



**AGENDA REPORT**  
**April 9, 2019**

**Golf Cart Use Viera East and West, District 4**

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**SUBJECT:**

Unrestricted use of golf carts in Viera East and West and between

**DEPT/OFFICE:**

Agenda Coordinator

**REQUESTED ACTION:**

Allow the use of golf carts in Viera East and West and the crossing of I-95 using golf carts. A solution that would allow carts traveling in the same direction as vehicles will solve this issue.

**SUMMARY EXPLANATION and BACKGROUND:**

Viera is a golf cart community with golf carts as a transportation option for many people. Currently the Brevard County government is not allowing golf carts to travel over the new Viera Boulevard I-95 interchange. This is a great disadvantage to many citizens of all ages who use golf carts to cross I-95 for many reasons. Golf courses on both sides, VHS students traveling to school involved in extra-curricular activities, the Avenues, and the Regional Center are all popular spots that are frequented by golf cart users as well as restaurants and stores. A solution to this problem is that all Westbound golf carts traffic enter the overpass on the North side and all Eastbound golf cart traffic enter the overpass on the South side. This solution would allow the golf carts to cross each other in the middle.

Contact: Bill Hobson; 919 Delta Way, Melbourne, FL., 321-243-7946

**ATTACHMENTS:**

**Description**

☐ **Staff Report**



Tammy Rowe, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001  
Fax: (321) 264-6972  
Tammy.Rowe@brevardclerk.us

April 10, 2019

**M E M O R A N D U M**

**TO:** Corrina Gumm, Interim Public Works Director

**RE:** Item J.3., Citizen Request by Bill Hobson Regarding Golf Cart Use Through the I-95/Viera Boulevard Interchange

The Board of County Commissioners, in regular session on April 9, 2019, directed staff to approach Florida Department of Transportation (FDOT) with the County's idea that all westbound golf cart traffic enter the overpass on the north side, and all eastbound golf cart traffic to enter the overpass on the south side, and to seek FDOT's input.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS  
SCOTT ELLIS, CLERK

*Tammy Rowe*

Tammy Rowe, Deputy Clerk

cc: Commissioner Smith  
Assistant County Manager Denninghoff

# Staff Report

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**Subject:** Golf Cart use through the I-95/Viera Boulevard Interchange

**Summary Statement:** A citizen request has been received to consider allowing golf carts through the I-95/Viera Boulevard Interchange.

## **Background & Current Status:**

Viera Boulevard is a 4-lane divided arterial roadway that extends from Tavistock Drive to US Highway 1. The portion within the new interchange at I-95 and the existing Viera Boulevard overpass is owned and managed by the Florida Department of Transportation (FDOT) as limited access right-of-way. The interchange is currently under construction and FDOT has indicated an estimated completion in June 2019. The purpose of the proposed improvements is to improve the mobility and safety in the Viera community and central Brevard County by relieving congestion at the I-95 interchanges with Fiske Boulevard to the north and Wickham Road to the south.

## **Existing Condition:**

The type of interchange that is under construction is referred to as a diverging diamond interchange, or "DDI", where traffic crosses to the left side of the road to safely navigate through the I-95 overpass. The design eliminates the need for left turn movements that cross opposing traffic lanes, reducing the number of potential conflicts between motorists and therefore increasing the safety of the traveling public.

The existing pedestrian walkway along and on both sides of Viera Boulevard is 8 feet in width. Although it is frequently used by golf carts, it has not been designated as a multi-use sidewalk that would legally allow the use in accordance with Chapter 106, Article III of Brevard County Code. In particular, Code Section 106-73(b)(3)f states that:

Viera Boulevard shall not be a designated road/street, except that Viera Boulevard may be crossed at any signalized intersection and at designated pedestrian crossings. Notwithstanding any other definitions of this ordinance; no portion of a street, road, multi-use sidewalk or trail within the I-95/Viera Boulevard interchange shall be designated for golf cart usage.

Brevard County Code Section 106-72 defines a designated multi-use sidewalk as "all sidewalks approved for use by pedestrians, bicycles and golf carts and designated as such by appropriate

signs. The required signage shall be provided and maintained by the private entity, homeowners' association, community development district or special district seeking to designate multi-use sidewalks. Multi-use sidewalks shall have a minimum un-obstructed width of 8 feet, be located not less than 5 feet from the outside edge of the nearest traffic lane of any adjacent road or street, and have one adjoining grassed shoulder which is relatively flat and not less than 4 feet wide."

