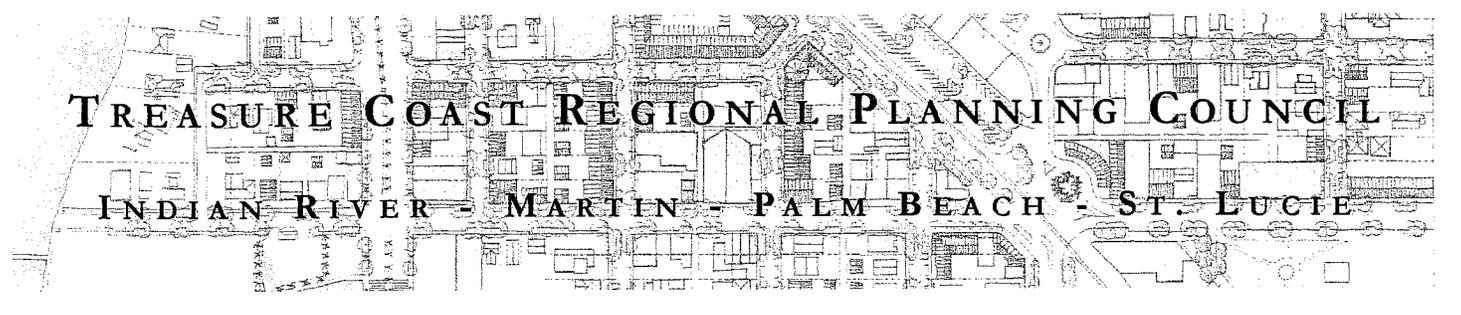


WATERWAY VILLAGE
DEVELOPMENT OF REGIONAL IMPACT
ASSESSMENT REPORT



Riverwalk, West Palm Beach, FL

TREASURE COAST REGIONAL PLANNING COUNCIL
INDIAN RIVER - MARTIN - ST. LUCIE - PALM BEACH



TREASURE COAST REGIONAL PLANNING COUNCIL

INDIAN RIVER - MARTIN - PALM BEACH - ST. LUCIE

June 23, 2004

The Honorable Caroline Ginn, Chairman
Indian River County Board of County Commissioners
1840 25th Street
Vero Beach, FL 32960

Subject: Waterway Village Development of Regional Impact

Dear Chairman Ginn:

Council staff is hereby transmitting the report and recommendations adopted by Treasure Coast Regional Planning Council on June 18, 2004 for Waterway Village Development of Regional Impact. The attached report and recommendations represent the fulfillment of Council's responsibilities as provided for in Section 380.06(12), Florida Statutes.

The report provides General Conditions of Approval recommended for inclusion in the County's Development Order. They represent the minimum actions necessary to mitigate the expected regional impacts of Waterway Village. In addition, Council adopted a recommendation strongly encouraging Indian River County to consider the alternative master development plan created by Council for Waterway Village. The alternative plan addresses the larger land use issues and the goals and policies of Council's adopted Strategic Regional Policy Plan. By vote, Council requested that Indian River County, in consultation with the Council, work together with the developer, the City of Fellsmere, Town of Indian River Shores, Town of Orchid, City of Sebastian, City of Vero Beach, the community of Gifford, and the Indian River County School District in revising the Master Development Plan.

Should you feel the Council staff can be of any further assistance, please contact me at your convenience. Council staff will be happy to work with the County as it formulates the Development Order and will review and comment on any draft document.

"Bringing Communities Together" • Est. 1976

301 East Ocean Boulevard - Suite 300 - Stuart, Florida 34994
Phone (772) 221-4060 - SC 269-4060 - Fax (772) 221-4067 - E-mail - admin@tcrpc.org

The Honorable Caroline Ginn
June 23, 2004
Page Two

I look forward to receipt of the adopted Development Order as provided for by Section 380.06, Florida Statutes. In turn, the County will be notified of the action taken by Council upon its review of the Development Order.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael J. Busha', followed by a horizontal line extending to the right.

Michael J. Busha, AICP
Executive Director

MJB:lg

Attachment

cc: Doug Smith, TCRPC Chairman
Indian River County Commission
Bob Keating, IRC
Stan Boling, IRC
Keith Pelan, Kimley Horn
Rick Greene, Divosta Homes

**A DEVELOPMENT OF REGIONAL IMPACT
ASSESSMENT REPORT**

FOR

WATERWAY VILLAGE

INDIAN RIVER COUNTY, FLORIDA

JUNE 2004

PREPARED BY:

**TREASURE COAST REGIONAL PLANNING COUNCIL
301 EAST OCEAN BOULEVARD
STUART, FLORIDA 34994
(772) 221-4060**

TREASURE COAST REGIONAL PLANNING COUNCIL

Commissioner Doug Smith, Chairman
Martin County

Commissioner Thomas Lowther, Vice Chairman
Indian River County

Commissioner Jeff Koons, Secretary/Treasurer
Palm Beach County

Commissioner Susan Valliere
Martin County

Commissioner Frannie Hutchinson
St. Lucie County

Commissioner Christine Coke
City of Fort Pierce

Commissioner Jeffrey Krauskopf
City of Stuart

Commissioner Thomas Lowther
Indian River County

Mayor Karen Golonka
Town of Jupiter

Commissioner Jeff Koons
Palm Beach County

Vice Mayor Joe Barczyk
City of Sebastian

Councilmember Sabin Abell
City of Vero Beach

Commissioner Karen Marcus
Palm Beach County

Mayor Robert Minsky
City of Port St. Lucie

Councilmember Annie Delgado
City of Palm Beach Gardens

Commissioner Warren Newell
Palm Beach County

Councilmember Joni Brinkman
Village of Palm Springs

Councilwoman Carmela Starace
Village of Royal Palm Beach

Mayor Samuel Ferreri
City of Greenacres

Gubernatorial Appointees

Kevin J. Foley (Palm Beach County)

Susan Haynie (Palm Beach County)

Elizabeth Webb (Palm Beach County)

Herman Baine (Palm Beach County)

Nancy Hemphill (Martin County)

Susan Hershey (Martin County)

Eugene Gibbins (St. Lucie County)

Ramon Trias (St. Lucie County)

Richard Hurley (Indian River County)

Ex-Officio Members

Marguerita Engle, St. Johns River Water Management District

Larry Hymowitz, Alt., Florida Department of Transportation

Karen Smith, South Florida Water Management District

Mary Murphy, Florida Department of Environmental Protection

ABBREVIATIONS

The following abbreviations are used throughout this report:

ADA	Application for Development Approval
BMP	Best Management Practice
Council	Treasure Coast Regional Planning Council
DO	Development Order
DRI	Development of Regional Impact
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FFWCC	Florida Fish and Wildlife Conservation Commission
FDOT	Florida Department of Transportation
GPD	Gallons per Day
IRFWCD	Indian River Farms Water Control District
LOS	Level of Service
NGVD	National Geodetic Vertical Datum
SF	Square Feet
SJRWMD	St. Johns River Water Management District
SRPP	Strategic Regional Policy Plan
USFWS	United States Fish and Wildlife Service

**WATERWAY VILLAGE DRI
REPORT AND RECOMMENDATIONS**

CONTENTS

	<u>PAGE</u>
Council Members.....	i
Abbreviations.....	ii
Contents.....	iii
Introduction.....	1
Project Information.....	2
Project Location Map.....	3
Master Development Plan.....	4
General Project Description.....	5
Regional Impacts.....	6
Master Plan Design Issues.....	12
Alternative Master Development Plan.....	14
Recommendation.....	19
General Conditions of Approval.....	20

APPENDICES

Appendix A:	Additional Maps.....	A-1
	Land Use Map.....	A-2
	Wetlands Map.....	A-3
	Vegetations Association Map.....	A-4
	Bald Eagle & Gopher Tortoise Locations.....	A-5
	Florida Scrub-Jay Locations.....	A-6
	Master Drainage Plan.....	A-7
	Transportation Network.....	A-8
Appendix B:	Correspondence.....	B-1
	Indian River County.....	B-2
	Florida Department of Transportation.....	B-11
	Florida Department of State.....	B-15
	St. Johns River Water Management District.....	B-17
	Florida Fish and Wildlife Conservation Commission.....	B-19
	U.S. Fish and Wildlife Service.....	B-22
	U.S. Army Corps of Engineers.....	B-24
Appendix C:	SRPP Goals, Strategies, and Policies.....	C-1
Appendix D:	Energy Saving Methods.....	D-1
Appendix E:	Gibbs Planning Group Retail Planning Review.....	E-1
Appendix F:	Bald Eagle Management Guidelines.....	F-1
Appendix G:	Florida Scrub-Jay Mitigation Guidelines.....	G-1
Appendix H:	Traffic Methodology Summary.....	H-1
Appendix I:	Transportation Tables TR 1 – TR 4.....	I-1
Appendix J:	Transportation Maps TR 1 – TR 2.....	J-1
Appendix K:	Components of Neighborhoods and Districts.....	K-1

INTRODUCTION

This assessment of the Waterway Village Development of Regional Impact (DRI) has been prepared by the Treasure Coast Regional Planning Council (Council) as required by Section 380.06(12), Florida Statutes and 9J-2.024(1), Florida Administrative Code (FAC). The primary purpose of the assessment report is to identify the regional impacts, both positive and negative, that can reasonably be expected to occur should the proposed project be approved. In carrying out this objective, the report through its recommendations, suggests opportunities to eliminate or mitigate negative impacts that are expected to occur and where possible to enhance the positive features of the proposed development.

The Waterway Village Application for Development Approval (ADA) was originally submitted on October 29, 2003 and was supplemented with additional information submitted on February 4, 2004; and March 22, 2004. On April 21, 2004 the County and the applicant were notified that the ADA for the Waterway Village DRI has been found to be complete pursuant to Section 380.06(10), Florida Statutes. The County was notified that the public hearing may be set for the proposed DRI pursuant to Section 380.06(11), Florida Statutes, and that Council will prepare the regional assessment report.

The series of recommendations contained in the Waterway Village assessment report are based on the goals, strategies, and policies of the Strategic Regional Policy Plan (SRPP), adopted pursuant to Section 186.508, Florida Statutes. The recommendations of the Council are provided to assist the County in creating a development order (DO) for the DRI, consistent with 9J-2.025, FAC. This report and the recommendations are primarily directed at regional systems and facilities and do not necessarily address all local concerns. The recommendations do not foreclose or abridge the legal responsibility of the local government to act pursuant to applicable local laws or ordinances.

Once Council adopts the Waterway Village DRI assessment report it is transmitted to the County. From there the County shall hold the public hearing that has been set for the proposed Waterway Village DRI. At the hearing the County shall approve, deny or approve with conditions, restrictions, or limitations taking into consideration whether and the extent to which:

1. the development is consistent with local comprehensive plan and local land development regulations;
2. the development is consistent with the report and recommendations of the regional planning council; and
3. the development is consistent with the State Comprehensive Plan.

The County is required to render a decision on the proposed Waterway Village DRI within 30 days after the hearing unless an extension is requested by the developer.

PROJECT INFORMATION

Project Name: Waterway Village

Applicant: DiVosta & Company, Inc.

Jurisdiction: Indian River County

Size: 696 Acres

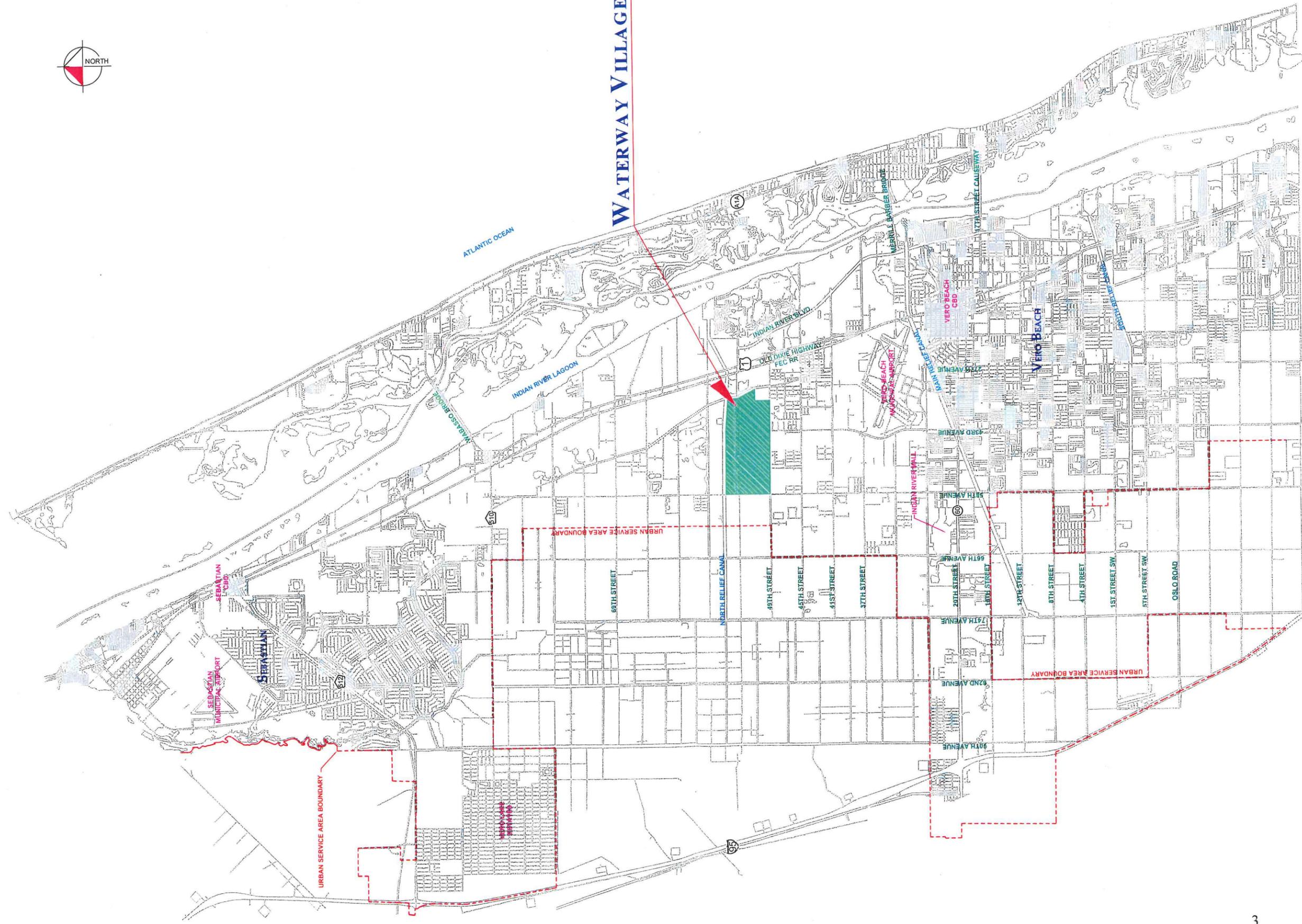
Location: East of Kings Highway (58th Avenue)
North of Lindsey Road (49th Street)

Employment: 11 Jobs

Uses: 1,740 Residential Units in a mix of Single-Family,
Duplex, Attached Townhomes, and Multi-Family

Phases: 7 Phases, each with approximately 250 Residential Units

Buildout Date: 2012



WATERWAY VILLAGE

WATERWAY VILLAGE

Indian River County, Florida

MAP A

GENERAL
LOCATION MAP



INITIAL SUBMITTAL

Project Team:

- Applicant**
Divosta and Company
Palm Beach Gardens, Florida
- Planning / DRI Coordination**
Kinley-Horn and Associates, Inc.
Vero Beach, Florida
- Legal Counsel**
Collins, Brown, Caldwell, Barkett, & Garavaglia
Vero Beach, Florida
- Engineering**

- Environmental Biological Research**
Associates
Vero Beach, Florida
- Traffic**
Yvonne Ziel
Traffic Consultants, Inc.
West Palm Beach, Florida
- Hydrology**



Project Team:

Applicant
Divosta and Company
Palm Beach Gardens, Florida

Planning / DRI Coordination
Kimley-Horn and Associates, Inc.
Vero Beach, Florida

Legal Counsel
Collins, Brown, Caldwell, Barkett, & Garavaglia
Vero Beach, Florida

Engineering
Lawson, Noble, & Webb, Inc.
Port St. Lucie, Florida

Environmental
Biological Research Associates
Vero Beach, Florida

Traffic
Yvonne Ziel
Traffic Consultants, Inc.
West Palm Beach, Florida

Hydrology
Arcadis G & M, Inc.
North Palm Beach, Florida

REVISIONS:

WATERWAY VILLAGE

Indian River County, Florida



GENERAL PROJECT DESCRIPTION

Waterway Village DRI is a proposed residential development to be located at the northeast corner of the intersection of 58th Avenue (Kings Highway) and 49th Street in east central Indian River County (see Project Location Map). The 696 acres of land are to include 1,740 residential units and a clubhouse in a gated community (see Master Development Plan). The residential units include a mix of single-family, duplex, attached townhouse and multi-family housing. The clubhouse consists of 5,000 square feet (SF) of commercial uses such as a convenience store/deli, gasoline sales, bank with an ATM, hair salon, and real estate office. Also within the clubhouse will be approximately 20,000 SF of non-commercial space including the project's post office, fitness center, meeting rooms, library, and card room.

The Master Development Plan includes approximately 74 acres of upland natural communities dedicated as preserve areas, and an extensive system of lakes. The plan also includes about a 40-acre preserve designed to protect an active Bald Eagle nest. Potable water will be provided by Indian River County Utilities. Stormwater from the project site will be directed to the North Relief Canal, which discharges to the Indian River Lagoon.

Construction on the project's infrastructure is planned to begin in 2005 with the first occupancy of residential units in 2006. The project is proposed in seven phases, each with approximately 250 units. Buildout is planned for 2012. Prices for housing are expected to range from \$190,000 to \$285,000 for townhouse/condo and duplex units and from \$270,000 to \$400,000 for single-family units. The project also encompasses apartment rental units that will have projected rents ranging from \$1,000 to \$2,000 per month. The project is designed to attract what the applicant describes as the active adult consumer.

REGIONAL IMPACTS

During review of the proposed Waterway Village DRI, Council identified several issues that will have significant impact on the Indian River County and the Region. These issues are related to: 1) the master development plan, 2) transportation, 2) environmental and natural resources, and, 4) human resources. This section summarizes the impacts. The proposed general conditions of approval contained in a following section of this report are designed to reduce or mitigate the impacts to the Region.

MASTER DEVELOPMENT PLAN

The proposed Master Development Plan for Waterway Village DRI follows current trends and patterns of conventional subdivision development. It is typified by individual residential land uses into segregated freestanding parcels of land. It is the same pattern of development that saturates the landscape in Dade, Broward, Palm Beach and other counties to the south. There is no connection or relationship to surrounding communities (existing or future), excluding them from the benefits each new increment of growth should bring to an area. Walls and gates define the edge of this housing project. There are no direct street connections between individual pods. All travel is directed onto a collector street system and ultimately a portion of the arterial roadway network.

Public, civic, and retail uses contained within the project are privatized. The public elementary school site which has been offered in the plan is isolated and disconnected from the project, making pedestrian access a hardship for existing and future residents. The current plan contains an adequate preserve area for a nesting pair of bald eagles and a good amount of other upland natural communities.

To address concerns with the proposed Master Development Plan, this report offers an Alternative Master Development Plan. Council's alternative plan has been designed to assist the County in efficiently addressing the larger land use issues and needs of this developing area. The alternative plan is meant to show instructive examples of key planning and design concepts that may be the most effective means to address inconsistencies of the current Waterway Village DRI master plan with the SRPP. They are not meant to be inclusive of all examples that represent good planning. In fact, there are countless ways in which the master plan could be redesigned following these planning concepts and principles to achieve a high level of consistency with the SRPP.

TRANSPORTATION

The provision of adequate right-of-way within the project boundaries is important to accommodate traffic at buildout of the project. To ensure that adequate right-of-way is available for the future expansion of 53rd Street, 49th Street, 58th Avenue, and 43rd Avenue to accommodate the projected future traffic volumes, right-of-way should be dedicated and protected. This will ensure that the regional roadway network is protected from

encroachment by development. The right-of-way should be dedicated consistent with the Thoroughfare Right-of-Way Protection Plan adopted by Indian River County.

The proposed development is expected to impact the level of service (LOS) on the regional roadway network. Rule 9J-2.045, FAC requires that state and regional roads be maintained at their adopted LOS. Mitigation through adding lanes, and improving intersections, and providing adequate lane geometry is necessary to ensure that an acceptable LOS can be maintained on the regional roadways given growth in the area. The extension of both 53rd Street and 43rd Avenue are necessary to provide access to the project. If 53rd Street is not permitted to cross the Florida East Coast Railroad, a new traffic study identifying traffic impact of the development should be prepared. Traffic impact of the project based on the new study will have to be mitigated and additional or revised transportation conditions may be required.

Other factors may affect government's ability to maintain an acceptable LOS on the regional roadway network. Changes to the Indian River County adopted Five Year Road Program and/or the Florida Department of Transportation Adopted Transportation Improvement Program may expedite or delay construction of the improvements required to main adequate LOS on the regional roadway network. Rule 9J-2.045 (7) (1) (b) FAC requires an assessment and report of the guaranteed improvements on no less than a biennial basis. This report needs to identify the timing of improvements to assure they will be constructed according to schedule.

ENVIRONMENTAL AND NATURAL RESOURCES

The project site currently is primarily undeveloped upland and wetland communities (Appendix A). The western half of the property has been cleared for cattle and farming activities and occurs as improved and unimproved pasture (479.8 acres). The eastern areas contain a variety of forested upland natural communities, including: palmetto prairie (22.0 acres); pine flatwoods (80.9 acres); sand pine scrub (5.7 acres); mesic oak/pine (42.0 acres); and sand live oak (2.2 acres). Approximately 74 acres of upland natural communities are proposed for preservation. These occur in several preserve areas on the eastern portion of the project site (see Master Development Plan).

The site also contains about 22.93 acres of wetlands, which are primarily freshwater marsh and wet prairies. The developer is proposing to preserve and enhance about 6.18 acres of wetlands and provide mitigation for the remaining 16.75 acres of wetlands, which have been highly disturbed due to agricultural activities. The proposed wetland mitigation plan will include the creation of approximately 23 acres of wetlands and associated upland buffers. The applicant has proposed that the exact location of the proposed wetland mitigation will be established through coordination with State and federal wetland and wildlife permitting agencies.

The project site has an active nest of a Bald Eagle (State and federally listed as Threatened), three families of Florida Scrub-Jays (State and federally listed as Threatened), and a population of gopher tortoises (State listed as a Species of Special

Concern). Also, several listed species of wading birds including the Wood Stork (State and federally listed as Endangered) and Florida Sandhill Crane (State listed as Threatened) were observed foraging, but not nesting on the project site.

The applicant is proposing to use standard United States Fish and Wildlife Service (USFWS) eagle nest protection guidelines of a 750-foot primary protection zone and an additional 750-foot secondary protection zone (Appendix F). The Master Development Plan includes about a 40-acre preserve composed of pasture in the western half of the project that forms the primary protection zone. Land uses such as medium to low-density residential development, recreation facilities, and stormwater management systems are allowed within the secondary protection zone. However, most construction activities will be restricted to non-nesting periods. The applicant is working with the USFWS to develop an acceptable plan to protect the Bald Eagle.

The three families of Florida Scrub-Jays identified on the project site occur in pasture, which is atypical for scrub-jays. The Florida Scrub-Jay generally occurs in open, oak dominated scrub communities. Because the habitat is not suitable, protection of the areas occupied by the jays on site is not likely to insure the long-term viability of this species on the project site. To resolve this issue, the applicant has proposed to provide mitigation for impacts to the scrub-jays on site. The applicant is working with the USFWS to develop an acceptable mitigation plan.

The USFWS has specific guidelines for the mitigation of Florida Scrub-Jays (Appendix G). The guidelines identify mitigation service areas where mitigation should take place for impacts to jays within the same service area. The preferred mitigation strategy is to protect and manage occupied and unoccupied scrub habitat that is contiguous with managed public or private lands where a viable population of scrub-jays occur. The guidelines contain specific procedures for determining the amount of scrub-jay habitat required for mitigation. All acquisitions must be accompanied by a cash endowment sufficient to provide perpetual management of preserved lands.

The main issue with the applicant's proposed mitigation plan is that they are proposing to protect lands in southern Brevard County. This area is within the appropriate USFWS mitigation service area for the Waterway Village project, but is outside the County and Region. Preference should be given to mitigation options in Indian River County to minimize regional impacts. Discussions with Florida Park Service representatives, who are responsible for managing scrub-jay habitat at St. Sebastian River Buffer State Preserve, have indicated there may be appropriate parcels in the Fellsmere area for scrub-jay mitigation. The applicant should pursue these and all other options for scrub-jay mitigation within Indian River County, before entering into an agreement to provide mitigation outside the county.

A population of about 79 gopher tortoises is estimated on the project site. Most of the tortoises occur in the forested areas. The applicant is proposing to protect a portion of the gopher tortoise population in the upland reserve areas on the eastern portion of the project site. To compensate for the loss of tortoise within the proposed development areas, the

applicant is proposing a combination of on-site and off-site tortoise mitigation through permitting with the Florida Fish and Wildlife Conservation Commission (FFWCC). Also, the FFWCC has recommended that the developer incorporate provisions into the road design to enable wildlife to safely cross between wetland and upland preserves that are bisected by roads (Appendix B).

Several free-flowing Floridan aquifer wells exist in the southwestern portion of the project site. Water from these wells contains high levels of minerals and is causing degradation of the ground water. The applicant has committed to proper abandonment of the artesian wells.

The project site falls within the service boundary for the Indian River County Utilities district. The applicant has projected the consumption of potable water will be about 435,000 gallons per day (GPD) for residential development, and 2,800 GPD for commercial development at buildout. The demand for non-potable water is projected to be 20,500 MGD for residential development, and 1,300 MDG for commercial development. The potable water supply system will be owned and operated by Indian River County Utilities Department. The non-potable system is to be owned, operated and maintained by the home owners association. The Indian River County Utility Department has indicated that they currently have the ability and capacity to provide water service for the project. No on-site wells are planned.

The applicant has projected that wastewater generation will be about 0.435 GPD for residential development, and 0.0028 GPD for commercial development at buildout. The Indian River County Utility Department has indicated that they currently have the ability and capacity to provide water service for the project. No septic tanks are planned on the project site.

The existing site is bounded on the north and east by drainage canals of the Indian River Farms Water Control District (IRFWCD). Canal H runs along the east boundary of the project, which then discharges into the North Relief Canal. The North Relief Canal runs along the north boundary of the project. The IRFWCD maintains a control structure in the North Relief Canal, located about 200 feet east of 58 Avenue. Upstream of this structure, the water control elevation is 15.15 National Geodetic Vertical Datum (NGVD) (15.15 feet above mean sea level). The control elevation downstream of the control structure is controlled at a level of 8.65 NGDV.

The proposed development of the site involves the construction of an extensive lake system. The control elevation for the on-site lake system is proposed to be at 17.0 NGVD. According to the IRFWCD, the principal site discharge should be to the west of the control structure on the North Relief Canal. Furthermore, the stormwater management system is not allowed to discharge directly into the North Relief Canal. The discharged water must first enter a lateral canal system, which can then enter the main canal.

The new roadways, including the 53rd Street and 43rd Avenue extensions, and all development parcels will drain into the new lake system. The developer has committed to working with the St. Johns River Water Management District to formulate and implement best management practices (BMPs) to reduce the use of pesticides and fertilizers throughout the project. The developer also needs to work with the IRFWCD to determine the best location for the main discharge point into the North Relief Canal.

Indian River County has indicated that make-up water proposed to be withdrawn from the North Relief Canal will be substituted with stormwater/reverse osmosis brine/wastewater effluent provided by Indian River County Utilities (Appendix B). The applicant has agreed to enter into a reuse agreement with Indian River County to accept stormwater/brine/wastewater effluent for augmenting lake supply to be used for irrigation and maintaining pond levels. Indian River County staff has indicated that IRFWCD would prohibit the commingling of reverse osmosis brine mixed reuse water west of the control structure in the North Relief Canal. Also, any plans to relocate the control structure to the east would not be allowed per IRFWCD requirements.

HUMAN RESOURCE ISSUES

As primarily a residential development with a limited amount of commercial space the project generates a small amount of internal employment opportunities. Based on the proposed plan of development, the project is expected to generate approximately 11 full time equivalent employees (excluding construction jobs) at build out, of which 8 will be in the very low-income group with no reasonable chance to afford housing on site.

The projected residential population at buildout will include approximately 134 school age children. About half of the children are elementary school age with the rest divided almost equally between middle and high school age. The project proposes a potential elementary school site to be sold at cost or payment of a negotiated impact fee to offset impacts on the County school system. The school site has been identified at the northwest corner of the project along 58th Avenue.

The Water Village DRI ADA indicates that due to recent changes to the Florida Building Code and the construction methods to be used in the project, it is anticipated that the homes and clubhouse will provide safe shelter for the residents during most hurricane events. Indian River County will need to determine if the shelter space is adequate prior to occupancy of the structures.

The proposed development will increase the need for additional facilities, equipment, and personnel for law enforcement and fire rescue emergency services. The County has requested that a 3-acre parcel be dedicated on the project site for Emergency Services. Additional needs are expected to be identified prior to occupancy.

The projected average daily electrical demand for the project is 12,250 kilowatt hours at buildout. No on-site electrical generating facilities are proposed on the project site. Florida Power and Light Company will be required to construct a new substation in the

immediate area in order to accommodate the development beyond phase 1. Appendix D of this report describes a number of energy saving methods that should be considered for incorporation into the proposed project.

The Florida Department of State Division of Historical Resources has recommended that a professional archaeological investigation be conducted to determine if archaeological or historic resources are present within the project area (Appendix B). In the event of discovery of any archaeological artifacts, proper protection needs to be provided to the satisfaction of the Division of Historical Resources.

MASTER PLAN DESIGN ISSUES

Does anyone suppose that, in real life, answers to any of the great questions that worry us today are going to come out of homogeneous subdivisions and shopping malls.

*-Jane Jacobs, *The Death and Life of Great American Cities* (1961)*

The Waterway Village DRI Master Development Plan is not consistent with the SRPP. There exists within the property a much greater opportunity to design and organize development to completely address all key regional issues and mitigate regional impacts.

