

**PARK AND RECREATION ADVISORY BOARD  
REGULAR MEETING  
WEDNESDAY, AUGUST 19, 2009  
7:30 PM  
TOWN OF MALABAR  
2725 MALABAR ROAD  
MALABAR, FLORIDA**

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**AGENDA**

- A. CALL TO ORDER, PRAYER AND PLEDGE**
- B. ROLL CALL**
- C. ADDITIONS/DELETIONS/CHANGES**
- D. CONSENT AGENDA**
  - 1. Approval of Minutes**  
**Regular Park and Recreation Meeting – 7/15/09**  
**Exhibit:** Agenda Report No. 1  
**Recommendation:** Motion to approve
- E. PUBLIC:**
- F. ACTION:**
  - 2. Recommendation to Council to Install Culvert at Road Entrance to 17 Acre Parcel**  
**Exhibit:** Agenda Report No. 2  
**Recommendation:** Discussion and recommendation
  - 3. Re-schedule Cameron Preserve Trail Work Party**  
**Exhibit:** Agenda Report No. 3  
**Recommendation:** Discussion and action
- G. DISCUSSION:**
- H. OLD BUSINESS/NEW BUSINESS:**
  - New Business:**
  - Old Business:**
- I. BOARD MEMBER/STAFF REPORTS:**
  - **Trash Can at North End of Cameron Preserve (Chair)**
  - **Disc Golf Park – paving prospect and/or schedule and cost (Staff)**
- J. ADJOURNMENT**

If an individual decides to appeal any decision made by this board with respect to any matter considered at this meeting, a verbatim transcript may be required, and the individual may need to insure that a verbatim transcript of the proceedings is made (Florida Statute 286.0105). The Town does not provide this service.

In compliance with the Americans With Disabilities Act (ADA), anyone who needs a special accommodation for this meeting should contact the Town's ADA Coordinator at 321-727-7764 at least 48 hours in advance of this meeting.

**TOWN OF MALABAR**  
**PARK AND RECREATION**

**AGENDA ITEM REPORT**

**AGENDA ITEM NO: 1**  
**Meeting Date: August 19, 2009**

**Prepared By: Cynthia Kelley, Secretary to Board**

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**SUBJECT: Approval Park Board Minutes**

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**BACKGROUND/HISTORY:**

Attached are the summary minutes for the following meetings:  
Regular Park & Recreation Board Meeting – 7/15/09

**ATTACHMENTS:**

- Draft Minutes from Park and Recreation regular meeting July 15, 2009

**ACTION OPTIONS:**

Recording Secretary requests approval of the minutes

The following draft minutes are subject to changes and/or revisions by the Park Board and shall not be considered the official minutes until approved by the Park Board.

**TOWN OF MALABAR – PARK AND RECREATION ADVISORY BOARD  
07/15/09 MEETING MINUTES**

This meeting of the Malabar Town Council was held at Town Hall at 2725 Malabar Road.

**CALL TO ORDER** - Meeting was called to order at 7:30 pm by Chair Hans Kemmler. Prayer and Pledge led by Chair Hans Kemmler.

**B. ROLL CALL OF MEMBERS**

**ROLL CALL:**

Hans Kemmler – Chair

Dick Korn, Vice-Chair

Bob Siegmann

Vickie Thomas

Scott Pollard

Maryann Marsh, Alt. #2,

Josh Treadwell, Alt. #1, excused; overseas on TDY

Cynthia Kelley, Recording Secretary

**C. ADDITIONS/DELETIONS/CHANGES:** Kemmler stated that the Eagle Scout is in the audience; he would like to move Discussion item #6 to be heard after approval of the consent agenda. Board members are in agreement with this change to the agenda.

**D. CONSENT AGENDA**

**1. Approval of Minutes**

**Regular Park and Recreation Meeting – 6/17/09**

**Exhibit:** Agenda Report No. 1

**Recommendation:** Motion to approve

**Discussion:** Korn, page 3, 2<sup>nd</sup> paragraph, half way down the page, Kemmler stated that the board should recommend to Council that the fence be approved. Kemmler stated he did not say this; feels this should be stricken from the minutes. Korn stated, page 4, with regards to the deed restrictions of Country Cove, the deed restrictions do not restrict fences. He stated they should reconsider the placement of fences in the community not reconsider the deed restrictions.

**MOTION: Korn/Marsh to approve the minutes from 6/17/09 as with corrections as noted. VOTE: All Ayes with exception of Seigmann, abstained, absent at last meeting.**

**DISCUSSION:**

**6. 17 Acre FCT Land Parcel**

**Exhibit:** Agenda Report No. 6

**Recommendation:** Discussion

**Discussion:** Kemmler stated at the last Park Board meeting, it was suggested that this land could be used as an Eagle Scout project; cut trails into the land and build a chick saw hut and place a kiosk to give information about the area. This property is behind Dr. Leedy's office and access is off of Weber Road. A culvert and driveway would need to be put into place for accessibility to the property. Thomas asked if the land had been given to the Town. Kemmler replied that it is part of the land we have through the Florida Communities Trust; he gave a brief overview of what the Town's obligations are for this land under the Florida Communities Trust; get rid of the invasive

species of trees and plants. They don't check our lands. Korn stated that we applied for this with a contract/grant. He would like the Board to review the application so they have an idea of what can and cannot be done on the property. Kemmler asked Kelley to provide this information to the Board in the next agenda packet. The land is about the same size as the Disc Golf Park. He would like the Board to make a recommendation to Council that a driveway and culvert be placed at the entryway. Korn also stated a gate should be in place as well.

Richard Cameron-650 Hall Road came forward and addressed the Board. He gave a brief overview of the property. He has been cutting and maintaining the property as he has had his livestock grazing in the area; it is also fenced. The area is pretty flat; it has a creek running through it that is sometimes dry due to the lack of rain. The ditch has not been maintained for a period of time. It would seem that the Town is moving towards concrete culverts throughout the Town to keep the erosion of the metal pipes. Marsh made the suggestion to have the Scouts walk back into the property if the culvert and driveway cannot be put in at this time. We could ask Dr. Leedy if they could park cars at her place of business. They usually do work on the weekends, so it won't interfere with weekly traffic. Thomas stated she had heard that culverts can be around \$40,000 to put in. She suggested that a foot bridge be built to access the property. Cameron stated that this is not a permanent culvert and would not be allowed by the Town.

At this time, Kemmler asked the Eagle Scout to come forward. Scott Prasse, 1210 Hollow Brook Lane came forward. Kemmler asked if this would be project he would be interested. Korn also made mention of the Fern Creek Crossing Park that was started with Bobbi Moccia. The Scouts could finish this park as a project as well by adding more native species and putting walk ways in the park. Kemmler asked if this project should take the place of the 17 acres. Korn stated no; it is an additional idea for the Scouts. Prasse stated that this project for the 17 acres sounded good to him. The project has to be completed by August of 2010; this is when he turns 18 years of age.

Korn stated that the Board needs to have a copy of the original agreement so they know what is allowable. Kemmler stated that this will be provided to the Board at the next meeting by staff. Thomas asked about it being ADA compliant for the public. Kemmler stated that buildings need to be ADA compliant; since this is an outdoor facility, it does not need to meet those guidelines. Thomas asked if we have any way to get information to the newspapers to give the Scouts credit for all the hard work they are doing in the Town. This is something that should be looked into.

Kemmler asked the Board, if in the coming month, to see what it would cost to have a culvert put in. This should be an action item at the next meeting. Thomas also suggested this be put on the wish list for Parks & Recreation.

Korn stated the application is the starting point; then we need to get with the Town Administrator with regards to the culvert to see if this is something that Public Works can do. Cameron stated that contact with the Town Administrator is a must for this project

**E. PUBLIC:**

**F. ACTION:**

**2. Recommendation to Council to Install Culvert at Road Entrance to 17 Acre Parcel**

**Exhibit:** Agenda Report No. 2

**Recommendation:** Discussion and recommendation

Discussion: This item was discussed in Discussion item 6. At this time, the Board decided to wait until further research is provided by staff to make a recommendation to Council. A copy of the original application for the grant monies to purchase the land is to be provided to the Board at the next scheduled meeting of August 19, 2009.

**MOTION: NO MOTION MADE AT THIS TIME.**

**3. Recommendation to Council to Pave Entrance Driveway to Disc Golf Park (to be included in next year's budget)**

**Exhibit:** Agenda Report No. 3

**Recommendation;** Discussion and recommendation

Discussion: Kemmler stated that the Board needs to start somewhere. He would like the Board to make a recommendation to Council to add funds in the 2009/2010 FY budget to pave the immediate entrance way to the Disc Golf Park. This area has millings; when you have to speed up a little to get out of the park, the millings are spun out and then maintenance is required to keep the millings in place. He is suggesting that this area of the driveway be paved to keep the millings and maintenance of the driveway. Richard Cameron stated that this is FDOT road and we would need to make sure that their requirements are followed as well.

**MOTION: Korn/Seigmann to recommend to Council to include funds to pave the immediate entrance driveway to Disc Golf Park in the 09/10 FY budget. VOTE: All Ayes.**

**4. Set Date for Cameron Preserve Trail Cleaning Work Party**

**Exhibit:** Agenda Report No. 4

**Recommendation:** Discussion and recommendation

Discussion: Kemmler would like to clear out the trail within the next month. Korn stated that he is only available the weekend of August 29<sup>th</sup>. Pollard and Seigmann stated this would be good for them as well. Thomas stated her husband had also volunteered to help with this project. Kemmler stated that he would provide water for drinking. PW would not be needed for this project; the only thing needed is the tools and they will be provided by the people working on the project.

**MOTION: Seigmann/Thomas to set August 29, 2009 at 8:00 am for cleaning work party for the Cameron Preserve Trail.**

Thomas gave brief over view of preserve. Alligator is gone; trash is increasing, needs to be cleaned constantly; rescued an animal that was hit by a motor vehicle as people are still driving back there. Korn asked if another trash receptacle is needed at the Boundary Trail. Disc Golf Park trash cans have been placed. Thomas reported that rescued animals can be taken to LaCourt Lane.

**VOTE: All Ayes.**

**G. DISCUSSION**

**5. Speedway Proposal in Malabar**

**Exhibit:** Agenda Report No. 5

**Recommendation:** Discussion

Discussion: Kemmler stated that there was a presentation made to Council and P&Z at a joint meeting OF July 8, 2009. Kelley advised the Board that this is brought as a concept only to get a feel for how it would be accepted. No land has been purchased

and no formal package has been submitted to the Town for review. Kemmler stated he wanted the Board to know about this as they were not present for the joint meeting.

Joyce Todd-2920 Rocky Point Road-came forward and addressed the Board. Kemmler stated this was not put on the agenda for people to speak about. She has spoken to everyone on Rocky Point Road and feels that everyone in the area is against having this type of activity in Malabar. She stated that this Board would have the opportunity to say if this would be good/bad for Malabar; she wanted the Board to know her opinion.

