



# DEPARTMENT OF PUBLIC WORKS

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## Crosswalk Study for Biscayne Drive and Pan American Boulevard

**November 28, 2017**

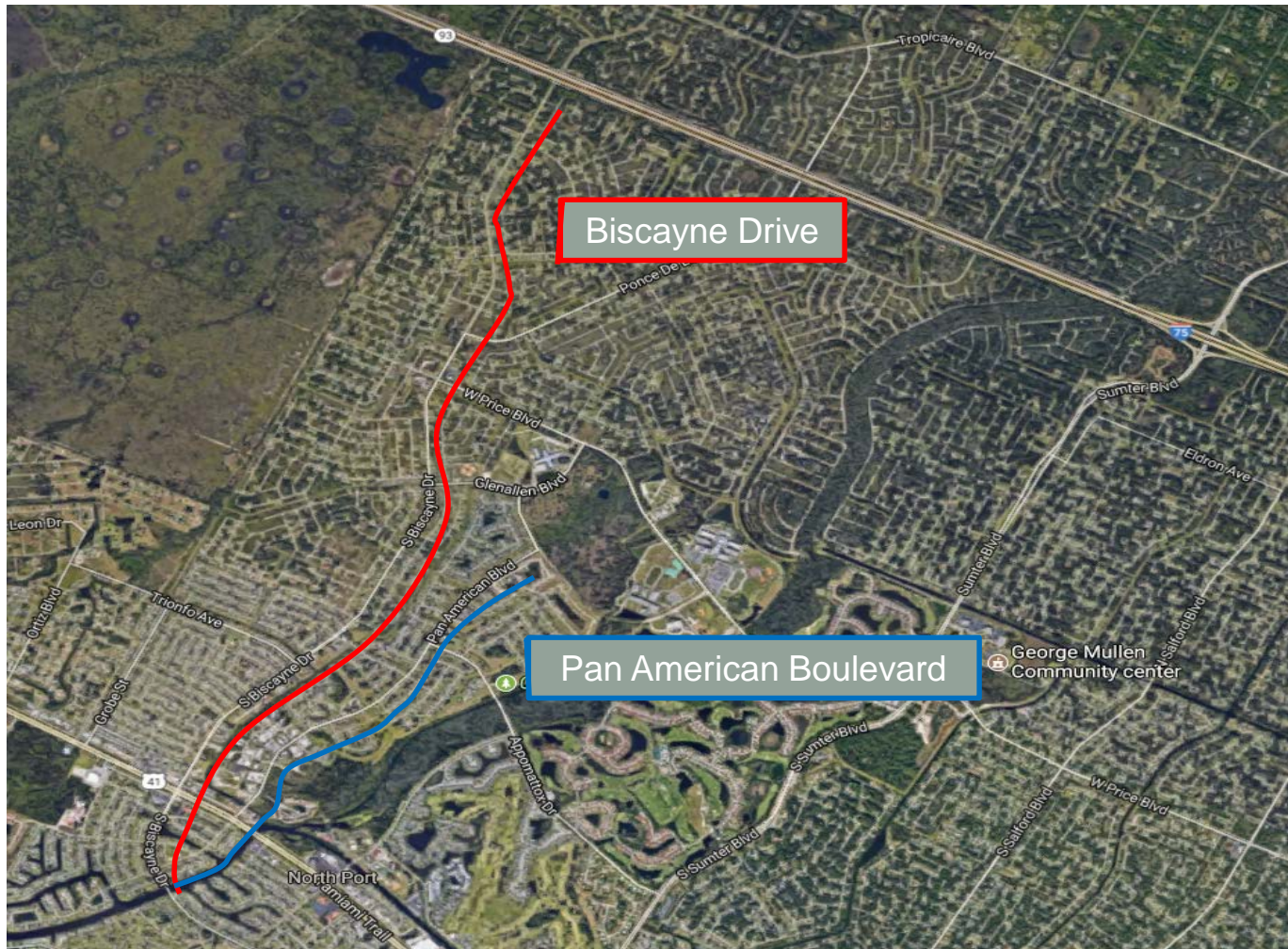


# **CROSSWALK STUDY FOR BISCAYNE DRIVE AND PAN AMERICAN BOULEVARD**

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- **Study limits of Biscayne Drive are from Safford Terrace to south of I-75**
  - **Study limits for Pan American Boulevard are from Biscayne Drive to Spring Haven Drive**
  - **Analyze the intersection of the frontage street known as Tamiami Trail and Biscayne Drive just south of US 41.**

# STUDY LIMITS

(NOT TO SCALE)



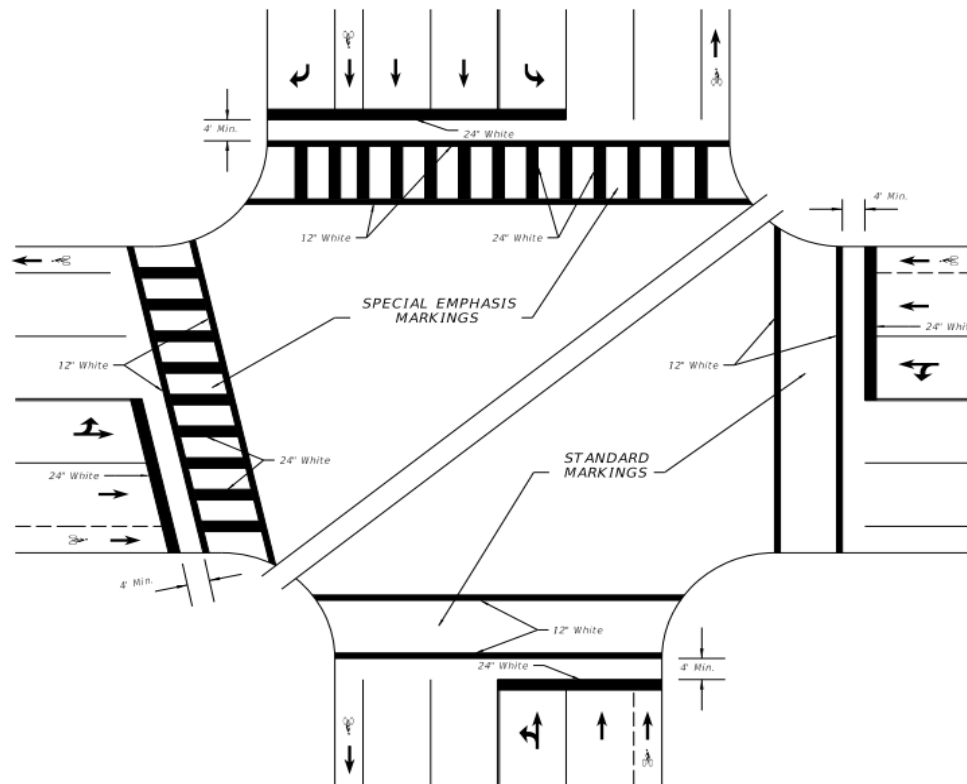
# STUDY CRITERIA

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- Safety for pedestrians: Per Florida Department of Transportation (FDOT) Plans Preparation Manual Volume 1, Chapter 8 dealing with sight distance, spacing, etc. (excepts attached)
- Proximity to potential Pedestrian Destinations
- Proximity to existing crosswalks
- Proximity to Sarasota County Area Transit (SCAT) bus stops
- FDOT Standard Index 17346, sheet 12 of 17 for controlled crossings, and sheet 13 of 17 for uncontrolled crossings (signalized or stop sign controlled) (attached)

# FDOT Standard Index 17346, sheet 12 of 17

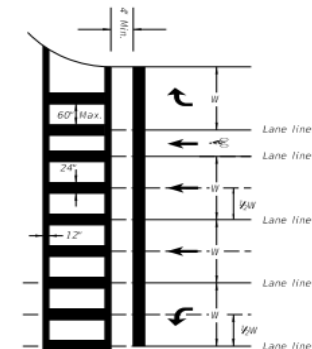
## Controlled Crossing



SPECIAL EMPHASIS AND STANDARD CROSSWALKS  
SIGNALIZED OR STOP SIGN CONTROLLED INTERSECTION

### GENERAL NOTES

1. For traffic and pedestrian signal installation, refer to Index No. 17721 through 17890.
  2. For public sidewalk curb ramps, refer to Index No. 304.
  3. For pavement marking and sign installation, refer to Indexes 11200 through 17356.
  4. Crosswalk minimum widths: Intersection Crosswalk 6'. Midblock Crosswalk 10'.
  5. All crosswalk marking must be white.
  6. Longitudinal markings in Special Emphasis Crosswalk must be 24" wide and spaced to avoid the wheel path of vehicles (see detail). Center the longitudinal markings at each lane line. Place additional longitudinal markings at the center of each lane (1/2W). The maximum spacing allowed between longitudinal markings is 60'.
- When the Crosswalk is skewed to the lane lines, the longitudinal markings should be parallel to the lane lines.
- 24" Longitudinal Bars in Special Emphasis Crosswalk must be preformed thermoplastic.
- 12" Transverse lines in the Special Emphasis Crosswalk may be standard thermoplastic or preformed thermoplastic.



