

DRAFT

Sociocultural Effects Report

Florida Department of Transportation

District 4

SR 5/ US 1 at Aviation Boulevard

Indian River, Florida

Financial Management Number: 441693-1-22-02

ETDM Number: 14475

May 2024

The environmental review, consultation and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration (FHWA) and FDOT

Project Development & Environment (PD&E) Study

SR 5/US 1 at Aviation Boulevard

Financial Management Number: 441693-1-22-02

ETDM Number: 14475

Indian River County, Florida

Draft

SOCIOCULTURAL EFFECTS REPORT

Prepared for:



Florida Department of Transportation

District 4

Prepared by:

WGI, Inc.

2035 Vista Parkway

West Palm Beach, FL 33411

May 2024

The environmental review, consultation and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration (FHWA) and FDOT.

TABLE OF CONTENTS

1.0	PROJECT SUMMARY	1-1
1.1	PROJECT DESCRIPTION	1-1
1.2	PURPOSE & NEED	1-3
1.3	COMMITMENTS.....	1-6
1.4	ALTERNATIVES ANALYSIS SUMMARY.....	1-6
	1.4.1 Alternatives Considered	1-6
	1.4.2 Alternatives Considered and Eliminated.....	1-8
	1.4.3 Alternatives Considered for Further Evaluation	1-8
1.5	DESCRIPTION OF PREFERRED ALTERNATIVE	1-8
1.6	LIST OF TECHNICAL DOCUMENTS	1-12
2.0	CORRIDOR CHARACTERICS	2-1
2.1	ETDM SCREENING LIMITS	2-1
2.2	LAND USE.....	2-2
2.3	DEMOGRAPHIC CHARACTERISTICS	2-5
2.4	INCOME	2-7
2.5	EDUCATION	2-7
2.6	TRANSPORTATION FACILITIES	2-7
2.7	FUTURE TRENDS.....	2-9
3.0	POTENTIAL EFFECTS	3-1
3.1	SOCIAL.....	3-2
3.2	ECONOMIC.....	3-6
3.3	LAND USE CHANGES	3-8
3.4	MOBILITY	3-9
3.5	AESTHETICS	3-12
3.6	RELOCATION POTENTIAL	3-13
4.0	RECOMMENDATIONS AND COMMITMENTS	4-1
4.1	RECOMMENDATIONS FOR RESOLVING ISSUES	4-1
4.2	PROJECT COMMITMENTS	4-1
5.0	ENVIRONMENTAL JUSTICE, CIVIL RIGHTS, AND RELATED ISSUES	5-1
5.1	PROTECTED POPULATIONS IN STUDY AREA	5-1
5.2	COORDINATION AND PARTICIPATION.....	5-1
5.3	SUMMARY OF PROJECT EFFECTS	5-1
5.4	MITIGATION AND ENHANCEMENT ACTIONS	5-2

5.5 FINDINGS REGARDING DISPROPORTIONATE ADVERSE EFFECTS5-2

6.0 SOURCES..... 6-1

7.0 APPENDICESA

LIST OF FIGURES

<u>Figure</u>	<u>Page Number</u>
Figure 1-1 Project Location Map	1-2
Figure 1-2 Proposed Typical Section for SR 5/US 1.....	1-10
Figure 1-3 Proposed Typical Section for Aviation Blvd (west approach).....	1-11
Figure 2-1 ETDM 14475 Screening Limits.....	2-1
Figure 2-2 Existing and Future Land Use Map.....	2-4
Figure 3-1 ETDM Degree of Effect (Published 01/21/2022).....	3-1
Figure 3-2 Study Intersection, looking north	3-2

LIST OF TABLES

<u>Table</u>	<u>Page Number</u>
Table 2-1 Study Area Demographic Characteristics.....	2-5
Table 3-1 Parcels Impacted by Alternative.....	3-7
Table 3-2 Affected Parcels and Potential Relocations.....	3-13

APPENDICES

Appendix A - Alternative Concept Plans

Appendix B - Alternatives Screening and Evaluation Matrix

Appendix C - Sociocultural Data Reports

Appendix D – Public Meeting Summaries

1.0 PROJECT SUMMARY

1.1 Project Description

The project intersection of SR 5/US 1 and Aviation Boulevard is located within the urbanized area of the City of Vero Beach in Indian River County (IRC), Florida. This is a 4-legged, signalized intersection that accommodates the Florida East Coast (FEC) Railroad crossing on the eastbound approach. The FEC Railroad, which is part of the Strategic Intermodal System (SIS) Railroad Corridor, includes double-tracks running north-south parallel to SR 5/US 1 on the west side. Pedestrian crosswalks are provided on the northbound and westbound approaches of the intersection. There are no dedicated bicycle facilities. Nearby landmarks include Vero Beach Regional Airport, Cleveland Clinic Indian River Hospital and Indian River Medical Center, and downtown Vero Beach. The intersection is near the Runway Protection Zone (RPZ) of the Vero Beach Regional Airport.

The project proposes operational and capacity improvements to the intersection of SR 5/US 1 and Aviation Boulevard/32nd Street. Various alternatives were considered during the Project Development & Environment (PD&E) study, which include grade-separated crossings over the FEC Railroad. Additional features were considered such as multi-modal improvements. To account for potential grade separation and other solutions that address the purpose and need, the north-south limits of the PD&E study extend beyond the intersection along US 1 between 21st Street and 41st Street (approximately 2 miles). The west limits extend along Aviation Boulevard between US 1 and 27th Avenue (approximately 1 mile). The east limits begin west of US 1 intersection and extend to 13th Avenue. The PD&E study limits are shown on the project location map in **Figure 1-1**.

SR 5/US 1 constitutes the north and south approaches of the intersection, as a four-lane divided facility with a painted center turn-lane, curb and gutter on both sides, and a sidewalk on the east side. SR 5/US 1 has a functional classification of Urban Principal Arterial Other and a context classification of Suburban Commercial (C3C) and Urban General (C4) since there are mostly non-residential land uses along the corridor with residential neighborhood connections. Indian River County has designated SR 5/US 1 corridor as a hurricane evacuation route.

At the eastbound approach of the intersection, Aviation Boulevard crosses the FEC Railroad. This is a 2-lane undivided roadway with no pedestrian facilities. Aviation Boulevard has a functional classification of Urban Minor Arterial and a context classification of C3 Commercial due to the non-residential land uses along the corridor.

SECTION 1 – PROJECT SUMMARY

Thirty-second (32nd) Street forms the westbound approach of the intersection as a local 2-lane undivided street serving limited commercial and residential properties.



Figure 1-1 Project Location Map

1.2 Purpose & Need

Purpose

The primary purpose of the project is to evaluate intersection improvement solutions to address existing and projected traffic demands, improve safety, support economic growth, and enhance modal interrelationships with rail, bicycle, and pedestrian modes.

Need

Project Status

The project is listed in the Indian River Metropolitan Planning Organization's (MPOs) 2045 Long Range Transportation Plan (LRTP) Cost Feasible Plan Projects as project ID 2 with as a “New Interchange” with an implementation timeframe between 2036 to 2045. This project is also listed as Priority Project #6 in the MPOs 2021/2022 Priority Projects Report. The project is programmed for funding for Preliminary Engineering (PE) phase in the Transportation Improvement Program (TIP) and the State Transportation Improvement Plan (STIP). The project is planned for funding for the right of way and construction phases according to the 2045 LRTP.

Traffic Demand and Capacity

According to the Indian River County Metropolitan Planning Organization (MPO) 2021 Priority Projects Report, the intersection is currently failing or nearly failing during peak periods and in peak directions.

As part of this PD&E study, FDOT District 4 developed, under a separate study, the Traffic Forecasting Memorandum - SR 5/US 1 at Aviation Boulevard PD&E Support, dated November 2, 2021. The Efficient Transportation Decision Making (ETDM) traffic forecasting section is updated as follows.

The SR 5/US 1 at Aviation Blvd intersection operates in year 2021 at Level of Service (LOS) C/D in the AM/PM peak periods. With the eastbound and westbound approaches operating at LOS E or F for both periods, with the eastbound queue length exceeding the available storage.

The future No-Build (without improvements) condition shows the 2045 traffic demand increasing due to population and employment growth as well as planned capacity improvements in the immediate network; therefore, conditions are expected to degrade at this intersection without improvements.

According to the analysis forecast developed from the Treasure Coast Regional Planning Model (TCRPM), the Annual Average Daily Traffic (AADT) is projected to increase 61% between the years 2021 and 2045. Along SR 5/US 1 south of Aviation Boulevard, No-Build traffic volumes are projected to increase from 26,500 to 42,600 AADT for the analysis years 2021 and 2045, respectively. To the north of Aviation Boulevard, SR 5/US 1 traffic volumes will increase from 34,200 to 55,000 AADT. Along Aviation Boulevard, the increase is from 12,000 to 19,300 AADT.

It is anticipated that traffic operations will degrade to LOS F by 2045 at the intersection of SR 5/US 1 at Aviation Boulevard without improvements under the No-Build condition. Delays will reach 135/156 seconds per vehicle during AM/PM peak periods, with the eastbound and westbound approaches operating at LOS F with delays ranging from 206/135 seconds of delay per vehicle, and the eastbound queue length exceeding the available storage by 169%.

The IRC Aviation Boulevard extension project, which is a separate nearby project, has construction funds committed according to the IRC Capital Improvement Element adopted in December 2020. At the time of this study, construction had not begun on the project, but the County has started the right-of-way acquisition process and design. The Preferred Alternative will connect with that new road extending Aviation Boulevard to the east from US 1 to 41st Street. According to the Indian River County MPO 2045 LRTP, other planned nearby capacity improvements include widening of Aviation Boulevard from 2 to 4 lanes, from 27th Avenue to the subject intersection with SR 5/US1. These projects will increase the traffic demand at the intersection of SR 5/US 1 and Aviation Boulevard as well.