**H. OLD BUSINESS/NEW BUSINESS:**

**New Business:** Korn will not be present next month.

**Old Business:**

**I. BOARD MEMBER REPORTS:** None

**J. ADJOURNMENT**

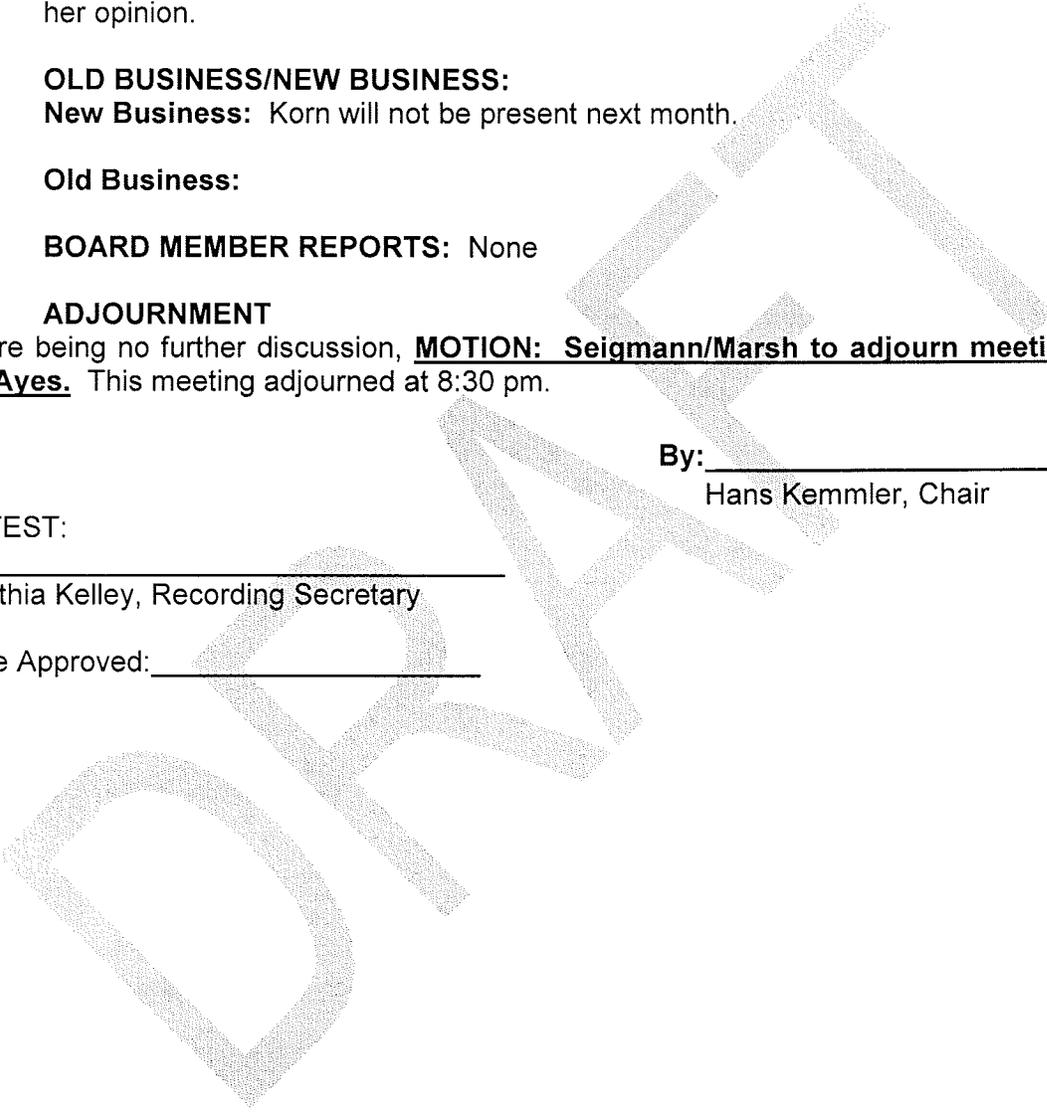
There being no further discussion, **MOTION: Seigmann/Marsh to adjourn meeting. VOTE: All Ayes.** This meeting adjourned at 8:30 pm.

**By:** \_\_\_\_\_  
Hans Kemmler, Chair

ATTEST:

\_\_\_\_\_  
Cynthia Kelley, Recording Secretary

Date Approved: \_\_\_\_\_



**TOWN OF MALABAR**  
**PARK AND RECREATION**

**AGENDA ITEM REPORT**

**AGENDA ITEM NO: 2**  
**Meeting Date: August 19, 2009**

Prepared By: Cynthia Kelley, Secretary to Board

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**SUBJECT: Recommendation to Council to Install Culvert at Road Entrance to 17 Acre Parcel**

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**BACKGROUND/HISTORY:**

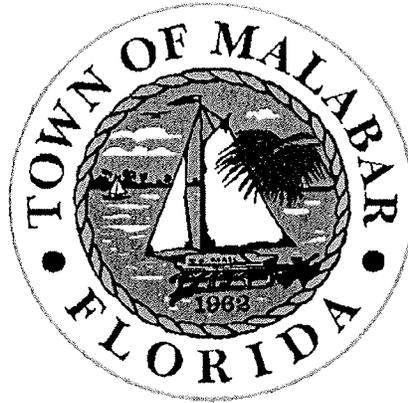
At the last Park Board meeting, there was discussion of a recommendation to Council to install a culvert at the 17 acre parcel on Weber Road. At that time, Dick Korn, Board Member, asked that a copy of the original grant application be provided to the Board for review.

**ATTACHMENTS:**

- Management Plan for Malabar Sanctuary Greenway I and II
- Copy of packet from July 15, 2009 meeting

**ACTION OPTIONS:**

Discussion and recommendation



MANAGEMENT PLAN  
FOR  
MALABAR SANCTUARY GREENWAY I  
AND II

INCLUDING

RICHARD E. CAMERON & VOLUNTEER  
WILDERNESS PRESERVE – 100 acres

FERN CREEK PARK – 1.1 acres

GOLF DISC PARK – 8.48 acres

WEBER RD CONSERVATION – 17 acres

Management Plans for Malabar Sanctuary  
Greenway I and Malabar Sanctuary Greenway II  
were combined in 2000

Original Management Plans were submitted in 1998

Annual Stewardship Reports follow the Management Plan

MANAGEMENT PLAN

FOR

MALABAR SANCTIJARY GREENWAY I AND II  
BREVARD COUNTY, FLORIDA  
FCT project #95-063-P56 and #96-019-P7A

PREPARED FOR THE TOWN OF MALABAR

BY

MARINE RESOURCES COUNCIL  
OF EAST FLORIDA

SEPTEMBER 1998

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## LIST OF EXHIBITS

- A. Map of Combined Malabar Sanctuary Greenway I and II.
- B. 100 Year Floodplain Map of Malabar.
- C. Master Site Plan

## LIST OF APPENDICES

- I. Conceptual Approval Agreements Malabar Sanctuary Greenway I and II.
- II. Species Lists for Turkey Creek and Malabar with Surveys of Listed Species.
- III. Cost Estimates.
- IV. Priority Schedule.
- V. Grant Award Agreement and recorded deed.

MALABAR SCRUB  
Greenway I and II

The following materials are provided as required by Rule Chapter 9K-4, Florida Administrative Code (F.A.C.) as a prerequisite to the acquisition funding effort of the Florida Communities Trust Program on behalf of the Town of Malabar. This management plan will be reviewed and approved by the Staff and Town Council of Malabar. The Town in association with several agencies described in the text will be responsible for the various aspects of management procedures and implementation of the plan.

## I. INTRODUCTION

### A. Combination of Management Plans for Malabar Sanctuary Greenway I and II.

Proposals for land acquisition were submitted to the Florida Communities Trust in the 1995 and 1996 grant cycles. Both projects, Malabar Sanctuary Greenway I (1995) and II (1996) received favorable reviews and approvals for funding. Conceptual Approval Agreements between the Florida Communities Trust and the Town of Malabar were approved in November 1995 (Greenway I) and on April 15, 1997 (Greenway II) (Appendix I). Land acquisition is proceeding for both projects. Since the purpose is to link the two proposed projects via floodplain greenways, this management plan is accomplished by combining planning and management of both. Maps and references will refer to the total Greenway. The distinction for administrative purposes is that Malabar Sanctuary Greenway I is north of Malabar Road on lands surrounding Turkey Creek and its floodplain, and Malabar Sanctuary Greenway II is south of Malabar Road. Three parcels have been acquired in the Malabar Sanctuary Greenway II, one on Weber, one on Corey and the third parcel east of Shiflett Road on Malabar. The project site also includes four parcels along the northern Town boundary located within the Greenway I scope totaling 100 acres. These parcels are on the south side of the drainage canal that borders Palm Bay, and are the key to the connection between the Turkey Creek Sanctuary and the Malabar Scrub Sanctuary. These four properties are also key connections with the 395 acres of Malabar Scrub Sanctuary, managed by the Environmentally Endangered Lands Program (EELs) located just to the east.

### B. Location

The project sites are found in Southern Brevard County, Florida, in the Town of Malabar. The town is located along the west shore of the Indian River Lagoon and east of interstate 1-95. The City of Palm Bay lies immediately north of Malabar with unincorporated County lands to the south.

Tributaries of Turkey Creek form in the southern portion of the Town and flowed, historically, north between a series of ancient dune lines to the main channel of the Creek. Roads, fields, canals, ponds and fill for homesites have altered this natural flow. The project lands are located along the flowway of Turkey creek, surrounding floodplains and uplands (Exhibit B).

### C. Resource Description

Malabar Sanctuary Greenway is comprised of lands in the floodplain of Turkey Creek, adjacent wetlands, and upland ecosystems directly associated with the floodplain. Turkey Creek, a fresh black water creek, extends from wetland headwaters in southern Malabar through the town to join the main creek channel and the Melbourne - Tillman Water Control District to the north. Historically, the low wetland marshes were formed by seepage from Pleistocene sand dunes. This, a series of barriers, restricted flow to the east or west.

The old dune formations of porous fine sand provide the unique conditions described as Florida Scrub or Sand Pine Scrub. Vegetation on the ecosystem of the dunes is adapted to the dry soil conditions, lack of nutrients for plant growth and frequent fires. Several plants and animals, endemic to the scrub habitat, are listed as threatened or endangered because of loss of habitat (i.e. gopher turtle (*Gopherus polyphemus*), scrub jay (*Confradina grandiflora*), and others).

Shallow wetlands of cord grass (*Spartina bakeri*), St. Johns Wort (*Hypericum sp.*), and other herbaceous species collect ground and surface runoff which combine to form small tributaries. Flowing north the dark tannin-rich waters are surrounded by hardwood hammocks of oaks, maples, sabal palms and giant leather ferns (Appendix II).

#### 1. Land Use

Much of the land surrounding the creek was drained for field crops in the 1930s and converted to pasture from the 1940s to the present. Parcels of 10-20 acres were subdivided during the Great Depression as subsistence farms. Since 1970, there has been an increase in the number of density of single family homes encroaching on the floodplain and sand scrub lands.

#### 2. Zoning

Existing zoning for the projected Greenway lands is primarily rural or single family residential of various densities. Two parcels on the southwestern corner of Cory Road are zoned office institutional. The Brook Hollow reserve area (parcel 12) is listed as institutional on the zoning map.

The Town of Malabar will submit to the Department of Community Affairs a local government Comprehensive Plan Amendment in July to include the land use classifications for conservation, preservation and recreation/open space. Once the Town adopts this new land classification, the Town will change the Future Land Use and zoning designation of all acquired parcels within the Malabar I and Malabar II project sites to conservation, preservation or recreation/open space.

#### D History of the Project

The vision held by the people of Malabar is that of a rural community with open space in native vegetation with opportunities for small farms, gardens, pastures and woodlands. Recreation in horseback riding, walking, and boating and nature study are actively pursued by the citizens of Malabar.

Issues facing the Town include:

- (1) buffering the slow pace of life in Malabar from the intense urbanization of neighboring Palm Bay;
- (2) drainage and flooding problems caused by floodplain development and drainage diversions;
- (3) maintaining the low tax base and limiting commercial services to the minimum needed for rural development.

In 1995, citizens serving on the Malabar Parks and Recreation Board received the notice of Florida Communities Trust funds available to towns of less than 10,000 people. The Board requested assistance from the Marine Resources to prepare a proposed - Malabar Sanctuary Greenway 1. The Turkey Creek floodplain lands were the focus because they are contiguous to the Turkey Creek Sanctuary in Palm Bay, are often flooded and form a

continuous greenway link between the Palm Bay Park and County owned endangered lands (432 acres) the Malabar Scrub. Parcels on two tributaries of the Creek were described in the proposal delivered and approved by the FCT Project Selection Committee. The Conceptual Project agreement was finalized in November 1995 and amended on May 30, 1997 and August 15, 1997.

The FCT proposal for the Malabar Sanctuary Greenway II was submitted on August 2, 1996, and approved for acquisition. The Conceptual Approval Agreement was signed on April 15, 1997. Addenda were executed; I and II on October 15, 1997, III on November 10, 1997, IV on March 10, 1998 and an extension granted on March 2, 1998.

## **II. PURPOSE OF THE PROJECT**

### **A. Rationale for Acquisition**

Malabar is a community with commitment to a rural lifestyle and concern for natural land use patterns. This it is appropriate to accommodate open space, flood protection, recreation and resource protection in a multiple use land acquisition program. The underlying impetus for the greenway is preservation of a life style important to the people of the town. Equally important is the urgent need to provide not only flood protection and drainage but also responsible water management.

The rationale is to acquire floodplains, wetlands and wildlife corridors to reverse the development pattern of encroachment on drainage ways and fragile ecosystems while providing open space, urban buffers and recreation opportunities for the people of Malabar.

The rationale of the project is to create a greenway corridor in the Town of Malabar, Florida, for recreation, open space buffers, habitat protection, and stormwater control. This corridor will provide a buffer between rural and urban land uses. It will link the 395 acres of publicly owned scrub habitat in Malabar to 113 acres of sand pine and riparian forest in the City of Palm Bay.