Part of the problem is that today's growth tends to be poorly planned and designed. It is based on assumptions that may work well in the short term, but offers no long term plan. If growth is to be desired once more and if it is to bring long-term prosperity and joy, it must create more than conventional subdivisions and big box and strip commercial retail centers that promote sprawl. Sprawl is defined as any type of development that does not create communities composed of authentic neighborhoods and districts. Sprawl often takes the form of homogenous, auto-dependent housing subdivisions; strip commercial development; poorly connected and integrated neighborhoods; isolated public buildings (e.g., schools, libraries, etc.); or private development (e.g., office and industrial parks, shopping centers, etc.) Sprawl can be characterized by a collection of specialized and disconnected uses spread out over large area, inefficiently arranged and conceived, and access such that it requires the use of a car. The Waterway Village DRI embodies the definition of sprawl.

ANALYSIS OF THE PROPOSED MASTER DEVELOPMENT PLAN

The proposed Master Development Plan for Waterway Village DRI follows current trends and patterns of conventional subdivision development. It is typified by individual residential land uses into segregated freestanding parcels of land. It is the same pattern of development that saturates the landscape in Dade, Broward, Palm Beach and other counties to the south. There is no connection or relationship to surrounding communities (existing or future), excluding them from the benefits each new increment of growth should bring to an area. Walls and gates define the edge of this housing project. There are no direct street connections between individual parcels. All travel is directed onto a collector street system and ultimately a portion of the arterial roadway network.

Structure

The proposed Master Development Plan presents a conventional subdivision with no neighborhood structure. The size of the development is simply limited by land ownership. Distances from the majority of homes to proposed internal amenities are in excess of ½ mile, making driving (despite proposed pedestrian bridges) the guiding principle within this development.

Center

The proposed center is private and detached from 53rd Street extension. The retail is isolated from traffic that will help ensure its viability and misses an opportunity to help the County balance land uses in this developing area.

Streets

There is a lack of connectivity, both internal and with the existing fabric. The proposed Master Development Plan suggests an internal loop road and a central spine. Both are “collector” roads, and the only alternative to get around, in, and out of the development. The “t” ends of each street stemming off of the collector further contribute to the lack of connectivity. There is a positive attempt to extend 53rd Street to Kings Highway, but the fact that it is extended along the edge, totally void of any connections, flanked by a perimeter wall and berm and a canal, will guarantee a high speed, unsafe (unsupervised) collector road.

Network of Public Parks and Open Spaces

All waterways are treated as a backyard, private space. There is no public network of connected parks and greens. Other natural preserves and public school recreation areas are isolated by walls, berms or roads and are treated as disconnected residual space.

Building Types

Buildings appear to be segregated by type. All the multi-family is concentrated in one location, clearly segregated from the single family units.

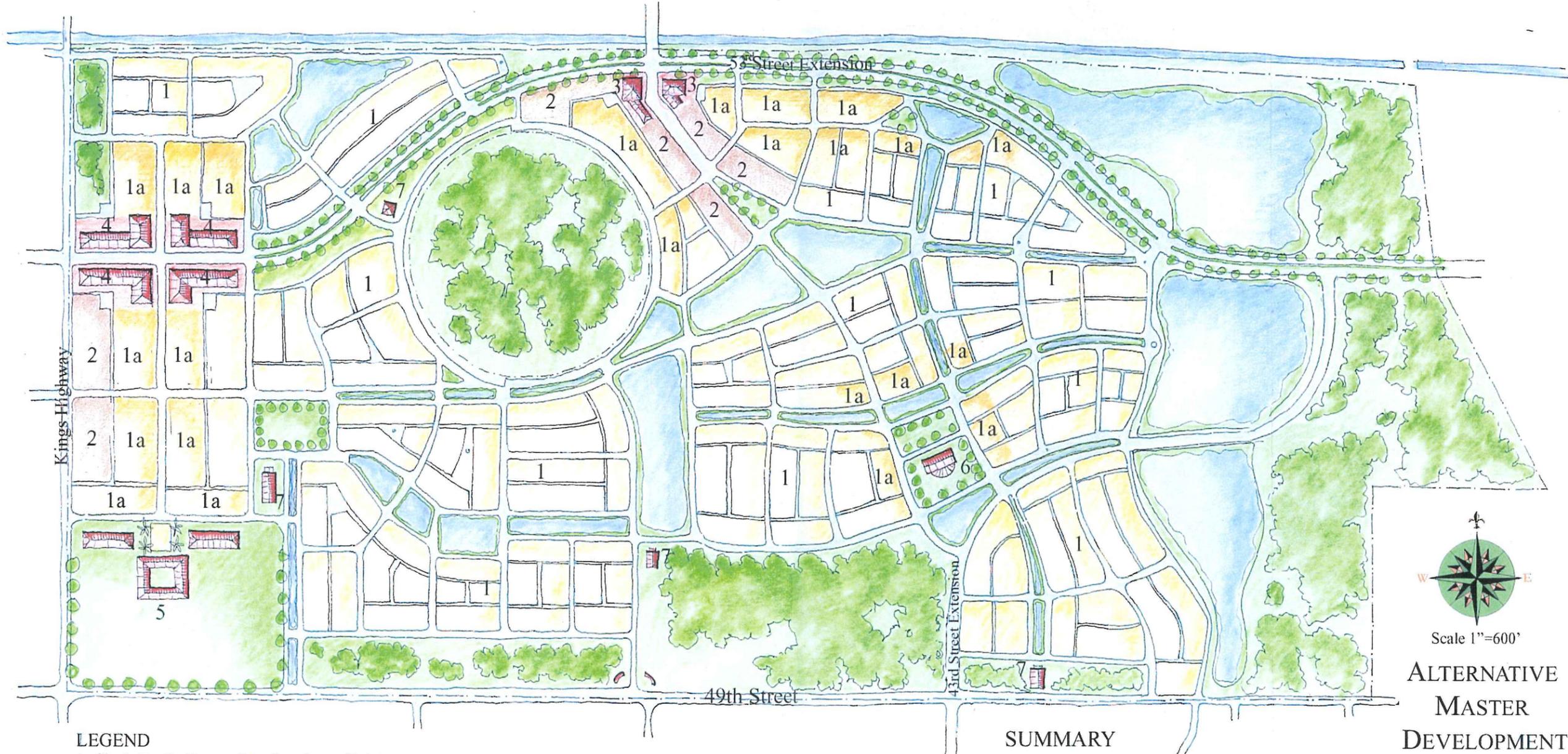
Civic Buildings

The clubhouse and all other proposed uses, including retail, are concentrated into one single, large building. It is a small-scale replica of a conventional commercial pod, surrounded by isolated residential pods. Execution of retail and civic uses in this manner misses an opportunity to address County land use issues in this developing area. In addition, the elementary school has been completely isolated, making pedestrian access to it impossible, both for existing and new residents.

AN ALTERNATIVE MASTER DEVELOPMENT PLAN

The current project site presents a great opportunity to design and organize new development in a way that completely addresses all key regional issues and mitigates regional impacts. The following Alternative Master Development Plan is offered as an example of how the project could be redesigned to address regional concerns.

North Lakes Subdivision - 525 Units



Scale 1"=600'

ALTERNATIVE
MASTER
DEVELOPMENT
PLAN

LEGEND

- 1. Single Family Homes (1a = Townhouse Units)
- 2. Multi-family Units
- 3. Commercial on 53rd Street
- 4. Mixed-Use/Commercial on Kings Highway
- 5. Elementary School
- 6. Clubhouse
- 7. Civic/Community Uses

SUMMARY

Single Family:	1,100 units
Multi-Family:	630 units
Commercial on 53rd Street:	24,000sf
Commercial on Kings Hwy.:	120,000sf
Clubhouse:	30,000sf
Civic/Community:	30,000sf (4 buildings total)
Elementary School:	Comparable to applicant's proposal

WATERWAY VILLAGE
Indian River County, Florida
Treasure Coast Regional Planning Council

KEY COMPONENTS OF THE ALTERNATIVE MASTER DEVELOPMENT PLAN

Council's Alternative Master Development Plan has been designed to assist the County in efficiently addressing the larger land use issues and needs of this developing area. Furthermore, the alternative plan is consistent with the goals, strategies and policies contained in the SRPP (Appendix C). A more detailed description and analysis of the key components of the alternative master plan follows:

- Three neighborhoods of defined size
- Neighborhood centers with appropriate scale and mix of uses
- An interconnected network of public streets
- An interconnected network of public open spaces and waterways treated as an amenity
- A mix of building types
- An array of civic buildings
- Preservation of natural environments
- A mix of uses addressing the larger land use needs of this developing area

Three Neighborhoods of Defined Size

The master plan is organized into three neighborhoods (east, center and west) that range in size from 80 to 160 acres.

Neighborhood Centers with Appropriate Scale and Mix of Uses

Each neighborhood has a clearly defined center. Each center has a unique scale, intensity and mix of uses:

- The east neighborhood center is defined by a central square fronted by a clubhouse/community building. Water flanks the northern edge, as a way to make this a defining feature accessible to everyone in the community. Higher density residential in the form of townhouses surrounds the main square. Streets surround the square, making it accessible to the public.
- The central neighborhood center occurs in the form of a traditional main street. Mixed-use buildings with up to 22,000 SF of retail on the ground floor, and offices or residential uses on the upper stories line the first 250' at the intersection of the 53rd Street extension and a proposed north-south connector. This retail and mix of uses is proposed as an initial phase. The location and amount of retail proposed in this area is based on the recommendations given by retail consultant Robert Gibbs and are intended to address the larger land use issues of this developing area (Appendix E).

- The western neighborhood center, at the intersection 53rd Street extension and Kings Highway, is the most intense of the three, with the potential of becoming an authentic village center for the area in the future. It also occurs in the form of a main street off of Kings Highway. The proposed mixed-use buildings can accommodate upwards of 100,000 SF. The location and amount of retail proposed in this area is based on the recommendations given by retail consultant Roberts Gibbs and are intended to address the larger land use issues of this developing area (Appendix E).

An Interconnected Network of Public Streets

The Alternative Master Development Plan suggests an interconnected network of curvilinear streets. The main components of this network are:

- Extension of 53rd Street west as a traditional, four-lane boulevard. The proposed configuration directs traffic through both proposed commercial areas while providing access to several north-south connections. The proposed layout of 53rd Street extension and the proposed north-south connections define a series of residential areas that can be “gated-off,” should the developer not desire public access to residential areas.
- A series of north-south connections are proposed.

An Interconnected Network of Public Open Spaces and Waterways Treated as an Amenity

All public open space, whether in the form of greens, waterways or preserves, is surrounded by streets and fronted with buildings. As a result, these spaces contribute to define the unique character of this community. In an attempt to maintain the “water theme” of the developer’s proposal, the alternative plan illustrates an interconnected system of canals and lakes. Most residential units face either a waterway, park, or preserve. Those that do not directly front a waterway or greenway, are within no more than one block from different types of public open space.

A Mix of Building Types

Different building types have been integrated and dispersed throughout the property. Multifamily buildings and townhouses surround the central areas, and density decreases towards the edges of the neighborhoods.

An Array of Civic Buildings

Buildings such as the clubhouse, fitness center, community center, and other proposed amenities, are treated as civic buildings and have been given a prominent location within the plan. This dispersion makes pedestrian access by those in close proximity feasible.

The elementary school is related to the southwest corner of the property to facilitate access and decrease traffic impact on existing roads. This location is strategic. The school is given a place of importance within the village, directly tied to the center, and making walking to school a viable option.

Preservation of Natural Environments

Existing natural environments have been protected and interconnected through greens or waterways and to the existing canal to the north.

A Mix of Uses Addressing the Larger Land Use Needs of this Developing Area

Council staff consulted with Robert Gibbs of Gibbs Planning Group, Inc. to determine what were the likely retail quantities and types that were sustainable in the study area based upon existing and projected growth patterns (Exhibit E). As a result, the Alternative Master Development Plan illustrates two primary retail locations as follows:

1. 53rd Street Extension

This Convenience Center would be 15,000 – 20,000 SF of neighborhood services including food market, gas station, carryout food, convenience store, and personal care types of uses. The primary users of this center would be the residents of Waterway Village; residents of the Bayer subdivision to the north, and east-west bound travelers on 53rd Street extension.

2. Kings Highway

The Kings Highway retail center would be a full supermarket-anchored Neighborhood Center of 80,000 – 120,000 SF. In addition to the supermarket, the Neighborhood Center uses could include a bank, sit-down restaurant, hardware, personal care and up to 40,000 SF of additional service uses. This site will intercept shoppers from Waterway Village and the Bayer subdivision as well as the large number of travelers on Kings Highway and residents north of the 53rd Street extension.

Appendix E contains a full report and recommendation for retail that could be supported in this developing area.

CONCLUSION

The alternative plan is meant to show instructive examples of key planning and design concepts that may be the most effective means to address inconsistencies of the current Waterway Village DRI master plan with the SRPP. They are not meant to be inclusive of all examples that represent good planning. In fact, there are countless ways in which the master plan could be redesigned following these planning concepts and principles to achieve a high level of consistency with the SRPP (See Appendix K).

It has been publicly stated over and over again by local and regional policy-makers editorial boards, and a wide variety of citizen groups, committees, and individuals that “they do not wish to become like Dade, Broward and Palm Beach counties.” If this is truly the case, importing the same sprawling development concepts and patterns which dominate the southeast Florida landscape, and employing them throughout the northern portions of the Treasure Coast Region and will not accomplish this objective. Indian River County is strongly encouraged to incorporate the regional planning ideas and town planning concepts of the Alternative Master Development Plan into any final master plan approved for the Waterway Village DRI.

RECOMMENDATION

As the Treasure Coast Region matures, planning efforts should start to differentiate between acceptable and excellent. The Treasure Coast Region is ready to set standards that reach beyond the mere provision of basic services and propose the creation of mixed-use neighborhoods and districts. Unfortunately, the proposed Master Development Plan for the Waterway Village DRI falls short of this standard. The Master Development Plan for this project should be revised to be consistent with the SRPP and better address the land use needs of this developing area. Furthermore, changes to the plan are necessary to encourage the use of compact, mixed-use development which is less costly to serve, has less impact to the natural environment and can help strengthen the economies of existing urban areas.

The Waterway Village DRI Master Plan is not consistent with the SRPP. There exists within the property a much greater opportunity to design and organize development to completely address all key regional issues and mitigate regional impacts. Many of the key regional issues can only be completely addressed by modifying the master plan proposed by the applicant. An Alternative Master Development Plan for the project has been presented in this report as a suggested way to mitigate regional impacts. It is recommended that Indian River County not approve the Waterway Village DRI, unless, at a minimum: 1) the development program for the project is consistent with the general organization of development contained in Council's Alternative Master Development Plan; and 2) the general conditions of approval contained within Council's DRI Assessment Report for Waterway Village are included in the DO issued by Indian River County.

GENERAL CONDITIONS OF APPROVAL

Incorporation of the ADA by reference, recital of the quantities of uses approved, recital of phasing and buildout dates, providing a termination date and providing for annual reports are required by the DCA rules regarding the content of the DO. The expiration date should be set to allow reasonable time for completion of all development and compliance with all conditions in the DO. Enough time should be allowed between the buildout date and the expiration date for the developer to request any needed extension to the buildout date. These requirements can be met by including the following conditions in the DO:

Application for Development Approval

1. The Waterway Village DRI ADA is incorporated herein by reference. It is relied upon, but not to the exclusion of other available information, by the parties in discharging their statute duties under Chapter 380, Florida, Statutes. Substantial compliance with the representations contained in the ADA, as modified by DO conditions, is a condition for approval.

For the purpose of this condition, the ADA shall include the following items:

- a) ADA dated October 29, 2003; and
- b) Supplemental information dated February 4, 2004 and March 22, 2004.

Commencement and Process of Development

2. In the event the developer fails, within one year from the effective date of the DO, to commence significant physical development beyond the development in existence on the approval date of the DO, development approval shall terminate and the development shall be subject to further DRI review by the Council, Department of Community Affairs, and Indian River County pursuant to Section 380.06, Florida Statutes. For the purpose of this paragraph, construction shall be deemed to have initiated after placement of permanent evidence of a structure (other than a mobile home) on a site, such as the pouring of slabs or footings or any work beyond the stage of excavation or a land clearing, or construction of a permanent access road.

Phasing

3. The phasing of the development is approved as follows:

Phase	Years	Single Family Dwelling Units	Multiple Family Dwelling Units	Clubhouse
1	2005-2006	250	0	
2	2006-2007	178	72	25,000 SF
3	2007-2008	180	70	
4	2008-2009	250	0	
5	2009-2010	250	0	
6	2010-2011	66	184	
7	2011-2012	0	240	

Buildout Date

4. This Project shall have a buildout date of December 31, 2012, unless otherwise amended pursuant to the conditions of this DO and Section 380.06, Florida Statutes.

Termination Date

5. This DO shall expire on December 31, 2017.

Transfer of Approval

6. Notice of transfer of all or a portion of the subject property shall be filed with the Indian River County Board of County Commissioners. Prior to transfer, the transferee shall assume in writing on a form acceptable to the County Attorney, any and all applicable commitments, responsibilities, and obligations pursuant to the DO. The intent of this Provision is to ensure that subsequent property transfers do not jeopardize the unified control, responsibilities, and obligations required of the project as a whole.

Annual Report

7. The annual report required by subsection 380.06(18), Florida Statutes, shall be submitted each year on the anniversary date of the adoption of the DO to Indian River County, the Council, the Florida Department of Environmental Protection, the Florida Department of Transportation, the St. Johns River Water Management District and such additional parties as may be appropriate or required by law. The contents of the report shall include those items required by this DO and Rule 9J-2.025(7), FAC. The Indian River County community development director shall be the local official

assigned the responsibility for monitoring the development and enforcing the terms of the DO.

General Provisions

8. Any modifications or deviation from the approved plans or requirements of this DO shall be made according to and processed in compliance with the requirements of Section 380.06(19), Florida Statutes and Rule 9J-2, FAC.
9. The definitions found in Chapter 380, Florida Statutes shall apply to this DO.
10. Reference herein to any governmental agency shall be construed to mean any future instrumentality that may be created or designated as a successor in interest to, or which otherwise possesses the powers and duties to any referenced governmental agency in existence on the effective date of this DO.
11. This DO shall be binding upon the developer and its assignees or successors in interest.

MASTER DEVELOPMENT PLAN

12. The developer shall revise the Master Development Plan for Waterway Village DRI to be consistent with the general organization of development suggested in the Alternative Master Development Plan contained in Council's Assessment Report for the Waterway Village DRI. At a minimum, the revised Master Development Plan shall be consistent with the goals, strategies and policies contained in the SRPP. The revised Master Development Plan shall be approved by Indian River County in consultation with Council prior to the commencement of any development activities on the project site.

TRANSPORTATION

Rights of Way

13. No building permits for Waterway Village DRI shall be issued until right-of-way within the project along 53rd Street, 58th Avenue, 49th Street, and 43rd Avenue and all intersections thereof, has been dedicated free and clear of all liens and encumbrances to Indian River County as necessary and consistent with the Indian River County Comprehensive Plan.

External Roadway Improvements

14. As a minimum, the developer shall pay a fair share contribution consistent with the road impact fee ordinance of Indian River County in effect at the time of issuance of building permits. Chapter 380, Florida Statutes, also requires that any DRI DO

exaction or fee required shall be credited toward an impact fee of exaction imposed by local ordinances for the same need. Any exaction receiving credit for impact fees must be in accordance with agreements between the developer and Indian River County.

15. No building permits for Waterway Village DRI shall be issued until the following roadway has been built in compliance with Indian River County design standards and regulations:

53rd Street from 58th Avenue to the project entrance as a two lane roadway

Intersection Improvements

16. No building permits for Waterway Village DRI shall be issued for more than 337 dwelling units or after December 2005, whichever comes last, until either: 1) contracts have been let for the intersection improvements identified below; 2) the improvements identified below have been included within the first three years of either the Indian River County adopted Road Building Program, or the Florida Department of Transportation adopted Transportation Improvement Program; or 3) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed and attached as an exhibit to the DO. Surety shall be provided to the satisfaction of Indian River County or the Florida Department of Transportation that sufficient funds will be available to complete the following intersection improvements, including signalization modifications as warranted by County or State criteria.

49th Street and 58th Avenue Add Westbound left-turn lane.

17. No building permits for Waterway Village DRI shall be issued for more than 635 dwelling units or after December 2006, whichever comes last, until either: 1) contracts have been let for the intersection improvements identified below; 2) the improvements identified below have been included within the first three years of either the Indian River County adopted Road Building Program, or the Florida Department of Transportation adopted Transportation Program; or 3) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed and attached as an exhibit to the DO. Surety shall be provided to the satisfaction of Indian River County or the Florida Department of Transportation that sufficient funds will be available to complete the following intersection improvements, including signalization modifications as warranted by County or State criteria.

26th Street and 43rd Avenue Add Northbound, Southbound, Eastbound, and Westbound right-turn lanes.

18. No building permits for Waterway Village DRI shall be issued for more than 859 dwelling units or after December 2007, whichever comes last, until either: 1) contracts have been let for the intersection improvements identified below; 2) the improvements identified below have been included within the first three years of either the Indian River County adopted Road Building Program, or the Florida Department of Transportation adopted Transportation Program; or 3) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed and attached as an exhibit to the DO. Surety shall be provided to the satisfaction of Indian River County or the Florida Department of Transportation that sufficient funds will be available to complete the following intersection improvements, including signalization modifications as warranted by County or State criteria.

26th Street and 58th Avenue Add Westbound right-turn lane.

19. No building permits for Waterway Village DRI shall be issued for more than 940 dwelling units or after December 2008, whichever comes last, until either: 1) contracts have been let for the intersection improvements identified below; 2) the improvements identified below have been included within the first three years of either the Indian River County adopted Road Building Program, or the Florida Department of Transportation adopted Transportation Program; or 3) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed and attached as an exhibit to the DO. Surety shall be provided to the satisfaction of Indian River County or the Florida Department of Transportation that sufficient funds will be available to complete the following intersection improvements, including signalization modifications as warranted by County or State criteria.

49th Street and 43rd Avenue Add Westbound left-turn lane.

20. No building permits for Waterway Village DRI shall be issued for more than 899 dwelling units or after December 2008, whichever comes last, until either: 1) contracts have been let for the intersection improvements identified below; 2) the improvements identified below have been included within the first three years of either the Indian River County adopted Road Building Program, or the Florida Department of Transportation adopted Transportation Program; or 3) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed and attached as an exhibit to the DO. Surety shall be provided to the satisfaction of Indian River County or the Florida Department of Transportation that sufficient funds will be available to complete the following intersection improvements, including signalization modifications as warranted by County or State criteria.

SR 60 and 43rd Avenue Convert Northbound right-turn lane to through/right lane.
Add Southbound through lane.

21. No building permits for Waterway Village DRI shall be issued for more than 1,150 dwelling units or after December 2009, whichever comes last, until either: 1) contracts have been let for the intersection improvements identified below; 2) the improvements identified below have been included within the first three years of either the Indian River County adopted Road Building Program, or the Florida Department of Transportation adopted Transportation Program; or 3) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed and attached as an exhibit to the DO. Surety shall be provided to the satisfaction of Indian River County or the Florida Department of Transportation that sufficient funds will be available to complete the following intersection improvements, including signalization modifications as warranted by County or State criteria.

SR 60 and 58th Avenue Add Northbound and Southbound through (three lanes each) and right-turn lanes.
Add Eastbound and Westbound left-turn lanes (two lanes each).

22. No building permits for Waterway Village DRI shall be issued for more than 859 dwelling units or after December 2008, whichever comes last, until either: 1) contracts have been let for the intersection improvements identified below; 2) the improvements identified below have been included within the first three years of either the Indian River County adopted Road Building Program, or the Florida Department of Transportation adopted Transportation Program; or 3) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed and attached as an exhibit to the DO. Surety shall be provided to the satisfaction of Indian River County or the Florida Department of Transportation that sufficient funds will be available to complete the following intersection improvements, including signalization modifications as warranted by County or State criteria.

53rd Street and US-1 Add Eastbound right and left-turn lanes.

23. No building permits for Waterway Village DRI shall be issued for more than 1,554 dwelling units or after December 2011, whichever comes last, until either: 1) contracts have been let for the intersection improvements identified below; 2) the improvements identified below have been included within the first three years of either the Indian River County adopted Road Building Program, or the Florida Department of Transportation adopted Transportation Program; or 3) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed and attached as an exhibit to the DO. Surety shall be provided to the satisfaction of Indian River County or the Florida Department of Transportation that sufficient funds will be available to complete the following

intersection improvements, including signalization modifications as warranted by County or State criteria.

49th Street and US-1 Signalize.

Add Eastbound left-turn lane.

24. Commencing in the year 2005 signal warrant analyses shall be performed at the following intersections:

53rd Street and US-1

45th Street and 58th Avenue

The signal warrant analyses shall be continued on an annual basis until buildout or until the signals are warranted. The analyses shall be performed during the peak season and presented and approved by Indian River County, or the Florida Department of Transportation, as applicable.

Additional certificates of occupancy shall not be issued within six months of the analysis showing a traffic signal is warranted until contracts are let for installation of the traffic signal including the appropriate lane geometry, pavement markings, signing, lighting, and the like as approved.

25. Commencing in the year 2006 signal warrant analyses shall be performed at the intersection of 49th Street and 58th Avenue. The signal warrant analyses shall be continued on an annual basis until buildout or until the signal is warranted. The analyses shall be performed during the peak season and presented and approved by the Indian River County, or the Florida Department of Transportation, as applicable.

Additional certificates of occupancy shall not be issued within six months of the analysis showing a traffic signal is warranted until contracts are let for installation of the traffic signal including the appropriate lane geometry, pavement markings, signing, lighting, and the like as approved.

Internal Roadway Improvements

26. As a minimum, the following turning lanes shall be provided at the intersection of 53rd Street and the project entrance:

Westbound left-turn lane

Eastbound right-turn lane

Northbound left and right-turn lanes

27. As a minimum, the following turning lanes shall be provided at the intersection of 49th Street and the project entrance:

Westbound left-turn lane
Eastbound left and right-turn lanes
Northbound left-turn lane

Other Issues

28. No additional building permits shall be issued after December 2007 until either: a) 53rd Street has been built between 58th Avenue and Old Dixie Highway; or b) a traffic study has been conducted by the developer and submitted to and approved by Indian River County, Florida Department of Transportation, and Council which demonstrates that the regional roadway network can accommodate Waterway Village traffic impact in the roadway network without the 53rd Street extension to Old Dixie Highway. The traffic study shall be performed in a manner consistent with State, Regional, and County standards applicable at the time of the study and shall:
- a) be conducted during the peak season in the year 2007
 - b) identify any improvements necessary to maintain the subject transportation network at adopted levels of service through the projected completion of the project.

Additional building permits shall not be issued after December 2008 until the roadway improvements necessary to maintain adopted levels of service have been 1) approved by Indian River County, Florida Department of Transportation, and the Council; and 2) incorporated into the development.

29. Commencing in 2005 and continuing every year thereafter, the developer shall submit an Annual Status Report indicating the status (schedule) of guaranteed improvements. This Annual Status Report shall be submitted to Indian River County, Florida Department of Transportation, Council and the Department of Community Affairs as part of the DRI Annual Report.

The Annual Status Report shall list all roadway improvements needed to be constructed, the guaranteed date of completion for the construction of each needed improvement, the party responsible for the guaranteed construction of each improvement, and the form of the binding commitment that guarantees construction of each improvement. Additionally, this report shall include a trip generation study determining new external traffic during both the AM and PM peak hour due to existing development.

No further building permits for Waterway Village DRI shall be issued at the time the Annual Status Report reveals that any needed transportation improvement included in the DO is no longer scheduled or guaranteed, or has been delayed in schedule such that it is no guarantee to be in place and operational, or under actual construction for the entire improvement consistent with the timing criteria established in this DO.

ENVIRONMENTAL AND NATURAL RESOURCES

Upland Preservation

30. The developer shall preserve 74 acres of forested pine flatwoods, sand pine, pine/mesic oak, and sand live oak natural communities on the project site as described on Map F, and shown on Map H of the DRI ADA for the Waterway Village. The intent of this development condition is to provide protection of upland natural communities, to provide habitat for wildlife, and to assist in improving water quality by buffering wetlands and water bodies. The continued viability and maintenance of the preserve area shall be assured through a Conservation Easement with Indian River County and the St. Johns River Water Management District, subject to District acceptance, as part of the Development Plan. Said easement shall be properly executed and recorded prior to issuance of a certificate of occupancy for any portion of the project.
31. Temporary fencing of all preserve areas shall be installed by the developer and inspected and approved by Indian River County prior to commencement of site clearing adjacent to the preserve area. The fencing shall be of a type that clearly identify and designate the boundaries of the preserve areas and minimize the potential disturbance of these features during land clearing and construction. The temporary fencing shall be established at least 30 feet outside the actual boundary of the preserve areas. Temporary fencing shall stay in place until it is necessary to remove it for finish grading, planting required buffers, and constructing any required permanent fencing. These provisions shall be addressed in any land clearing permit(s) issued by Indian River County for the project.
32. The developer shall incorporate provisions into the road design to enable wildlife, including amphibians, reptiles, and small mammals to safely cross between the wetland and upland preserve areas. Wildlife underpasses are necessary to connect the Wetland Restoration Area north of the proposed 43rd Avenue Extension to the upland preserves to the east and south; and to connect the upland preserves north and south of the proposed 53rd Street Extension. The design of the wildlife crossings shall be approved by the FFWCC prior to the construction of these roads.
33. The developer shall prepare a Preserve Area Management Plan for the conservation areas, upland buffers, and retained wetlands identified on the Waterway Village Master Development Plan. The plan shall: 1) identify management procedures and provide a schedule for their implementation; 2) include procedures for maintaining suitable habitat for state and federally listed species; 3) include methods to remove nuisance and exotic vegetation and any other species that are determined to threaten the natural communities; and 4) include plans to permanently mark the conservation areas and allow only limited access for passive recreation, education, or scientific study. The management plan shall be approved by Indian River County in

consultation with USFWS, and FFWCC, and St. Johns River Water Management District prior to the initiation of site clearing activities.

