any garbage encountered during regular staff visits shall be removed from the site. Restricted vehicular access and periodic patrols by the City of Marco Island Police will discourage illegal dumping and disposal.

5.0 Exhibits

EXHIBIT 1: Location Map

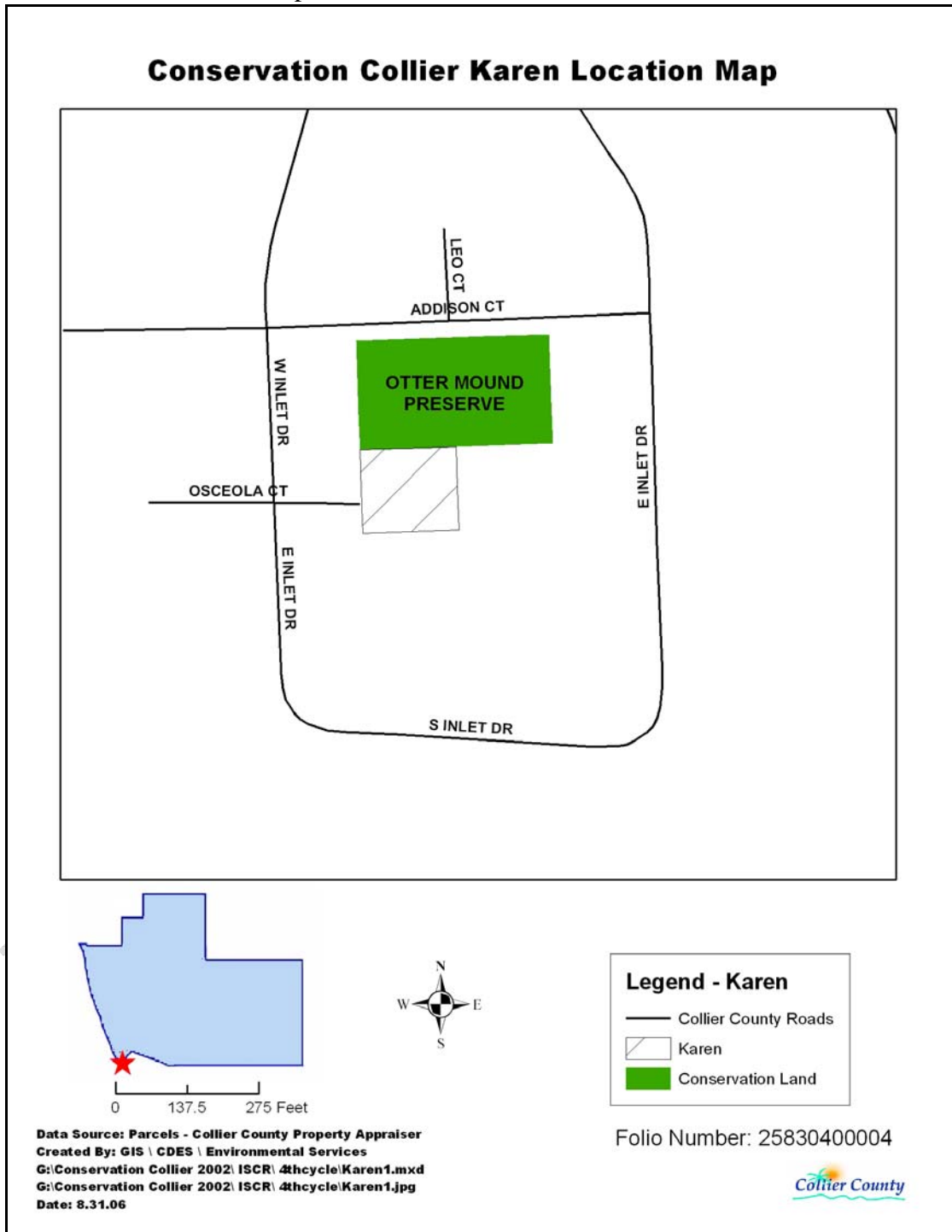
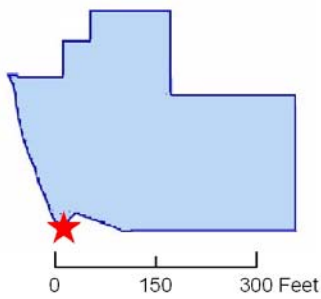
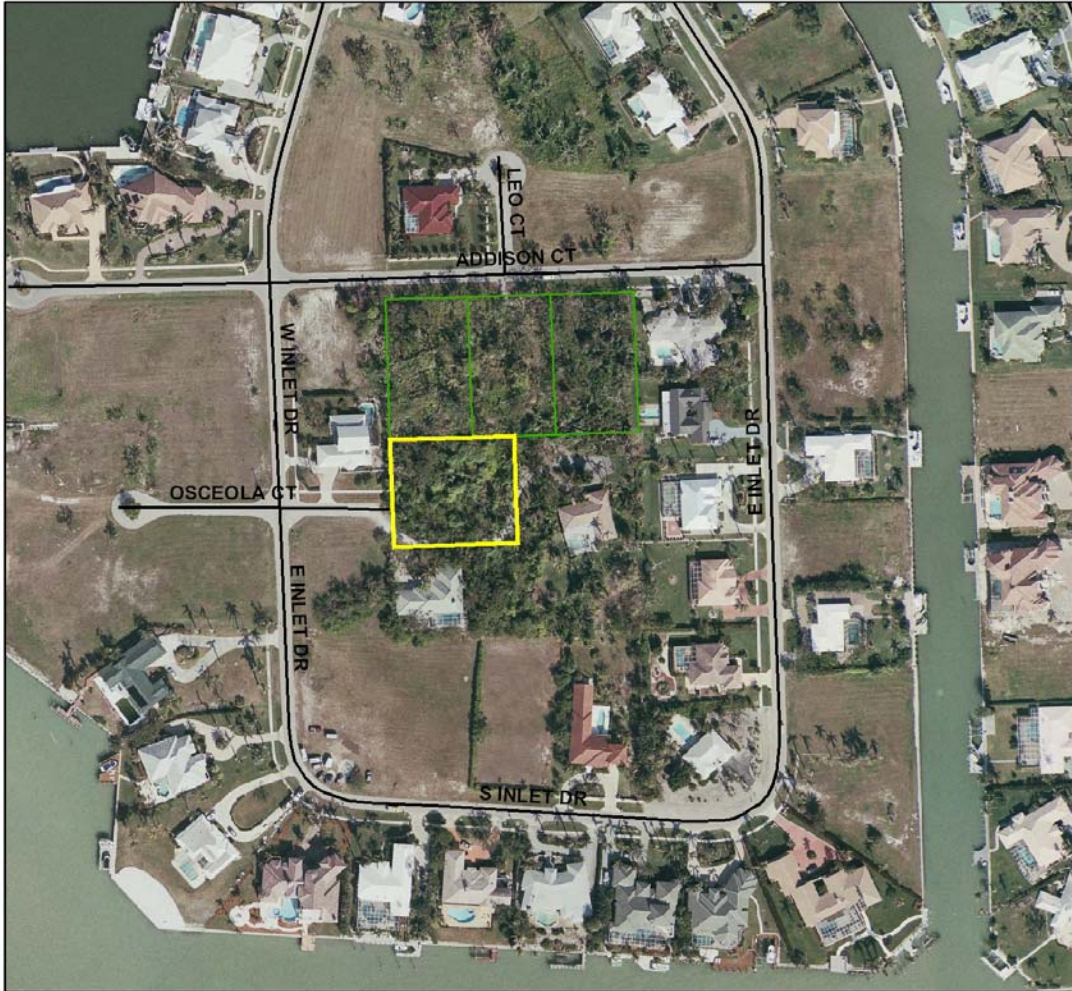