### **B. Comprehensive Plan Directives**

Acquisition of land and establishment of the Malabar Sanctuary Greenway is an essential element in accomplishing the goals and objectives of the Town of Malabar's Comprehensive Plan.

#### **Conservation**

Goals, objectives, and policies of Malabar's Comprehensive Plan address several factors furthered by the acquisition of the greenway property: water quality, stormwater and floodplain management, wetland protection, maintenance of native vegetation and wildlife habitat and environmentally sensitive lands.

Water quality of the Indian River Lagoon and its tributary, Turkey Creek, is protected through Objective 6-1.2 and Policy 6-1.2.1, which calls for stormwater control and management and Section 1-8.7 of the Land Development Code that sets stormwater design criteria. Agricultural land use activities like those surrounding the Greenway are directed by Policy 6-1.2.2 not to interfere with wetlands and the lagoon watershed. New developments are charged with protecting shorelines from erosion and water quality impacts (Policy 6-1.2.40. Additionally, Land Use Policy 1-3.1.3, calling for lower densities of development

along the creek and Policy 1-3.1.6 directs that performance standards are implemented for land development activities.

Several objectives and policies address floodplain development and management. Objective 6-1.3 directs the Town to protect the 100-year floodplain, its storage capacity and native vegetation. The Malabar Sanctuary Greenway will preserve the 100-year floodplain of two branches of Turkey Creek and the natural hardwood hammocks surrounding the streambed. This furthers Policy 6-1.3.1 and the Land Development Code that restrict development in the floodplain, as well as implements Policies 6-1.3.2 and 6-1.8.2 in the purchase and/or acquisition of floodplains. Policies 6-1.3.2 and 6-1.4 to protect and preserve wetlands are also reflected in the Town's adopted Floodplain Ordinance (92-4). Policy 4-3.1.3 directs use of natural corridors and natural lands for stormwater drainageways. The Malabar Master Drainage Plan and Land Development Codes define this policy in engineering design and regulation.

Conservation Objective 6-1.7 directs the Town to protect native vegetation, particularly hammocks and wetlands. Hammock vegetation, depression marshes (including the creek bed) and mesic flatwoods buffers are protected in the proposed Malabar Greenway. The Town's Landclearing and Tree Ordinance 90-5 and Development Standards also implement this objective.

The proposed Malabar Greenway is designed to incorporate fish and wildlife habitat for indigenous as well as rare and endangered species. Objective 6-1.8 (protection of wildlife) and Policy 6-1.8.1 (restriction of development in wildlife habitat) are implemented in the Land Development Code and Ordinance 94-3 which limits densities on the Atlantic Coastal Ridge, provides for protection of scrub jay habitat and adopts a scrub jay habitat policy. The Greenway extension proposed for Malabar extends and augments the green corridor from the Malabar Sanctuary Greenway I (124 acres), to the 342 acre County-owned scrub habitat to the sand pine scrub of the Turkey Creek Sanctuary on the Atlantic Coastal Ridge.

Objective 6-1.9 (the protection of environmentally sensitive lands) are augmented by Land Use Policies 1-3.5.1 and 1-3.5.4 and all are furthered by the proposed greenway. The Florida Natural Areas Inventory (FNAI) finds the scrub, hammocks and depression marshes of Malabar imperiled globally and/or rare throughout the state. The Brevard County Environmentally Endangered Lands Program supports efforts to protect scrublands and create greenway corridor connections between existing sanctuaries.

### **Coastal Management**

Goals, objectives and policies for wetland protection, shoreline uses, and lagoon watershed management coordinated with the city of Palm Bay are addressed in the Malabar Comprehensive Plan and are implemented through this proposal and other community initiatives.

Wetland protection is directed by goals of both the Coastal Management and the Future Land Use elements. Objective 5-1.1, Policy 5-1.1.1 and Land Development Codes

protect coastal wetlands, and restrictions directed to ecotones surrounding wetlands. Policy 5-1.1 directs protection of wetlands from exotic plant infestation. This project proposed removal of Brazilian pepper trees from the floodplain and the tributary of the wetlands.

The Coastal Management element of Malabar's Comprehensive Plan, just as the Conservation Element, includes policies to promote fish and wildlife (5-1.1.6 and 6-1.8.2). This is reiterated in the Future Land Use Policy 1-3.5.4, and more fully described in the preceding section of this summary.

One purpose of the Malabar Sanctuary Greenway is to provide for open space access by the public to shoreline and waterways while protecting natural ecosystem function (Refer to Project Purposes and Goals above). Malabar Comprehensive Plan Policy 5-1.2.1 described access to shoreline uses and Policy 7-1.4.1 directs the Town to provide access points to Turkey Creek. Objective 1-1.4 applies the Town's budget process to land acquisition for recreation and open space.

Several elements of the Town's Comprehensive Plan calling for coordination between agencies are fulfilled by the Greenway proposed. Policy 1-3.10.1 directs the Town to coordinate with Palm Bay in the management of coastal resources and water of the State, i.e. Turkey Creek and the Indian River Lagoon. This is similar to directives for intergovernmental coordination in Policies 6-1.11.1 and the Intergovernmental Element.

#### **Recreation and Open Space**

The Town of Malabar has few recreational facilities but a wide range of private traditional recreation activities: horseback riding, hiking, swimming, and boating. Existing trails and access points to the natural areas and waterways have traditionally been used on the private property included in the Greenway Acquisition Program..

This project fulfills several policy initiatives to adjust land use and supply of recreation amenities to protect and maintain the heritage of this outdoor recreation. Several recreation policies are incorporated into the Future Land Use Element summaries of Malabar's plan.

Policies 1-1.5.1 and 1-2.5.1 direct the establishment and protection of natural and man-made corridors in Malabar. Land use codes require screening and buffering between urban and rural development (Land Use Code 1-7.2.F) and means to ensure that adjacent land uses are compatible. Objective 1-3-1, that physical improvements be coordinated with natural systems, is supported by Policy 7-1.3.2, which directs that recreation, and access facilities be compatible with the character and quality of natural resources. This project maintains natural corridors along Turkey Creek and between the scrub sanctuaries.

Objective 7.1.5 and Policy 7-1.5.3 of the Recreation and Open Space Element are fulfilled by bringing together a cooperative of public and private agencies to design, implement and manage the Greenway. The greenway extends into Palm Bay and is integral to the recreation and floodplain management strategies of that adjacent city. The City of Palm Bay,

Brevard County and the Town of Malabar are working cooperatively together in management of this integral open space corridor.

### C. Comprehensive Plan Changes to Accommodate the Plan

The town has committed to amendments to the Comprehensive Plan on those parcels acquired for this project. Those changes will be made following the final purchases by FCT.

### D. Goals and Objectives of the Management Plan

#### 1. Acquisition Goal

The goal of this project is to create a greenway corridor in the Town of Malabar, Florida for recreation, open space buffers, habitat protection, and stormwater control.

#### (a) Objectives

- To extend and augment the existing greenway. Linking together 432 acres of County owned scrub habitat in Malabar to 113 acres of sand pine and riparian forest in the City of Palm Bay. The 290 acres of creek bed and hammock in Malabar Sanctuary Greenway I are extended to the 140 acres of Malabar the only piece of publicly owned green space in the Town south of Malabar Road. The Greenway connects to the Malabar Scrub-Valkaria Scrub wildlife corridor.
  - To reduce flooding and stormwater problems in Malabar through environmentally viable floodplain and wetland management.
  - To protect the water quality of Turkey Creek and the Indian River Lagoon by acquiring floodplain lands for stormwater storage, sediment control, and nutrient uptake.
  - To create wildlife corridors while protecting habitats of rare and endangered species
  - To protect areas of potential potable water for the Town of Malabar and the city of Palm Bay.
  - To provide greenway buffers between rural and urban land uses in Malabar.
  - To acquire for public use, lands for recreational opportunities for the people of Malabar, Palm Bay, and the region.
- #### 2. Natural Resource and Outdoor recreation.
- To maintain and restore natural vegetation and habitat to the shoreline, floodplain and surrounding uplands of the Greenway.
  - To preserve the open space and rural character of the community and provide for recreation access by trails and bridle paths between rare ecosystem wildlife refuge and park lands.
  - To provide an enriching outdoor experience for hikers, horseback riders and cyclists.
  - To maintain the greenway system for multiple uses, stormwater and flood management, recreation, habitat protection and open space.

- To remove exotic plants from the greenway and enhance the succession of natural habitats.
- To conduct vegetative and plant species surveys of the Malabar Sanctuary Greenway prior to each development and on an annual basis to ensure protection, restoration and preservation of the acquired lands.
- To manage the lands and waters of the Greenway to optimize habitat for listed wildlife species including scrub jays, alligators, gopher tortoise, indigo snake and wading birds.

### 3. Management

Goal - to develop and manage the Malabar Sanctuary Greenways (I and II) for maintenance of natural ecosystem function of existing habitats and species while buffering rural and urban landuses, providing for water management and maintaining and extending trails and paths for recreational use.

#### Objectives:

- To install and maintain natural flow patterns and ecosystems within the floodplain of Turkey Creek.
- To utilize the floodplain storage and conveyance capacity within a natural hydroperiod for water quality improvement and infrastructure flood protection.
- To maintain primitive trails and bridle paths connecting parks, parking areas and rural land uses.
- To establish a system of volunteer groups to assist the town in planning and management of trails.

#### E. Commitment to and Provision of FCT Approval and P-2000.

In executing Conceptual Approval Agreements #95-063-P56 and #96-019-P7A enclosed as Appendix I, the Town of Malabar has committed to conform to the plan put forward in those documents. The 14 conditions particular to the project site on pages 13 and 14 of the agreement were part of the agreement and will be addressed in description of Key Management Activities (Section IV of this Plan).

#### F. Identification of the site.

On all signage, literature, education materials and media communication, the Malabar Sanctuary Greenway will be identified as having been purchased with funding from the Florida Communities Trust and the Town of Malabar. Signage and other written media will be so designed to inform visitors that the site is publicly owned, open to the public and operated for natural resource conservation and water and wetland management.

### III. SITE DEVELOPMENT, IMPROVEMENT AND ACCESS.

#### A. Approvals from FCT.

In keeping with the contract between Florida Department of Community Affairs, the Town of Malabar will request and seek approval from FCT before undertaking any site alterations or physical improvements other than those described in the Approved Management Plan.

#### B. Existing Improvements

The lands approved for purchase in Malabar Sanctuary project I and II border and surround tributaries of Turkey Creek. The northern portion of the site connecting the Brevard County Malabar Scrub to the City of Palm Bay Turkey Creek Park is bordered by a drainage canal within and maintained by the City of Palm Bay. An access road for maintenance parallels the ditch. A series of trails used by hikers and off-road vehicles extends through the four parcels that make up the east-west corridor. Most have been used for field crops or unimproved pasture in the past. The lands are wetlands and hammocks fenced in and in some cases, drained by field ditches. Photographs made a part of the land acquisition plan show barbed wire fence lines, gates and corrals common to small ranching operations. One house exists on parcel 254 of the Malabar Scrub Sanctuary II project and one in the Malabar Scrub Sanctuary I.

#### C. Proposed Improvements

The purpose of land acquisition in Malabar Scrub Sanctuaries is to maintain and preserve the natural character of the flood plain making it accessible for the people of the community. Therefore, only minimal improvements are proposed. The properties along the canal in Malabar Greenway I will be made accessible through a series of hiking and bridle trails, some already established, between Malabar Community Park, Turkey Creek Sanctuary, Malabar Scrub Sanctuary, two neighborhoods and private landowners. This will be done through the cooperation of the Town of Malabar, Brevard County, the City of Palm Bay and the local Homeowners Associations. Signage and parking will be provided at both Malabar Community Park and Turkey Creek Sanctuary. The Sand Hill Trail will also be developed along Marie Street, both north and south of Malabar Road to provide linear trail connectivity between the Malabar Scrub Sanctuary I project and the EELs property and the Valkaria Scrub Refugia in south Brevard County. Please see Exhibit "aa" to see how these all tie in together. The two houses that presently exist on parcels within the two Malabar Scrub Sanctuary projects will be used for rest areas, nature education centers or for passive recreation. One may be used to highlight the history of Malabar.