Listed Species

34. In order to protect the nesting pair of Bald Eagles on the project site, the developer shall preserve and manage the area identified as Eagle Preserve/Habitat Enhancement on the Master Development Plan. The developer shall comply with all management procedures and development restrictions detailed in the U.S. Fish and Wildlife Service Habitat Management Guidelines for the Bald Eagle in the Southeastern Region, provided in the appendix of Council's Assessment Report for the Waterway Village. The plan shall be approved by the USFWS prior to the initiation of site clearing on the project site. Details of the Bald Eagle protection measures shall be provided in the Preserve Area Management Plan.
35. In order to provide mitigation for impacts to the Florida Scrub-Jay on the project site, the developer shall coordinate with the USFWS and the Florida Park Service to develop an off-site mitigation plan. The Developer shall pursue all options for scrub-jay mitigation within Indian River County. Prior the approval of a plan that provides mitigation for the Florida Scrub-Jay on lands outside of Indian River County, the developer shall provide documentation to Indian River County demonstrating why mitigation could not be provided in the county. The plan shall be approved by Indian River County, the USFWS, and Florida Park Service prior to the initiation of site clearing on the project site.
36. To further offset impacts to the Florida Scrub-Jay, the developer shall manage the scrub communities, including the sand pine, and sand live oak, and any scrubby pine flatwoods in the upland preserve areas in a way that is suitable for the Florida Scrub-Jay. The developer shall comply with all USFWS and FFWCC recommendations regarding the management of habitat for this State and federally threatened species. The plan shall be approved by Indian River County, the USFWS, and FFWCC prior to the initiation of site clearing on the project site. Details of the scrub habitat management procedures shall be provided in the Preserve Area Management Plan.
37. In order to protect gopher tortoise population on the project site, the developer shall develop a detailed management plan that provides for the protection and relocation of gopher tortoises into the conservation area identified on the Master Development Plan. The developer shall comply with the FFWCC gopher tortoise protection guidelines. The plan shall be approved by Indian River County and the FFWCC prior to the initiation of site clearing on the project site. Details of the gopher tortoise protection measures shall be provided in the Preserve Area Management Plan.
38. In order to protect the Florida Sandhill Crane on the project site, the developer shall maintain foraging habitat around wetlands preserved and created on the project site. The developer shall comply with all FFWCC recommendations regarding the creation

of foraging habitat for this State listed threatened species. The plan shall be approved by Indian River County and the FFWCC prior to the initiation of site clearing on the project site. Details of how the Florida Sandhill Crane foraging habitat will be maintained shall be provided in the Preserve Area Management Plan.

39. In order to protect the eastern indigo snake on the project site, the developer shall prepare an eastern indigo snake protection/education plan consistent with the USFWS guidelines. The plan shall consist of providing educational materials and informational signs. The plan shall be approved by Indian River County and the USFWS prior to the initiation of site clearing on the project site. Details of the eastern indigo snake protection/education plan shall be provided in the Preserve Area Management Plan.
40. The developer shall maintain Wood Stork foraging habitat on site by ensuring no additional net loss of wetland function and value, and by designing wetland mitigation areas to have suitable foraging habitat for the Wood Stork. The developer shall comply with all USFWS recommendations regarding the creation of foraging habitat for this federally endangered species. The plan shall be approved by Indian River County and the USFWS prior to the initiation of site clearing on the project site. Details of the wetland creation design, procedures, and management schedule shall be provided in the Preserve Area Management Plan.
41. In the event that it determined that any additional representative of a state or federally listed plant or animal species is resident on, or otherwise significantly dependent upon the project site, the developer shall cease all activities which might negatively affect that individual population and immediately notify Indian River County and Council. Proper protection, to the satisfaction of the Indian River County and Council, in consultation with the USFWS and the Florida Game and Fresh Water Fish Commission, shall be provided by the developer. These provisions shall be addressed in any land clearing permit(s) issued by Indian River County for the project.

Wetlands

42. The developer shall preserve and enhance 6.18 acres of wetlands identified as wetlands A, F, G, and M on Map F1, Wetlands Map, in the ADA for the Waterway Village DRI. The preserved and enhanced wetlands shall be protected within a Conservation Easement established with Indian River County and the St. Johns River Water Management District, subject to District acceptance. Said easement shall be properly executed and recorded prior to issuance of a certificate of occupancy for any future portion of the project.
43. The developer shall coordinate with the St. Johns River Water Management District, U.S. Army Corps of Engineers, and Indian River County to determine the exact acreage and type wetland mitigation required to off set wetland impacts on the project site. Wetland mitigation requirements shall be determined following the Unified

Mitigation Assessment Method provided in Chapter 62-345, FAC. Methods for the creation and management of wetland mitigation areas on the project site shall be described in the Preserve Area Management Plan to be approved by Indian River County.

44. All wetlands mitigation shall be completed prior to or simultaneous with the elimination of existing wetlands on the site. The detailed plans for mitigation shall be approved by the St. Johns River Water Management District and Indian River County in consultation with Council prior to the initiation of the mitigation plan and prior to the release of any site plan for all or a portion of the project. Reasonable assurance of financial ability to carry out the commitments in the approved mitigation plan shall be provided in a method agreed to and approved by Indian River County. Said assurances and commitments shall be approved by Indian River County planning staff prior to release of any site plan for all or a portion of the project.
45. The developer shall preserve or create a buffer zone of native upland edge vegetation around all wetlands preserved, restored, or created on site. The buffer zone shall include canopy, understory, and ground cover of native upland species. The upland buffers shall be restored to a natural condition if invaded by exotic vegetation or impacted by agricultural activities. The upland buffers shall be a minimum width of 15 feet and shall average 25 feet around the entire wetland. The buffer shall be shown on all appropriate project site plans and shall be designed to be consistent with the buffer requirements of St. Johns River Water Management District and Indian River County. During construction, the upland buffers adjacent to preserved or created wetlands shall be clearly marked prior to the commencement of construction activities to ensure those areas are protected. These provisions shall be addressed in any land clearing permit(s) issued by Indian River County for the project. The upland buffers shall be maintained according to the details provided in a Preserve Area Management Plan to be approved by Indian River County.

Exotic Species

46. Prior to obtaining a certificate of occupancy for any future structure located on any development parcel, the developer shall remove from that parcel all Melaleuca, Brazilian pepper, Old World climbing fern, Australian pine, and any other nuisance and invasive exotic vegetation listed by the Florida Exotic Pest Plant Council. Removal shall be in a manner that avoids seed dispersal by any of these species. These provisions shall be addressed in any land clearing permit(s) issued by Indian River County for the project. There shall be no planting of these species on site. Methods for the removal of exotic and nuisance species should be described in the Preserve Area Management Plan. The entire site, including conservation area, shall be maintained free of these species in perpetuity.

Stormwater Management

47. The developer shall design and construct a stormwater management system to retain the maximum volumes of water consistent with St. Johns River Water Management District criteria for flood control. Post-development runoff volumes and rates shall not exceed predevelopment runoff volumes and rates consistent with Water Management District criteria. The system shall be designed and constructed consistent with the criteria and requirements of St. Johns River Water Management District and Indian River County. Required retention volumes may be accommodated in a combination of vegetated swales, dry retention areas, lakes with vegetated littoral zones, or other suitable detention/retention structures. All discharges from the surface water management system shall meet the water quality standards of FAC Rule 17-3. These provisions shall be addressed in project site plans.
48. The developer shall design and construct the surface water management system so that maintenance of normal hydroperiods within preserved wetlands can be guaranteed against the adverse impacts of activities within the project boundaries, and so that the functions and values provided by these preserve areas will be maintained. Via the site plan project development review and permitting process, the developer shall submit a plan establishing wetland control elevations and post-development drainage sub-areas for each wetland to St. Johns River Water Management District and Indian River County for approval. This plan may be included in the Preserve Area Management Plan. The plan shall demonstrate how sufficient quantities of surface runoff from portions of the developed areas will be conveyed to wetland areas in order to maintain or improve their existing hydroperiod.
49. All elements of the stormwater management system shall be designed to prevent impacts to adjacent areas and to the receiving bodies of water, including the North Relief Canal and the Indian River Lagoon. The lakes within Waterway Village DRI shall be designed to treat the stormwater from developed parcels as well as the stormwater from adjacent roadways, including 49th Street, 53rd Street, 43rd Avenue, 58th Avenue, and any other roads identified as appropriate by Indian River County. The developer shall prepare plans that reasonably demonstrate that these waterbodies and adjacent properties will not be adversely impacted by water quantity or timing of delivery. These plans shall be approved by St. Johns River Water Management District and Indian River County prior to the construction of the surface water management system.
50. The developer shall coordinate with the IRFWCD and SJRWMD to identify the preferred locations to discharge storm water from the project site. The developer shall not relocate the existing control structure located just east of 58th Avenue in the North Relief Canal. The developer shall provide a 20-foot wide utility easement along the east side of the project site for maintenance of stormwater systems.

51. During the site plan review process, the developer and Indian River County shall work together to minimize the amount of impervious surface constructed for the purposes of automobile parking on the Waterway Village site. The developer and the County shall consider the use of pervious parking lot materials where feasible.
52. Landscape management shall be addressed within the Preserve Area Management Plan in conjunction with applying for an Environmental Resources Permit and prior to installing landscape material on the project site. The Preserve Area Management Plan shall provide details concerning the application of fertilizers, herbicides and pesticides in landscaped areas. The plan shall include methods for minimizing the impact of chemical runoff associated with lawn and landscape maintenance. The Developer shall coordinate with the St. Johns River Water Management District to formulate and implement BMPs to reduce the use of pesticides, herbicides, and fertilizers throughout the project.
53. A vegetated littoral zone shall be established in the lakes constructed on site. The littoral zone shall be constructed to provide a minimum of 40 SF of littoral area for every linear foot of lake shore not adjacent to residential units. Prior to the expansion of the existing lake system, the developer shall prepare a design and management plan for the wetland/littoral zone that will be developed as part of that system. The plan may be incorporated into the Preserve Area Management Plan and shall be subject to approval by the St. Johns River Water Management District, and Indian River County prior to beginning any excavation activity. Littoral zones shall be constructed concurrent with lake excavation and final grading. Operational permits for the surface water management system shall not be issued nor shall a certificate of occupancy for any future portion of the project be issued until such time as littoral zones have been found to be constructed in conformance with approved plans.
54. Maintenance and management efforts required to assure the continued viability of preserved wetland habitats and the proper operation of all components of the surface water management system shall be the financial and physical responsibility of the developer. Any entities subsequently approved by Indian River County and St. Johns River Water Management District to replace the developer shall be required, at a minimum, to assume the responsibilities outlined above.

Water Supply

55. No building permits shall be issued for any phase of the Waterway Village development until the developer has provided written confirmation that the developer has coordinated with the St. Johns River Water Management District regarding the abandonment of free-flowing Floridan aquifer wells on site and completed the abandonment process.
56. No building permits shall be issued for any phase of the Waterway Village development until the developer has provided written confirmation from Indian River

County Department of Utility Services that adequate capacity of treated potable water and service/distribution infrastructure will exist by development of the phase. The developer shall enter into an agreement with Indian River County to construct a 12" diameter master planned water main and 12" diameter master planned force main along 53rd Street from 58th Avenue to the eastern property line of the project site.

57. Non-potable water shall be used for irrigation. The preferred source of irrigation water shall be treated wastewater effluent at such time as this source is made available at the site. Should treated wastewater be unavailable or a supplemental source of irrigate be needed, existing or created surface water (i.e. lakes or canals) shall be used to the maximum extent available. Project site plans shall show that the project's irrigation systems will be designed and installed in a manner that will allow utilization of reuse water, and connected to reuse water when it becomes available. The developer shall enter into a reuse agreement with Indian River County to accept stormwater/brine/wastewater effluent for augmenting lake supply to be used for irrigation and maintaining pond levels. The developer shall coordinate with the St. Johns River Water Management District to establish a suitable irrigation water use rate that may allow use of excess storm water to divert it away from other water resources, such as the Indian River Lagoon.
58. In order to reduce irrigation water demand, xeriscape landscaping shall be implemented throughout the project. At a minimum, 50 percent of all areas requiring landscaping material shall be landscaped with native drought-tolerant adapted to soil and climatic conditions existing on site. Project site plans shall show compliance with this provision.
59. The project shall use water-saving plumbing fixtures and other water conserving devices as specified in the Water Conservation Act, Section 553.14, Florida Statutes, to reduce water use for future project development.

Wastewater Management

60. No building permits shall be issued for the Waterway Village development until the developer provides evidence from the Indian River County Department of Utility Services to Indian River County Planning Department that adequate capacity, service infrastructure, and adequate provision for the effluent disposal, will be available to collect and treat and dispose of the wastewater generated by the portion of the development for which permits are required. This provision shall be addressed via Indian River County's concurrency management system.

Solid Waste and Hazardous Materials

61. Development shall only occur concurrently with the provision of adequate solid waste disposal services and facilities. Prior to issuing site plan approval for any phase of development, the developer shall provide to Indian River County planning staff

written evidence from the Indian River County Waste Management Disposal District that adequate facilities will be available when needed.

Air Quality

62. During land clearing and site preparation, soil treatment techniques appropriate for controlling unconfined particulate emissions shall be undertaken. If construction on a parcel will not begin within thirty days of clearing, the soil shall be stabilized until construction of the parcel begins. Cleared areas may be sodded, seeded, landscaped or mulched to stabilize the soil. Minimal clearing for access roads, survey lines, fence installation, or construction trailers and equipment staging areas is allowed without the need for soil stabilization. The purpose of this condition is to minimize dust and dirt production during land clearing and to prevent soil from becoming airborne between the time of clearing and construction. These provisions shall be addressed in any land clearing permit(s) issued by Indian River County for the project.

HUMAN RESOURCE ISSUES

Schools

63. Prior to the issuance of building permits for any phase of development, the development must obtain a letter from the School District of Indian River County stating that they have sufficient space and capacity at schools serving the project to adequately meet the educational needs of students expected to be generated by the project, concurrent with need and with any levels of service standards that may apply.
64. Within one year of the effective date of the DO, the development shall enter into an agreement with the School District of Indian River County regarding provision of an elementary school site needed to serve Waterway Village or payment of a negotiated impact fee to offset the District's need for additional school facilities. If the School District determines that the location reserved as "Potential Elementary School Site" as indicated on the Master Development Plan (Map H) within Waterway Village facilitates the District's goals rather than a payment in lieu of land, then the site shall be dedicated for use as a school to the School District free and clear of all liens and encumbrances within 180 days of execution of the agreement.

Police and Fire Protection

65. Prior to the issuance of any building permits for the Waterway Village project, the developer shall provide Indian River County and the Council with written confirmation from the Indian River County Sheriff that law enforcement is adequate to serve the project concurrent with construction. The developer shall provide a solution acceptable to the Indian River County Sheriff Department prior to obtaining a certificate of occupancy for any structure in each phase of the development.

66. Prior to December 31, 2004, the developer shall dedicate a 3-acre site free and clear of all liens and encumbrances for Emergency Services.
67. Prior to obtaining a certificate of occupancy for any structure located on any development parcel, the developer shall provide the County written confirmation from Indian River County Department of Community Services Fire Rescue Division that there is sufficient manpower, equipment and response time to adequately serve the fire protection/emergency medical service needs of those portions of the project that are ready for occupancy.

Hurricane Preparedness

68. Prior to obtaining a certificate of occupancy for any structure located on any development parcel, the developer shall provide evidence that emergency shelter facilities have been provided for residents of the Waterway Village. Emergency shelter requirements may be accomplished through providing a safe space within each home or constructing a community hurricane shelter within the development capable of housing all residents.

Historic and Archaeological Sites

69. Prior to the commencement of any clearing activities on the project site, the developer shall conduct a professional archaeological investigation to determine if archaeological or historic resources are present within the project area. The report should conform to the specifications set forth in Chapter 1A-46, FAC, and be forwarded to the Florida Department of State, Division of Historical Resources. If significant remains are located, the developer shall implement measures to avoid, minimize, or mitigate adverse impacts to historic properties to the satisfaction of the Division of Historical Resources.
70. In the event of discovery of any archaeological artifacts during project construction, construction shall stop in the area of discovery and immediate notification provided to Indian River County and the Division of Historical Resources in the Florida Department of State. Proper protection shall be provided to the satisfaction of the Division.

Energy

71. The final site and building designs shall comply with Florida Thermal Efficiency Code Part VII, Chapter 553, Florida Statutes. To the maximum extent feasible the project shall also incorporate measures identified in Council's energy plan guide entitled, Energy Planning in the Twenty-First Century: A Guide for Florida Communities, updated January 2003; and the SRPP.

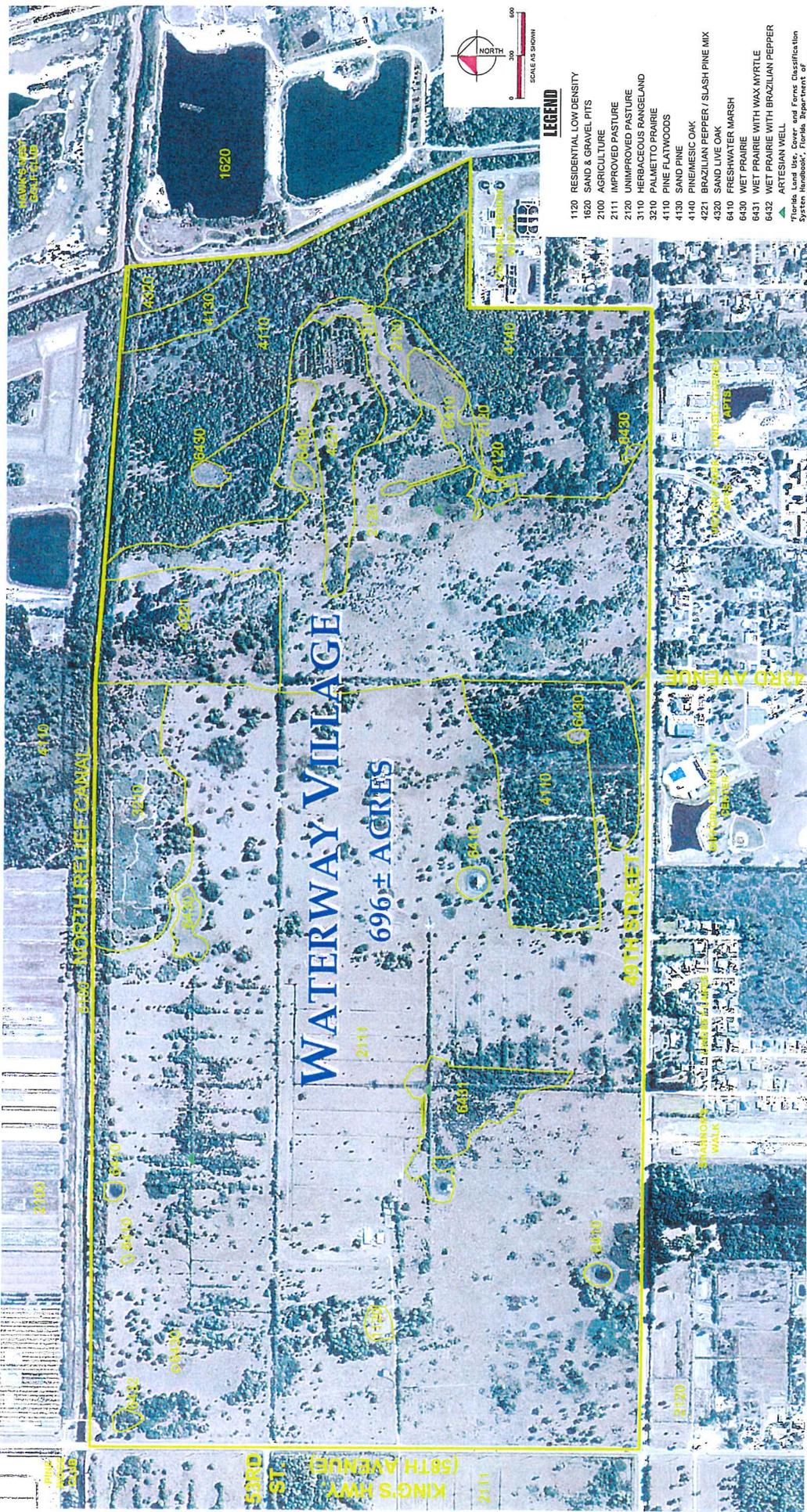
72. The developer shall incorporate each of the 17 energy saving methods outlined in the appendix of Council's Assessment Report for the Waterway Village unless it can be demonstrated to the satisfaction of Indian River County that individually each method is not cost effective.

APPENDIX A

Additional Maps

This appendix contains the following maps from the Waterway Village DRI Application for Development Approval:

- Land Use Map
- Wetlands Map
- Vegetations Associations Map
- Bald Eagle Survey Data & Gopher Tortoise Burrow Locations
- Scrub Jay Reference Station & Habitat
- Master Drainage Plan
- Transportation Network



LEGEND

- 1120 RESIDENTIAL LOW DENSITY
- 1620 SAND & GRAVEL PITS
- 2100 AGRICULTURE
- 2111 IMPROVED PASTURE
- 2120 UNIMPROVED PASTURE
- 3110 HERBACEOUS RANGELAND
- 3210 PALMETTO PRAIRIE
- 4110 PINE FLATWOODS
- 4130 SAND PINE
- 4140 PINE/MESIC OAK
- 4221 BRAZILIAN PEPPER / SLASH PINE MIX
- 4320 SAND LIVE OAK
- 6410 FRESHWATER MARSH
- 6430 WET PRAIRIE
- 6431 WET PRAIRIE WITH WAX MYRTLE
- 6432 WET PRAIRIE WITH BRAZILIAN PEPPER

▲ ARTESIAN WELL
 Florida Land Use, Cover and Forest Classification System Handbook, Florida Department of Transportation, Surveying and Mapping Office, Geographic Mapping Section, January 1997, 11th Edition

MAP D
 LAND USE
 MAP

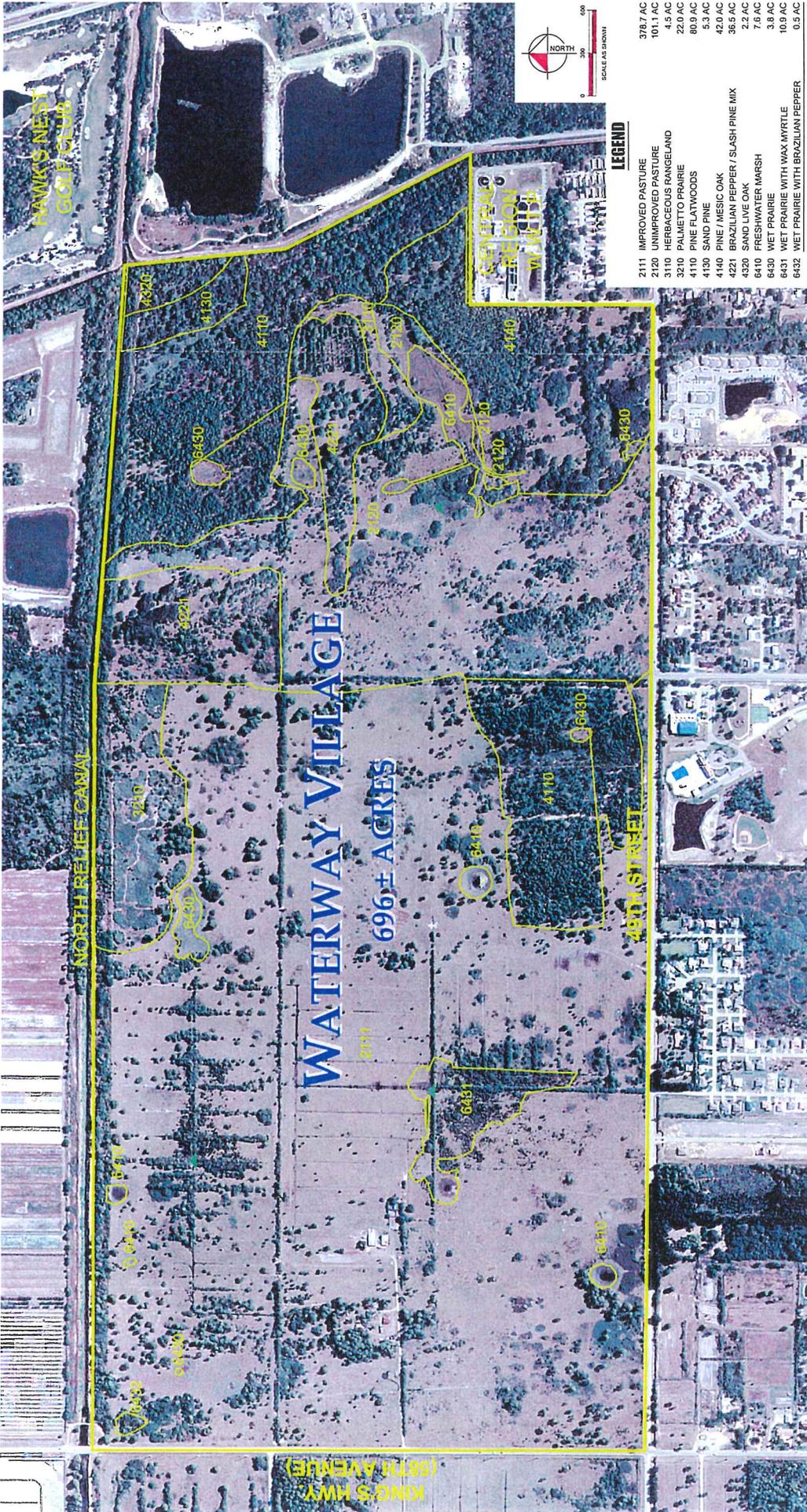
INITIAL SUBMITTAL
 OCTOBER 2003

WATERWAY VILLAGE
 Indian River County, Florida



REVISIONS:

Project Team:	Revisions:
Applicant: Divosta and Company P.O. Box 6000, Ft. Pierce, FL 34945	Environmental: Kings Highway Research Associates, Inc. Vero Beach, FL 34984
Planning / O&M Coordination: Kings Highway Research Associates, Inc. Vero Beach, FL 34984	Traffic: Yuhimo Zhai Kings Highway Research Associates, Inc. Vero Beach, FL 34984
Legal Counsel: Balkin, Caldwell, & Caravaggio Vero Beach, FL 34984	Hydrology: Arcadis G & M, Inc. Fort Pierce, FL 34945
Engineering: Balkin, Caldwell, & Webb, Inc. Fort Pierce, FL 34945	



WATERWAY VILLAGE

Indian River County, Florida



MAP F

VEGETATION
ASSOCIATIONS MAP

INITIAL SUBMITTAL
OCTOBER 2003

REVISIONS:

- Project Team:**
- Architect: Divosta and Company, Palm Bay, Florida
 - Planning / DRP Coordination: Divosta and Company, Palm Bay, Florida
 - Environmental Research: Environmental Research Associates, Inc., Vero Beach, Florida
 - Trails: Tyenne Ziel, Vero Beach, Florida
 - Callings, Brown, Caldwell, Engineering: Callings, Brown, Caldwell, Inc., Vero Beach, Florida
 - Hydrology: Hydrology Associates, Inc., Vero Beach, Florida
 - Lawson, Noble, & Webb, Inc. (Civil, Survey, Flood)



WATERWAY VILLAGE

Indian River County, Florida

MAP G
BALD EAGLE SURVEY DATA
& GOPHER TORTOISE
BURROW LOCATIONS
INITIAL SUBMITTAL
OCTOBER 2003



Project Team:

Applicant
Divosta and Company
10000 US Highway 1
Palm Bay, Florida 32909

Planning Team Coordination
Kimley-Horn and Associates, Inc.
10000 US Highway 1
Palm Bay, Florida 32909

Soil Consultant
Collins, Brown, Colwell, Barrett, & Garavaglia
10000 US Highway 1
Palm Bay, Florida 32909

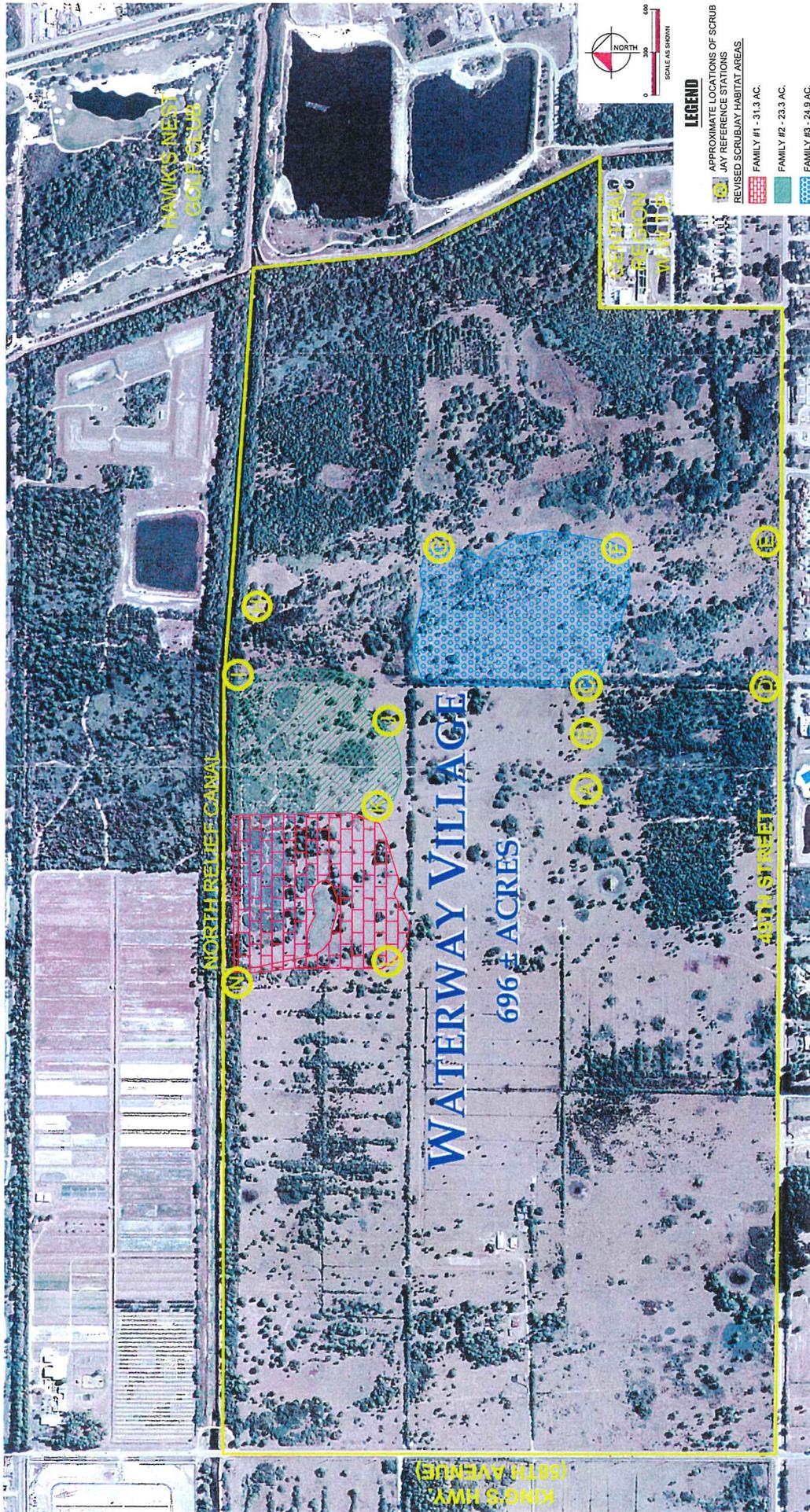
Hydrology
Lawson, Noble, & Webb, Inc.
10000 US Highway 1
Palm Bay, Florida 32909