The existing sidewalk meets the minimum 8 foot width requirement and is more than 5 feet from the nearest travel lane. However, the sidewalk along the overpass does not meet the requirement to have a 4 foot wide grassed shoulder which would allow for golf carts to yield to other users of the sidewalk, including other oncoming golf carts. The existing sidewalk is also physically restricted on both sides by a concrete barrier wall as it crosses the overpass, which does not allow safe two-way golf cart traffic. The sidewalk as it existed prior to the construction of the Viera Interchange did not meet the criteria to be a designated multi-use sidewalk.

### **Proposed Improvements:**

The design plans for the Viera Interchange show a proposed 8 foot wide sidewalk on both sides of Viera Boulevard approaching the I-95 Interchange, and crosses to the inside of the travel lanes along the overpass. Approaching the DDI crossover, the sidewalk is 8 feet in width with a 2 foot grass shoulder on each side. It is immediately adjacent to a drainage conveyance swale on one side and a transition to existing grade on the other side that can be as steep as a 1 foot vertical drop for every 3 feet of horizontal distance on each side of the sidewalk. Along the bridge overpass the sidewalk remains 8 feet in width, but it is physically restricted on both sides with a traffic barrier wall. This is illustrated on Exhibits A and B, the project design typical cross sections for the roadway approaching the DDI crossover, as well as for along the bridge over I-95.

While this recently constructed sidewalk meets the 8 foot width requirement and is more than 5 feet from the nearest travel lane, it does not meet the requirement to provide a 4 foot wide grassed shoulder. The sidewalk was not designed to accommodate golf cart traffic in that it does not meet all of the previously mentioned criteria and does not provide sufficient width for golf carts to safely yield to all other users of the sidewalk, including pedestrians, bicyclists, and people using wheelchairs and strollers. The existing bridge would have required very costly modification (widening) or replacement in order to design a multi-use sidewalk that could be designed for golf cart use.

### **Staff Recommendations:**

FDOT has established criteria for the safe operation of golf carts on authorized portions of the state highway system, which our code is based on. FDOT has not permitted the use of golf carts through the Viera Boulevard interchange. Brevard County is not authorized to permit the use of golf carts through the I-95/Viera Boulevard Interchange, as it is state owned limited access right-of-way.

FDOT has established criteria for safe operation of golf carts on authorized portions of the State Highway System. As such, the proposed use of golf carts through the I-95/Viera Boulevard Interchange must be reviewed and approved by FDOT District 5 Traffic Operations. If the Board of County Commissioners choose to proceed with the request, the County will need to provide an engineering study that documents that FDOT criteria is met, all safety considerations were reviewed, along with any proposed traffic control devices, and a review of crash history. In addition, maintenance responsibilities would need to be established prior to them considering golf cart use through the interchange.

The citizen request suggests that a solution could be to allow one-way golf cart travel through the interchange. Westbound golf carts would travel along the sidewalk adjacent to the westbound vehicular lanes. Similarly, eastbound golf carts would travel along the sidewalk adjacent to the eastbound vehicular lanes. This suggested one-way golf cart travel is illustrated on Exhibit C – “I-95/Viera Blvd Interchange Golf Cart Exhibit”.

In order for FDOT to consider this request, Brevard County will need to submit the proposal to the FDOT District 5 Traffic Operations Engineer.

### **Alternative One-Way Golf Cart Travel:**

Staff has been working diligently on this matter to evaluate the suggestion of one-way golf cart travel through the interchange and present this to FDOT for consideration. While the suggestion to provide for one-way golf cart travel resolves the physical constraint issue inherent in two golf carts attempting to pass each other, there are a number of safety and feasibility issues that are still present. As an example, a wheelchair requires a minimum of 3 feet of the 8 foot wide constrained sidewalk. A golf cart is typically 4 feet in width. There is only 12” remaining for these users to have any clearance from each other and the wall on each side.

Another challenge that is introduced with one-way golf cart travel is that the one-way travel must begin and end at Stadium Parkway and Murrell Road, approximately 1.1 miles from one end to the other, where there are existing signalized intersections that can be used to cross safely. Future signalized intersections are anticipated at an extension of Lake Andrew Drive and also at Star Rush Drive. However, at this time there are currently no signalized intersections

between Stadium Parkway, Murrell Road and the northbound/southbound I-95 Ramp Signals. This is illustrated on Exhibit D – “I-95/Viera Blvd Interchange Intersection Spacing Exhibit”.

In the current condition, a golf cart user coming from Star Rush Drive on the south side Viera Boulevard would first need to travel east to Murrell Road, cross Viera Boulevard, and then proceed west along Viera Boulevard to Stadium Parkway. This would add approximately 0.5 miles to their route, which some golf cart drivers would consider an unreasonable distance, resulting in noncompliance.