Safety

The 2021 Florida Strategic Highway Safety Plan (FSHSP) has identified intersections as an emphasis area while rail crossings are an evolving emphasis area. A historical crash evaluation of the intersection of SR 5/US 1 and Aviation Boulevard revealed a total of 54 crashes observed over a five-year period between 2016 and 2020. Approximately 23% of these crashes resulted in injuries. The majority of these crashes were rear end at approximately 42% followed by sideswipe at 26% and left turn crashes at 15%. These types of crashes may be correlated to congested conditions at the intersection. One crash involved an FEC Railroad train and a vehicle which resulted in injury. Two crashes involved the FEC Railroad crossing gate. The existing facility's safety performance crash rate was calculated at 0.92 which is significantly higher than the Statewide crash rate of 0.53 and the Districtwide crash rate of 0.34. This indicates a potential safety concern. The SR 5/US 1 corridor has been designated by Indian River County as an evacuation route.

Social Demands or Economic Development

According to the Indian River County MPO 2045 LRTP, the County's population is projected to grow 41% between the year 2015 to 2045 (143,326 population in 2015 to 201,839 in 2045). Similarly, employment is projected to grow 24% (76,386 employed during 2015 to 94,626 in 2045).

The City of Vero Beach Comprehensive Plan (April 2018) shows existing undeveloped lands along SR 5/US 1 in the vicinity of the intersection with Aviation Boulevard. The Future Land Use map presents a transformation of this area with mixed-use development, commercial, mixed residential, and residential medium. This indicates potential land development growth in the immediate area of the project.

Based on the Indian River County Comprehensive Plan, the Indian River County/City of Vero Beach Enterprise Area includes an area from SR 5/US 1 as the eastern boundary, 43rd Avenue as the western boundary, 53rd Street as the northern boundary, and Atlantic Boulevard as the southern boundary. The Enterprise Area encourages economic growth and investment through tax incentives which may increase traffic demand in the area.

The Vero Beach Regional Airport Master Plan includes an Airport Commercial Village and proposes to increase daily passenger traffic and identifies aircraft storage. Moreover, the master plan forecasts an annual average growth rate for aircraft operations at 1.5% indicating an increase in air traffic to/from the airport.

Modal Interrelationships

The intersection of SR 5/US 1 and Aviation Boulevard currently serves numerous modes of transportation, including: vehicles, pedestrians (sidewalks and crosswalks), transit, and the FEC Railroad crossing at the eastbound approach of the intersection. Indian River County's transit system, GoLine, includes three bus routes along SR 5/US 1 and one route along Aviation Boulevard based on the 2021 transit system map. In addition, the Vero Beach Regional Airport is located directly northwest of the intersection with direct access along Aviation Boulevard.

The existing bicycle and pedestrian network are limited in the vicinity of the project. There are no bicycle lanes, and sidewalks are only present on the east side of SR 5/US 1. Guided by the 2015 Bicycle and Pedestrian Plan, the Indian River MPO 2045 LRTP proposes new sidewalks and bicycle facilities in conjunction with roadway improvement projects along Aviation Boulevard between SR 5/US 1 and 43rd Avenue which is the entire southern boundary of the Vero Beach Regional Airport. The plan also proposes a new bicycle facility along SR 5/US 1 north of Aviation Boulevard which supports a vision to have a bicycle facility along most SR 5/US 1 within the County.

The Indian River MPO 2045 LRTP, which is based on the Indian River County Transit Development Plan (TDP), presents several transit needs in the immediate area of the intersection of SR 5/US 1 including a potential bus shelter at the intersection, new/modified route service along SR 5/US 1, and improved route operations along Aviation Boulevard.

The FEC Railroad, which is parallel and abutting west of SR 5/US 1, is part of the FDOT Strategic Intermodal System (SIS). According to the Indian River MPO 2045 LRTP, a performance evaluation goal is to enhance the FDOT SIS by constructing a flyover at the FEC Railroad at the intersection of SR 5/US 1 and Aviation Boulevard (Objective 1.04, Policy 1.04.1, and Performance Indicator 1.041.1).

In 2016, the Vero Beach Regional Airport released their master plan that identified numerous needs such as an "Airport Commercial Village" along Aviation Boulevard which would function as a key commercial district. In addition, the plan describes improvements to Aviation Boulevard which is the gateway and primary access to the Airport.

1.3 Commitments

This section to be completed after the public hearing is held.

1.4 Alternatives Analysis Summary

Alternatives analysis is the process of developing, evaluating, and eliminating potential project alternatives based on the purpose and need of the project. The analysis focused on the intersection and approaches at SR 5/US 1 and Aviation Boulevard/32nd Street. The IRC MPO LRTP included a feasibility study into the PD&E study to consider grade separating the intersection over the railroad. The process also included a separate Runway Protection Zone (RPZ) alternatives analysis requested by the FAA to evaluate effects to Runway 30L operations and safety.

The alternatives analysis process included a screening of eight alternatives, elimination of four alternatives, and four alternatives considered for additional study. The 'No-Build' alternative is defined as the alternative in which the proposed project improvements would not take place and is used as the baseline against which 'Build' alternatives are evaluated. Local coordination with the public, Vero Beach Regional Airport, City of Vero Beach, Indian River County Public Works and MPO occurred throughout the alternatives analysis process.

1.4.1 Alternatives Considered

No Build Alternative: This alternative does not implement improvements and maintains the existing conditions through the project with only periodic maintenance improvements.

Alternatives 1 through 6 represent the at-grade and grade separated alternatives. Alternatives 7 and 8 resulted from the Intersection Control Evaluation (ICE) process.

Alternative 1 Conventional Intersection: This alternative reconstructs the intersection and adds turn lanes to all approaches and adds one westbound through lane on Aviation Boulevard to accept the dual left and right turns. The Main Canal bridge is replaced. The at-grade railroad crossing is improved. Shared use paths are provided in lieu of on-street bike lanes due to right of way constraints.

Alternative 2 One-way Pair: This alternative splits SR 5/US 1 into a pair of roadways. The existing SR 5 serves southbound traffic, and a new two-lane roadway is located 600 feet to the east. The Main Canal bridge is replaced. The at-grade railroad crossing is improved. Shared use paths are provided in lieu of on-street bike lanes due to right of way constraints.

Alternative 3 US-1 Overpass Alternative: This alternative elevates the four through lanes of SR 5/US 1 over Aviation Boulevard with ramps to provide for turning movements and local access. The Main Canal bridge is replaced. The at-grade railroad crossing is improved. Shared use paths are provided in lieu of on-street bike lanes due to right of way constraints. The SR 5/US 1 overpass is outside of the runway protection zone (RPZ) and below the 40:1 flight surface.

Alternative 4 Aviation Boulevard Overpass (without railroad grade crossing): This alternative elevates Aviation Boulevard over SR 5/US 1 and eliminates the at-grade FEC railroad crossing and signalized intersection on SR 5/US 1. A new four-lane quadrant street connection provides for turning movements to/from the overpass. The overpass and approaches are within the RPZ and below the 40:1 flight surface. The Main Canal bridge is replaced. Shared use paths are provided in lieu of on-street bike lanes due to right of way constraints.

Alternative 5 Aviation Boulevard Underpass (without railroad grade crossing): This alternative depresses Aviation Boulevard and eliminates the at-grade FEC railroad crossing and signalized intersection on SR 5/US 1. A new four-lane quadrant street connection provides for turning movements to/from the underpass. Two (2) new bridge structures would be required to carry the FEC railroad and SR 5/US 1 roadway over the underpass. This depressed, open-cut type roadway is within the RPZ. The Main Canal bridge is replaced. Shared use paths are provided in lieu of on-street bike lanes due to right of way constraints.

Alternative 6 Aviation Boulevard Overpass (with railroad grade crossing): This alternative elevates Aviation Boulevard through lanes over the FEC railroad and SR 5/US 1 and retains an at grade railroad crossing for turning movements and the signalized intersection at SR 5/US 1. The Aviation Boulevard overpass embankment is within the RPZ

and below the 40:1 flight surface with 17.8 ft of clearance between the bridge profile and flight surface. The Main Canal bridge is replaced. Shared use paths are provided in lieu of on-street bike lanes due to right of way constraints.

Alternative 7 Displaced Left Turn (DLT): This alternative is at-grade with the northbound SR 5/US 1 left turn displaced or deflected to the west side of the SR 5/US 1 right of way via a signalized directional median and a two-lane, two-way parallel roadway located between southbound lanes of SR 5/US 1 and the FEC right of way. The Main Canal bridge is replaced. Shared use paths are provided in lieu of on-street bike lanes due to right of way constraints.

Alternative 8 Median U-Turn with Roundabout: This alternative eliminates three of the four left turns and incorporates a roundabout and quadrant road to provide for the left turns on the northbound, westbound, and southbound approaches. The eastbound left turn remains in place. The Main Canal bridge is replaced. The at-grade railroad crossing is improved. Shared use paths are provided in lieu of on-street bike lanes due to right of way constraints.

1.4.2 Alternatives Considered and Eliminated

The alternatives analysis process included several coordination meetings with the city, county, airport, Federal Aviation Administration (FAA), Florida East Coast Railroad (FEC RR), and Metropolitan Planning Organization (MPO). The FAA required a RPZ alternatives analysis that evaluated the PD&E alternatives and alternatives that modified the runway. The RPZ analysis concluded that at-grade PD&E alternatives were the best solution for aviation safety and operations. The FAA, airport, and city officials concurred with the findings of the RPZ alternatives analysis and supported only at-grade alternatives. A screening matrix compared the eight alternatives' operations, impacts and cost. The four at-grade alternatives scored best. Alternatives 3, 4, 5, and 6 were eliminated from further study.

1.4.3 Alternatives Considered for Further Evaluation

Alternatives 1, 2, 7, and 8, which are the at-grade alternatives, were advanced into detailed PD&E analysis. A public alternatives workshop was held and further coordination with the city, county, airport, FAA, FEC RR, and MPO occurred. Alternative 1 scored the best, was supported by the city, county and public and became the Preferred Alternative.

1.5 Description of Preferred Alternative

The Preferred Alternative was identified based on the results of the alternatives evaluation, public involvement, and coordination with local officials. No design exceptions or variations are anticipated with the Preferred Alternative, shown in **Figure 1-2**.