Existing fencing would be maintained and signage will be erected at the link to the Malabar Community Park, Malabar Road and Cory Road, and at each of the major park access points. As of September 1, 1998, the Town of Malabar has not allocated funding in its Capital Improvements Program for Sanctuary improvements, since properties have not yet been acquired. The local cycling groups, Equestrian Clubs and environmental and hiking clubs support funding for improvements through the Florida Recreation and Development Program, and volunteer programs. The Florida Trails Association will guide trail layout, blazing and maintenance.

#### D. Land Alterations Related to Listed Species

The purpose of the Malabar Greenway is to provide habitat for several endangered species. Since the project calls for restoration of the floodplain wetlands, the project will improve habitat for sandhill cranes, caracara and other birds seen in open marshes and flood plains of South Brevard County. Bald eagles nesting in Malabar, although not on this site, will have improved foraging and feeding grounds.

Improved water management practices, the floodplain berm and retention/detention facilities will protect the State Manatee Sanctuary downstream in Turkey Creek. A scrub jay management program, developed by Brevard's Environmental Endangered Lands Program is the model for Malabar's plans of the Greenway. All Sanctuary Greenway plans will be coordinated and addressed cooperatively with the Brevard County scrub jay protection plan.

#### E. Permits Required

Establishment of trails and signage will have minimal impacts on the natural environment. Stormwater improvements will re-establish wetland and creek hydroperiod. Proposed improvements may require contact or regulation by the following agencies:

1. Malabar City Codes and Land Use Plan;
2. St. Johns River Water Management District - Stormwater Management,.
3. Florida Department of Transportation - Malabar Road culverts;
4. Florida Game and Freshwater Fish Commission - endangered species;
5. Brevard County Environmentally Sensitive Lands Office - use of trail along boundary of the Malabar Scrub Lands;
6. U.S. Fish and Wildlife Service Endangered Species review.

Prior to initial construction copies of all permits will be submitted to the Florida Community Trust office for review.

#### F. Signage

Signage will be provided at Cory and Malabar Roads, the Malabar Community Park, the bridle path trail head and at the nature education center and rest areas. Trail markers will indicate the trail and direct users to the appropriate path.

All signage will acknowledge purchase of the Malabar Sanctuary Greenway by the Florida Communities Trust through the cooperation of the Town of Malabar, the Marine Resources Council, Brevard County, and the City of Palm Bay, in cooperation with the St. Johns River Water Management District. The configuration of the land finally purchased and the establishment of conservation easements with private land owners will determine the final signage placement.

## G. Access

### 1. Parking

Space for 10 horse trailers and parking for hikers (10) will be provided at Cory Road so that horses and riders can access the bridle path on the east side of Turkey Creek Channel. Existing parking facilities at the Turkey Creek Sanctuary Park in Palm Bay and at the two rest area/education centers, each providing parking for fifteen cars. These facilities provide trail heads for the bridle path, cycling route and walking trail. All parking areas shall incorporate pervious materials, wherever feasible.

### 2. Walking Trails

A marl path and cleared trails will be developed in concert with the flood plain management plan designed to establish the hydroperiod of Turkey Creek. The exact location will be established based upon elevations established. Walking trails will also be accessible to all private land owners bordering the greenway through individual paths to the trail and the walking trails from the Turkey Creek Sanctuary Park and City of Palm Bay neighborhoods.

The trail systems will be placed on a floodplain berm designed as part of the water management system. On some reaches of the berm which are twenty-four feet wide, a ten foot portion will be prepared for cycling and a slope slightly below will serve as a separate walking path. The slopes will be vegetated as a buffer between uses. This berm would allow restoration of a wetland parcel located at the corner of Malabar and Weber Roads (See Map 1b).

### 3. Bicycling

In cooperation with the local Cycling Club, a trail will connect to an existing though unauthorized bicycle trail from Malabar Woods Road in Palm Bay. Following an existing canal maintenance road east, the trail will follow the fence line of the Brevard County Malabar Scrub lands to the Malabar Community Park or south to a bike way currently being developed. The new greenway trail not a part of the project, leads from Malabar, south on Marie Street, around Goat Creek in Valkaria and then to Grant, Sebastian and ultimately to the Florida Department of Environmental Regulation large holds, the Sebastian River Buffer Preserve. Bicycle racks will be provided at appropriate locations at the Project Sites. The bike park on the south side of Malabar road (See Map 3b) requires a crossing at Malabar Road. The Department of Transportation has already projected a plan for a stoplight at this site.

## H. Easements, Concession and Leases

There are no proposed or existing utility or road easements for the Malabar Sanctuary Greenway. If easement concessions or leases are proposed, FCT will be notified prior to any contract agreements. The town will provide 60 day prior written notice and information regarding any lease of any interest, the operation of any concession, any sale or option, any management contracts for the Project Site, and any use of the Project Site by any person other than in such person's capacity as a member of the general public.

## IV. KEY MANAGEMENT ACTIVITIES

### A. Maintenance

Activities to ensure trash removal and upkeep of the site and the Town of Malabar will direct facilities in cooperation with volunteers. Groups for each special interest trail will lead routine monitoring of trails and sponsor clean up and work days. Brevard County cycling department, clubs and equestrian groups will be augmented by homeowner's organizations for neighborhood sections of the trails. The Malabar Public Works Department with guidance and cooperation from the St. Johns River Water Management District will oversee facilities associated with stormwater and flood plain management

No public access roads will be maintained on the greenway. Existing fences discourage dumping of trash and other hazardous materials. There are no contemplated service contracts with private concerns anticipated. The town of Malabar has a certified HAZMET Team to address any release of toxic substances into branches of the Creek

### B. Security

Posted "no trespassing" signs are already positioned on several of the perimeter fences of the project sites. These and others will restrict access to managed trailheads and rest areas. Obstacles to vehicular traffic will be placed where unapproved access exists or develops. The Brevard County Sheriff Deputy stationed at the Malabar Town Hall near the site will patrol the greenway. Neighborhood Watch programs for the two nearby subdivisions will assist in surveillance.

In addition, the Malabar Fire Department is located adjacent to the Malabar Community Park, a trailhead for the cycling and walking trail Fire Department personnel and volunteers will be available in case of emergencies.

### C. Staffing

The trails are to be minimally improved and staffed. The Malabar Parks and Recreation Board will assist in planning, policy and management of the greenway. Staff from the Brevard County Environmentally Sensitive Lands program who manage the adjacent sand scrub preservation area will consult with the City Manager and Recreation Board in conservation matters. The Public Works Department under the direction of the City Manager will handle flood and drainage in the floodplain lands

Volunteers from homeowners groups, schools and trail users will conduct regular surveillance of the trails and schedule clean-up days. Park Rangers from the Turkey Creek Sanctuary Park conduct tours to the project sites. Additionally, they conduct regular surveys of flora and fauna in both Palm Bay and Malabar.

#### D. Natural Resource Protection

##### 1. Natural Resource Assets

The Malabar Sanctuary Greenway includes the small tributaries of a black water creek and surrounding wetlands. Depending on the elevation and slope of the terrain, the streambeds are fringed by hardwood hammocks and/or cabbage palms. Field ditches from unimproved pastures have drained some parcels.

The Management Plan for the Malabar Sanctuary Greenway focuses on reestablishing and maintaining the natural hydroperiod and hence the ecosystems dependent on that seasonal fluctuation of the watertable.

Education and passive recreation programs will be developed in concert with the Brevard County Environmentally Endangered Lands Program, the Turkey Creek Sanctuary Staff and the St. Johns River Water Management District. The Malabar Parks and Recreation Board who conceived this project will act in an advisory and/or implementation support group.

The creekbed and banks of the Turkey Creek tributaries will be maintained in pristine condition. Debris or trash will be removed from the waterway and banks but natural snags will not be disturbed. As advised by representatives of the St. Johns River Water Management District, channels and field ditches will be diverted, blocked or stepped through wetlands before discharge into the natural channels.

All recreation improvements will be designed to avoid erosion of the creek banks. Minimal channel crossings will be designed and located so as to maintain the natural contour and bottom of the stream and the unimpeded flow of water in the 1 in 100 year storm design.

The hammocks surrounding the creek and headwaters will be managed to accomplish progression to full mature, hardwood wetlands. Exotic plants – Brazilian pepper and Meleluca – will be removed and appropriate understory plants and shrubs introduced. Volunteer and neighborhood groups will undertake this project. Their efforts will be augmented by use of work crews supervised by County Sheriff Deputies.

Pastures within the project are primarily drained freshwater wetlands. In dealing with the problem of decreasing flows to the Turkey Creek Sanctuary, these lands will be reflooded or used to absorb stormwater runoff. Thus, wetland habitat function will result. The Water Management District and the Archbald Biological Station will provide guidance for this

program. The Station has developed strategies for conversion and use of prairie pastures to restore wetland function. The staff of the Brevard Environmentally Endangered Lands program is also an asset

Water quality of Turkey Creek is also addressed by the Management Plan. The Water Management District, the Melbourne Tillman Water Control District and Indian River Lagoon National Estuary Program have programs in place to decrease nutrient and sediment loads from the Creek into the Indian River Lagoon (an Estuary of National Significance). The Water Quality Monitoring program of the Marine Resources Council has established sites and analysis programs for turbidity, dissolved oxygen and other parameters.

## 2. Survey - Base Line for Plants and Animals

A survey and inventory of natural communities, processes and species will be undertaken with the cooperation of the professional biologists and rangers from the Turkey Creek Sanctuary (downstream from Malabar). The survey of vegetative communities and plant species on the Project Sites will be used to locate physical improvements in areas that will not adversely impact these resources. These studies and monitoring programs will be augmented with support from the U.S. Fish and Wildlife Service, Florida Tech and the Marine Resources Council and Florida Native Plant Society.

## 3. Protection of Endangered Species

The Malabar Sanctuary Greenway contains critical areas for both the Florida manatee and the Florida scrub jay. The tributaries of the creek in the Malabar Greenway are too small and shallow for inclusion by manatees. However, the improvements to hydroperiod and water quality to the main body of the creek area will enhance the stability of the state manatee sanctuary as described by the U.S. Fish and Wildlife Service.

The scrublands of the greenway will be managed with the adjacent Brevard County Scrub Preservation area. Exotic plants, trash and other debris will be removed. Hence the addition and enhancement of these lands will positively impact the other listed species associated with scrublands (i.e. gopher tortoise, indigo snake and others). The Town shall coordinate with the Game and Fresh Water Fish Commission for appropriate guidance, recommendations, and necessary permits to avoid impacts to listed species

## 4. Protection of Imperiled or Critically Imperiled Vegetative Communities

The blackwater streams are classified as S2 in Florida, threatened because of rarity and vulnerable to extinction through much of its range. The description of natural community's protection previous in this plan describes the method and strategies for protecting and increasing the total area of the creek bed, stream banks, bottom and fringing wetlands.

Scrub lands are recognized by the Florida Natural Areas Inventory (FNAI) as imperiled both globally (G2) and statewide (S2). The scrub lands in the Malabar Greenway I proposal are ranked highly in the studies of scrub jay habitats by the Brevard County Environmentally Endangered Lands Program. These lands will be surveyed and delineated for preservation. Minimal use of the site for recreation is planned with passive recreation permitted only along habitat boundaries or minimum links for trails. The three parcels located south of Malabar road do not contain any scrub habitat. Any Scrub Management would be coordinated through the Brevard County Environmentally Endangered Lands program.

## 5. Geologic Features

The significant topography and hydrology of the Malabar Sanctuary Greenway will be preserved. No mining or excavation of the typical white porous sands, which underlie the scrub habitat, will be permitted. Paving and hardening of ground surfaces will be allowed only for emergency access or fencing of restricted areas.

## 6. Protection of Surface Water, Ground Water and Hydrology

Since the purpose of this project is to reclaim the floodplain of Turkey Creek and restoration of natural hydroperiods of adjacent wetlands, preservation of the scrub ecosystem also ensures maximum percolation into the shallow water aquifer. This aquifer is the source of surface water to the wetlands during spring droughts. The aquifer is the only source of drinking water for the Town of Malabar. The aquifer also supplies a series of wells which provide water to the utilities service for the City of Palm Bay.

No impervious surfaces are planned for the scrub lands. Trails and access may be stabilized with marl. No water wells will be drilled on the scrub sites.

The surface water for Turkey Creek will be protected by trash removal and bank revegetation. Field ditches and channels will be redirected through wetlands and/or retention-detention facilities. The exact configuration will be developed with the guidance of the St. Johns River Water Management District.

