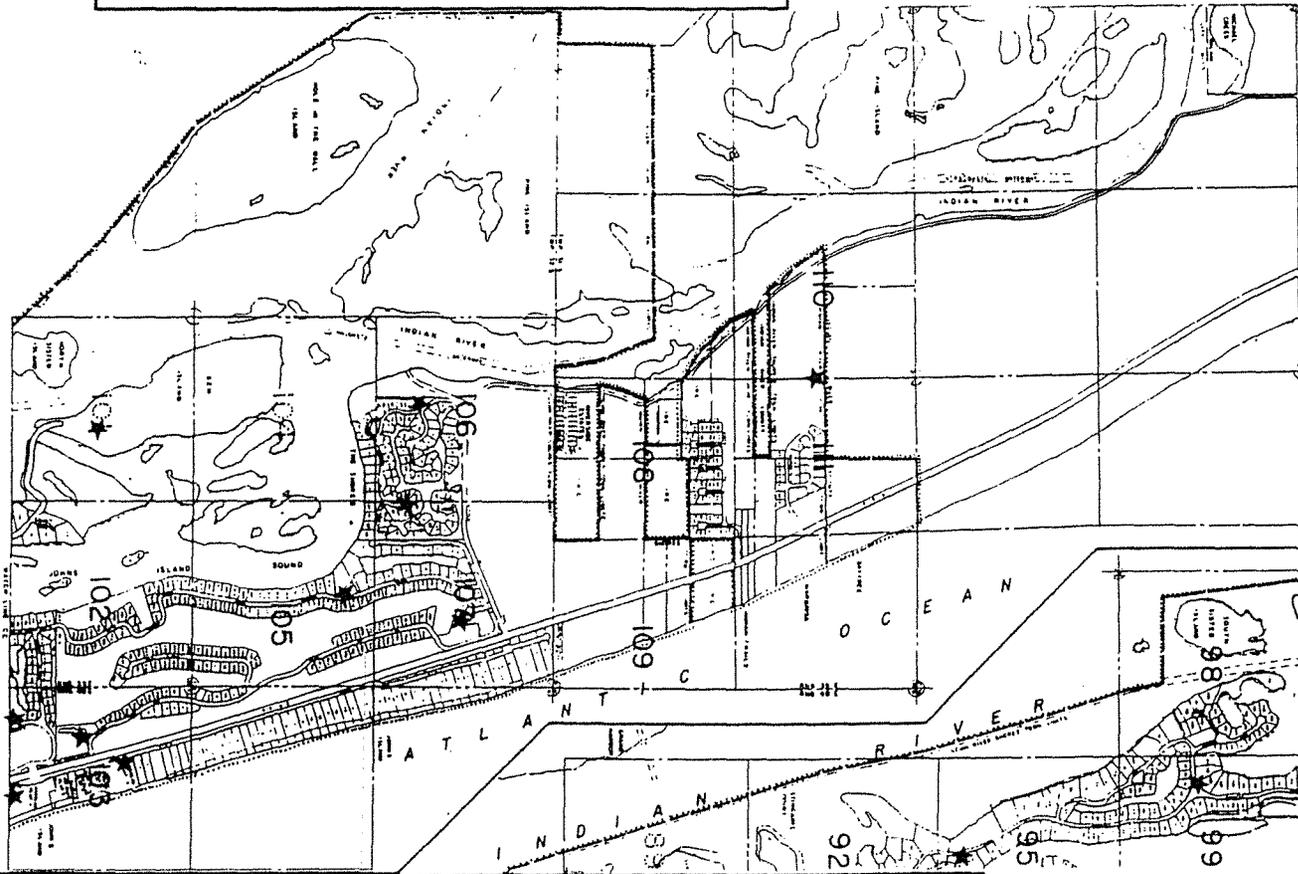


Appendix I

Map with Sewer Lift Stations Outside City Limits

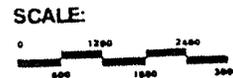
CITY OF VERO BEACH
INDIAN RIVER COUNTY,
FLORIDA

A-2



LEGEND

- ★ SANITARY SEWER LIFT STATION
- WATER & SEWER SERVICE AREA
- WATER SERVICE AREA ONLY
- 67 EXISTING ATLAS SHEETS
- PROPOSED ATLAS SHEETS
- CITY LIMITS LINE

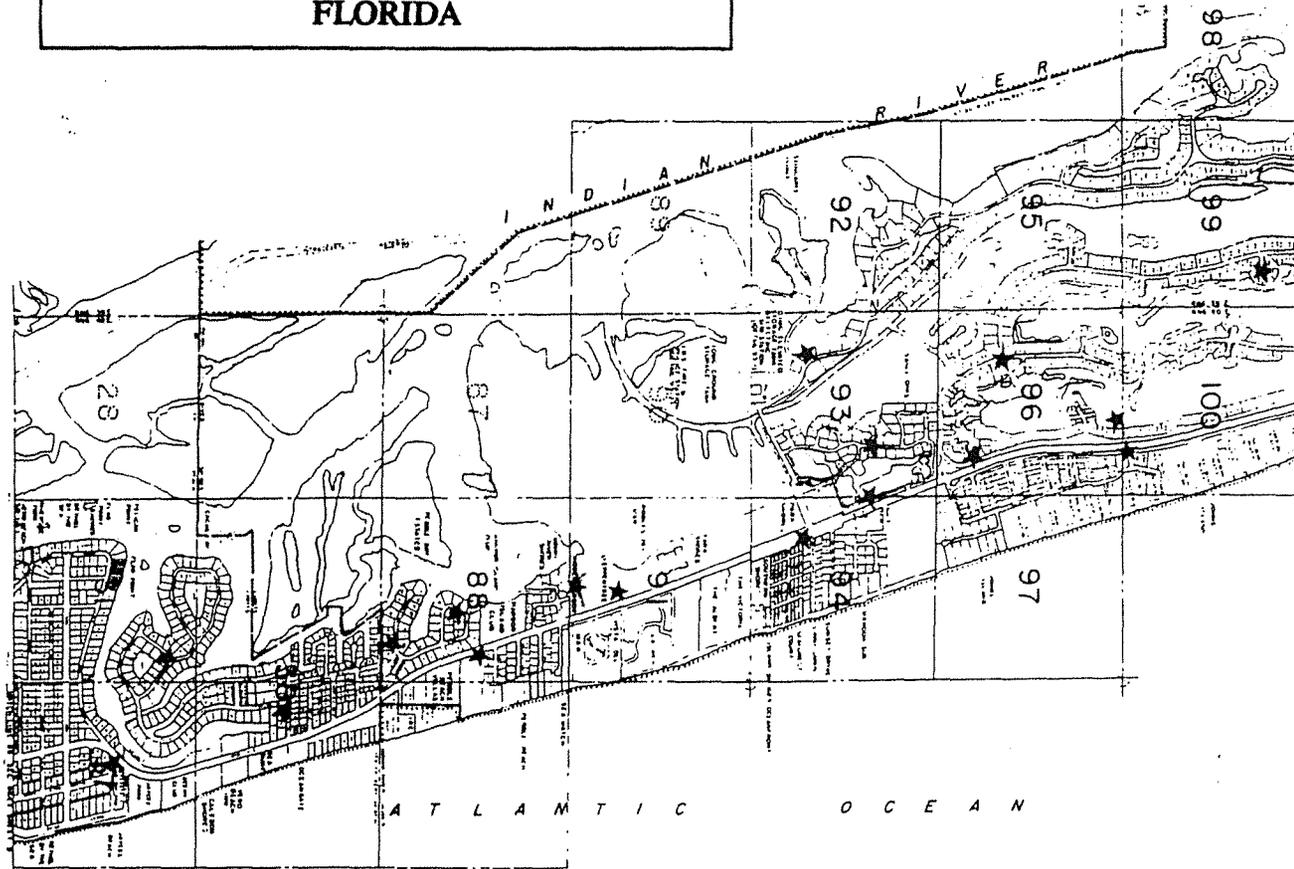


SOURCE: Lloyd & Associates, Inc., Engineers & Surveyors and
 Vero Beach Water and Sewer Department

RS-H / PLANTEC

SEPTEMBER 1989

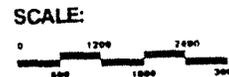
**CITY OF VERO BEACH
INDIAN RIVER COUNTY,
FLORIDA**



A-3

LEGEND

- | | | | |
|-------|-----------------------------|-----|-----------------------|
| ★ | SANITARY SEWER LIFT STATION | 67 | EXISTING ATLAS SHEETS |
| | WATER & SEWER SERVICE AREA | --- | PROPOSED ATLAS SHEETS |
| ----- | WATER SERVICE AREA ONLY | --- | CITY LIMITS LINE |



SOURCE: Lloyd & Associates, Inc., Engineers & Surveyors and
Vero Beach Water and Sewer Department

RS&H / PLANTEC

SEPTEMBER 1989

Appendix IIA

Indian River County Evaluation

of Storm Damaged Structures

INDIAN RIVER COUNTY, FLORIDA
INTER - OFFICE MEMORANDUM

TO: Stephen J. Wells, Director DATE: November 24, 1984 FILE:
Emergency Management

SUBJECT: Preliminary Assessment Of Dam
along Vero Beach Ocean Front
Property From OceanGate Condo
minium to Humiston Park -
Approximately 1½ Miles


FROM: Jim Davis, P.D.
Public Works Director

REFERENCES:

A field inspection was conducted on Saturday, November 24, 1984, from 10 a.m. till 1:00 p.m., along the developed ocean-front property from Ocean Gate Condominium to Humiston Park, Vero Beach, Indian River County, Florida. The field inspection included the following:

1. A visual inspection of the beachfront property.
2. A personal contact with property owner or representative.
3. Photographs.
4. A preliminary cost estimate of damage caused by high tide and storm surge conditions. High winds resulting in high velocity projectiles were observed. Winds were estimated on 11/ 23/84 (approximately 4:00 p.m.) at 60 to 70 knots.

The attached maps are presented as Exhibit "A". Parcels are numbered in "Red" ink to correspond with the assessment in this memorandum.

PARCEL 1 - OCEAN GATE CONDOMINIUMS

Frontage approximately 420' - Lost 40' shoreline
Fill Lost = 420' x 40' x 10' = 168,00 cf - 6,200 c.y.
\$3.00 = \$19,000.
Landscaping - 17,000 s.f. @ \$2.00 = \$34,000.
Walkovers - 2 C \$10,000 = 20,000
TOTAL \$73,000

No structures or seawalls lost.

PARCEL 2 - THE LANDINGS CONDOMINIUM

Frontage approximately 600'
Lost Building East of Condominium
Portion of Pier destroyed
Fill Loss = 600' x 40' x 12' = 288,000 cf
= 10,700 cy @ 3.00
= \$32,100
Structure 2,000 sf x \$40.00 = \$80,000
Pier/Crossovers = \$50,000
Landscaping - 600' x 40' = 24,000 @ 2.00 = \$48,000
Miscellaneous (electrical, sprinklers, etc.) \$20,000
TOTAL \$230,100

PARCEL 3 - SHERATON HOTEL

Approximate frontage 400'	
Fill loss = 400' x 40' x 10' = 160,000 cf = 6,000 yds.	
6,000 yds @ 3.00 =	\$18,000
Landscaping - 400' x 40' x \$2.00	32,000
Miscellaneous (electrical, etc.)	5,000
	<u>\$55,000</u>
Walkovers	10,000
	<u>\$65,000</u>
	TOTAL

PARCEL 4 - CALEDON SHORES

Approximate Frontage 400'	
Fill Loss - 400' x 40' x 10' = 160,000cf	
6,000 c. yds. @ 3.00	\$18,000
Swimming Pool undermined	10,000
Landscaping 400' x 40' x \$2.00	32,000
Dune walkovers	10,000
Miscellaneous - electrical	5,000
	<u>\$75,000</u>
	TOTAL

PARCEL 5 - OCEAN CLUB 1,2,3

Approximate Frontage 490'	
Fill Loss - 490' x 40' x 10' = 196,000 cf	
= 7,300 c.y.	
7,300 c.y. @ 3.00 =	\$21,900
Structure Loss - 700 sf Patio =	7,000
Landscaping 490 ft x 40' x 2.00 =	39,200
Miscellaneous (utilities, Accessory struct., etc.)	10,000
	<u>\$78,100</u>
	TOTAL

PARCEL 6 - JAYCEE PARK - CONN BEACH

Approximate Frontage = 2,030 L.F.	
Fill loss - 2,030 x 25' x 8' = 406,000 c.f.	
= 15,000 cy @ 3.00 =	\$45,000
Dune Structures 1,000 lf @ \$100.	\$100,000
Landscaping - 2,000 LF x 20' x 2.00	80,000
Lifeguard stand	10,000
Miscellaneous	25,000
	<u>\$260,000</u>
	TOTAL

CONTINUED
 Damage Estimation
 11/24/84
 Page 3

PARCEL 7 - WILLIAMS RESIDENCE

Approximate Frontage = 270'	
Fill Loss - 200' x 30' x 10' = 60,000 CF	
= 2,200 cy @ 3.00 =	\$ 6,600
Swimming Pool Pump Bldg.	3,000
Pool Repairs	3,000
Landscaping	10,000
	<u>22,600</u>
TOTAL	\$22,600

PARCEL 8 - HATFIELD RESIDENCE

Approximate Frontage = 100'	
Fill Loss - 100' x 30' x 10' = 30,000 cf	
= 1,100 cy =	\$ 3,300
Landscaping 100' x 30' x 2.00 =	6,000
	<u>9,300</u>
TOTAL	\$9,300

PARCEL 9 - CLEMENTS RESIDENCE

Frontage 206'	
Fill Loss - 206' x 20' x 10' = 41,200 cf	
= 1,530 cy @ 3.00	\$ 4,600
Seawall 80' x \$250./ft =	20,000
Landscaping 206' x 20' x \$2.00	8,300
	<u>32,900</u>
TOTAL	\$32,900

PARCEL 10 - VACANT

200' Frontage	
Fill Loss = 200' x 30' x 10' = 60,000 cf	
2,200 c.y. @ 3.00 =	\$ 6,600
Landscaping = 200' x 30' x 2.00 =	12,000
	<u>18,600</u>
TOTAL	\$18,600

PARCEL 11 - ROCH RESIDENCE

150' Frontage	
Fill Loss 150' x 30' x 10' = 45,000 = 1,600 cy	
1,600 c.y. @ \$3.00	\$ 4,800
Landscaping 150' x 30' x 2.00	9,000
Miscellaneous	6,000
	<u>19,800</u>
TOTAL	\$19,800

PARCEL 12 - SIEBERT RESIDENCE

150' Frontage	
Fill Loss 150' X 30' x 10' = 1,600 cy	
1,600 cy @ 3.00 =	\$ 4,800
Landscaping =	9,000
Structures	10,000
	<u>\$23,800</u>

PARCEL 13 - ELERBE RESIDENCE

Frontage = 300'	
Fill Loss = 300' X 60' X 12' = 216,000 cf	
= 8,000 cy @ 3.00 =	\$24,000
Guest House Structure 2000 sf @ 50.00=	\$100,000
Seawall 300' @ 300 cf =	\$ 90,000
House is undermined =	\$ 15,000
Patio Lost 500 sf @ 10.00	\$ 5,000
Dune Walkover	\$ 6,000
Landscaping 300' X 50' X 2.00	\$ 30,000
	<u>\$270,000</u>

PARCEL 14 - VILLAGE SPIRES CONDOMINIUM

Approx. Frontage = 300'	
Fill Lost = 300' X 30' X 15' =	\$ 90,000 cf
= 3,400 cy @ \$3.00 -	10,200
Seawall 200' @ 1000/ft =	200,000
Dune Walkcover (Concrete)	50,000
Landscaping = 300' X 30' X 2.00	18,000
Club House Foundation	5,000
Miscellaneous	10,000
	<u>\$293,200</u>

PARCEL 15 - AQUARIUS MOTEL

Frontage - Approx. = 130 L.F.	
Motel Structure (2 story)	
40' x 200' = 3000 SF @ \$50.00 =	\$400,000
Seawall 130 LF X \$1000/LF =	130,000
Fill 130 LF X 20' X 15' = 39,000 =	
1,500 @ \$3.00 =	4,500
Landscaping 130 X 20 X 2.00	5,200
	<u>\$541,200</u>

PARCEL 16 - VACANT LOT

200' Frontage	
Fill Lost = 200' X 30' X 10' = 60,000 cf	
= 2,300 cy @ \$3.00	\$ 6,900
Landscaping = 6000 st @ 2.00	12,000
	<u>\$ 18,900</u>

PARCEL 17 - REEF MOTEL

Frontage - 250'	
Landscaping 30' X 250 X 2.00=	\$ 15,000
Stairs	10,000
Seawall End	30,000
Rock Revetment OK	<u>\$ 55,000</u>

PARCEL 18 - PARKING LOT

Frontage 100'	
Fill Lost 100' X 20' X 10 = 20,000 cf	
740 c yds. @ \$3.00 =	\$ 2,200
Seawall 100' X 1000 =	100,000
	<u>\$102,000</u>

PARCEL 19 - HOLIDAY INN

Frontage 300'	
Seawall 300' X \$1000. =	\$300,000
Fill 30' X 300 X 10' = 90,000 =	
3,400 cy @ 3.00 =	10,200
Landscaping 30 X 300 X 2.00	18,000
Dining Room Damage	20,000
Utilities	20,000
Boardwalk 300' X 100.00 =	30,000
	<u>\$398,200</u>

PARCEL 20 - SEXTAN PLAZA PARKING LOT

Frontage 160'	
Parking lot 160' X 30' - 4,800 SF	
= 180 sy @ \$25.00 =	4,500
Fill 160' X 60' X 15' = 144,000 cf	
5,400 xy @ \$3.00 =	16,200
Walkover	10,000
Utilities	5,000
Landscaping 160 X 60 X 2.00	19,200
	<u>\$ 54,900</u>

PARCEL 21 - OCEAN GRILL

Frontage = 135' approx.	
Restaurant 100' X 60' = 6000 sf @ 30.00	\$180,000
Fill 135' X 40' X 10' = 2000 cy =	6,000
	<u>\$186,000</u>

PARCEL 22
 & 23 - DRIFTWOOD INN - TIME SHARING

Frontage 800'	
Seawall 600' X \$500 =	\$300,000
Fill 600' X 40' X 10' = 9000 cy =	27,000
Miscell, electrical, etc.	20,000
Landscaping 800' X 50' X 2.00	80,000
Wood Deck Structure 2000 sf @ 20.00	40,000
	<u>\$467,000</u>

Appendix IIB

City of Vero Beach Evaluation

of Storm Damaged Structures

**1984 THANKSGIVING DAY STORM
DAMAGE TO PUBLIC PROPERTY
VERO BEACH, FL**

Loss of Sand (20,000 yards)	\$ 81,000
Repair Conn Beach Boardwalk	129,000
Dune Crosswalk Repairs	8,000
Wheelchair Ramp Extension, South Beach	2,500
Sexton Plaza Seawall	119,000
Humiston Beach Lifeguard Station	20,000
Misc. Lumber and Equipment	<u>8,000</u>
	\$367,500

**APPENDIX III
TECHNICAL ADDENDUM
UPDATING CITY OF
VERO BEACH COMPREHENSIVE PLAN
DATED JULY 21, 1992**

Please Note: The data and analysis contained in this addendum supplements the technical support information in Chapters 1 through 7 and 9 and may replace, revise, and supercede specific information contained in those chapters.

**TECHNICAL SUPPORT DOCUMENT A-1
CHAPTER 1, LAND USE ELEMENT
CITY OF VERO BEACH COMPREHENSIVE PLAN**

INTRODUCTION/BACKGROUND

The intent of this document is to provide a summary of the technical information that supports amendments to the Land Use Element, Goal, Objectives, and Policies (GOPs) of the Comprehensive Plan. The amended GOPs have been prepared in response to the State of Florida, Department of Community Affairs (DCA), Objections, Recommendations and Comments (ORC) Report.

DCA Objection and Recommendation 2, restated below for reference, describes the issues that require addressing in the Land Use Element of the Comprehensive Plan.

Objection:

The City's EAR-based amendments do not include proposed policies to update data or introduce policies in the Future Land Use Element that will address the requirements of Rule 9J-5.006, F.A.C. Updating data and analysis in the plan is an integral part of the Evaluation and Appraisal Report process. FLUE Policy 5.1 indicates that the City will map environmental resources by March 31, 1991, however, the City has not submitted maps to the Department. Related to this policy is the requirement of Rule (9J-5.006(1)(b) 1., which requires local governments to map existing public potable waterwells and wellhead protection areas. The City has not addressed the issue of dredge spoil sites. Additionally, to further hazard mitigation and post-disaster redevelopment initiatives in the future, the City has not mapped coastal high hazard areas within its jurisdiction, based on the evacuation zone for a Category 1 hurricane, or included a map or maps of these areas as part of the Future Land Use Map series. Furthermore, the City's plan does not include policies to protect groundwater, or prime, or high aquifer recharge areas. [Rule 9J-5.003(17), 9J-5.005(2), 9J-5.006(1)(b) 1., 9J-5.006(1)(f)3., 9J-5.006(2)(f), 9J-5.006(3)(c)6., 9J-5.006(3)(c)8., 9J-5.006(3)(c)9., 9J-5.006(4)(b)1., and 9J-5.006(4)(b)6., F.A.C. Section 163.3177(6)(a), F.S.]

Recommendation:

Update the data and analysis within the Future Land Use Element to reflect the best available data. Adopt policies in the plan to protect archeological and historical resources. Provide a map in the plan that indicates the location of potable waterwells and wellhead protection areas, and adopt policies that ensure the protection of potable waterwells and wellhead protection areas and that designate appropriate uses within

wellfield protection areas. Adopt policies to address dredge spoil sites. To further hazard mitigation and post-disaster redevelopment initiatives, include a map or maps of all coastal high hazard areas within the City and include these maps as part of the Future Land Use Map series in the Future Land Use Element. Of note, the coastal high hazard area to be mapped is the evacuation zone for a Category 1 hurricane.

DATA AND ANALYSIS

This section provides a brief summary of the data and analysis for the amendments to Chapter 1, Land Use Element, consistent with Rule Chapters 9J-5 and 9J-11, Florida Administrative Code and Chapter 163, Part II, Florida Statutes. The data and analysis within the Land Use Element shall be updated with the next Evaluation and Appraisal Report (EAR), which is due by September 1, 2010. Land Use Element Policy 1.20 was introduced in the amendments to the Goals, Objectives, and Policies to provide for a complete review and update of the land use data and analysis by July 2009. Included in the update will be maps of the environmental resources in the City. In addition to the brief summary included in this section, additional data and analysis is provided in individual chapters of the amendments to the Comprehensive Plan.

The text amendments to Land Use Element, Goals, Objectives and Policies (GOPs), are based on existing data and analysis provided in the adopted Vero Beach Comprehensive Plan dated July 21, 1992. The amendments to the GOPs include explanations, clarifications and codification of the purpose and intent of the City's existing adopted land use designations, densities, and intensities.

In addition, the GOPs amendments include expansion of provisions for natural resource conservation, protection and management. Natural resources including, but not limited to, environmentally sensitive lands, wildlife habitat, groundwater, water resources and wetlands. Provisions were added to establish a concurrency management system, clarification of already established hurricane evacuation time for the coastal high hazard area, policy guidance for land development regulations to implement the Professional, Office and Institutional (POI) zoning district and other overall revisions to correct outdated dates and references.

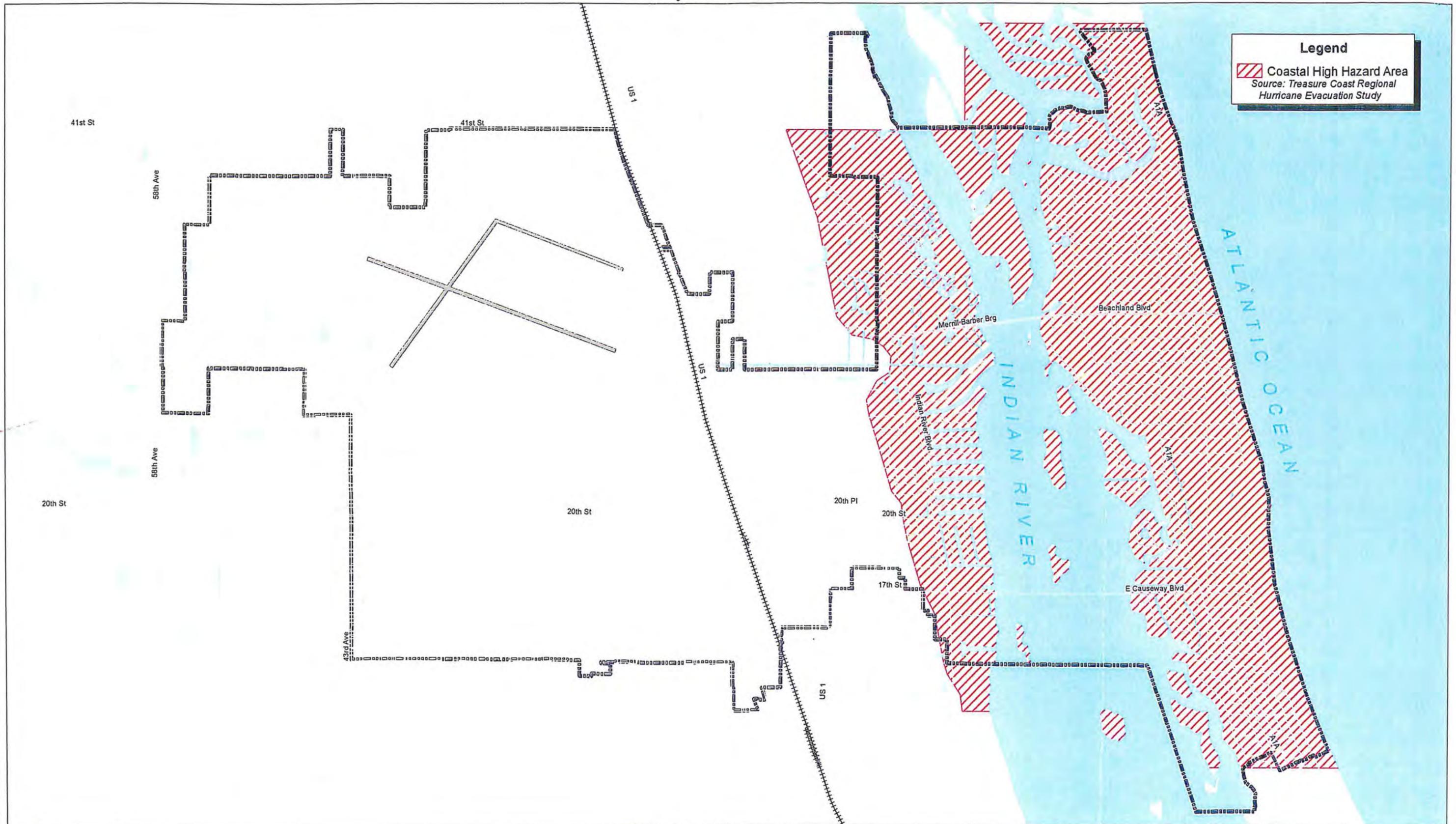
The Coastal High Hazard Area (CHHA) is defined in the Coastal Management Element of the Comprehensive Plan. Addendum Figure A-1.01 provides the most current Coastal High Hazard Area, as defined in rule 9J-5.003 (17), FAC. In 1999, the Coastal High Hazard Area (CHHA) included the evacuation zone and storm surge for a Category 1 hurricane. The CHHA includes the barrier island and the area generally east of US 1 on the mainland and is consistent with the County's CHHA designation map.