These concerns will be evaluated in more detail as we prepare for coordination with FDOT.

Figure 1: Existing Conditions – I-95 NB Ramp, looking west at the crossover



Figure 2: Existing Conditions – I-95 NB Ramp, looking southwest at the crossover pedestrian landing





Figure 3: Existing Conditions – I-95 NB Ramp, looking west on the bridge overpass



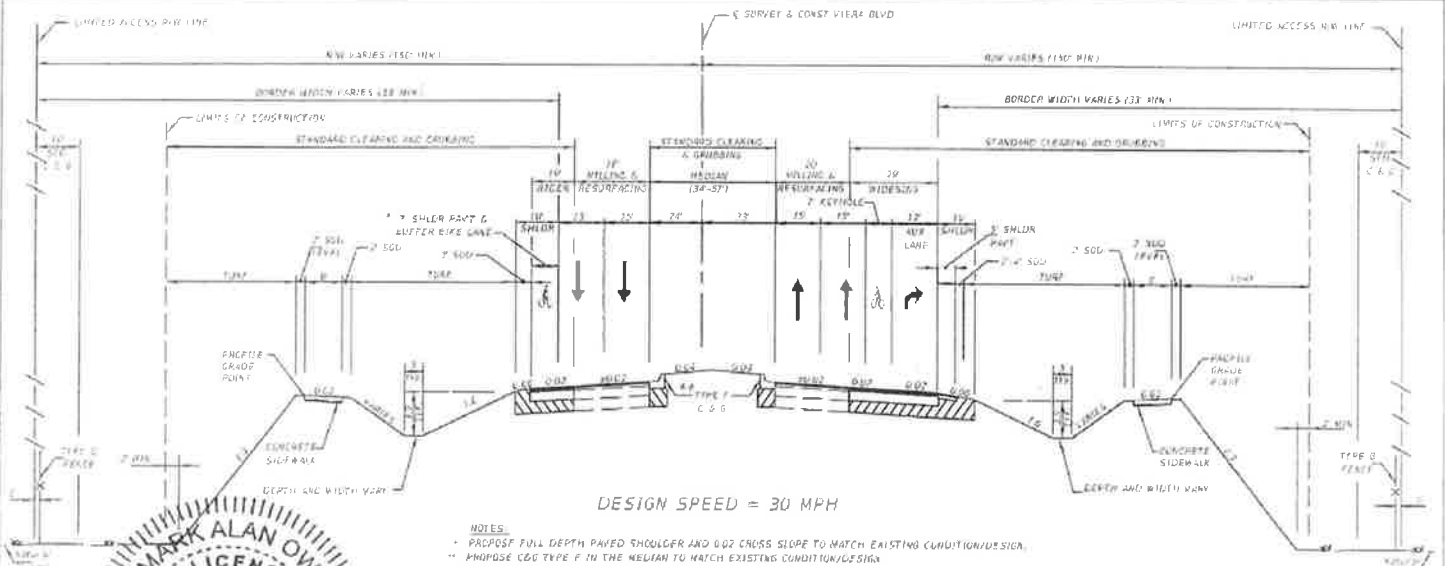
Figure 4: Existing Conditions – I-95 SB Ramp, looking west



# PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 428238-1-52-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME BREVARD  
 SECTION NO. 70220 000 ROAD DESIGNATION VIERA BLVD LIMITS/MILEPOST N/A  
 PROJECT DESCRIPTION SR 9 (I-95) INTERCHANGE AT VIERA BLVD