The Preferred Alternative reconstructs SR5/US 1 and Aviation Boulevard:

- Limits of Construction:
 - SR 5/US 1 limits begin at 28th Street and end 1300 ft north of Aviation Boulevard, for a total length of 2700 ft.
 - Aviation Blvd limits begin 750 ft west of Airport N. Drive and end 670 ft east of SR 5/US 1, for a total length of 2200 ft.
- The existing SR5 5/US 1 bridge (no. 880085) over the Indian River Farms Water Control District (IRFWCD) Main Canal will be replaced and includes a 12-ft shared use path on the east side.
- A 2.52-acre dry retention pond is proposed and located adjacent to the project between 30th Street and 31st Street.
- SR 5/US 1 at Aviation Boulevard intersection configuration:
 - Northbound approach: two left turns, two travel lanes, and one right turn lane,
 - Southbound approach: one left turn, two travel lanes, and two right turn lanes,
 - Westbound approach: one left turn lane, one travel lane, one right turn lane,
 - Eastbound approach: two left turn lanes, one travel lane, one right turn lane,
 - Bicycle lanes are provided on SR 5/US 1 from 29th street to approximately 350 feet north of 33rd Street.
 - Bicycle lanes are provided on Aviation Boulevard from SR 5/US 1 to 33rd Street in the eastbound and westbound direction; and from SR 5/US 1 to Airport N. Drive in the westbound direction only. The bicyclist will use the shared use path in the eastbound direction within the airport property.
- The alignment east of SR 5/US 1 curves to the north and connects with 33rd Street to be compatible with the proposed alignment of the Aviation Boulevard Extension project being conducted by Indian River County. The Main Canal Bridge, SR 5/US 1 is shifted 15 feet to the east for additional maintenance access between the bridge and FEC Railroad right-of-way.
- Bus bays are provided on SR 5/US 1, north and south of the intersection.

SECTION 1 – PROJECT SUMMARY

- A 12-foot shared use path is provided along the east side of SR 5/US 1 throughout the study area and a 12-ft shared use path is provided on the south side of Aviation Boulevard west of SR 5/US 1.
- High emphasis crosswalks are provided on the south and east approach of the intersection.
- Access to Airport N. Drive is provided with one westbound right turn lane and one eastbound left lane.

The conceptual plans for the preferred alternative are shown in **Appendix A** and the proposed typical sections are shown in **Figure 1-2** and **Figure 1-3**.

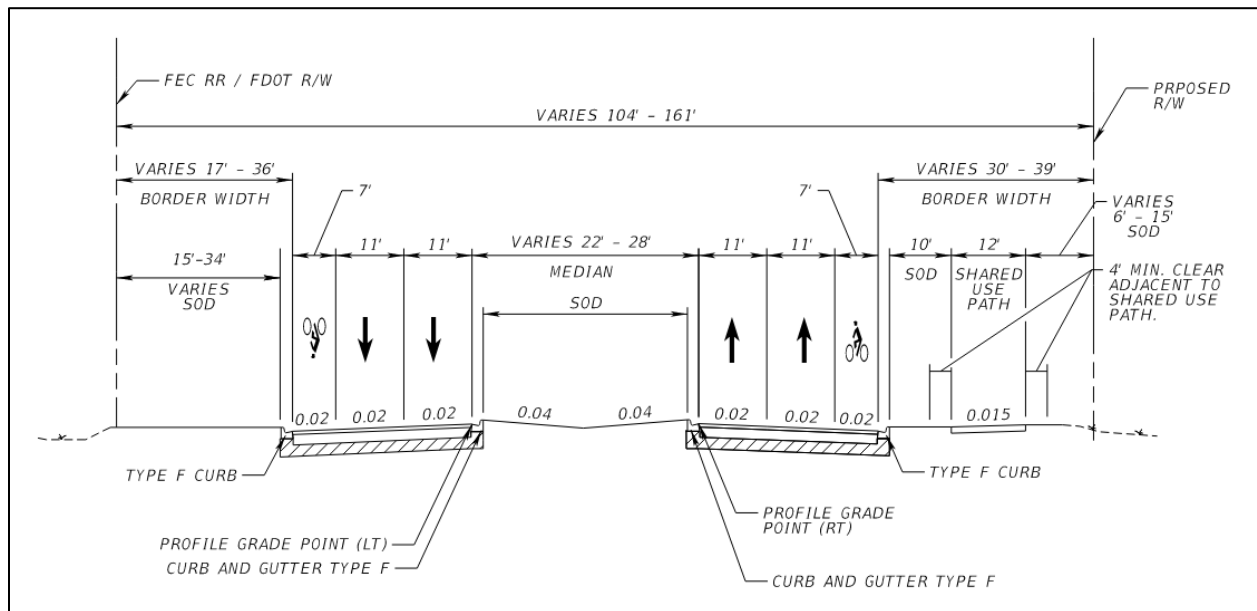


Figure 1-2 Proposed Typical Section for SR 5/US 1

SECTION 1 – PROJECT SUMMARY

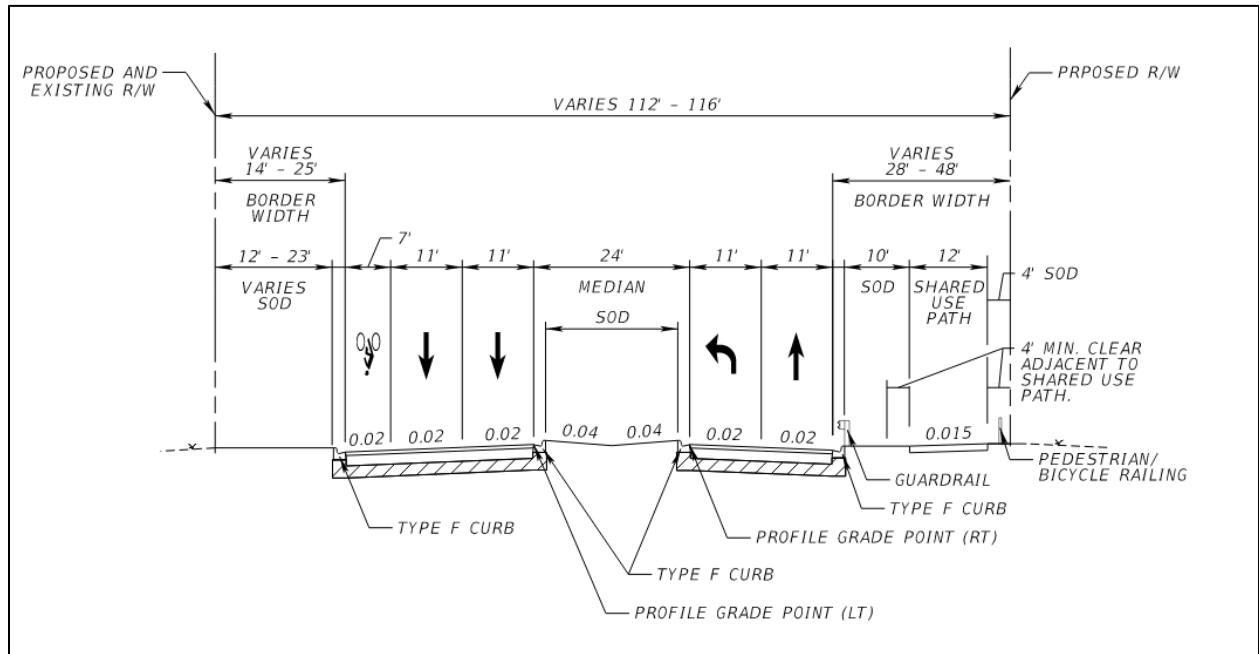


Figure 1-3 Proposed Typical Section for Aviation Blvd (west approach)

1.6 List of Technical Documents

Below is a list of technical documents prepared as a part of this PD&E Study and included as part of the project file in FDOT’s State-Wide Environmental Project Tracker (SWEPT).

Public Involvement:

- Public Involvement Plan – Final July 2022
- Comments and Coordination Report – Draft May 2024
- Public Hearing Transcript – Draft (planned June 2024)

PD&E Engineering:

- Conceptual Design Plan Set – Draft May 2024
- Geotechnical Report – Final May 2024
- Location Hydraulics Report – Draft March 2024
- Pond Siting Report – Draft March 2024
- Preliminary Engineering Report – Draft May 2024
- Project Traffic Analysis Report – Final March 2024
- Typical Section Package – Draft May 2024
- Utilities Assessment Package – Draft April 2024

Environment:

- Conceptual Stage Relocation Plan – Draft April 2024
- Contamination Screening Evaluation Report (CSER) – Draft March 2024
- Cultural Resource Assessment Survey – Draft April 2024
- Noise Study Report – Draft April 2024
- Section 4(f) Determination of Applicability (DOA) – Final July 2023
- SocioCultural Effects Evaluation (SCE) – Draft May 2024
- Type II Categorical Exclusion – Draft May 2024
- Water Quality Impact Evaluation – Draft March 2024

General:

- Planning Consistency Form – Draft March 2024
- Project Commitments Record – Draft May 2024

2.0 CORRIDOR CHARACTERISTICS

2.1 ETDM Screening Limits

The limits of the ETMD screening included a larger area than the project limits of the preferred alternative. The ETDM screening limits are shown in **Figure 2-1** and the corridor characteristics reflect those limits.