It should be noted that the state recently revised the definition of the CHHA to be the area below the elevation of a Category 1 storm surge line as established by a storm surge computer model. The new CHHA boundary line will not be available from the state until sometime in mid-2008.

Addendum Figure A-4.01 depicts the City's water/wastewater facilities, a description of which is found in the Addendum to Chapter 4, Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element, Technical Support Summary.

Coastal High Hazard Zone

City of Vero Beach



Legend

 Coastal High Hazard Area
 Source: Treasure Coast Regional Hurricane Evacuation Study

Scale: 1 in = 2500 ft



Created by Marcus Bradley
 City of Vero Beach
 Department of Public Works
 GIS Division
 February 28, 2007

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**TECHNICAL SUPPORT DOCUMENT A-2
CHAPTER 2, TRANSPORTATION ELEMENT
CITY OF VERO BEACH COMPREHENSIVE PLAN**

INTRODUCTION/BACKGROUND

The intent of this document is to provide a summary of the technical information that supports the amendments to the Transportation Element, Goal, Objectives, and Policies (GOPs) of the Comprehensive Plan. The amended GOPs have been prepared in response to the State of Florida, Department of Community Affairs (DCA), Objections, Recommendations and Comments (ORC) Report.

DCA Objection and Recommendation 3, provided below for reference describes specifically the issues that are required to be addressed in the Transportation Element of the Comprehensive Plan.

Objection:

The City's EAR-based amendments do not include a Transportation Element. [Rule 9J-5.019, F.A.C. Sections 163.3177(6)(b), (6)(j), (7)(a), and (7) (b), F.S.]

Recommendation:

Provide maps indicating the existing and future conditions of the City's transportation system. Provide an analysis of the existing transportation system, including levels of service and system needs based upon existing design and operating capacities, most recently available estimates for average daily and peak hour vehicle trips, existing modal split and vehicle occupancy rates, as well as data regarding public transit facilities and major trip generators and attractors within the community. Include data regarding the availability of transportation facilities and services to serve existing land uses, hurricane evacuation routes, and state roads. Furthermore, include goals within the Transportation Element that will establish the long term-end toward which transportation programs and activities are ultimately directed, objectives that address the requirements of Section 163.3177(6)(b),(6)(j),(7)(a), and (7)(b), F.S., and that will ensure the coordination of the transportation system with the FLUM, the plans and programs of the MPO, and that will ensure the provision of efficient public transit systems. Adopt specific policies within the plan that address implementation activities, including policies to establish level of service standards at peak hour for roads and public transit facilities, coordinate land uses and transportation, and that encourage intermodal forms of transportation.

DATA AND ANALYSIS

This section provides a summary of the data and analysis for the amendments to Chapter 2, Transportation Element, consistent with Rule Chapters 9J-5 and 9J-11, Florida Administrative Code and Chapter 163, Part II, Florida Statutes. The data and analysis within the Transportation Element shall be updated with the next Evaluation and Appraisal Report (EAR), which is due by September 1, 2010.

The text amendments to the Transportation Element, Goals, Objectives and Policies (GOPs), are based on existing data and analysis provided in the adopted Vero Beach Comprehensive Plan dated July 21, 1992 and the most recent Indian River County Metropolitan Planning Organization (MPO) transportation plans and the County Comprehensive Plan.

The City's 1990 comprehensive plan included a traffic circulation element. Since that time, the Census Bureau designated the City of Vero Beach and the densely populated area around the City as an urbanized area. By definition, an urbanized area is a census designation determined by concentrations of population of 50,000 or more. The urbanized area designation brings with it the creation of the Indian River County Metropolitan Planning Organization (MPO). The MPO is the organization responsible for continuing, cooperative and comprehensive transportation planning throughout the county. Another requirement is, once a jurisdiction is included within the urban area of a MPO, to prepare and adopt a transportation element that includes transit, bicycle/pedestrian, and air/water transportation systems.

Existing Conditions

This section provides a summary of the existing transportation system in the City, including roadway, transit, bicycle/pedestrian, and aviation systems. The source of this information is the most recent transportation plans prepared and adopted by the MPO and the Indian River County Comprehensive Plan, Transportation Element, adopted 2006.

Roadway System

This section provides a summary of the existing roadway systems. The data summarized in Addendum Table A-2.01, Existing Roadway Characteristics, and in the Transportation Map Series located in this Addendum (Tables A-2.01 through A-2.03) includes general roadway characteristics such as location, roadway laneage, functional classification, jurisdictional responsibility, and critical evacuation routes for major roadways in and near the City.

The City uses the County's methodology to determine roadway level of service. The level of service for roadway links is determined by comparing the traffic volume to the roadway capacity.

Level of service calculations are determined using guidelines established in the latest edition of FDOT's *Level of Service Handbook*. Generalized tables used in this element also are derived from FDOT's *Level of Service Handbook*.

Alternatively, level of service can be determined using other methodologies, including ART-Plan analyses, speed-delay studies or the Highway Capacity Manual method.

Addendum Table A-2.02, Crash Data, summarizes data associated with locations of crash data in the City and surrounding planning area. The intersection of SR 60 (Tarpon) and Indian River Boulevard had the most number of accidents in the City, with 16 accidents recorded. The intersections with the highest accident rates (MEV – accidents per million entering vehicles) are 41st Street and Old Dixie Highway and SR 60 and 10th Avenue.

Public Transit

The Indian River County Council on Aging, Inc., is the designated Community Transportation Coordinator, the provider of fixed route transit services, and the provider of paratransit services throughout the County. As such, the Council on Aging operates both fixed-route and paratransit vehicles and serves as the broker of rides through a coordinated organization of paratransit providers. Transit routes located in and near the City boundaries are depicted in Addendum Figure A-2.04. The major trip producers and generators in the area are identified in the Indian River County MPO transportation plans, and the Indian River Transit bus routes serve all of these areas with regular service.

Bicycle/Pedestrian System

The bicycle and pedestrian network is composed of the sidewalks and bicycle lanes adjacent to the existing roadway collector and arterial network. Major bicycle and pedestrian facilities located in the City are illustrated in Addendum Figure A-2.05. Existing facilities include on-road facilities, such as bike lanes, wide shoulders, and sidewalks.

Aviation and Other Systems

There are no seaports or rail yards in the City. The Florida East Coast (FEC) Railroad is a freight rail line that runs north-south through the mid- to eastern-portion of the City.

The City owns and operates the City of Vero Beach Airport. The Vero Beach Municipal Airport is located in the northwest portion of the City of Vero Beach. The 1,707 acre airport, with an elevation of 25 feet above mean sea level, is owned and operated by the City and occupies approximately one quarter of the total land area of the City of Vero Beach. The airport is open to the flying public twenty-four (24) hours per day every day of the year, with air traffic control services provided by an FAA control tower operated from 7:00 a.m. until 9:00 p.m. every day.

Three asphalt runways and their supporting taxiway systems are in operation. The primary runway, 11R/29L, is 7,314 feet long and 100 feet wide, and of sufficient length to accommodate a Gulfstream V. The secondary or crosswind runway, 4/22, is 4,975 feet long

and 100 feet wide. The third runway, 11L/29R, is 3,504 feet long and 75 feet wide, and runs parallel to the primary runway.

Although no regularly scheduled commercial airline service is provided at this time, a full range of general aviation services are made available to the public by several local Fixed Base Operators. In addition, The New Piper Aircraft Corp. (aircraft manufacturing) and Flight Safety International, Inc. (flight training), as well as a variety of non-aviation businesses offering a wide range of products and services to the community, are located at the Vero Beach Airport.

The Vero Beach Municipal Airport can be accessed through U.S. 1, Aviation Blvd, 43rd Ave, 34th Avenue and 27th Avenue. Primary access to the Vero Beach Municipal Airport is provided at U.S. 1 and Aviation Boulevard. Twenty-seventh Avenue is a county and city maintained urban collector that runs north-south and connects the airport to SR 60. SR 60, located one half mile south of the airport, is a state maintained east-west arterial that provides access to both US 1 and Interstate 95. US 1 is situated one mile to the east, and I-95 is located seven miles to the west.

Existing Levels of Service

Analysis of the existing levels of service for major roadways in the City was part of the MPO transportation plans and the County's Comprehensive Plan. Traffic counts were completed for each roadway on the network. These counts were then converted to peak hour/peak season/peak direction volumes for each roadway link using the Florida Department of Transportation default tables. These volumes can be found in Appendix A of the Indian River County Comprehensive Plan Transportation Element and are based on the latest edition of Florida's Quality/Level of Service Handbook, 2002.

Each roadway link and its corresponding capacity were then compared to determine the existing level of service for the roadway. Addendum Table A-2.01, Existing Roadway Characteristics, indicates the existing level of service for each roadway on the network. As indicated in that table, there were no existing deficiencies on the traffic circulation system as of the date of this analysis (IRC Comprehensive Plan, Transportation Element, September 2006).

- Latest Update

Since the MPO adopted its most recent Long Range Plan in 2005 and the County adopted its Comprehensive Plan, Transportation Element in September of the 2006, the County has prepared an updated draft traffic volume and roadway level of service table as part of their April 13, 2007, partial draft of the Evaluation and Appraisal Report (EAR) for the Indian River Comprehensive Plan, Transportation Element. The updated draft table is provided in Addendum Table A-2.07 and indicates certain segments of SR A1A and 27th Avenue in the City are currently operating below the adopted level of service.

The future widening of 27th Avenue is part of the 2030 Roadway Improvement Schedule, found in Addendum Table A-2.05 and intersection improvements are programmed for funding in the next five years as depicted in Addendum Table A-2.06, Intersection Improvement Projects. In addition, a section of SR A1A is also scheduled for intersection and turning lane/operational improvements within the next five years.

Further operational analysis should be conducted by the MPO in conjunction with the City on the remaining sections of SR A1A that are experiencing deficiencies, and solutions should be focused on transportation demand management and transportation system management techniques and solutions rather than adding through lanes. Further data and analysis shall be provided in the City's 2010 Evaluation and Appraisal Report.

Near Term Planned Roadway Capacity Improvements

Besides the current inventory of roadways and the existing system, there are various roadways programmed for construction in the near future. Capacity improvements that are budgeted and programmed for construction within five years are considered committed improvements. Addendum Table A-2.03, Existing and Committed Roadway Improvements, identifies committed roadway projects located within or near the City limits.

Projected Levels of Service and System Needs

This section provides a summary of the projected transportation system needs in the City, including roadway, transit, bicycle/pedestrian and aviation systems. The source of this information is the most recent transportation plans prepared and adopted by the MPO.

Growth Trends and Travel Patterns

Growth trends in the City, and the accompanying travel patterns, are expected to follow the patterns established through the Future Land Use Map (FLUM). The roadway network in the City to service this growth is generally already in place.

Growth through much of the City will take the form of infill development and redevelopment. Identified roadway improvements should accommodate this projected growth on the existing network.

The land use pattern for the City is reflected in the Future Land Use Element of this plan. As shown on the Future Land Use Map, the land use pattern is a continuation of the existing development pattern in the City. Both the existing and future land use patterns are generally characterized by low density, low rise development, commercial/industrial concentrations, higher density residential along high volume roadway corridors and the downtown area, an urban service boundary in the unincorporated county limiting westward expansion, and a continuation of the current coast-parallel development pattern.

Roadway System

Analysis of the projected levels of service for major roadways in the City was part of the MPO transportation plans and the County's Comprehensive Plan. The Indian River County MPO completed its most recent Long Range Plan update in 2005. The horizon year for this plan is 2030.

The MPO traffic model makes its projections of future year traffic in the form of traffic volumes on roads. For each roadway on the network, the model uses the projected traffic volume ("v") for the road (produced by the model) and the maximum acceptable capacity ("c") of the road to transform each of these raw volume projections into more understandable volume to acceptable capacity ("v/c") ratios. If the v/c ratio exceeds 1.0, the traffic volume of a roadway segment is projected to exceed the acceptable capacity of that roadway segment. While a v/c of 1.0 indicates that the traffic volume is just at the acceptable level of service, a roadway with a v/c much less than 1.0 has excess traffic capacity. In the latter case, more traffic could be accommodated, and the road would still function at an adequate level of service.

Based on the volume to capacity analysis summarized above and further detailed in the MPO and County transportation plans, the needed roadway improvements are identified in Addendum Table A-2.04, 2030 Roadway Improvements & Needed Right-of-Way. The Addendum Table A-2.04, identifies the additional estimated advanced right-of-way needs for the roadways through the year 2030 and provides a listing of all major streets, their classification, responsible agency, ultimate right-of-way width, ultimate pavement width, and programmed improvements (if any).

In order to maintain future year (2030) level of service standards needed roadway capacity improvements have been identified in Addendum Table A-2.04, Roadway Improvements and Needed Right-of-Way. The list of cost affordable improvements are identified in Addendum Table A-2.05, 2030 Cost Affordable Roadway Improvements, and in the 2030 Roadway Improvement Plan Map depicted in Addendum Table A02.06. Supplemental to the roadway capacity improvements identified in the 2030 Roadway Improvement Plan there are other traffic circulation system needs such as intersection improvements. The intersections are identified in Addendum Table A-2.06, Intersection Improvement Projects.

Transit

As part of its transit planning activities, the MPO prepared a Transit Development Plan and a Transportation Disadvantaged Service Plan. Based upon the results of these planning efforts, proposed future transit facilities are mapped in Addendum Table A-2.04.

Although results of the planning analysis conducted by the MPO indicates transit is not currently a viable option for most County residents, there is a possibility that transit may have an expanded role in the future. Therefore, it is important to ensure that new development complements future transit use. The Land Use Element attempts to do that by

setting urban growth limits, promoting infill, encouraging higher intensity development along major roadway corridors, inter-connecting uses and encouraging other transit.

Bicycle/Pedestrian System

The Indian River County Metropolitan Planning Organization (MPO) Bicycle and Pedestrian Plan was completed in 1997. As structured, the MPO Bicycle/Pedestrian Plan includes a set of proposed improvements to meet the bicycle/pedestrian needs of the entire metropolitan planning area, including the City. The bicycle and pedestrian system improvements programmed by 2025 include facilities for the unincorporated county only and, therefore, are not shown in this document. The objective of the plan is to provide a continuous bicycle system throughout the metropolitan planning area. The plan calls for 5-foot-wide paved shoulders on each side of all collector and arterial roads where no major constraints exist. The plan also calls for a pedestrian system along the major roads. The ideal pedestrian improvement is a 5-foot-wide sidewalk on each side of major roadways.

Aviation and Other Systems

The Airport Master Plan, dated January 2000, lists airport improvement projects for the years 2000 to 2020. The plan indicates the airport anticipates limited expansion of existing runways and does not anticipate any new runways. The improvements include terminal expansion, additional hangars, taxiway and apron improvements and other similar projects.

The City maintains its airport zoning regulations that address airport height and noise impacts on new development. As structured, the Future Land Use Map should provide for compatible land uses in areas close to airports. Height requirements are incorporated within the airport zoning ordinance. Roadway improvements incorporated within the transportation improvement program should ensure adequate access to the airport.

Transportation Element

TABLES

(Addendum Tables A-2.01 through A-2.07)

Addendum Table A-2.01 Existing Roadway Characteristics

Link ID	On Street	From Street	To Street	Length	No. of Lanes	Exist ROW	Road Type	Existing LOS	Jurisdiction	Functional Class	LOS Standard
1010	S.R. A1A	S. County Line	S. VB City L	4.70	2	100	U	A	SR	MA	D
1020	S.R. A1A	S. VB City L	17th St	1.30	2	120	D	D	SR	MA	D
1030	S.R. A1A	17th St	S.R. 60	1.50	2	80	D	C	SR	MA	D
1040	S.R. A1A	S.R. 60	N. VB City L	1.50	2	50	D	D	SR	MA	D
1050	S.R. A1A	N. VB City L	Fred Tuerk Rd	1.00	2	100	D	D	SR	MA	D
1060	S.R. A1A	Fred Tuerk Rd	Old Winter Bch Rd	3.00	2	100	U	B	SR	MA	D
1070	S.R. A1A	Old Winter Bch Rd	N. IRS L	1.00	2	100	U	B	SR	MA	D
1080	S.R. A1A	N. IRS L	C.R. 510	1.50	2	100	U	B	SR	MA	D
1090	S.R. A1A	C.R. 510	N. County Line	7.30	2	100	U	A	SR	MA	D
1110	Indian River Bd.	4th St @ Us 1	12th St	1.00	4	150	D	B	CR	MA	D
20	Indian River Bd.	8th St	12th St	0.50	4	150	D	C	CR	MA	D
1130	Indian River Bd.	12th St	17th St	0.50	4	150	D	C	CR	MA	D
1140	Indian River Bd.	17th St	20th St	0.39	4	150	D	B	CR	MA	D
1145	Indian River Bd.	20th St	21st St	0.19	4	150	D	B	CR	MA	D
1150	Indian River Bd.	21st St	Royal Palm	0.37	4	150	D	C	CR	MA	D
1155	Indian River Bd.	Royal Palm	MB Bridge	0.46	4	150	D	C	CR	MA	D
1160	Indian River Bd.	MB Bridge	37th St.	0.71	4	150	D	B	CR	MA	D
1170	Indian River Bd.	37th St.	U.S. 1 @53rd St	2.60	4	150	D	B	CR	MA	D
1320	U.S. 1	8th St	12th St	0.50	4	80	D	D	SR	PA	D
1325	U.S. 1	12th St	S. VB City L	0.50	4	80	D	B	SR	PA	D
1330	U.S. 1	S. VB City L	17th St	0.50	4	80	D	D	SR	PA	D
1335	U.S. 1	17th St	S.R. 60	0.50	4	80	D	D	SR	PA	D
1340	U.S. 1	S.R. 60	Royal Palm Pl	0.50	4	70	D	D	SR	PA	D
1345	U.S. 1	Royal Palm Pl	Atlantic Blvd	0.50	4	70	D	B	SR	PA	D
1350	U.S. 1	Atlantic Blvd	37th St.	0.50	4	70	D	B	SR	PA	D

Link ID	On Street	From Street	To Street	Length	No. of Lanes	Exist ROW	Road Type	Existing LOS	Jurisdiction	Functional Class	LOS Standard
1355	U.S. 1	37th St.	Old Dixie Hwy	0.50	4	70	D	D	SR	PA	D
1360	U.S. 1	Old Dixie Hwy	41st St	0.50	4	70	D	D	SR	PA	D
1365	U.S. 1	41st St	45th St	0.50	4	70	D	D	SR	PA	D
1925	S.R. 60	66th Ave	58th Ave	1.00	6	100	D	B	SR	PA	D
1930	S.R. 60	58th Ave	43rd Ave	1.00	6	100	D	B	SR	PA	D
1935	S.R. 60	43rd Ave	27th Ave	1.00	6	100	D	B	SR	PA	D
1940	S.R. 60	27th Ave	W. of 20th Ave	0.50	6	100	D	C	SR	PA	D
1945	S.R. 60 (EB)	W. of 20th Ave	Old Dixie Hwy	0.50	3	70	O	D	SR	PA	D
1950	S.R. 60 (EB)	Old Dixie Hwy	10th Ave	0.30	3	70	O	D	SR	PA	D
1955	S.R. 60 (EB)	10th Ave	U.S. 1	0.30	3	70	O	D	SR	PA	D
1960	S.R. 60 (EB)	U.S. 1	W. of 6th Ave	0.50	3	70	O	D	SR	PA	D
1962	S.R. 60	W. of 6th Ave	Indian River Blvd	0.34	4	140	D	D	SR	MA	D
1965	S.R. 60	Indian River Blvd	ICWW	1.10	4	140	D	D	SR	MA	D
1970	S.R. 60	ICWW	S.R. A1A	0.50	4	80	D	C	SR	MA	D
1975	S.R. 60 (WB)	W. of 20th Ave	Old Dixie Hwy	0.43	4	N/A	O	D	SR	PA	D
1980	S.R. 60 (WB)	Old Dixie Hwy	10th Ave	0.35	4	N/A	O	D	SR	PA	D
1985	S.R. 60 (WB)	10th Ave	U.S. 1	0.25	4	N/A	O	D	SR	PA	D
1990	S.R. 60 (WB)	U.S. 1	W. of 6th Ave	0.24	4	N/A	O	D	SR	PA	D
2020	16th St	58th Ave	43rd Ave	1.00	2	50	U	B	CR	MA	D
2030	16th St	43rd Ave	27th Ave	1.00	2	50	U	B	CR	MA	D
2040	16th St	27th Ave	20th Ave	0.50	2	100	U	B	CR	MA	D
2050	16th St	20th Ave	Old Dixie Hwy	0.50	2	100	U	B	CR	MA	D
2060	16th/17th St	Old Dixie Hwy	U.S. 1	0.50	4	100	D	C	CR	MA	D
2110	17th St	U.S. 1	Indian River Blvd	0.50	4	100	D	B	CR	MA	D
2120	17th St	Indian River Blvd	S.R. A1A	2.00	4	100	D	B	CR	MA	D
2325	Old Dixie Hwy	12th St	S. VB City L	0.30	2	60	U	B	CR	MA	D
2330	Old Dixie Hwy	S. VB City L	16th St	0.50	2	60	U	B	CR	MA	D
2335	Old Dixie Hwy	16th St	S.R. 60	0.50	2	60	U	B	CR	MA	D
2440	27th Ave	8th St	12th St	0.50	2	80	U	B	CR	MA	D
2450	27th Ave	12th St	S. VBCL	0.30	2	80	U	B	CR	MA	D

Link ID	On Street	From Street	To Street	Length	No. of Lanes	Exist ROW	Road Type	Existing LOS	Jurisdiction	Functional Class	LOS Standard
2460	27th Ave	S. VB City L	16th St	0.40	2	80	U	B	CR	MA	D
2470	27th Ave	16th St	S.R. 60	0.50	2	80	U	B	CR	MA	D
2480	27th Ave	S.R. 60	Atlantic Blvd	0.30	2	80	U	B	CR	MA	D
2510	27th Ave	Atlantic Blvd	Aviation Blvd	0.30	2	80	U	B	CR	MA	D
2610	6th Ave	12th St	17th St	0.64	2	60	U	B	CR	MA	D
2615	6th Ave	17th St	S. VB City L	0.13	2	60	U	B	CR	MA	D
2620	6th Ave	S. VB City L	S.R. 60	0.50	2	60	U	B	CR	MA	D
2710	10th Ave	17th St	S.R. 60	0.43	2	60	U	C	CI	COL	D
2720	10th Ave	S.R. 60	Royal Palm Blvd	0.21	2	60	U	C	CI	COL	D
2830	20th Ave	8th St	12th St	0.50	2	60	U	C	CR	LOC	D
2840	20th Ave	12th St	S. VB City L	0.50	4	80	D	B	CR	MA	D
2850	20th Ave	S. VB City L	16th St	0.50	4	80	D	B	CR	MA	D
2860	20th Ave	16th St	S.R. 60	0.50	4	80	D	B	CR	MA	D
2870	20th Ave	S.R. 60	Atlantic Blvd	0.50	2	80	U	B	CR	MA	D
2920	43rd Ave	8th St	12th St	0.50	2	50	U	B	CR	COL	D
2925	43rd Ave	12th St	16th St	0.50	2	80	U	B	CR	MA	D
2930	43rd Ave	16th St	S.R. 60	0.50	2	80	U	C	CR	MA	D
2935	43rd Ave	S.R. 60	26th St	0.50	2	80	U	B	CR	MA	D
2940	43rd Ave	26th St	41st St	2.00	2	80	U	B	CR	COL	D
2945	43rd Ave	41st St	45th St	0.50	2	80	U	C	CR	COL	D
4460	37th St	U.S.1	Indian River Blvd	1.10	2	D	U	B	CR	COL	D
4730	26th St	58th Ave	43rd Ave	1.00	2	50	U	B	CR	LOC	D
4740	26th St	43rd Ave	27th Ave	1.05	2	50	U	B	CR	LOC	D
4760	26th St	U.S. 1	Country Club Drive	0.65	2	50	U	B	CR	LOC	D
5805	Atlantic Blvd	S.R. 60	27th Ave	1.07	2	60	U	A	CI	COL	D
5810	Atlantic Blvd	27th Avenue	20th Avenue	0.50	2	60	U	A	CI	COL	D
5820	Atlantic Blvd	20th Avenue	U.S. 1	0.50	2	60	U	B	CI	COL	D
5910	Aviation Blvd	U.S. 1	27th Avenue	0.91	2	60	U	A	CI	COL	D
6010	Royal Palm Blvd	Royal Palm Pl	Indian River Blvd	1.00	2	60	U	B	CI	COL	D
6110	Royal Palm Pl	U.S. 1	Indian River Blvd	1.00	2	60	U	B	CI	COL	D
9200	Ocean Dr	Greytwig	Beachland	0.44	2	N/A	U	C	CI	COL	D
9210	Ocean Dr	Beachland	Riomar	0.63	2	N/A	U	C	CI	COL	D
9220	21st St	Indian River B.	U.S. 1	0.52	2	N/A	U	D	CI	COL	D

Link ID	On Street	From Street	To Street	Length	No. of Lanes	Exist ROW	Road Type	Existing LOS	Jurisdiction	Functional Class	LOS Standard
9230	21st St	U.S. 1	20th Avenue	0.54	2	N/A	U	D	CI	COL	D
9240	23rd St	20th Avenue	U.S. 1	0.47	2	N/A	U	C	CI	COL	D
9250	23rd St	U.S. 1	Royal Palm Blvd	0.38	2	N/A	U	D	CI	COL	D
9260	14th Ave	Old Dixie Hwy	16th Street	0.31	2	N/A	U	C	CI	COL	D
9270	14th Ave	16th Street	S.R. 60	0.51	2	N/A	U	C	CI	COL	D
9280	14th Ave	S.R. 60	U.S. 1	0.48	2	N/A	U	C	CI	COL	D
9290	Victory	Atlantic	Cordova	0.30	2	N/A	U	C	CI	COL	D
9300	Victory	Cordova	20th Avenue	0.26	2	N/A	U	C	CI	COL	D
9975	S.R. 60	S.R. A1A	Ocean Dr	0.24	4	N/A	D	C	CI	COL	D

Source: Indian River County MPO; Indian River County Comprehensive Plan.