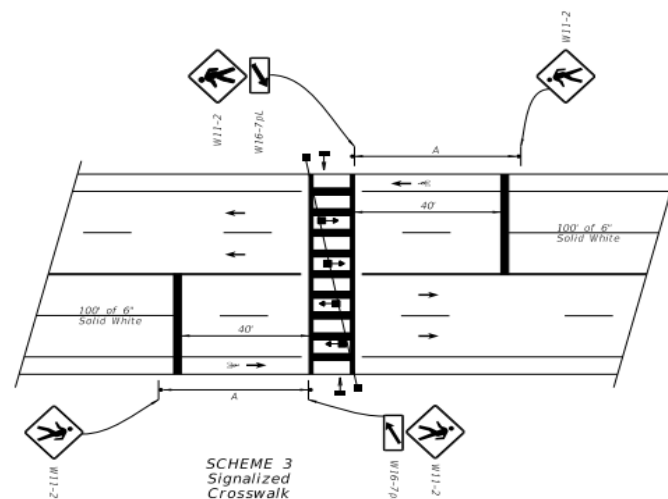
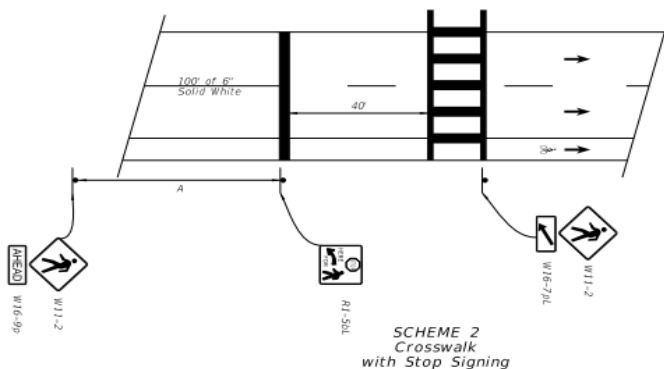
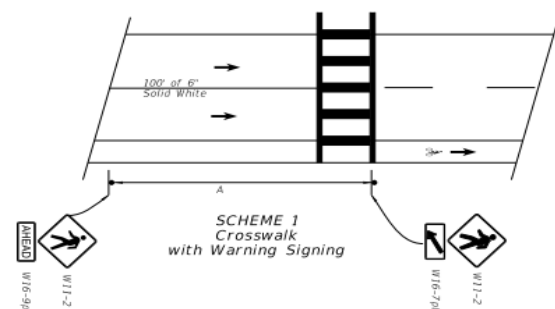
SPECIAL EMPHASIS  
CROSSWALK MARKING  
DETAIL

LAST REVISION 11/01/16	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	PAVEMENT MARKINGS	INDEX NO. 17346	SHEET NO. 12 of 17
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# FDOT Standard Index 17346, sheet 13 of 17

## Uncontrolled Crossing





APPROACH SPEED MPH	A-SUGGESTED DISTANCE (FL)
25 Or Less	200
26 To 35	250
36 To 45	300

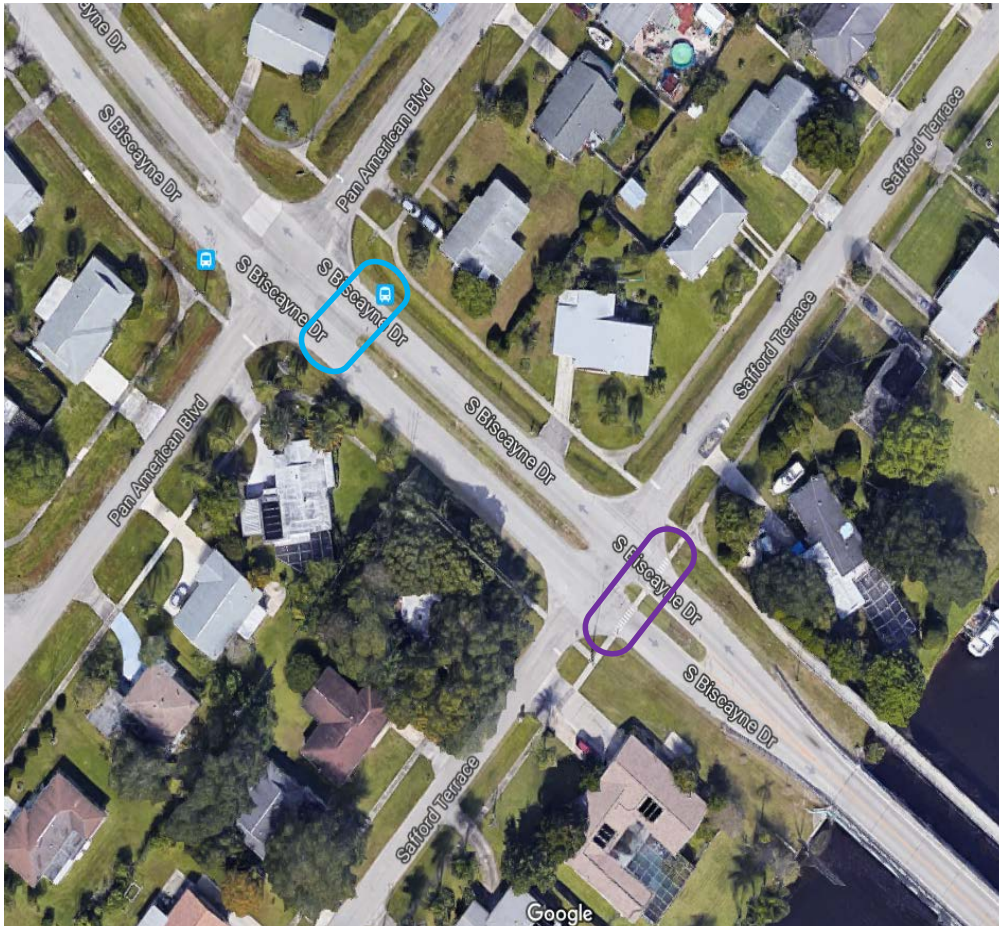
- Plans shall indicate which crosswalk scheme is to be used.
- The details shown do not depict the signing and markings for multi-lane roadways with divided medians. For these applications, additional signs shall be installed on the median side. Minimum width of Mid-Block Crosswalks is 10'.
- All mid-block crosswalks shall use special emphasis crosswalk markings.
- Crosswalk marking shall be preformed marking materials.

# BISCAYNE DRIVE

## SAFFORD TERRACE AND PAN AMERICAN BOULEVARD

### LEGEND

-  PROPOSED CROSSWALK
-  EXISTING NON-COMPLIANT CROSSWALK

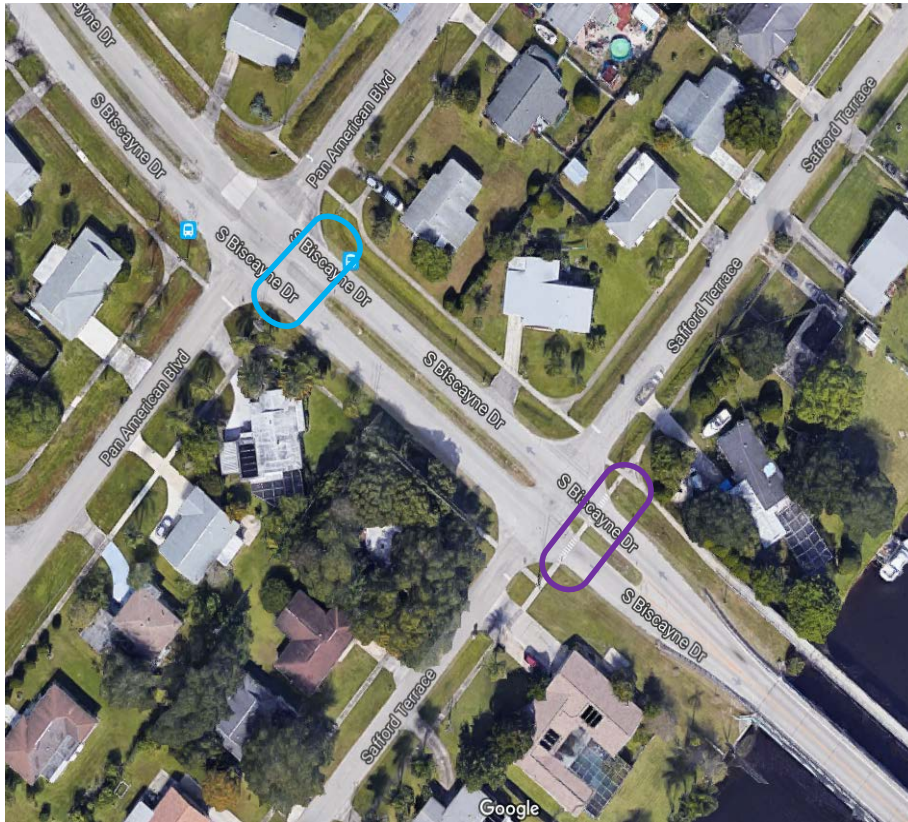




# BISCAYNE DRIVE

## SAFFORD TERRACE AND PAN AMERICAN BOULEVARD

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### Analysis

- Relocate existing crosswalk from Safford Terrace approximately 200 ft. north to Pan American Boulevard.