## PROPOSED ROADWAY TYPICAL SECTION VIERA BLVD ROADWAY APPROACHING DDI CROSSOVERS AND BRIDGES



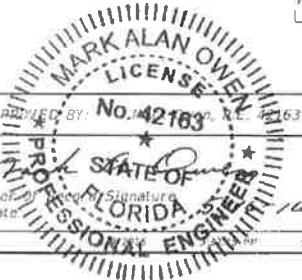
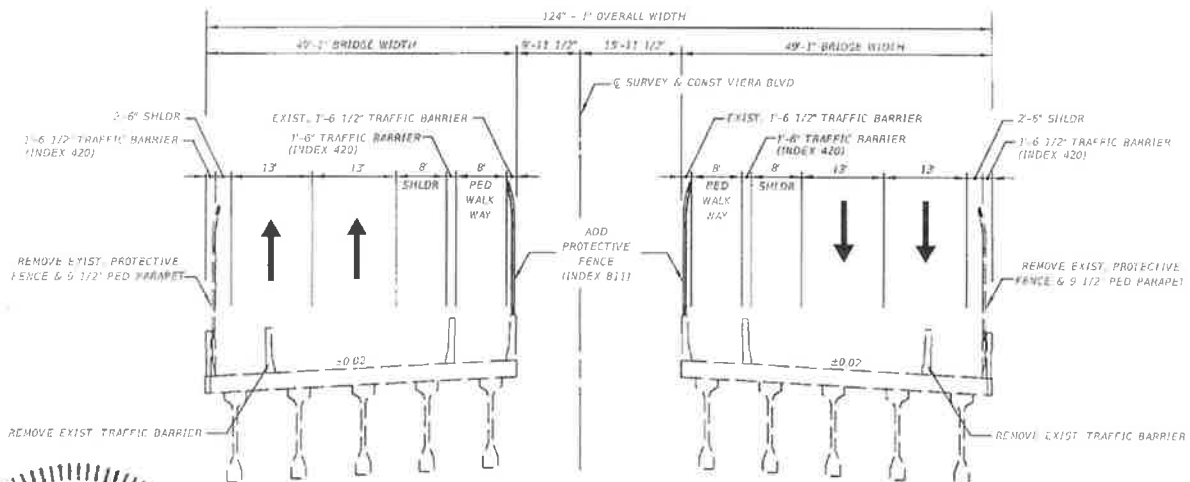
APPROVED BY: <b>MARK ALAN OWEN</b> No. 42183 7/2/04 FLORIDA PROFESSIONAL ENGINEER	FDOT CONCURRENCE <b>AK Brennan</b> TYPICAL SECTION (3) Annette Brennan, PE FDOT District Design Engineer	FHWA CONCURRENCE <b>Nahir DeTizio, EI</b> FHWA Transportation Engineer
Engineer of Record Signature and Date	Date <b>5/18/16</b>	Date

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FINANCIAL PROJECT ID 428238-1-S2-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME BREVARD  
 SECTION NO. 70220 000 ROAD DESIGNATION VIERA BLVD LIMITS/MILEPOST N/A  
 PROJECT DESCRIPTION SR 9 (I-95) INTERCHANGE AT VIERA BLVD

## PROPOSED STRUCTURE TYPICAL SECTION VIERA BLVD BRIDGES OVER SR 9 (I-95)



APPROVED BY: **No. 42163**

FDOT CONCURRENCE

FHWA CONCURRENCE

*AK Brennan*  
 Annette Brennan, PE  
 FDOT District Design Engineer

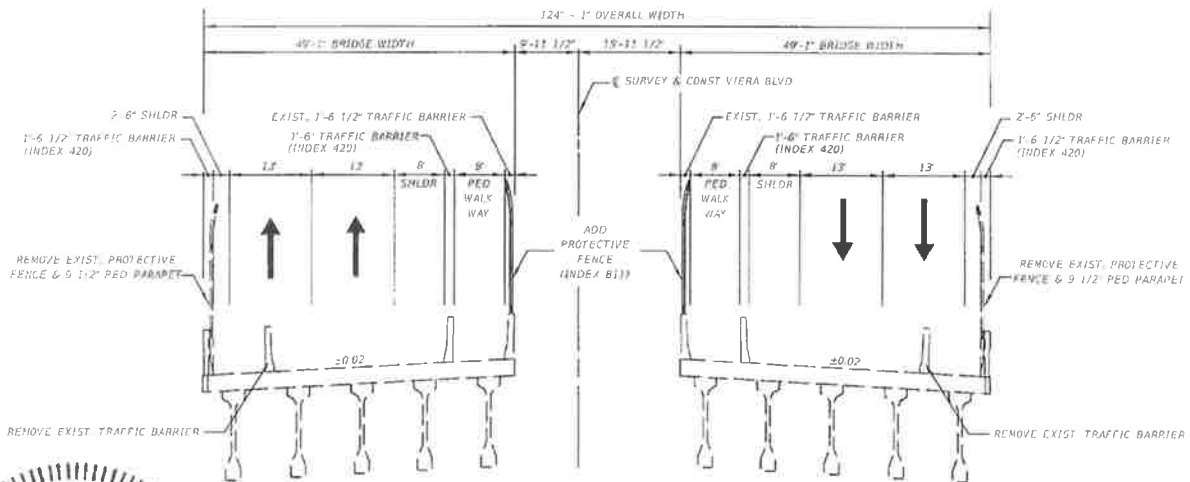
*5/18/16*  
 Date

*Nahir DeTizio, EI*  
 FHW Transportation Engineer

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## PROPOSED STRUCTURE TYPICAL SECTION VIERA BLVD BRIDGES OVER SR 9 (I-95)