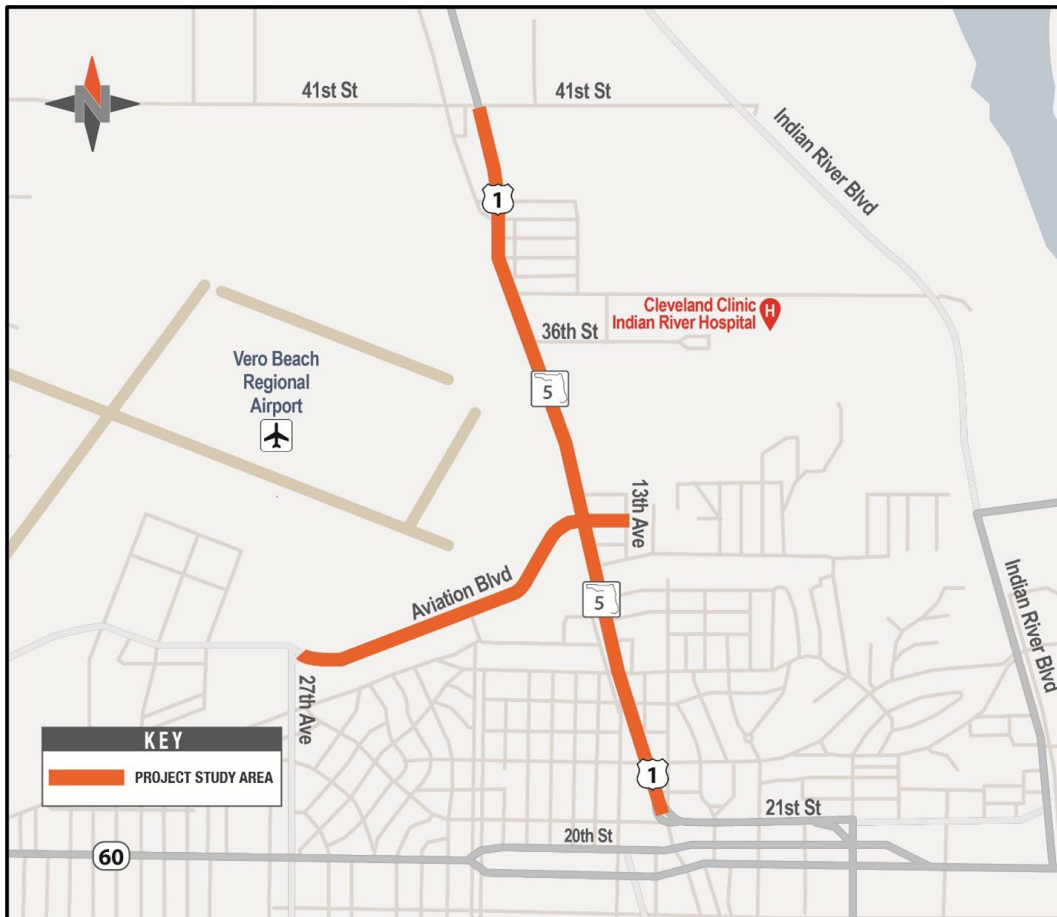


Figure 2-1 ETDM 14475 Screening Limits

2.2 Land Use

Existing Land Use

This project is within the City of Vero Beach and the unincorporated community of Gifford, two census designated areas within Indian River County, Florida. The land use within 500 feet of the project area consists primarily of public/semi-public (89.66 acres), residential (21.96 acres), industrial (43.81 acres), retail/office (33.64 acres) and vacant nonresidential (35.37 acres) land use. Agricultural (3.53 acres), institutional (11.99 acres), recreational (4.64 acres), and vacant residential (10.69 acres) land uses are also within 500-feet of the project corridor. There are no farmlands in the project area.

The Vero Beach Regional Airport (VRB) is the primary surrounding land use to the northwest of the intersection of SR 5/US- 1 and Aviation Blvd. The public airport, which spans 1,700 acres, serves general aviation for both commercial and non-commercial uses and is also home to a manufacturing plant for Piper Aircraft. A runway protection zone extends beyond the northwest-to-southeast 12R/30L runway and overlaps with the project study area. Also, in the northwest quadrant of the SR 5/US 1 and Aviation Boulevard intersection is a water treatment plant for the City of Vero Beach.

Commercial uses are adjacent to SR 5/US 1 in the northeast, southeast, and southwest quadrants of the intersection. Businesses include retail (e.g., auto, flooring, and furniture sales) services (e.g., car wash), medical services, lodging, and recreational (e.g., golf driving range). Cleveland Clinic Indian River Hospital is located to the northeast of the subject intersection, with access from 36th and 37th Streets.

The FEC railroad runs west of and parallel to SR 5/US 1 through the entire project corridor. Based on existing plans the FEC railroad right of way is approximately 92 feet wide at the Aviation Boulevard crossing.

Community Focal Points

- Community and Fraternal Centers
 - Vero Beach Community Center, 2266 14TH AVE 32960
 - Chamber Of Commerce - Indian River County, 1216 21ST ST 32960
 - Elks Lodge 1774, 1350 26TH ST 32960
 - Italian American Civic Associates, Inc, 1600 25TH ST 32960
 - Masonic Lodge - Vero 250 F & Am 1959 14TH AVE 32960
 - Florida Irish American Society Inc 1314 20TH ST 32960
 - Boys & Girls Club - Indian River County 2926 PIPER DR 32960
 - Garden Club of Indian River County 2526 17TH AVE 32960

- Cultural Centers
 - Indian River Citrus Museum/Heritage Center 2140 14TH AVE 32960 (at Pocahontas Park)
 - The Railroad Museum 2336 14TH AVE 32960
 - Indian River County Law Library 2000 16TH AVE 32960
 - Indian River County Library 1600 21ST ST 32960
- Parks and Recreational
 - Michael Field
 - Pocahontas Park
 - Hosie Schumann Park
- Historic and Archaeological
 - Vero Man Local Historic Site/Archeological Zone
 - Camp Gordon, also known as Beattyville

Future Land Use

The City of Vero Beach future land use plan designates the parcels along SR 5/US 1 as Mixed Use, which would allow higher densities of both residential and commercial development. Indian River County's future land use map designates the area along SR 5/ US 1 as Commercial/Institutional, except for an existing small residential neighborhood between 37th Place and 39th Street.

An existing and future land use map is shown in **Figure 2-2**.

EXISTING LAND USE MAP

FUTURE LAND USE MAP

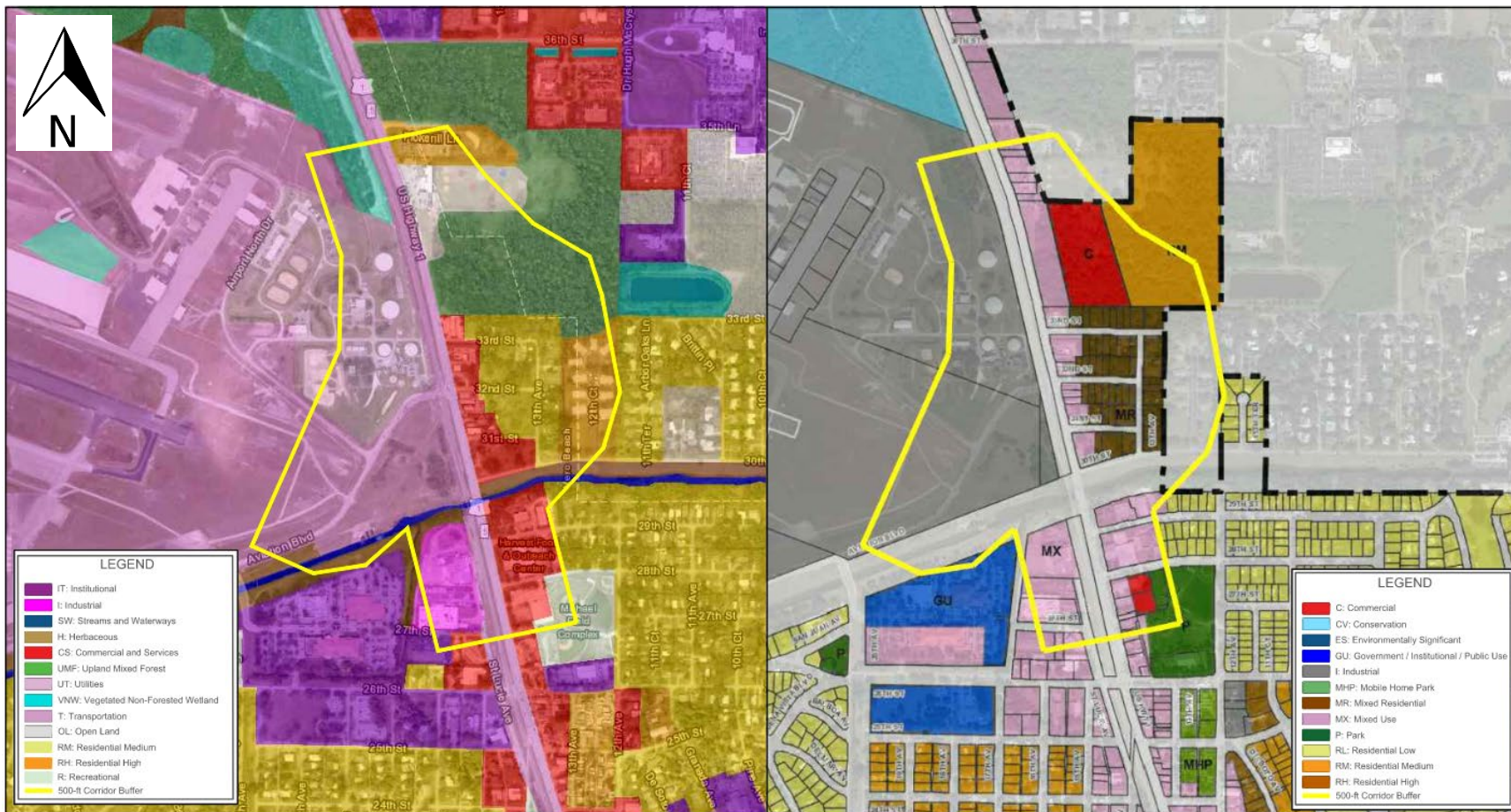


Figure 2-2 Existing and Future Land Use Map

2.3 Demographic Characteristics

The Environmental Screening Tool (EST) Sociocultural Data Report (SDR) was used for demographic data (the SDR can be found within the Community Coordination section of the EST). The SDR uses the Census 5-year 2017-2021 American Community Survey (ACS) data and reflects the approximation of the population based on a quarter mile (1,320-foot) project buffer area intersecting the Census Block Groups along the project corridor. Using the 1,320-foot clipped project buffer area, the SDR identified the following demographics shown in **Table 2-1**.

Table 2-1 Study Area Demographic Characteristics

Population Characteristic	Study Area (1,320-foot buffer)	Indian River County
Total Population	1,297	158,002
Population per acre	3.33	0.48
Total Households	525	63,377
Racial/Ethnic Minority	19.66%	26.07%
Age – Under 18	14.26%	15.93%
Age – 65 and Over	23.82%	32.97%
Disability – Age 20-64	15.32%	10.89%
Median Household Income	\$48,402	\$61,594
Households below Poverty Level	9.33%	9.72%
Limited-English Proficiency – Age 5 and Over	2.39% (30)	4.29% (6,500)
Less than 12 Grade/No Diploma – Age 25 and Over	5.98%	8.87%
Total Housing Units	720	82,555
Occupied Housing Units with Zero Cars	8.38%	4.49%

General population trends

The population in the study area was estimated at 1,297 in the 2017-2021 ACS, representing a 25.2% drop in population since the 1990 census, while overall population in Indian River County has increased by 75.2% in the same time frame. The distribution of households per acre is denser within the study area than in the county generally.