Environmental Biological Research Associates
10000 US Highway 1
Palm Bay, Florida 32909

Traffic
Yonker, Ziel Traffic Consultants, Inc.
10000 US Highway 1
Palm Bay, Florida 32909

Hydrology
Lawson, Noble, & Webb, Inc.
10000 US Highway 1
Palm Bay, Florida 32909

REVISIONS:



WATERWAY VILLAGE

Indian River County, Florida

MAP G2

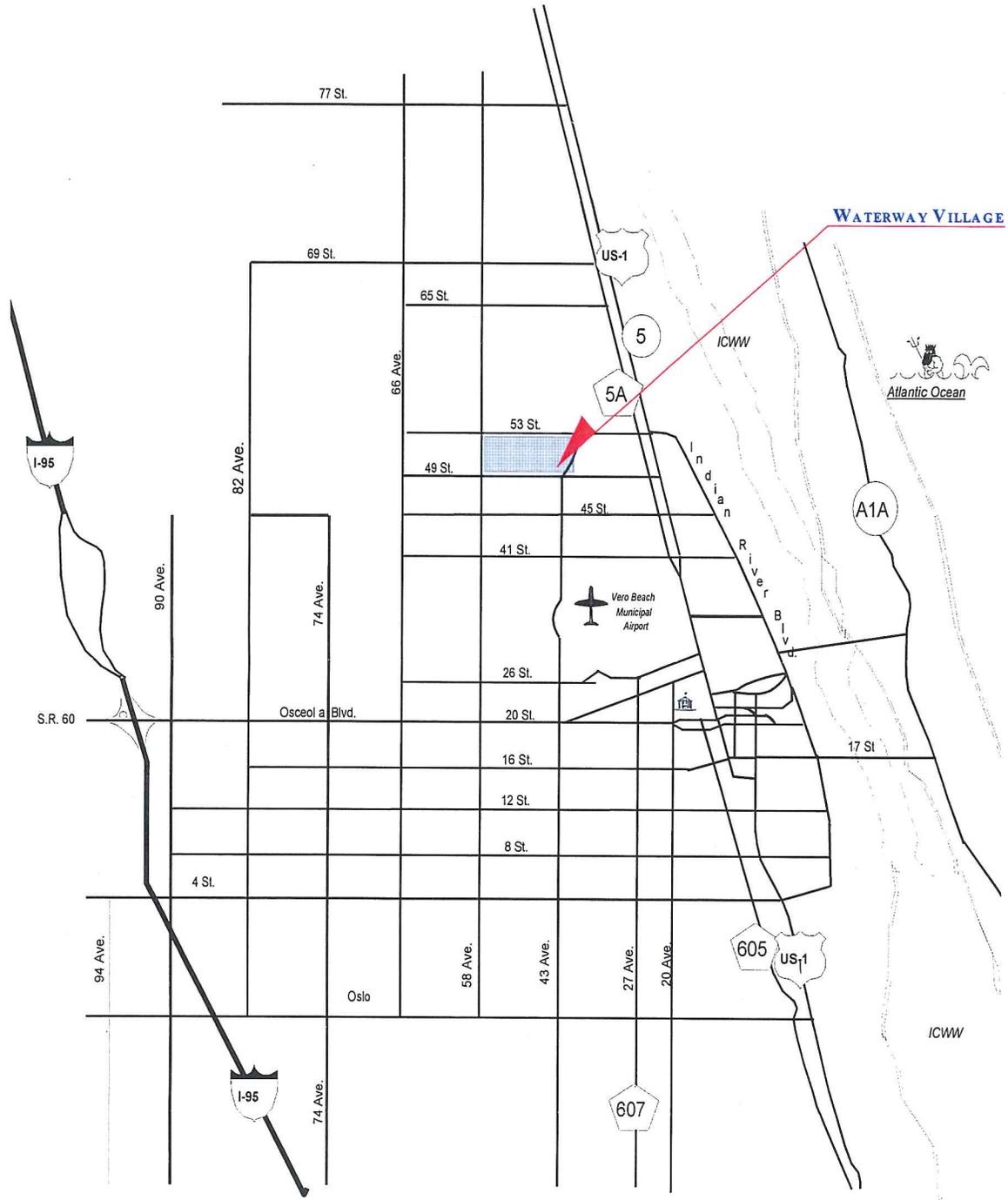
SCRUB JAY REFERENCE
STATION & HABITAT

INITIAL SUBMITTAL
OCTOBER, 2003



REVISIONS:

- | | |
|---|---|
| <p>Project Team:</p> <ul style="list-style-type: none"> Divosta and Company Planning / DRI Coordination Army-Horn and Associates, Inc. Legal Counsel Collins, Brown, Caldwell, Garavaglia Engineering Lawson, Noble, & Webb, Inc. | <ul style="list-style-type: none"> Environmental Biological Research Vegetation Traffic Yvonne Ziel Traffic Consultants, Inc. Hydrology Arcadis G & M, Inc. |
|---|---|



Project Team:

Applicant
 Divosta and Company
 Palm Beach Gardens, Florida
 Planning / DRI Coordination
 Kinley-Horn and Associates, Inc.
 Vero Beach, Florida
 Legal Counsel
 Collins, Brown, Caldwell, Barkett, & Garavaglia
 Vero Beach, Florida
 Engineering
 Lawson, Noble, & Webb, Inc.
 Port St. Lucie, Florida

Environmental
 Biological Research Associates
 Vero Beach, Florida
 Traffic
 Yvonne Ziel
 Traffic Consultants, Inc.
 Vero Beach, Florida
 Hydrology
 Arcadis G & M, Inc.
 North Palm Beach, Florida

WATERWAY VILLAGE

Indian River County, Florida



A-8

MAP J

TRANSPORTATION NETWORK

FIRST SUFFICIENCY
 FEBRUARY 2004

APPENDIX B

Correspondence

This appendix contains correspondence concerning the Waterway Village DRI from the following organizations:

Indian River County
Florida Department of Transportation
Florida Department of State
St. Johns River Water Management District
Florida Fish and Wildlife Conservation Commission
U.S. Fish and Wildlife Service
U.S. Army Corps of Engineers

BOARD OF COUNTY COMMISSIONERS

1840 25th Street, Vero Beach, Florida 32960-3365



Telephone: (772) 567-8000

April 16, 2004

Mr. Michael Busha
Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, FL 34994

RECEIVED

APR 23 2004

TREASURE COAST
REGIONAL PLANNING COUNCIL

RE: Comments on Waterway Village DRI ADA Third Round

Dear Mr. Busha:

The County Staff has reviewed the resubmitted Waterway Village application for development approval (ADA). This letter contains the original staff comments and the staff's reply to the applicant's response. Based on that review, County staff has the following comments and recommended conditions as follows:

Planning

1. The applicant responses to the two comments in the supplemental letter of December 5, 2003 have been evaluated by staff and have been found to be insufficient. Staff has the following response:
 - a. *Original Comment: Staff recommends that an access point on 49th Street be constructed in the southwest portion of the site when the 58th Avenue initial / construction entrance is closed. Without such a permanent access point, residents in the southwest portion of the site will have a long distance to cover just to leave the development. The ADA should be revised accordingly. A condition needs to be placed in the development order to provide this access point.*

Applicant's response: The applicant does not agree with this comment. We originally provided a loop road around the entire project and, at the County staff's insistence, we provided an additional east-west roadway to alleviate this concern. We would like to further address this issue at the County Commission public hearing.

Staff's response: As stated since August 2003, staff believes that an access point at the southwest corner of the site will be beneficial to the future residents and the area traffic patterns. Such a connection will be needed to replace the temporary 58th Avenue connection when it is closed, and could help address staff's pedestrian system connection comment (see 2 b, below). Planning, Public Works, and Traffic Engineering staff concur that this connection will be recommended as a D.O. and

P.D. requirement. Therefore, staff will recommend a 49th Street access point as a condition of the local development order. This condition will necessitate a revision to the traffic impact analysis. Contact Chris Mora 772-567-8000, Ext 1234 for information on the extent of the revisions needed to the TIA.

- b. *Original Comment: Based upon discussions with the Indian River Farms Water Control District (IRFWCD), staff recommends a different method of outfall than the North Relief Canal. An alternative would be the sub-lateral canal on the south side of 49th Street. The applicant should coordinate with the Indian River Farms Water Control District on this issue. The ADA should be revised accordingly.*

Applicant's response: Due to the amount and rate of discharge from the site, the IRFWCD would like the site discharge point to occur either into Lateral 'H' or into a new lateral canal on 53rd Street, then into the North Relief Canal east of the control structure. The District will require that the discharge not be into any system upstream of the control structure, since the discharge water will contain diluted R/O waste. The applicant will work with the IRFWCD to determine the best point of discharge.

Staff's response: The Indian River Farms Water Control District will set the discharge point through their permitting criteria. Based on our conversations, the discharge point will need to be substantially to the west of the currently depicted location or into the Lateral H Canal.

2. (Original #2):

- a. *Original Comment: The pedestrian system needs to provide a pedestrian path (8' wide paved pedestrian path) along the perimeter loop road.*

Applicant's response: The applicant will provide an 8' wide pedestrian path on the perimeter loop roadway.

Staff's Response: This item appears to have been addressed. Please insure that the improvement is properly noted on the conceptual plan.

- b. *Original Comment: Pods A, N, AA, BB, and CC need to connect to the perimeter path. The connection from POD A is critical as it will be a connection to the school site and will need to be a condition of the development order.*

Applicant's response: The applicant does not agree with this comment. These parcels are connected to the perimeter path through a series of pedestrian bridges that are built to encourage pedestrian activity. Out residents on parcels AA, BB and CC will have access to the perimeter path through parcel Z although most residents will be traveling to the clubhouse and accompanying recreational facilities. If a school is located in the northwest corner, we will attempt to provide a pedestrian connection in that general location but a connection at this time is not warranted.

Staff's Response: For proper pedestrian flow for the project residents to the school site, 58th Avenue sidewalk and to the south, pedestrian connections to the perimeter at the northwest corner Pods A and B, southwest corner Pod AA, are essential. These pedestrian connection will facilitate both inter and intra pedestrian connections. Also, there needs to a pedestrian connection from Pod N to the perimeter pedestrian path to complete an internal loop. The staff will include this a condition in the local development order.

School / Public Recreation:

1. *Original comment: A condition needs to be included in the development order providing for the dedication of a school site or other solution acceptable to the School Board.*

Applicant's response: The applicant has a concern with this condition, however the School Board has not made a decision at this time regarding the viability of a school at this location. The County must also recognize that we intend to provide mitigation for our wetlands at this location. Dedication of this property without compensation is an issue that we should continue to address with the School Board as they move through their site selection process. Our targeted market for this community is an active adult buyer and we have projected that a maximum of 133 school age children will live in this community. In the past, the County has expressed a concern regarding traffic along King's Highway and, as a result, we were asked to relocate our primary entrance to this community.

Staff's Response: This will be condition of the local development order.

Design Issues:

1. (Original #1)

- a. *Original comment: As part of the landscape plan and environmental enhancement, 40' wide littoral zones need to be provided along all lake edges that are not adjacent to residential or recreation areas. These locations need to be depicted on Map H and I. Such littoral zones could be credited toward meeting any TCRPC lake / wetland edge requirements. This will be a development order condition.*

Applicant's response: The applicant agrees with this condition provided that the County recognized that the 40' dimension should be an average width for littoral zones. Maps H and I have been revised to reflect these changes and are attached for your review.

Staff's Response: Staff agrees that this item is resolved and will be addressed by a condition. The 40' width is for calculation purposes and the staff agrees that greater littoral area may be provided at some places and a lesser amount at others.

2. (Original #2)

- a. *Original Comment :One tree per 100' lineal feet of shoreline needs to be provided along*

the lake shoreline. These trees can be grouped and do not need to be evenly spaced. The trees need to be species that do well near water such as cypress, maples and sweetgums. These trees need to be a minimum of 5' tall and have a 1" caliper at planting. Please provide a typical landscape section for the lake area adjacent to the residential areas that provide an alternative choice to sod (e.g. spartina, bulrush, sedges, etc.) at the lake / backyard interface. This will be a development order condition.

Applicant's response: The applicant agrees with this condition.

Staff's Response: Staff agrees the first part of this issue is resolved and addressed through a condition. The one tree per 100' is for calculation purposes and applies to the entire lake frontage, although the trees can be clustered or grouped to meet this criterion. The second part of the comment does not appear to have been addressed.

"Town Center" and Internal Design:

1. (Original #1)

a. Original Comment: To adequately address county comprehensive plan policies on mixed use and compact development, and regional plan policies, the "town center" / multi-family area needs to be shifted toward the 53rd Street entrance area, and the entrance road into the "town center" retail and office area needs to be open to customers from "the public". This comment has not been satisfactorily addressed. The ADA needs to be revised to address this comment.

Applicant's response: The applicant strongly disagrees with this comment. The approximately 5,000 square feet of retail in our clubhouse is intended to serve only the residents of the community and help capture trips that would otherwise travel on roads outside the community. Our other "walk" communities have shown a daily trip generation rate average of 4.42 daily trips as a result of these uses within our centrally located clubhouse. Retail merchants have told us that a commercial center of this size would not be viable in the middle of a roadway like 53rd Street and an intersection location is mandatory. In that regard, North American Properties has prepared a site plan showing two commercial shopping centers containing approximately 68,000 square feet with four yet to be determined out parcels at both corners of U.S. Highway #1 and 53rd Street. This center is immediately east of our project and they are awaiting our final approval before committing to one of the two sites.

Staff's response: The staff acknowledges that the applicant disagrees that this issue is not resolved, and will make this a condition of the local development order, including a revised traffic impact analysis. Please contact Chris Mora at 772-567-8000, Ext 1234.

Public Works:

1. (Original #6)

- a. *Original Comment: A condition needs to be placed in the development order providing for the dedication without compensation for right-of-way for all Thoroughfare plan roads.*

Applicant's response: The applicant does not agree with this condition and feels impact fee credits should be provided. We would like the opportunity to discuss this in more detail at the public hearing.

Staff's Response: The Public Work's Director has indicated that there is a potential for compensation of some of the thoroughfare plan right-of-way. All local road right-of-way (60' width) for 53rd Street and 43rd Avenue must be dedicated without compensation. Most or all of the 43rd Avenue right-of-way will not be compensable due to the extended length proposed to benefit the developer with an expanded development area "inside" the thoroughfare plan roads. The amount of compensable thoroughfare plan right-of-way will be determined through negotiations with Public Works Director. The amount of compensation will also be affected by the Murphy Act Easements and right-of-way abandonments requested and needed by the applicant. The applicant needs to contact the Public Works Director now to initiate negotiations. The concept of the agreement needs to be agreed upon prior to scheduling the Conceptual PD for consideration by the Planning and Zoning Commission. This could affect the public hearing dates to be set by the county.

- b. *Original Comment: A condition needs to be placed in the development order providing for the acceptance and treatment of by the applicant of runoff from 53rd Street, 49th Street, 43rd Avenue, and 58th Avenue.*

Applicant's response: The applicant intends to accept and treat stormwater from 53rd Street, 43rd Avenue and 58th Avenue. However, the applicant intends to deed sufficient right-of-way to treat 49th Street drainage, and not accept 49th Street drainage into the site since 49th Street currently drains into the canal located on the south side of the road and not toward the site.

Staff Response: Based on the applicant's response to accept stormwater from 58th, 43rd Avenue and 53rd Street, and to dedicate the additional right-of-way necessary for 49th Street to treat the stormwater in the right-of-way. The county is in agreement with applicant's response.

- c. *Original Comment: The property is encumbered with Murphy Act Road Reservations other than 58th Avenue. (58th Avenue and King's Highway is the same road) The developer has agreed to work with the County to provide all necessary right-of-way for the County roads surrounding the site, including sufficient right-of-way for stormwater management or management of it within the projects development. All Murphy Act Road Reservations encumbering the site shall be released by the County concurrent with or after deeding of necessary rights-of-way. This needs to be a condition of the development order.*

Applicant's response: The applicant agrees with this condition.

Staff's Response: This will be a condition of the local developers agreement. The Murphy Act Easements that have not released by the County will need to be depicted on the conceptual plan. The release of these easements will be part of the issue related to compensation for thoroughfare plan right-of-way. The County has not compensated developers for thoroughfare plan right-of-way that is covered by a Murphy Act Easement. It has been the County's practice to sign-off on releases outside of the thoroughfare plan ultimate right-of-way, and keep the area inside the thoroughfare plan area, and to swap release area for other right of way areas. To date, the County has not signed off on any releases in this area.

Environmental:

1. *Original Comment: Please provide details to County environmental planning staff with respect to listed species on-site protection measures, as well as off-site mitigation measures, once the details are finalized with the U.S. Fish and Wildlife Service. Environmental planning staff will provide additional comments once the details are received for review.*

Applicant's response: Once the details are finalized with U.S. Fish and Wildlife regarding on-site protection and off-site mitigation the petitioner will provide them to the County planning staff.

Staff's Response: This information will need to be provided prior to the application being scheduled for consideration by the Planning and Zoning Commission. This could affect the public hearing dates to be set by the county.

Traffic: Traffic Engineering comments will follow under separate cover.

Emergency Services:

1. *Original Comment: A condition needs to be placed in the development order to provide for an emergency shelter. The applicant shall have the option of providing a safe space within each home or construct a community shelter within the development that provides 20 sq. ft. of space per resident. The shelter needs to be provided with the Town Center phase.*

Applicant's response: If the School Board selects the northwest corner of the site for an elementary school that could be used as a community shelter. If the site is not use, the applicant will provide a safe space within each home.

Staff Response: Please see the attached e-mail from Nathan McCollum. Based on that e-mail individual homes will need to have a safe space. Staff will incorporate this as condition in the development order. Please contact Nathan McCollum at 772-567-8000, ext 1289 to determine specifications for each unit's safe space.

2. *Original Comment: A condition needs to be placed in the development order providing for an EMS site (2 to 3 acres) or other solutions acceptable to Emergency Services.*

Applicant's response: The applicant has not received correspondence from Emergency Services that an EMS site is required. The applicant would like to discuss this matter further with staff.

Staff's Response: Emergency Services has expressed interest in two potential sites with one on 58th Avenue and one on 49th Street. Please contact John King at 772-567-8000, ext 1225 regarding size, location, and acquisition.

Utilities:

1. *Original Comments: Applicant must enter into a reuse agreement to accept stormwater/brine/wastewater effluent for augmenting lake supply to be used for irrigation and maintaining pond levels.*

Applicant's response: The applicant has agreed to enter into a reuse agreement with Indian River County to accept stormwater/brine/wastewater to be used for irrigation and maintenance of pond levels.

2. *Relocation of control structure to the east as indicated will not be allowed per Indian River Farms Water Control requirements of not allowing commingling of R.O. Brine mixed reuse water west of the upper pool control structure. The make-up water proposed to be withdrawn from the North Relief Canal will be substituted with the stormwater/brine/wastewater effluent provided by the Utilities Department.*

Applicant's response: So noted.

3. *Applicant must enter into a developer's agreement to construct a 12" diameter master planned water main and 12" diameter master planned force main along 53rd Street from 58th Avenue to eastern property line*

Applicant's response: The applicant has agreed to enter into a developer's agreement with Indian River County to construct the above-mentioned water main and force main.

These 3 items need to be included as development order conditions. Any questions regarding this comment should be directed to Mike Hotchkiss at 772-567-8000 ext. 1821.

Staff's Response: The county agrees that these items will be the included as conditions in the development order.

Budget

1. *Original Comment: Original comment 3 has not been completely addressed. The table needs to be revised for all project years that contain multi-family.*

Applicant's response: The table has been revised and is attached for your review.

Staff Response: This comment has been addressed.

General Comments:

1. *Original comment: The list of permits on question 8 and page 1 needs to include an IRC Wetland Resource permit and Utility Construction permit.*

Applicant's response: The applicant has agreed to acquire any permit necessary during the development of the site.

Staff Response: These permits need to be listed on sheet C-1 of the conceptual plan.

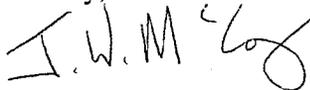
2. *Original Comment: Map A1 depicts two middle schools in the Gifford area, where there is only one school. Please adjust the map accordingly.*

Applicant's response: Map A1 has been revised to show only one middle school in the Gifford area and is attached for your review.

Staff's response: This comment has been addressed.

Traffic engineering comments will follow. At this time traffic engineering indicates that the traffic analysis is insufficient so far to consider the application sufficient. Should you have any questions, please contact me at 772-567-8000, extension 1242.

Sincerely,



John W. McCoy, AICP
Senior Planner, Current Development

cc: Robert M. Keating, AICP
Stan Boling, AICP
Jim Davis
Chris Kafer
Chris Mora
Jeanne Bresett
John King
Nathan McCollum
Dale Justice
Erik Olson
Steve Doyle
Mike Hotchkiss

Bill Eubank
Joe Baird
Jason Brown
Sasan Rohani
Greg Smith
DCA
IR Farms



Florida Department of Transportation

JEB BUSH
GOVERNOR

PLANNING AND ENVIRONMENTAL MANAGEMENT - DISTRICT 4
3400 West Commercial Blvd., Ft. Lauderdale, FL 33309-3421
Telephone (954) 777-4601 Fax (954) 777-4671
Toll Free Number: 1-866-336-8435

RECEIVED
APR 21 2004
TREASURE COAST
REGIONAL PLANNING COUNCIL
JOSÉ ABREU
SECRETARY

April 14, 2004

Mr. Michael Busha
Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, FL 34994

Dear Mr. Busha:

**SUBJECT: Waterway Village Development of Regional Impact (DRI)
Indian River County
Application for Development Approval (ADA) – Sufficiency Response #2**

In response to your letter dated March 30, 2004, the Florida Department of Transportation (FDOT) has reviewed the second sufficiency response for the Waterway Village DRI ADA. This sufficiency response was prepared in order to address our comments of March 2, 2004.

The Waterway Village DRI site is bounded by the Relief Canal to the north, 49th Street to the south, Old Dixie Highway to the east, and Kings Highway (58th Avenue) to the west, in unincorporated Indian River County north of the City of Vero Beach. The approximately 700-acre site is proposed to include 1,740 residential units, a 5,000-square foot Town Center commercial area that will include a convenience store, gasoline station, bank, and real estate office, and 20,000 square feet of non-commercial uses which will provide a post office, library, fitness center, and community facilities area. It is anticipated that the project will be completed in 2012.

It should be noted that the comments provided herein include the previous comments from March 2, 2004, which have not been adequately addressed by the applicant. They have been restated below along with additional comments related to the newly submitted second ADA sufficiency response.

Major Issues:

1. The capacity analysis for the intersection of SR-60 and 43rd Avenue for Phase I and II Background Traffic, Background Traffic with Improvements, and Total Traffic with Improvements scenarios utilizes an Arrival Type 5 for either the eastbound or westbound through movement. Please revise the AM and PM peak hour analyses of all intersections for all scenarios such that Arrival Type 3 (random arrivals) is used in the capacity analyses.

2. The capacity analyses for the intersections of SR-60 and 43rd Avenue, and SR-60 at 58th Avenue, for Phase I and II Background Traffic, Background Traffic with Improvements, and Total Traffic with Improvements scenarios, used a modified Extension of Effective Green Time variable. This variable, which is the amount of the change and clearance interval that is deemed usable for the movement of vehicles, was increased from its default value of 2.0 seconds to 4.0 seconds. With Yellow Plus All-Red phases of between five (5) and six (6) seconds, only 1.0 to 2.0 seconds per phase are considered as Lost Time for the movement. Without field data supporting this increase, the Applicant should revise all analyses where the Extension of Effective Green Time variable was modified from the default value of 2.0 seconds.
3. In a cursory review of the peak hour turning movement data collected in 2003, the intersection of SR-60 and Indian River Boulevard was adjusted to reflect peak season traffic conditions using an incorrect Peak Season Adjustment Factor adjustment factor based on the date of the count. In addition, the raw turning movement counts for the intersection of 45th Street and US-1 were utilized in the capacity analysis, and were not adjusted to reflect peak season conditions. The Applicant should review and revise, as necessary, all raw and adjusted turning movement counts for each intersection to ensure that the correct adjustment factor is applied.
4. The Percent Heavy Vehicle factor of five (5) percent is only applied to a few movements for the analysis of the intersection of 49th Street and 43rd Avenue. Please revise the intersection analyses so that each turning movement is applied the Percent Heavy Vehicle factor for all analysis scenarios.
5. A signal warrant analysis should be provided for the intersections where signalization is the proposed improvement to solve capacity deficiencies to ascertain whether or not a signal is warranted at these locations during either phase. This includes the intersections of 53rd Street at 58th Avenue, 49th Street at 58th Avenue, and 45th Street and 58th Avenue for Phase I and, if necessary Phase II. If a traffic signal is not warranted at these locations, the Applicant should mitigate the anticipated traffic impacts associated with this project by some other means.
6. The method used by the applicant to determine the phasing of improvements appears to be inconsistent with the actual magnitude of the impact upon various roadway segments and intersections. The applicant determined the percentage of delay increase above the maximum Level of Service D delay value, and applied that percentage to the number of trips generated during Phase I. The phasing of the improvements should be assessed based on the number of project trips that can be accommodated on a roadway segment or intersection prior to exceeding an acceptable level of service. Then, based on the trip distribution, the applicant can calculate the overall number of trips allowed to be generated by the project without impacting the segment or intersection. The number of project trips can then be used as the development threshold to phase improvements proposed to mitigate the traffic impacts associated with the project. We offer our assistance to the applicant to develop a mutually acceptable methodology for determining the phasing of improvements, if desired.

7. The corridor analysis submitted for 43rd Avenue from SR-60 to 41st Street only addresses the PM peak hour. The Applicant should also evaluate the AM peak hour.
8. The analysis for the US-1 corridor from 37th Street to 53rd Street should also include the cross streets of 41st Street, 45th Street, and 49th Street. These three streets intersect with US-1 and create significant impacts to the overall corridor operation.

Minor Issues:

9. On Map J-A-3 Signalized Intersection, the intersections of 53rd Street at US-1, and 41st Street at 58th Avenue are identified as being signalized. However, the existing conditions capacity analysis evaluated the intersections as two-way stop control. The Applicant should revise the map to denote that the intersection is programmed to be signalized in near future, but is currently unsignalized.
10. Signal timing modifications, most notably right-turn overlap signal phasing, appears to be proposed to improve intersection traffic operations at the following intersections:
 - 26th Street at 43rd Avenue
 - 49th Street at 58th Avenue
 - 53rd Street at US-1
 - SR-60 at 58th Avenue
 - SR-60 at 43rd Avenue
 - Indian Street at 37th Street
 - 41st Street at 43rd Avenue

Because modifications to the existing traffic signal infrastructure, such as replacing three-section heads with five-section heads, may be required, the Applicant should verify these signalization improvements and include them in Table 21-F-1 as identified intersection improvements.

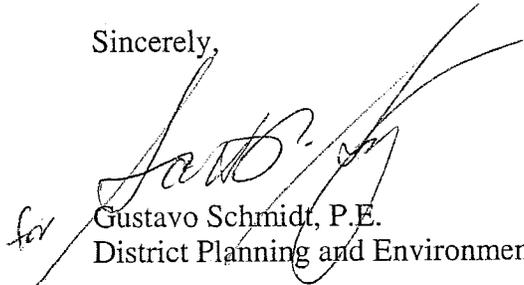
11. The proposed signalization and resulting cycle length for the intersection of 49th Street and US-1 is 180 seconds. This appears to be excessively long for a Tee intersection where the minor street traffic volume has a forecasted magnitude of approximately 120 vehicles during the peak hour. It is suggested that the intersection be analyzed with a shorter cycle length, possibly one-half of the cycle length used for adjacent signalized intersections to promote double cycling at 49th Street along the US-1 corridor, especially if progression is to be implemented through this section of US-1.
12. The output submitted for the arterial analysis of 43rd Avenue from SR-60 to 41st Street, and for US-1 from 37th Street to 53rd Street, should be in Rich Text Format which provides more detailed information concerning the inputs associated with the analysis.

Mr. Michael Busha
April 14, 2004
Page 4

13. It is unclear whether or not the intersection of 43rd Avenue and 45th Street is included in the corridor analysis of 43rd Avenue. The Applicant should clearly indicate the northern and southern terminus of the analysis, and identify each intersection within the corridor that is studied.

In conclusion, we find the second sufficiency response for the Waterway Village DRI inadequate. The applicant should address the comments detailed above. Please feel free to contact us at (954) 777-4601 should you have any questions.

Sincerely,


for Gustavo Schmidt, P.E.
District Planning and Environmental Engineer

GS:cg/cw

cc: D. Ray Eubanks – Community Program Administrator, FDCA
Bob Romig – Director, Office of Policy Planning, FDOT
Gerry O'Reilly – Director of Transportation Development, FDOT
John Krane – Transportation Planning Engineer, FDOT



RECEIVED
SEP 07 2003
TREASURE COAST
REGIONAL PLANNING COUNCIL

FLORIDA DEPARTMENT OF STATE
Glenda E. Hood
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Mr. James T. Snyder
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, Florida 34994

August 26, 2003

RE: DHR Project File Number: 2003-7014
Received by DHR August 4, 2003 *LMC 8/26/03*
Waterway Village Development of Regional Impact
Indian River County

Dear Mr. Snyder:

Our office received and reviewed the above referenced project in accordance with this agency's responsibilities under Section 380.06, *Florida Statutes*. The State Historic Preservation Officer is to advise in the identification of historic properties (listed or eligible for listing, in the *National Register of Historic Places*), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

A review of the Florida Master Site File indicates that there are no known archaeological or historical sites within the project boundaries. However, since this area has never been subjected to professional archaeological investigation, this is not necessarily indicative of the absence of archaeological or historical materials. The proposed project will affect an area that is environmentally similar to regions within Indian River County that are known to have yielded archaeological and historic resources.