## 7. Prescribed Burns

On scrub communities, fire is a naturally occurring process which maintains the integrity of the ecosystem and its associated flora and fauna. Since the scrub lands in Malabar are so intricately associated with those of the Palm Bay Turkey Creek Sanctuary and the Brevard County Malabar Scrub, all fire management strategies will be co-ordinated and initiated by those agencies. Professional biologists and natural resource managers staff both. Thus, the trained staff of the adjacent properties will direct the plans for prescribed burns. The Malabar Fire Department and the Forestry Service will actively support any planned burns with personnel and equipment. The Town shall coordinate with the Division of Forestry and the Game and Fresh water Fish Commission on the development of a Prescribed Burn Plan for the scrub habitat on the Project Site.

A Fire Management Plan will include co-operated management agreements with local, state and federal agencies. Measures to protect the preservation areas in both Palm Bay and Malabar will be developed. Likewise, safety measures for surrounding homes and subdivisions will be strictly observed. If safety of residential areas is a significant possibility, alternatives to prescribed burning will be explored.

## E. Resource, Restoration and Enhancement

### 1. Exotic Plant Removal

Brazilian pepper trees have invaded ditches and roadside channels. Work crews supervised by the Brevard County Sheriff's Department will remove them from the project areas. This effort will be augmented by the efforts of a Malabar Pepper Buster program, coordinated by Malabar Parks and Recreation committee.

Melaleuca trees have become prevalent on one site. The Sheriff's Department work crews will remove these. Cleared sites will be revisited every six months until removal of regrowth is assured.

### 2. Floodplain Wetlands

In areas where exotic plants, trash and debris are removed, native plants, seeds, seedlings or plants will be introduced. In some areas where hydroperiod is restored, native species will be allowed to establish themselves and only invasive exotics and non natives will be removed.

### 3. Revegetation

New plantings at greenway entrances, trailheads and as buffers between residential and recreation lands may be necessary. The Florida Native Plant Society, Florida Trails Association and other groups will cooperate in revegetation projects.

## F. Archaeological and Cultural Site Elements

There are no known archaeological sites on any of the greenway tracts. Culturally, the lands of the greenway have been traditionally used for small farms and cattle pasture. The survey team of the Florida Anthropological Society will make an assessment of the site. If any artifacts are found, a thorough inspection of the developed area will be made. State of Florida guidelines and protocols will be used to report and protect archaeological or cultural resources. All survey results will be submitted to the Florida Department of State, Division of Historical Resources, Chapter 267, Florida Statute [sections 267.061(2)(a) and (b)] will guide management of archaeological and historic resources.

## G. Coordination of Impacts to or from Adjacent Landowners

Homeowners and city and county public lands adjoin the Malabar Sanctuary Greenway. The Greenway, a link between the County Scrubland preserve and Palm Bay Turkey Creek Sanctuary is itself a coordination strategy. As described in previous sections, surveys, monitoring and recreation and education programs will be managed cooperatively. The purpose is to create a team of professional and volunteer staff to implement this management plan. Neighborhood associations on subdivisions bordering the trails will be included in planning, surveillance and special projects for reaches of the trails near homes.

## H. Greenway Management

The Town Council will formally incorporate the project site parcels into the Town's greenway network. The Site on Weber Road connects the two Phases of the Greenway together. The Site south of Malabar Road and east of Shiflett Lane will eventually link back to the bike trail on Marie street connecting it with another greenway project. As described in previous sections, surveys, monitoring and recreation and education programs will be managed cooperatively. The purpose is to create a team of professional and volunteer staff to implement this management plan. The Town of Malabar, the City of Palm Bay and the Brevard County Environmentally Endangered Lands Program will coordinate to develop and implement a resource management strategy to protect and manage the separate parcels of greenway. Neighborhood associations on subdivisions bordering the trails will be included in planning, surveillance and special projects for reaches of the trails near homes.

## V. COST ESTIMATES AND FUNDING SOURCES

### A. Cost Estimates

The funds for implementing the Malabar Sanctuary Greenway plan will be derived from the Capital funds of the city augmented by volunteer labor, donations and grants from local, state and federal agencies. The estimates of project costs appear in this document as Appendix III. Security staffing will be provided by the Brevard County Sheriff's Department; emergency services by the Malabar Fire Department and canal and creek bed maintenance by the City Drainage Department and St. Johns River Water Management District.

### B. Funding Sources

The Town of Malabar will allocate Capital funds for the Malabar Sanctuary Greenway in the budgeting process in 1999. Grant proposals will be prepared to the following agencies and funding programs.

- Federal Emergency Management Agency (FEMA) - the Town Manager is in negotiations with FEMA to improve stormwater management in Malabar's branches of Turkey Creek. Aspects of the Sanctuary plan are consistent with the FEMA proposals.
- St. Johns River Water Management District - Conceptual plans for stormwater and floodplain management on and adjacent to the Turkey Creek tributaries finds for construction of the floodplain berm topped by trails have been discussed as part of that plan. Construction funding is available through the District to implement those plans.
- TEA-21 - Grant funds from the Federal Department of Transportation are available for bicycle trails and non-vehicular modes of transportation. The bicycle paths for the Malabar Greenway link to a system of bikeways from Melbourne, south to the south Brevard County line. Thus, the Malabar Greenway is eligible for these funds.
- Florida Historic Preservation Grant Program - The use of long existing horse trails through Malabar and the re-creation of the 1916-1925 East Florida Homestead provide a basis for a historic preservation grant. There are no homestead homes restored or protected in Brevard County.
- Florida Bureau of Trails and Greenways - The nature of the Malabar Greenways and the vital link to a coastal region greenway makes this project eligible for trail and greenway funding.
- Volunteer Efforts:
  1. The Brevard Sheriff's Department - Work crews are available to the Town at no charge. The county prisoners are trained, well equipped and overseen by

foremen knowledgeable in canal and exotic plant clearing. The team of 15 to 20 men will be assigned to project implementation.

2. Malabar Pepper Buster - Directed by the Malabar Parks and Recreation Committee, this team of citizens will be available for trail blazing and layout, exotic plant removal and other projects.
- 3 Professional biologists from the City of Palm Bay, Turkey Creek Sanctuary Park Brevard County, Florida Institute of Technology and the Marine Resources Council will provide services in monitoring and evaluation, trail design and coordination to existing projects.

## **VI. PRIORITY SCHEDULE**

Priority Schedule appears as Appendix IV.

## **VII. MONITORING**

### **A. Annual Report**

Each year the Town will evaluate the progress in reaching the goals and priority schedule of this management plan. City staff will prepare the report with the assistance from the Environmental Endangered Lands and the Turkey Creek Sanctuary Staff The Malabar Parks and Recreation Committee will review the report. The report is due and will be delivered on the anniversary date of the acquisition of the last FCT properties listed in the Malabar Sanctuary Greenway plans. The first annual stewardship report will be due October 27, 1999.

### **B. Ecosystem Viability**

The Parks and Recreation Board of Malabar will develop an ecosystem monitoring plan with the guidance of biologists and hydrologists from the U.S. Fish and Wildlife Service, the Florida Natural Areas Inventory, Florida Institute of Technology and the Florida Native Plant Society. A meeting of representatives of these groups will meet two months after the final land acquisition to establish protocols, standard methods. Permanent transects will be monitored twice yearly.

Volunteer water quality monitors will be solicited from Malabar citizens or students to test water samples weekly. This information will be collected and analyzed by the existing monitoring program of the Marine Resources Council.

Since floodplain and hydrologic management are driven by episodic events, regular monitoring programs may not be adequate to evaluate events or conditions not consistent with scheduled monitoring dates. Surveys with FEMA and the Water Management District will be made following major storm events, droughts or wild fires which impact the Greenway. Report of these field surveys will be made part of the final report and the basis for plan update.

C. Surveys to Florida Natural Areas Inventory

Malabar will make appropriate reports and forms to record ecosystems and rare and endangered plants to the appropriate officials with the inventory. Included is a copy of the FNAI form.

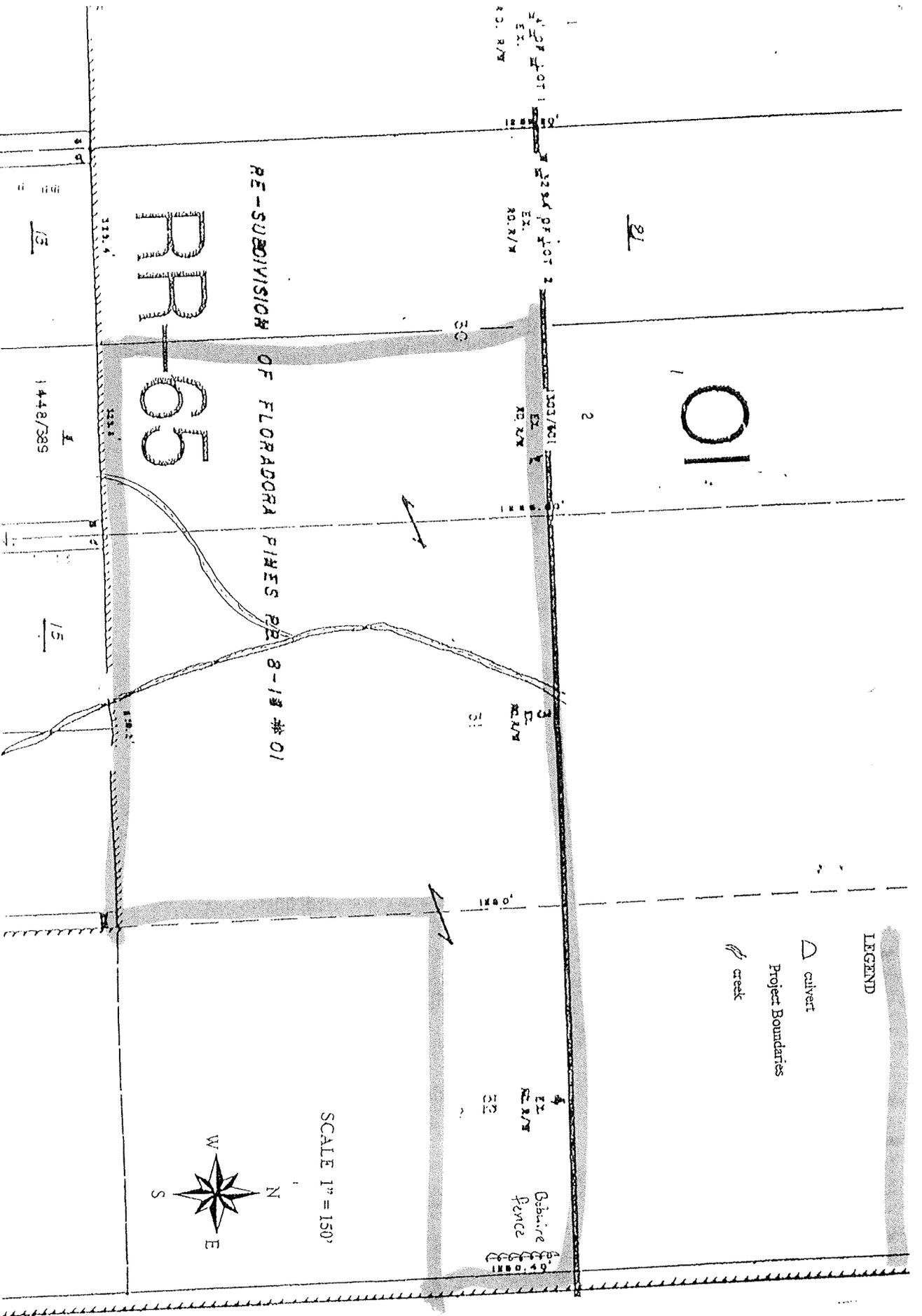
D. Plan Up-date

The Malabar Sanctuary Greenway Annual Plan will include up-dates as recommended by the advisory groups and the Town Council.