Housing trends

The study area contains approximately 525 housing units with a quarter-mile buffer, primarily to the south and east of the intersection. These are mostly single-family homes, with some multi-family homes mixed in, generally south of 26th Street.

Orange Blossom Village, a community of Assisted Rental Housing Units is located within the study area, to the east of the intersection and accessed from 30th Street.

Camp Haven, a non-profit transitional residential program that provides housing and social services to homeless men, is located on the east side SR 5/US 1 just north of the intersection with Aviation Boulevard.

Community Cohesion

The project intersection is in an area with a mix of commercial and light industrial land uses, the FEC railroad, Vero Beach Regional Airport, abandoned homes and vacant lands. The immediate project area lacks any defined public or sense of community space. Sidewalks exist only along the east side of SR 5/US 1 and the local streets are both paved and unpaved without pedestrian walkways. There is not an existing sense of community cohesion in the project area that would be threatened by the proposed improvements to the intersection.

The area between SR 5/US 1 and 13th Avenue, and between 30th Street and 33rd Street was previously a tourist fishing retreat called Camp Gordon with many wooden cabins. Over the years the business closed, cabins were abandoned and/or demolished.

A few occupied wooden homes with residents are located 500 feet east of SR 5/US 1 along 13th Avenue. Further east of 13th Avenue and away from the project area, there are single and multi-family residential units and the Vero Beach Golf and Country Club.

Corridor Diversity

The population of residents in the corridor study area is 19.66% racial/ethnic minority, compared to the county's 26.07% racial/ethnic minority population.

The northern end of the study area, beyond the Vero Beach city limit and between 37th Street and 41st Street is the southeastern corner of the unincorporated community of Gifford. This section includes a commercially zoned section of SR 5/US 1 and a small neighborhood bounded by SR 5/US-1 to the west, 17th Avenue to the east, 39th Avenue to the north, and 37th Place to the South. Nearly 80 percent of the community identifies as Black alone, and over 88 percent of the population of Gifford is either a racial or ethnic minority (or identifying as anything other than white alone) (US Decennial Census, 2020). The build alternative project limits do not extend into the region between 37th Street and 41st Street.

2.4 Income

The median income for the study area is \$48,402, 27.3% lower than the Indian River County median income of \$63,377. The rate of households below the poverty level is similar between the study area (9.33%) and the county (9.72%).

With a population of about 5,500 people and a median household income of \$22,353, Gifford is one of the poorest towns in Florida. Over 48 percent of Gifford's population lives below the Federal poverty level (American Community Survey, 2021 5-Year Estimates).

2.5 Education

An estimated 5.98% of the population within the study area has less than a grade 12 education, compared to 8.87% of the overall Indian River County population.

In the community of Gifford, approximately 28 percent of the population 25 years of age and higher has less than a grade 12 education.

2.6 Transportation Facilities

The City of Vero Beach sits at the conjunction of State Road 60 running East-West and SR 5/US 1 running North-South along the west bank of the Indian River. Approximately eight miles west, Interstate 95 provides north-south connectivity to the entire east coast. US 1/SR 5 is designated as a critical evacuation route in the Indian River County 2030 Comprehensive Plan.

The intersection of SR 5/US 1 and Aviation Boulevard currently serves numerous modes of transportation, including: vehicles, pedestrians (sidewalks and crosswalks), transit, and

the FEC Railroad crossing at the eastbound approach of the intersection. Within the PD&E study area, Indian River County's transit system, GoLine, includes two bus routes along SR 5/US 1 (routes 3 and 8) and two bus routes (route 2 and 8) along Aviation Boulevard based on the 2021 transit system map. In addition, the Vero Beach Regional Airport is located directly adjunct to the intersection with direct access along Aviation Boulevard.

The existing bicycle and pedestrian network are limited in the vicinity of the project. There are no existing bicycle lanes, and sidewalks are only present on the east side of SR 5/US 1. North of the project study area, on-street bicycle lanes are present on SR 5/US 1. Guided by the 2015 Bicycle and Pedestrian Plan, the Indian River MPO 2045 LRTP proposes new sidewalks and bicycle facilities in conjunction with roadway improvement projects along Aviation Boulevard between SR 5/US 1 and 43rd Avenue which is the entire southern boundary of the Vero Beach Regional Airport. The plan also proposes a new bicycle facility along SR 5/US 1 north of Aviation Boulevard which supports a vision to have a bicycle facility along most SR 5/US 1 within the County. The *Central Indian River County Greenways Plan* (IRC, 2006) and the *Indian River County 2030 Comprehensive Plan* (2010), identified development of shared use trails that connect with SR 5/US 1 and Aviation Blvd.

The Indian River MPO 2045 LRTP and the IRC Transit Development Plan (TDP), present several transit needs in the immediate area of the intersection of SR 5/US 1 including a potential bus shelter at the intersection, new/modified route service along SR 5/US 1, and improved route operations along Aviation Boulevard.

The FEC Railroad, which is parallel and abutting west of SR 5/US 1, is part of the FDOT Strategic Intermodal System (SIS) and is currently operating Brightline passenger service between Maimi and Orlando. According to the Indian River MPO 2045 LRTP, a performance evaluation goal is to enhance the FDOT SIS by constructing a flyover at the FEC Railroad at the intersection of SR 5/US 1 and Aviation Boulevard (Objective 1.04, Policy 1.04.1, and Performance Indicator 1.041.1).

The Aviation Boulevard extension project is a separate IRC project with construction funds committed in the Fiscal Year 2023/2024 according to the Indian River County Capital Improvement Element adopted in December 2020. The project will extend Aviation Boulevard towards the medical region and hospital located to the northeast of the project intersection.

2.7 Future Trends

According to the Indian River County MPO 2045 LRTP, the County's population is projected to grow 41% between the year 2015 to 2045 (143,326 population in 2015 to 201,839 in 2045). Similarly, employment is projected to grow 24% (76,386 employed during 2015 to 94,626 in 2045). The City of Vero Beach *Comprehensive Transportation Plan* (2018) provides 2035 population growth projections, drawn from the University of Florida Bureau of Economic and Business Research and City of Vero Beach planning data. The projections see the City of Vero Beach's population reaching 17,160 by 2035.

The future traffic conditions are expected to increase 61% through the year 2045 and congestion and delay will double without intersection improvements.

3.0 POTENTIAL EFFECTS

The initial study area was screened through ETDM and the Degree of Effect summary chart is shown in **Figure 3-1**.

#14475 State Road (SR) 5/US-1 at Aviation Boulevard																					
District: District 4				Phase: Programming Screen																	
County: Indian River				From:																	
Planning Organization: FDOT District 4				To:																	
Plan ID: Not Available				Financial Management No.: 441693-1																	
Federal Involvement: Other Federal Funding FHWA Funding Other Federal Permit																					
Contact Information: Vandana Nagole 954-777-4281 vandana.nagole@dot.state.fl.us																					
Snapshot Data From: Project Published 1/21/2022																					
Issues and Categories are reflective of what was in place at the time of the screening event.																					
Social and Economic							Cultural and Tribal			Natural			Physical								
Social	Economic	Land Use Changes	Mobility	Aesthetic Effects	Relocation Potential	Farmlands	Section 4(f) Potential	Historic and Archaeological Sites	Recreational and Protected Lands	Wetlands and Surface Waters	Water Resources	Floodplains	Protected Species and Habitat	Coastal and Marine	Noise	Air Quality	Contamination	Infrastructure	Navigation	Special Designations	
Alternative #1	3	2	2	1	3	3	N/A	3	3	3	3	3	3	3	3	3	2	3	3	N/A	N/A
Published: 01/21/2022 Reviewed from 10/08/2021 to 11/22/2021																					

Figure 3-1 ETDM Degree of Effect (Published 01/21/2022)

This section describes the sociocultural effects of the four (4) alternatives (Alternatives 1, 2, 7, and 8). Each subsection briefly summarizes the impacts of alternatives, then provides the potential effects of the preferred alternative. Concepts of the four alternatives are located in **Appendix A**.

The project limits of the four (4) alternatives extend along SR 5/US 1 about 1400 feet to the north and south of the project intersection at Aviation Boulevard. Due to the FEC Railroad being adjacent to the west right of way line of SR 5/US 1, all roadway widening is proposed to occur to the east where existing business and residential areas are located.

The two Evaluation Matrices (Appendix B) compares the initial eight alternatives in a screening evaluation matrix and the second matrix compares the four alternatives presented at the October 2024 public alternatives workshops. The matrix compares the socioeconomic, cultural, natural and physical effects of the project alternatives.

3.1 Social

ETDM Degree of Effect

The ETDM Summary Report degree of effect for Social was 3 Moderate. A Sociocultural Data Report is provided in **Appendix C**.

Demographics

The effect to persons protected under Title VI is limited to the 4 businesses and 10 residential homes depending on the alternative. Potential Title VI persons in low income would be anticipated at Camp Haven which has transitional housing for men participating in rehabilitation and job placement. However overall, there is no change to the overall demographics of the region.

Alternatives 1 and 7 impact four (4) business properties and Camp Haven Men’s Rehabilitation Center, located along SR 5/US1 between 30th Street to 33rd Street. Alternative 2 impacts two (2) businesses on SR 5/US 1 and ten residential properties along 13th Avenue and minimizes impacts to Camp Haven. Alternative 8 has four business impacts and six vacated residential home impacts.

To summarize, the impacts of the four alternatives to persons protected under Title VI is low based on the low number of occupied business and residential units affected by the project. The conceptual stage relocation plan is in the project file and identified available land and housing for business and residential relocation.

Community Cohesion

Existing conditions for the study intersection are lacking pedestrian, bicycle and transit facilities and are shown in **Figure 3.2**. All alternatives would increase access, mobility, walkability, and bike-ability in the study area through the addition of a shared use path on SR 5/US 1 and Aviation Boulevard. Bus stops and/or bus bays are included in the alternatives.