Addendum Table A-2.02 Crash Data

Intersection	# of Accidents	ADT	ADT	Accident Rate (MEV)	Relative Rate
		N/S			
SR 60 (Tarpon) & IR. Blvd	16	3874	24956	1.52	Low
17th Street & US #1	14	14026	23431	1.02	Low
SR 60 & 20th Avenue	13	24687	4280	1.23	Low
SR 60 & 43rd Avenue	12	24639	14426	0.84	Low
EB SR60 & US #1	12	11671	22245	0.97	Low
17th Street & IR.Blvd	12	21554	22095	0.75	Low
41st Street & Old Dixie	10	3045	3858	3.97	High
WB SR60 & US #1	9	5487	22245	0.89	Low
WB SR60 & 10th Avenue	9	7611	3913	2.14	Medium
37th Street & US #1	8	4657	30140	0.63	Low
26th Street & US #1	8	2298	27295	0.74	Low
SR60 & Heddin Place	7	34095	2520	0.52	Low
SR60 & 27th Avenue	7	27718	6555	0.56	Low
16th Street & Old Dixie	7	12045	6283	1.05	Low
MB. Bridge & IR. Blvd	6	14133	27060	0.40	Low
21st Street & 20th Avenue	6	6104	2871	1.83	Low
21st Street & 10th Avenue	6	21781	2336	0.68	Low
15th Pl. & US #1	6	3000	30608	0.49	Low
Royal Palm & IR. Blvd	5	6462	32606	0.35	Low
EB SR 60 & 14th Avenue	5	14096	6268	0.67	Low
Beachland & SR A1A	5	15525	20724	0.38	Low
8th Street & Old Dixie	5	8484	10649	0.72	Low
41st Street & US #1	5	1605	21538	0.59	Low
23rd Street & US #1	5	6494	15255	0.63	Low
SR 60 & 34th Avenue	4	27001	1500	0.38	Low
EB SR 60 & 10th Avenue	4	12414	3913	0.67	Low
E. Causeway & SR A1A	4	26208	18313	0.25	Low
Bahia Mar & SR.A1A	4	2000	24077	0.42	Low
21st Street & 5th Avenue	4	8860	3000	0.92	Low
21st Street & 11th Avenue	4	10782	3790	0.75	Low
16th Street & 14th Avenue	4	12310	4789	0.64	Low

Source: Indian River County Traffic Engineering: Indian River County Comprehensive Plan

Addendum Table A-2.03 Existing and Committed Roadway Improvements

Roadway	From	To	2009 Existing & Committed Condition
43rd Avenue	26th Street	16th Street	4D
43rd Avenue	16th Street	8th Street	4D
Aviation Blvd	43rd Avenue	U.S. 1	4D
16th/17 th Street	W of 14th Avenue	U.S. 1	4D

Legend:

4D - 4-lane divided

Source: Indian River County MPO, Indian River County Transportation Improvement Program (TIP); Indian River County Capital Improvement Program; Indian River County Comprehensive Plan

Addendum Table A-2.04 2030 Roadway Improvements & Needed Right-of-Way

Link ID	On Street	From Street	To Street	Length	No. of Lanes	Road Type	Jurisdiction	Functional Class	LOS	Exist ROW	Needed ROW	Improvements by 2030
1010	S.R. A1A	S. County Line	S. VB City L	4.70	2	U	SR	MA	D	100	120	
1020	S.R. A1A	S. VB City L	17th St	1.30	2	D	SR	MA	D	120	120	
1030	S.R. A1A	17th St	S.R. 60	1.50	2	D	SR	MA	D	80	120	
1040	S.R. A1A	S.R. 60	N. VB City L	1.50	2	D	SR	MA	D	50	120	
1050	S.R. A1A	N. VB City L	Fred Tuerk Rd	1.00	2	D	SR	MA	D	100	120	
1060	S.R. A1A	Fred Tuerk Rd	Old Winter Bch Rd	3.00	2	U	SR	MA	D	100	120	
1070	S.R. A1A	Old Winter Bch Rd	N. IRS L	1.00	2	U	SR	MA	D	100	120	
1080	S.R. A1A	N. IRS L	C.R. 510	1.50	2	U	SR	MA	D	100	120	
1090	S.R. A1A	C.R. 510	N. County Line	7.30	2	U	SR	MA	D	100	120	
1130	Indian River Bd.	12th St	17th St	0.50	4	D	CR	MA	D	150	150	
1140	Indian River Bd.	17th St	20th St	0.39	4	D	CR	MA	D	150	150	
1145	Indian River Bd.	20th St	21st St	0.19	4	D	CR	MA	D	150	150	
1150	Indian River Bd.	21st St	Royal Palm	0.37	4	D	CR	MA	D	150	150	
1155	Indian River Bd.	Royal Palm	Mb Bridge	0.46	4	D	CR	MA	D	150	200	Add 2 Lanes
1160	Indian River Bd.	MB Bridge	37th St.	0.71	4	D	CR	MA	D	150	200	Add 2 Lanes
1170	Indian River Bd.	37th St.	US 1 @53rd St	2.60	4	D	CR	MA	D	150	200	
1325	U.S. 1	12th St	S. VB City L	0.50	4	D	SR	PA	D	80	120	
1330	U.S. 1	S. VB City L	17th St	0.50	4	D	SR	PA	D	80	120	
1335	U.S. 1	17th St	S.R. 60	0.50	4	D	SR	PA	D	80	120	
1340	U.S. 1	S.R. 60	Royal Palm Pl	0.50	4	D	SR	PA	D	70	70	
1345	U.S. 1	Royal Palm Pl	Atlantic Blvd	0.50	4	D	SR	PA	D	70	70	
1350	U.S. 1	Atlantic Blvd	37th St.	0.50	4	D	SR	PA	D	70	160	Add 2 Lanes
1355	U.S. 1	37th St.	Old Dixie Hwy	0.50	4	D	SR	PA	D	70	160	Add 2 Lanes
1360	U.S. 1	Old Dixie Hwy	41st St	0.50	4	D	SR	PA	D	70	160	Add 2 Lanes
1365	U.S. 1	41st St	45th St	0.50	4	D	SR	PA	D	70	160	Add 2 Lanes

Link ID	On Street	From Street	To Street	Length	No. of Lanes	Road Type	Jurisdiction	Functional Class	LOS	Exist ROW	Needed ROW	Improvements by 2030
1930	S.R. 60	58th Ave	43rd Ave	1.00	6	D	SR	PA	D	100	130	
1935	S.R. 60	43rd Ave	27th Ave	1.00	6	D	SR	PA	D	100	130	
1940	S.R. 60	27th Ave	W. of 20th Ave	0.50	6	D	SR	PA	D	100	130	
1945	S.R. 60 (EB)	W. Of 20th Ave	Old Dixie Hwy	0.50	3	O	SR	PA	D	70	140	
1950	S.R. 60 (EB)	Old Dixie Hwy	10th Ave	0.30	3	O	SR	PA	D	70	140	
1955	S.R. 60 (EB)	10th Ave	U.S. 1	0.30	3	O	SR	PA	D	70	140	
1960	S.R. 60 (EB)	U.S. 1	W. of 6th Ave	0.50	3	O	SR	PA	D	70	140	
1962	S.R. 60	W. of 6th Ave	Indian River Blvd	0.34	4	D	SR	MA	D	140	140	
1965	S.R. 60	Indian River Blvd	ICWW	1.10	4	D	SR	MA	D	140	140	
1970	S.R. 60	ICWW	S.R. A1A	0.50	4	D	SR	MA	D	80	130	
1975	S.R. 60 (WB)	W. Of 20th Ave	Old Dixie Hwy	0.43	4	O	SR	PA	D	N/A	N/A	
1980	S.R. 60 (WB)	Old Dixie Hwy	10th Ave	0.35	4	O	SR	PA	D	N/A	N/A	
1985	S.R. 60 (WB)	10th Ave	U.S. 1	0.25	4	O	SR	PA	D	N/A	N/A	
1990	S.R. 60 (WB)	U.S. 1	W. of 6th Ave	0.24	4	O	SR	PA	D	N/A	N/A	
2020	16th St	58th Ave	43rd Ave	1.00	2	U	CR	MA	D	50	80	
2030	16th St	43rd Ave	27th Ave	1.00	2	U	CR	MA	D	50	80	
2040	16th St	27th Ave	20th Ave	0.50	2	U	CR	MA	D	100	100	
2050	16th St	20th Ave	Old Dixie Hwy	0.50	2	U	CR	MA	D	100	100	
2060	16th/17th St	Old Dixie Hwy	U.S. 1	0.50	4	D	CR	MA	D	100	120	
2110	17th St	U.S. 1	Indian River Blvd	0.50	4	D	CR	MA	D	100	120	
2120	17th St	Indian River Blvd	S.R. A1A	2.00	4	D	CR	MA	D	100	120	
2325	Old Dixie Hwy	12th St	S. VB City L	0.30	2	U	CR	MA	D	60	80	
2330	Old Dixie Hwy	S. VB City L	16th St	0.50	2	U	CR	MA	D	60	80	
2335	Old Dixie Hwy	16th St	S.R. 60	0.50	2	U	CR	MA	D	60	80	
2340	Old Dixie Hwy	U.S. 1	41st Ave	0.35	2	U	CR	MA	D	D	D	
2345	Old Dixie Hwy	41st St	45th St	0.52	2	U	CR	COL	D	60	80	
2450	27th Ave	12th St	S. VB City L	0.30	2	U	CR	MA	D	80	80	Add 2 Lanes
2460	27th Ave	S. VB City L	16th St	0.40	2	U	CR	MA	D	80	80	Add 2 Lanes
2470	27th Ave	16th St	S.R. 60	0.50	2	U	CR	MA	D	80	80	Add 2 Lanes
2480	27th Ave	S.R. 60	Atlantic Blvd	0.30	2	U	CR	MA	D	80		
2510	27th Ave	Atlantic Blvd	Aviation Blvd	0.30	2	U	CR	MA	D	80		

Link ID	On Street	From Street	To Street	Length	No. of Lanes	Road Type	Jurisdiction	Functional Class	LOS	Exist ROW	Needed ROW	Improvements by 2030
2610	6th Ave	12th St	17th St	0.64	2	U	CR	MA	D	60	80	
2615	6th Ave	17th St	S. VB City L	0.13	2	U	CR	MA	D	60	80	
2620	6th Ave	S. VB City L	S.R. 60	0.50	2	U	CR	MA	D	60	80	
2710	10th Ave	17th St	S.R. 60	0.43	2	U	CI	COL	D	60	N/A	
2720	10th Ave	S.R. 60	Royal Palm Blvd	0.21	2	U	CI	COL	D	60	N/A	
2840	20th Ave	12 th St	S. VB City L	0.50	4	D	CR	MA	D	80	100	
2850	20th Ave	S. VB City L	16th St	0.50	4	D	CR	MA	D	80	100	
2860	20th Ave	16 th St	S.R. 60	0.50	4	D	CR	MA	D	80	100	
2870	20th Ave	S.R. 60	Atlantic Blvd	0.50	2	U	CR	MA	D	80	n/a	
2920	43rd Ave	8th St	12th St	0.50	2	U	CR	COL	D	50	100	Add 2 Lanes
2925	43rd Ave	12 th St	16th St	0.50	2	U	CR	MA	D	80	100	Add 2 Lanes
2930	43rd Ave	16 th St	S.R. 60	0.50	2	U	CR	MA	D	80	100	Add 2 Lanes
2935	43rd Ave	S.R. 60	26th St	0.50	2	U	CR	MA	D	80	100	Add 2 Lanes
2940	43rd Ave	26 th St	41st St	2.00	2	U	CR	COL	D	80	100	
2945	43rd Ave	41 st St	45th St	0.50	2	U	CR	COL	D	80	100	
4460	37th St	U.S.1	Indian River Blvd	1.10	2	U	CR	COL	D	D	110	
4730	26th St	58th Ave	43rd Ave	1.00	2	U	CR	LOC	D	50	162	Add 2 Lanes
4740	26th St	43rd Ave	27th Ave	1.05	2	U	CR	LOC	D	50	162	Add 2 Lanes
4760	26th St	U.S. 1	Country Club Drive	0.65	2	U	CR	LOC	D	50	80	
5805	Atlantic Blvd	S.R. 60	27th Ave	1.07	2	U	CI	COL	D	60	N/A	
5810	Atlantic Blvd	27th Avenue	20th Avenue	0.50	2	U	CI	COL	D	60	N/A	
5820	Atlantic Blvd	20th Avenue	U.S. 1	0.50	2	U	CI	COL	D	60	N/A	
5910	Aviation Blvd	U.S. 1	27th Avenue	0.91	2	U	CI	COL	D	60	162	Add 2 Lanes
	Aviation Blvd	IR Blvd	U.S. 1	1.00	0	U	CR	COL	D	N/A	130	New 4 Lanes
6010	Royal Palm Blvd	Royal Palm Pl	Indian River Blvd	1.00	2	U	CI	COL	D	60	N/A	
6110	Royal Palm Pl	U.S. 1	Indian River Blvd	1.00	2	U	CI	COL	D	60	N/A	
9200	Ocean Dr	Greytwig	Beachland	0.44	2	U	CI	COL	D			
9210	Ocean Dr	Beachland	Riomar	0.63	2	U	CI	COL	D			

Link ID	On Street	From Street	To Street	Length	No. of Lanes	Road Type	Jurisdiction	Functional Class	LOS	Exist ROW	Needed ROW	Improvements by 2030
9220	21st St	Indian River Blvd	U.S. 1	0.52	2	U	CI	COL	D			
9230	21st St	U.S. 1	20th Avenue	0.54	2	U	CI	COL	D			
9240	23rd St	20th Avenue	U.S. 1	0.47	2	U	CI	COL	D			
9250	23rd St	U.S. 1	Royal Palm Blvd	0.38	2	U	CI	COL	D			
9260	14th Ave	Old Dixie Hwy	16th Street	0.31	2	U	CI	COL	D			
9270	14th Ave	16th Street	S.R. 60	0.51	2	U	CI	COL	D			
9280	14th Ave	S.R. 60	U.S. 1	0.48	2	U	CI	COL	D			
9290	Victory	Atlantic	Cordova	0.30	2	U	CI	COL	D			
9300	Victory	Cordova	20th Avenue	0.26	2	U	CI	COL	D			
9975	S.R. 60	S.R. A1A	Ocean Dr	0.24	4	D	CI	COL	D			

Source: Indian River County MPO; Indian River County Comprehensive Plan

Addendum Table A-2.05 2030 Cost Affordable Roadway Improvements

	On Street	From	To	Base Road Type	Future Road Type	Total Cost
State Roads						
	SR 60	6th Ave	Indian River Blvd	4 Lane Divided	6 Lane Divided	\$1,864,758
	US 1	Aviation Blvd	Old Dixie Hwy (N)	4 Lane Divided	6 Lane Divided	\$44,372,047
County Roads	26th St	66th Ave	43rd Ave	2 Lane Undivided	4 Lane Divided	\$13,006,154
	Aviation Blvd	43rd Ave	U.S. 1	2 Lane Undivided	4 Lane Divided	\$8,537,828
	27th Ave	Oslo Rd	S.R. 60	2 Lane Undivided	4 Lane Divided	\$12,330,699
	Aviation Blvd Ext	U.S. 1	Indian River Blvd	00	4 Lane Divided	\$14,387,771
	Indian River Blvd	Royal Palm	37th St	4 Lane Divided	6 Lane Divided	\$8,678,255
	12 Street	43 rd Ave	27 th Ave	2 Lane Undivided	2 Lane Divided	\$2,854,618

Source: Indian River County MPO; Indian River County Comprehensive Plan

Addendum Table A-2.06 Intersection Improvement Projects

Project	FY 2006/07	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	Revenue Source†
Misc. Intersections						
12th Street/27th Avenue	\$200,000	\$0	\$0	\$0	\$0	Traffic Impact Fees
43rd Avenue/SR 60 - 19th Street to 26th Street - 4 lanes	\$0	\$702,329	\$2,000,000	\$1,800,000	\$0	Traffic Impact Fees
43rd Avenue/SR 60 - 19th Street to 26th Street - 4 lanes	\$0	\$0	\$0	\$9,700,000	\$0	Gas Tax
43rd Avenue/SR 60 - 19th Street to 26th Street -4 lanes	\$398,836	\$398,836	\$0	\$0	\$0	Developer Contributions
17th Street/A1A Intersection	\$900,000	\$1,000,000	\$0	\$0	\$0	Traffic Impact Fees
16th Street/20th Avenue	\$200,000	\$0	\$0	\$0	\$0	Traffic Impact Fees
27th Avenue/16th Street	\$50,000	\$75,000	\$125,000	\$0	\$0	Traffic Impact Fees

Source: Indian River County Comprehensive Plan

Attachment 6. Traffic Volume and Roadway Level-of-Service
 Comparison of Conditions at the Time of the Last Major Plan Update (1996) and Existing Conditions (2005)

Roadway	From	To	Roadway Type		Peak Season Daily Volume		Established LOS Standard		Peak Hour/Peak Season/Peak Direction						Traffic Study
			1995	2006	1995	2006	1995	2006	Capacity		Volume		LOS		
									1995	2006	1995	2006	1995	2006	
SR A1A	S. COUNTY LINE	S. VB CITY L	2L	2L	5,000	7,999	D	D	1,680	950	352	412	A	C	
SR A1A	S. VB CITY L	17TH STREET	2L	2L	12,700	20,029	D	D	1,640	860	785	907	C	F	
SR A1A	17TH STREET	SR 60	2L	2L	13,900	13,960	D	D	1,060	860	719	640	B	C	
SR A1A	SR 60	N. VB CITY L	2L	2L	16,000	19,887	D	D	1,120	860	878	916	C	F	
SR A1A	N. VB CITY L	FRED TUERK RD	2L	2L	16,000	19,887	D	D	1,240	860	835	911	C	F	
SR A1A	FRED TUERK RD	OLD WINTER BCH RD	2L	2L	8,800	11,142	D	D	1,310	860	570	581	B	C	
SR A1A	OLD WINTER BCH RD	N. IRS L	2L	2L	6,100	10,117	D	D	1,310	860	413	539	B	C	
SR A1A	N. IRS L	CR 510	2L	2L	6,100	10,117	D	D	1,310	860	448	587	B	C	
SR A1A	CR 510	N. COUNTY LINE	2L	2L	4,900	7,727	C	C	1,340	998	257	606	A	C	
INDIAN RIVER BLVD	4TH ST @ US 1	12TH STREET	4L	4L	17,100	23,124	D	D	1,890	1,860	660	1,394	B	B	
INDIAN RIVER BLVD	12TH STREET	S. VB CITY L	4L	4L	20,900	26,556	D	D	1,890	1,860	846	1,420	B	B	
INDIAN RIVER BLVD	S. VB CITY L	17TH STREET	4L	4L	20,900	26,556	D	D	1,890	1,860	834	1,400	B	B	
INDIAN RIVER BLVD	17TH STREET	TARPON	4L	4L	21,100	26,868	D	D	1,890	1,860	918	1,384	B	B	
INDIAN RIVER BLVD	TARPON	21ST STREET	4L	4L	21,100	26,868	D	D	1,890	1,860	918	1,384	B	B	
INDIAN RIVER BLVD	21ST STREET	SR 60/ROYAL PALM	4L	4L	22,600	34,983	D	D	1,890	1,860	1,035	1,650	B	C	
INDIAN RIVER BLVD	SR 60/ROYAL PALM	M.B.BRIDGE	4L	4L	22,600	34,161	D	D	1,890	1,860	1,035	1,650	B	C	
INDIAN RIVER BLVD	M.B.BRIDGE	W. VB CITY L/37TH ST	4L	4L	25,000	26,475	D	D	1,890	1,860	1,223	1,095	B	B	
INDIAN RIVER BLVD	W. VB CITY L/37TH ST	US 1 @53RD ST	4L	4L	7,700	16,153	D	D	1,890	1,860	450	947	B	B	
I-95	N. COUNTY LINE	CR 512	4L	4L	27,600	0	C	C	2,700	2,740	1,280	1,524	B	B	
I-95	CR 512	SR 60	4L	4L	28,300	0	C	C	2,700	2,740	1,324	1,549	B	B	
I-95	SR 60	OSLO RD	4L	4L	26,600	0	C	C	2,640	2,890	1,319	1,770	B	B	
I-95	OSLO RD	S. COUNTY LINE	4L	4L	26,600	0	C	C	2,640	2,890	1,300	1,751	B	B	
US 1	S. COUNTY LINE	OSLO RD	4L	4L	28,300	31,034	D	D	2,300	1,860	1,143	1,641	B	C	
US 1	OSLO RD	4TH ST @ IR BLVD	4L	4L	38,700	35,966	D	D	2,220	2,790	1,464	1,442	B	B	2/27/2004
US 1	OSLO RD	4TH ST @ IR BLVD	4L	4L	38,700	35,966	D	D	2,220	2,790	1,464	1,803	B	B	2/27/2004
US 1	4TH ST @ IR BLVD	8TH STREET	4L	4L	27,100	22,120	D	D	2,270	1,860	1,142	1,503	C	B	
US 1	8TH STREET	12TH STREET	4L	4L	29,200	23,722	D	D	2,270	1,860	1,308	1,505	D	B	
US 1	12TH STREET	S. VB CITY L	4L	4L	30,900	26,599	D	D	2,370	1,710	1,399	1,348	B	C	

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Addendum Table A-2.07

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Roadway	From	To	Roadway Type		Peak Season Daily Volume		Established LOS Standard		Peak Hour/Peak Season/Peak Direction						Traffic Study
			1995	2006	1995	2006	1995	2006	Capacity		Volume		LOS		
									1995	2006	1995	2006	1995	2006	
US 1	S. VB CITY L	17TH STREET	4L	4L	30,900	26,518	D	D	2,270	1,710	1,437	1,378	D	D	
US 1	17TH STREET	SR 60	4L	4L	33,700	25,947	D	D	2,270	1,510	1,666	1,278	D	D	
US 1	SR 60	ROYAL PALM PL	4L	4L	16,600	20,988	D	D	2,300	1,510	797	1,299	C	D	
US 1	ROYAL PALM PL	ATLANTIC BLVD	4L	4L	25,300	0	D	D	2,300	1,710	998	1,192	B	C	
US 1	ATLANTIC BLVD	N. VB CITY L	4L	4L	27,200	27,469	D	D	2,300	2,010	1,213	1,785	B	D	3/31/2006
US 1	N. VB CITY L	OLD DIXIE HWY	4L	4L	27,200	28,834	D	D	2,300	2,010	1,178	1,795	D	D	3/31/2006
US 1	OLD DIXIE HWY	41ST STREET	4L	4L	21,600	27,566	D	D	2,300	2,010	1,098	1,876	C	D	3/31/2006
US 1	41ST STREET	45TH STREET	4L	4L	21,300	24,846	D	D	2,650	2,010	1,066	1,637	C	D	3/31/2006
US 1	45TH STREET	49TH STREET	4L	4L	18,800	22,367	D	D	2,650	2,010	953	1,616	B	D	3/31/2006
US 1	49TH STREET	65TH STREET	4L	4L	22,300	27,742	C	C	2,650	2,010	1,175	1,996	A	D	3/31/2006
US 1	65TH STREET	69TH STREET	4L	4L	22,100	27,113	C	C	2,650	2,232	1,109	1,884	B	D	11/14/2005
US 1	69TH STREET	OLD DIXIE HWY	4L	4L	21,400	26,588	D	D	2,650	2,232	1,114	1,840	B	D	11/14/2005
US 1	OLD DIXIE HWY	SCHUMANN DR	4L	4L	24,700	25,643	D	D	2,370	2,210	1,247	1,565	B	D	11/14/2005
US 1	SCHUMANN DR	CR 512	4L	4L	23,600	25,643	D	D	2,370	1,860	1,206	1,383	B	B	
US 1	CR 512	N. SEB CITY L	4L	4L	25,500	0	D	D	2,300	1,710	1,167	1,331	B	C	
US 1	N. SEB CITY L	ROSELAND RD	4L	4L	25,500	24,044	D	D	2,300	1,860	1,246	1,359	B	B	
US 1	ROSELAND RD	N. COUNTY LINE	4L	4L	26,800	24,044	D	D	2,320	1,860	1,419	1,166	B	B	
SCHUMANN DR	CR 510	66TH AVE/ S.SEB	2L	2L	6,400	10,133	D	D	680	860	275	715	C	C	
SCHUMANN DR	S. SEB CITY L	US 1	2L	2L	6,400	2,087	D	D	680	860	275	125	C	B	
ROSELAND RD	CR 512	N. SEB CITY L	2L	2L	6,400	6,979	D	D	680	860	275	351	C	C	
ROSELAND RD	N. SEB CITY L	US 1	2L	2L	9,700	7,362	D	D	680	860	439	383	C	C	
CR 512	SR 60	I-95	2L	2L	5,600	0	D	D	600	860	287	718	C	C	
CR 512	I-95	CR 510	2L	2L	8,800	15,388	D	D	680	1,860	537	853	C	B	
CR 512	CR 510	W. SEB CITY L	2L	2L	8,600	0	D	D	680	1,860	447	771	C	B	
CR 512	W. SEB CITY L	ROSELAND RD	2L	2L	8,600	0	D	D	680	1,860	436	992	C	B	
CR 512	ROSELAND RD	US 1	2L	2L	12,700	0	D	D	680	1,860	484	724	C	B	
CR 510	CR 512	66TH AVE	2L	2L	5,200	0	D	D	680	1,860	402	880	C	B	
CR 510	66TH AVE	58TH AVE	2L	2L	10,300	11,368	D	D	680	1,860	422	834	C	B	
CR 510	58TH AVE	US 1	2L	2L	9,700	13,597	D	D	680	1,860	416	896	C	B	
CR 510	US 1	SR A1A	2L	2L	9,100	14,246	D	D	680	1,900	454	1,231	C	B	