DESIGN SPEED = 30 MPH

APPROVED BY: **MARK ALAN OWEN**  
No. 42183

FDOT CONCURRENCE

FHWA CONCURRENCE

PROFESSIONAL ENGINEER  
 STATE OF FLORIDA  
 License No. 42183  
 Signature: *Mark Alan Owen*  
 Date: *5/18/16*

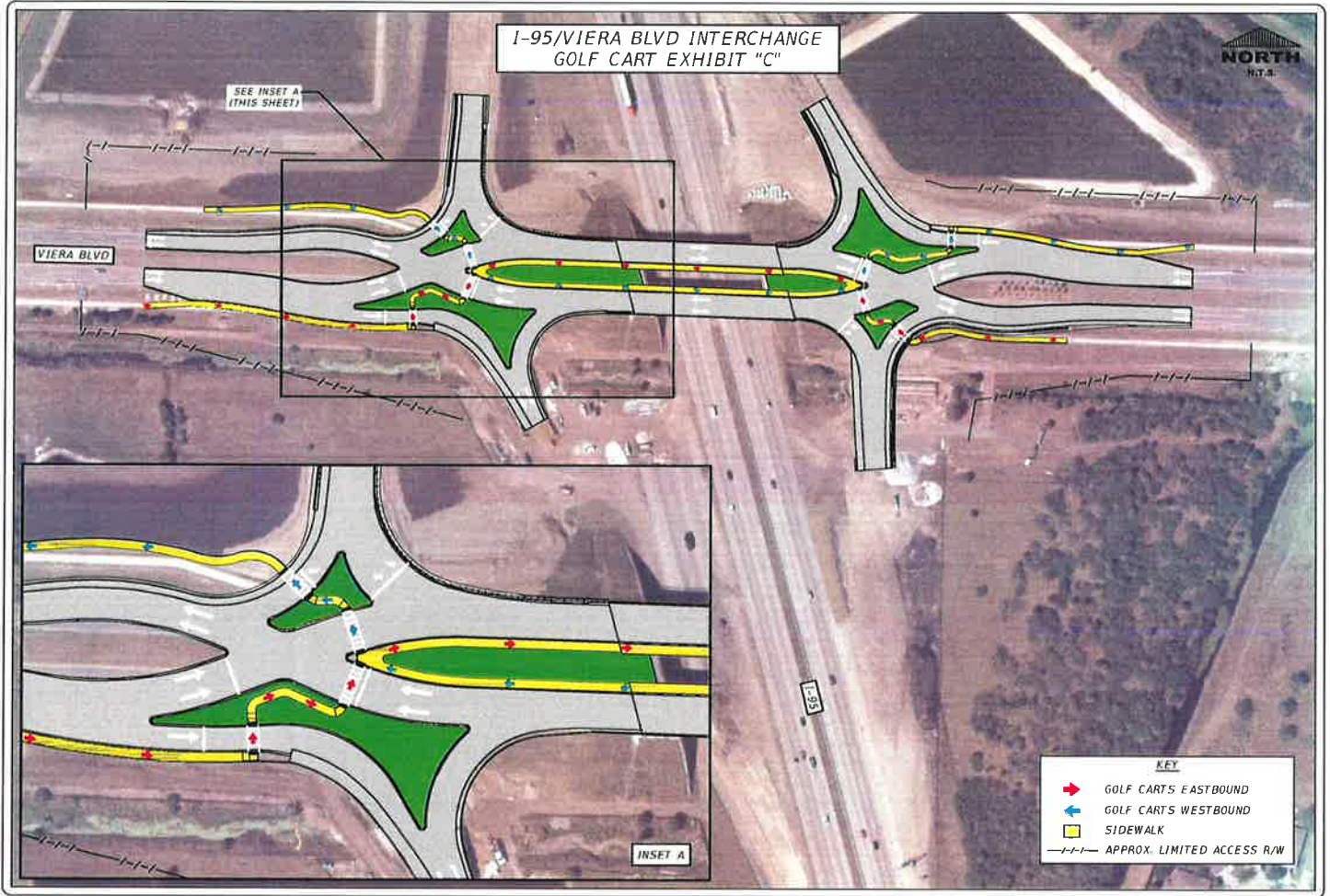
*AK Brennan*  
 Annette Brennan, PE  
 FDOT District Design Engineer