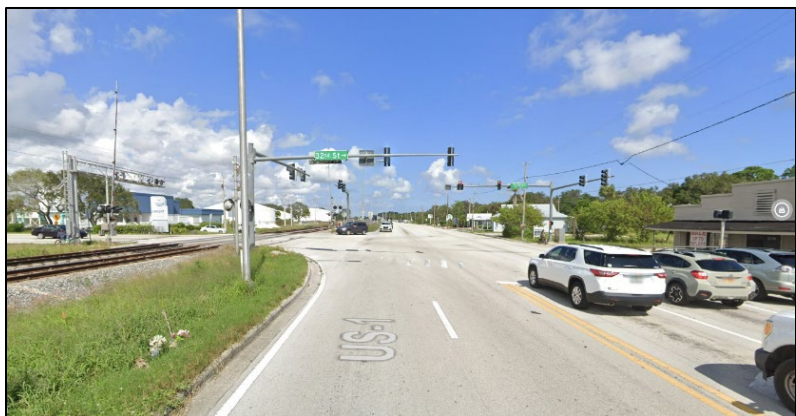


Figure 3-2 Study Intersection, looking north

A safer and more comfortable environment for walking and biking would facilitate future community cohesion as a mix of land uses, including residential, are developed along SR 5/US 1. Increased connectivity within the community will result, especially, with the project's connection to the IRC extension of Aviation Boulevard to the medical region.

Alternatives 1 and 7 are similar to the existing condition with widening to the east, access via 30th Street, Aviation Boulevard, and 33rd Street.

Alternative 2 introduces a one-way pair system that introduces a new northbound roadway 500 ft east of the existing corridor. This separation changes the shape and access points to the land remaining between the one-way pairs. Alternative 2 has minimal impact to the Camp Haven Rehabilitation Center. However, along SR 5/US 1 there is minimal existing right of way to improve sidewalks and drainage north of Aviation Boulevard.

Alternative 8 introduces a new access road from the roundabout to SR 5/US 1 that splits a large parcel and changes the access points to the land remaining.

Increase in noise levels may require abatement with noise walls that may have a minor effect to community cohesion. The public will have an opportunity for input if or when noise walls become identified.

Safety/Emergency Response

The intersection improvements, regardless of alternative, would meet the Purpose and Need of improving safety and addressing traffic demand in the future. Congestion and delays would be lessened with the build alternatives, which would benefit emergency response times. The connection to the extension of Aviation Boulevard to the medical region will improve emergency response time.

The safety of both motorists and pedestrians would be improved with a new reconstructed roadway, shared use path, and lighting. All alternatives are predicted to have a 64% to 80% crash reduction over the No Build alternative. Alternatives 1, 7, and 8 have an increased buffer between the roadway and FEC railroad right of way which allows canal and bridge maintenance vehicles to operate on roadway right of way and outside of railroad right of way. Alternative 2 does not provide the buffer improvement.

Community Goals

Public comments showed support for development and growth in this area. Future land use plans and community planning for both the City of Vero Beach and Indian River County indicate a desire for further growth and development near this intersection and along SR 5/US-1.

The local landowners are interested in developing their property and support the at-grade alternatives. Many property owners were against the four (4) grade-separated (over/underpass) alternatives which were eliminated. The Indian River County and the MPO desired to elevate Aviation Boulevard over the FEC Railroad, however those alternatives were not compatible with the airport operations and safety requirements.

The City of Vero Beach supported Alternative 1 and was neutral on Alternative 7 and Alternative 8; and not supportive of Alternative 2.

Quality of Life

Increased safety and mobility, aesthetic improvements, plus potential economic development would improve quality of life for users and nearby communities. The proposed project is in line with local community planning goals, which seek to increase multimodal connectivity (with rail, bicycle, and pedestrian modes) and to foster economic development. The shared use path provides opportunities for mobility, recreation, and enjoying the outdoors.

Noise level increases will have a minor effect as one to two residential properties have potential noise impacts for all four alternatives. During construction, access to residences, businesses, and recreational features could be temporarily affected and/or modified as a result of the proposed improvements.

Special Community Designations

There is the Vero Man Ice Age archeological zone located on the airport property, west of the FEC Railroad. The zone is not marked by a formal boundary, but is identified as an area south of Aviation Boulevard to the Main Canal. The project alternatives minimize any encroachment and excavation in this area.

Community History & Character

The project area is not unique nor has a formal designation. The Cultural Resource Assessment Report (CRAS) evaluated the historic and archeological features and has not identified any characteristics that would make the area notably historic.

The area is not expected to negatively impact the sense of community history or character. This stretch of SR 5/US 1 is already home to a variety of commercial, institutional, and industrial uses, and the increased safety and mobility offered by the improved intersection will support local community planning goals which seek to increase multimodal connectivity and to foster economic development.

Preferred Alternative Effects

The Preferred Alternative, Alternative 1, has approximately four (4) business relocations located between 30th Street to 33rd Street, that includes Camp Haven Men’s Rehabilitation Center. There are no residential relocations anticipated with this alternative.

Access, mobility, walkability, and bike-ability in the study area would be expanded through the addition of a shared use path on SR 5/US 1 and Aviation Boulevard. Bus stops and/or bus bays are included in the Preferred Alternative. This will result in a safer and more comfortable environment for walking and biking which would facilitate future community cohesion as a mix of land uses, including residential, are developed along SR 5/US 1.

The Preferred Alternative, Alternative 1, would meet the Purpose and Need of improving safety and addressing traffic demand in the future. This will result in a lessening of congestion and delays, which would benefit emergency response times, especially the connection to the extension of Aviation Boulevard to the medical region.

The safety of both motorists and pedestrians would be improved with a new reconstructed roadway, shared use path, and lighting. The preferred alternative is predicted to have a 64% to 80% crash reduction over the No Build alternative. With the increased buffer between the roadway and FEC railroad right of way allows canal and bridge maintenance vehicles to operate on roadway right of way and outside of railroad right of way.

One public kickoff meeting and two public alternatives meetings were held that provide the project alternatives for public review and comment, with FDOT representatives attending both the online and in-person meetings. The project website also provided the public an opportunity to review the project alternatives and provide written comments. Coordination occurred with the representatives of Camp Haven regarding the impacts and assistance provided by the FDOT related to right of way acquisition and relocation services. The City of Vero Beach passed a resolution in support of Alternative 1, the preferred alternative. Indian River County and the MPO supported the preferred alternative.

The impacts to persons protected under Title VI is low based on the four business being affected by the preferred alternative. There are no residential impacts from the preferred alternative as noted in the conceptual stage relocation plan (CSR) which is in the project

file. The CSRP identified available replacement land and housing for business and residential relocations.

Although minority or low-income populations have been identified that may be affected, the environmental analysis described above demonstrates that they will not be adversely affected in accordance with the provisions of Executive Order 12898 and FHWA 6640.23A.

3.2 Economic

ETDM Degree of Effect

The ETDM Summary Report degree of effect for Economic was 2 Minimal.

Business, Employment, and Tax Base

The project is located in the northern most section of the City of Vero Beach who has identified this area for redevelopment into multifamily housing and commercial services. The City and property owners stated they are interested in redevelopment of the area. Additional housing and commercial services will serve the growing airport and medical industries located in close proximity to the project. All the Build alternatives that were considered would directly impact and require the relocation of nine (9) to ten (10) commercial businesses currently located at the intersection.

All of the alternatives will impact businesses directly. The remaining lands of Alternatives 1 and 7 create large, contiguous areas for future development. However, Alternative 2 introduces a new curved roadway through the area identified for future development changing the shape of the remainder properties and impacting the greatest number of parcels. Alternative 8 has impacts similar to Alternatives 1 and 7 plus additional impacts associated with the roundabout, access road, and the large pond site, resulting in the greatest land impacts (in acres) of all the alternatives.

The City of Vero Beach planning department commented that Alternatives 2 and 8 were not desirable from a redevelopment view point due remaining land configurations.

Table 3-1 summarizes the total number of impacted parcels by alternative.

	Alternative 1	Alternative 2	Alternative 7	Alternative 8
Parcels	27	42	29	35
Relocations	4 business 0 residential	2 business 10 residential	5 business 2 residential	5 business 6 residential
Acres	7.68	7.61	6.03	8.89

Travel Patterns

For all Alternatives the project removes the existing flush or paved median and implements a raised median. All Alternatives also improve delay time for the area which serves the nearby airport and medical region surrounding Cleveland Clinic Indian River Hospital.

Alternative 1 travel patterns mimic the existing condition which is typical for most intersections. Access to the airport and medical region would be via left or right turns, respectively. The local streets, 30th Street and 33rd Street remain in their original configuration; and 31st Street and 32nd Street do not connect to SR 5/US 1.

Alternative 2 travel pattern shifts the northbound lanes 500 ft east on a new alignment to create a one-way pair. The existing southbound direction remains on the existing alignment creating a counter-clockwise access movement for the parcels between the northbound and southbound roadways. Northbound has a U-turn option, but the southbound does not due to the curvature and bridge over the Main Canal. Access to the airport and medical region are typical movements. The Aviation Boulevard eastbound left turn is shifted to the new northbound roadway. A number of turning movements change with this alternative. The pedestrians and bicyclists have numerous routes to take and only two or three lanes to cross versus seven lanes in Alternative 1.

Alternative 7 change the northbound left turn and eastbound right turn movements by adding a displaced left turn and channelized two-way roadway to handle the displaced turns. This intersection configuration is new to this area, and it adds a second two-way set of lanes parallel to the railroad tracks, further complicating the maneuver. The public and MPO has commented that this is not a desirable operating feature for drivers.

Alternative 8 converts the northbound left turn to a right turn then a U-turn at the roundabout; and shifts the eastbound left turn to the roundabout and access road to reach

northbound SR 5/US 1. Four local streets are cul-de-sacs, 31st Street, 32nd Street, 33rd Street and 13th Avenue.

Business Access

Alternatives 1 and 7 maintain similar business access patterns as the existing condition.

Alternative 2 can provide right-in/out access along SR 5/US 1 to serve the business.