### Benefits/Advantages/Opportunities/Issues

- Improve Safety of pedestrians by increasing the sight distance for motorists traveling northbound on Biscayne Drive.
- If existing crosswalk at Safford Terrace remains, the northbound advanced warning sign, needed for compliance with FDOT Standard 17346, will have to be attached to the bridge.

### Recommendation

- Strongly recommend relocation of existing pedestrian crosswalk from Safford Terrace to Pan American Boulevard.





# BISCAYNE DRIVE

## SYDNEY AVENUE AND HYDE PARK AVENUE

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### LEGEND

-  PROPOSED CROSSWALK
-  PROPOSED SIDEWALK

### Analysis

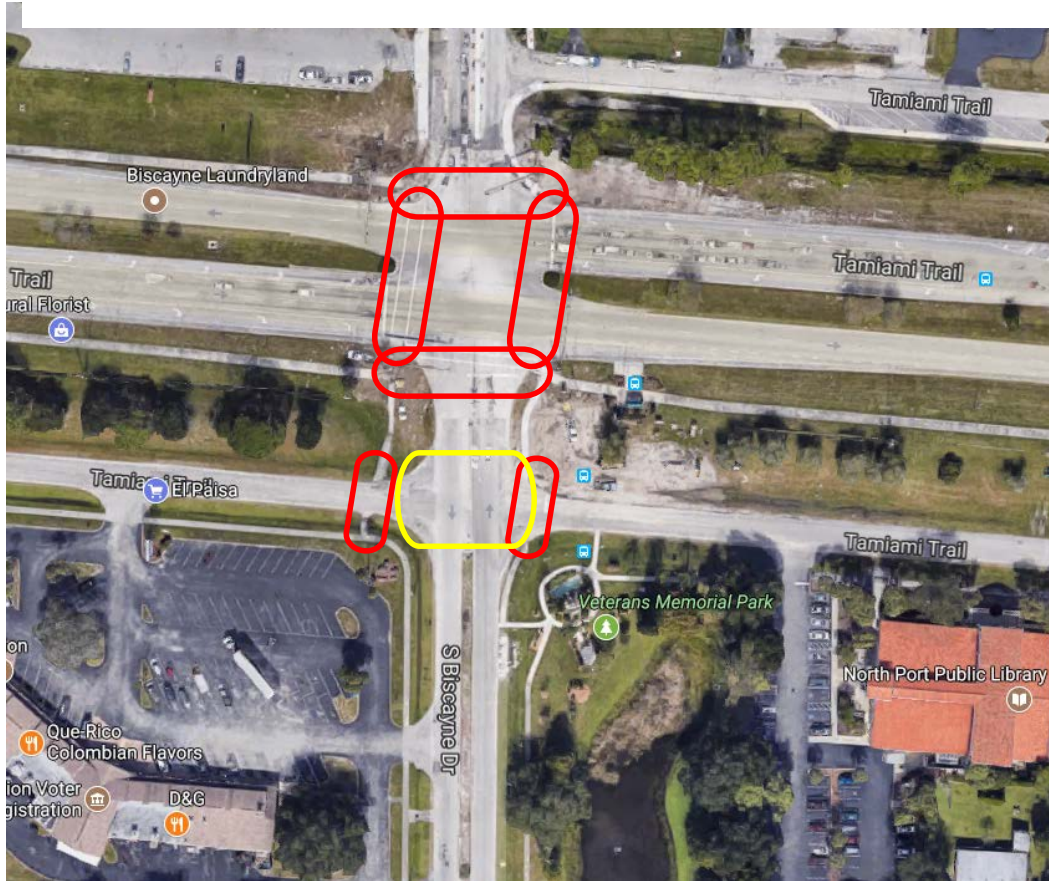
- None.

### Recommendation

- The proposed pedestrian crossings at Sydney Avenue and Hyde Park Avenue, in addition to a sidewalk along the east side of Biscayne Drive, has been approved by Commission.

# BISCAYNE DRIVE

## US 41 SOUTH FRONTAGE ROAD



### LEGEND

 EXISTING  
CROSSWALK

 ANALYZED  
LOCATION

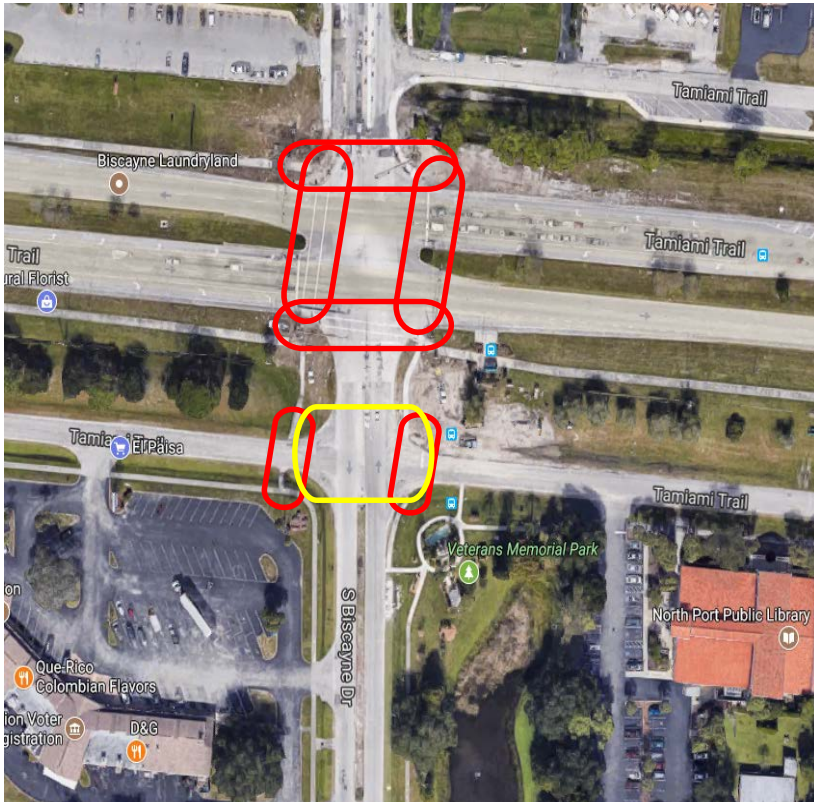




# BISCAYNE DRIVE

## US 41 SOUTH FRONTAGE ROAD

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### Analysis

- To provide a pedestrian crossing along Biscayne Drive at the south Frontage Road/Tamiami Trail and Biscayne Drive.

### Benefits/Advantages/Opportunities/Issues

- FDOT Plans Preparation Manual, Volume 1, Chapter 8, specifies that, “*Midblock/Uncontrolled crosswalks should not be located where the distance from crosswalk to the nearest intersection (or crossing location) is less than 300 feet*”.
- The existing controlled crosswalk on US 41 is less than 100 feet from the proposed location at the Frontage Road.
- Operation and safety of the intersection of US 41 and Biscayne Boulevard will be affected and will require coordination with FDOT.

### Recommendation

- We recommend not including a pedestrian crosswalk at this location.

# BISCAYNE DRIVE AT PICKWICK ROAD



## LEGEND

 PROPOSED CROSSWALK

 PROPOSED SIDEWALK

## Analysis

- To provide a pedestrian crossing along Biscayne Drive at Pickwick Road.

## Benefits/Advantages/Opportunities/Issues

- Add approximately 60 feet of sidewalk to connect bus pads to proposed pedestrian crossing.
- Provide connectivity between bus stops.
- Meets the required minimum 300 feet distance to controlled crossing at US 41 to the south.
- Once Sarasota County Area Transit (SCAT) reactivates the bus stop, Public Works shall construct the pedestrian crossing.

## Recommendation

- Construct pedestrian crossing in coordination with the reactivation of the SCAT bus stop.