Therefore it is the recommendation of this office that prior to such disturbances, a professional archaeological investigation be conducted of the property in question. Its purpose will be to determine if archaeological or historic resources are present within the project area, and the significance of any resources located. The resultant report should conform to the specifications set forth in Chapter 1A-46, *Florida Administrative Code*, and be forwarded to this agency in order to complete the process of reviewing the impact of this proposed project on historic properties. The results of the investigations will determine if significant archaeological resources would be disturbed by this project. In addition, if significant remains are located, the data described in the report and the consultant's conclusions will assist this office in determining measures that must be taken to avoid, minimize, or mitigate adverse impacts to historic properties listed, or eligible for listing in the *National Register of Historic Places*, or otherwise of historic or archaeological significance.

The results of the investigations will determine if significant historic properties would be disturbed by this project. In addition, if significant remains are located, the data described in the report and the

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

Director's Office
(850) 245-6300 • FAX: 245-6435

Archaeological Research
(850) 245-6444 • FAX: 245-6436

Historic Preservation
(850) 245-6333 • FAX: 245-6437

Historical Museums
(850) 245-6400 • FAX: 245-6433

Palm Beach Regional Office
(561) 279-1475 • FAX: 279-1476

St. Augustine Regional Office
(904) 825-5045 • FAX: 825-5044

Tampa Regional Office
(813) 272-3843 • FAX: 272-2340

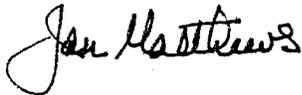
Mr. Snyder
August 26, 2003
Page 2

consultant's conclusions will assist this office in determining measures that must be taken to avoid, minimize, or mitigate adverse impacts to historic properties listed, or eligible for listing in the *National Register of Historic Places*, or otherwise of historical or architectural significance.

Because this letter and its contents are a matter of public record, consultants who have knowledge of our recommendations may contact the project applicant. This should in no way be interpreted as an endorsement by this agency. The Registry of Professional Archaeologists (RPA) is the national certifying organization for archaeologists. A listing of archaeologists who are RPA members living or working in Florida can be accessed at <http://dhr.dos.state.fl.us/bhp/compliance>. In addition, the complete RPA Directory of Certified Professional Archaeologists is available at <http://www.rpanet.org>. Otherwise, upon request, we will forward our RPA list to the applicant.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservationist, by electronic mail sedwards@dos.state.fl.us, or at 850-245-6333 or 800-847-7278.

Sincerely,



Janet Snyder Matthews, Ph.D., Director, and
State Historic Preservation Officer



St. Johns River Water Management District

Kirby B. Green III, Executive Director • David W. Fisk, Assistant Executive Director

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500
On the Internet at www.sjrwmd.com.

RECEIVED

May 24, 2004

MAY 27 2004

Michael J. Busha, Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, FL 34994

TREASURE COAST
REGIONAL PLANNING COUNCIL

Re: Waterway Village DRI Application for Development Approval (ADA)
Final Comments and Recommendations

Dear Mr. Busha:

St. Johns River Water Management District (District) staff have reviewed the DRI referenced above. District staff final comments and recommendations for the development order are provided below.

Question 14 — Water

The applicant indicated that the existing Floridan aquifer free-flowing wells on-site will be properly abandoned. The development order should require that the developer coordinate the abandonment with the District and complete the abandonment prior to development.

The applicant acknowledged that during the environmental resource permit (ERP) process the developer will address the use of fertilizer, pesticides, and herbicides near the conservation areas shown on the development plan with upland buffers, conservation easement language, and deed restrictions. The development order should require at the time of ERP application that the developer address the use of fertilizer, pesticides, and herbicides near the conservation areas shown on the development plan with upland buffers, conservation easement language, and deed restrictions.

The applicant indicated that the developer will work with the District at the appropriate time to formulate and implement best management practices (BMPs) to reduce the use of pesticides and fertilizers throughout the DRI. The development order should require at the time of ERP application that the developer work with the District to formulate and implement best management practices (BMPs) to reduce the use of pesticides and fertilizers throughout the DRI.

Question 17 — Water Supply

The applicant proposes to use nonpotable water for landscape irrigation, including storm water and diluted R/O discharge, and has agreed to work with the District to establish a suitable irrigation water use rate that may allow use of any excess storm water available to

GOVERNING BOARD

Ometrias D. Long, CHAIRMAN
APOPKA

David G. Graham, VICE CHAIRMAN
JACKSON

R. Clay Albright, SECRETARY

Duane Ottenstroer, TREASURER
JACKSONVILLE

W. Michael Branch
FERNANDINA BEACH

John G. Sowinski
CLAWSON

Ann T. Moore
DUNEDIN

Susan N. Hughes
JACKSONVILLE

divert the excess away from other water resources, such as the Indian River Lagoon. The development order should require that nonpotable water will be used for landscape irrigation and that the developer work with the District to establish a suitable irrigation water use rate that may allow use of any excess storm water available to divert the excess away from other water resources, such as the Indian River Lagoon.

This letter does not substitute for or constitute permit review. District regulatory staff have indicated throughout the application for development approval review process that during the formal ERP review process, additional information relevant to District rules will likely need to be provided, and that components of the development may need to be relocated or diminished based on the additional information. District regulatory staff also informed the applicant that the state of Florida's mitigation rules significantly changed as of February 2, 2004, with the implementation of the Unified Mitigation Assessment Method (UMAM) provided in Chapter 62-345, *Florida Administrative Code*. The conceptual mitigation plan for the proposed development was reviewed under rules that no longer apply. A detailed UMAM study must be completed to calculate the exact mitigation acreage needed to offset all proposed development impacts. In order to avoid delays in the permitting process, the applicant should initiate the study as soon as possible.

We appreciate the opportunity to provide comments. If you have any questions or need additional information, please contact District Policy Analyst Peter Brown at 386-329-4311/Suncom 860-4311 or pbrown@sjrwmd.com.

Sincerely,



Linda Burnette, Director
Office of Communications and Governmental Affairs

LB/PB

cc: Fran Adams, Indian River County Commissioner
Kenneth Macht, Indian River County Commissioner
Caroline Ginn, Indian River County Commissioner
Thomas Lowther, Indian River County Commissioner
Arthur Neuberger, Indian River County Commissioner
Robert M. Keating, Indian River County
Keith Pelan, Kimley-Horn
Peter Merritt, TCRPC
Barbara Bess, DEP
Jeff Cole, SJRWMD
Rich Burklew, SJRWMD
Mary Kutz, SJRWMD
Marc VonCanal, SJRWMD
Marguerita Engel, SJRWMD
Peter Brown, SJRWMD

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION



RODNEY BARRETO
Miami

SANDRA T. KAUPE
Palm Beach

H.A. "HERKY" HUFFMAN
Enterprise

DAVID K. MEEHAN
St. Petersburg

JOHN D. ROOD
Jacksonville

RICHARD A. CORBETT
Tampa

BRIAN S. YABLONSKI
Tallahassee

KENNETH D. HADDAD, Executive Director
VICTOR J. HELLER, Assistant Executive Director

BRIAN S. BARNETT, INTERIM DIRECTOR
OFFICE OF ENVIRONMENTAL SERVICES
(850)488-6661 TDD (850)488-9542
FAX (850)922-5679

May 12, 2004

RECEIVED

MAY 14 2004

TREASURE COAST
REGIONAL PLANNING COUNCIL

Mr. Michael J. Busha
Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Blvd., Suite 300
Stuart, FL 31994

Re: Waterway Village Development
of Regional Impact, Indian
River County

Dear Mr. Busha:

The Office of Environmental Services of the Florida Fish and Wildlife Conservation Commission (FWC) has reviewed the referenced Application for Development Approval, and offers the following comments.

The applicant proposes to construct a residential development with a town center on a 730-acre tract of land in east central Indian River County. The site consists primarily of improved and unimproved pasture and herbaceous rangeland (483.5 acres), along with existing residential (0.8 acres). Native communities include palmetto prairie (22.0 acres), pine flatwoods (80.9 acres), sand pine (5.3 acres), pine/mesic oak (42.0 acres), sand live oak (2.2 acres), pine/Brazilian pepper (365 acres), freshwater marsh (7.6 acres), wet prairie (3.8 acres), wet prairie with wax myrtle (10.9 acres), and wet prairie with Brazilian pepper (0.5 acres). The site contains one active bald eagle (threatened) nest, three families of Florida scrub jays (threatened) living in marginal habitat (mostly pasture areas and disturbed pine flatwoods), and a population of gopher tortoises. Also utilizing the sites are several listed wading bird species, including the endangered wood stork, along with foraging Florida sandhill cranes (threatened), although no nesting habitat for these species occurs on site.

The applicant has proposed using standard U.S. Fish and Wildlife Service (USFWS) eagle nest protection guidelines of a 750-foot primary protection zone and an additional 750-foot secondary protection zone. The applicant has also proposed mitigating for the project's impacts to the three scrub jay territories by purchasing scrub jay habitat within the Micco/Valkaria area in southern Brevard County. To date, neither the eagle nest protection plan nor the scrub jay mitigation plan has been approved by the USFWS. For gopher tortoises, the applicant has proposed a combination of on-site and off-site tortoise habitat mitigation using the Micco/Valkaria scrub jay lands. In addition to the approximately 40 acres of pasture habitat retained around the eagle nest,

Mr. Michael J. Busha

Page 2

May 12, 2004

the applicant proposes to preserve an additional 74 acres of uplands, primarily pine/mesic oak, pine flatwoods, sand pine, and sand live oak, along with 6.08 acres of wetland restoration in the eastern part of the site. While this is a significant area, the proposed extensions of 53rd Street and 43rd Avenue will bisect this preserve, reducing its value as wildlife habitat.

The applicant also proposes to create approximately 23 acres of wetlands in the northwest corner of the site as partial mitigation for the proposed 16.75 acres of wetland impacts. However, this site is also designated as a potential elementary school site on the master development plan, and is totally isolated from the other proposed preserve areas.

The proposed project has the potential to adversely impact wildlife resources. We are concerned that the bald eagle nest and scrub jay mitigation plans have not been finalized with the USFWS or the FWC prior to the final review of this ADA. While we are not opposed to mitigating for scrub jay impacts offsite, due to the marginal quality of on-site scrub jay habitat, we would also like to see an attempt made to enhance and manage the on-site preserve areas to provide some additional scrub jay habitat. We are also concerned, as we stated at the pre-application meeting, that the proposed on-site upland preserves, eagle preserve, wetland restoration area, and wetland creation area were not laid out to provide a large contiguous tract of habitat. Both the proposed wetland creation area and eagle preserve are totally isolated from all other habitat areas, while the upland preserves and wetland restoration area are separated by major roads. While we realize that it may be impossible to totally combine these areas without some road impacts, we would recommend that the wetland creation area be located adjacent to the eagle preserve to increase the size and to provide some wetland habitat in conjunction with this preserve. We also recommend that the proposed 43rd Avenue extension be realigned to the west of the proposed wetland restoration area. If the county determines that this type of realignment is not possible, then provisions should be incorporated into this road design to enable wildlife, particularly amphibians, reptiles, and small mammals, to safely cross between the wetland and upland areas. Similar wildlife crossings should be incorporated into the 53rd Street extension adjacent to the upland preserve areas. A detailed habitat management plan should also be developed, with review by the FWC, for all of the site's preserve and enhancement areas. This plan should include proposals to enhance these preserves for scrub jays in addition to the proposed off-site mitigation. These recommendations should be incorporated into the final Development Order for this project.

Sincerely,



Brian S. Barnett, Interim Director
Office of Environmental Services

bsb/sl/js

ENV 1-11-3

A:\waterway village.doc

cc: Mr. Keith Pelan

Kimley-Horn and Associates, Inc.

Mr. Michael J. Busha

Page 3

May 12, 2004

601 21st Street, Suite 400
Vero Beach, FL 32960



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960

January 23, 2004



RECEIVED

JAN 26 2004

SOUTH FLORIDA
REGIONAL PLANNING COUNCIL

James T. Snyder
Development and Regional Impact Coordinator
301 East Ocean Boulevard, Suite 300
Stuart, Florida 34994

Service Log No.: 4-1-03-TA-3969
Date: July 31, 2003
Project: Waterway Village, Pre-application
 submittal
County: Indian River

Dear Mr. Snyder:

The Fish and Wildlife Service (Service) has received your letter dated July 31, 2003, regarding a pre-application meeting to discuss the impact of the Waterway Village Development on regional and State resources and facilities, and adjacent jurisdictions. The project site is located northeast of the intersection of 58th avenue and 49th Street, in Section 15 and 16, Township 32 South, Range 39 East, Indian River, Florida.

Due to constraints in personnel and daily schedules we were unable to attend the meeting on August 20, 2003.

As indicated in the information packet submitted by Divosta and Company, the project site supports three families of the threatened Florida scrub-jay (*Aphelocoma coerulescens*), and an active nest of the threatened bald eagle (*Haliaeetus leucocephalus*). The project site is located within the Core Foraging Area of the endangered wood stork (*Mycteria americana*). The environmental report for the project site also reports the presence of gopher tortoises (*Gopherus polyphemus*). The threatened eastern indigo snake (*Drymarchon corais couperi*) is often associated with gopher tortoise habitat and burrows that the snakes use for shelter, hence suggesting the possibility that indigo snakes may occur in the project site.

The Service believes that Waterway Village Development, as proposed, will result in the take of federally listed species. Take of federally listed species is prohibited, but may be authorized by an incidental take permit under certain circumstances as provided for under section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 *et seq.*). Additional details regarding the section 10 permitting process may be obtained from Sharon Tyson at 772-562-3909, extension 324.

B-22

TAKE PRIDE[®]
IN AMERICA 

James T. Snyder
January 23, 2004
Page 2

Thank you for allowing us to provide these comments and for your cooperation and effort in protecting fish and wildlife resources. If you have any questions regarding this project, please contact Al Begazo at 772-562-3909, extension 234.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Linda S. Ferrell".

Linda S. Ferrell
Assistant Field Supervisor
South Florida Ecological Services Office

cc:

FWC, Vero Beach, Florida
FWC, Tallahassee, Florida (Dan Sullivan)
DEP, West Palm Beach, Florida
EPA, West Palm Beach, Florida



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
MERRITT ISLAND REGULATORY OFFICE
2460 NORTH COURTENAY PARKWAY, SUITE 204
MERRITT ISLAND, FLORIDA 32953

RECEIVED

DEC 10 2003

TREASURE COAST
REGIONAL PLANNING COUNCIL

Regulatory Division
North Branch
Atlantic Permits Section
Merritt Island Regulatory Field Office

December 3, 2003

Mr. Jim Snyder
DRI Coordinator
Treasure Coast Regional Planning Council
301 East Ocean Blvd.
Suite 300
Stuart, FL 34994

Dear Mr. Snyder:

This letter is in reference to the United States Army Corps of Engineers (Corps) review of the *Waterway Village Development of Regional Impact (DRI) Application for Development Approval (ADA)*, located in Indian River County, Florida. The project area includes ±696-acres, located east of 58th Avenue and north of 49th Street (Sections 15, 16, 21, 22; Township 32 South; Range 39 East).

Pursuant to the Code of Federal Regulations (Part 320 through 331.12), the Corps has defined regulatory policies for protection of the nation's waters. Currently, the Corps is not required to comment on ADAs submitted for DRIs, a program administered by the State of Florida. Further, Corps approval of impacts to waters of the United States through the DRI process may in fact circumvent regulatory policies required under the National Environmental Policy Act and Section 404(b)(1) of the CWA.

However, as part of the current restructuring towards a watershed approach to permitting in the Jacksonville District, the Corps is attempting to provide comments on ADAs for DRIs where there is a significant Corps regulatory component. As outlined above, this participation will likely never constitute approval of a project but rather, identify issues concerning any future Corps permit action.

Based on the August 20, 2003 meeting and a review of the October 29, 2003 ADA submittal for Waterway Village, the Corps offers the following comments:

1. Based on *Map F1 Wetlands Map*, wetlands H, K and L may also be Corps jurisdictional.
2. The applicant noted that a Wetland Rapid Assessment Procedure (WRAP) had been conducted on the impact wetlands and mitigation areas. Please note, the wetland creation area will require a significant risk factor due to its proximity to the North Relief Canal. For both restoration and creation areas, the Wildlife Utilization and Buffer variables will likely be lower in the post-development condition. Additionally, if the mitigation areas are dependent on stormwater for hydration, wetland impacts may occur in advance of the proposed mitigation. Therefore, a significant temporal loss factor may also be required.
3. Subsequent to receipt of a complete application, the Corps will request consultation with the United States Fish and Wildlife Service (USFWS), as defined under Section 7 of the Endangered Species Act, for Southern bald eagle (*Haliaeetus leucocephalus*), Florida scrub jay (*Aphelocoma coerulescens*), eastern indigo snake (*Drymarchon corais couperi*) and wood stork (*Mycteria americana*) foraging habitat.
4. Potential impacts to eastern indigo snake may be addressed by incorporating the *Standard Protection Measures for the Eastern Indigo Snake*.
5. Pursuant to the state-federal joint permit process, future permit applications will be submitted by the applicant to the St. Johns River Water Management District (SJRWMD); the SJRWMD will copy the Corps on the initial application submittal. Please note, the Corps may not receive the initial application in its entirety, nor is the SJRWMD responsible for any subsequent coordination with the Corps. As such, it is the responsibility of the applicant to ensure the Corps receives information critical to a timely review of the permit application. This particularly includes the initial application submittal and any changes coordinated with the SJRWMD.
6. In order for a Corps permit to be issued for the proposed project, we must receive water quality certification or waiver from the State of Florida. As stated, any revisions or

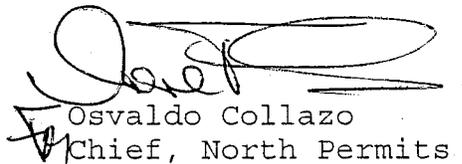
modifications proposed during the permit evaluation process should be coordinated with both the SJRWMD and the Corps.

Please be aware, the Corps permit process is independent of SJRWMD permit review and issuance. There is no guarantee a Corps permit can be issued for the proposed project, or permit issuance may require significant project modifications. Therefore, any property purchase, business venture or other capital expenditure initiated by you, the applicant, prior to obtaining the required Corps permit, is done so at your own risk.

You are cautioned that work performed below the mean high waterline or ordinary high waterline in waters of the United States, or the discharge of dredged or fill material into adjacent wetlands without a Corps permit, could subject you to enforcement action. Receipt of a permit from the SJRWMD does not obviate the requirement for obtaining a Corps permit for the proposed project, prior to commencing work.

In order to prevent future delays, please submit correspondence directly to the project manager, Jeffrey S. Collins.

Sincerely,



Osvaldo Collazo
Chief, North Permits Branch

Cc:
Rick Greene
Keith Pelan
Wendy Swindell

Respond to the Attention of:
Jeffrey S. Collins, M.S.
Merritt Island Regulatory Field Office
Suite 204
2460 North Courtenay Parkway
Merritt Island, Florida 32953
email: Jeffrey.S.Collins@saj02.usace.army.mil
Phone: 321-453-7655, ext. 13

04-1351

City of Vero Beach
1053 - 20th PLACE - P.O. BOX 1389
VERO BEACH, FLORIDA - 32961-1389
Telephone: (772) 978-4550 • Fax: (772)778-3856

OFFICE OF THE
PLANNING DIRECTOR

June 17, 2004

Chairman Smith and Members of the
Treasure Coast Regional Planning Council
301 East Ocean Boulevard
Stuart, Florida 34994

RE: Waterway Village Development of Regional Impact

Dear Chairman Smith:

On behalf of the City of Vero Beach, I would like to express support for the Assessment Report for Waterway Village prepared by TCRPC staff regarding the above captioned property. While the proposed development is not within City limits, new City leadership is seeking to take a more active role in addressing issues outside the City that affect quality of life. The City of Vero Beach is very concerned about the impacts a development of this scale and design will have on the City and adjacent residential communities.

I believe I speak for many in the City and Indian River County when I say that the character and quality of Waterway Village is indicative of the South Florida development pattern. Most recognize that some level of growth in Indian River County is inevitable. However, a repetition of South Florida does not have to be inevitable. People in Vero Beach and Indian River County are clamoring for better, and I think the recommendations contained within the Assessment Report are a step in the right direction.

Vero Beach and Indian River County have traditionally been characterized by neighborhoods that connect both visually and physically to surrounding areas. In recent years, walled-off and gated communities have sprung up throughout the area and have served to change that character. Evidence that people no longer believe this is an acceptable development pattern is being clearly stated in the City's visioning process. All indications are that this development pattern be a major point of discussion in the Indian River County visioning process.

The Alternate Master Development Plan prepared by your staff is a better example of development consistent with Vero Beach. The traditional subdivisions in Vero Beach and Indian River County, such as McAnsh Park, Royal Park, Riomar, Vero Mar, Vero Beach Estates and many others both on the mainland and the barrier island are all interconnected to adjacent neighborhoods. They do not export all their negative impacts on the adjacent roadways and neighborhoods while keeping all their amenities to themselves.

Chairman Smith, TCRPC
Waterway Village
June 17, 2004
Page 2

My specific concerns reflect those stated by staff and are as follows:

1. Lack of both interior and exterior pedestrian and vehicular connectivity to neighborhoods, community centers, schools and other nonresidential uses;
2. Lack of mixing of the single family and multiple family uses within the project;
3. Poor neighborhood layout and configuration;
4. Poor location of civic and nonresidential uses;
5. Construction of walls all around the project to separate it both physically and visually from everything nearby.

Moreover, I believe that locating the civic and retail uses at the project edge may help reduce the amount of traffic that has to travel well outside the area for services.

The developer is to be commended for their proposed environmental mitigation plan. This the kind of positive result good planning through the DRI process can create. This sort of planning needs to be extended to the overall subdivision design and, in my opinion, is what the Assessment Report entails.

This Regional Planning Council has an opportunity to help change what passes for an acceptable pattern of development on the Treasure Coast. Please support the recommendation of your staff and assist the Indian River County staff improve the quality of development by sending this proposal back for major revisions. I appreciate the opportunity to comment on behalf of the City of Vero Beach to the Treasure Coast Regional Planning Commission.

Sincerely,



Mark Satterlee, AICP
Acting Planning & Development Director

MS/tf

XC: Mayor White & Vero Beach City Council
David Mekarski, City Manager
Chairman Jay Smith & Members of the Vero Beach Planning and Zoning Board
Bob Keating, Director, IRC Community Development Department
Press

APPENDIX C

Goals, Strategies and Policies

This appendix contains a summary of the goals, strategies and policies in the SRPP that are most relevant to the project. Please refer to the SRPP for a more complete discussion of regional issues and additional goals, strategies, and policies.

Future of the Region

MASTER PLAN

Goal 4.1: Future development should be part of existing or proposed cities, towns, or villages.

Goal 6.1: Create new neighborhoods and communities.

Goal 10.1: Neighborhoods and communities which are served by a variety of transportation modes.

Goal 15.1: Preferred forms of development which result in downtown redevelopment and infill, the containment of suburban sprawl and the creation of new cities, towns, and villages.

Goal 16.1: The formation of new towns, cities and villages.

Strategy 6.1.1: Encourage the formation of sustainable neighborhoods and communities.

Strategy 7.1.3: Promote improved community planning and urban design.

Strategy 7.2.1: Promote patterns of development which provide better opportunities for the transportation disadvantaged.

Strategy 7.3.1: Reduce vulnerability to natural and man-made disaster events through better transportation, land use and community planning.

Strategy 12.1.1: Encourage patterns of development and programs which improve the independence and self-sufficiency of children.

Strategy 13.1.1: Encourage patterns of development and programs which minimize dependency on the automobile, encourage and accommodate public transit, and reduce vehicle miles traveled and the amount of vehicle emission discharged into the atmosphere.

Strategy 16.1.1: Encourage and facilitate preferred forms of development.

Policy 6.1.1.1: New neighborhoods and districts should contain a balanced, well-planned, compatible mix of land uses appropriately located so that State, local and regional goals are achieved.

Policy 6.1.1.2: New neighborhoods and districts should have compact designs, with a mix of building types.

Policy 6.1.2.3: Require that an urban design study be prepared to evaluate development proposals in the countryside.

Policy 7.1.1.4: Urban design and architectural studies should be performed when evaluating residential and commercial projects. Such studies should analyze building typology and compatibility, land use mix and the overall impact of the project on the surrounding neighborhood or district.

Policy 7.1.3.1: Encourage patterns and forms of development and redevelopment that maximize public transportation alternatives, minimize the use of the Region's collector and arterial roadway network, and reduce the total amount of daily vehicle miles traveled.

Policy 7.2.1.1: Encourage patterns and forms of development and redevelopment and street design that will improve mobility opportunities for transit dependent groups especially the poor, handicapped and young.

Policy 7.3.1.2: Plan and design new development and redevelopment to increase the ability of the internal and external roadway network to accommodate emergency traffic, enhance post disaster recovery efforts, and provide central locations for public shelters and emergency relief centers.

Policy 8.1.1.3: Encourage patterns of development which minimize the public cost for providing services, maximize the use of existing service systems and facilities and take into full consideration environmental/physical limitations.

Policy 9.1.1.1: Encourage patterns of development and programs which reduce dependency on the automobile, encourage and accommodate public transit, and reduce the overall use of fossil fuels.

Policy 10.1.1.1: Plan and design development to effectively accommodate alternative modes of transportation.

Policy 12.1.1.1: Consider the special mobility needs of children in all development proposals.

Policy 12.1.1.2: Encourage the location and provision of schools, parks, recreational and other uses (e.g., retail, civic uses, etc.) within biking or walking distance.

Policy 12.1.1.4: Provide sites for civic uses such as schools, parks and libraries within neighborhoods.

Policy 15.1.3.13: Make non-preferred forms of development occurring in undeveloped areas responsible for the full and true infrastructure costs to support the development through buildout.

Policy 16.1.1.1: Local governments should identify appropriate locations for preferred forms of development.

Policy 16.1.1.2: Future land use plans should be prepared for locations considered appropriate for new towns, cities, villages, neighborhoods and districts.

Transportation

RIGHTS OF WAY

Policy 7.1.1.1: Reserve and protect sufficient road right-of-way on the regional roadway network to provide for an efficient multi-modal transportation system.

EXTERNAL ROADWAY IMPROVEMENTS

Goal 8.1: Public facilities which provide a high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effective.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of necessary infrastructure and services.

INTERSECTION IMPROVEMENTS

Goal 8.1: Public facilities which provide a high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effective.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of necessary infrastructure and services.

ACCESS DRIVEWAYS

Goal 7.1: A balanced and integrated transportation system.

Strategy 7.1.3: Promote improved community planning and urban design.

Policy 7.1.3.1: Encourage patterns and forms of development and redevelopment that maximize public transportation alternatives, minimize the use of the Region's collector and arterial roadway network, and reduce the total amount of daily vehicle miles traveled.

ANNUAL REPORTING AND MONITORING

Goal 8.1: Public facilities which provide a high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effective.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of necessary infrastructure and services.

NEIGHBORHOOD IMPACTS

Policy 7.1.3.2: Suggests planning development to provide interconnections for pedestrians and public transportation within and between residential areas, schools, employment and retail centers, recreational areas and other public facilities.

Policy 7.1.3.3: An urban design study should be prepared prior to the development and redevelopment of building sites or changes to the street network.

Human Resource Issues

HOUSING

Goal 2.1: An adequate supply of safe and affordable housing to meet the needs of the very low, low, and moderate-income residents of the Region.

Goal 2.2: A range of housing types and affordabilities in proximity to employment and services.

Strategy 2.1.1: Create a planning/regulatory climate which is conducive to the production of affordable housing.

Strategy 2.1.2: Create and expand public/private partnerships among all entities involved in the provision of affordable housing including financial institutions, developers, contractors, government agencies, social service and other non-profit organizations, churches and realtors.

Strategy 2.2.1: Ensure that all areas have a reasonable mix of housing, employment opportunities, and services.

Policy 2.1.1.1: Local governments should reduce unnecessary regulatory barriers which make it more difficult to build affordable housing. Examples of such barriers are large lot sizes, minimum unit size and floor space, and setbacks.

Policy 2.1.1.2: Local governments should allow zero lot line development, cluster development, accessory apartments, high-density zoning, mixed-use buildings, modified site improvement standards, alternate construction techniques, etc.

Policy 2.1.1.4: Local governments should consider the enactment of incentives such as density bonuses, linkage programs, and inclusionary housing policies.

Policy 2.1.1.5: Local governments should designate adequate sites where affordable housing can be developed.

Policy 2.1.2.1: Work closely with non-profit organizations who are interested in sponsoring housing projects which serve very low, low and moderate-income residents.

Environment and Natural Resources

UPLAND PRESERVATION

Strategy 1.1.1: Preserve and manage complete natural systems as a network of connected nature preserves.

Strategy 6.1.1: Preserve and manage natural systems as a network of connected nature preserves and promote the establishment of greenway systems in the region.

Policy 6.7.1.2: Development plans should be designed to maximize the amount of protected habitat. Protected natural communities and ecosystems should be preserved in viable condition with intact canopy, under-story, and ground cover. Where possible, preserve areas should be designed to interconnect with other natural areas that have been set aside for preservation. A restoration and management plan for the protected areas should be developed.

As a minimum baseline measure for consistency with the SRPP, Council strives to achieve protection of 25 percent of upland natural communities in the evaluation of development plans. Council supports the maximum protection of natural communities, and recommends that more than 25 percent of the upland habitat be preserved where appropriate.

Policy 6.7.1.9: Preserve areas should be designed to protect integrated systems of uplands and wetlands.

Strategy 6.8.1: Preserve areas should be designed and established to protect endangered and potentially endangered species.

Policy 7.1.2.6: Redirect development patterns away from interstates and major arterials to town and neighborhood centers along collector and minor arterials.

Policy 8.1.1.3: Encourage patterns of development which minimize the public cost for providing services, maximize the use of existing service systems and facilities and take into full consideration environmental/physical limitations.

LISTED SPECIES

Strategy 1.1.1: Preserve and manage complete natural systems as a network of connected nature preserves.

Strategy 6.8.1: Preserve areas should be designed and established to protect endangered and potentially endangered species.

Policy 6.8.1.2: All endangered and potentially endangered plant and animal populations should be protected and all habitat of significant value to existing populations of endangered and threatened species should be preserved and protected.