Date  
*5/18/16*

Nahir DeTizio, EI  
 FHWA Transportation Engineer

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I-95/VIERA BLVD INTERCHANGE  
INTERSECTION SPACING EXHIBIT "D"





# Staff Report

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Figure 3: Existing Conditions – I-95 NB Ramp, looking west on the bridge overpass





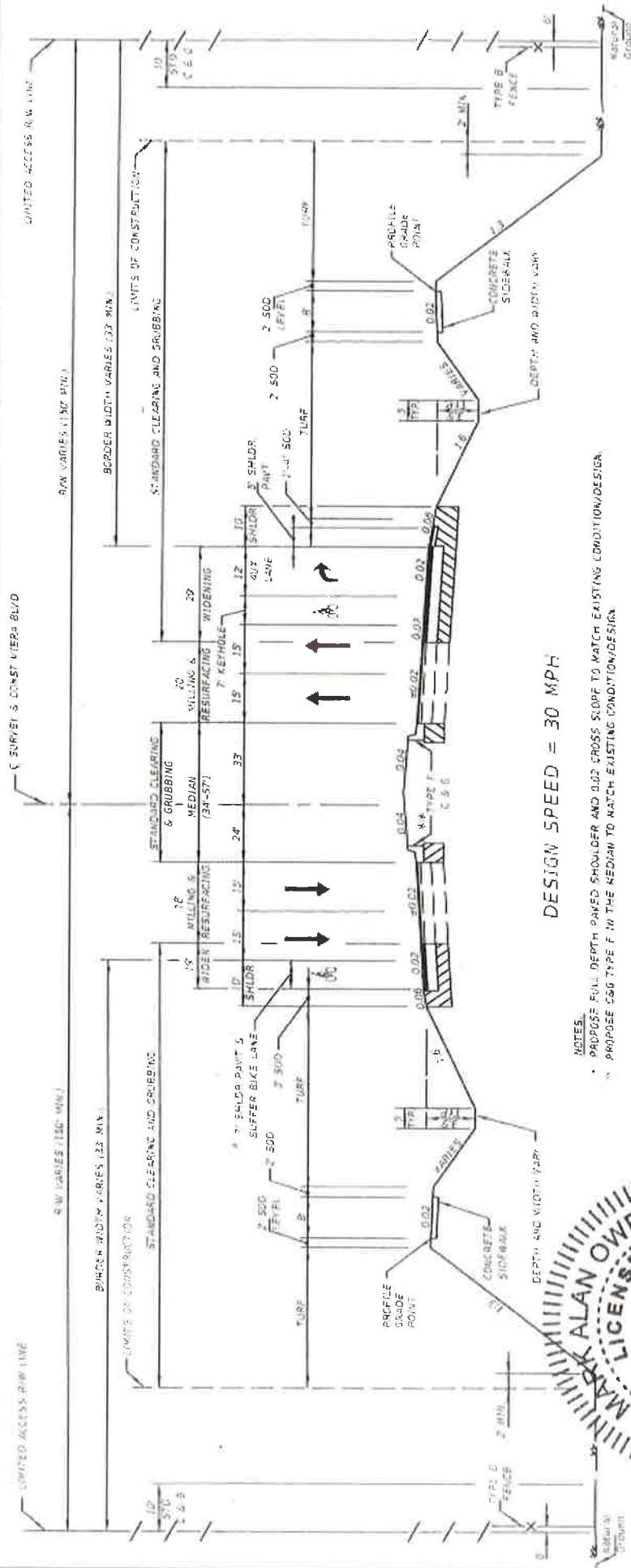
Figure 4: Existing Conditions – I-95 SB Ramp, looking west



# PROJECT IDENTIFICATION

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 SECTION NO. 70220 000 ROAD DESIGNATION VIERA BLVD LIMITS/MILEPOST N/A  
 PROJECT DESCRIPTION SR 9 (I-95) INTERCHANGE AT VIERA BLVD.