**EXHIBIT A**

Map of Combined Malabar Sanctuary Greenway I and II





01

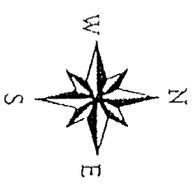
21

2

LEGEND

- △ culvert
- Project Boundaries
- ⤿ creek

SCALE 1" = 150'



RE-SUBDIVISION OF FLORADORA PINES P.E. 8-13 #01

PR-65

1448/389

1/5

1/5

1  
N. OF LOT 1  
EX.  
R.D. R/W

2  
N. OF LOT 2  
EX.  
R.D. R/W

3  
E.  
R.D. R/W

4  
E.  
R.D. R/W

150.0'

4  
E.  
R.D. R/W

Oblique  
Fence

150.0'

30.0'

313.4'

223.3'

112.2'

158.2'

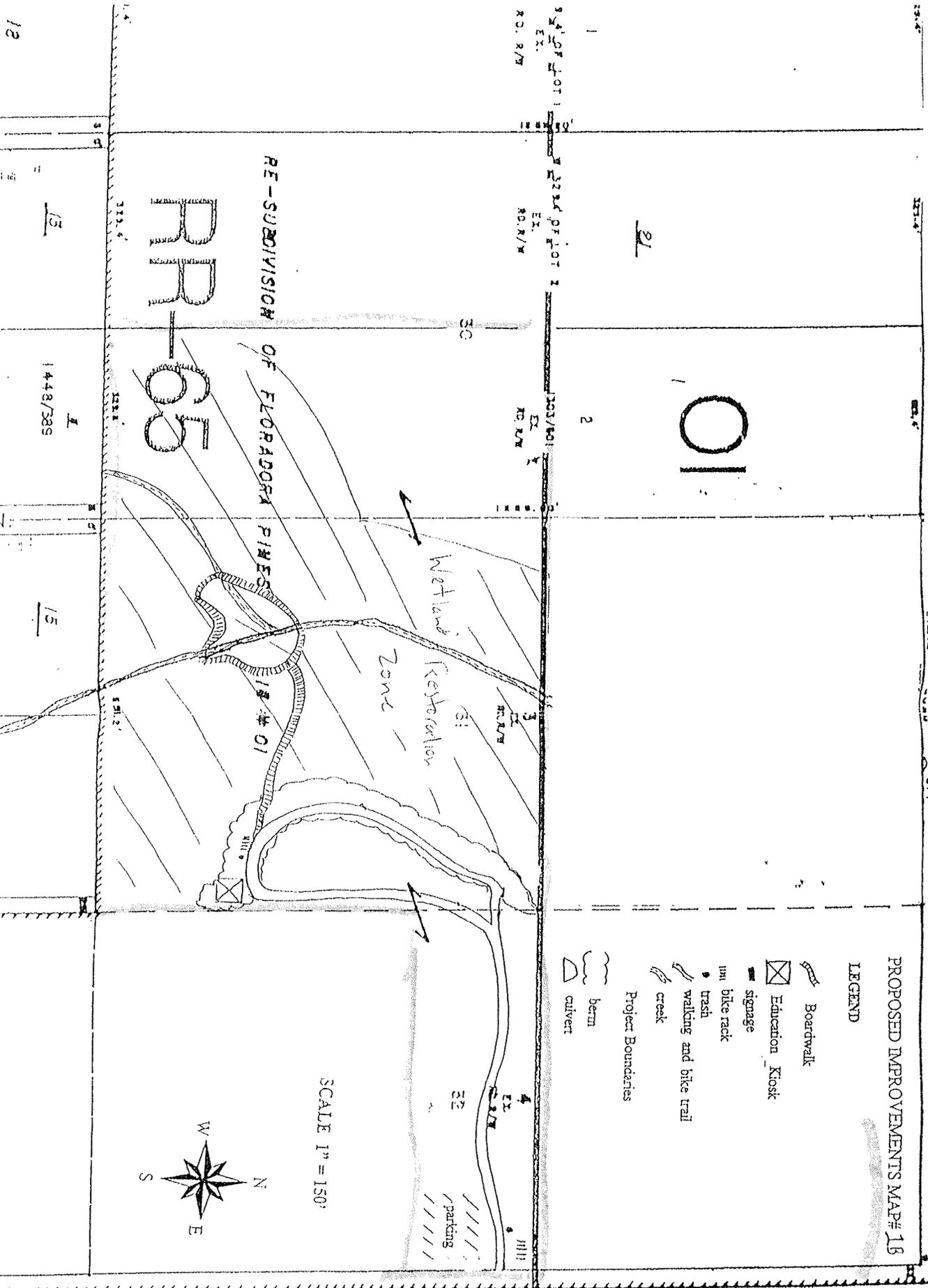
150.0'

150.0'

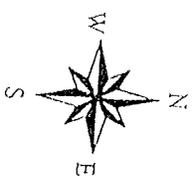
PROPOSED IMPROVEMENTS MAP# 1B

LEGEND

-  Boardwalk
-  Education Kiosk
-  signage
-  bike rack
-  trash
-  walking and bike trail
-  creek
-  Project Boundaries
-  berm
-  culvert



SCALE 1" = 150'



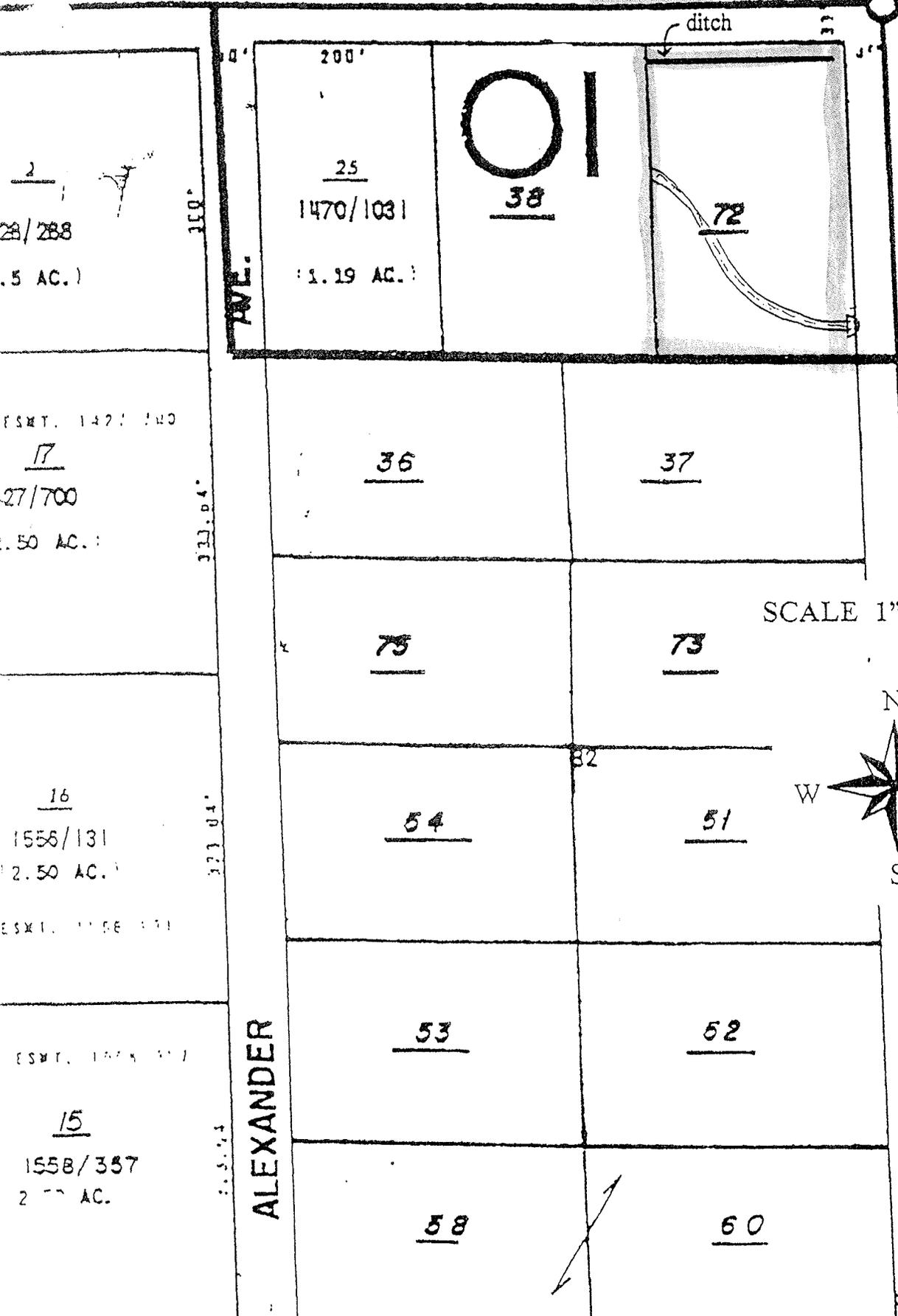
CURRENT IMPROVEMENTS MAP# 2A

35

36

LEGEND

-  culvert
-  signage
-  bike rack
-  trash
-  walking trail
-  creek
-  picnic table
-  Project Boundary
-  benches



2  
28/288  
0.5 AC.

ESMT. 1421 140  
17  
27/700  
0.50 AC.

16  
1556/131  
2.50 AC.

ESMT. 1424 141  
15  
1558/357  
2.00 AC.

200'  
25  
1470/1031  
1.19 AC.

36

37

75

73

54

51

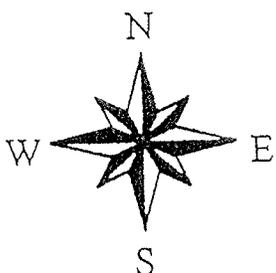
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52

58

60

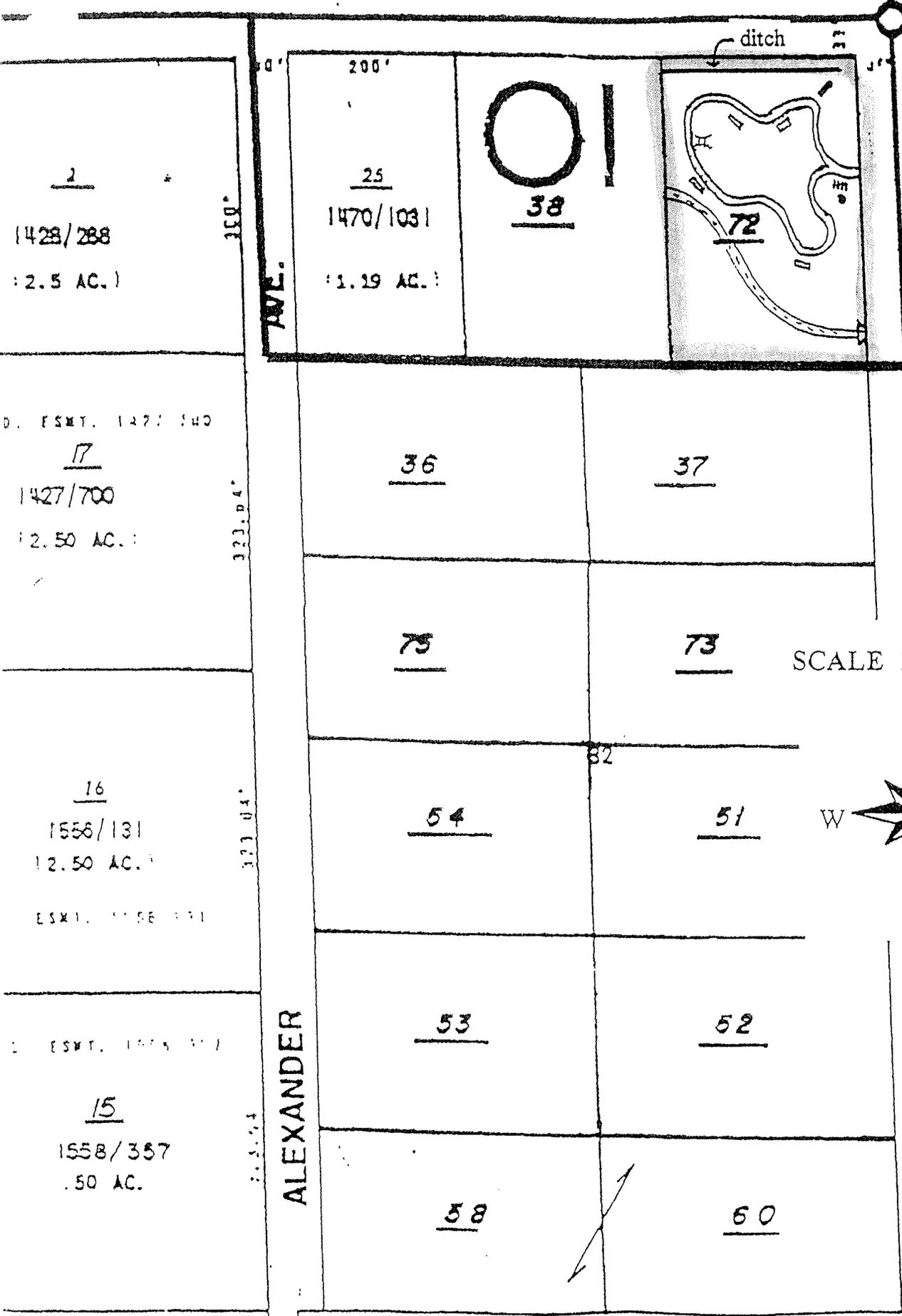
SCALE 1" = 150'



ALEXANDER

PROPOSED IMPROVEMENTS MAP# 2 B

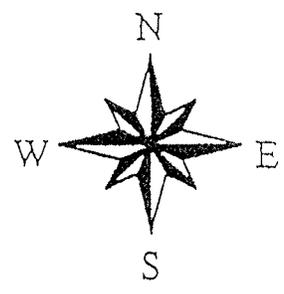
36



LEGEND

- culvert
- signage
- bike rack
- trash
- walking trail
- creek
- picnic table
- Project Boundary
- benches

SCALE 1" = 150'



ALEXANDER AVE.