WETLANDS

Policy 6.6.1.1: No activity should be allowed that results in the alteration, degradation, or destruction of wetlands and deepwater habitats, except when:

1. Such an activity is necessary to prevent or eliminate a public hazard;
2. Such an activity would provide direct public benefits which would exceed those lost to the public as a result of habitat alteration, degradation, or destruction;
3. Such an activity is proposed for habitats in which the functions and values currently provided are significantly less than those typically associated with such habitats and cannot be reasonably restored;
4. Such an activity is water dependent or, due to the unique geometry of the site, minimal impact is the unavoidable consequence of development for uses, which are appropriate given site characteristics.

Policy 6.6.1.2: Whenever any wetland or deepwater habitat is degraded or destroyed, mitigation should be provided through the creation of new wetland and deepwater habitat, through the restoration of degraded habitat, or through the enhancement of functions and values provided by existing habitats.

Policy 6.6.1.3: A buffer zone of native upland edge vegetation should be provided and maintained around wetland and deepwater habitats, which are constructed or preserved on new development sites. The buffer zone may consist of preserved or planted vegetation but should include canopy, under-story, and ground cover of native species

only. The edge habitat should begin at the upland limit of any wetland or deepwater habitat.

EXOTIC SPECIES

Policy 6.7.1.4: All nuisance and invasive exotic vegetation listed by the Florida Exotic Pest Plant Council should be removed and where appropriate replaced with plant species adapted to existing soil and climatic conditions. Removal should be in such a manner that avoids seed dispersal by any such species. State and federal agencies and local governments should coordinate and assist in the removal and replacement of nuisance exotic pest species.

STORMWATER MANAGEMENT

The following strategy and policies in the SRPP apply to the project:

Strategy 1.1.2: Promote compatibility of urban areas, regional facilities, natural preserves and other open spaces.

Policy 6.3.1.1: All new, reconstructed or substantially expanded storm and surface water management systems should be designed and constructed to meet state water quality standards. Where feasible, retention is the preferred method for treatment of stormwater, recharging the aquifer, and protecting the region's estuaries.

Policy 6.3.1.2: A vegetated and functional littoral zone should be established as part of new surface water management systems where possible. Prior to construction of the surface water management system for any phase of a project, the developer should prepare a design and management plan for the wetland/littoral zone that will be established as part of these systems. The littoral zone established should consist entirely of native vegetation and should be maintained permanently as part of the water management system.

Policy 6.3.1.6: Design drainage systems that maintain the natural discharge pattern of stormwater from a site.

WATER SUPPLY

Goal 8.1: Public facilities which provide high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effectively.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of the necessary infrastructure and services.

Goal 6.2: A regional water supply managed to provide for all recognized needs on a sustainable basis.

Strategy 6.2.1: Develop and implement water conservation programs.

Policy 6.2.1.1: Use reclaimed wastewater for irrigation and other suitable purposes when such use is determined to be feasible.

Policy 6.2.1.3: Protect natural communities on development sites as a method to reduce the need for irrigation.

Policy 6.2.1.4: In order to protect and conserve the water resources of the Region and southern Florida to ensure the availability for future generations:

1. All landscaping material used on the primary dune system should be composed of native plants adapted to soil and climatic conditions occurring on-site. In all other locations the majority of landscaped areas should be composed of native or drought tolerant plants adapted to soil and climatic conditions occurring on-site.
2. The lowest acceptable quality water should be used to meet nonpotable water demands.
3. Potable water rates should be structured to encourage conservation.
4. All new and expanding wastewater treatment facilities should make reclaimed wastewater available for use in irrigation. Where possible, all new development should rely on wastewater reuse for irrigation.
5. Use of water saving device, irrigation systems, and plumbing fixtures should be required to the maximum extent justified. Where appropriate, existing systems should be retrofitted to make use of the most cost efficient water saving devices.
6. Leak detection programs should be developed and implemented.

WASTEWATER MANAGEMENT

Goal 8.1: Public facilities which provide high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effectively.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of the necessary infrastructure and services.

SOLID WASTE AND HAZARDOUS MATERIALS

Goal 6.3: Protection of water quality and quantity.

Goal 8.1: Public facilities which provide a high quality of life.

Policy 8.1.1.1: All development should take place concurrent with or after the provisions of necessary infrastructure and services.

AIR QUALITY

Goal 13.1: Maintenance of acceptable air quality levels

Strategy 13.1.1: Encourage patterns of development and programs which minimize dependency on the automobile, encourage and accommodate public transit, and reduce vehicle miles traveled and the amount of vehicle emission discharged into the atmosphere.

Policy 13.1.1.1: Implement practices, which minimize airborne dust and particulate emission.

Strategy 7.1.3: Promote improved community planning and urban design.

Policy 7.1.3.1: Encourage patterns and forms of development and redevelopment that maximize public transportation alternatives, minimize the use of the Region's collector and arterial roadway network, and reduce the total amount of daily vehicle miles traveled.

Policy 7.1.3.4: Reduce VMT per capita by private automobile within the Region through a combination of the following:

- (1) provision of public transportation alternatives;
- (2) provision of housing opportunities in proximity to employment opportunities;
- (3) provision of essential services and recreational opportunities in proximity to demand;
- (4) concentration of commercial and other essential services;
- (5) provision of a street network designed for the pedestrian the disabled, the automobile and transit;
- (6) provision of parking in ways that will encourage pedestrianism and public transportation alternatives;
- (7) provision of incentives encouraging infill and downtown redevelopment;

- (8) support of public and private sector efforts to carry out TDM strategies that will reduce congestion; and
- (9) expansion of commuter rail and intermodal connections.

POLICE AND FIRE PROTECTION

Goal 8.1: Public facilities which provide a high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effectively.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of necessary infrastructure and services.

HISTORIC AND ARCHAEOLOGICAL SITES

Strategy 15.1.1: Identify and protect archaeological and historical resources in the Region.

ENERGY

Goal 9.1: Decreased vulnerability of the Region to fuel price increases and supply interruptions.

Strategy 9.1.1: Reduce the Region's reliance on fossil fuels.

Policy 9.1.1.1: Encourage patterns of development and programs, which reduce the dependency on the automobile, encourage and accommodate public transit, and reduce the overall use of fossil fuels.

Policy 9.1.1.3: Encourage energy efficient buildings. Strategies should include: 1) proper siting according to solar orientation; b) design of passive architectural systems; c) site designs that provide shade to buildings; d) use of sustainable building materials; and e) use of solar mechanical systems.

ECONOMIC AND FISCAL IMPACTS

Policy 8.1.1.3: Encourage patterns of development, which minimize the public cost for providing services, maximize the use of existing service systems and facilities and take into full consideration environmental/physical limitations.

Policy 8.1.2.2: Give high priority to restoring or establishing new public facilities only in areas that have been designated as locations that will be built following preferred development form principles.

Strategy 3.4.1: Promote patterns of development, which allow public services and facilities to be provided more cost effectively.

Policy 3.4.1.3: Non-preferred forms of development, which occur in undeveloped areas should be responsible for and bear the full and true infrastructure costs to support the development through build out.

Policy 3.4.1.4: Develop a tiered system of impact fees which recognizes cost differences of providing public services to the development based on the size, type, form, location and service demands of the development proposed.

APPENDIX D

Energy Saving Methods

As energy consumption continues to increase in the Region, more consideration should be given to alternative and locally derived energy sources. More consideration should be given to site design and energy saving devices and features that reduce energy consumption. The following energy saving methods are easily incorporated into most site plans and building designs:

1. Use of computerized load management where cost-effective and economically feasible.
2. Preserve native vegetation and topography in order to retain their natural energy conserving benefits.
3. Promote carpooling and van pooling through incentives such as priority parking areas.
4. Encourage incentives to non-automotive travel such as provision of sheltered bus stops, bicycle locking facilities, shaded pathways, and protected crossings.
5. Participate in a systematic approach to the development of walkway and bicycle path networks with the local government that will result in safe, convenient links between home, work, shopping, recreation, and schools.
6. Use of energy-efficient features in window design (e.g. tinting and exterior shading).
7. Use operable window and ceiling fans.
8. Install energy-efficient appliances and equipment.
9. Reduce coverage by asphalt, concrete, rock, and similar substances in streets, parking lots, and other areas to reduce local air temperatures and reflect light and heat.
10. Install energy-efficient lighting for streets, parking areas, recreation areas, and other interior and exterior public areas.
11. Use water closets with a minimum flush of 3.5 gallons and showerheads and faucets with a maximum flow rate of 3.0 gallons per minute (at 60 pounds of pressure per square inch) as specified in the Water Conservation Act, Section 553.14, Florida Statutes.

12. Select native plants, trees, and other vegetation and landscape design features that reduce requirements for water, fertilizer, maintenance, and other needs.
13. Plant native shade trees to provide reasonable shade for all recreation areas, streets, and parking areas.
14. Place trees to provide needed shade in the warmer months while not overly reducing the benefits of sunlight in the cooler months (shade in the summer should receive primary consideration).
15. Orient structures, as possible, to reduce solar heat gain by walls and windows and to utilize the natural cooling effects of the wind.
16. Provide structural shading (e.g. trellises, awnings, and roof overhangs) wherever practical when natural shading cannot be used effectively.
17. Use solar hot water heating systems or photovoltaic energy systems.

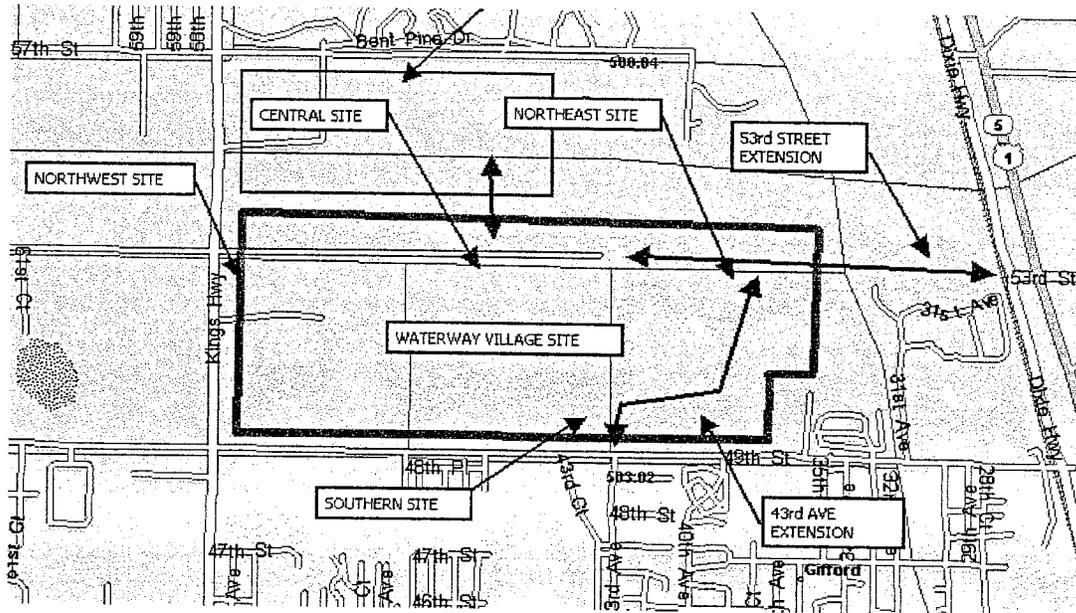
APPENDIX E

GIBBS
PLANNING
GROUP

Waterway Village Retail Planning Review January 24, 2004

Executive Summary

The Gifford study area is presently under-served for neighborhood commercial. As a result, the surrounding and future residents must travel an unusually long distance for daily goods and services. This area's commercial shortage will likely support up to 120,000 square feet of additional neighborhood retail during the next five to seven years.



This study examined potential commercial development sites surrounding the proposed Waterway Village Community development.

The exact range of supportable retail in the study area is dependent upon the specific site location and future commercial competition. The intersection of Kings Highway and 53rd Street (northwest site) is likely able to support the greatest amount of retail, followed by the intersection of 53rd Street and the 42nd Avenue extension (northeast site).

Both of the proposed the located mid-way along 53rd and 49th Streets (central & southern sites) will likely support the

least amounts of new retail development due their location away from a primary intersection.

Purpose of Study

This study was commissioned by the Treasure Coast Regional Planning Council to gain a better understanding of the range of potential supportable new retail development in and around the proposed Waterway Village community. In addition, this study evaluated the roadway corridors around Waterway Village to determine the most likely location for various types of new retail development.

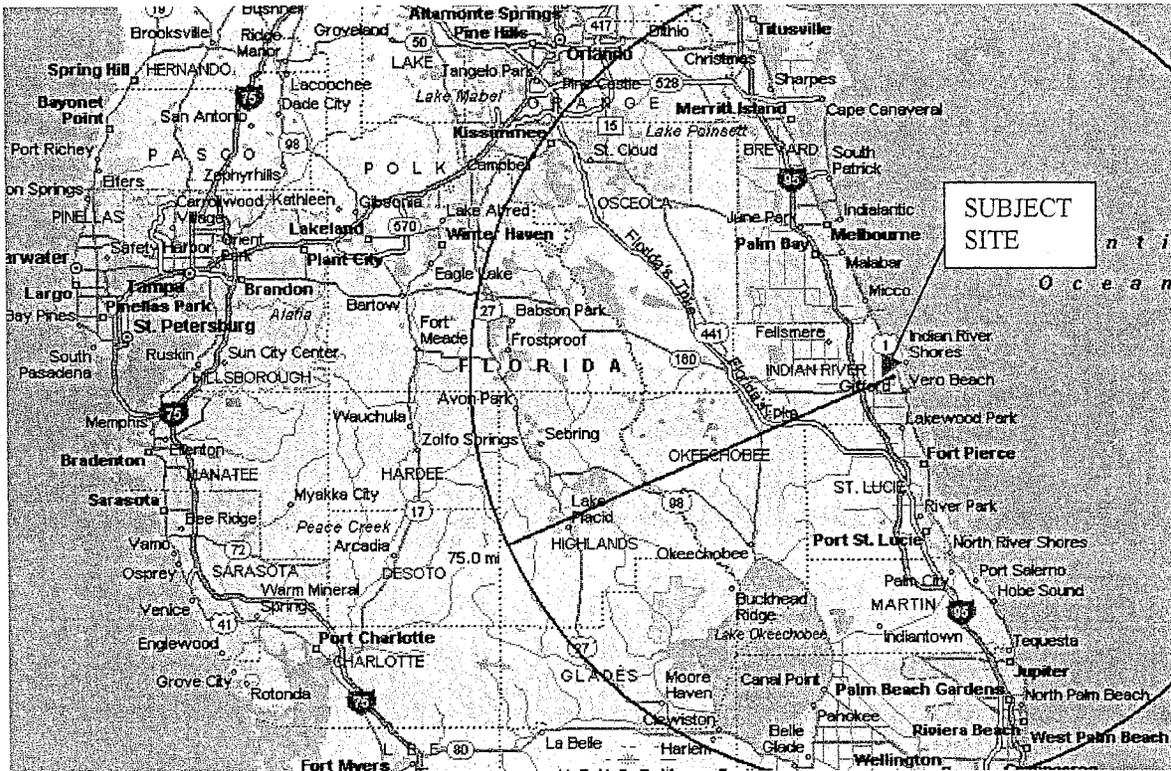
Methodology and Limits of Study

The findings of this study are based upon GPG's participation in a one (1) day planning workshop conducted with the Indian River County Planning Department and the Treasure Coast Regional Planning Council. During the workshop, GPG toured the Vero Beach area and visited most of the surrounding shopping centers and residential communities. Prior to the workshop, GPG also conducted preliminary market research of the general Vero Beach area's demographic trends based upon 2000 U.S. Census data.

This study is intended to serve as one of several general informational opinions for the County Planning Department to gain a general understanding of the Gifford area's commercial dynamics. The observations and interviews have not been independently verified and further research and planning should be conducted prior to making specific land purchases, master planning policy changes and real estate development.

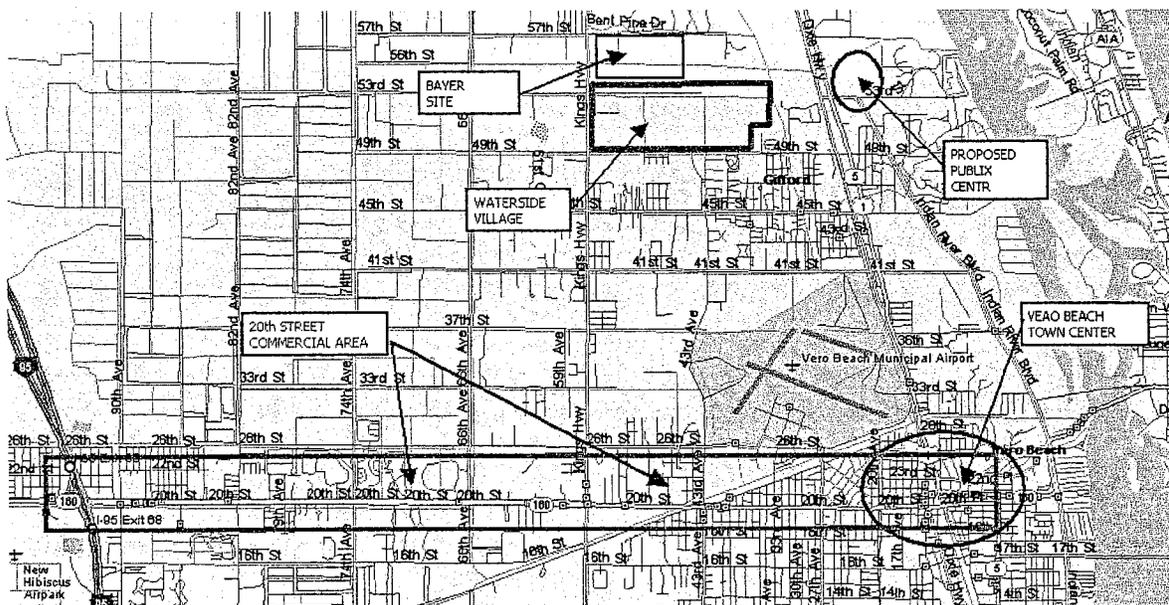
This study should not be the sole basis for any investment, development or planning policy decisions.

Site Location & Access



Vero Beach is located along the Atlantic Seaboard approximately 75 miles between Palm Beach & Orlando.

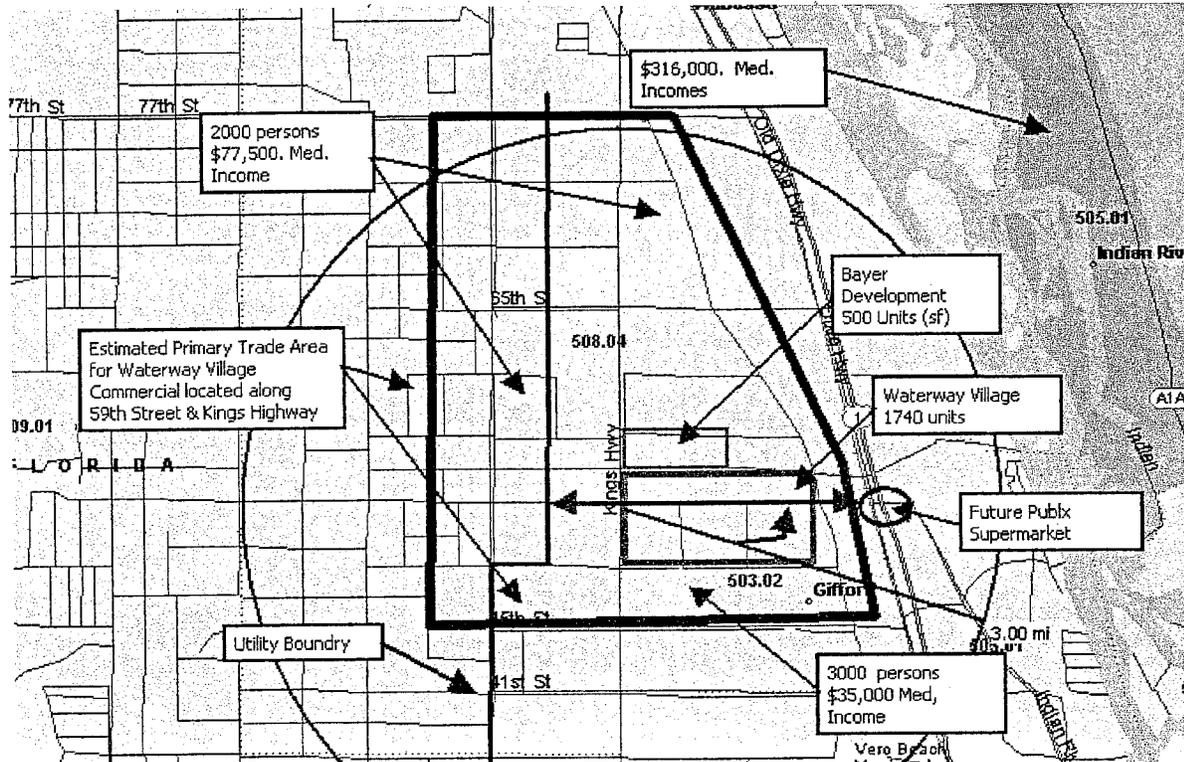
The Vero Beach area is located in the path of rapid suburban growth moving along I-95 and the Florida Turnpike from both the Palm Beach and Orlando regions.



Waterway Village site is approximately 4 miles northwest of the downtown area of Vero Beach.

The Waterway Village Site is located northwest of the Vero Beach downtown commercial area and adjacent to the Gifford neighborhood. The Vero Beach Airport limits the residents' access to the 20th Street (Highway 160) commercial corridor. North-south vehicular traffic is funneled along Kings Highway (58th Avenue) and U.S. 1 (Dixie Highway).

Site Commercial Development Potential



The Waterside Village commercial has a potential trade area of up to 3 miles mostly focused towards the north. This trade area includes approximately 5,000 persons with a median income ranging from \$35,000.-\$77,500.

The Vero Beach area is well serviced with community and regional retail shopping centers. Focused along 20th Street and U.S. 1 (Dixie Highway), these centers range from restaurants to an outlet mall. In addition, a new Publix Supermarket-anchored neighborhood center is presently under-construction 1 mile east of Waterway Village at 53rd Street and Indian River Boulevard.

Growth around the Waterway Village area and to the west is reported to be limited due to the County's existing *Urban Service Boundary* (identified as *Utility Boundary* in the graphic above) line located approximately one mile west of the Waterway Village. Waterway Village is proposed to build

over 1700 dwellings and an additional 500 dwellings are proposed north in the Bayer site.

Based upon U.S. Census data, this study estimates that over 4000 residents presently live with-in a two mile area north and west of Waterway Village. Most of these residents will drive past or through the Waterway Village site on a daily basis along Kings Highway or 53rd Street.

The study area is ideally located between residential areas, the 20th Street commercial corridor, and new Publix center. All areas surrounding the proposed Waterway Village were reviewed for potential commercial development. Commercial development depends upon demographics, competition, and vehicular accessibility. Please find below GPG's estimation of the supportable amount of commercial development around the Waterway Village property:

Northwest (School Site): Full supermarket anchored neighborhood center 80,000 - 120,000 square feet and including: bank, sit-down restaurant, hardware, personal care and up to 40,000 sf of services.

- Located at the south-east corner of Kings Highway and the proposed 53rd Street this intersection will be become one of the areas busiest. Intercepting northern residents traveling to the 20th Street and Dixie Highway corridors.
- The location is approximately 2 miles away from the new Publix Shopping center proposed along 59th and Dixie Highway.
- The site offers an easy in-ward right turn for home-bound Kings Highway traffic.
- The location is much closer to Gifford, Waterway Village and Bayer homeowners than the new Publix Center.

Mid-53rd (Main Entry to Waterway & Bayer): Convenience center 15,000-20,000 sf including food market, gas station, carry-out food, anchored, convenience store, personal care and neighborhood services.

- Will miss all north-south traffic along Kings Highway and 43rd Avenue extension.
- Is too close to the new Publix to support a second supermarket.

- Will capture a high percentage of the neighborhood expenditures of Waterway and Bayer residents.
- Does not satisfy the primary site selection criteria of many national retailers and franchise businesses.

Northeast (53rd & 43rd): Local center supporting up to 25,000-40,000 sf including: food market, gas station, carry-out foods, restaurants, bank and local offices.

- Will capture north-south traffic from 43rd extension.
- Is too close to new 53rd and Dixie Highway to support an additional full-service supermarket.
- Will capture east-west traffic along 53rd.
- New Publix located along 53rd and Dixie Highway will create a significant traffic generator that will support additional retail.

Southern (49th Street & 43rd Avenue): Local center supporting up to 5,000-10,000 of local neighborhood retail including: food market, carry-out foods, local services and personal care.

- Will have little pass-by traffic except for Gifford residents traveling to new Publix located at 53rd & Dixie Highway.
- Will benefit from activity of neighborhood recreation center located along 49th Street.
- Is difficult to access by Waterway Village and Bayer residential.

-- END OF REPORT--

HABITAT MANAGEMENT GUIDELINES FOR THE BALD EAGLE IN THE SOUTHEAST REGION



Introduction

These guidelines are published and issued by the U.S. Fish and Wildlife Service, Southeast Region, but were prepared in consultation with all the Southeastern State wildlife agencies and a number of bald eagle experts, with assistance from FWS solicitors. A number of Federal and State laws and/or regulations prohibit, cumulatively, such acts as harassing, disturbing, harming, molesting, pursuing, etc., bald eagles, or destroying their nests, (see Section IV); although advisory in nature, these guidelines represent a biological interpretation of what would constitute violations of one or more of such prohibited acts. Their purpose is to maintain and/or improve the environmental conditions that are required for the survival and well-being of bald eagles in the Southeastern United States, and are designated essentially for application in bald eagle/human activity (principally land development) conflicts. The emphasis is to avoid or minimize detrimental human-related impacts on bald eagles, particularly during the nesting season.

General

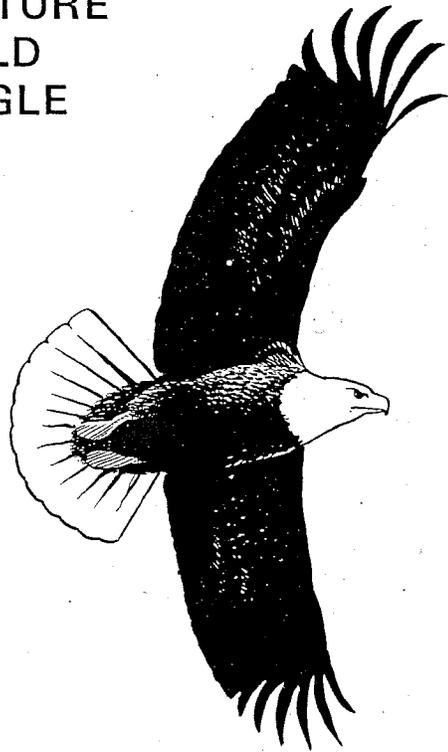
Individual bald eagle pairs exhibit considerable variation in response to human activity, depending in part upon the type, frequency, and duration of activity; extent of modification of the environment; time in the bird's reproductive cycle; and various other factors not well understood. Therefore, it cannot be predicted with absolute certainty the effects a given disturbance might have on a particular pair of bald eagles. Certain human activities are, however, known to disturb bald eagles more than others, and are addressed in the following sections as recommended restrictions. The guidelines are divided into sections on nesting, feeding, roosting, and legal considerations.

- I. **NESTING:** In the Southeast, the bald eagle nesting period is usually from October 1 to May 15. However, in the northern portion of the range, nesting has occurred as late as August. Individual pairs return to their same territories year after year, and often territories are inherited by subsequent generations. Eagles are most vulnerable to disturbance early in the nesting period, i.e. during courtship, nest building, egg laying, incubation, and brooding (roughly the first 12 weeks of the nesting cycle). Disturbance during this critical period may lead to nest abandonment and/or chilled or overheated eggs or young. Human activity near a nest later in the nesting cycle may cause premature fledging, thereby lessening the chance of survival.

Loss of Nests or Nest Trees: Although bald eagle nests are legally protected, a nest in and of itself, from a biological perspective, is relatively inconsequential to a given pair of eagles (a pair can construct a nest in less than a week). It is the nest site that originally attracted the pair that is of critical importance. It is not uncommon for nests to be blown from trees by storms, after which the resident pairs typically renest on the same sites, often in the same trees. Therefore, in instances where nests, and even nest trees, are lost, these guidelines should continue to apply in their absence for a period extending through at least two complete breeding seasons subsequent to the loss.