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Roadway	From	To	Roadway Type		Peak Season Daily Volume		Established LOS Standard		Peak Hour/Peak Season/Peak Direction						Traffic Study
			1995	2006	1995	2006	1995	2006	Capacity		Volume		LOS		
									1995	2006	1995	2006	1995	2006	
SR 60	CR 512	100TH AVE	2L	2L	7,900	0	C	C	460	1,810	291	259	B	B	1/31/05
SR 60	CR 512	100TH AVE	2L	2L	6,800	0	C	C	460	1,810	273	260	B	B	
SR 60	100TH AVE	I-95	2L	2L	8,400	0	D	D	1,280	1,860	521	463	A	B	
SR 60	I-95	82ND AVE	4L	4L	22,700	32,486	D	D	1,890	2,000	1,558	1,854	B	D	
SR 60	82ND AVE	66TH AVE	4L	4L	27,900	33,860	D	D	3,110	2,120	1,711	2,222	B	F	
SR 60	66TH AVE	58TH AVE	6L	6L	28,400	39,840	D	D	2,840	2,790	2,336	2,034	B	B	
SR 60	58TH AVE	43RD AVE	6L	6L	29,200	32,079	D	D	2,840	2,790	2,145	1,875	B	B	
SR 60	43RD AVE	27TH AVE	6L	6L	26,300	31,939	D	D	2,840	2,790	1,768	1,889	B	B	
SR 60	27TH AVE	20TH AVE	6L	6L	19,900	27,654	D	D	2,510	2,790	1,380	1,653	C	B	
SR 60	20TH AVE	OLD DIXIE HWY	3O/3O	3O/3O	22,100	25,274	D	D	2,328	3,252	1,384	1,454	D	C	
SR 60	OLD DIXIE HWY	10TH AVE	3O/3O	3O/3O	21,100	24,029	D	D	2,328	3,252	1,402	1,337	D	C	
SR 60	10TH AVE	US 1	3O/3O	3O/3O	16,500	19,559	D	D	2,328	3,252	1,273	1,178	D	C	
SR 60	US 1	INDIAN RIVER BLVD	3O/3O	3O/3O	10,800	13,019	D	D	2,328	3,252	630	806	D	C	
SR 60	INDIAN RIVER BLVD	ICWW	4L	4L	20,400	17,255	D	D	1,640	1,860	1,045	1,266	C	B	
SR 60	ICWW	SR A1A	4L	4L	15,100	17,057	D	D	1,640	1,860	802	996	C	B	
16TH STREET	58TH AVE	43RD AVE	2L	2L	3,000	3,847	D	D	880	860	293	402	B	C	
16TH STREET	43RD AVE	27TH AVE	2L	2L	7,700	8,218	D	D	880	860	437	589	B	C	
16TH STREET	27TH AVE	20TH AVE	2L	2L	10,200	9,222	D	D	880	860	488	596	B	C	
16TH STREET	20TH AVE	OLD DIXIE HWY	2L	2L	13,700	12,639	D	D	970	810	677	775	B	D	
16TH/17TH ST	OLD DIXIE HWY	US 1	4L	4L	11,300	0	D	D	970	1,710	679	814	B	C	
17TH ST	US 1	INDIAN RIVER BLVD	4L	4L	13,700	11,401	D	D	1,990	1,710	633	777	B	C	
17TH ST	INDIAN RIVER BLVD	SR A1A	4L	4L	25,100	22,141	D	D	1,890	1,860	1,123	1,314	B	B	
12TH STREET	82ND AVENUE	58TH AVE	2L	2L	2,300	0	D	D	880	870	134	98	B	B	
12TH STREET	58TH AVE	43RD AVE	2L	2L	2,300	0	D	D	880	860	134	290	B	C	
12TH STREET	43RD AVE	27TH AVE	2L	2L	6,300	0	D	D	880	860	257	399	B	C	
12TH STREET	27TH AVE	20TH AVE	2L	2L	7,800	0	D	D	880	860	326	544	B	C	
12TH STREET	20TH AVE	OLD DIXIE HWY	2L	2L	9,600	0	D	D	880	860	432	706	B	C	
12TH STREET	OLD DIXIE HWY	US 1	4L	4L	12,900	0	D	D	1,890	1,368	622	701	B	B	
OLD DIXIE HWY	S. COUNTY LINE	OSLO RD	2L	2L	4,100	7,790	D	D	880	860	433	512	B	C	
OLD DIXIE HWY	OSLO RD	4TH ST	2L	2L	10,500	7,399	D	D	880	860	462	519	B	C	

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Roadway	From	To	Roadway Type		Peak Season Daily Volume		Established LOS Standard		Peak Hour/Peak Season/Peak Direction						Traffic Study
			1995	2006	1995	2006	1995	2006	Capacity		Volume		LOS		
									1995	2006	1995	2006	1995	2006	
OLD DIXIE HWY	4TH ST	8TH ST	2L	2L	11,500	10,471	D	D	880	810	448	645	B	D	
OLD DIXIE HWY	8TH ST	12TH ST	2L	2L	11,800	11,977	D	D	880	810	576	714	B	D	
OLD DIXIE HWY	12TH ST	S. VB CITY L	2L	2L	11,300	7,269	D	D	880	810	554	395	B	C	
OLD DIXIE HWY	S. VB CITY L	16TH ST	2L	2L	11,300	7,269	D	D	880	850	590	396	B	C	
OLD DIXIE HWY	16TH ST	SR 60	2L	2L	3,800	5,098	D	D	880	850	276	311	B	C	
OLD DIXIE HWY	41ST ST	45TH ST	2L	2L	11,300	4,300	D	D	880	860	590	215	B	B	
OLD DIXIE HWY	45TH ST	49TH ST	2L	2L	11,300	2,445	D	D	880	860	590	197	B	B	
OLD DIXIE HWY	49TH ST	65TH ST	2L	2L	11,300	2,756	D	D	880	860	590	241	B	C	
OLD DIXIE HWY	65TH ST	69TH ST	2L	2L	11,300	2,133	D	D	880	860	590	248	B	C	
OLD DIXIE HWY	69TH ST	CR 510	2L	2L	1,500	1,318	D	D	880	860	90	162	B	B	
OLD DIXIE HWY	69TH ST	CR 510	2L	2L	1,500	1,318	D	D	880	860	90	141	B	B	
27TH AVENUE	S. COUNTY LINE	OSLO RD	2L	2L	7,500	13,932	D	E +20	880	1,068	513	1,267	B	F	
27TH AVENUE	OSLO RD	4TH ST	2L	2L	8,800	13,765	D	E +20	880	1,068	452	1,075	B	F	
27TH AVENUE	4TH ST	8TH ST	2L	2L	10,100	13,086	D	E +20	880	1,020	339	1,039	B	F	
27TH AVENUE	8TH ST	12TH ST	2L	2L	10,400	12,736	D	E +20	880	1,020	349	959	B	E	
27TH AVENUE	12TH ST	S. VB CITY L	2L	2L	9,800	13,183	D	E +20	880	1,020	322	1,393	B	F	
27TH AVENUE	S. VB CITY L	16TH ST	2L	2L	9,800	13,183	D	E +20	880	1,020	356	918	B	E	
27TH AVENUE	16TH ST	SR 60	2L	2L	9,900	10,910	D	E +20	880	1,020	365	772	B	D	
27TH AVENUE	SR 60	ATLANTIC BLVD	2L	2L	2,400	6,381	D	D	880	810	88	466	B	C	
27TH AVENUE	ATLANTIC BLVD	AVIATION BLVD	2L	2L	2,400	12,326	D	D	880	810	69	768	B	D	
OSLO RD	82ND AVE	58TH AVE	2L	2L	4,800	4,115	D	D	600	870	261	239	C	C	
OSLO RD	58TH AVE	43RD AVE	2L	2L	7,300	10,475	D	D	880	1,953	385	803	B	B	
OSLO RD	43RD AVE	27TH AVE	2L	2L	7,400	14,585	D	D	880	1,953	392	958	B	B	
OSLO RD	27TH AVE	20TH AVE	2L	2L	7,500	12,717	D	D	880	1,953	348	789	B	B	
OSLO RD	20TH AVE	OLD DIXIE HWY	2L	2L	10,100	12,515	D	D	880	1,953	499	989	B	B	
OSLO RD	OLD DIXIE HWY	US 1	4L	4L	10,600	12,057	D	D	1,890	1,953	511	712	B	B	
6TH AVENUE	17TH STREET	S. VB CITY L	2L	2L	10,100	0	D	D	880	860	499	488	B	C	
6TH AVENUE	S. VB CITY L	S.R.60	2L	2L	10,100	0	D	D	880	850	499	369	B	C	
10TH AVENUE	S.R.60	ROYAL PALM BLVD	2L	2L	6,900	723	D	D	760	810	375	100	C	C	
10TH AVENUE	ROYAL PALM BLVD	17TH STREET	2L	2L	6,900	0	D	D	760	810	375	395	C	C	

2006 Comprehensive Plan Evaluation and Appraisal Report - Transportation Element, Traffic Section

Roadway	From	To	Roadway Type		Peak Season Daily Volume		Established LOS Standard		Peak Hour/Peak Season/Peak Direction						Traffic Study
			1995	2006	1995	2006	1995	2006	Capacity		Volume		LOS		
									1995	2006	1995	2006	1995	2006	
20TH AVENUE	OSLO RD.	4TH ST	2L	2L	6,700	0	D	D	760	860	261	589	C	C	
20TH AVENUE	4TH ST	8TH ST	2L	2L	7,700	0	D	D	760	810	265	710	C	D	
20TH AVENUE	8TH ST	12TH ST	2L	2L	9,900	0	D	D	760	810	292	683	C	D	
20TH AVENUE	12TH ST	S. VB CITY L	4L	4L	8,400	0	D	D	1,890	1,710	315	658	B	C	
20TH AVENUE	S. VB CITY L	16TH ST	4L	4L	8,400	0	D	D	1,890	1,800	316	657	B	C	
20TH AVENUE	16TH ST	SR 60	4L	4L	6,400	0	D	D	1,890	1,800	261	466	B	C	
20TH AVENUE	SR 60	ATLANTIC BLVD	2L	2L	3,400	0	D	D	730	850	155	216	C	B	
43RD AVENUE	S. COUNTY LINE	OSLO RD	2L	2L	4,500	6,874	D	E +20	760	950	235	558	C	C	
43RD AVENUE	OSLO RD	4TH ST	2L	2L	6,200	10,213	D	E +20	730	1,068	320	823	C	D	
43RD AVENUE	4TH ST	8TH ST	2L	2L	9,000	12,412	D	E +20	760	1,020	357	908	C	E	11/22/2005
43RD AVENUE	8TH ST	12TH ST	2L	2L	10,700	12,940	D	E +20	760	1,071	443	872	C	E	11/22/2005
43RD AVENUE	12TH ST	16TH ST	2L	2L	12,300	13,363	D	E +20	880	1,071	497	847	B	E	
43RD AVENUE	16TH ST	SR 60	2L	2L	14,700	14,531	D	E +20	880	1,796	628	889	B	E	
43RD AVENUE	SR 60	26TH ST	2L	2L	11,100	10,557	D	D	880	1,796	494	743	B	D	
43RD AVENUE	26TH ST	41ST ST	2L	2L	7,800	10,288	D	D	760	860	394	706	C	C	
43RD AVENUE	41ST ST	45TH ST	2L	2L	4,900	6,125	D	D	760	860	226	452	C	C	
43RD AVENUE	45TH ST	49TH ST	2L	2L	2,200	3,258	D	D	760	860	127	400	C	C	
58TH AVENUE	OSLO RD	4TH ST	2L	4L	5,200	8,299	D	D	600	1,860	267	540	C	B	
58TH AVENUE	4TH ST	8TH ST	2L	4L	7,900	15,076	D	D	760	1,710	364	808	C	C	
58TH AVENUE	8TH ST	12TH ST	2L	4L	8,600	20,711	D	D	760	1,710	531	1,254	C	C	
58TH AVENUE	12TH ST	16TH ST	2L	4L	11,400	21,768	D	D	760	1,710	605	1,204	C	C	
58TH AVENUE	16TH ST	SR 60	4L	4L	13,600	24,807	D	D	1,890	1,710	901	1,281	B	C	
58TH AVENUE	SR 60	41ST ST	2L	2L	10,300	0	D	D	1,890	1,860	705	1,381	B	B	
58TH AVENUE	41ST ST	45TH ST	2L	2L	9,400	11,585	D	D	760	860	511	792	C	D	
58TH AVENUE	45TH ST	49TH ST	2L	2L	9,000	10,390	D	D	760	860	451	725	C	D	
58TH AVENUE	49TH ST	65TH ST	2L	2L	8,600	9,097	D	D	1,230	860	428	625	A	C	
58TH AVENUE	65TH ST	69TH ST	2L	2L	7,500	8,040	D	D	1,230	860	348	521	A	C	
58TH AVENUE	69TH ST	CR510	2L	2L	6,200	6,881	D	D	820	860	353	443	B	C	
66TH AVENUE	SR 60	26TH ST	2L	2L	4,600	9,663	D	D	760	860	260	625	C	C	
66TH AVENUE	26TH ST	41ST ST	2L	2L	4,300	9,717	D	D	1,230	860	273	702	A	C	

A-2-25

2006 Comprehensive Plan Evaluation and Appraisal Report - Transportation Element, Traffic Section

Roadway	From	To	Roadway Type		Peak Season Daily Volume		Established LOS Standard		Peak Hour/Peak Season/Peak Direction						Traffic Study
			1995	2006	1995	2006	1995	2006	Capacity		Volume		LOS		
									1995	2006	1995	2006	1995	2006	
66TH AVENUE	41ST ST	45TH ST	2L	2L	4,700	9,389	D	D	760	950	200	628	C	C	
66TH AVENUE	45TH ST	65TH ST	2L	2L	4,000	8,682	D	D	600	870	215	610	C	C	
66TH AVENUE	65TH ST	69TH ST	2L	2L	3,900	7,145	D	D	600	870	212	578	C	C	
66TH AVENUE	69TH ST	CR 510	2L	2L	4,200	8,503	D	D	600	870	243	617	C	C	
82ND AVENUE	OSLO RD	4TH ST	2L	2L	2,000	3,151	D	D	680	950	125	176	C	B	
82ND AVENUE	4TH ST	12TH ST	2L	2L	2,400	3,989	D	D	760		139		C	A	
82ND AVENUE	4TH ST	12TH ST	2L	2L	4,500	3,989	D	D	760	950	231	210	C	B	
82ND AVENUE	12TH ST	SR 60	2L	2L	4,500	3,894	D	D	760	860	231	303	C	B	
82ND AVENUE	SR 60	65TH ST	2L	2L	1,000	275	D	D	600	410	78	84	B	C	
82ND AVENUE	65TH ST	69TH ST	2L	2L	200	204	D	D	600	410	15	23	B	C	
98TH AVENUE	8TH ST	12TH STREET	2L	2L	1,000	0	D	D	600	860	78	13	B	B	
98TH AVENUE	12TH STREET	16TH ST	2L	2L	1,000	0	D	D	600	860	78	72	B	B	
98TH AVENUE	16TH ST	SR 60	2L	2L	1,000	0	D	D	600	860	78	73	B	B	
98TH AVENUE	SR 60	26TH ST	2L	2L	1,000	0	D	D	600	860	78	143	B	B	
77TH ST	66TH AVENUE	US 1	2L	2L	800		D	D	820	820	28	183	B	B	
69TH STREET	82ND AVENUE	66TH AVE	2L	2L	400	410	D	D	600	410	29	66	B	C	
69TH STREET	66TH AVENUE	58TH AVE	2L	2L	1,000	829	D	D	680	870	48	86	C	B	
69TH STREET	58TH AVENUE	OLD DIXIE HWY	2L	2L	800	1,042	D	D	1,230	870	47	88	A	B	
69TH STREET	OLD DIXIE HWY	US 1	2L	2L	800	885	D	D	1,230	870	48	72	A	B	
65TH ST	66TH AVENUE	58TH AVENUE	2L	2L	800	724	D	D	1,230	870	36	65	A	B	
65TH ST	58TH AVENUE	OLD DIXIE HWY	2L	2L	1,300	1,611	D	D	1,230	870	74	112	A	B	
65TH ST	OLD DIXIE HWY	US 1	2L	2L	1,100	1,066	D	D	1,230	870	59	76	A	B	
49TH ST	66TH AVENUE	58TH AVENUE	2L	2L	400	497	D	D	1,230	860	30	50	A	B	
49TH ST	58TH AVENUE	43RD AVENUE	2L	2L	2,100	3,494	D	D	760	860	127	219	C	B	
49TH ST	43RD AVENUE	OLD DIXIE HWY	2L	2L	2,600	3,784	D	D	760	810	196	329	C	C	
49TH ST	OLD DIXIE HWY	US 1	2L	2L	2,100	3,518	D	D	760	810	106	251	C	C	
45TH ST	66TH AVENUE	58TH AVENUE	2L	2L	1,600	2,419	D	D	1,230	860	98	178	A	B	
45TH ST	58TH AVENUE	43RD AVENUE	2L	2L	3,600	3,898	D	D	760	860	232	249	C	C	
45TH ST	43RD AVENUE	OLD DIXIE HWY	2L	2L	6,100	8,559	D	D	760	860	355	511	C	C	
45TH ST	OLD DIXIE HWY	INDIAN RIV BD	2L	2L	4,500	0	D	D	760	860	250	354	C	C	

2006 Comprehensive Plan Evaluation and Appraisal Report - Transportation Element, Traffic Section

Roadway	From	To	Roadway Type		Peak Season Daily Volume		Established LOS Standard		Peak Hour/Peak Season/Peak Direction						Traffic Study
			1995	2006	1995	2006	1995	2006	Capacity		Volume		LOS		
									1995	2006	1995	2006	1995	2006	
41ST ST	66TH AVENUE	58TH AVENUE	2L	2L	2,600	2,015	D	D	820	870	186	154	B	B	
41ST ST	58TH AVE	43RD AVE	2L	2L	2,600	3,658	D	D	880	860	186	330	B	C	
41ST ST	43RD AVE	OLD DIXIE HWY	2L	2L	3,900	4,062	D	D	880	860	238	258	B	C	
41ST ST	OLD DIXIE HWY	INDIAN RIV BD	2L	2L	1,600	0	D	D	880	860	92	151	B	B	
37TH ST	US 1	INDIAN RIV BLVD	2L	2L	7,200	10,423	D	D	880	860	267	658	B	C	
26TH ST	66TH AVENUE	58TH AVENUE	2L	2L	500	7,888	D	D	880	860	102	537	B	C	
26TH ST	58TH AVENUE	43RD AVENUE	2L	2L	2,700	8,808	D	D	880	860	180	595	B	C	
26TH ST	43RD AVE	AVIATION BLVD	2L	2L	4,000	0	D	D	880	860	182	669	B	C	
26TH ST	AVIATION BLVD	27TH AVENUE	2L	2L	5,100	0	D	D	880	860	280	219	B	B	
8TH ST	58TH AVENUE	43RD AVENUE	2L	2L	3,000	0	D	D	880	860	196	128	R	B	
8TH ST	43RD AVENUE	27TH AVENUE	2L	2L	5,300	0	D	D	880	860	297	416	B	C	
8TH ST	27TH AVENUE	20TH AVENUE	2L	2L	8,700	0	D	D	880	860	447	557	B	C	
8TH ST	20TH AVENUE	OLD DIXIE HWY	2L	2L	8,500	0	D	D	880	810	359	657	B	D	
8TH ST	OLD DIXIE HWY	US 1	2L	2L	10,100	0	D	D	880	810	486	575	B	C	
8TH ST	US 1	INDIAN RIVER BLVD	2L	2L	5,200	0	D	D	880	860	160	246	B	C	
4TH ST	82ND AVE	58TH AVE	2L	2L	1,600	0	D	D	820	870	75	104	B	B	
4TH ST	58TH AVE	43RD AVE	2L	2L	3,000	0	D	D	880	860	203	273	B	C	
4TH ST	43RD AVE	27TH AVE	2L	2L	4,800	0	D	D	880	860	254	303	B	C	
4TH ST	27TH AVE	20TH AVE	2L	2L	6,700	0	D	D	880	860	357	320	B	C	
4TH ST	20TH AVE	OLD DIXIE HWY	2L	2L	8,000	0	D	D	880	860	372	526	B	C	
4TH ST	OLD DIXIE HWY	US 1	2L	2L	9,300	0	D	D	880	860	376	479	B	C	
FRED TUERK DR	A1A	W OF COCONUT DR	2L	2L	1,600	0	D	D	630	860	75	110	B	B	
WINTER BEACH RD	A1A	JUNGLE TRAIL	2L	2L	1,600	0	D	D	630	860	75	62	B	B	
ATLANTIC BLVD	27TH AVENUE	20TH AVENUE	2L	0.5	4,000	3,003	D	D	630	860	232	264	C	C	
ATLANTIC BLVD	20TH AVENUE	US 1	2L	0.5	5,100	2,832	D	D	630	860	254	275	C	C	
AVIATION BLVD	26TH STREET	27TH AVENUE	2L	0.5	5,100	0	D	D	630	1,280	216	654	C	C	
ROYAL PALM BLVD	ROYAL PALM PL	INDIAN RIVER BLVD	2L	1	4,400	0	D	D	630	880	119	272	C	C	
ROYAL PALM PL	US 1	INDIAN RIVER BLVD	2L	1	5,200	0	D	D	630	880	331	368	C	C	

Source - IRC MPO, 2007

Notes: Definitions: 2U: 2-lane undivided (some roads may have center turn lanes), 4D: 4-lane divided, 6D: 6-lane divided, 3O/3O: paired 3-lane one-way roads
INDIAN RIVER COUNTY

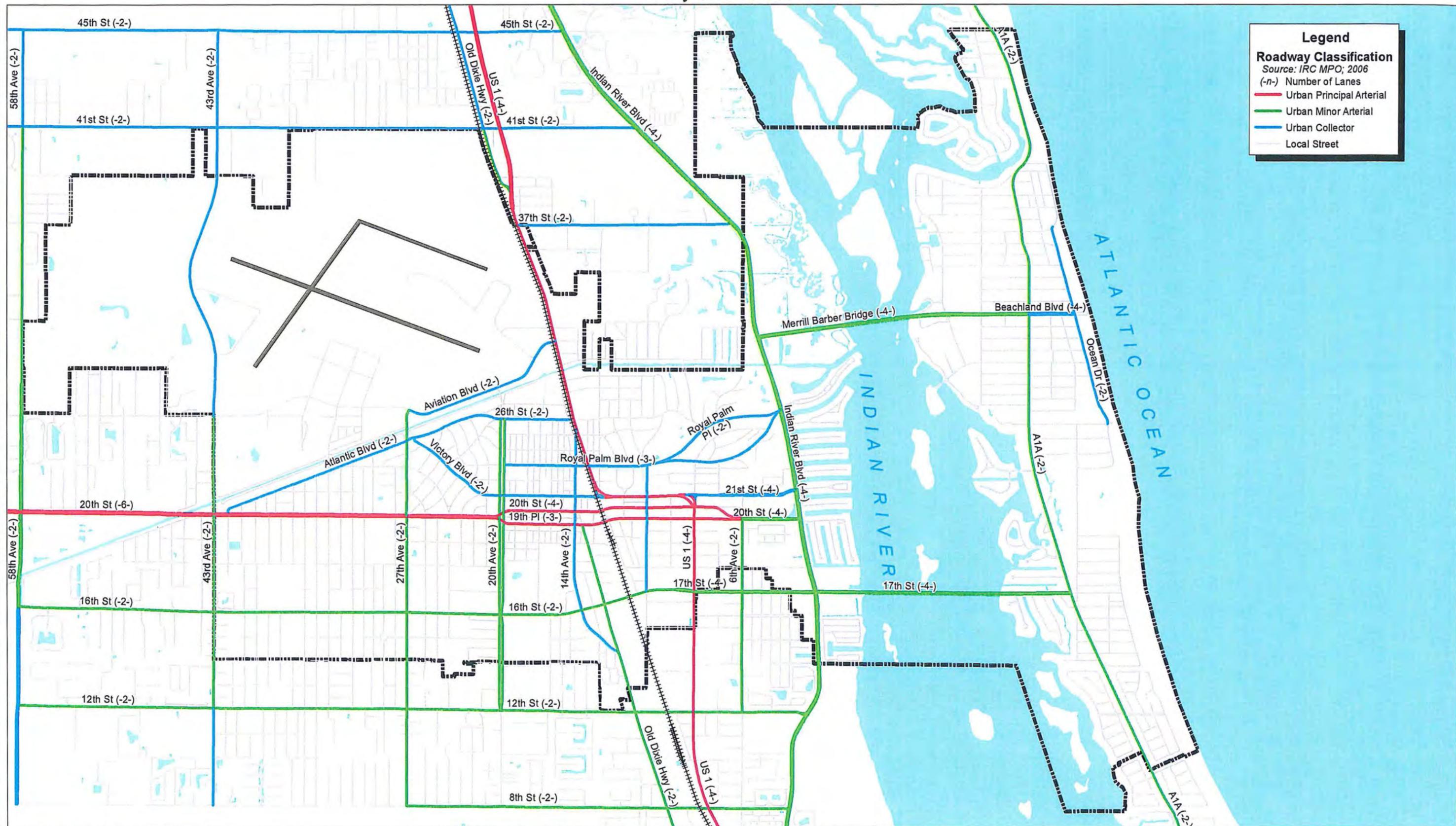
Transportation Element
(Transportation Map Series)

FIGURES

(Addendum Figures A-2.01 through A-2.06)

Roadway Laneage and Functional Classification

City of Vero Beach



Legend

Roadway Classification
 Source: IRC MPO; 2006
 (-n-) Number of Lanes

- Urban Principal Arterial
- Urban Minor Arterial
- Urban Collector
- Local Street