# BISCAYNE DRIVE AT DOROTHY AVENUE

## LEGEND

 PROPOSED CROSSWALK

## Analysis

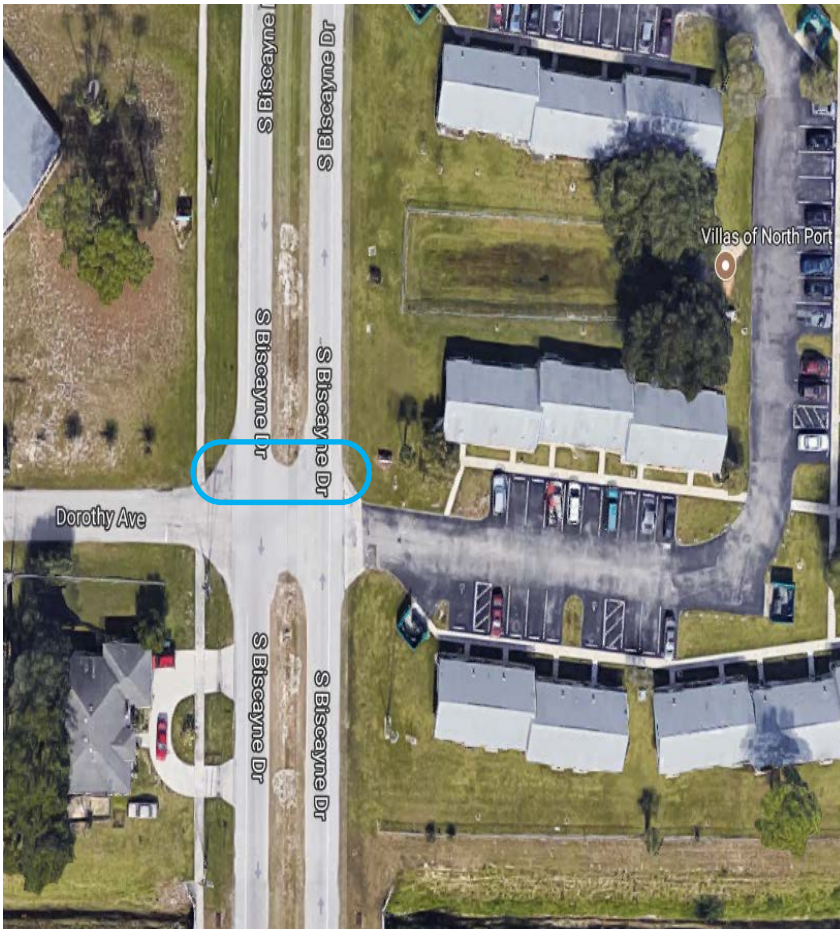
- To provide a pedestrian crossing along Biscayne Drive at Dorothy Avenue.

## Benefits/Advantages/Opportunities/Issues

- During recent field visit, we noticed residents/visitors of the Villas of North Port crossing Biscayne Drive at Dorothy Avenue to access the existing sidewalk along the west side of Biscayne Drive.
- A properly stripped and signed crossing will improve the safety of pedestrians in this area.

## Recommendation

- Staff will prepare an engineers cost estimate to design and construct a sidewalk north of US 41 along the easterly side of South Biscayne Drive from Pickwick Road to Elyton Drive in the fiscal year 2018-2019 budget.



# BISCAYNE DRIVE AT PORTO CHICO AVENUE

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## LEGEND

 PROPOSED CROSSWALK

### Analysis

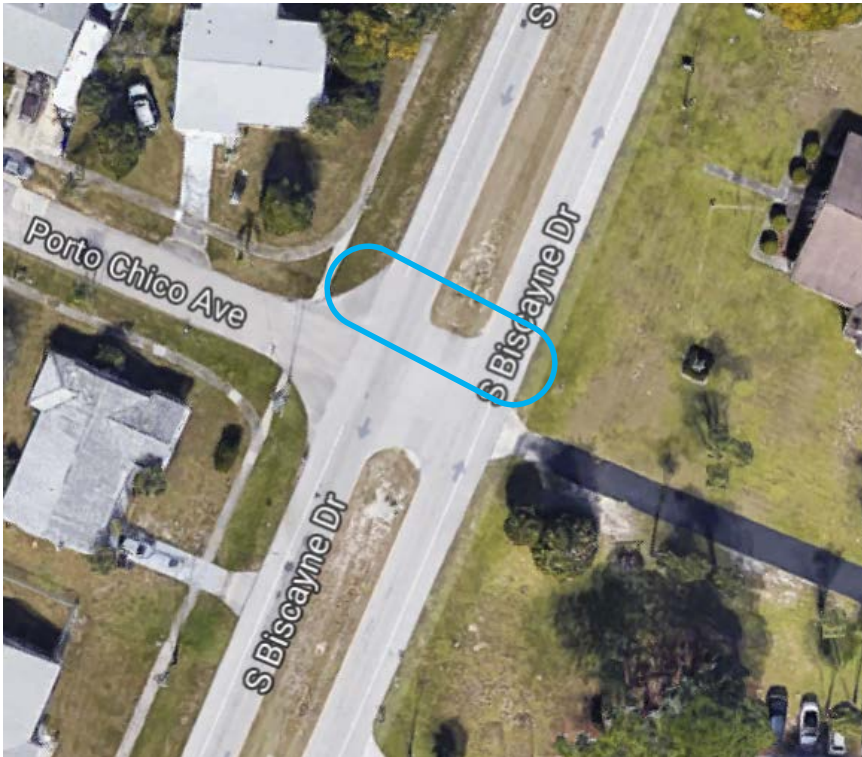
- To provide a pedestrian crossing along Biscayne Drive at Porto Chico Avenue.

### Benefits/Advantages/Opportunities/Issues

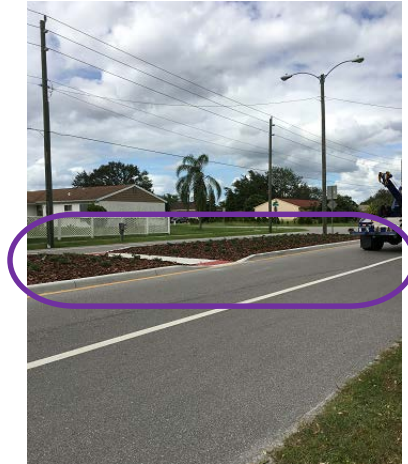
- Connect several churches and multi-family residential facilities on the east side of Biscayne Drive to the existing sidewalk along the west side of Biscayne Drive.
- Potential for future enhancement by adding a sidewalk along the east side of Biscayne Drive from Coco Solo Avenue to Boca Grande Avenue or Trionfo Avenue.

### Recommendation

- We recommend considering this location for a pedestrian crossing.



# BISCAYNE DRIVE AT ELYTON DRIVE



## LEGEND

-  EXISTING NON-COMPLIANT CROSSWALK

## Analysis

- Bring existing pedestrian crossing to current FDOT Standards per 17346.

## Benefits/Advantages/Opportunities/Issues

- Current crossing does not meet FDOT current criteria in Standard Index 17346.
- Improve the safety of pedestrians and motorist.

## Recommendation

- Public Works shall design and install pavement markings and signage per FDOT Standard Index 17346 in fiscal year 2017-2018.



# BISCAYNE DRIVE AT HUMAY AVENUE

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## LEGEND

 PROPOSED CROSSWALK

### Analysis

- To provide a pedestrian crossing along Biscayne Drive at Humay Avenue.

### Benefits/Advantages/Opportunities/Issues

- Near existing SCAT bus stops.
- Can coordinate with Sarasota County Area Transit (SCAT) to move the existing pedestrian crossing from southeast of Humay Avenue to northeast of Humay Avenue in fiscal year 2018-2019.

### Recommendation

- Coordinate the SCAT bus stop relocation on Humay Avenue and Public Works shall construct the pedestrian crossing along Biscayne Drive and Humay Avenue in fiscal year 2018-2019.



# BISCAYNE DRIVE AT DULCE AVENUE

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## LEGEND

 PROPOSED CROSSWALK

### Analysis

- To provide a pedestrian crossing along Biscayne Drive at Dulce Avenue.

### Benefits/Advantages/Opportunities/Issues

- Near existing SCAT bus stops.
- Can coordinate with Sarasota County Area Transit (SCAT) to move the existing pedestrian crossing from southeast of Dulce Avenue to northeast of Dulce Avenue in fiscal year 2018-2019.

### Recommendation

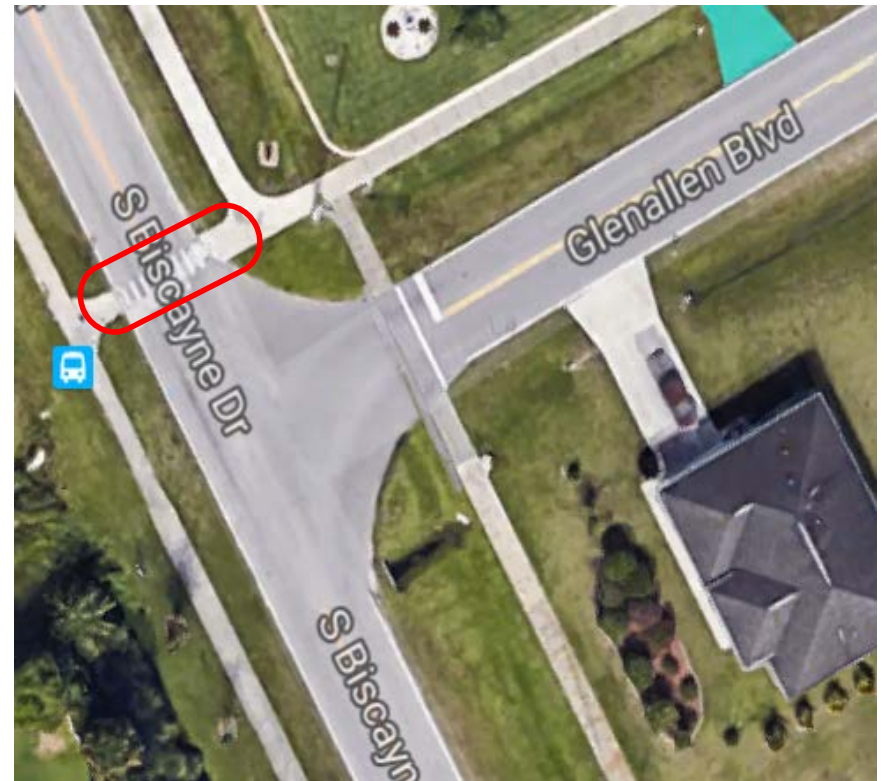
- Coordinate the SCAT bus stop relocation on Dulce Avenue and Public Works shall construct the pedestrian crossing along Biscayne Drive and Dulce Avenue in fiscal year 2018-2019.