EXHIBIT 2: Aerial Map

### Conservation Collier Karen Aerial Map



#### Legend - Karen

- Collier County Roads
- Karen
- Conservation Land

Folio Number: 25830400004

Data Source: 2006 aeriels adn parcels - Collier County Property Appraiser  
Created By: GIS \ CDES \ Environmental Services  
G:\Conservation Collier 2002\ISCR\4thcycle\Karen2.mxd  
G:\Conservation Collier 2002\ISCR\4thcycle\Karen2.jpg  
Date: 8.31.06





EXHIBIT 3: Ingress/Egress Easement Map

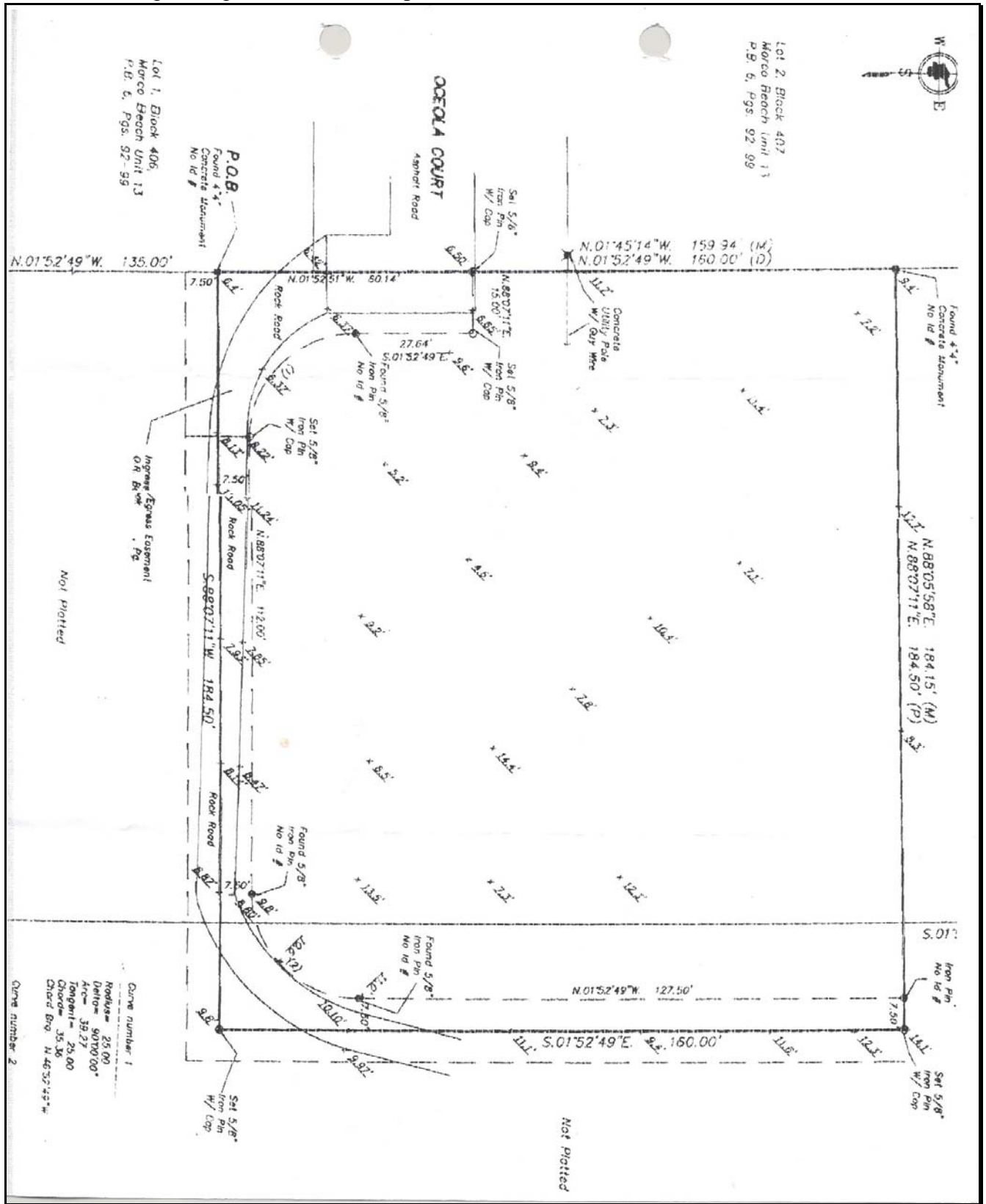


EXHIBIT 4: Estimated Cost Table

Management Element	Initial Cost	Annual Recurring Costs	Comments
Exotics Control	\$15,000	\$5,200	Based on approx. 80% infestation, poison, cut and remove debris
Otter Mound Preserve sign	\$200	n/a	One 3'X1.5' – metal, brown background, uninstalled
Archeological Consultant fees	\$1,400	n/a	\$35.00 per hour – 40 hours during initial exotic removal
<b>Total</b>	<b>\$16,600</b>	<b>\$5,200</b>	

EXHIBIT 5: Implementation Time Line

	S E P 0 7	O C T 0 7	N O V 0 7	D E C 0 7
Install “Otter Mound Preserve” sign	X			
Listed species survey			X	X
Debris removal				X
Initial exotic vegetation removal	WILL PURSUE GRANTS FOR INITIAL REMOVAL			
Completion of Otter Mound final management plan				X

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