2  
1428/288  
2.5 AC.

D. ESMT. 142: 140  
17  
1427/700  
2.50 AC.

16  
1556/131  
2.50 AC.  
ESMT. 142: 140

D. ESMT. 142: 140  
15  
1558/357  
.50 AC.

25  
1470/1031  
1.29 AC.

38

36

37

75

73

54

51

53

52

58

60

CURRENT IMPROVEMENTS MAP# 3A

2186 10'

R O A S S . 5 . 4 E F W I D E

LEGEND

Project Boundaries

No current improvements

O I

254

71' 655  
EX. RC.

253

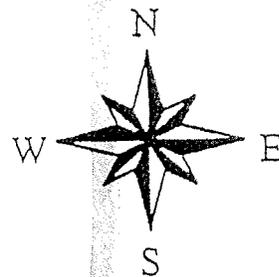
286

27

251

SCALE 1" = 150'

250



252

EX. RD. R/W

DITCH



# PROPOSED IMPROVEMENTS MAP# 3B

\* Traffic light (DOT proposed)

2188 18'

R O A S S . 3 . 4 E F ' W I D E

254

31' 655  
EX. RD.

253

286

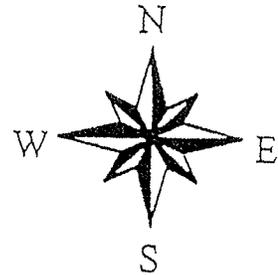
01

PASSIVO  
GOLF DISC  
COURSE

## LEGEND

- signage
- trash
- ~ walking and bike trail
- ▭ Project Boundaries

SCALE 1" = 150'



future  
Connection  
to  
Marie St  
Bike  
Trail

251

252

31' 323  
EX. RD. R/W

250

DITCH

EXHIBIT "aa"



**EXHIBIT B**

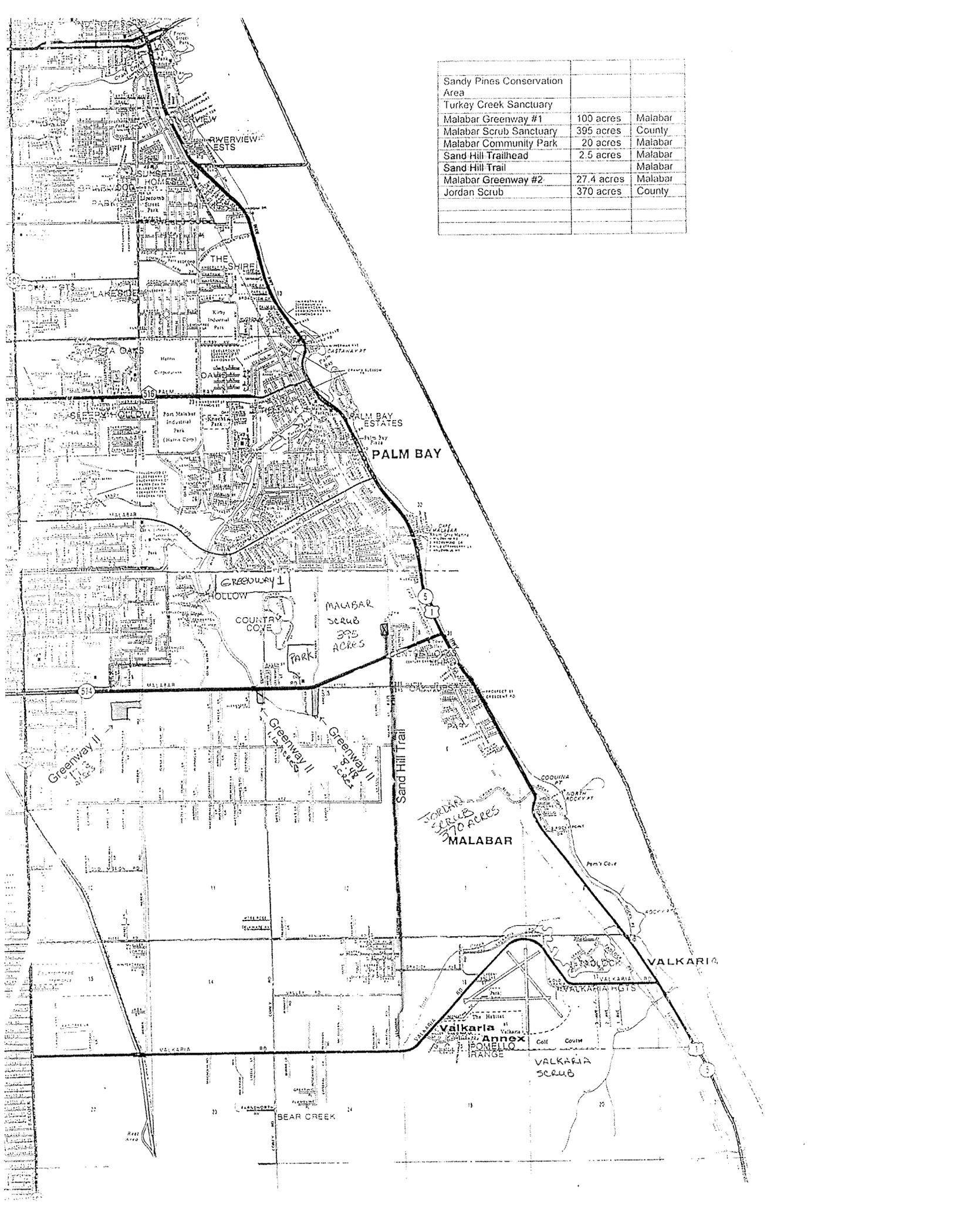
100 Year Floodplain Map of Malabar



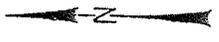
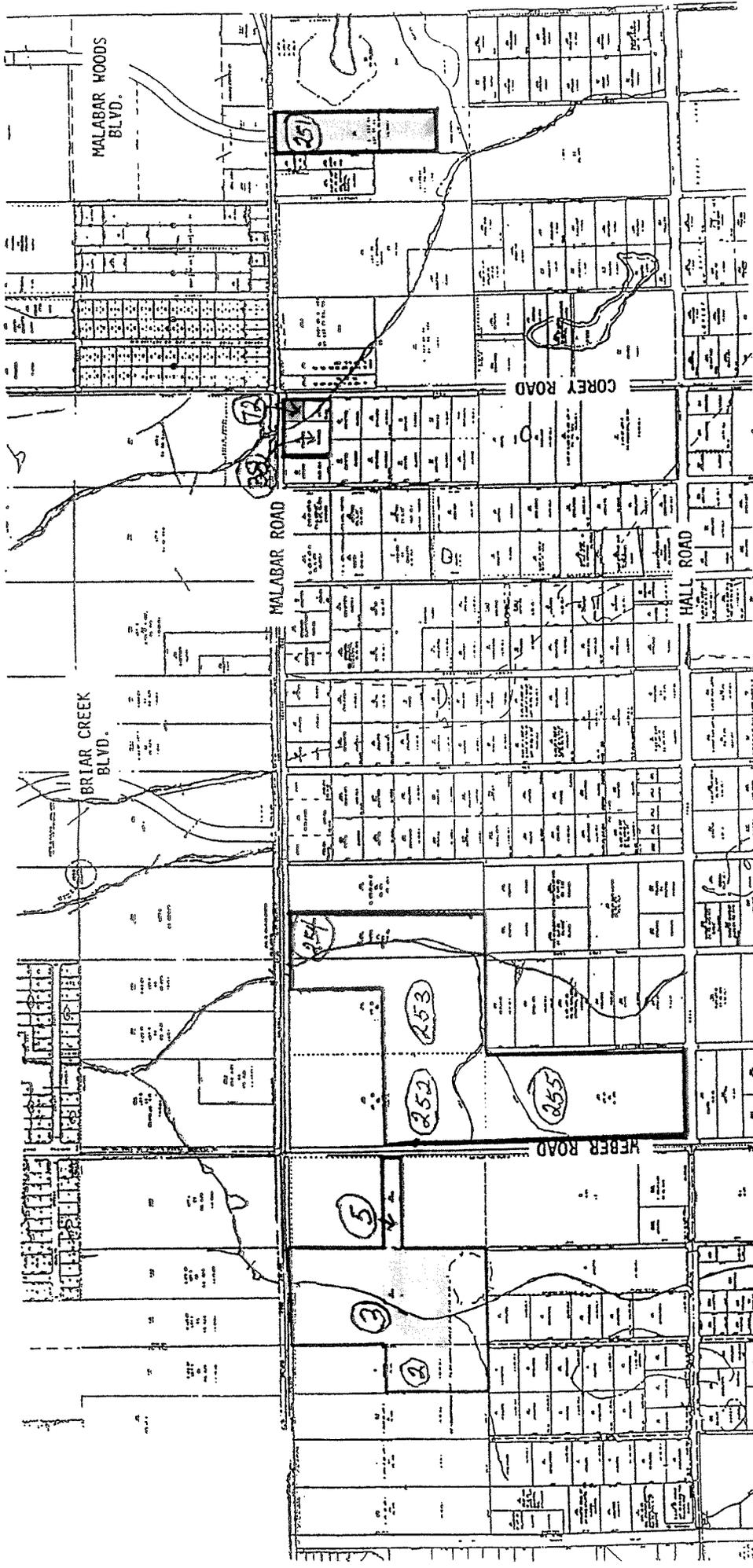
# Exhibit C

## Master Site Plan

Sandy Pines Conservation Area		
Turkey Creek Sanctuary		
Malabar Greenway #1	100 acres	Malabar
Malabar Scrub Sanctuary	395 acres	County
Malabar Community Park	20 acres	Malabar
Sand Hill Trailhead	2.5 acres	Malabar
Sand Hill Trail		Malabar
Malabar Greenway #2	27.4 acres	Malabar
Jordan Scrub	370 acres	County



PALM BAY



SCALE 1:800

SITE DESCRIPTION - SHAW TRACT

17.8

SITE DIMENSIONS

The Shaw property is slightly irregular in shape and contains 17.8 acres. According to the title search furnished by the client, the subject property has legal and physical access. The parcel fronts approximately 150 feet along the west side of Weber Road, the only paved access from the subject. The site extends west about 626 feet and widens into a larger rectangular portion measuring 690' x 988.66'. This portion of the site contains approximately 15.7 acres and the majority of the acreage.