Scale: 1 in = 2500 ft

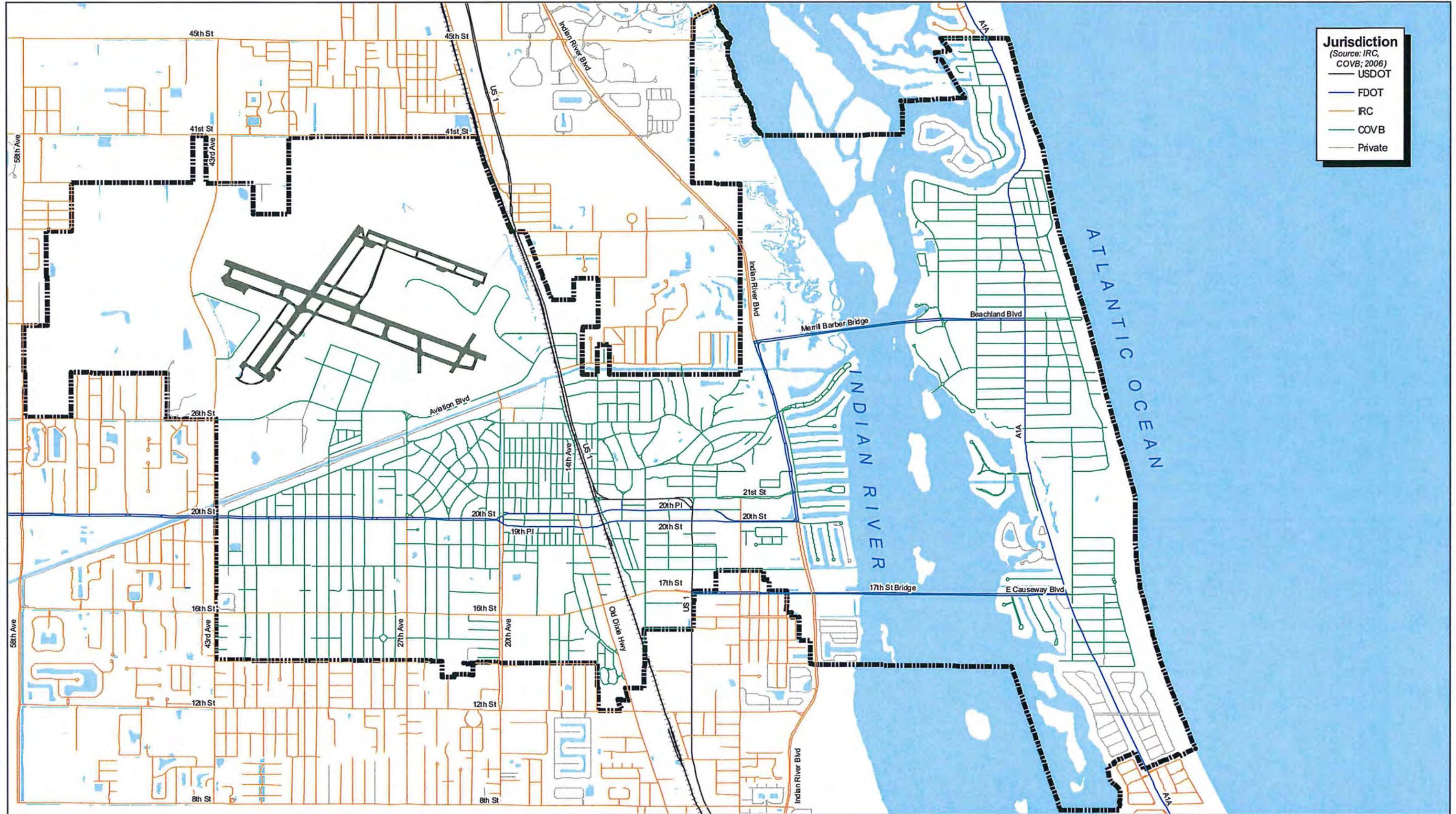
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Roadway Jurisdictional Responsibility

City of Vero Beach



Jurisdiction
 (Source: IRC, COVB; 2006)

- USDOT
- FDOT
- IRC
- COVB
- Private

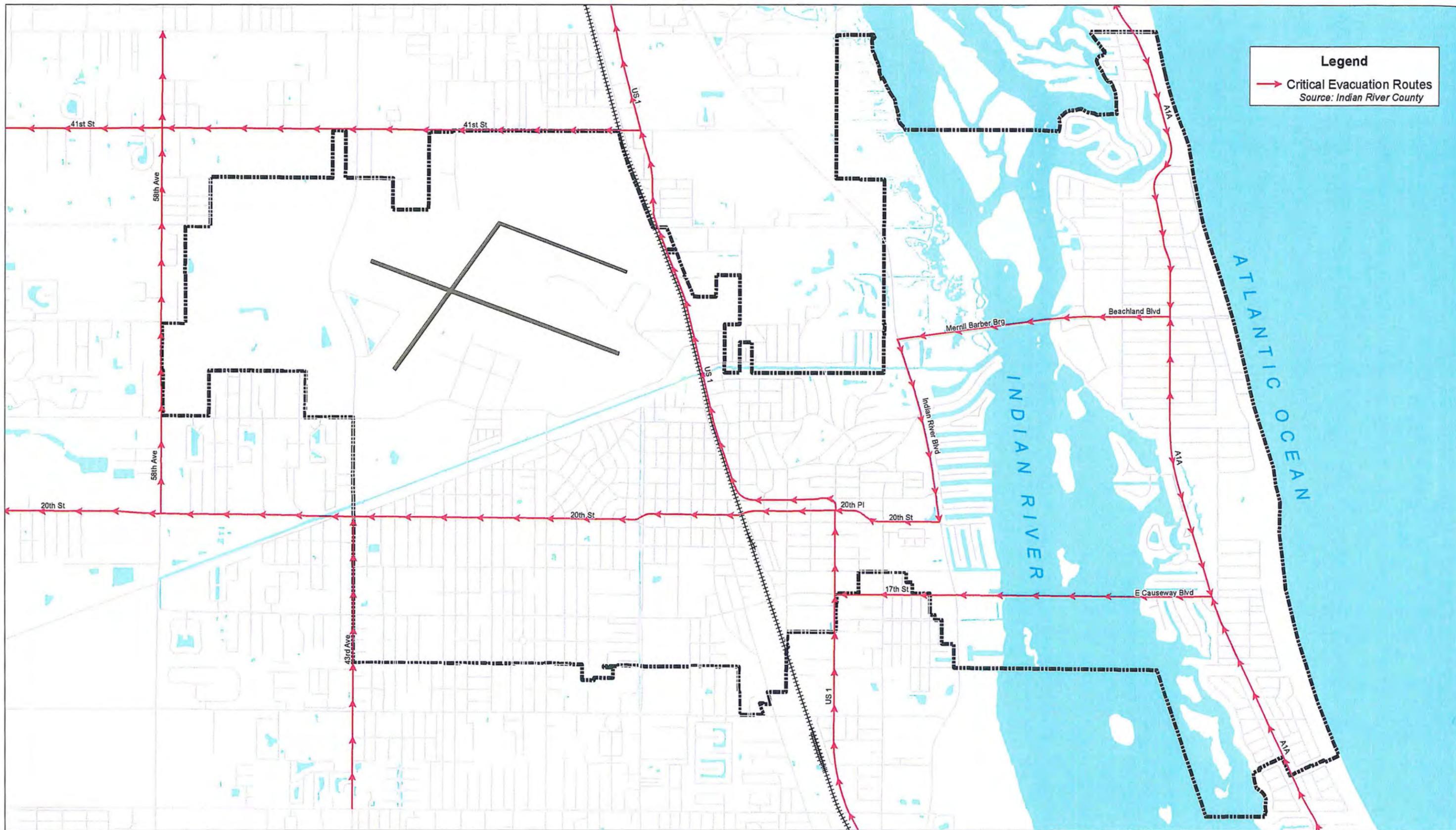
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Critical Evacuation Routes

City of Vero Beach



Legend
→ Critical Evacuation Routes
Source: Indian River County

Scale: 1 in = 2500 ft

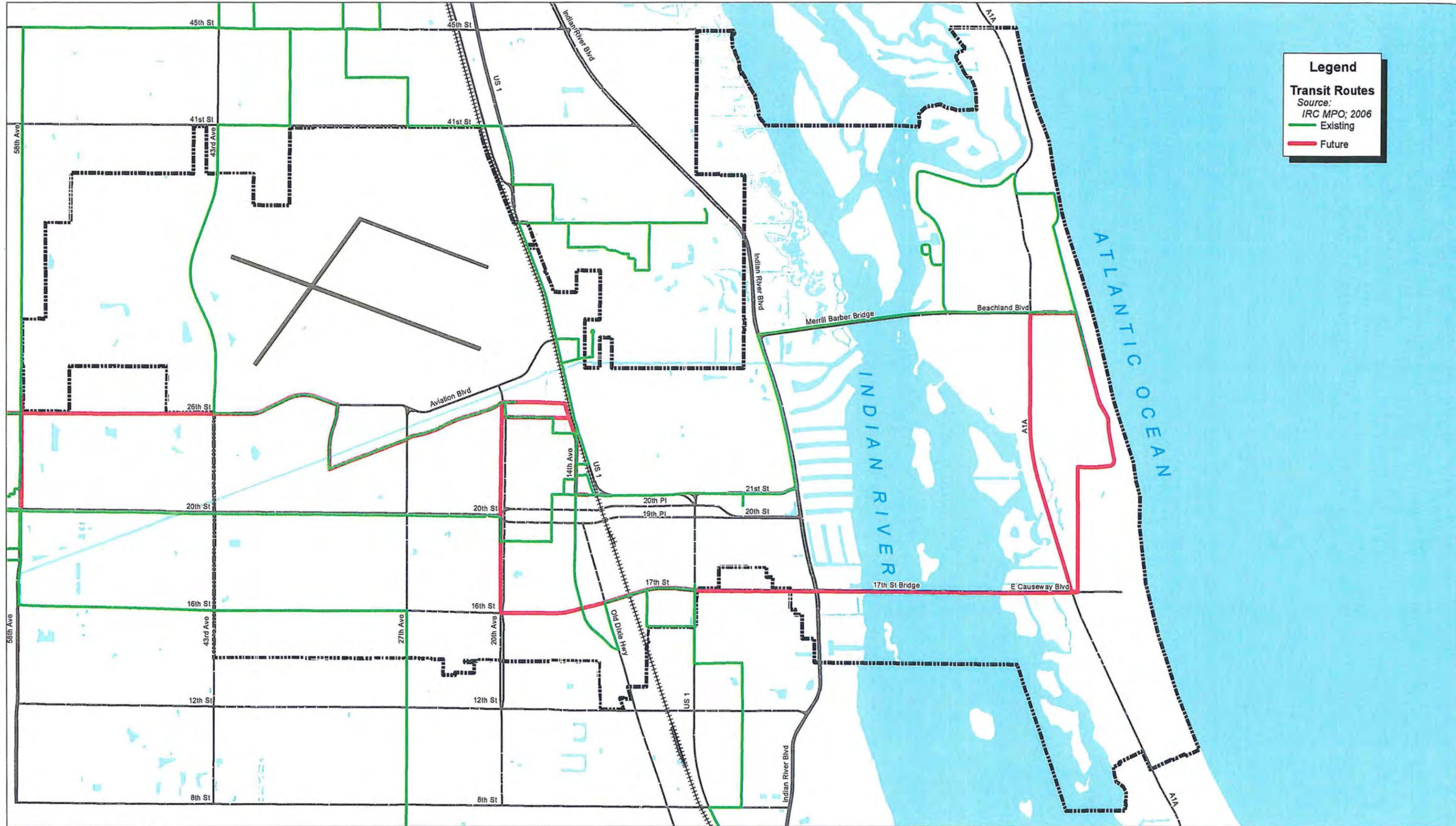
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Existing and Future Transit Routes

City of Vero Beach



Legend

Transit Routes
 Source:
 IRC MPO; 2006

- Existing
- Future

Scale: 1 in = 2500 ft

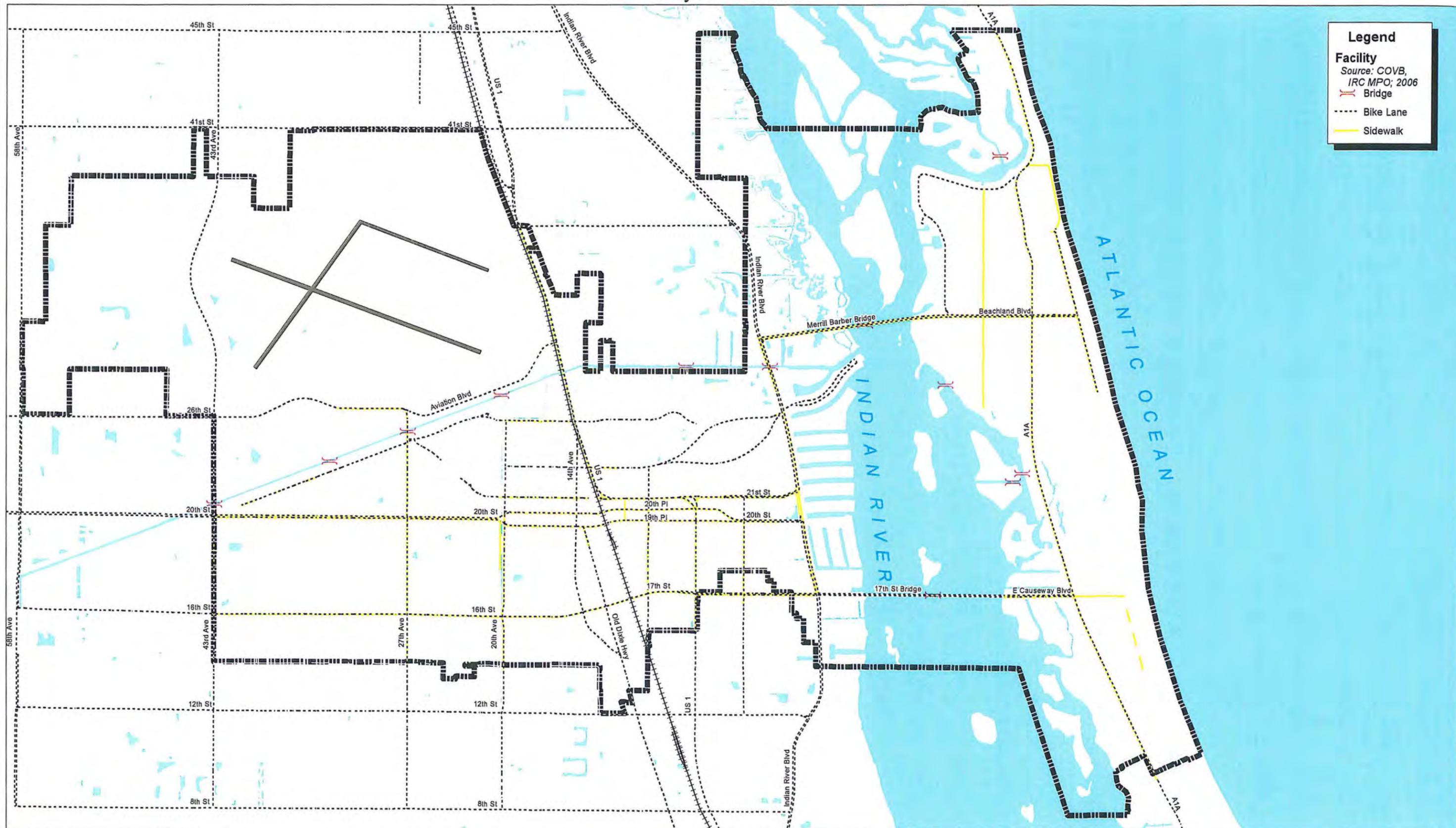

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Existing Bicycle and Pedestrian Facilities

City of Vero Beach



Legend

Facility
 Source: COVB, IRC MPO; 2006

- Bridge
- Bike Lane
- Sidewalk

Scale: 1 in = 2500 ft

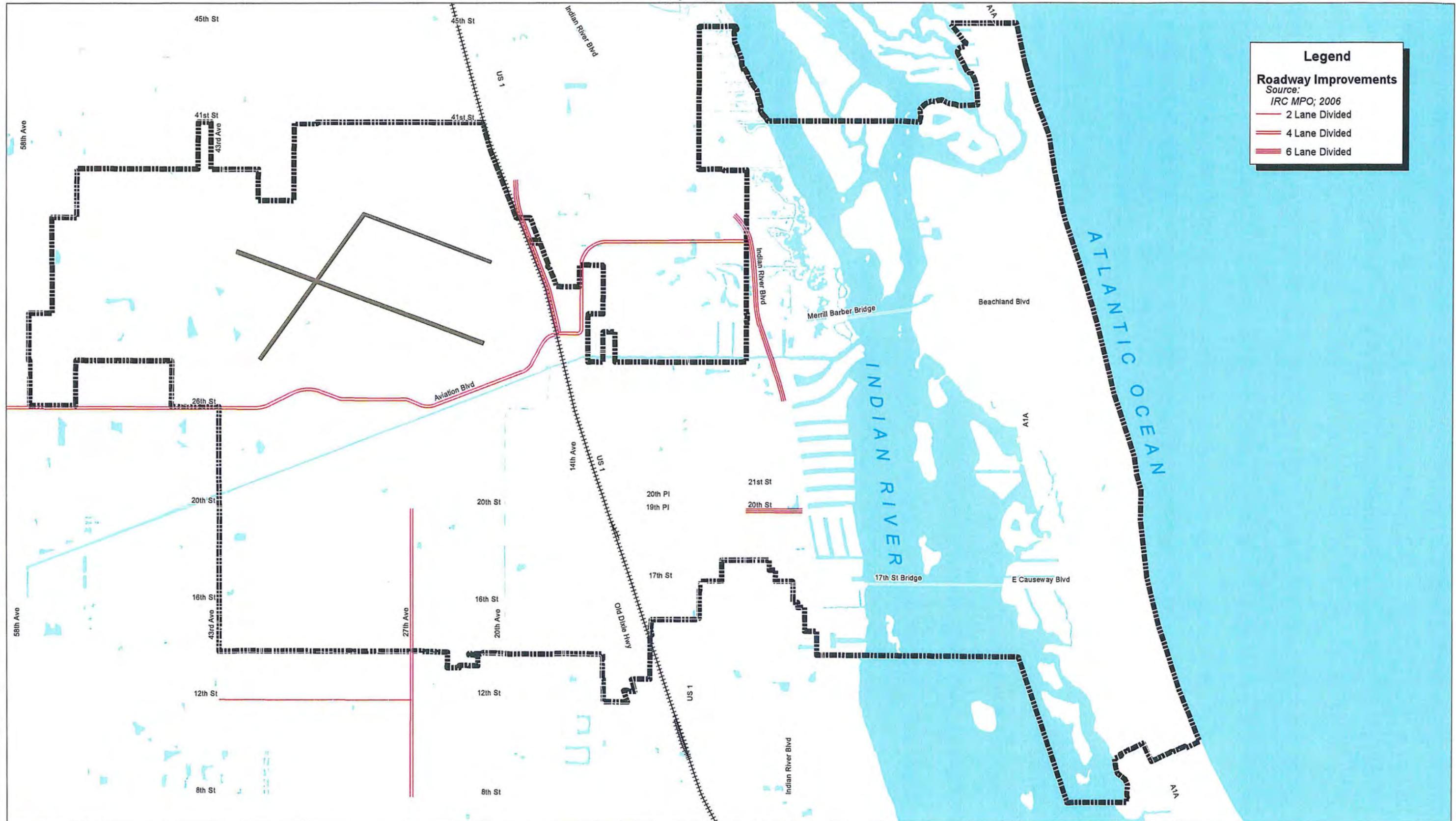

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2030 Roadway Improvement Plan

City of Vero Beach



Scale: 1 in = 2500 ft



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TECHNICAL SUPPORT DOCUMENT A-3
CHAPTER 3, HOUSING ELEMENT
CITY OF VERO BEACH COMPREHENSIVE PLAN

INTRODUCTION/BACKGROUND

The intent of this document is to provide a summary of the technical information that supports the amendments to the Housing Element, Goal, Objectives, and Policies (GOPs) of the Comprehensive Plan. The amended GOPs have been prepared in response to the State of Florida, Department of Community Affairs' (DCA), Objections, Recommendations and Comments (ORC) Report.

DCA Objection and Recommendation, 4, restated below for reference, describes the issues that need to be addressed in the Housing Element of the Comprehensive Plan.

Objection:

The City's EAR-based amendments do not meet the requirements of Rule 9J-5.010, F.A.C., or include supporting data and analysis regarding the provision of housing, including housing for moderate-income, low-income, and very low-income households, group homes, foster care facilities, and households with special housing needs. [Rules 9J-5.010, 9J-5.010(1), (9J-5.010(2)(b), 9J-5.010(2)(f)1., 9J-5.010(2)(f)3., 9J-5.010(3)(b)1., 9J-5.010(3)(b)3., 9J-5.010(3)(c)2., 9J-5.010(3)(c)5., 9J-5.010(3)(c)6., 9J-5.010(3)(c)8., 9J-5.010(3)(c)10, and 9J-5.10(3)(c)11, and 9J-5.011(1)(g), F.A.C. Section 163.3177(6)(f), F.S.]

Recommendation:

Provide data and analysis regarding the City's current and future housing situation, including an affordable housing needs assessment. Include objectives in the Housing Element that will encourage the creation and/or preservation of affordable housing and that will provide for adequate sites and the distribution of housing for very low-income, low-income, and moderate-income households, as well as mobile and manufactured homes. Adopt policies that will ensure that supporting infrastructure will be provided for current residents, and that will ensure that the City designates sufficient sites at sufficient densities to accommodate the need for affordable housing over the planning timeframe. Adopt policies to streamline the permitting process and minimize costs and delays for housing, especially affordable housing, and that establish criteria to guide the location of housing types. Adopt a policy to establish group home locations consistent with Chapter 419, F.S.

DATA AND ANALYSIS

This section provides a brief summary of the data and analysis for the amendments to Chapter 3, Housing Element, consistent with Rule Chapters 9J-5 and 9J-11, Florida Administrative Code and Chapter 163, Part II, Florida Statutes. The data and analysis within the Housing Element shall be updated with the next Evaluation and Appraisal Report (EAR), which is due by September 1, 2010. In addition to the summary included in this section, additional data and analysis is provided in individual chapters of the amendments to the Comprehensive Plan.

The GOPs amendments include language that clarifies and strengthens existing affordable housing objectives, such as encouraging the creation and/or preservation of affordable housing, providing for adequate sites and the distribution of a variety of housing types in the City. Included in the amendments are existing policies that were clarified and new policies developed for supporting affordable housing infrastructure, designating land use and zoning sites with appropriate densities, minimizing costs and delays of permitting, establishing criteria to guide housing types, and establish group home locations consistent with state law.

The text amendments to the Housing Element, Goal, Objectives and Policies (GOPs), are based on existing data and analysis provided in the adopted Vero Beach Comprehensive Plan dated July 21, 1992. In addition, relevant 1990 and 2000 census data and estimates and projections on housing needs are provided. The summary data tables are based upon the Florida Housing Data Clearinghouse, University of Florida, Shimberg Center for Affordable Housing.

The tables located at the end of the document provide a summary of Housing Element data about local housing inventory, conditions, and affordability. The data also includes population projections required for Comprehensive Plans. In addition to Census data, the primary source of the data and the tables is the Affordable Housing Needs Assessment (AHNA), prepared by the Shimberg Center for Affordable Housing for the state Department of Community Affairs.

The following is a description of each of the tables:

- Table A-3.01, Population and Selected Economics Summary, 1990 and 2000. The table presents 1990 and 2000 U.S. Census data for population and various population characteristics, average household size, median household income, and per capita income. The data demonstrates the maturity and build-out nature of the City of Vero Beach.
- Table A-3.02, Population and Household Projections, 2005 to 2015. Projections on population and households are presented in this table through the year 2015. These projections assume little growth in population or household formation over the next decade. These projections will be thoroughly re-evaluated during the upcoming

Evaluation and Appraisal process, particularly to incorporate potential changes in the City's boundaries due to annexations.

- Table A-3.03, Housing Summary, 1990 and 2000. Selected housing characteristics from the 1990 and 2000 U.S. Census are presented in this table. The Census figures indicate that between 1990 and 2000 the number of renter occupied housing units actually decreased and the seasonal units share of housing increased from 10.1 percent of the housing stock to 10.4 percent.
- Table A-3.04, Housing Conditions, 1990 and 2000. This table provides data from the 1990 and 2000 Census for housing characteristics that typically indicate substandard conditions. The data shows that the number of units without complete plumbing and/or kitchen facilities decreased between 1990 and 2000; however, the number of units with overcrowding (1.01 persons per room) increased. The data needs to be re-evaluated in the Evaluation and Appraisal Report to possibly include other indicators of substandard housing conditions as defined in Section 420.004, Florida Statutes.
- Table A-3.05, Projections of Households by Income Range, 2000 – 2015. Projections of the number of households by income range are presented in this table based on Florida Housing Data Clearinghouse data.
- Table A-3.06, Households by Income and Cost Burden, 2005. Households that pay more than 30 percent of their income for rent or mortgage costs are considered “cost-burdened” for State comprehensive planning and housing needs purposes. The table shows that estimated number of households earning less than 80 percent of the annual median income, adjusted for size, in the Sebastian-Vero Beach Metropolitan Statistical Area in 2005 was 2,426 which was 28.2 percent of City households. A more telling statistic, as listed in a footnote to the table, is that almost 40 percent of all rental households are classified as “cost burdened.” Not only do these households not get the tax and other benefits of “homeownership,” but they generally do not have an option of whether or not to pay more than 30 percent of their income for rent as would homeowners.