## PROPOSED ROADWAY TYPICAL SECTION VIERA BLVD ROADWAY APPROACHING DDI CROSSEOVERS AND BRIDGES

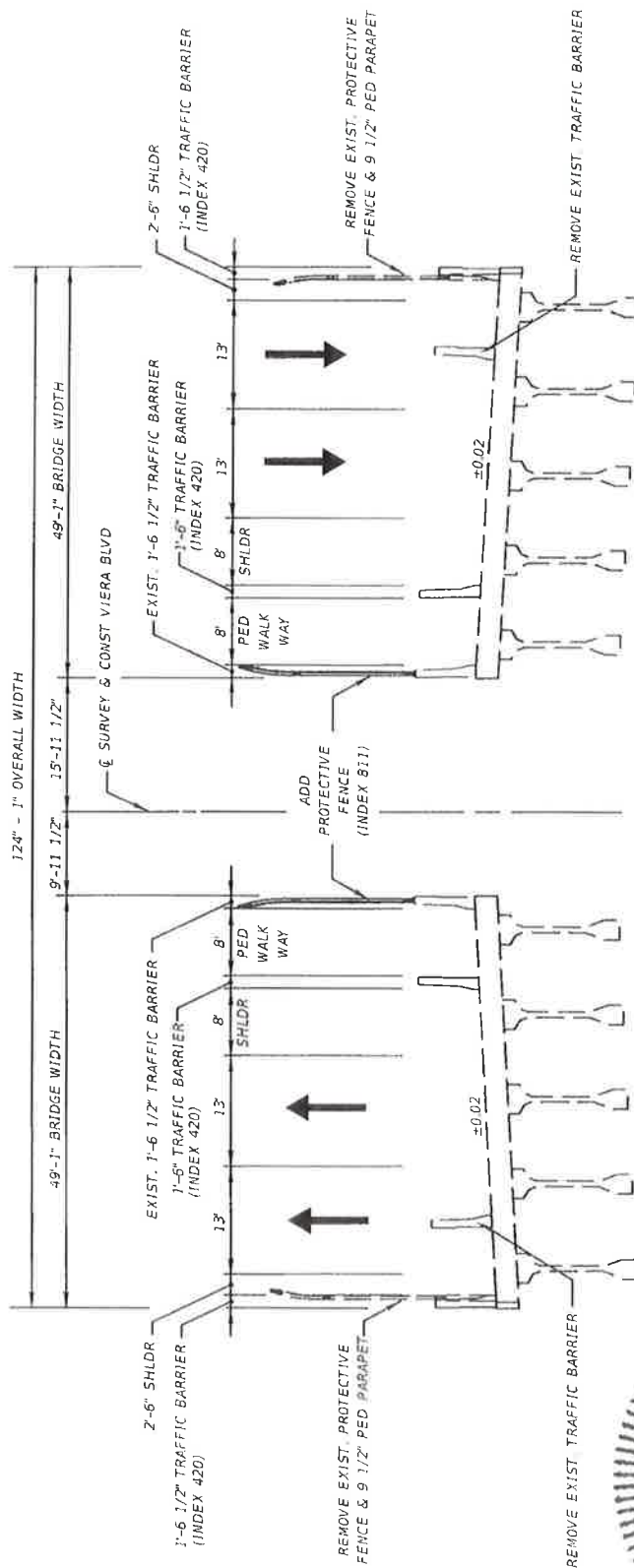


APPROVED BY: <b>MARK ALAN OWEN</b> No. 42163, P.E. 42163 PROFESSIONAL ENGINEER State of Florida Date: 5/18/16	FDOT CONCURRENCE	FHWA CONCURRENCE
Engineer's Signature and Date: <b>Annette Brennan, PE</b> Date: 5/18/16	FDOT District Design Engineer	FHWA Transportation Engineer



FINANCIAL PROJECT ID	428238-1-52-01	FEDERAL AID PROJECT NO.	N/A	COUNTY NAME	BREVARD
SECTION NO.	70220 000	ROAD DESIGNATION	VIERA BLVD	LIMITS/MILEPOST	N/A
PROJECT DESCRIPTION SR 9 (I-95) INTERCHANGE AT VIERA BLVD.					

PROPOSED STRUCTURE TYPICAL SECTION  
VIERA BLVD BRIDGES OVER SR 9 (I-95)



DESIGN SPEED = 30 MPH

APPROVED BY: **No. 42-1997, R.E. 42163**

FDOT CONCURRENCE

FHWA CONCURRENCE

PROFESSIONAL ENGINEER  
STATE OF FLORIDA  
Signature  
and Date

AK Brennan 5/18/16  
 Annette Brennan, PE Date  
 FDOT District Design Engineer

Nahir DeTizio, EI  
FHWA Transportation Engineer

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I-95/VIERA BLVD INTERCHANGE  
GOLF CART EXHIBIT "C"

SEE INSET A  
(THIS SHEET)