# BISCAYNE DRIVE AT BRUBECK ROAD AND GLENALLEN BOULEVARD

## LEGEND

 EXISTING CROSSWALK

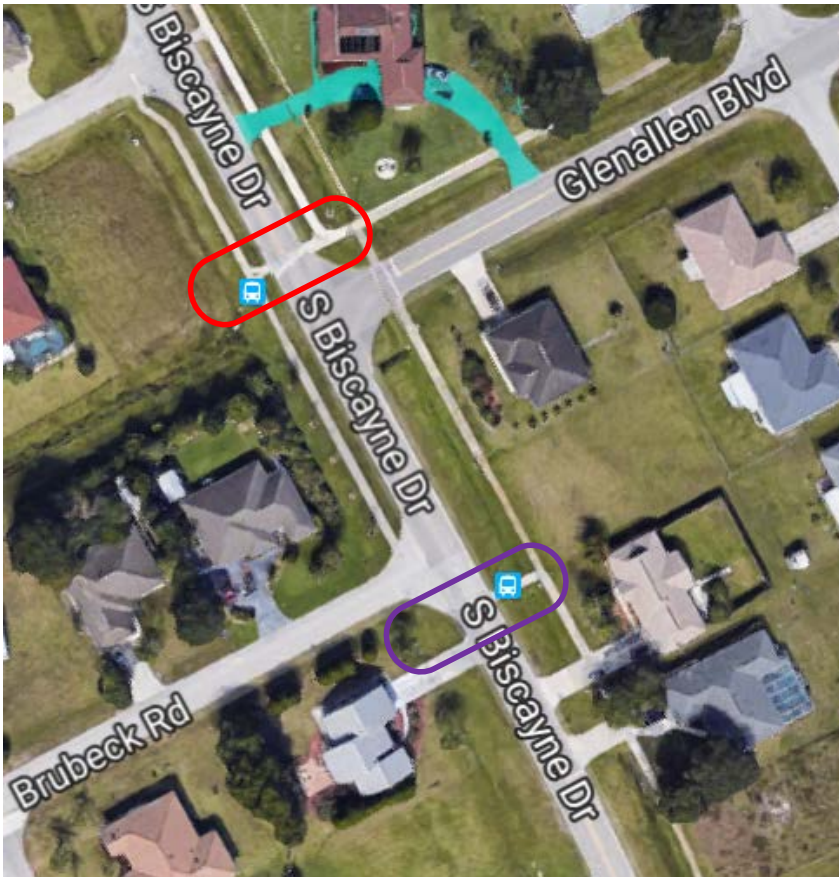
 EXISTING NON-COMPLIANT  
CROSSWALK





# BISCAYNE DRIVE AT BRUBECK ROAD AND GLENALLEN BOULEVARD

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## Analysis

- To consolidate the two existing pedestrian crossings at Glenallen Boulevard and bring this crossing into compliance with latest FDOT Standards.

## Benefits/Advantages/Opportunities/Issues



- Improvements to the operation and safety of Biscayne Drive and Glenallen Boulevard.
- Bring the existing crossing at Glenallen Boulevard to compliance with latest FDOT Standard 17344 for school crossings.
- FDOT has grant funds to upgrade school crossings (signs and flashing beacons only) to comply with the revised Standard 17344.
- Coordinate with SCAT consolidation of bus stops along northbound and southbound Biscayne Drive in fiscal year 2017-2018.

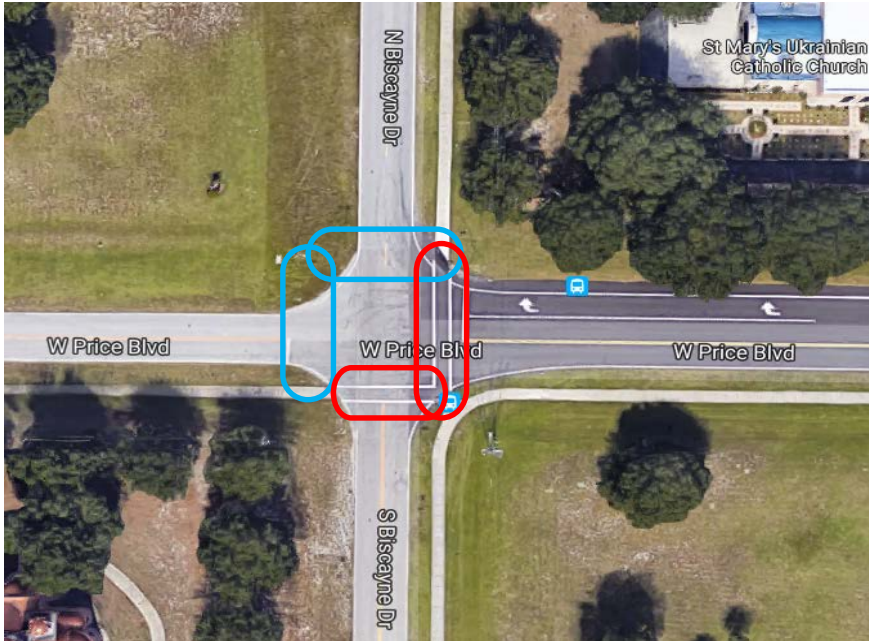
## Recommendation

- Public Works shall consolidate these two pedestrian crossing into one at Glenallen Boulevard in fiscal year 2017-2018.

# BISCAYNE DRIVE AT PRICE BOULEVARD

## LEGEND

-  EXISTING CROSSWALK
-  PROPOSED CROSSWALK



## Analysis

- To provide a pedestrian crossing along Biscayne Drive and Price Boulevard.

## Benefits/Advantages/Opportunities/Issues

- Add pedestrian crossings on north leg of Biscayne Drive and west leg of Price Boulevard.
- Price Boulevard will be converted to a 4-way stop control condition that will improve the safety of pedestrians as well as motorist in the area.

## Recommendation

- Staff will prepare an engineers cost estimate to design and construct a pedestrian crossing and concrete pad in the fiscal year 2018-2019 budget.



# BISCAYNE DRIVE AT PONCE DE LEON BOULEVARD

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## LEGEND

 PROPOSED CROSSWALK



## Analysis

- To provide a pedestrian crossing along Biscayne Drive at Ponce de Leon Boulevard.

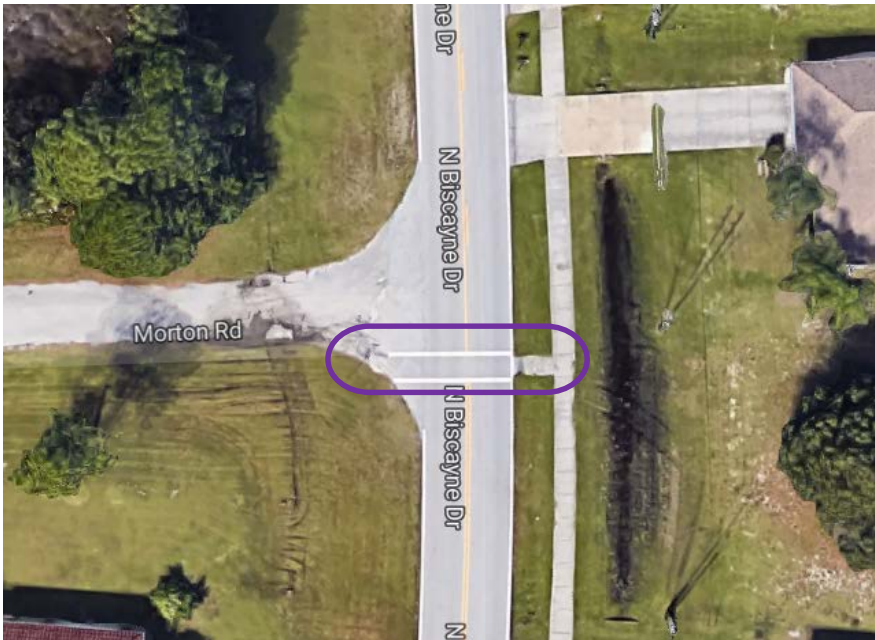
## Benefits/Advantages/Opportunities/Issues

- Near new Fire Station 85 at the southeast corner of Biscayne Drive and Ponce de Leon Boulevard.
- Potential future commercial development at the northeast corner of Biscayne Drive and Ponce de Leon Boulevard, can be a pedestrian destination.

## Recommendation

- We recommend considering this location for a future pedestrian crossing.

# BISCAYNE DRIVE AT MORTON DRIVE



## LEGEND

-  EXISTING NON-COMPLIANT CROSSWALK

## Analysis

- Bring existing pedestrian crossing to current FDOT Standards per 17346.