MATURE
BALD
EAGLE



IMMATURE
BALD
EAGLE



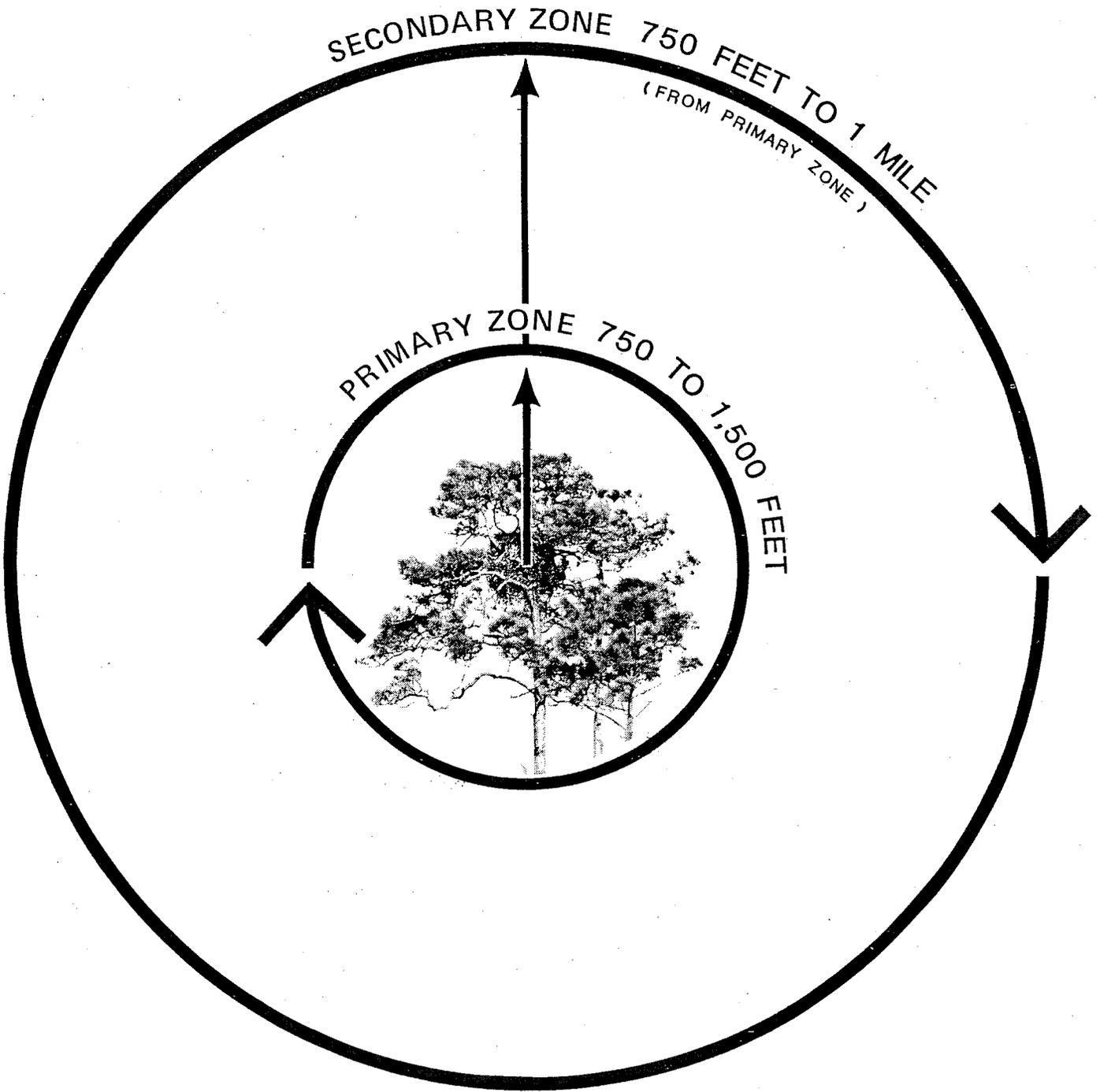
TO AVOID CONFUSION WITH MATURE
GOLDEN EAGLE REMEMBER:

- IMMATURE BALD EAGLES HAVE
WHITE ON WING LININGS
- AND DO NOT HAVE FEATHERS
EXTENDING TO TOES

"Abandoned" Nests: Bald eagles often use alternate nests in different years. Although all nests used by a given pair are situated in the same general vicinity, some nests go unused for several consecutive years and thereby may appear abandoned. Even a solitary nest can go unused for several years, often due to the death of one member of the resident pair, and then be reoccupied by either the original pair or one member of the original pair with a new mate. Even in instances where both members of a pair have died, the site would likely be taken over by another pair if no habitat degradation occurs. For these reasons, these guidelines should apply to apparently "abandoned" nests for a period extending at least through five consecutive breeding seasons of non-use.

Management Zones:

- A. **Primary Zone:** This is the most critical area and must be maintained to promote acceptable conditions for eagles.
1. **Size:** Except under unusual circumstances, the primary zone should encompass an area extending from 750 to 1,500 feet outward from the nest tree. The precise radius distance between these two extremes would be dependent upon the proximal and spatial configuration of the critical elements (nest tree(s), feeding area, roost trees, etc.) within a particular nesting area, or other compelling factors.
 2. **Recommended Restrictions:**
 - a. Close proximity of the following activities to bald eagle nests are likely to have detrimental impacts on eagle nesting and, therefore, should not occur within the primary management zone at any time:
 - (1) Residential, commercial or industrial development, tree cutting, logging, construction and mining; and
 - (2) Use of chemicals toxic to wildlife.
 - b. The following activities would likely be detrimental while eagles are present and, therefore, should be restricted in the primary zone during the nesting period, but not necessarily during the non-nesting season:
 - (1) Unauthorized human entry; and
 - (2) Helicopter or fixed-wing aircraft operation within 500 feet vertical distance or 1,000 feet horizontal distance from a nest.



B. **Secondary Zone:** Restrictions in this zone are needed to minimize disturbance that might compromise the integrity of the primary zone and to protect important areas outside the primary zone. The secondary zone should be arranged so as to be contiguous with feeding areas and provide a protected access between nests and the feeding area. In some cases that would involve extending a corridor from the primary zone to a particular feeding area, with that corridor requiring the same restrictions as the secondary zone.

1. **Size:** The secondary zone should encompass an area extending outward from the boundary of the primary zone, a distance of 750 feet to 1 mile. The precise distance will be dependent upon site-specific circumstances.

2. **Recommended Restrictions:**

a. Certain activities within the secondary zone are likely to be detrimental to bald eagles and in most cases should be restricted. These activities include, but are not necessarily limited, to:

- (1) Development of new commercial and industrial sites;
- (2) Construction of multi-story buildings and high density housing developments between the nest and the eagles' feeding area;
- (3) Construction of new roads, trails, and canals which would tend to facilitate access to the nest; and
- (4) Use of chemicals toxic to wildlife, such as herbicides or pesticides.

b. Other activities may take place in the secondary zone, but only during the non-nesting period. Even intermittent use or activities of short duration during nesting are likely to constitute disturbance. Examples are logging, land clearing, construction, seismographic activities employing explosives, mining, oil well drilling, and low-level aircraft operations. Minor activities such as hiking, bird watching, fishing, camping, picnicking, hunting, and recreational off-road vehicle use may be permitted in the secondary zone at any time.

II. **FEEDING:** These guidelines are designed to enhance the quality of bald eagle feeding areas and eliminate or minimize human disturbance.

A. The use of toxic chemicals in watersheds and rivers where bald eagles feed should be prohibited.

B. Alteration of natural shorelines where bald eagles feed should be prevented or limited. Degraded shorelines should be rehabilitated where possible.

- C. Water quality in eagle feeding areas should be monitored and remedial steps taken when needed.

III. **ROOSTING:** These guidelines are designed to help preserve present roosting sites and provide future habitat.

A. Roosts within and adjacent to nesting territories

- 1. Within the primary management zone, no trees, living or dead, should be removed.
- 2. Within the secondary management zone, as many large trees as possible, living or dead, should be retained as roost and perch trees. Characteristically, these should be the larger trees in the stand. Trees with open crowns and stout lateral limbs are preferable.

B. Communal Roosts

- 1. There should be no significant logging, land clearing, or disruptive human activity within 1,500 feet of traditional roost sites.
- 2. Bald eagle roosting concentrations should be brought to the attention of the Fish and Wildlife Service or State wildlife agency so that a public or private agency can consider preservation of the roost by purchase, easement, or land exchange.

IV. **LEGAL CONSIDERATIONS:**

A. **Federal Statutes:**

- 1. The Bald Eagle Protection Act (16 U.S.C. 668-668d), and the regulations derived therefrom (50 CFR 22), state, in part, that no person ". . . shall take . . . any bald eagle . . . or any golden eagle, alive or dead, or any part, nest, or egg thereof . . .," with 'take' meaning ". . . to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" Whoever violates any part of the BEPA may be fined from \$5,000 to \$10,000 or imprisoned from 1 to 2 years or both.
- 2. Section 9 of the Endangered Species Act of 1973 (16 U.S.C. 1531), as amended, makes it unlawful to 'take' any listed species with 'take' meaning to ". . . harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct"

For persons who violate the provisions of Section 9, the penalties can be civil or criminal with fines of from \$5,000 to \$20,000 and/or imprisonment from 6 months to 1 year. Section 7 of the ESA requires that all Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitat.

3. The Migratory Bird Treaty Act (16 U.S.C. 703-711) makes it unlawful ". . . to pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, . . . offer for sale, sell, . . . , any migratory bird, any part, nest or eggs of any such bird" Violators may be fined from \$500 to \$2,000 and/or imprisoned from 6 months to 2 years.

B. State Statutes

1. State of Alabama:

Section 9-11-232 of Alabama's Fish, Game and Wildlife regulations curtails the possession, sale, and purchase of wild birds. "Any person, firm, association, or corporation who takes, catches, kills or has in possession at any time, living or dead, any protected wild bird not a game bird or who sells or offers for sale, buys, purchases or offers to buy or purchase any such bird or exchange same for anything of value or who shall sell or expose for sale or buy any part of the plumage, skin or body of any bird protected by the laws of this state or who shall take or willfully destroy the nests of any wild bird or who shall have such nests or eggs of such birds in his possession, except as otherwise provided by law, shall be guilty of a misdemeanor. . . ." Section 9-11-236, which prohibits the hunting of or possession of protected birds during closed season and carries a fine of up to \$500, also protects eagles.

2. State of Arkansas:

Section 14.01 of the Official Codebook of Arkansas Game and Fish Commission Regulations states, "It shall be unlawful to take or attempt to take wild birds or bird eggs." A violation of this code carries a \$100 to \$500 fine.

3. State of Florida:

Rule 39-27.011 of the State of Florida Wildlife Code (Chapter 39, Florida Administrative Code) reads, "No person shall kill, attempt to kill, or wound any endangered or threatened species," and Rule 39-27.002(1) states, in part, "No person shall pursue, molest, harm, harass, capture or possess any endangered or threatened species or parts thereof or their nests or eggs" (The bald eagle is listed as a threatened species by the State of

State of Florida (cont'd):

Florida.) Violation of those regulations constitutes a second degree misdemeanor punishable by a \$500 fine and/or up to 60 days in jail.

4. State of Georgia:

State law 27-3-22, referring to wildlife, states, in part, "It shall be unlawful for any person to hunt, trap, take, possess, sell, purchase, ship, or transport any hawk, eagle, owl, or any other bird or any part, nest, or egg thereof"

5. State of Kentucky:

Chapter 150, Section 330, of the Kentucky Fish and Wildlife Codes, revised in 1986, reads ". . . No person shall take, pursue, possess, purchase or sell or attempt to do so, any migratory birds, except as authorized by the migratory bird treaty act (40 stat. 755) as amended and regulations under it" Section 183 prohibits the importing, transporting, or possessing of endangered wildlife.

6. State of Louisiana

Chapter 9, Section 1901.C., which was amended in 1981, prohibits or carefully regulates ". . . the taking, possession, transportation, exportation from the state, processing, sale, or offer for sale or shipment within the state of . . . endangered species." (Endangered or threatened species are defined as those covered under the Federal Endangered Species Act, as concurred in by the Louisiana Wildlife and Fisheries Commission.) The bald eagle is recognized as an endangered species in Louisiana.

7. State of Mississippi:

Section 49-5-7 of the Mississippi Code of 1972 reads, "No wild bird other than a game bird shall be pursued, taken, wounded, killed, captured, possessed, or exported at any time, dead or alive. No part of the plumage, skin, or body of any bird . . . shall be sold or had in possession for sale in this state. No person shall molest, take or destroy the nests or eggs of any wild bird, or have such nests in his possession" Section 49-5-109 states, ". . . it shall be unlawful for any person to take, possess, transport, export, process, sell or offer for sale or ship, and for any common or contract carrier knowingly to transport or receive for shipment any species or subspecies of wildlife appearing on the following lists: (1) the list of wildlife indigenous to the state determined to be endangered within the State" (The bald eagle is listed as endangered in Mississippi.) Any person who violates these regulations will face a \$1,000 fine and/or imprisonment for up to 1 year.

8. State of North Carolina:

In 1985 North Carolina law G. S. 113-294 was amended to include subsection(1) which refers specifically to eagles. It reads:
". . . any person who unlawfully takes, possesses, transports, sells or buys any bald eagle or golden eagle, alive or dead, or any part, nest or egg of a bald eagle or golden eagle is guilty of a misdemeanor. Unless a greater penalty is prescribed for the offense in question, any person convicted under this subsection is punishable by a fine of not more than \$1,000, or imprisonment of not more than 1 year, or both."

9. State of South Carolina:

Regulation 123-160, derived from the Nongame and Endangered Species Conservation Act, and adopted in December 1976, protects eagles and other wildlife of the Orders Falconiformes and Strigiformes. "It shall be unlawful for any person to take, possess, transport, export, process, sell or offer for sale or ship, and for any contract carrier knowingly to transport or receive for shipment any such species or products or parts thereof except by permit for scientific, educational or falconry purposes issued by the South Carolina Wildlife and Marine Resources Department."

10. State of Tennessee:

Section 70-8-105(c) of the Tennessee Nongame and Endangered or Threatened Wildlife Conservation Act of 1974 states, ". . . it shall be unlawful for any person to take, possess, transport, export, process, sell or offer for sale or ship, and for any common or contract carrier knowingly to transport or receive for shipment any species or subspecies of wildlife appearing on any of the following lists: (1) The list of wildlife indigenous to the state determined to be endangered or threatened within the state pursuant to subsection (a); (2) The United States' List of Endangered Native Fish and Wildlife as it appears on April 5, 1974 (Part 17 of Title 50, Code of Federal Regulations, Appendix D); and (3) The United States' List of Endangered Foreign Fish and Wildlife (Part 17 of Title 50, Code of Federal Regulations, Appendix A)" A violation of this code constitutes a \$25 to \$1,000 fine and/or imprisonment for up to 1 year.

APPENDIX G



United States Department of the Interior

FISH AND WILDLIFE SERVICE
6620 Southpoint Drive, Suite 310
Jacksonville, Florida 32216-0958
Phone: (904) 232-2580 FAX: (904) 232-2404



In Reply Refer To:
FWS/R4/ES-JAFL

IN REPLY REFER TO:
FWS/R4/ES-JAFL

February 24, 2004

MEMORANDUM

To: Staff

From: Field Supervisor, Jacksonville Field Office
Field Supervisor, South Florida Ecological Services Office

Subject: Amended Guidance for Assessing Mitigation Needs for Florida Scrub-Jays

This guidance supercedes similar guidance provided by the State Supervisor on July 2, 1999 (amended July 10, 2003), and is to be used when assessing minimization/mitigation needs for the Florida scrub-jay relative to applications for Incidental Take Permits for Florida scrub-jays. The Service will pursue similar "minimization" goals for scrub-jay conservation in section 7 actions, subject to the ultimate determination of acceptability by the action agency. This guidance is intended to provide interim direction until the scrub-jay recovery plan is revised.

The primary underlying principle embraced by this guidance is that future mitigation efforts by the Service will enhance existing scrub-jay populations occurring on publicly and privately protected lands. To evaluate conservation opportunities for scrub-jays under this guidance, the Service assessed multiple data sources to determine current and expected habitat availability, and current and expected scrub-jay distribution. Results of a spatially-explicit model in combination with published metapopulation data, GIS coverages of public lands and scrub habitat, published and unpublished biological data, and working knowledge of localized scrub-jay populations were used to identify and delineate areas within which future mitigation needs would result in the highest conservation benefit to scrub-jays.

These analyses resulted in the delineation of mitigation service areas (MSAs) throughout the range of the species (Figure 1). MSAs encompass areas that: (1) contain one or more public or protected private lands that, when combined, have one or more populations of scrub-jays that are anticipated to persist long-term, (2) have at least one population with a minimum of 10 pairs of scrub-jays, and (3) minimize the potential for demographic fragmentation. To maximize the effectiveness of this guidance, impacts to scrub-jays within MSAs should be mitigated within the

same MSA. Impacts to scrub-jays occurring outside of a defined MSA may be mitigated to the closest MSA.

The overall procedures are as follows:

A. General Mitigation Strategies (in order of preference)

1. Expand existing preserves and protect and manage occupied and unoccupied habitat that is contiguous with managed public or private lands where the extant population of scrub-jays is viable.
2. Protect and manage occupied and unoccupied habitat within 2 miles of protected and managed occupied habitat where the extant population of scrub-jays is viable, provided proposed mitigation lands are sufficient to support at least one family of scrub-jays. Ensure that dispersal barriers (such as open water exceeding 200 yards, densely urbanized areas, heavily canopied pine forests or plantations, open pasture, or croplands) do not predominate the landscape between mitigation sites and occupied scrub-jay habitat. Composition of the habitat proposed for mitigation should maximize continuity of habitat and minimize the edge effect of the suitable or restorable habitat. In this respect, a circular parcel of land with contiguous suitable or restorable habitat would be more beneficial (biologically), whereas a linear strip of land with interspersed patches of suitable and unsuitable habitat would be of low benefit.
3. Protect and manage occupied and unoccupied habitat that is within 5 miles of protected and managed occupied scrub-jay habitat where the extant population of scrub-jays is viable, provided proposed mitigation lands are sufficient to support at least one family of scrub-jays. Ensure that, in addition to the dispersal barriers identified above, other barriers (such as heavily canopied suburbs, unbroken citrus groves, treeless or nearly treeless suburbs, or pine flatwoods) do not predominate the landscape between mitigation sites and occupied habitat. The relative biological benefit of mitigation lands with respect to its composition should be assessed as described above.

B. Determine Population Viability

Ensure that a minimum of 10 families of demographically connected scrub-jays are present or will be present following mitigation **OR** sufficient unoccupied but restorable scrub-jay habitat (unoccupied habitat) is, or will be (after restoration, as set forth in the proposed action and concurred to by the Service) available to support at least 10 scrub-jay families. Viable groups of scrub-jays require about 200 acres of scrub habitat which may be contiguous or composed of patches of scrub habitat at least 20 acres in size. The spatial orientation of habitat patches must not lead to demographic isolation, as described in A.2 and A.3 above, and must provide for the successful dispersal of scrub-jays between habitat patches.

C. Determine Demographic Priority

Demographic considerations in selecting mitigation locations within the MSA are described in order of preference below:

1. Mitigate onsite if conditions in B. (above) exist or can be achieved through management.
2. Mitigate offsite but within affected viable population, as defined in B.
3. Mitigate offsite to the nearest viable population, as defined in B.

D. Determining Habitat Mitigation Need - Small Landowners Only

1. Small landowners (described herein as any person or company owning real property represented by one or more contiguous lots not exceeding, in combination, 0.5 acres, within a residential subdivision) may choose to implement any one of the mitigation alternatives described in items E.1. - E.5. without regard to preference.

E. Determine Habitat Mitigation Need (in order of preference) - Other Than Small Landowners. Selection of any of the first 5 options will require the applicant to provide funds for restoration (if needed) and management of the lands into perpetuity.

1. Purchase (or otherwise acquire fee title) two acres of occupied scrub-jay habitat for each acre of affected occupied scrub-jay habitat^{1,2}.
2. Purchase (or otherwise acquire fee title) two acres of unoccupied, but restorable³ habitat for each acre of affected occupied habitat provided the unoccupied, restorable habitat is immediately contiguous to occupied scrub-jay habitat under public ownership that is managed for conservation purposes^{1,2}.
3. Secure perpetual conservation easement and land management agreement on sufficient lands to achieve mitigation needs identified in E.1. and E.2. above^{1,2}. Holder of any agreement must be approved by the Service.
4. Purchase (or otherwise acquire fee title) or secure perpetual conservation easement and land management agreement on three acres of unoccupied, but restorable habitat for each acre of affected habitat, provided the unoccupied, but restorable habitat lies within two miles of occupied scrub-jay habitat under public ownership that is managed for conservation purposes^{1,2,4}.
5. Deposit funding into the Florida Scrub-Jay Conservation Fund sufficient to achieve mitigation needs identified in E.1., plus five percent of total mitigation costs to cover administrative overhead.

6. Purchase/acquire fee title (at a ratio of five acres of habitat for each acre of affected occupied habitat) lands adjoining publicly-owned occupied or unoccupied but restorable scrub-jay habitat to provide buffer from adjacent urban activities and to buffer adjacent urban areas from land management activities (e.g., prescribed fire).

F. Applicant Protocols

1. A through E above will be discussed and reviewed with applicants as soon as sufficient information is provided to determine the extent of project impacts.
2. The Service will provide the applicant a list of mitigatory requirements immediately following initial discussion of a project. Written updates will be provided if the project changes scope.
3. If E.5. applies, notify applicant that mitigation cost will be based on the cost to conduct work at the most appropriate mitigation site as determined above. Field offices will maintain written cost estimates on file for applicant review as requested. Mitigation cost will be obtained primarily through assessments of comparative sales of land within the scrub-jay group (as defined in B above) to which mitigation will be directed. Where such data are lacking, broader assessments of comparative sales data may be needed. These values should be updated as necessary considering changes in land values and inflation. Mitigation cost estimates will be based on Service documents at the time of final application for an incidental take permit, unless the applicant can demonstrate comparative land sales data resulting in a lower mitigation cost.
4. Upon request, the Service shall provide the applicant copies of modeling software and associated data used by the Service in making determinations in A through E above, provided the release of information does not violate copyright or other legal instruments that may protect such information.

This guidance should be updated jointly by our respective staffs as needs and new information dictate.

¹ During the process of drafting the Brevard County Scrub Conservation and Development Plan, certain “core” areas were designated as essential to long-term survival of Florida scrub-jays within that county. As a result, these core areas are more beneficial (biologically speaking) to scrub-jays than other areas within the county. Impacts to core areas within Brevard County, therefore, will be mitigated by purchase or otherwise acquiring fee title to four acres of occupied habitat for each acre of occupied habitat affected and will be located only in areas included in the draft reserve design.

² All acquisition and easements must be accompanied by a cash endowment sufficient to provide perpetual management of preserved lands and any other funds identified by a prospective title or easement recipient that may be necessary for that entity to accept title or easement (e.g., contaminants surveys, fencing, trash removal, etc.).

³ Restorable habitat refers to areas with appropriate soil and vegetation types that require implementation of land management actions to provide the vegetative structure and diversity typical of suitable scrub-jay habitat.

⁴ The Service requires a higher ratio in the case of restored habitat not contiguous to public lands managed for and occupied by scrub-jays to address the uncertainties inherent in habitat restoration and recolonization by scrub-jays, and the temporal loss of habitat.

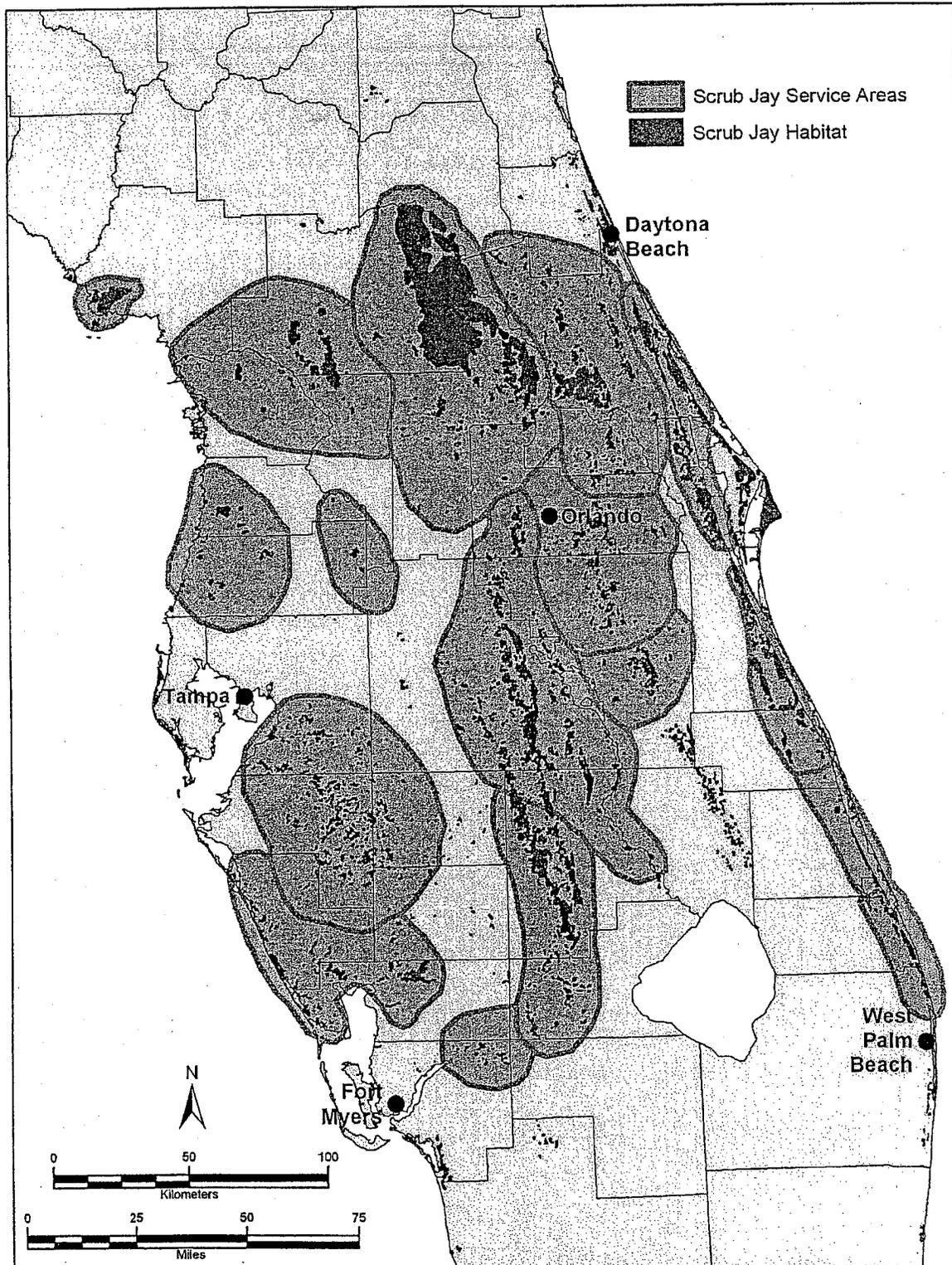


Figure 1. Mitigation Service Areas for the Florida scrub-jay.

APPENDIX H

Traffic Methodology Summary

Waterway Village DRI is a proposed residential development to be located at the northeast corner of the intersection of 58th Avenue (Kings Highway) and 49th Street in east central Indian River County. The 696 acres of land are to include 1,740 residential units as well as a clubhouse. The clubhouse consists of 5,000 square feet of commercial uses such as a convenience store/deli, gasoline sales, a bank with an ATM, a hair salon, and a real estate office. Also within the clubhouse will be approximately 20,000 square feet of non-commercial space including the project's post office, fitness center, meeting rooms, library, and card room.

The development is proposed as a gated community and is to be developed in seven phases; however, for purposes of traffic analysis the project is considered to be developed in two phases as shown in the following table:

Land Use	Cumulative Intensity	
	Phase I (2008)	Phase II (2012)
Single-Family Residential	473 D.U.	621 D.U.
Multi-Family Residential	527 D.U.	695 D.U.
Multi-Family Residential *	-----	424 D.U.
Total	1,000 D.U.	1,740 D.U.

* Units outside gated community
D.U. – Dwelling Units

Methodology

Roadway improvements were determined based on the Department of Community Affairs's Transportation Standard Rule for DRI's (Rule 9J-2.045, F.A.C.). Based on the rule, roadway improvements are recommended for roadway sections which meet the following two criteria:

- Project traffic is five percent (5%) or more of the adopted level of service,
- Total traffic exceeds the adopted level of service.

In accordance with Rule 9J-2.045, F.A.C., roadway improvements included in the current three years of the Indian River County Improvement Program or the Florida Department of Transportation Adopted Work Program are assumed as improvements.

Trip Generation

Trip generation characteristics of the proposed development were determined using a hybrid trip generation rate developed from studies performed at the DiVosta Riverwalk project in Palm Beach County and the Institute of Transportation Engineers (ITE) Trip Generation rates. The rates used in the study follows:

Daily	6.01 Trips per dwelling unit
AM Peak Hour	0.46 Trips per dwelling unit
AM Peak Hour/In	0.08 Trips per dwelling unit
AM Peak Hour/Out	0.38 Trips per dwelling unit
PM Peak Hour	0.55 Trips per dwelling unit
PM Peak Hour/In	0.35 Trips per dwelling unit
PM Peak Hour/Out	0.20 Trips per dwelling unit

The hybrid rates account for the community retail and other amenities within the project. Trip generation for residential units located in the out-parcel along 43rd Avenue have been calculated using standard ITE rates. The following table summarizes the net PM peak hour trip generation for the two phases:

Phase (Year)	Net PM Peak Hour Trips		
	Cumulative Total	In	Out
I (2008)	550	350	200
II (2012)	953	614	339

Table TR-1 summarizes trip generation for all phases of development.

Reduction for internal capture is not applied to the trip generation as trip generation rates were developed assuming the internalization of residential and non-residential uses.

Analysis

Future year traffic volumes were established for each roadway segment within the study area. Future traffic volumes consist of two components of traffic: future background traffic and future project traffic.

Future background traffic conditions on the surrounding roadway network included historic growth and traffic from committed developments. An area-wide historic growth

rate of three percent (3%) was utilized. Committed development data was obtained from Indian River County.

In order to determine total traffic, project traffic has to be added to background traffic on all roadway links within the study area.

Project traffic distribution was defined based on a select-zone model run of FSUTMS with some manual adjustments. New traffic from the proposed DRI was assigned to the study roadways. **Map TR-1** presents the project traffic distribution.

Total traffic volumes for each phase were then compared to the adopted service volume for the committed number of lanes for each roadway link. **Tables TR-2 and TR-3** summarize the comparison of projected traffic volumes on the study roadways for phases I and II, respectively.

While the generalized service volumes are projected to be exceeded in some roadway links, an arterial analysis indicates these roadway links will operate at acceptable levels of service.

Intersection analyses were also performed to determine deficiencies. Based on the results of the analyses, several intersection improvements are recommended as necessary to address regional traffic impacts. A summary of the recommended intersection improvements is presented in **Table TR-4** and depicted in **Map TR-2**.

53rd Street Extension

The traffic analyses have been performed under the assumption that 53rd Street will be extended to the east through Old Dixie Highway. This roadway provides access to the development. A significant amount of project traffic is assigned to the east along 53rd Street.

While the proposed extension to 53rd Street is conceptually approved by Indian River County, it also requires a railroad crossing for the FEC line. At the time of writing the assessment, the permit to cross the FEC Railroad had not been obtained.

A new traffic study is necessary to determine traffic impacts if 53rd Street is not extended east of the FEC. This study is included as a recommended condition.

Guarantee for Roadway Improvements

Rule 9J-2.045, F.A.C. defines acceptable methods of guaranteeing identified roadway improvements:

- “1. Scheduling of Facility Improvements

- a) A schedule which specifically provides for the mitigation of impacts from the proposed development on each significantly impacted roadway which will operate below the adopted level of service standard at the end of each project Phase's build out, or alternatively, a subset stage of that Phase. The schedule shall ensure that each and every roadway improvement which is necessary to achieve the adopted level of service standard for that project stage or Phase shall be guaranteed to be in place and operational, or under actual construction for the entire improvement, at build out of each project stage or Phase that creates the significant impact.