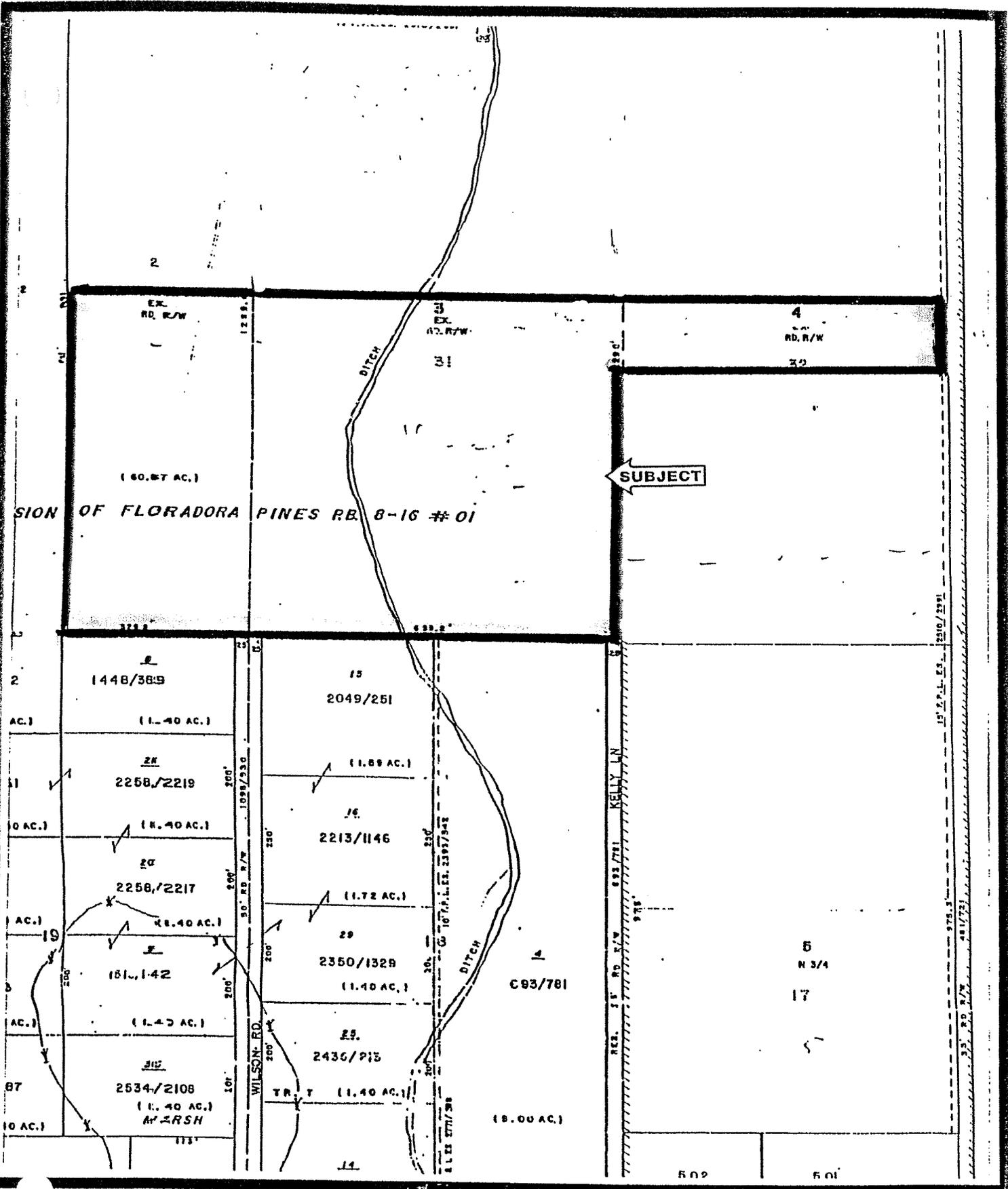
SITE TOPOGRAPHY AND VEGETATION

The site consists of improved pasture land and is covered with field grasses. A small creek runs north to south through the center of the property.

According to the Soil Survey of Brevard County, the subject soil type is for the most part conducive to building improvements.

SITE ACCESS

As previously mentioned, the subject property has legal access from Weber Road.



10/20/11 04. INC. ©COPYRIGHT 1976

**Plat Map**

SITE DESCRIPTION (Continued)

UTILITIES AND SERVICES

The only utilities available would be Electric and telephone.

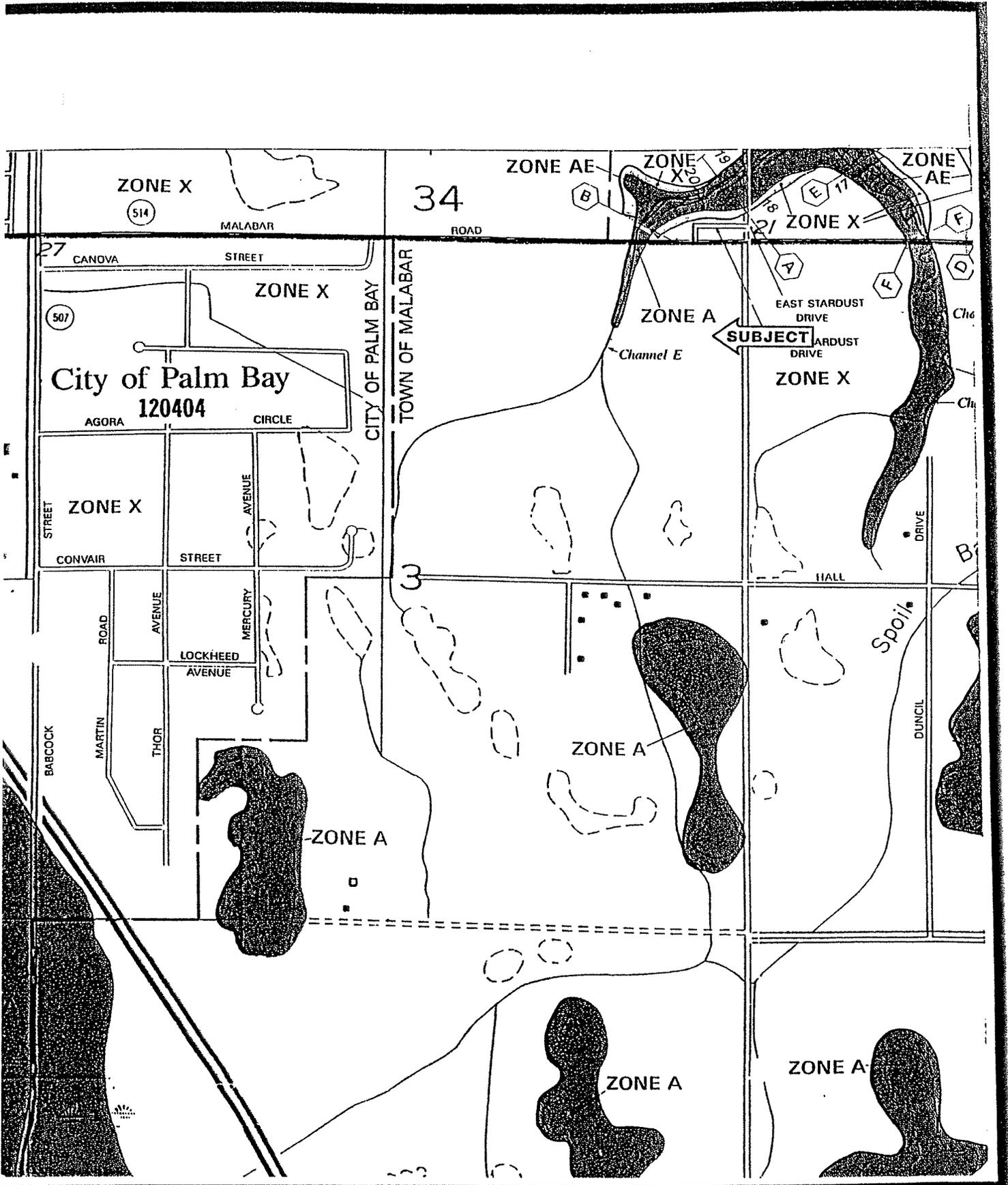
FLOOD ZONE

According to Flood Insurance Rate Maps of the National Flood Insurance Program, administered by the Federal Department of Housing and Urban Development, the subject property is in zone "A" and "X". These classifications denote "SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD. Base flood elevations determined." Essentially, the zone A area is confined to the small creek area. These zones are prevalent for this area of the county.

The map reference is 12009C0605E, dated April 3, 1989.

EASEMENTS AND ENCROACHMENTS

No adverse encroachments were found to exist on the subject site.



State C ne ©COPYRIGHT 1976

# FLOOD MAP

## ZONING AND FUTURE LAND USE DESIGNATIONS

The subject is zoned "RR, Rural Residential" by the local zoning authority, the Town of Malabar. This classification is established to manage rural residential development at a density not to exceed 1.5 acres per dwelling unit. The district is intended to protect and preserve existing agricultural and rural residential lands. These lands are generally developed for agricultural uses or for large lot rural residential homesites. These areas generally contain few urban services and the street systems are generally incapable of carrying traffic generated by more intense urban development. The district is intended to accommodate and preserve a unique lifestyle which cannot be accommodated in more dense residential areas.

Minimum lot size is 1.5 acres, minimum lot width is 150 feet with a minimum depth of 250 feet. The maximum building height is 35 feet, minimum floor area is 1,500 SF with the front setback of 40 feet, side setback of 30 feet and a rear setback of 30 feet.

The north 30 feet of the subject falls within the "OI" zoning classification which is Office/Institutional and is in the OI land use category as well. In order for the entire site to be developed, the portion zoned OI would need to be zoned to a residential use. This condition does not appear to adversely affect the property value.

In addition to zoning regulations, the subject must also comply with the Malabar Comprehensive Land Use Plan. This plan categorizes the subject property as being in an Rural Residential area.

## HIGHEST AND BEST USE

Due to the current zoning and current trends, the highest and best use for the subject would be residential homesite in the 1.5 to 3 acre size range.

## APPRAISAL PROCESS

Traditionally, the appraiser has three approaches to value; The Cost, Market or Direct Sales Comparison and Income Approaches.

The Cost Approach requires the estimation of the construction cost of all improvements. The appraiser then deducts from

329.4'

329.4'

# IMPROVEMENTS MAP# 1B

2

kiosk

bike trail

aries

21

29.4' OF LOT 1

EX.

RD. R/W

128.8'

32.4' OF LOT 2

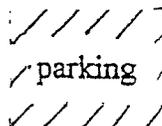
EX.

RD. R/W

30

EX.  
RD. R/W

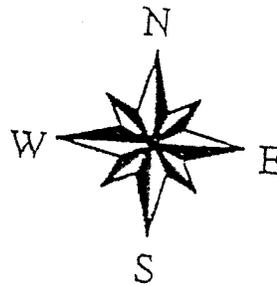
32



SCALE 1" = 150'

RE-SUBDIVISION

# RR



33.4'

329.4'

13

12

**TOWN OF MALABAR**  
**PARK AND RECREATION**

**AGENDA ITEM REPORT**

**AGENDA ITEM NO: 3**  
**Meeting Date: August 19, 2009**

**Prepared By: Cynthia Kelley, Secretary to Board**

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**SUBJECT: Re-Schedule Cameron Preserve Trail Work Party**

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**BACKGROUND/HISTORY:**

At the last Park Board meeting, a work party was scheduled on Saturday, August 29, 2009, to work in the Cameron Preserve. Chair Hans Kemmler will be out of town and has requested that this be placed on the agenda to re-reschedule the date.

**ATTACHMENTS:**

- September Calendar
- October Calendar

**ACTION OPTIONS:**

Discussion and recommendation



# September 2009

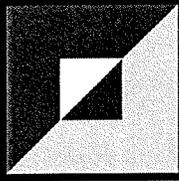
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
	7 Labor Day Town Hall Closed	8 Brevard County Public Hearing 5:30 PM	9 Town Council 1st Budget Public Hearing 7:30	10 Brevard County School Board Public Hearing 5:30 PM	11	12
13	14 Space Coast League of Cities Dinner Meeting	15 Malabar Mariners Association Meeting 5:00	16 Park Board 7:30	17	18	19
20	21 Town Council 2nd Budget Public Hearing 7:30	22 Brevard County Public Hearing 5:30 PM	23 P & Z 7:30	24	25	26
27	28	29	30			

**Town of Malabar**

2725 Malabar Road  
Malabar, Florida 32950

Phone: 321-727-7764  
Fax: 321-722-2234

E-mail:  
TownClerk@townofmalabar.org



# October 2009

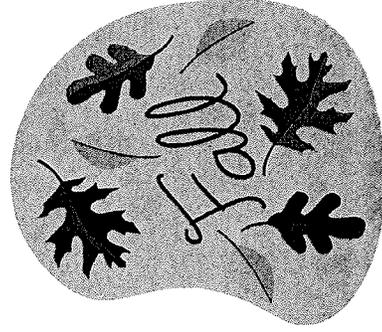
**Town of Malabar**

2725 Malabar Road  
Malabar, Florida 32950

Phone: 321-727-7764  
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[TownClerk@townofmalabar.org](mailto:TownClerk@townofmalabar.org)



Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	
4	5 Town Council 7:30	6	7	8	9	10
11	12 Space Coast League of Cities Dinner Meeting	13 Malabar Mariners Association Meeting 5:00	14 P & Z 7:30	15	16	17 Malabar Mariners Association Meeting 4:00
18	19 Town Council 7:30	20	21 Park Board 7:30	22	23	24
25	26	27	28 P & Z 7:30	29	30	31 Halloween 