## Benefits/Advantages/Opportunities/Issues

- Current crossing does not meet FDOT current criteria in Standard Index 17346.
- Improve the safety of pedestrians and motorist.

## Recommendation

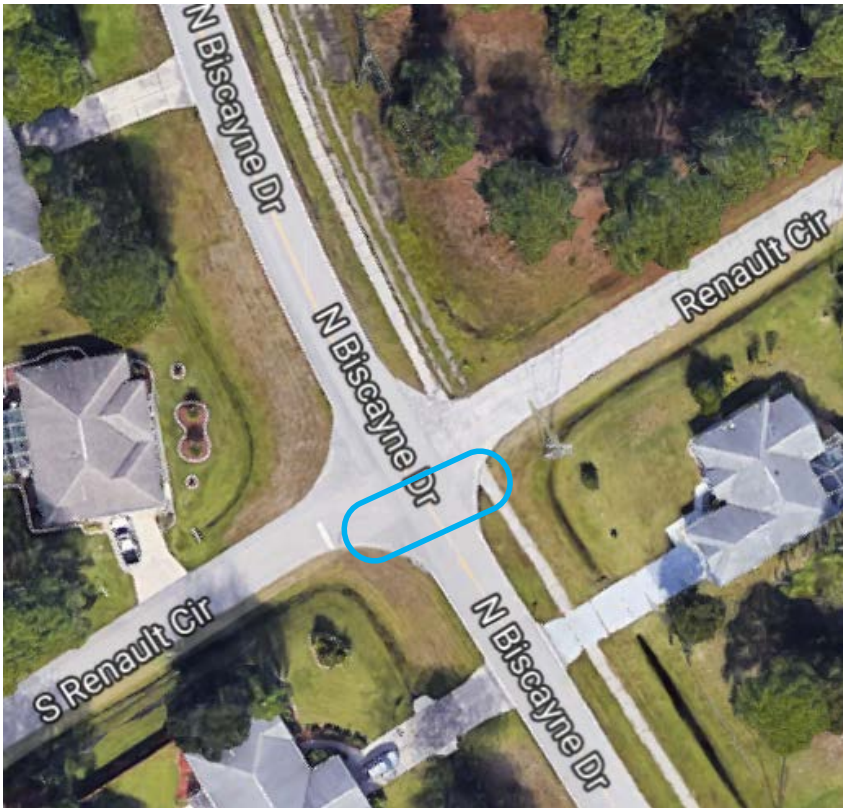
- Add pavement markings, concrete pad south of Morton Drive, and signage per FDOT Standard Index 17346 in fiscal year 2017-2018.

# BISCAYNE DRIVE AT RENAULT CIRCLE

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## LEGEND

 PROPOSED CROSSWALK



## Analysis

- To provide a pedestrian crossing along Biscayne Drive at Renault Circle.

## Benefits/Advantages/Opportunities/Issues

- This is the last major intersecting road along Biscayne Drive before the end of the existing sidewalk along the eastern side of Biscayne Drive.

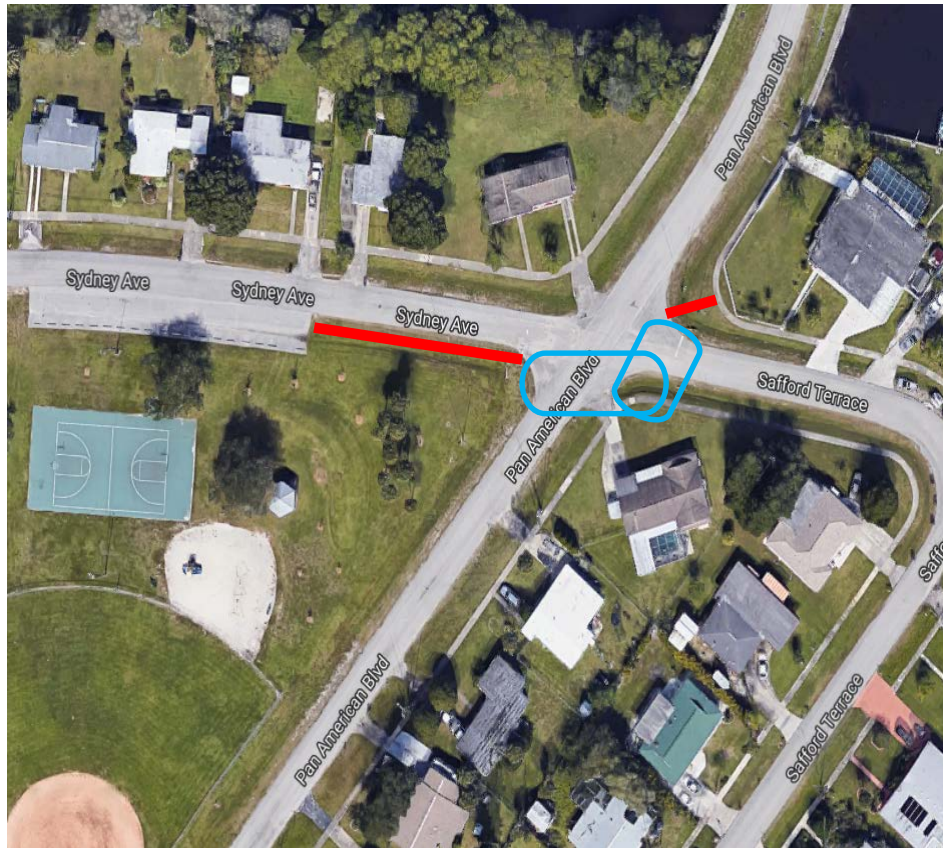
## Recommendation

- In the future, when sidewalks are completed from Renault Circle to I-75, Staff will construct a pedestrian crossing for this segment of Biscayne Drive.



# PAN AMERICAN BOULEVARD AT SYDNEY AVENUE

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## LEGEND

 PROPOSED CROSSWALK

 PROPOSED SIDEWALK

## Analysis

- To provide a pedestrian crossing along Pan American Boulevard and Safford Terrace.

## Benefits/Advantages/Opportunities/Issues

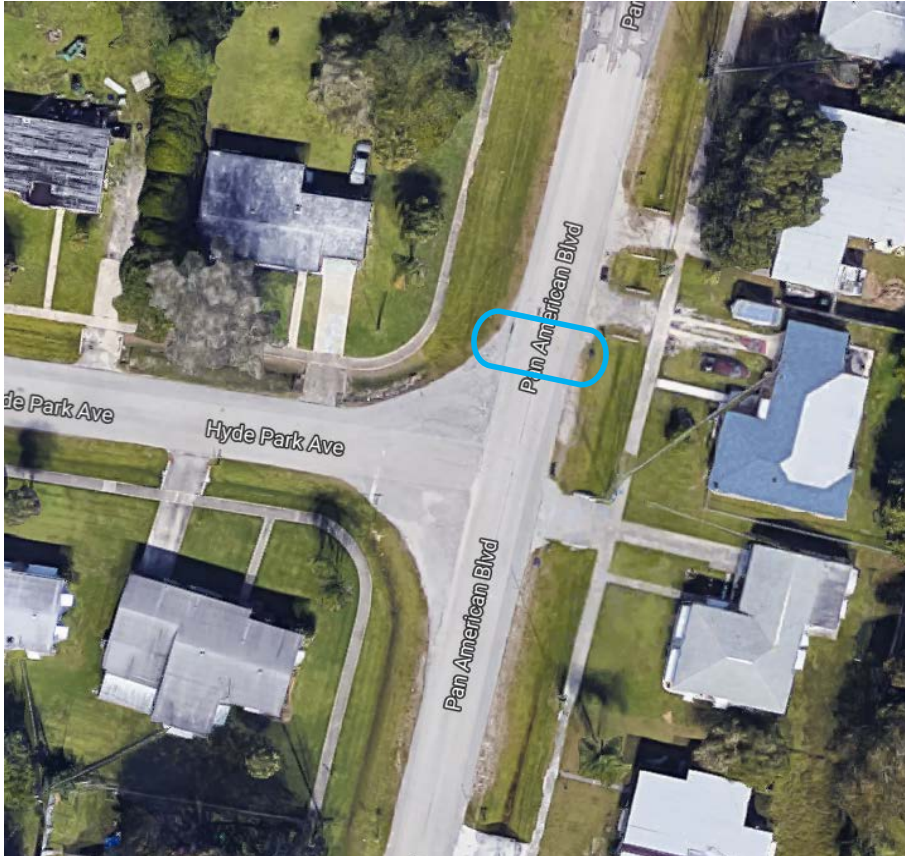
- Provide connectivity from sidewalks along the east side of Pan American Boulevard and Hyde Park.

## Recommendation

- Public Works will prepare an engineers cost estimate to design and construct a sidewalk and pedestrian crossing to the Park parking/access in 2018-2019.

# PAN AMERICAN BOULEVARD AT HYDE PARK AVENUE

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## LEGEND

 PROPOSED CROSSWALK

## Analysis

- To provide a pedestrian crossing along Pan American Boulevard at Hyde Park Avenue.