Addendum Table A-3.01

**Population and Selected Economics Summary
City of Vero Beach
1990 and 2000**

	<u>1990</u>	<u>2000</u>
Population		
Household	17,155	17,208
Group Quarters	195	497
Total	17,350	17,705
Race		
White	95.6%	92.7%
Black	3.3%	3.4%
Other	1.1%	3.9%
Age		
Under 18 Years Old	15.6%	16.0%
65 Years and Older	29.9%	29.4%
Median Age	47.0	47.7
Average Household Size	2.07	2.02
Median Household Income	\$26,877	\$38,427
Per Capita Income	\$20,310	\$30,940

Source: 1990 and 2000 U.S. Census

Addendum Table A-3.02

**Population and Household Projections
City of Vero Beach
2005 to 2015**

<u>Category</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>
Population			
Household	17,380	17,563	17,647
Group Quarters	<u>515</u>	<u>522</u>	<u>525</u>
Total	17,895	18,085	18,172
Households			
Renter	3,084	3,156	3,212
Homeowners	<u>5,628</u>	<u>5,759</u>	<u>5,861</u>
Total	8,712	8,915	9,073

Source: Florida Data Clearinghouse, 2007; and
Vero Beach Planning and Development Department, 2007.

Addendum Table A-3.03

**Housing Summary
City of Vero Beach
1990 and 2000**

	<u>1990</u>	<u>2000</u>
Total Housing Units	10,064	10,232
Units in Structure		
1- Unit	5,063	5,265
Multiple Units	4,470	4,461
Mobile Home and Other	531	506
Occupancy		
Occupied Units	8,269	8,516
Owner Occupied	5,136	5,505
Percent Owner Occupied	62.1%	64.6%
Renter Occupied	3,133	3,011
Percent Renter Occupied	37.9%	35.4%
Vacant Units	1,795	1,770
Seasonal	1,013	1,075
Housing		
Owner Occupied (Median Value)	\$76,400	\$144,800
Renter Occupied (Median Gross Rent)	\$411	\$598

Source: 1990 and 2000 U.S. Census

Addendum Table A-3.04

**Housing Conditions
City of Vero Beach
1990 and 2000**

	<u>1990</u>	<u>2000</u>
Total Housing Units	10,064	10,232
Lack Complete Plumbing Facilities	57	15
Lack Complete Kitchen Facilities	41	0
1.01 or More Persons Per Room	188	227

Source: 1990 and 2000 U.S. Census

Addendum Table A-3.05

**Projections of Households by Income Range
City of Vero Beach
2000 to 2015**

<u>Income Level</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>	<u>% of Total*</u>
¹ Very Low	1,670	1,708	1,747	1,778	19.6
² Low	1,526	1,559	1,596	1,624	17.9
³ Moderate	2,063	2,108	2,157	2,196	24.2
>Moderate	<u>3,265</u>	<u>3,337</u>	<u>3,415</u>	<u>3,475</u>	<u>38.3</u>
Total Households	8,524	8,712	8,915	9,073	100.0

Source: Florida Data Clearinghouse and modified by Vero Beach Planning and Development Department to reflect City generated household projections, 2007.

*Percentage held constant over 15-year forecast period.

Notes:

¹ Very Low: 50% or less of annual median household income.

² Low: 80% or less of annual median household income.

³ Moderate: less than 120% of annual median household income.

Addendum Table A-3.06

**Households by Income
and Cost Burden
City of Vero Beach
2005**

<u>% of Area Median Household Income (AMI)</u>	<u>30-50%</u>	<u>50%</u>	<u>Total</u>	<u>% of Households</u>
<30% of AMI	125	541	666	74.2
>30% - 50% of AMI	349	323	672	33.5
>50% - 80% of AMI	511	127	638	37.2
>80% of AMI	<u>352</u>	<u>98</u>	<u>450</u>	<u>9.1</u>
Total	1,337	1,089	2,426 ³	28.2

Source: Florida Data Clearinghouse, 2007.

Notes:

1. Area median household income is the income for the Sebastian-Vero Beach metropolitan area.
2. The area median household income is adjusted for family size; the U.S. Housing and Urban Development's estimated median income for a family of four is \$54,100 in 2007.
3. The percentage of renter households that are estimated to be "cost burdened" is 39.3%.

**TECHNICAL SUPPORT DOCUMENT A-4
CHAPTER 4, SANITARY SEWER, SOLID WASTE,
DRAINAGE, POTABLE WATER, AND NATURAL
GROUNDWATER AQUIFER ELEMENT
CITY OF VERO BEACH COMPREHENSIVE PLAN**

INTRODUCTION/BACKGROUND

The intent of this document is to provide a summary of technical information that supports the amendments to the Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Element, Goals, Objectives, and Policies (GOPs) of Chapter 4 of the Comprehensive Plan. The amended GOPs have been prepared in response to the Florida Department of Community Affairs (DCA) Objections, Recommendations, and Comments Report issued pursuant to Rule 9J-11.010, Florida Administrative Code (FAC)

DCA Objection and Recommendation 6 provided below describes the issues that need to be addressed in Chapter 4 of the Comprehensive Plan.

Objection:

The City's EAR-based amendments do not include policies to protect high, as well as prime aquifer recharge areas, or include policies to establish water quality standards for stormwater discharge. [Rules 9J-5.011(1)(g), 9J-5.011(2)(a), and 9j-5.011(2)(c)4, F.A.C. and Section 163.3177(6)(c), F.S]

Recommendation:

Adopt goals, objectives, and policies in the plan to protect high, as well as prime, aquifer recharge areas, and establish water quality standards for stormwater discharge.

In DCA's Recommendation to Objection 1 regarding the lack of GOPs for a "concurrency management system," the staff reviewed existing level-of-service standards for potable water and sanitary sewer to determine if the standards in the 1992 Comprehensive Plan were current and relevant, and if not, to make necessary amendments to these standards and associated GOPs.

DATA AND ANALYSIS

This section provides a brief summary of the data and analysis for the amendments to Chapter 4 of the Comprehensive Plan. It both supplements and updates the data and analysis information provided in the adopted Comprehensive Plan dated July 21, 1992. The data and analysis of Chapter 4 will be fully updated with the next Evaluation and Appraisal Report, which is due by September 1, 2010.

Sanitary Sewer Subelement

The City of Vero Beach wastewater treatment facility (WWTF) is a post-secondary treatment plant with a capacity of 4.5 million gallons per day (mgd). The primary means of effluent disposal is through a reuse system and land application on agricultural farms of residual wastes.

The reuse system, including land application through exfiltration trenches, is a slow rate, public-access reuse system with a capacity annual average of 3.86 mgd and a storage capacity of 8.0 million gallons. The reused effluent includes irrigation of residential areas, golf courses, recreation areas and roadway medians and as cooling water at the Vero Beach Power Plant.

During wet weather conditions, surface water discharge is permitted for disposal during wet weather conditions and is limited to 60 days per year. With a 4.5 mgd disposal capacity, this translates into an average annual daily flow capacity of .74 mgd.

The service area of the WWTF is shown in Addendum Figure A-4.01 that includes the entire corporate limits of the City of Vero Beach and Town of Indian River Shores and portions of unincorporated Indian River County. The estimated population served is estimated at 30,850 of which approximately 15,000 is within the City of Vero Beach (Source: City of Vero Beach Water and Sewer Department, 2007).

The City has approximately 1,477 residences on septic tanks scattered throughout the city. The primary concentration of residences on septic tanks is on the barrier island, which has approximately 900 septic tank systems.

The 2001 to 2005 annual average daily flow from the City's WWTF was 3.38 mgd. In 2006, the average daily flow was 3.05 mgd, which is approximately 68 percent of its capacity.

The level-of-service standard in the 1992 Comprehensive Plan for wastewater was 101 gallons per capita per day (gpcd). At the recommendation of the City's Water and Sewer Department, the level-of-service standard has been revised to 99 gpcd to reflect the most current data.

It is recognized that gpcd is a very "general" indicator of service, especially for facility capacity planning as it doesn't account very well for non-residential demand. A more valid level-of-service standard would be based on an "equivalent residential or dwelling unit" gallons per day. A specific policy has been incorporated in the amendments to the GOPs that call for reconsideration of the level of service standard for wastewater treatment as part of the upcoming Evaluation and Appraisal Report process.

Potable Water Subelement

The City of Vero Beach Water Treatment Plant has a permitted maximum daily flow capacity of 16.29 mgd. In 2006, the plant's average daily flow was 6.78 mgd and the peak hour flow was 14.8 mgd. The plant has a current surplus capacity of 9.42 mgd.

The water service area is shown in Addendum Figure A-4.01. It includes the entire corporate limits of the City of Vero Beach and Town of Indian River Shores and portions of unincorporated Indian River County. The estimated population served is estimated at 37,407 including all the population of the City of Vero Beach.

The average daily flow is approximately 181 gpcd and the maximum daily flow is 166 gpcd (City of Vero Beach Water and Sewer Department, 2007). The water system has a storage capacity of 5.75 million gallons.

The institution of a wastewater effluent public reuse system in the 1990s dramatically reduced per capita water demand. The existing average flow level-of-service standard in 1992 Comprehensive Plan is 288 gpcd compared to the 181 gpcd in 2006.

The sources of water for the City's system are 35 surficial aquifer wells and 7 Florida aquifer wells. [The locations of the City's production wells are shown on Addendum Figure 4.01.] The primary source of water are the surficial wells with a total rated capacity of 9,200 gallons per minute (gpm).

Water from the Florida aquifer is primarily used for irrigation due to its variable quality. In 1992, the City placed into service a reverse osmosis plant to treat the artesian well water from the Florida aquifer. The City's 7 deep wells into the Florida aquifer have a total rated capacity of 6,000 gpm.

Updated information from the City of Vero Beach Water and Sewer Department regarding annual average and maximum daily per capita flows, minimum system pressure, and storage capacity have been incorporated in the revised level-of-service standards for potable water in the GOPs.

As noted in the Sanitary Sewer Subelement, the use of population based level-of-service standards fails to adequately account for non-residential demand. Therefore, as with wastewater, a policy amendment to the GOPs calls for reconsideration of the level of service standard for potable water as part of the upcoming Evaluation and Appraisal Report process.

Drainage Subelement

The existing drainage system in the City of Vero Beach is depicted on Addendum Figure A-4.03, which is intended to replace Figures 4.6, 4.7, and 4.8 in the adopted Comprehensive Plan. The M-Series Basin is under the primary jurisdiction of the Indian

River Farms Water Control District. The R-Series and Beach Series Basins are under the primary jurisdiction of the City of Vero Beach.

The existing GOPs in Chapter 4 of the Comprehensive Plan call for the City establishing best management practices for on-site detention/retention facilities (Policy 18.2) of Objective 18 and “promotion of stormwater detention and/or retention as a means of improving water quality” (Objective 2). The GOPs contain only a level-of-service standard for quantity of stormwater, but none for quality.

The City’s existing Land Development Regulations require single family to meet drainage requirements, but such development is exempt from stormwater plan requirements for non-single-family development. These stormwater regulations require retention of the first inch of rainfall from the site for projects exempt from St. Johns River Water Management District’s (SJRWMD) permitting process and the requirements of Section 62-25.025(9), FAC, regarding the discharge into Outstanding Florida Waters. Projects that are subject to SJRWMD’s permitting process are required to meet the provisions of Chapters 40C-4, 40C-40, 40C-42, and 40C-44, FAC.

Since the adoption of the 1992 Comprehensive Plan, the State of Florida through its Department of Environmental Protection and Water Management Districts has embarked upon a watershed approach to coordinate and focus on protection and enhancement of natural resources in Florida including surface waters. An integral element to implement this approach was the enactment of the Florida Water Restoration Act of 1999. This legislative act provides a legal framework for development and implementation of Total Maximum Daily Loads (TMDL) that establish for specific water segments, bodies, or watersheds, their assimilative capacity for various pollutants.

TMDLs are to be set by rule of the Secretary of the Department of Environmental Protection and will establish the maximum discharges of pollutants to a water segment or body. With the development and implementation of Basin Management Action Plans, specific allocation loads by individual point and non-point sources will be developed in coordination with major stakeholders. For impaired water bodies, such as the Indian River Lagoon, the waste load allocation budget may include specific Pollutant Load Reduction Goals, which may be used to establish specific level-of-service water quality standards for stormwater.

However, it will be several years or more before this process is completed for the Indian River Lagoon and its individual segments. Until such time, specific level-of-service water quality standards for stormwater need to be incorporated in the Comprehensive Plan GOPs in Chapter 4 and implemented through the City’s Land Development Regulations.

The City’s municipal stormwater sewer system is currently operating under a stormwater discharge permit from FDEP. This permit will be renewed in a couple of years. At that time, it is anticipated that further requirements will be place on the City including

possibly incorporating any regulations resulting from the establishment of TMDLs for the Indian River Lagoon.

The standards applicable to development for incorporation in the Comprehensive Plan are based on the current water quality level of service adopted by Indian River County in its Comprehensive Plan and stormwater performance standards set by the SJRWMD. These standards require retention/detention of the first 1 inch of rainfall on site. Any direct discharges into the Indian River Lagoon require retention/detention of the first 1.5 inches of rainfall.

In addition to these standards, a specific policy is needed and has been added to link the adequacy of stormwater management facilities directly with the Concurrency Management System. The concurrency requirements for stormwater management systems are fully established in the GOPs of the Capital Improvements Element (Chapter 4).

Since the 1992 Comprehensive Plan, the City has embarked on a program to retrofit outfalls from its storm drainage systems with sediment boxes and other best management practices to improve the quality of stormwater entering the Indian River Lagoon. A specific policy calling for the continuation and budgeting of this program is included as an amendment to the GOPs.

Aquifer Recharge Subelement

The DCA ORC specifically states the need for policies to protect “prime aquifer recharge areas.” In reviewing aquifer recharge information provided in the Indian River County Comprehensive Plan and in SJRWMD information, the staff determined that the only potential prime recharge areas within the City of Vero Beach are those for the surficial (“shallow”) aquifer.

The prime recharge areas for the Floridian (“deep”) Aquifer are located outside of Indian River County. A relatively impermeable confining bed between the surficial and Floridian Aquifer in Indian River County limits interchange of waters between the two aquifers and therefore, reduces the potential for any significant recharge of the Floridian Aquifer from rainfall within the City of Vero Beach.

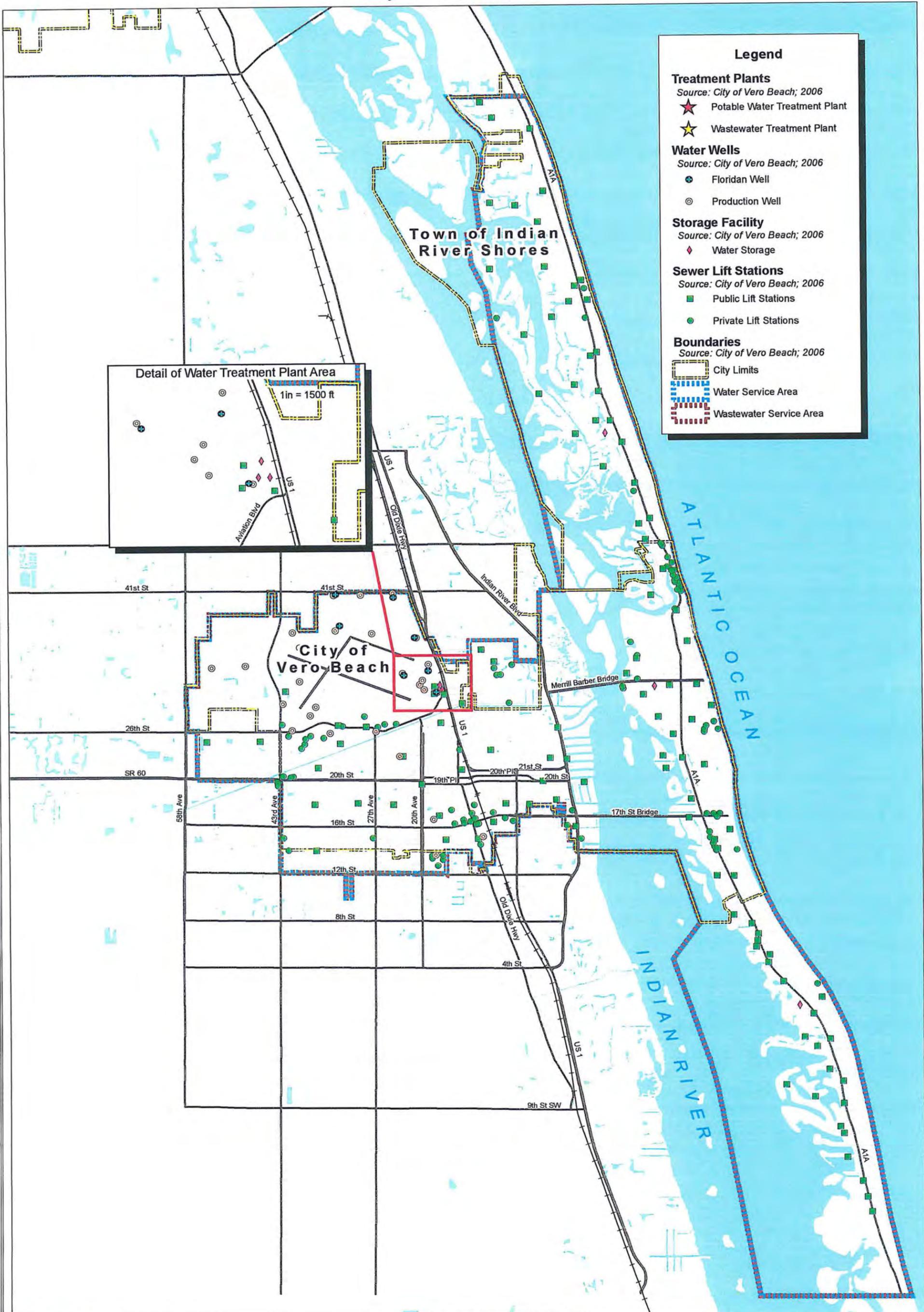
Although the SJRWMD has not completed any specific groundwater modeling of the surficial aquifer within the City of Vero Beach, the Indian River County Comprehensive Plan has identified the potential prime aquifer recharge areas as lying within the Atlantic Coastal Sand Ridge including palustrine wetlands in proximity to the ridge. This soils associated with the Atlantic Coastal Sand Ridge are “moderately well drained” to “excessively well drained” soils (Atatula-Archibold-St. Lucie). These “moderately well to excessively well drained” soils are depicted on “Soils and Drainage Characteristics,” Addendum Figure A-4.02.

Indian River County and the City of Sebastian have already adopted Comprehensive Plan policies and Land Development Regulations to protect recharge areas lying along the Atlantic Coastal Sand Ridge. The amendments to the Comprehensive Plan for recharge protection generally mirror those enacted by the County and City of Sebastian. Basically, these policies are intended to limit the potential for pollutants to enter the aquifer; protect the recharge capabilities of the aquifer by limiting the expansion of impermeable surfaces; and, protect existing percolating underlying soils from depletion.

The amendments to the GOPs for the Aquifer Recharge Subelement recognize the need for further study and mapping before regulations are enacted and specific timeframe for their adoption. However, as a significant portion of the aquifer recharge area is already publicly owned, a policy amendment has been made to designate as an “Area of Special Concern for Groundwater Protection,” all lands with “moderately well drained to excessively well drained” soils depicted on Addendum Figure 4.02. Until regulations are enacted pursuant to new Policy 21.3, any development on public lands will be required to be compliant with Policy 21.4.

Water and Wastewater Facilities

City of Vero Beach



Legend

Treatment Plants
Source: City of Vero Beach; 2006

- ★ Potable Water Treatment Plant
- ★ Wastewater Treatment Plant

Water Wells
Source: City of Vero Beach; 2006

- Floridan Well
- Production Well

Storage Facility
Source: City of Vero Beach; 2006

- ◆ Water Storage

Sewer Lift Stations
Source: City of Vero Beach; 2006

- Public Lift Stations
- Private Lift Stations

Boundaries
Source: City of Vero Beach; 2006

- - - City Limits
- - - Water Service Area
- - - Wastewater Service Area

Detail of Water Treatment Plant Area

1 in = 1500 ft

US 1

Aviation Blvd

Old Dixie Hwy

Scale: 1 in = 5000 ft

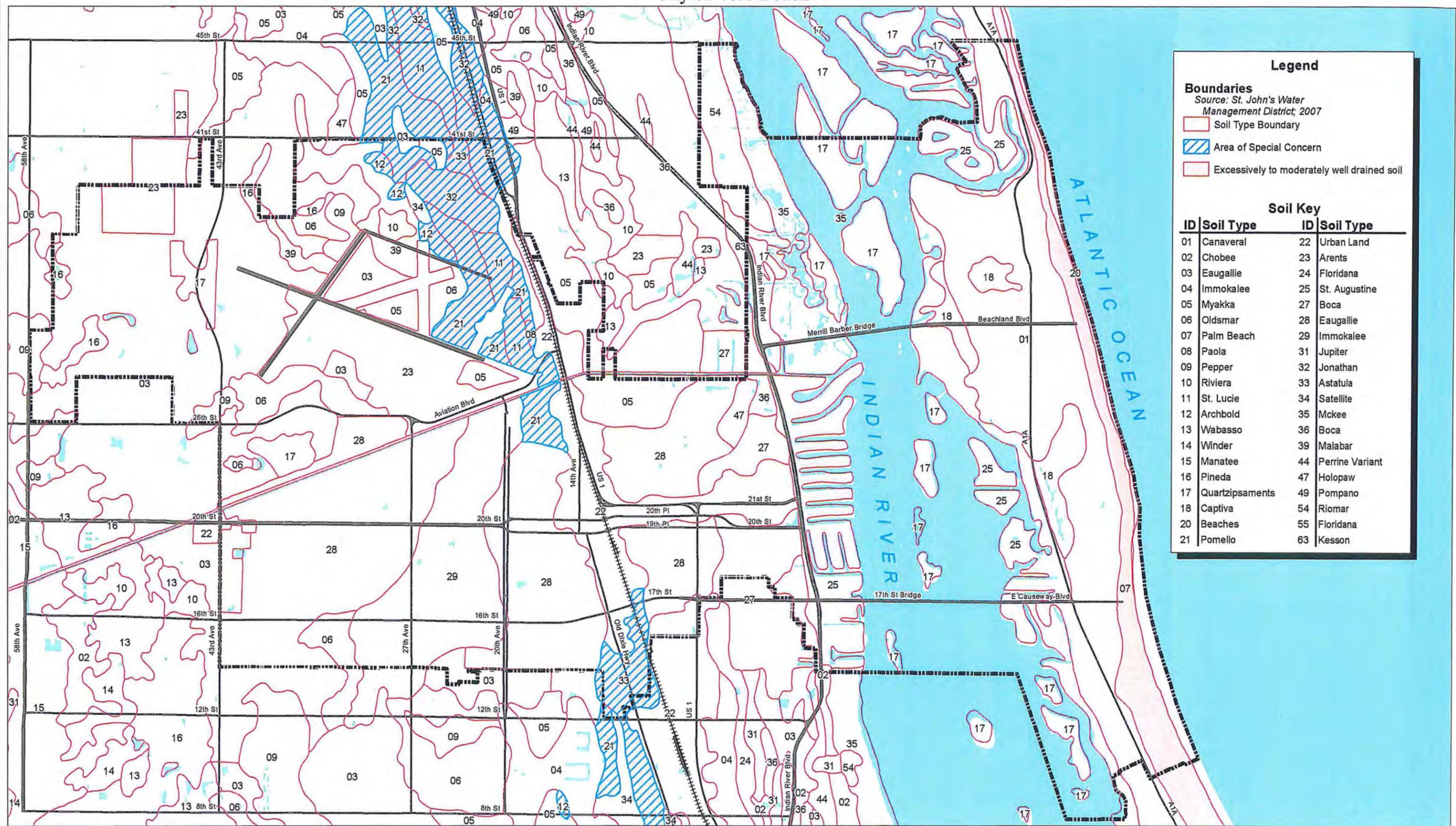
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Department of Public Works
GIS Division
January 23, 2007



Area of Special Concern

City of Vero Beach



Legend

Boundaries
 Source: St. John's Water Management District, 2007

- Soil Type Boundary
- Area of Special Concern
- Excessively to moderately well drained soil

Soil Key

ID	Soil Type	ID	Soil Type
01	Canaveral	22	Urban Land
02	Chobee	23	Arents
03	Eaugallie	24	Floridana
04	Immokalee	25	St. Augustine
05	Myakka	27	Boca
06	Oldsmar	28	Eaugallie
07	Palm Beach	29	Immokalee
08	Paola	31	Jupiter
09	Pepper	32	Jonathan
10	Riviera	33	Astatula
11	St. Lucie	34	Satellite
12	Archbold	35	Mckee
13	Wabasso	36	Boca
14	Winder	39	Malabar
15	Manatee	44	Perrine Variant
16	Pineda	47	Holopaw
17	Quartzipsaments	49	Pompano
18	Captiva	54	Riomar
20	Beaches	55	Floridana
21	Pomello	63	Kesson

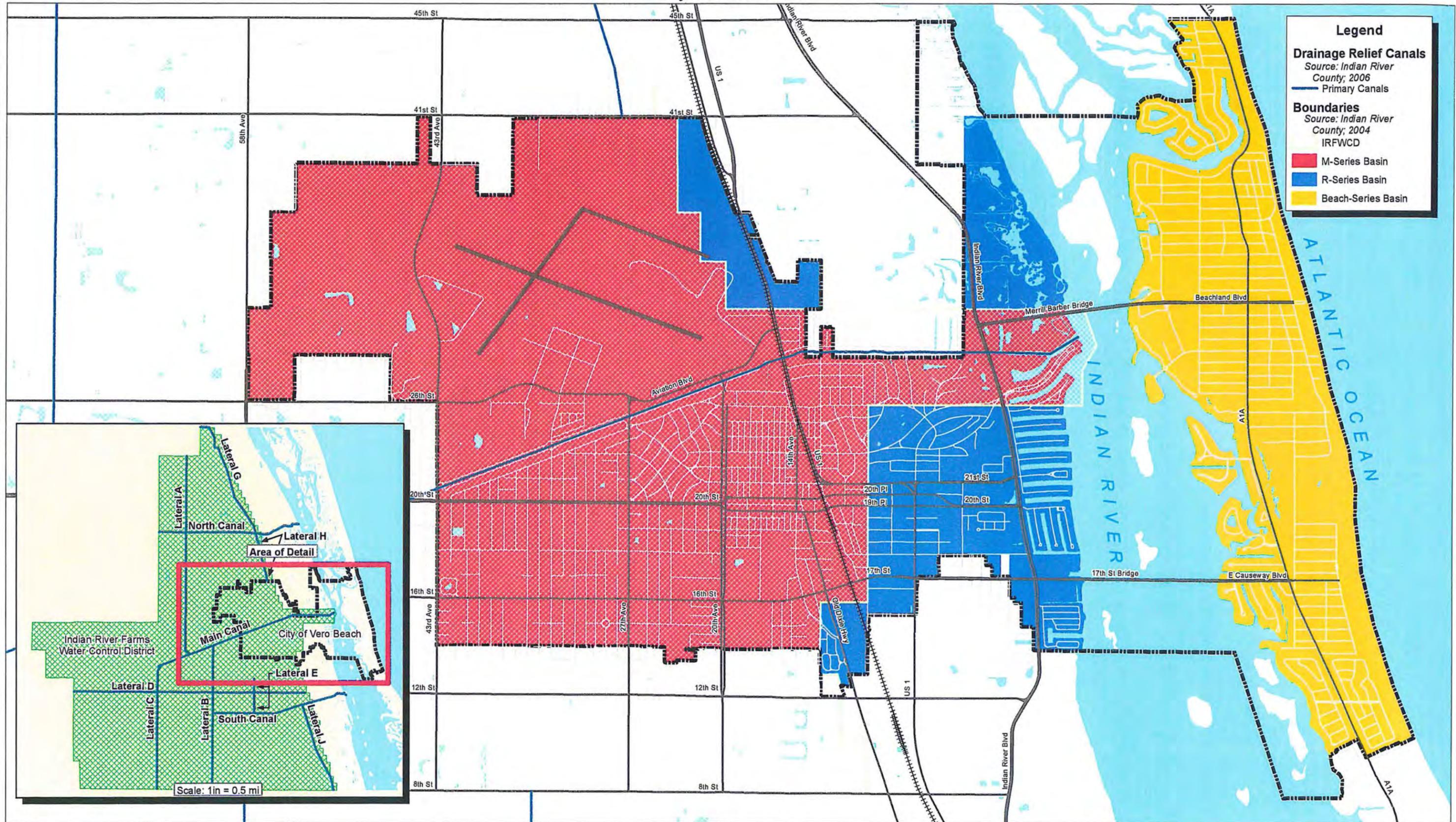
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 February 06, 2007

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Existing Drainage System City of Vero Beach



Legend

Drainage Relief Canals
Source: Indian River County; 2006
— Primary Canals

Boundaries
Source: Indian River County; 2004
IRFWCD

- M-Series Basin
- R-Series Basin
- Beach-Series Basin

Scale: 1 in = 2500 ft

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Department of Public Works
GIS Division
February 8, 2007

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**TECHNICAL SUPPORT DOCUMENT A-5
CHAPTER 5, COASTAL MANAGEMENT ELEMENT
CITY OF VERO BEACH COMPREHENSIVE PLAN**

INTRODUCTION/BACKGROUND

The intent of this document is to provide a summary of the technical information that supports the amendments to the Coastal Management Element, Goal, Objectives, and Policies (GOPs) of the Comprehensive Plan. The amended GOPs have been prepared in response to the State of Florida, Department of Community Affairs' (DCA), Objections, Recommendations and Comments (ORC) Report.