Alternative 8 requires the connections of four local streets to be terminated due to the proposed geometry. This limits connectivity and access between 30th Street and Aviation Boulevard. One parcel at the southeast corner of the access road and SR 5/US 1 has constrained access due to the intersections and pond site.

Access to proximate businesses (those not requiring relocation) along the corridor may be affected temporarily during project construction for all alternatives.

Special Needs and Patron

Full transit services can be provided with Alternative 1, 2 and 8. Alternative 7 would not have southbound transit access due to the displaced left turn.

Freight Movement

The alternatives are designed for trucks and will serve freight movement. Alternatives 7 and 8 have unconventional turns and/or a roundabout that will require slow movement of freight trucks.

Preferred Alternative Effects

The Preferred Alternative, Alternative 1 is expected to improve vehicular and pedestrian/bicyclist mobility at the intersection of Aviation Boulevard and SR 5/US 1 which supports future expansions of the airport and nearby healthcare facilities. Existing travel patterns and business access would be maintained during project construction.

3.3 Land Use Changes

ETDM Degree of Effect

The ETDM Summary Report degree of effect for Land Use Changes was 2 Minimal.

Urban Form and Local Plan Consistency

The project is consistent with the local land use plans and will support the future land use planned by the city and county by addressing projected traffic demand, improving safety and supporting economic growth. Both Indian River County and the City of Vero Beach have planned future land use within the project area that would be mixed use to support commercial and residential development.

Alternative 2 would require greater levels of right-of-way acquisition than Alternatives 1, 7, and 8. The City of Vero Beach opposed the grade-separated alternatives (3, 4, 5, and 6) because of the loss of developable land due to the project footprint and changes to access. Mixed use development is in the City's future land use plans for this area, so the at-grade alternatives are more aligned with the City's land use goals.

Open Space, Sprawl, and Focal Points

Build Alternatives 1, 2, 7 and 8 are consistent with future land use visions, do not increase/decrease sprawl and will not impact any existing unique community features, landmarks and/or structures.

There are no impacts to the nearest park to the study intersection is Michael Field, south of the Main Canal bridge. There are currently no existing trails or conservation features within the area of potential effects.

Alternative 2 is expected to have the largest impact to vacant lands due to the bifurcation of SR 5/US 1 and the creation of irregular parcels shapes for redevelopment. Alternative 8 could also have similar impacts due to the proposed roundabout and quadrant roadway.

Preferred Alternative Effects

The Preferred Alternative is consistent with local growth management plans and is supported by the City of Vero Beach. The preferred alternative will not change the land use in the project area.

3.4 Mobility

ETDM Degree of Effect

The ETDM Summary Report degree of effect for Economic was 1 Enhanced.

SR 5/US 1 and Aviation Boulevard carries local traffic to and from communities in the area as well as traffic from the Vero Beach Regional Airport. There are two bus transit routes (Routes 3 and 8) within the project study intersection. Additionally, the Florida East

Coast (FEC) railroad is within the project corridor. The project will improve travel within the City of Vero Beach and the unincorporated community of Gifford. The project is anticipated to improve mobility with the implementation of on-street buffered bicycle lanes, shared use path and sidewalks within the corridor. These features will address future mobility, transportation demand, and safety issues, as well as provide improved access for multimodal users.

Modal Choices

All the build alternatives incorporate a shared use path along SR 5/US 1, with sidewalk and crosswalk infrastructure to support pedestrian movements. These improvements conform with the *Central Indian River County Greenways Plan* (IRC, 2006) and the *Indian River County 2030 Comprehensive Plan* (2010), which propose and place high priority on the development of a proposed Airport Loop Trail, a shared use trail the circles the Vero Beach Municipal Airport property, and a shared use trail running north-south along SR 5/US 1 between 53rd Street and just south of 4th Street.

Alternatives 1, 2, and 8 all include a shared use path, which would enhance multimodal mobility through the intersection and would meet local planning objectives.

Alternative 7 includes a shared use path, which would enhance multimodal mobility through the intersection and would meet local planning objectives, however, this configuration would require a crosswalk and signal at the displaced left turn.

All alternatives offer compatibility with the adjacent FEC railroad. Alternatives 1 and 2 include an at-grade crossing of the railroad that includes six (6) lanes. Alternative 8 includes an at-grade rail crossings, but with fewer lanes (3 lanes and 5 lanes, respectively). Alternative 7 would include a six (6) lane at-grade rail crossing and adds a separated northbound deflected left turn lane at the railroad crossing.

Indian River County's transit system, GoLine, includes two bus routes along SR 5/US 1 (Routes 3 and 8) and two routes along a portion of Aviation Boulevard (Route 2 and 8) based on the 2021 transit system map. Route 3 has two existing bus stops located at the south end of the project area on SR 5/US 1, at 28th Street and 30th Street, and one Route 8 stop is located at the north end of the project area on SR 5/US 1 at 38th Lane. Two stops for Route 2 are located on Aviation Boulevard west of the project limits.

Alternative 1 would provide dedicated bus bays on SR 5/US 1, with the bus bays just south and north of Aviation Boulevard. Alternatives 2, 7, and 8 do not propose dedicated bus pullouts but would continue to accommodate existing services.

Transportation Disadvantaged

Special needs transportation service areas and transportation disadvantaged populations could have potential enhanced effects due to the shared use paths provided and proposed infrastructure to increase other mode choices. Furthermore, all build Alternatives are expected to reduce congestion and travel time through the intersection for vehicles.

Connectivity

All alternatives offer enhanced mobility in the community by providing shared use paths and reduced travel time for vehicles and connection to the future county extension of Aviation Boulevard to the hospital and medical region to the northeast.

Traffic Circulation

All alternatives considered would be compatible with Indian River County's planned Aviation Boulevard extension project. Alternative 1 would keep the existing traffic circulation patterns for the study area and minimize changes in traffic circulation patterns.

Alternative 2 alters existing traffic patterns by separating the northbound and southbound SR 5/US 1 traffic with one-way pair roadways. Alternative 7 has minor changes to traffic circulation by displacing the SR 5/US 1 northbound to westbound left turn movement west of the southbound SR 5/US 1 lanes. Alternative 8 would require the Aviation Boulevard extension to be connected via a quadrant intersection or roundabout to SR 5/US 1. In Alternative 8, traffic circulation is changed by the improvements not allowing eastbound to northbound left turn movements at the SR 5/US 1 and Aviation Boulevard intersection. Alternative 8 proposes a roundabout and new quadrant roadway that connects to SR 5/US 1 north of the Aviation Boulevard intersection.

Public Parking

No changes to public parking are anticipated with the proposed Alternatives in this study.

Preferred Alternative Effects

The Preferred Alternative would increase mobility with improvements to the walkability and bikeability in the study area through the addition of sidewalks, striped crosswalks, transit stops, on-street buffered bicycle lanes and a shared-use path. A safer and comfortable environment for walking and biking would facilitate future community cohesion as the area redevelops with mixed land use. The Preferred Alternative is anticipated to accommodate all future travel demands in the project study area.

3.5 Aesthetics

ETDM Degree of Effect

The ETDM Summary Report degree of effect for Economic was 3 Moderate.

The project area primarily consists of public/semi-public, residential, industrial, retail/office and vacant nonresidential land use. Specific community features associated with the four project alternatives include Michael Field and the Vero Man Local Historic Site. The railroad, airport and water treatment plant dominate the western viewshed of the project.

Community Goals

Early in the PD&E study, Alternatives 3, 4, 5, and 6 proposed an elevated bridge or grade separation at the intersection, which would have introduced a dominant visual element to the immediately surrounding area. As stated in **Section 1.4**, the City of Vero Beach and some public comments were opposed to the grade separated alternatives, in part due to the potential aesthetic impacts.

Vibration

On the southeast corner of SR 5/US 1 and Pickerill Lane, there is one potential vibration sensitive site, Center for Advanced Eye Care.

Viewshed

Alternatives 1, 2, 7, and 8 would have minor aesthetic impacts due to their at-grade low profile. The viewshed for all alternatives is expected to remain the same.

Compatibility

Alternatives 1, 2, 7 and 8 are compatible with local aesthetic character and consistent with current highway plans. There are no specific overlay districts or streetscape standards for this area.

Preferred Alternative Effects

The Preferred Alternative is supported by the City of Vero Beach and consistent with public comments received regarding potential aesthetic impacts. The preferred alternative would have minor aesthetic impacts and is compatible with local character and area plans.

3.6 Relocation Potential

ETDM Degree of Effect

The ETDM Summary Report degree of effect for Relocation Potential was 3 Moderate.

The area surrounding the project corridor primarily consists of public/semi-public, residential, industrial, retail/office and vacant nonresidential land use. Right-of-way relocation impacts are anticipated at the intersection of Aviation Boulevard and SR 5/US 1 as a result of the proposed intersection improvements.

Residential, Non-residential and Public Facilities

All alternatives considered would require right-of-way parcel impacts and potential relocations or displacements and are quantified in **Table 3-2**.

Table 3-2 Affected Parcels and Potential Relocations

Alternative	Parcels affected	Potential Business Relocations	Potential Residential Relocations
1. Preferred Alternative	27	4	0
2. One-Way Pair	42	2	10
7. Deflected Left Turn	29	5	2
8. Median U-turn Roundabout	35	5	6

Alternatives 2, and 8 have the highest property impacts and the highest potential for business and residential displacement, largely due to the new bifurcated and quadrant roadways.

Preferred Alternative Effects

The Preferred Alternative would impact approximately four (4) business properties located along SR 5/US1 between 30th Street to 33rd Street which includes the non-profit Camp Haven Men's Rehabilitation Center. A separate *Conceptual Stage Relocation Plan (CSR)* was prepared for this PD&E Study.

In order to minimize the unavoidable effects of Right of Way acquisition and displacement of people, a Right of Way and Relocation Assistance Program will be carried out in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

4.0 RECOMMENDATIONS AND COMMITMENTS

4.1 Recommendations for Resolving Issues

Any relocations and encroachment into surrounding parcels will be coordinated with the appropriate property owners. The Preferred Alternative would impact approximately four (4) business properties located along SR 5/US1 between 30th Street to 33rd Street including Camp Haven Men’s Rehabilitation Center.