## Benefits/Advantages/Opportunities/Issues

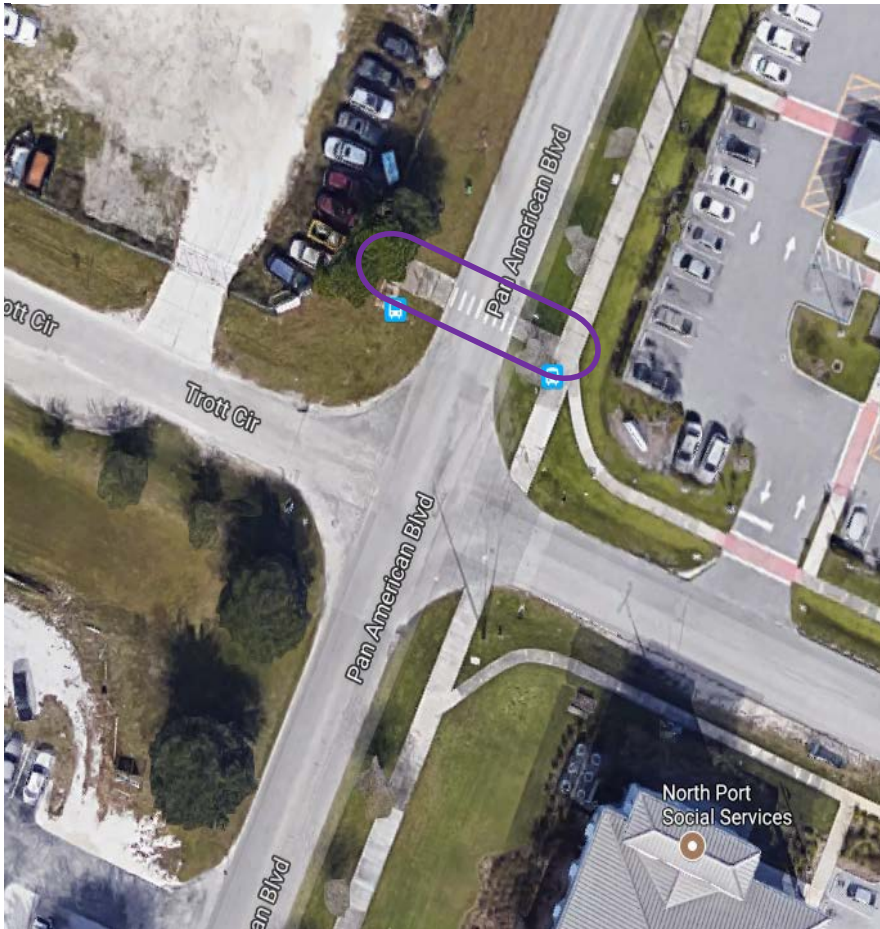
- Provide connectivity from sidewalks along the east side of Pan American Boulevard.
- Provide access to pedestrians wanting to access to the Sarasota County Public Library on Hyde Park Avenue.

## Recommendation

- Public Works will prepare an engineers cost estimate to design and construct a crosswalk in fiscal year 2018-2019.



# PAN AMERICAN BOULEVARD AT TROTT CIRCLE



## LEGEND

-  EXISTING NON-COMPLIANT CROSSWALK

## Analysis

- Bring existing pedestrian crossing to current FDOT Standards per 17346.

## Benefits/Advantages/Opportunities/Issues

- Current crossing does not meet FDOT current criteria in Standard Index 17346.
- Improve the safety of pedestrians and motorist.

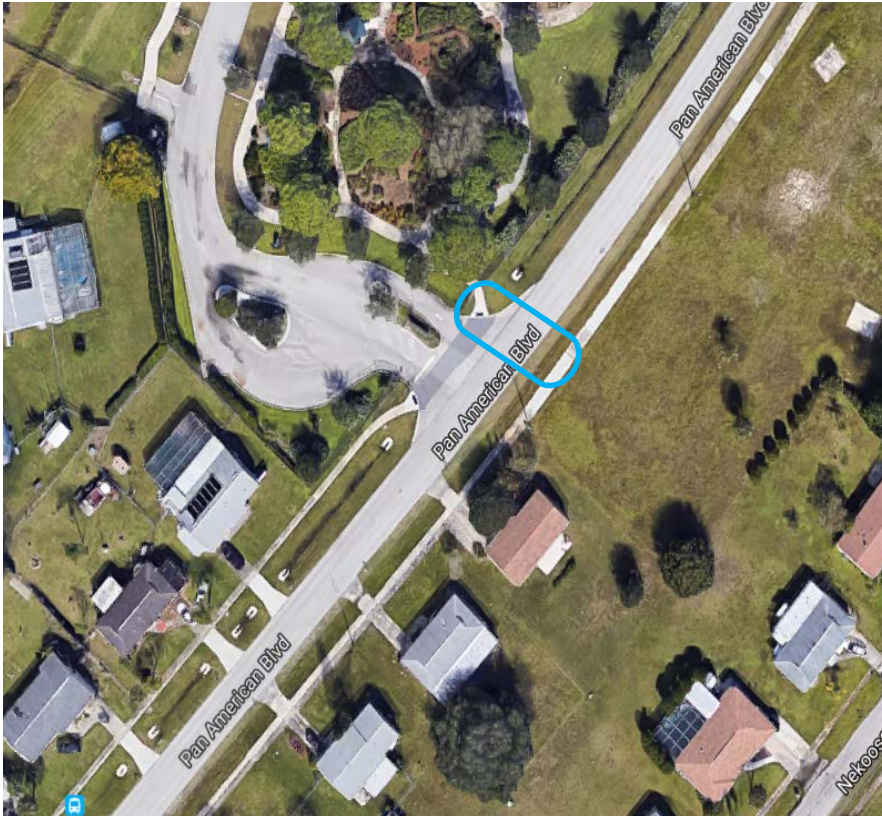
## Recommendation

- Public Works shall replace pavement markings and add signage per FDOT Standard Index 17346 in fiscal year 2017-2018.



# PAN AMERICAN BOULEVARD AT GARDEN OF THE FIVE SENSES ENTRANCE

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## LEGEND

 PROPOSED CROSSWALK

## Analysis

- To provide a pedestrian crossing along Pan American Boulevard at the Garden of The Five Senses entrance.

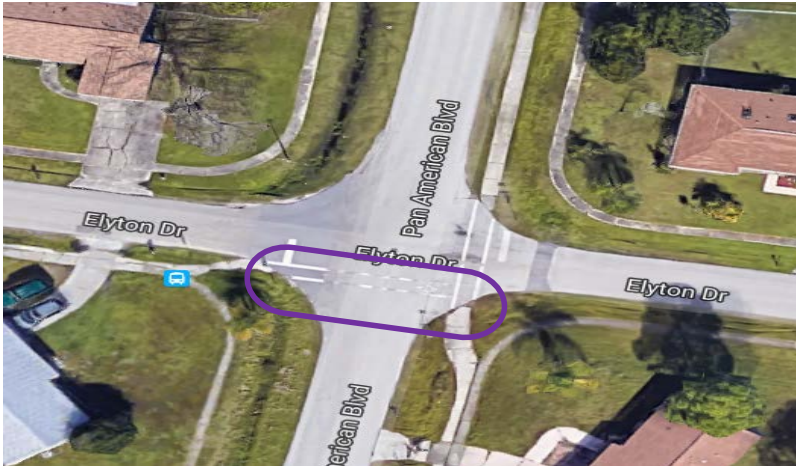
## Benefits/Advantages/Opportunities/Issues

- Provide access to pedestrians wanting to access the Garden of the Five Senses.
- Provides connectivity between the existing sidewalks along the east and west side of Pan American Boulevard.

## Recommendation

- Staff will prepare an engineers cost estimate to design and construct a crosswalk in fiscal year 2018-2019.

# PAN AMERICAN BOULEVARD AT ELYTON DRIVE



## LEGEND

-  EXISTING NON-COMPLIANT CROSSWALK

## Analysis

- Bring existing pedestrian crossing to current FDOT Standards per 17346.

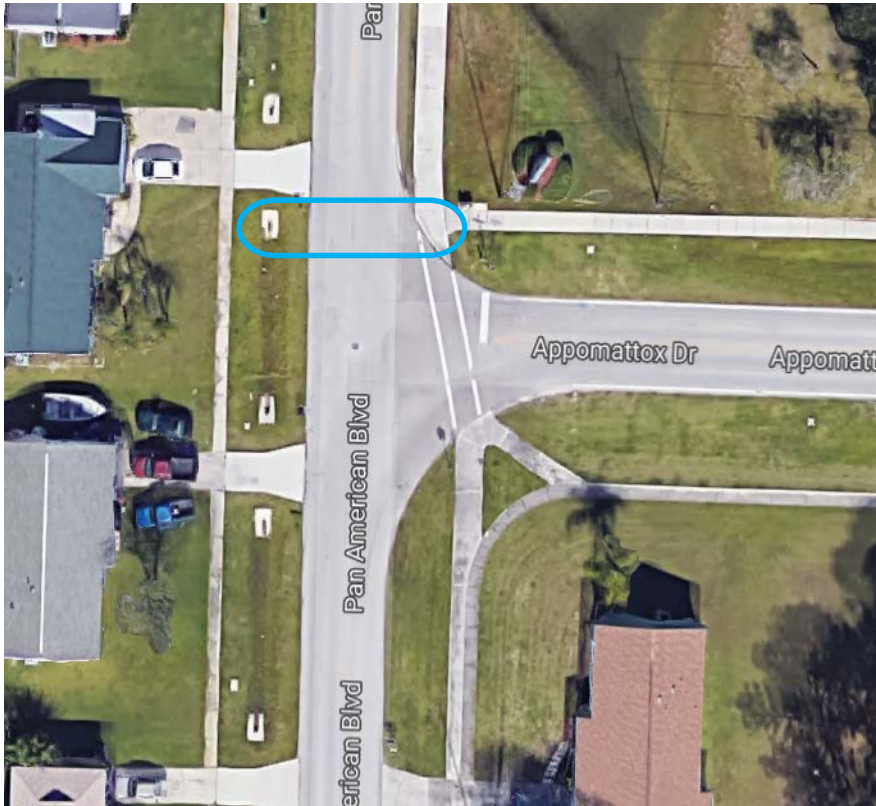
## Benefits/Advantages/Opportunities/Issues

- Current crossing does not meet FDOT current criteria in Standard Index 17346.
- Improve the safety of pedestrians and motorist.