DCA Objection and Recommendation 6, restated below for reference, describes the issues that need to be addressed in the Coastal Management Element of the Comprehensive Plan.

Objection:

The City's EAR-based amendments do not address post-disaster redevelopment, and the need for policies to address how the City will relocate, mitigate, or replace infrastructure in the coastal high hazard area. Additionally, to further hazard mitigation and post-disaster redevelopment initiatives in the future, the City has not mapped coastal high hazard areas within its jurisdiction, based on the evacuation zone for a Category 1 hurricane, or included a map or maps of these areas as part of the Future Land Use Map series [Rules 9J-5.003(17), 9J-5.006(4)(b) 6., 9J-5.012(3)(c) 5., 9J-5.12(3)(c)8., F.A.C. Section 163.3177(g), F.S.].

Recommendation:

Adopt policies for the Coastal Management Element to address post-disaster redevelopment, and to relocate, mitigate, or replace infrastructure in the coastal high hazard area if State funding is needed. To further hazard mitigation and post-disaster redevelopment initiatives, include a map or maps of all coastal high hazard areas within the City and include these maps as part of the Future Land Use Map series in the Future Land Use Element. Of note, the coastal high hazard area to be mapped is the evacuation zone for a Category 1 hurricane.

DATA AND ANALYSIS

This section provides a brief summary of the data and analysis for the amendments to Chapter 5, Coastal Management Element, consistent with Rule Chapters 9J-5 and 9J-11, Florida Administrative Code and Chapter 163, Part II, Florida Statutes. The data and analysis within the Coastal Management Element shall be updated with the next

Evaluation and Appraisal Report (EAR), which is due by September 1, 2010. In addition to the summary included in this section, additional data and analysis is provided in individual chapters of the amendments to the Comprehensive Plan.

The text amendments to the Coastal Management Element, Goals, Objectives and Policies (GOPs), are based on existing data and analysis provided in the adopted Vero Beach Comprehensive Plan dated July 21, 1992.

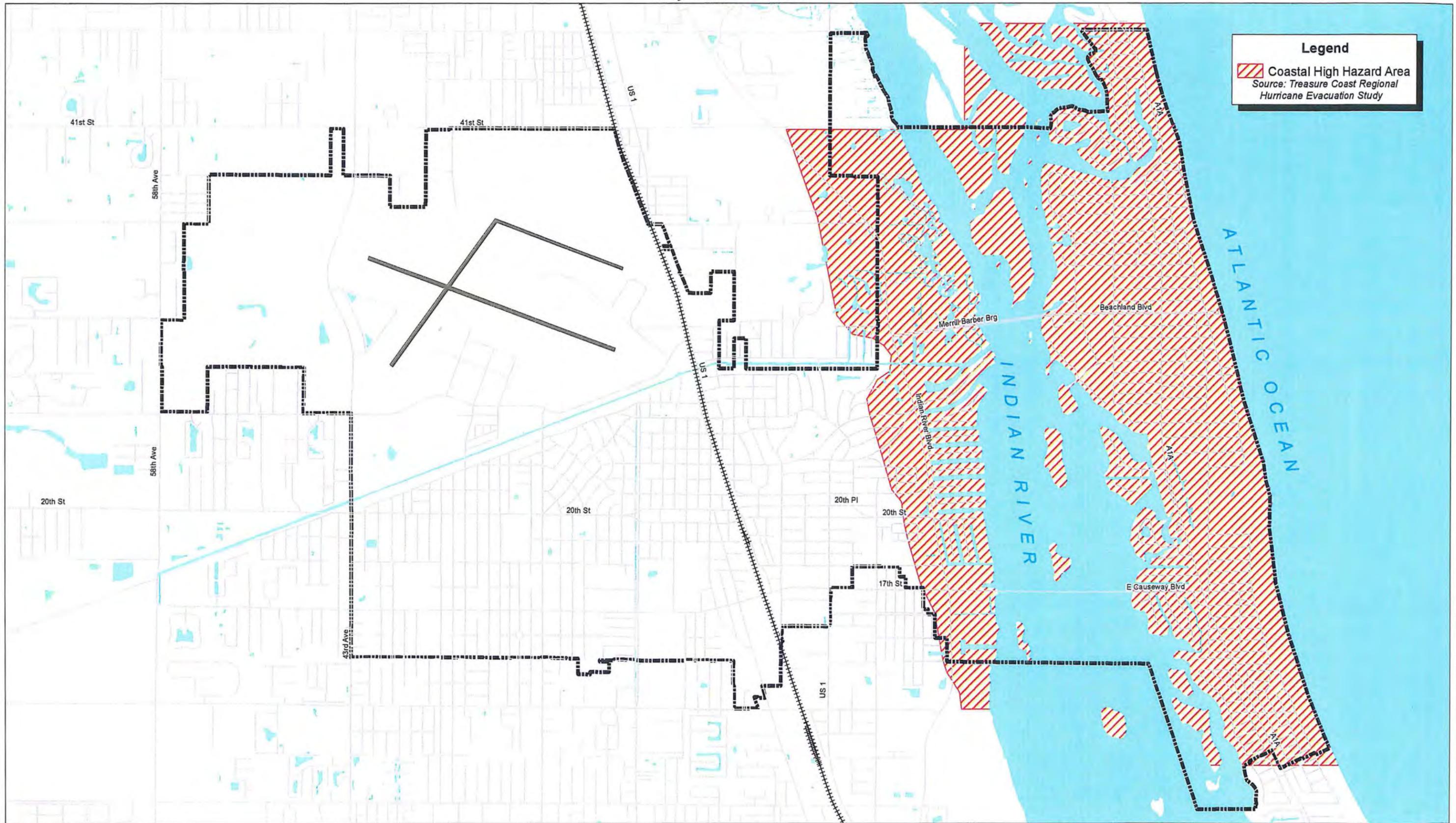
The GOPs amendments address post-disaster redevelopment and replacement of infrastructure in the coastal high hazard area. Included in the amendments are policies that were added to consider appropriate comprehensive plan amendments based on Hazard Mitigation and Local Mitigation Strategy reports, in cooperation with Indian River County and other local governments, as part of the 2010 Evaluation and Appraisal Report (EAR).

Addendum Figure A-5.01 depicts the Coastal High Hazard Area (CHHA). In 1999, the CHHA included the evacuation zone and storm surge line for a Category I hurricane. The CHHA includes the barrier island and the area generally east of US1 on the mainland and is consistent with the County's CHHA designation map.

It should be noted that the State recently revised the definition of the CHHA to be the area below the elevation of the Category I storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. The new CHHA boundary line will not be available from the State until sometime in mid-2008.

Coastal High Hazard Zone

City of Vero Beach



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Department of Public Works
GIS Division
February 28, 2007

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**TECHNICAL SUPPORT DOCUMENT A-6
CHAPTER 6, CONSERVATION ELEMENT
CITY OF VERO BEACH COMPREHENSIVE PLAN**

INTRODUCTION/BACKGROUND

The intent of this document is to provide a summary of the technical information that supports the amendments to the Conservation Element (Chapter 6), Goal, Objectives, and Policies (GOPs) of the Comprehensive Plan. The amended GOPs have been prepared in response to the State of Florida, Department of Community Affairs' (DCA), Objections, Recommendations and Comments (ORC) Report.

DCA Objection and Recommendation 7, provided below, describes issues that need to be addressed in the Conservation Element of the Comprehensive Plan.

DCA Objection:

The City's EAR-based amendments do not include policies for the Conservation Element that address the requirements of Rule 9J-5.013, F.A.C., for the protection of natural resources, including wildlife, wildlife habitat, groundwater, water resources, and wetlands. [Rules 9J-5.013(3), F.A.C. Section 163.3177(6)(d), F.S.]

DCA Recommendation:

Adopt objectives and policies to protect and conserve the natural functions of wetlands through a comprehensive planning process that includes consideration of the types, values, functions, sizes, conditions, and locations of wetlands, and which are based on supporting data and analysis. Future land uses which are incompatible with the protection and conservation of wetlands and wetland functions shall be directed away from wetlands. The type, intensity or density, extent distribution and location of allowable land uses, and the types, sizes, values, functions, conditions, and location of wetlands are land use factors which shall be considered when directing incompatible uses away from wetlands.

Additionally, DCA Objection and Recommendation 2, discussed in the Technical Support Addendum to the Land Use Element, identifies issues related to groundwater and wellhead protection addressed in the Conservation Element of the Plan. DCA recommendations to address these issues include preparation of map(s) depicting the location of existing public potable water wells and wellhead protection areas and *adopt policies that ensure the protection of potable water wells and wellhead protection areas and that designate appropriate uses within well field protection areas.*

DATA AND ANALYSIS

This section provides a brief summary of the data and analysis for the proposed amendments to Chapter 6, Conservation Element, consistent with Chapters 9J-5 and 9J-11, Florida Administrative Code (F.A.C.) and Chapter 163, Part II, Florida Statutes. The data and analysis within the Conservation Element shall be updated with the next Evaluation and Appraisal Report (EAR), which is due by September 1, 2010.

The amendments to the Conservation Element, Goals, Objectives and Policies (GOPs), are based on existing data and analysis provided in the adopted Vero Beach Comprehensive Plan dated July 21, 1992. Additional data and analysis are provided in this addendum to update or fill in any voids in information pertinent to these plan amendments.

Groundwater and Wellhead Protection

Addendum Figure A-6.01 shows the location of the wellhead protection areas. The wellhead protection areas encompass a 500-foot radius around each of the public potable water production wells.

As most of these wellhead areas are located on public lands, the City has regulated any development within these areas based on the requirements of Chapter 62-251, F.A.C. On private property, the City has a utility policy to acquire by lease or easement a minimum of 100-foot radius around each production well to protect public water supply wells from contamination.

The policies for groundwater (Objective 3) have been amended to include specific standards and criteria for protection of public potable water production wells. These policies incorporate the requirements of Chapter 62-251, F.A.C. New policies have been added to the Conservation Element requiring the City to adopt amendments to its Land Development Regulations consistent with Chapter 62-521, F.A.C.

Other new policies address depletion of the surficial aquifer. These policies complement new policies established for protection of the aquifer recharge area in Chapter 4 of the Comprehensive Plan.

Wetlands

Addendum Figure A-6.02 depicts the location of the existing wetlands based on information provided by the St. Johns River Water Management District (SJRWMD). This map shall serve on an interim basis as the wetlands map for the Comprehensive Plan until a more detailed series of maps is completed by December 2008 pursuant to amended Policy 9.1 under Environmentally Sensitive Lands.

The City currently has few specific standards or policies governing the protection of wetlands and Indian River Lagoon in either its Comprehensive Plan or Land

Development Regulations. The major governing policies and regulations affecting protection and development of wetlands have been primarily left up to the Florida Department of Environmental Protection and U.S. Army Corps of Engineers. However, the City does not approve any development project subject to the jurisdiction of these agencies without the cognizant agency's approval or issuance of a permit.

Significant amendments have been made to the GOPs in Chapter 6 of the Comprehensive Plan to address this policy and regulatory gap. The wetland policies reflect the recommendations of the *Final Report of the Committee for a Sustainable Treasure Coast* (2005); strategies and policies for the protection of estuarine resources and wetlands in the Natural Resources Element of the Treasure Coast Planning Development Council's Strategic Regional Policy Plan (1995); and wetland objectives and policies in the Conservation Element of the Indian River County Comprehensive Plan.

The GOPs of the Conservation Element of the Comprehensive Plan have been amended to include a new objective and supporting policies specifically for wetlands. To ensure that these policies are implemented, amendments to the City's Land Development Regulations are required by December 1, 2008.

This new objective and supporting policies accomplish the following:

- O Provides a definition for wetlands based on the Florida Statutes.
- O Classifies wetlands into three categories for protection and resource management with Class I wetlands having the highest priority for protection and Class III wetlands the lowest priority.
- O Provides specific standards for protection of wetland categories including standards for development activity within each category.
- O Requires a native upland vegetative buffer, called a "wetlands buffer zone," between upland development and Category I and II wetlands or between upland development and the Indian River Lagoon and connected natural surface waters.
- O Limits filling of wetlands to Category III wetlands.
- O Provides for clustering of development located outside wetland areas.
- O Requires that a conservation easement be placed on wetlands identified for preservation, constructed wetlands and wetland buffer zones.

Environmentally Sensitive Lands

Policy 8.1 of the Comprehensive Plan calls for mapping of environmentally sensitive lands by March 31, 1991. The City has not completely mapped these natural resource lands to the degree necessary for adequate planning and resource protection.

The wording of existing Policy 8.1 and its placement as a policy under “Environmentally Sensitive Lands” created confusion in interpretation. In the Comprehensive Plan, this term refers to both specific sensitive environmental features and a Future Land Use Map designation. Further confusion is added by a list of features, such as the 100-year floodplain, that are not really “environmentally sensitive” lands in the same sense as wetlands or endangered species habitat.

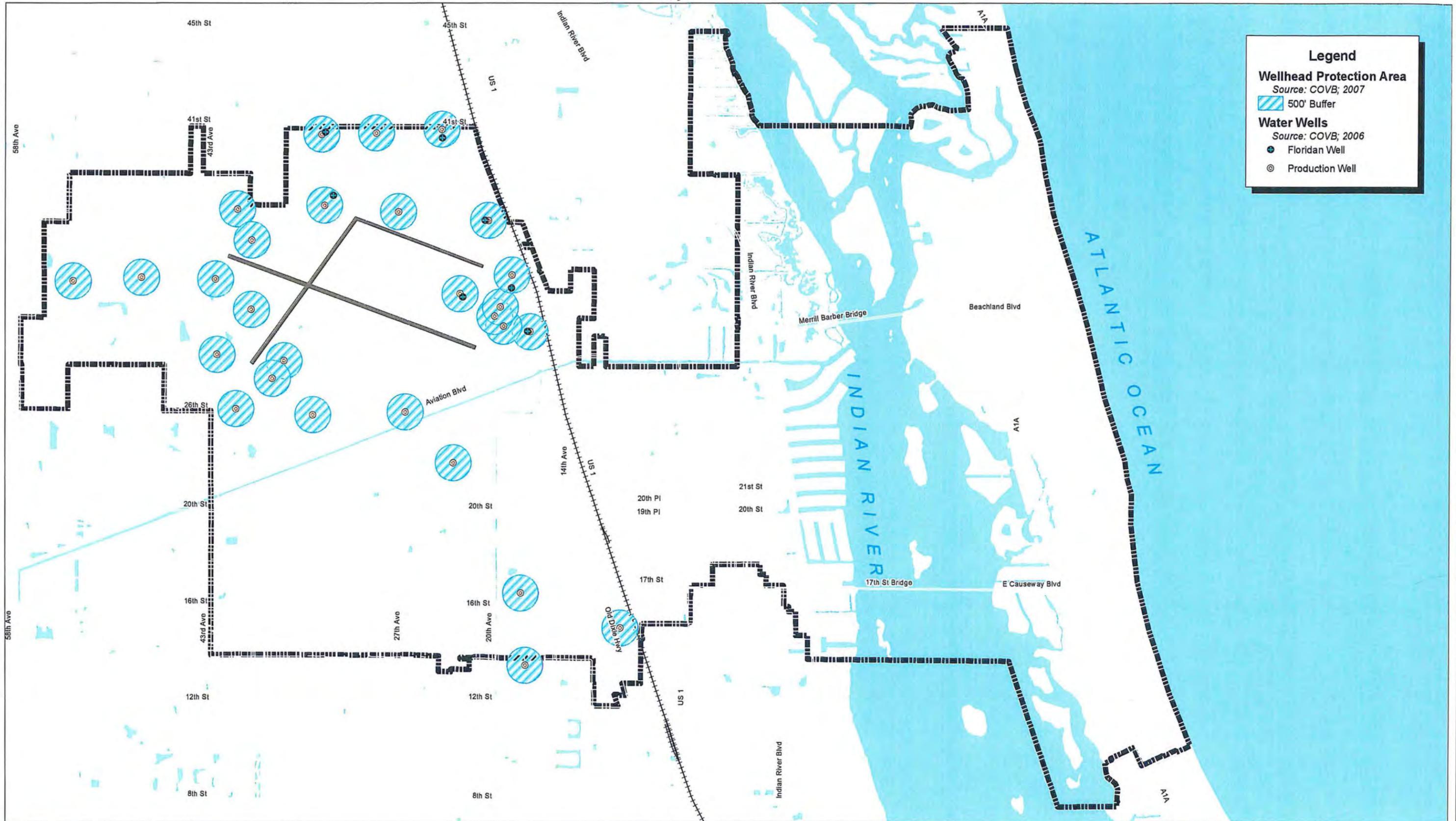
To clarify matters, Policy 8.1 has been replaced by new Policy 9.1 that requires a map(s) of “significant natural resources” be completed by December 1, 2008. The specific environmental features to be mapped have been revised to eliminate those features not considered as a significant natural resource (i.e., 100-year flood plain) or an evaluation factor for identification of an environmental feature (i.e., tidal flow pattern or hydric soils). Added to the list are such environmental features as “wetlands” and “upland habitat” as recommended by DCA in its ORC report.

Policy 9.1 also establishes a date of July 1, 2009, to adopt amendments to the Land Development Regulations to protect these natural resources. Policy 5.2 (now 6.2) under Wildlife, Wildlife Habitat (Objective 6), has been revised to reflect this change [It should be noted that Policy 3.10 under the Wetlands requires amendments to the Land Development Regulations to be adopted by December 1, 2008].

Other policies under existing the Environmentally Sensitive Lands objective have been revised to reflect that the policies pertain to lands designated as Environmentally Sensitive on the Future Land Use Map.

Wellhead Protection Areas

City of Vero Beach



Legend

Wellhead Protection Area
Source: COVB; 2007

500' Buffer

Water Wells
Source: COVB; 2006

● Floridan Well

⊙ Production Well

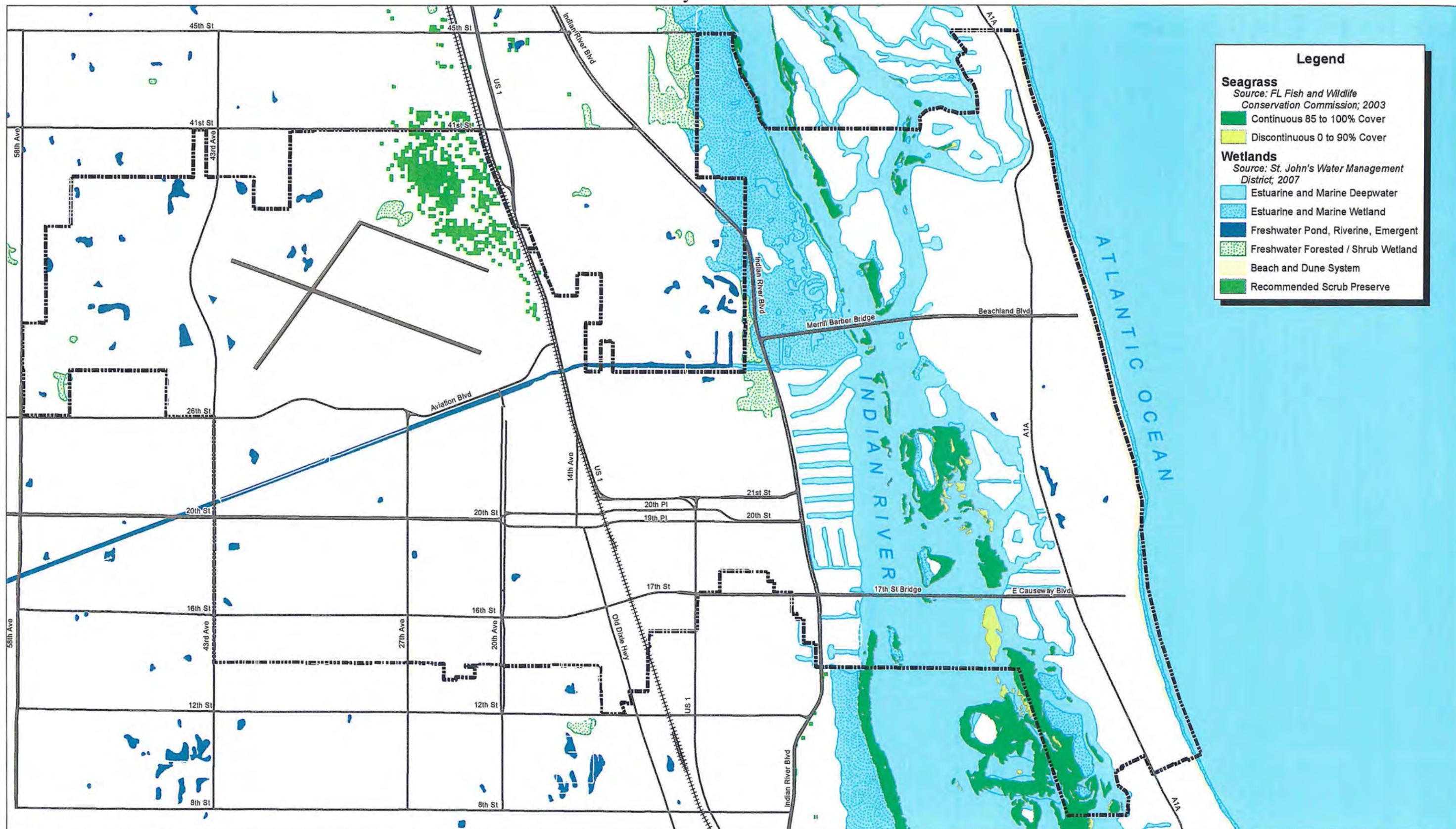
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Wetlands and Seagrass

City of Vero Beach



Legend

Seagrass
 Source: FL Fish and Wildlife Conservation Commission; 2003

- Continuous 85 to 100% Cover
- Discontinuous 0 to 90% Cover

Wetlands
 Source: St. John's Water Management District; 2007

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Pond, Riverine, Emergent
- Freshwater Forested / Shrub Wetland
- Beach and Dune System
- Recommended Scrub Preserve

Scale: 1 in = 2500 ft

Created by Marcus Bradley
 City of Vero Beach
 Department of Public Works
 GIS Division
 February 15, 2007

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TECHNICAL SUPPORT DOCUMENT A-7
CHAPTER 7, RECREATION AND OPEN SPACE ELEMENT
CITY OF VERO BEACH COMPREHENSIVE PLAN

INTRODUCTION/BACKGROUND

The intent of this document is to provide a summary of the supporting technical data and information for the amendments to the Goal, Objectives, and Policies (GOPs) of the Recreation and Open Space Element (Chapter 7) of the Comprehensive Plan. The amended GOPs have been prepared in response to the State of Florida Department of Community Affairs' (DCA) Objections, Recommendations, and Comments (ORC) Report issued, pursuant to Rule 9J-11.010, Florida Administrative Code (F.A.C.).

Although the ORC report did not raise any specific objections regarding Chapter 7, Recreation and Open Space Element, DCA's Recommendation to Objection 1 calls for the City to "*Adopt necessary goals, objectives, and policies to establish a concurrency management system that meets the requirements of Rule 9J-5.0055, F.A.C.*" In preparing the necessary GOPs to establish a compliant concurrency system (see Chapter 9, Capital Improvements Element, GOPs), City staff reviewed existing level of service standards for recreational facilities and open space to determine if the standards in the 1992 Comprehensive Plan were current and relevant and, if not, to make necessary amendments to these standards and associated GOPs.