VIERA BLVD

I-95

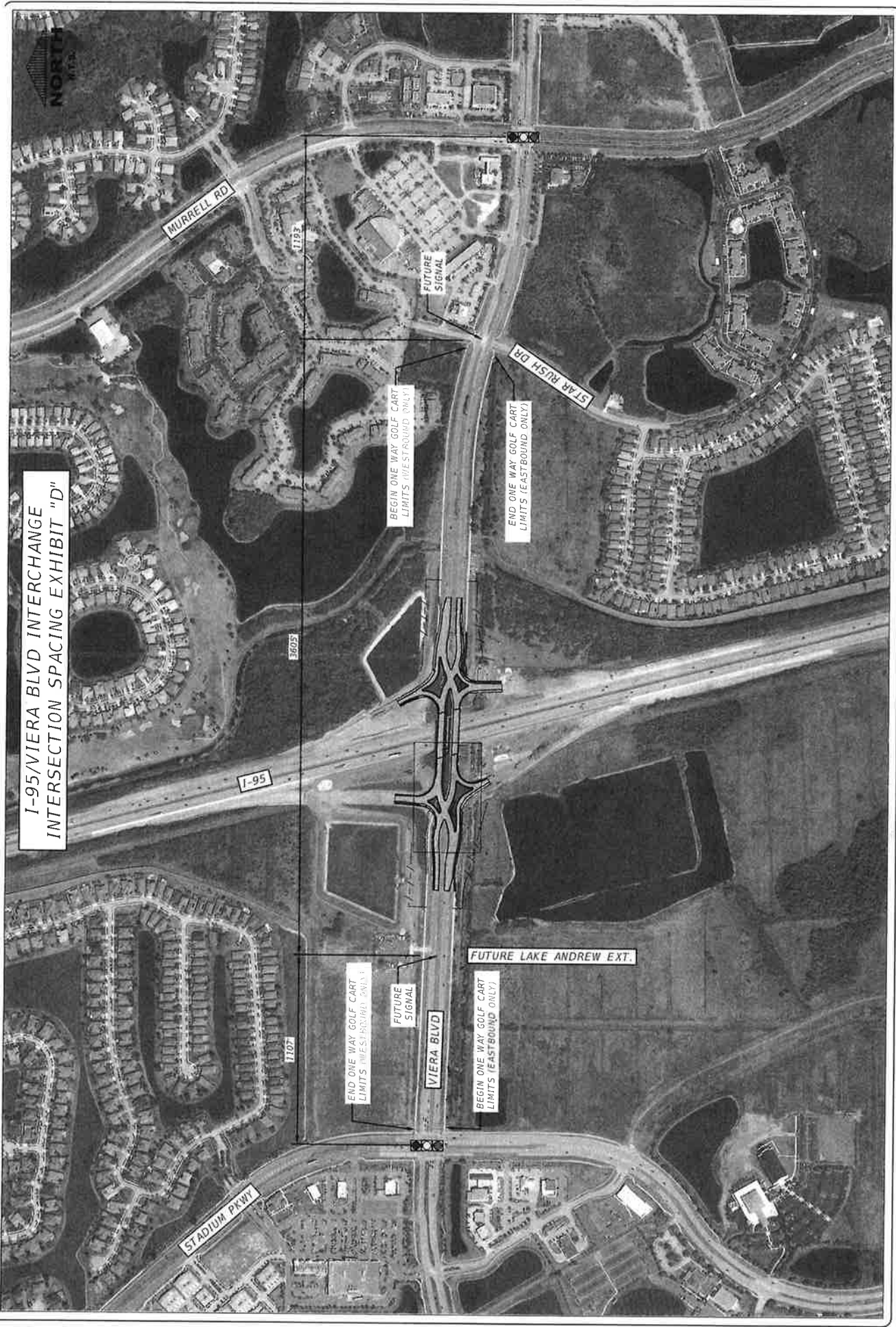
**KEY**

↑	GOLF CARTS EASTBOUND
↔	GOLF CARTS WESTBOUND
□	SIDEWALK
---	APPROX. LIMITED ACCESS R/W

INSET A



I-95/VIERA BLVD INTERCHANGE  
INTERSECTION SPACING EXHIBIT "D"



NORTH

MURRELL RD

1123

FUTURE  
SIGNAL

BEGIN ONE WAY GOLF CART  
LIMITS (WESTBOUND ONLY)

END ONE WAY GOLF CART  
LIMITS (EASTBOUND ONLY)

STAR RUSH DR

3605

I-95

1107

END ONE WAY GOLF CART  
LIMITS (WESTBOUND ONLY)

FUTURE  
SIGNAL

BEGIN ONE WAY GOLF CART  
LIMITS (EASTBOUND ONLY)

FUTURE LAKE ANDREW EXT.

VIERA BLVD

STADIUM PKWY