## Recommendation

- Public Works shall remove existing bike lane pavement markings; add pavement markings and add signage per FDOT Standard Index 17346 in fiscal year 2017-2018.

# PAN AMERICAN BOULEVARD AT APPOMATTOX DRIVE



## LEGEND

 PROPOSED CROSSWALK

## Analysis

- To provide a pedestrian crossing along Pan American Boulevard at Appomattox Drive.

## Benefits/Advantages/Opportunities/Issues

- Provide connectivity for access to the Jockey Club.
- Add signage and pavement marking per FDOT Standard 17344 for School Crossings.
- FDOT has grant funds to upgrade school crossings (signs and flashing beacons only) to comply with the revised Standard 17344.

## Recommendation

- Public Works will prepare an engineers cost estimate to design and construct a sidewalk in fiscal year 2018-2019.



# PAN AMERICAN BOULEVARD AT PRIMM PLACE

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## LEGEND

 PROPOSED CROSSWALK

## Analysis

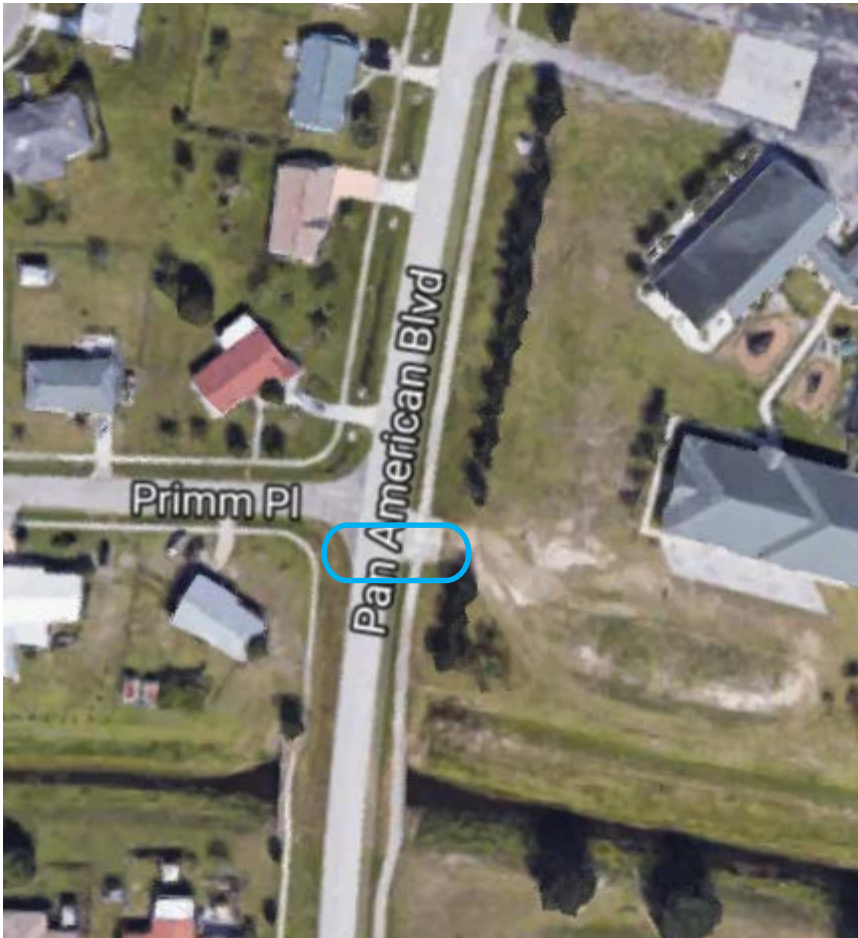
- To provide a pedestrian crossing along Pan American Boulevard at Primm Place.

## Benefits/Advantages/Opportunities/Issues

- Provide connectivity for access to the Gulfcoast Christian Academy.
- Add signage and pavement marking per FDOT Standard 17344 for School Crossings.
- FDOT has grant funds to upgrade school crossings (signs and flashing beacons only) to comply with the revised Standard 17344.

## Recommendation

- Staff will prepare an engineers cost estimate to design and construct a pedestrian crossing in the future.



# PAN AMERICAN BOULEVARD AT SPRING HAVEN DRIVE

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## LEGEND

 PROPOSED CROSSWALK

## Analysis

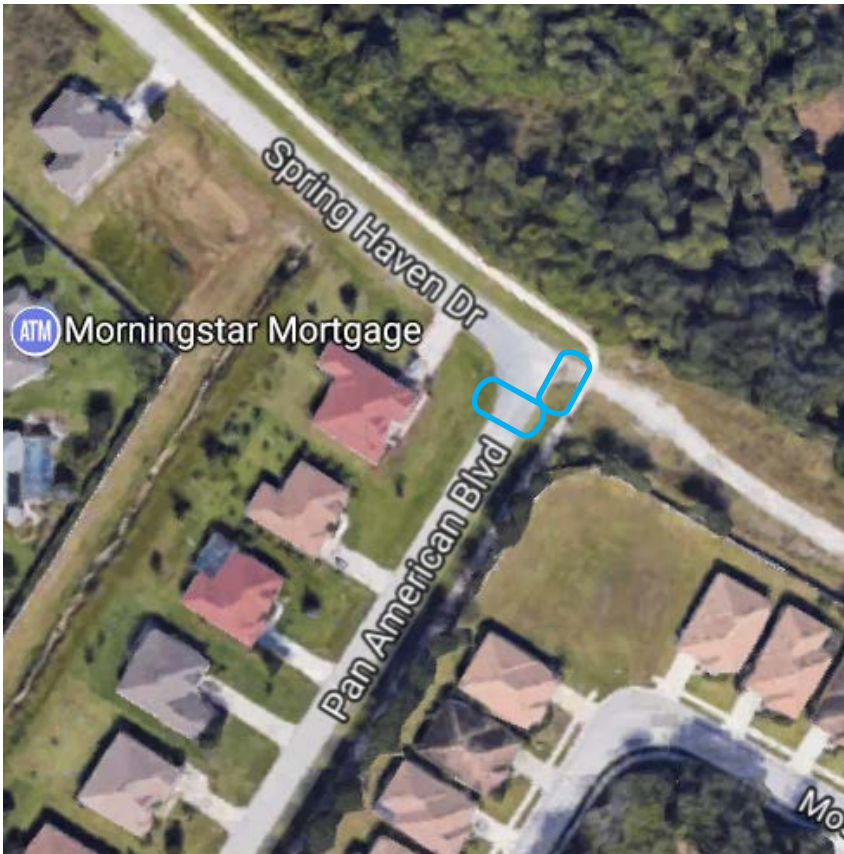
- An analysis will be done by the consultant of the Spring Haven Drive project.

## Benefits/Advantages/Opportunities/Issues

- Pedestrian crossings being coordinated with the consultant for the Spring Haven Drive Extension project.

## Recommendation

- To be determined upon completion of the consultant's analysis.



# SUMMARY OF EXISTING AND PROPOSED PEDESTRIAN CROSSINGS

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## BISCAYNE DRIVE

Existing to be improved or modified (Fiscal Year 2017-2018):

- Brubeck Road
- Glenallen Boulevard
- Price Boulevard
- Morton Road

Proposed New Locations (Fiscal Year 2018-2019 or later):

- Pan American Boulevard
- Sydney Avenue
- Hyde Park Avenue
- Pickwick Road
- Dorothy Avenue
- Porto Chico Avenue
- Humay Avenue
- Dulce Avenue
- Price Boulevard
- Ponce de Leon Boulevard
- Renault Circle

## PAN AMERICAN BOULEVARD

Existing to be improved or modified (Fiscal Year 2017-2018):

- Biscayne Drive
- Trott Circle
- Elyton Drive

Proposed New Locations (Fiscal Year 2018-2019 or later):

- Sydney Avenue
- Hyde Park Avenue
- Garden of the Five Senses Entrance
- Appomattox Drive
- Primm Place
- Spring Haven Drive





# QUESTIONS?