DATA AND ANALYSIS

The review of the existing level of service standards for recreation and open space relied upon the data and analysis provided in the adopted Vero Beach Comprehensive Plan dated July 21, 1992, except that population used in ascertaining compliance with standards was based upon updated data presented in the Technical Support Document Addendum to Chapter 3, Housing Element. The data and analysis within this element of the Comprehensive Plan will be updated with the next Evaluation and Appraisal Report, which is due by September 1, 2010.

In review of the existing level of service standards in the Comprehensive Plan, two specific problems were identified:

- O The level of service standards of Policy 3.1 are not listed in Table 9.4 (Capital Improvements Element) which is intended to be a list of level of service standards for facilities required by Rule 9J-5.0055, F.A.C. Table 9.4 does include levels of service for recreation facilities referenced by Policy 3.2 in Table 7.3.
- O Policy 3.2 establishes levels of service standards for numerous recreational facilities identified in Table 7.3, which are mirrored in Table 9.4. Although these standards have value for planning purposes in the

development of recreational facilities, the City does not believe that these specific recreational facilities should be used for concurrency purposes as defined under Chapter 163, Florida Statutes. The general levels of service standards in Policy 3.1 are considered to be the more appropriate measures for the City's recreational facilities.

In Chapter 3, Housing Element of the Comprehensive Plan, estimates and projections on the City's permanent population are presented, including methodology and source materials used in its preparation. The population estimates and projections through 2010 show that the City is meeting and will continue to meet the concurrency requirements for recreation and open space through 2010.

It should be noted that the City of Vero Beach has an estimated seasonal population of approximately 3,000 persons. Although, even if seasonal population is included, the City would still meet concurrency for recreational facilities as part of the preparation of the upcoming Evaluation and Appraisal Report some consideration should be given to taking into account the seasonal population when reviewing the levels of service for recreational facilities due to the demand on facilities from seasonal residents and tourists.

**TECHNICAL SUPPORT DOCUMENT A-9
CHAPTER 9, CAPITAL IMPROVEMENTS ELEMENT
CITY OF VERO BEACH COMPREHENSIVE PLAN**

INTRODUCTION/BACKGROUND

The intent of this document is to provide a summary of technical data and information for amendments to the Goal, Objectives, and Policies (GOPs) of the Capital Improvements Element (Chapter 9) of the Comprehensive Plan. The amended GOPs have been prepared in response to the State of Florida Department of Community Affairs' (DCA) Objections, Recommendations, and Comments (ORC) report, issued pursuant to Rule 9J-11.010, Florida Administrative Code (F.A.C.).

The DCA Objection and Recommendation 1, restated below for reference, describes the issue about the lack of any GOPs for establishing a concurrency management system:

DCA Objection 1:

Although the City has level of service standards and concurrency requirements for development, the City has not adopted goals, objectives, and policies in the plan to establish a concurrency management system, pursuant to Rule 9J-5.0055, F.A.C.

Recommendation:

Adopt the necessary goals, objectives, and policies to establish a concurrency management system that meets the requirements of Rule 9J-5-5.0055, F.A.C.

DATA AND ANALYSIS

This section provides a brief summary of the data and analysis for proposed amendments to Chapter 9, Capital Improvements Element, consistent with Chapters 9J-5 and 9J-11, F.A.C. and Chapter 163, Florida Statutes. The data and analysis within the Capital Improvements Element will be completely updated to comply with the provisions of Senate Bill 360 by no later than December 1, 2008.

As specified in the DCA ORC report, the City's Comprehensive Plan has concurrency standards for facilities as required by Rule 9J-5.0055, F.A.C., but established no concurrency management system. Prior to December 2006, the City had been administering concurrency management for roads (coordinated through the Indian River County Community Development Department), stormwater/drainage, water, sewer and recreation through its development review process without any adopted policy or regulatory framework to ensure the availability of public facilities and the adequacy of those facilities, including levels of service.

In December 2006, the City of Vero Beach adopted Chapter 75 to its Land Development Regulations that established a concurrency management system with a “proportionate fair share transportation fee” component as required by the Florida Legislature. This system is consistent with and meets all the requirements for concurrency management, pursuant to Chapter 163, Florida Statutes.

The concurrency system established by amendments to the GOPs in the Capital Improvements Element was prepared based on the requirements of Chapter 9J-5, F.A.C., and Chapter 163, Florida Statutes. In addition to the amendments to the Capital Improvements Element GOPs to establish a concurrency management system, amendments to GOPs regarding concurrency for various public facilities were made to other appropriate elements of the Comprehensive Plan to fully integrate.

Other substantive amendments made to the GOPs are intended to bring the Capital Improvements Element into compliance with comprehensive plan requirements enacted subsequent to the adoption of the City’s Comprehensive Plan in 1992, including the need for integration of concurrency management with the capital improvements process. A significant element of this integration is the requirement for preparation of an annual Public Facilities and Capacity Report in conjunction with the preparation of the annual Capital Improvements Schedule and City’s Five-Year Capital Program.

Table 9.1, “Level of Service Standards (LOS) for Facilities, City of Vero Beach,” has been amended to reflect changes to standards in other amended elements of the Comprehensive Plan.

Table 9.1. Level of Service Standards (LOS) for Facilities, City of Vero Beach

Facility	LOS Standard
<u>Transportation Roads</u>	<u>Level of Service D (Peak Hour)</u>
Principal Arterials and Collectors	Level of Service D (Peak Hour)
All Other Roadways	Level of Service E (Peak Hour)
<u>Sanitary Sewer</u>	
<u>Average Flow</u>	<u>101 99 Gallons Per Capita Per Day gpcd*</u>
<u>Maximum Flow</u>	<u>259 gpcd</u>
<u>Potable Water</u>	
<u>Average Flow</u>	<u>288-181 gpcd GPCD*</u>
<u>Maximum Flow</u>	<u>223 gpcd</u>
<u>Minimum Pressure</u>	<u>40 pounds per square inch (psi)</u>
<u>Storage Capacity</u>	<u>5.75 million gallons (MG)</u>
<u>Solid Waste</u>	<u>6.3 Ppounds Pper Ccapita Pper Dday (ppcd)</u>
<u>Stormwater Drainage</u>	<u>Ten-Year, 24-Hour Storm</u>
<u>Quantity</u>	<u>Ten-Year/24-Hour Rainfall Event</u>
<u>Quality</u>	<u>A minimum on-site retention/detention of first one inch of rainfall - no direct discharge to the Indian River Lagoon</u>
	<u>A minimum retention/detention of first one and one half inches of rainfall - direct discharge to the Indian River Lagoon</u>
<u>Recreation</u>	
<u>Public Recreation and Open Space</u>	<u>5 acres per 1,000 population</u>
<u>Community Parks</u>	<u>1 park per 25,000 population</u>
<u>Neighborhood Parks</u>	<u>1 park per 5,000 population</u>
<u>Marina Wet Slips</u>	<u>Based on DNR Statewide Marina Siting Program (1985, p.30)</u>
<u>Baseball Field</u>	<u>1 per 6,000 Population</u>
<u>Basketball Court</u>	<u>1 per 2,000 Population</u>
<u>Boat Ramps</u>	<u>1 per 2,200 Population</u>
<u>Gymnasium</u>	<u>1 per 6,000 Population</u>
<u>Par Cours</u>	<u>1 per 9,000 Population</u>
<u>Picnic</u>	<u>1 per 2,200 Population</u>
<u>Playfield</u>	<u>1 per 2,000 Population</u>

Table 9.1. (Cont'd) Level of Service Standards (LOS) for Facilities, City of Vero Beach

Facility	LOS Standard
Playground	1 per 2,200 Population
Softball	1 per 6,000 Population
Swimming	1 per 20,000 Population
Tennis	1 per 1,000 Population

~~*To be reduced to 218 by mid-1991 when effluent reuse system becomes operational.~~

*gpcd is "gallons per capita per day."

**APPENDIX IV
TECHNICAL SUPPORT DOCUMENT
ORIGINAL TOWN NEIGHBORHOOD
OBJECTIVE AND POLICIES OF THE
LAND USE ELEMENT OF THE
COMPREHENSIVE PLAN**

Please Note: The data and analysis contained in this addendum supplements the technical support information in Chapters 1 through 7 and 9 and may replace, revise, and supercede specific information contained in those chapters.

**APPENDIX IV
TECHNICAL SUPPORT DOCUMENT
ORIGINAL TOWN NEIGHBORHOOD
OBJECTIVE AND POLICIES OF THE
LAND USE ELEMENT OF THE
COMPREHENSIVE PLAN**

OVERVIEW

This document presents the background data and analysis to support the amendment to the Land Use Element of the City of Vero Beach Comprehensive Plan specifically tailored to the Original Town neighborhood. This amendment establishes an objective and supporting policies for encouraging private development/redevelopment and public infrastructure investment and service decisions in the historic Original Town neighborhood to stabilize and enhance the underlying physical fabric and character of this historic inner city neighborhood.

BACKGROUND

In its adoption of the *Original Town Neighborhood Enhancement Strategies* in 2009, the City Council directed staff to thoroughly review, refine, modify and/or expand strategies contained in that document designated as a City responsibility. Subsequently, the *Vero Beach Evaluation and Appraisal Report for the City of Vero Beach Comprehensive Plan* adopted by the City Council on September 21, 2010, recommended that the Land Use Element be amended to include an objective and set of supporting policies for the Original Town neighborhood based on the adopted neighborhood enhancement strategies.

Using the *Original Town Neighborhood Enhancement Strategies* as the starting basis for this effort, the staff prepared an objective and set of supporting policies for the Original Town neighborhood. The initial draft objective and set of policies went through numerous reiterations based on input at several Planning and Zoning Board public workshops including a Planning and Zoning Board evening workshop held in the Original Town neighborhood in March of 2014.

Neighborhood Profile

The Original Town neighborhood is the oldest residential neighborhood in the City. It was part of the first subdivision established by the Indian River Land Company in 1913 that eventually became the Town of Vero.

The neighborhood has an estimated population of less than 380. The 2010 U.S. Census shows a total of 221 housing units of which 185 units were occupied for a vacancy rate of 16% compared to a City-wide vacancy rate of 27%. [Vacancy rate includes seasonal housing.] Approximately 26% of the occupied units are owner occupied compared to a City-wide figure of around 65%.

Of the total of 221 housing units, it is estimated that 71 are in single-family structures and 150 units in structures or on lots with 2 or more units. A survey of the condition of housing structures in the neighborhood conducted by staff in 2009 found that the overall condition of

housing to be good. Except for a few isolated cases, the condition of housing has not materially changed since that survey.

Based on the 2009 survey, single-family uses account for 22.4 percent (14.1 acres), multi-family uses 14.9% (9.4 acres), commercial/office 7.5% (4.8 acres), public/institutional 54.3% (34.3 acres), and vacant 0.9% (.6 acres) of the total 63.2 acres comprising the neighborhood (excluding rights-of-way). The majority of the neighborhood (72.2%) is zoned RM-10//12 Multi-family residential at 10 units per acre. The remainder of the neighborhood is designated under one of three different nonresidential districts.

Specific socio-economic data for the neighborhood is unavailable as much of this data is only available by census tract or group block data which are larger in area than the neighborhood. Furthermore, the boundaries of the 2000 and 2010 Census Tract and block group data that contain the neighborhood differ.

However, based on extrapolated 2010 U.S. Census data the population of the neighborhood is considerably younger than the City's population. The percentage of the neighborhood's population age 65 and older is approximately half of that for the City (28.4%) as a whole. The percentage of the population under age 18 is slightly less than that for the City (18.9%).

Census data on education and household income at the block group level is unavailable as of this writing. However, the 2000 U.S. Census showed that the neighborhood's population was less educated than the city's population as a whole. Based on the 2009 *American Community Survey* prepared by the U.S. Census the median household income was 10 percent less than that for the City.

DATA AND ANALYSIS

The following is the background data and analysis that provided the policy basis and rationale for the amendment to the Land Use Element:

1.4.2.0 Residential Neighborhood Strategies

A new category is added to the Land Use Element to establish a placeholder in the text for the incorporation of residential objectives and policies for individual residential neighborhoods to be added later.

Objective 12 – Original Town Objective

The grid pattern of the neighborhoods streets and alleyways serves as the “bones” or basic framework of the historic neighborhood. This pattern encourages dispersion of traffic and improves connectivity for cars and pedestrians.

It serves to provide strong connections between the neighborhood and the downtown and other inner city neighborhoods. The alleys allow service delivery and parking in the rear of residences rather than on the narrow residential streets in the neighborhood.

Over the years, the historic street grid established has been disrupted through the vacating of streets and alleyways. In particular, 19th Avenue between 23rd and 22nd Streets and 22nd Street between 15th and 17th Avenues were abandoned to accommodate the expansion of large religious institutions. These abandonments have led to loss of connectivity and further facilitated the expansion of non-residential uses south of 23rd Street.

Since the 1970's, the residential area of the neighborhood south of 23rd has experienced expansion of commercial, institutional and public uses replacing the predominately residential uses in that area. By comparing recent survey data compiled by staff with data from the 1970 City Atlas, more than 70 single family residences have been lost from the neighborhood blocks south of 23rd Street since 1970.

The average density of single family development is approximately 5 units per acre. Duplex and multi-family uses average 15.8 units per acre. The overall density of existing residential uses is about 9.4 units per acre.

The average density of existing multi-family and single family developed properties is higher than the allowed under the existing RM-10/12 zoning district. Many of the lots in terms of width, area, and setbacks with existing residential development don't meet the current Code as most of the properties were developed before significant amendments were enacted to the City's zoning regulations in the 1980's.

Some vesting provisions exist in the Code for lots of record; however, the existing zoning is restrictive for new residential development, limiting opportunities for redevelopment and infill to more efficiently utilize available land, further stabilize the neighborhood and expand the residential population base. These restrictions may lessen the pressure to demolish these historic residential structures, but make redevelopment of these properties more difficult. (See discussion of Policy 12.6)

The RM-10/12 zoning district covers more than 72 percent of all property within the neighborhood. In addition to residential uses and congregate living facilities, this zoning allows by conditional use approval, places of worship, day care facilities, cultural activities, educational institutions, golf courses and country clubs, and public and private facilities.

Certain vested conditional uses, such as offices and medical clinics, were permitted in the neighborhood until the City's zoning regulations were amended in 2003. These vested conditional uses are given flexibility under special vesting provisions that allow limited expansion of these uses or even a change to other conditional uses that were previously allowed in the RM-10/12 zoning district.

This historical pattern of approving new or expanded conditional uses has resulted in an estimated 46 percent of the parcels zoned RM-10/12 located south of 25th Street to be occupied by an approved conditional use. Such approvals have contributed to the further erosion of the residential character and viability of the historic neighborhood and to low home ownership rates.

This impact is somewhat reflected in a homeownership rate of 26 percent according to the 2010 U.S. Census compared to the rate for the City as a whole. Such a low rate of homeownership is not unexpected in a neighborhood where only a quarter of the housing units are single-family detached and the population is younger, with lower household incomes and more transient than in other parts of the City.

Significantly, the reduction in the number of housing units and the decrease in average household size has reduced the total resident population of the neighborhood to less than 380. To be a viable and sustainable neighborhood, Original Town needs increased residential development to expand its base of residential stakeholders. Increased housing opportunities will benefit from the connectivity and short walking distance to most parts of the historic downtown. Not only does this proximity to the downtown benefit residential development in the neighborhood, but it also benefits the downtown by giving it the increased customer base to sustain its retail, entertainment, and cultural establishments.

The proposed objective specifically addresses these issues through its supporting policies. It is based on the consolidation into one overall objective of the goals from each of the various elements of the *Original Town Neighborhood Enhancement Strategies*.

The predominate theme of the objective statement is neighborhood preservation through a mixture of development and public/private investment decisions, policies, and programs to stabilize the underlying physical framework of the historic residential neighborhood while limiting further intrusion of incompatible nonresidential uses into remaining predominately residential areas. Clearly stated is the need to attract additional residential growth to both stabilize and improve the viability and sustainability of the historic neighborhood.

Policy 12.1 – Boundary Map

The physical boundaries of the Original Town neighborhood must be identified in the Comprehensive Plan, since the proposed objective and policies are to be specifically applied to this geographic area. The boundary map in Figure 1-6 is drawn directly from the *Original Town Neighborhood Enhancement Strategies*. The physical boundaries of the neighborhood were determined with the active participation of the Original Town Neighborhood Association and residents.

Policy 12.2 – Neighborhood Contact Organization

A significant contribution to the viability and stability of any residential neighborhood is the need for an open, working relationship between its stakeholders (residents and property and business owners) and the City as well as other governmental and nongovernmental organizations. This policy recognizes the need to facilitate and build such a relationship.

It is preferable for the City to have one or more local contact organizations rather than relating to numerous individual residents and business and property owners. Such an approach allows the City to better allocate its limited resources to addressing neighborhood issues and coordinating services and infrastructure improvements. It also assists in bringing stakeholders together to

address issues of mutual concern, recognizing that the responsibility for the viability and stability of the neighborhood rests primarily with the stakeholders themselves.

Policy 12.3 – Prohibition on Vacating of ROW

As noted under the analysis of the objective statement above, the historic grid street system in the neighborhood has been disrupted and connections lost due to vacating of streets for the expansion of nonresidential uses. This policy supports the objective to preserve the grid system by denying property-owner initiated petitions for abandonment of public right-of-way. It does not preclude any City sponsored action to vacate right-of-way.

Policy 12.4 – Restrictions on Rezoning to Nonresidential Uses.

Although the “Great Recession” has had a dampening effect on conversion of residential lands to commercial and institutional uses, over the years, nonresidential uses have expanded in the neighborhood. This expansion has been principally in the southern portion of the neighborhood resulting from approvals of new conditional uses or the expansion of existing ones. The remaining residential uses are primarily concentrated in the area north of 22nd Street and south of nonresidential development along 25th Street.

A particular concern is the threat for the rezoning of properties to POI (Professional Office Institutional) as this designation is allowed in areas designated Residential Medium or High under the Comprehensive Plan. Although Policy 1.16 in the Land Use Element ostensibly limits such rezoning to locations “principally” along arterial roadways, it still leaves the door open to rezoning of properties not so situated. The City has still not undertaken a comprehensive review of the POI district regulations as called for in Policy 1.17.

The proposed policy further limits encroachment of nonresidential development into the remaining residential area north of 22nd Street. It establishes new criteria in addition to those in Section 65.22 of the City Code and Policy 1.16 of the Land Use Element of the Comprehensive Plan that must be met in approving any rezoning of property from residential to nonresidential.

Policy 12.5 – Policy to Restrict Further Expansion of Conditional Uses

This proposed policy directly addresses the issue of the encroachment and expansion of conditional uses, which now occupy 46 percent of all property within the neighborhood. In addition to conditional uses, the RM-10/12 zoning district allows by right single family, duplex and multiple-family (10 units/acre) uses, adult congregate living facilities, and nursing homes.

Although the City Code contains specific criteria required to be met in approving a conditional use, history has shown that such criteria have not been entirely effective in protecting this neighborhood from expansion of such uses. In the initial set of policies drafted by the staff, an overlay district was considered that would apply to properties zoned RM-10/12 located between 22nd and 25th Streets. This geographic area contains the remaining concentration of residential uses in the neighborhood.

The properties within this overlay district would be subject to the district's underlying RM-10/12 regulations. However, except for a few exceptions for certain conditional uses, the establishment of new conditional uses or the expansion of existing conditional uses to vacant or parcels with residential uses would be prohibited within the overlay district.

At a neighborhood workshop held by the Planning and Zoning Board on March 20, 2014, to discuss the initial set of draft policies, some participants voiced concerns that a wholesale prohibition on expansion of conditional uses to vacant properties or properties with residential uses would be too burdensome for property owners. As proposed, it appeared to these individuals that the restrictions unfairly treated new conditional uses or expanded conditional uses the same with no recourse for a waiver or a variance.

After further reconsideration subsequent to that workshop, the staff proposed a different approach that doesn't require the enactment of an overlay district. Instead it relies on adding a criterion to Policy 11.5 that must be met by any applicant in addition to all criteria already existing in the Land Development Regulations.

This additional criterion specifically focuses on the need to restrict the demolition of historic residential structures or alterations to these structures that negatively impact their historical authenticity. This approach is more flexible than the previously proposed "overlay district" and certainly easier to administer, but it would still serve to protect the residentially historic characteristics of the neighborhood without unduly impacting or restricting the rights of property owners.

Policy 12.6 – Investigation of Regulatory Incentives for Encouraging Residential Infill

One of the strategies in the *Original Town Neighborhood Enhancement Strategies* is to develop and implement design guidelines for new development and substantial improvements to existing development. In response, the staff drafted a general policy establishing a framework and process for enacting overlay district regulations to limit the encroachment of incompatible uses and development through new design and development standards tailored to the community.

At the neighborhood meeting held to discuss the draft objective and policies on March 20th, concerns were raised some of the participants that the emphasis of the draft policy regarding creation of "additional overlay district regulations" in conjunction with those initially proposed in Policy 12.5, was too negative. The criticism was that it focused on more regulations restricting development in the neighborhood rather than focusing on incentives to encourage quality development.

The staff believed that this concern has some validity. Furthermore, as proposed, the policy was purely reactive, establishing procedures for addressing requests from property owners and other stakeholders for the City to prepare and enact overlay regulations. This didn't fully address the basic need to encourage residential infill development in the neighborhood.

Based on the above considerations, the staff drafted a new Policy 12.6 that directs the staff to investigate specific residential infill concepts that may be applied to the RM-10/12 zoning

district to encourage and facilitate infill development. Specific policy guidelines for enactment of any overlay district regulations are described under Policy 12.7.

Policy 12.6 directs staff to investigate and prepare a report on potential regulatory incentives for encouraging and facilitating residential infill development. The policy calls for the report to be completed by December 31, 2015, for review by the Planning and Zoning Board and eventual recommendation to the City Council. This final report will serve as the guide in preparing appropriate amendments to the City's Land Development Regulations.

The policy identifies at least four general options to be investigated and evaluated by the staff as follows:

- *Overlay District Amending RM-10/12 District Regulations.* Development standards for the RM-10/12, such as minimum lot area, setbacks, FAR, and open space, could be modified to facilitate infill residential development. The modifications would be enacted through an overlay district. Specific standards would be included to conserve and protect existing historic assets and the neighborhood character.
- *Residential Group Project.* Similar to the provisions in the Land Development Regulations for "Planned Development" in certain commercial zoning districts, "residential group projects" could be approved as a "conditional use" on a project-by-project basis. These projects would be able to modify various development standards or receive waivers from these standards in return from meeting specific standards to ensure compatibility with the character of the existing historic residential neighborhood.
- *Residential Infill Overlay District.* An overlay district could be enacted that would apply to all residential lots in the neighborhood meeting certain eligibility requirements. Residential projects on these lots would be subject to modified development standards intended to facilitate infill and ensure compatibility with the character of the existing historic residential neighborhood.
- *Transfer of Development Rights (TDR).* An overlay district or incorporated for the RM-10/12 zoning district could be enacted that would authorize the transfer of density from one property to another within the zoning district in the neighborhood. Such transfers would be required to meet specific standards intended to ensure compatibility with the character of the existing historic residential neighborhood. This option could be instituted through a geographic specific overlay district or as a provision in all RM-10/12 or other multiple-family zoning districts. This approach still requires further legal review to ensure it doesn't conflict with the City Charter. It may require a further amendment to the Comprehensive Plan.

Policy 12.7. Policy on Enactment of Residential Neighborhood Overlay Districts

The 2005 Vision Plan recommended that any neighborhood overlay district that establishes restrictive development regulations should be considered only by a neighborhood request or petition representing a “super majority” of property owners. This policy provides a more practicable and less rigid approach that identifies four specific factors that should be considered in determining whether or not to proceed in preparing and enacting a special overlay district for the neighborhood.

Policy 12.8 Preservation of Historic Elements of Neighborhood

As documented in the *Historic Resource Survey Update of the Original Town and Osceola Park Area Neighborhoods*, since the 1990 survey of historic structures in Indian River County more than 14 historic buildings have been demolished in the neighborhood and few have had alterations that adversely impact their historic authenticity. Church expansions, new government buildings, and spread of parking lots to serve these uses have facilitated these changes.

However, the northern portion of the historic neighborhood still contains a significant concentration of buildings of historic significance. The *Historic Resource Survey Update of the Original Town and Osceola Park Area Neighborhoods* identified over 80 properties consisting primarily of single family, duplex, and multi-family structures north of 22nd Street as potentially eligible for historic designation or eligible as a contributing building to a National Register Historic District or a local historic district. The concentration of such eligible historic properties in the neighborhood led to the recommendation in the survey update, that a designated area of the neighborhood be considered for designation as an historic neighborhood on the National Register of Historic Places.

A National Register Historic District, similar to the district established for a portion of the Osceola Park neighborhood, would be much easier to enact than a local historic district as it would not place any regulatory requirements on property owners. As the City’s Historic Preservation Ordinance requires the approval of the owner to designate a property as historic, to enact a local historic district would most likely require every property owner within the proposed district to approve such designation. Therefore, it is not considered as a viable option at this point in time.

Rather than enactment of a historic district, a “conservation or neighborhood stabilization” district could be enacted as an overlay district. A conservation district, which would be much less of a regulatory burden on property owners than a local designated historic district, would focus only on regulating those building features and site characteristics deemed necessary to retain the physical look and characteristics of the neighborhood. Such a district could be implemented as element of one of the proposed regulatory approaches identified in Policy 12.6 above and evaluated for implementation based on the four factors in Policy 12.7.

Policy 12.8 establishes a framework for the City and Historic Preservation Commission to assist the neighborhood and property owners in protecting and enhancing the historic residences in the neighborhood. Such efforts include educating and assisting property owners in obtaining historic

designation of their property or designation of the neighborhood on the National Register of Historic Places.

A third element of the policy is for the Historic Preservation Commission to work in conjunction with the Planning and Zoning Board in considering any possible regulatory approaches for the neighborhood and making recommendations to the City Council.

Policy 12.9 City Services and Programs to Stabilize and Enhance Neighborhood

Efforts to stabilize, preserve, and enhance the historic Original Town neighborhood require a comprehensive set of programs and services by the City and the active involvement and commitment of the local neighborhood contact organization, civic organizations, and stakeholders. This policy has numerous elements, the majority of which are based on recommendations of the *Original Town Neighborhood Enhancement Strategies*. It contains language that acknowledges limitations of the City's financial and staff resources to deliver and support these programs to the neighborhood.