This guarantee shall be in the form of:

- I. A clearly identified, executed and recorded local government development agreement, consistent with Sections 163.3220 through 163.3243, F.S., that is attached as an exhibit to the development order, and which ensures, at a minimum, that all needed roadway improvements will be available concurrent with the impacts of development, consistent with paragraph 163.3180 (2) (c), F.S.;
- II. A binding and enforceable commitment in the development order by the local government to provide all needed roadway improvements concurrently with the development schedule approved in the development order;
- III. A local government commitment in the current year of their local government comprehensive plan Capital Improvement Element (CIE) to provide all needed roadway improvements, or a local government commitment in the current three years of their CIE to provide all needed roadway improvements when the local government has specifically adopted an in-compliance Rule 9J-5.0055 (2) (c), F.A.C., concurrency management system in their plan;
- IV. A Florida Department of Transportation commitment in the current three years of the Adopted Work Program to provide all needed roadway improvements;
- V. A binding and enforceable commitment in the development order by the developer to provide all needed roadway improvements concurrently with the development schedule approved in the development order; or
- VI. Any combination of guarantees I through V above that ensures that all needed roadway improvements will be provided concurrently with the development schedule approved in the development order."

Along with including the recommended conditions in the development order, Indian River County needs to provide a form of guarantee as stated above to meet the minimum

criteria for insuring DCA will not appeal the DO. In accordance with the Transportation Standard Rule, Indian River County should attach an executed and recorded local government development agreement as an exhibit to the development order, if applicable. A condition specifying that compliance with this agreement as a circumstance underlying approval of the project is recommended.

APPENDIX I

**Table TR-1
Waterway Village
Trip Generation**

Land Use	Dwelling Units	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			Total	Enter	Exit	Total	Enter	Exit
Phase I								
Single-Family Residential	473	2,843	218	37	181	260	165	95
Multi-Family Residential/Condo/Townhouse	527	3,167	242	41	201	290	185	105
Total Trips Phase I		6,010	460	78	382	550	350	200
Phase II (Cumulative)								
Single-Family Residential	621	3,732	286	49	237	342	217	124
Multi-Family Residential/Condo/Townhouse	695	4,177	319	54	265	382	243	139
Multi-Family Residential/Condo/Townhouse *	424	2,485	187	32	155	229	153	76
Total Trips Phase II		10,394	792	135	657	953	614	339

* Units outside gated community

Table TR-2
Waterway Village
Phase I - Year 2008 - PM Peak Hour/Peak Season Traffic Conditions

Roadway Link	Station Direction	Number of Lanes	Adopted Service Volume	Existing 2002 Traffic	Committed Development Traffic	Background Growth	2008 Background Traffic	Project Traffic	2008 Total Traffic	Meets Adopted Service Volume?	Significant Impact?
Indian River Blvd./SR 60/W. VB City	1160N	4L	1,620	786	123	153	1,062	49	1,111	Yes	No
Indian River Blvd./SR 60/W. VB City	1160S	4L	1,620	1,037	96	201	1,334	28	1,362	Yes	No
Indian River Blvd./W. VB City/US-1	1170N	4L	1,620	758	132	147	1,037	52	1,090	Yes	No
Indian River Blvd./W. VB City/US-1	1170S	4L	1,620	472	238	92	802	30	832	Yes	No
I-95/SR 60/Oslo Road	1230N	4LX	2,640	1,600	12	310	1,922	28	1,950	Yes	No
US-1/41st Street/45th Street	1365N	4L	1,860	1,085	61	211	1,357	56	1,413	Yes	No
US-1/41st Street/45th Street	1365S	4L	1,860	762	35	148	945	32	977	Yes	No
US-1/45th Street/49th Street	1370N	4L	1,860	1,042	33	202	1,277	59	1,337	Yes	No
US-1/45th Street/49th Street	1370S	4L	1,860	694	23	135	852	34	886	Yes	No
US-1/49th Street/53rd Street	1375N	4L	1,860	1,298	45	252	1,595	59	1,654	Yes	No
US-1/49th Street/53rd Street	1375S	4L	1,860	835	33	162	1,030	34	1,064	Yes	No
SR 60/ICWW/SR A1A	1970W	4L	1,640	844	47	164	1,055	14	1,069	Yes	No
12th Street/27th Ave./20th Ave.	2240W	2L	760	392	3	76	471	0	471	Yes	No
Old Dixie Hwy/45th Street/49th Street	2350S	2L	760	80	2	16	98	4	102	Yes	No
27th Avenue/16th Street/SR 60	2470S	2L	760	508	20	99	627	8	635	Yes	No
10th Avenue/SR 60/Royal Palm Blvd.	2710S	2L	760	65	0	13	78	0	78	Yes	No
43rd Street/4th Street/8th Street	2915S	4L	1,620	493	56	96	645	2	647	Yes	No
43rd Avenue/SR 60/26th Street	2935N	2L	760	419	67	81	567	42	609	Yes	Yes
43rd Avenue/SR 60/26th Street	2935S	2L	760	533	60	103	696	24	720	Yes	No
43rd Avenue/26th Street/41st Street	2940N	2L	760	348	97	68	513	59	572	Yes	Yes
43rd Avenue/26th Street/41st Street	2940S	2L	760	445	88	86	619	34	653	Yes	No
43rd Avenue/41st Street/45th Street	2945N	2L	760	244	30	47	321	59	381	Yes	Yes
43rd Avenue/41st Street/45th Street	2945S	2L	760	238	32	46	316	34	350	Yes	No
43rd Avenue/45th Street/49th Street	2950N	2L	760	129	8	25	162	77	239	Yes	Yes
43rd Avenue/45th Street/49th Street	2950S	2L	760	95	9	18	122	44	166	Yes	Yes
43rd Avenue/49th Street/53rd Street	2950N	2L	760	NA	0	0	0	80	80	Yes	Yes

**Table TR-2
Waterway Village
Phase I - Year 2008 - PM Peak Hour/Peak Season Traffic Conditions**

Roadway Link	Station Direction	Number of Lanes	Adopted Service Volume	Existing 2002 Traffic	Committed Development Traffic	Background Growth	2008 Background Traffic	Project Traffic	2008 Total Traffic	Meets Adopted Service Volume?	Significant Impact?
43rd Avenue//49th Street//53rd Street	2950S	2L	760	NA		0	0	46	46	Yes	Yes
58th Avenue//SR 60//26th Street	3030N	4L	1,620	563	50	109	722	70	792	Yes	No
58th Avenue//SR 60//26th Street	3030S	4L	1,620	539	119	105	763	40	803	Yes	No
58th Avenue//26th Street//41st Street *	3030N	2L	760	563	50	109	722	108	831	No	Yes
58th Avenue//26th Street//41st Street *	3030S	2L	760	539	119	105	763	62	825	No	Yes
58th Avenue//41st Street//45th Street	3035N	2L	760	351	25	68	444	112	556	Yes	Yes
58th Avenue//41st Street//45th Street	3035S	2L	760	343	24	67	434	64	498	Yes	Yes
58th Avenue//45th Street//49th Street	3040N	2L	760	325	19	63	407	112	519	Yes	Yes
58th Avenue//45th Street//49th Street	3040S	2L	760	308	20	60	388	64	452	Yes	Yes
58th Avenue//49th Street//53rd Street	3045N	2L	760	330	24	64	418	112	530	Yes	Yes
58th Avenue//49th Street//53rd Street	3045S	2L	760	304	38	59	401	64	465	Yes	Yes
58th Avenue//89th Street//CR 510	3055S	2L	760	207	26	40	273	14	287	Yes	No
82nd Avenue//65th Street//69th Street	3350S	2L	760	8	1	2	11	0	11	Yes	No
49th Street//43rd Ave.//Old Dixie Hwy	4240W	2L	760	156	12	30	198	3	202	Yes	No
26th Street//66th Ave.//58th Ave.	4720E	2L	760	185	24	36	245	38	283	Yes	Yes
26th Street//66th Ave.//58th Ave.	4720W	2L	760	259	35	50	344	22	366	Yes	No
26th Street//58th Ave.//43rd Ave.	4730W	2L	760	339	47	66	452	4	456	Yes	No
4th Street//43rd Ave.//27th Ave.	4940W	2L	760	285	23	55	363	0	308	Yes	No
53rd Street//58th Ave.//Entrance	E	2L	880	NA	NA	NA	NA	136	136	Yes	Yes
53rd Street//58th Ave.//Entrance	W	2L	880	NA	NA	NA	NA	78	78	Yes	Yes
53rd Street//Entrance//US-1	E	2L	880	NA	NA	NA	NA	76	76	Yes	Yes
53rd Street//Entrance//US-1	W	2L	880	NA	NA	NA	NA	133	133	Yes	Yes

* Arterial analysis indicates acceptable Level of Service

Table TR-3
Waterway Village
Phase II - Year 2012 - PM Peak Hour/Peak Season Traffic Conditions

Roadway Link	Station Direction	Number of Lanes	Adopted Service Volume	Existing 2002 Traffic	Committed Development Traffic	Background Growth	2012 Background Traffic	Project Traffic	2012 Total Traffic	Meets Adopted Service Volume?	Significant Impact?
Indian River Blvd./SR 60/W. VB City	1160N	4L	1,620	786	123	270	1,179	86	1,265	Yes	Yes
Indian River Blvd./SR 60/W. VB City	1160S	4L	1,620	1,037	96	357	1,490	47	1,537	Yes	No
Indian River Blvd./W. VB City/IUS-1	1170N	4L	1,620	758	132	261	1,151	92	1,243	Yes	Yes
Indian River Blvd./W. VB City/IUS-1	1170S	4L	1,620	472	238	162	872	51	923	Yes	No
US-1/18th Street/12th Street	1320S	4L	1,860	1,178	39	405	1,622	3	1,626	Yes	No
US-1/41st Street/45th Street	1365N	4L	1,860	1,085	61	373	1,519	98	1,617	Yes	Yes
US-1/41st Street/45th Street	1365S	4L	1,860	762	35	262	1,059	54	1,113	Yes	No
US-1/45th Street/49th Street	1370N	4L	1,860	1,042	33	358	1,433	104	1,538	Yes	Yes
US-1/45th Street/49th Street	1370S	4L	1,860	694	23	239	956	58	1,013	Yes	No
US-1/49th Street/53rd Street *	1375N	4L	1,860	1,298	45	446	1,789	104	1,894	No	Yes
US-1/49th Street/53rd Street	1375S	4L	1,860	835	33	287	1,155	58	1,213	Yes	No
SR 60/I-95/82nd Avenue	1915W	4L	1,860	983	68	161	666	7	672	Yes	No
SR 60/ICWW/SR A1A	1970W	4L	1,640	844	47	290	1,181	25	1,206	Yes	No
12th Street/27th Ave./20th Ave.	2240W	2L	760	392	3	135	530	0	530	Yes	No
Old Dixie Hwy/45th Street/49th Street	2350S	2L	760	80	2	28	110	7	116	Yes	No
27th Avenue/16th Street/SR 60	2470S	2L	760	508	20	175	703	14	716	Yes	No
10th Avenue/SR 60/Royal Palm Blvd.	2710S	2L	760	65	0	22	87	0	87	Yes	No
43rd Street/4th Street/8th Street	2915S	4L	1,620	493	56	170	719	3	722	Yes	No
43rd Avenue/SR 60/26th Street	2935N	2L	760	419	67	144	630	74	704	Yes	Yes
43rd Avenue/SR 60/26th Street *	2935S	2L	760	533	60	183	776	41	817	No	Yes
43rd Avenue/26th Street/41st Street	2940N	2L	760	348	97	120	565	104	669	Yes	Yes
43rd Avenue/26th Street/41st Street	2940S	2L	760	445	88	153	686	58	744	Yes	Yes
43rd Avenue/41st Street/45th Street	2945N	2L	760	244	30	84	358	104	462	Yes	Yes
43rd Avenue/41st Street/45th Street	2945S	2L	760	238	32	82	352	58	409	Yes	Yes
43rd Avenue/45th Street/49th Street	2950N	2L	760	129	8	44	181	135	316	Yes	Yes
43rd Avenue/45th Street/49th Street	2950S	2L	760	95	9	33	137	75	211	Yes	Yes
43rd Avenue/49th Street/53rd Street	2950N	2L	760	NA	0	0	0	141	141	Yes	Yes
43rd Avenue/49th Street/53rd Street	2950S	2L	760	NA	0	0	0	78	78	Yes	Yes
58th Avenue/SR 60/26th Street	3030N	4L	1,620	563	50	194	807	123	929	Yes	Yes
58th Avenue/SR 60/26th Street	3030S	4L	1,620	539	119	185	843	68	911	Yes	No
58th Avenue/26th Street/41st Street *	3030N	2L	760	563	50	194	807	190	997	No	Yes
58th Avenue/26th Street/41st Street *	3030S	2L	760	539	119	185	843	105	948	No	Yes

Table TR-3
Waterway Village
Phase II - Year 2012 - PM Peak Hour/Peak Season Traffic Conditions

Roadway Link	Station Direction	Number of Lanes	Adopted Service Volume	Existing 2002 Traffic	Committed Development Traffic	Background Growth	2012 Background Traffic	Project Traffic	2012 Total Traffic	Meets Adopted Service Volume?	Significant Impact?
58th Avenue//41st Street//45th Street	3035N	2L	760	351	25	121	497	196	693	Yes	Yes
58th Avenue//41st Street//45th Street	3035S	2L	760	343	24	118	485	108	593	Yes	Yes
58th Avenue//45th Street//49th Street	3040N	2L	760	325	19	112	456	196	652	Yes	Yes
58th Avenue//45th Street//49th Street	3040S	2L	760	308	20	106	434	108	542	Yes	Yes
58th Avenue//49th Street//53rd Street	3045N	2L	760	330	24	113	467	196	664	Yes	Yes
58th Avenue//49th Street//53rd Street	3045S	2L	760	304	38	105	447	108	555	Yes	Yes
58th Avenue//89th Street//CR 510	3055S	2L	760	207	26	71	304	25	329	Yes	No
82nd Avenue//65th Street//69th Street	3350S	2L	760	8	1	3	12	0	12	Yes	No
49th Street//43rd Ave.//Old Dixie Hwy	4240W	2L	760	156	12	54	222	6	228	Yes	No
26th Street//66th Ave.//58th Ave.	4720E	2L	760	185	24	64	273	67	340	Yes	Yes
26th Street//66th Ave.//58th Ave.	4720W	2L	760	259	35	89	383	37	420	Yes	No
26th Street//58th Ave.//43rd Ave.	4730W	2L	760	339	47	117	503	7	509	Yes	No
4th Street//43rd Ave.//27th Ave.	4940W	2L	760	285	23	98	406	0	308	Yes	No
53rd Street//58th Ave.//Entrance	E	2L	880	NA	NA	NA	NA	239	239	Yes	Yes
53rd Street//58th Ave.//Entrance	W	2L	880	NA	NA	NA	NA	132	132	Yes	Yes
53rd Street//Entrance//US-1	E	2L	880	NA	NA	NA	NA	129	129	Yes	Yes
53rd Street//Entrance//US-1	W	2L	880	NA	NA	NA	NA	233	233	Yes	Yes

* Arterial analysis indicates acceptable Level of Service

**Table TR-4
Waterway Village
Recommended Intersection Improvements**

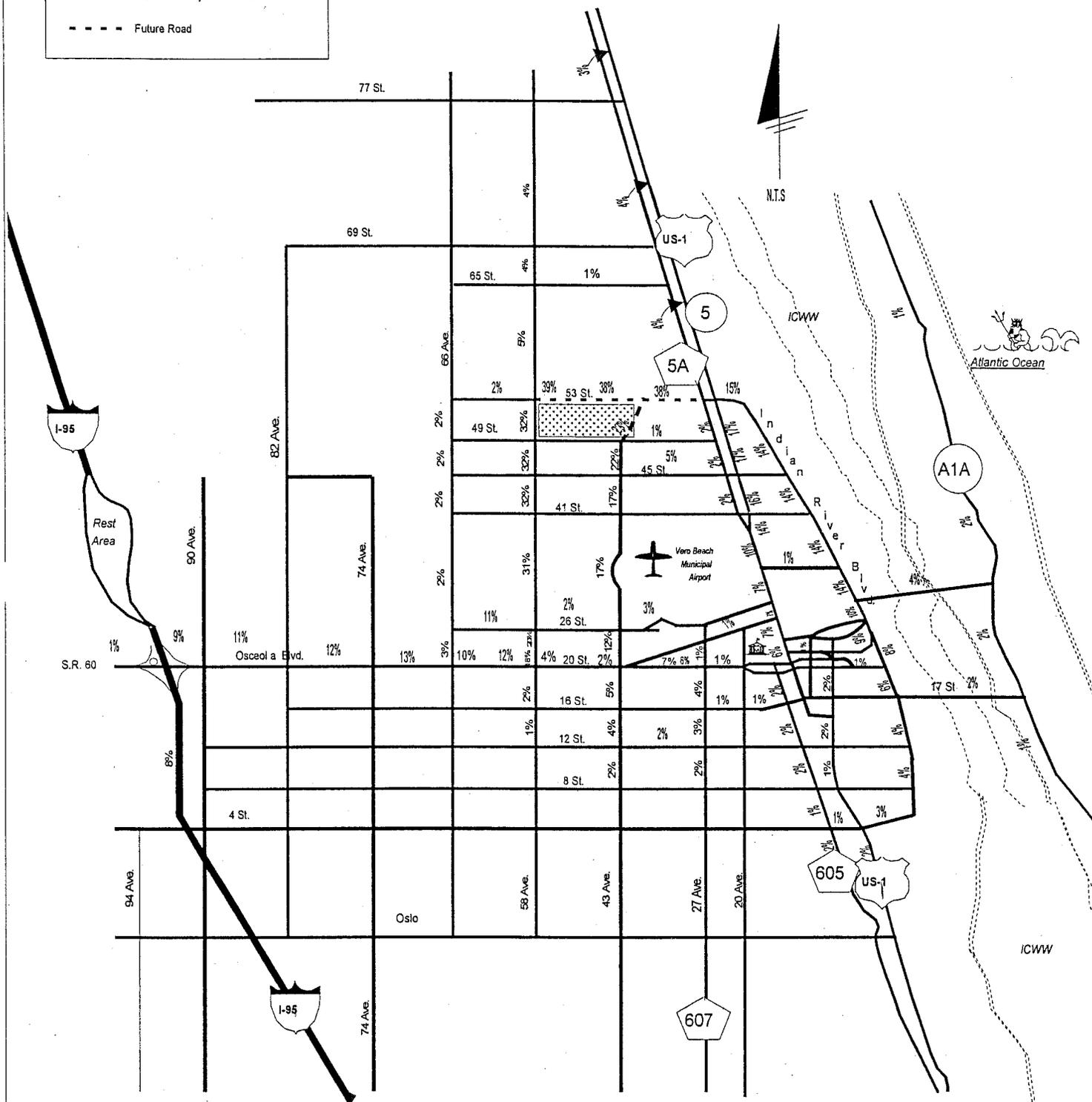
Intersection	Improvements	Dwelling Units	Date
53rd Street & US-1	Signalize	284	-
45th Street & 58th Avenue	Signalize	337	December 2005
49th Street & 58th Avenue	Signalize/Add WB left-turn lane	337	December 2005
26th Street & 43rd Avenue	Add NB, SB, EB & WB right-turn lanes	635	December 2006
53rd Street & 58th Avenue	Signalize	731	December 2006
26th Street & 58th Avenue	Add WB right-turn lane	859	December 2007
49th Street & 43rd Avenue	Add WB left-turn lane	940	December 2008
SR 60 & 43rd Avenue	Convert NB right-turn lane to through-right Add SB through lane	899	December 2008
SR 60 & 58th Avenue	Add NB & SB through and right-turn lanes Add EB & WB left-turn lanes (dual)	1,150	December 2009
53rd Street & US-1	Add EB right and left-turn lanes	859	December 2008
49th Street & US-1	Signalize/Add EB left-turn lane	1,554	December 2011

APPENDIX J

LEGEND

1% Percent Project Traffic

--- Future Road



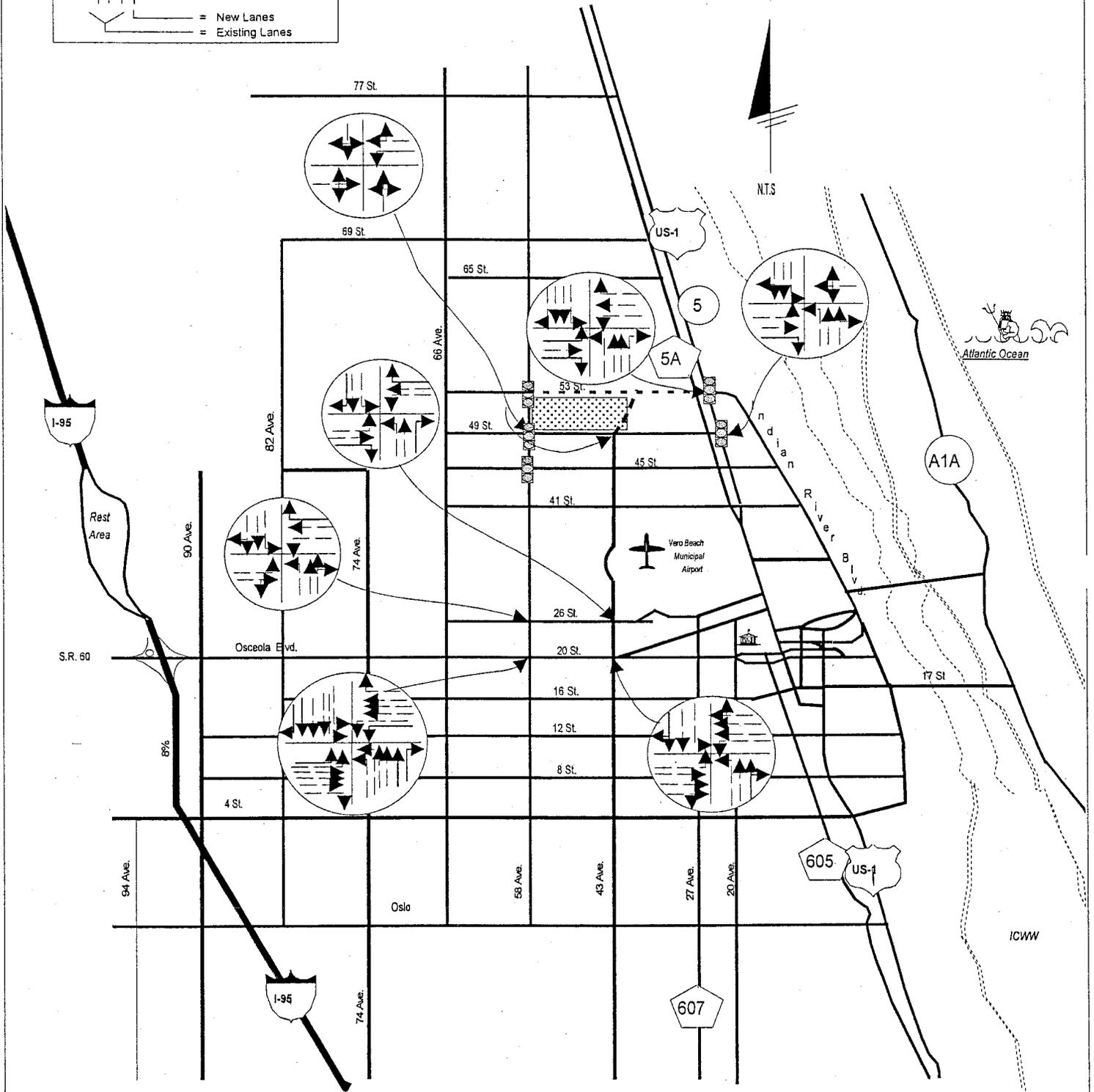
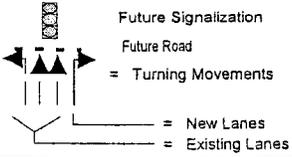
WATERWAY VILLAGE

Indian River County, Florida

MAP TR-1

PROJECT
TRAFFIC
DISTRIBUTION

LEGEND



WATERWAY VILLAGE
Indian River County, Florida

MAP TR-2
FUTURE
INTERSECTION
GEOMETRICS
AND IMPROVEMENTS

APPENDIX K

Components of Neighborhoods and Districts

Prepared by Treasure Coast Regional Planning Council

American neighborhoods and cities are organisms, which are as complex and unique as the individuals who reside in them. Like people, places grow at different times, at different scales, with differing values and a varying sense of purpose. While it is impossible to generically characterize the human ethos and spirit, there are consistent basic needs like food, water, and shelter, which are fundamental to human existence.

Cities, towns, and neighborhoods also require basic elements if they are to provide a memorable and sustainable habitat for their residents. These elements, while they may vary in scale and character from place to place, are consistently found in traditional development patterns. Listed below are the basic components which make up the traditional urban neighborhood.

I. Neighborhood Size

- a. The neighborhood is scaled upon a five-minute walking radius (1,350 feet) as measured from the approximate center of the neighborhood.
- b. In general, the neighborhood has well-defined edges, and should range between 40 – 150 acres in size. This size may vary depending upon physical and geological conditions.
- c. Adjacent neighborhoods are connected with a series of streets detailed to encourage pedestrian and bicycle traffic.

II. Neighborhood Center

- a. Each neighborhood has a recognizable center in the form of a public square, a park, a green, or a plaza.
- b. The neighborhood center is faced by the fronts of buildings, which are sited to best define the public open space. A minimum of 80% of these buildings has a minimum height of 2 stories in order to achieve adequate spatial definition.

III. Streets, Blocks, and Alleyways

- a. The basic building blocks of the neighborhood are the street, the block, and the alleyway. Each neighborhood has a fine-grained network of streets and blocks. Alleyways are encouraged in residential areas

(especially where higher densities occur) and are provided in the mixed-use areas of the neighborhood.

- b. Streets are detailed with sidewalks, on-street parallel parking, regularly spaced street trees and pedestrian-scaled lighting. Street trees are placed between the pedestrian and the roadway in parkways or tree grates.
- c. Blocks are scaled to accommodate a variety of building types and encourage pedestrian traffic. Typical block dimensions range between 300' – 500' on a block face and do not exceed 750' on any single block face. Single blocks do not exceed a total perimeter distance of 2,500'.
- d. Alleyways provide access for rear-loaded parking, municipal services, loading and unloading of goods, and allows the street face to be inhabited by buildings and people. In residential areas, alleyways provide private entrances and parking for rental units located behind single-family homes.
- e. Streets, blocks, and alleyways provide a continuous network of vehicular, pedestrian, and bicycle circulation and are designed to accommodate each in a meaningful way.
- f. A hierarchy of streets is provided in the neighborhood. Larger streets have larger buildings and sidewalks; smaller streets have smaller buildings and sidewalks.
- g. Streets are designed so the buildings facing a street are proportional to the width of that street. The preferred ratio of height to width proportion is 1:1.5 (1 unit in height to 1.5 units in width).
- h. Sidewalks are continuous, provided on both sides of every street, and are a minimum dimension of 5'-0" wide on residential streets and a minimum of 10'-0" on mixed-use streets.

IV. Public Open Spaces

- a. Each neighborhood has at least one primary, centrally located public plaza, green, park, or square. This space is faced by the fronts of buildings and is detailed with pedestrian-scaled street lighting, regularly spaced street trees, and street furnishings such as benches and fountains.
- b. Streets and public open spaces are accessible to the public.
- c. Public open spaces, including waterfronts, parkways, and golf courses have public edges so these amenities are not wholly privatized.

- d. Each neighborhood has a series of secondary and tertiary public open spaces, which are linked to one another by streets and parkways. Every residential unit is within a five-minute walk of a neighborhood park, green, square, or plaza.

V. Civic and Public Buildings

- a. Civic and public buildings are sited on locations of high public visibility and importance. These locations include street terminations, parkways and greens, squares, important intersections, and other special sites.
- b. Civic and public buildings include, but are not limited to, municipal buildings, places of worship, meeting halls, hotels and clubhouses, gazebos and other forms of garden architecture.

VI. Mix of Uses

- a. Neighborhoods accommodate a mix of uses to support the daily needs of the neighborhood. Varying uses can occur in mixed-use buildings or within walkable distances of each other; not every building must have multiple uses. However, proximity alone is not enough. Streets must be detailed so that pedestrians will walk to different uses.
- b. Mixed-use buildings are designed so they can accommodate a variety of uses over time as the local market dictates.

VII. Mix of Housing Prices

- a. Neighborhoods provide a variety of housing opportunities to accommodate varying housing prices.
- b. The neighborhood provides home-ownership as well as rental housing opportunities in an integrated manner. Rental housing is not concentrated in segregated areas; they are dispersed and filtered into the general neighborhood fabric in a compatible way.
- c. The use of accessory or "out" buildings to provide dispersed rental housing, or other accessory uses, within the single-family fabric is critical to the overall sustainability of the neighborhood.

VIII. Building Types

- a. Housing types are defined by building typologies (single family, multi-family, townhouse, mixed-use, etc.) so that they can be logically and fairly distributed throughout the neighborhood.
- b. Building types of like scale, massing, and uses face one another on any given street. Differing building types may be placed back-to-back on a single block.
- c. The primary entrance of every building directly faces a street, a square, a park, a plaza, or a green.

IX. Parking

- a. All streets have on-street parking, which should be counted towards meeting parking requirements.
- b. All surface parking lots are screened from the street view with buildings, garden walls, and/or landscaping.
- c. Parking structures are located to the interior of the block and are completely screened by buildings with habitable uses for all floors.
- d. All on-site parking is located behind the primary building façade. Civic, cultural, and clubhouse buildings are exempted from this provision.
- e. For residential lots 50' wide or less, parking is accessed from the rear alleyway.

TREASURE COAST REGIONAL PLANNING COUNCIL

STAFF

<u>EMPLOYEE</u>	<u>TITLE</u>
Michael J. Busha	Executive Director
Marcela Camblor	Urban Design Coordinator
Kim Delaney	Growth Management Coordinator
Sandy Gippert	Accounting Manager
Elizabeth Gulick	Administrative Secretary
Wynsum Hatton	Administrative Assistant
Terry L. Hess	Deputy Director
Diane Martin	Accounting Clerk
Peter G. Merritt	Regional Ecologist
Shirley Monroe	Computer Graphic Designer
Penny Myszkowski	Secretary/Receptionist
Gregory Vaday	Economic Development Coordinator

301 East Ocean Boulevard, Suite 300
Stuart, Florida 34994
(772) 221-4060 (phone)
(772) 221-4067 (fax)
e-mail: admin@tcrpc.org