There was a meeting held on November 13, 2023, to facilitate an open and interactive discussion with representatives from the Camp Haven Rehabilitation Center, the City of Vero Beach and FDOT regarding right of way impacts. Camp Haven representatives provided an overview of the center’s goal, facility and operations before discussing the FDOT Right of Way process, timeline, and property owner rights as well as potential options for Camp Haven to relocate or rebuild. Following the meeting FDOT Right of Way was to look into advanced acquisition, funding status, and the financial requirements of the process and the FDOT will continue to coordinate with Camp Haven as the project advances.

4.2 Project Commitments

To be completed after public hearing.

5.0 ENVIRONMENTAL JUSTICE, CIVIL RIGHTS, AND RELATED ISSUES

5.1 Protected Populations in Study Area

The impacted project area has a limited number of residents due to the low number of housing units. Approximately 10 residential single-family homes, one (1) temporary residence facility (Camp Haven Rehabilitation Center), and Vero Motel exist within the project limits.

5.2 Coordination and Participation

The Florida Department of Transportation (FDOT) actively engaged in coordination efforts with local government and Camp Haven Men’s Rehabilitation Center.

Three (3) public meetings were conducted by FDOT and one (1) public meeting was hosted by the City of Vero Beach. The public comments were not in-favor of the overpass alternatives and supported the at-grade intersection improvements with the least right of way impact to businesses and residents. These meetings are detailed in the Comments and Coordination Report in the project file. Summaries of the three meetings below are in **Appendix D**.

- Public Kick-off Meeting October 20th (virtual) and 26th (in-person), 2022
- City of Vero Beach Public Meeting held February 8th, 2023
- Alternatives Public Workshop held October 10th (virtual) and 11th (in-person) 2023.

5.3 Summary of Project Effects

The Preferred Alternative, Alternative 1 would impact approximately 4 business properties would be relocated along SR 5/US1 between 30th Street to 33rd Street which includes Camp Haven Men’s Rehabilitation Center.

Alternative 2 was evaluated to minimized impacts to the Camp Haven Rehabilitation non-profit center, however additional 15 properties required acquisition, that included at least nine (9) occupied single family houses along 13th Avenue. Increased noise levels are predicted to occur at the remaining multifamily homes located east of the 13th Avenue single family homes. Alternative 2 was over \$2 million dollars more and required additional impacts and funding for a bridge detour during construction and was not selected as the preferred alternative.

5.4 Mitigation and Enhancement Actions

This section to be completed after the public hearing.

5.5 Findings Regarding Disproportionate Adverse Effects

There should be no adverse impacts to any sociocultural populations, communities or individual demographic resulting from the proposed project. The proposed project will provide additional capacity, infrastructure for transit and improve bicycle and pedestrian facilities which will benefit the local community and regional users.

Based on the above discussion and analysis, the project will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of E.O. 12898 and FHWA Order 6640.23A.

6.0 SOURCES

City of Vero Beach, Planning and Development GIS Maps. *Buildings by Use*. Accessed June 15, 2023. URL:
<https://covb.maps.arcgis.com/apps/View/index.html?appid=5badef543e1a4928bf90b013a48afa4d>.

City of Vero Beach, Planning and Development GIS Maps. *Future Land Use*. Accessed June 15, 2023. URL:
<https://covb.maps.arcgis.com/apps/View/index.html?appid=06fdb2428d9349b3b969e2800b375412>

City of Vero Beach, Planning and Development GIS Maps. *Zoning Districts*. Accessed June 15, 2023. URL:
<https://covb.maps.arcgis.com/apps/View/index.html?appid=d5075de84a4146178c9c9e9c6b3ea712>.

City of Vero Beach. *Airport Master Plan*. 2016.

City of Vero Beach. *Comprehensive Transportation Plan*. 2018.

Indian River County Metropolitan Planning Organization. 2045 Long Range Transportation Plan. February 2021.

Indian River County, Planning Division GIS Maps. *IRC Future Land Use*. Accessed June 15, 2023. URL:
<https://ircgis.maps.arcgis.com/apps/webappviewer/index.html?id=c381d522240247f7b7e98b7389758827>.

Indian River County, Planning Division GIS Maps. *IRC Zoning*. Accessed June 15, 2023. URL:
<https://ircgis.maps.arcgis.com/apps/webappviewer/index.html?id=c381d522240247f7b7e98b7389758827>.

Indian River County. Central Indian River County Greenways Plan. 2006.

7.0 APPENDICES

Appendix A: Alternative Concept Plans

Appendix B: Alternatives Screening and Evaluation Matrix

Appendix C: Sociocultural Data Reports

Appendix D: Public Meeting Summaries

Appendix A
Alternative Concept Plans

**ALTERNATIVE 1
CONVENTIONAL INTERSECTION**
 DRAFT - SUBJECT TO REVISION 5/17/2023
 STATE ROAD (SR) 5/US 1 AT AVIATION BOULEVARD
 PD&E STUDY
 INDIAN RIVER COUNTY, FLORIDA
 FPID: 441693-1-22-02
 ETDM NUMBER: 14475



CANAL STRUCTURE #D40F88000-01760

CONNECT TO EXISTING ROADWAY

WATER TREATMENT PLANT (CITY OF VERO BEACH)

DESIGN SPEED = 30 MPH
 R = 335'
 e = .032

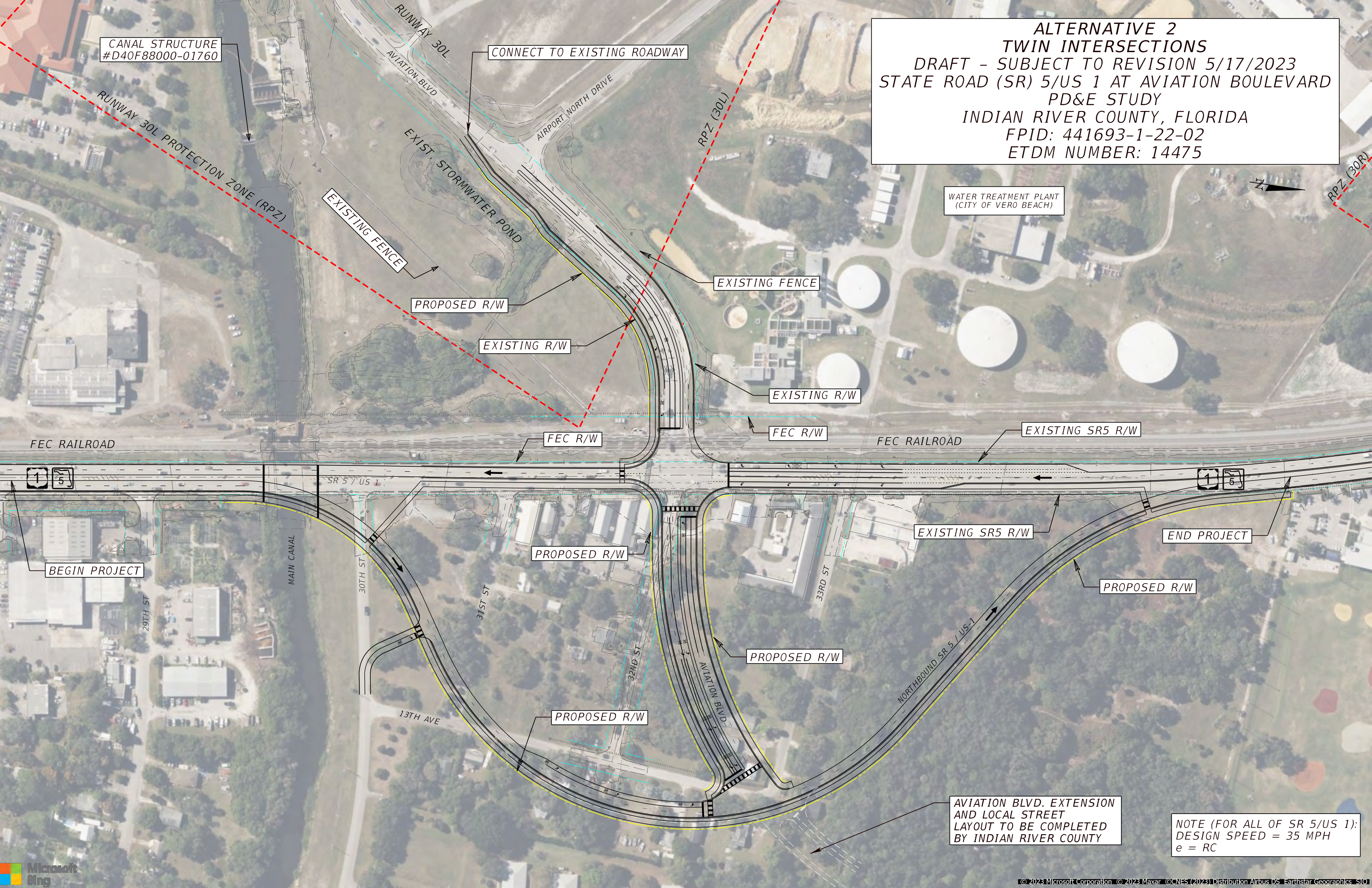
DESIGN SPEED = 30 MPH
 R = 375'
 e = 0.024

POINT OF CONNECTION TO INDIAN RIVER COUNTY ALIGNMENT

AVIATION BLVD. EXTENSION AND LOCAL STREET LAYOUT TO BE COMPLETED BY INDIAN RIVER COUNTY

NOTE:
 SR 5 / US 1
 DESIGN SPEED = 45 MPH
 e = NC

**ALTERNATIVE 2
TWIN INTERSECTIONS**
 DRAFT - SUBJECT TO REVISION 5/17/2023
 STATE ROAD (SR) 5/US 1 AT AVIATION BOULEVARD
 PD&E STUDY
 INDIAN RIVER COUNTY, FLORIDA
 FPID: 441693-1-22-02
 ETDM NUMBER: 14475



CANAL STRUCTURE
#D40F88000-01760

CONNECT TO EXISTING ROADWAY

EXISTING FENCE

PROPOSED R/W

EXISTING R/W

EXISTING FENCE

EXISTING R/W

FEC R/W

FEC R/W

EXISTING SR5 R/W

BEGIN PROJECT

PROPOSED R/W

EXISTING SR5 R/W

END PROJECT

PROPOSED R/W

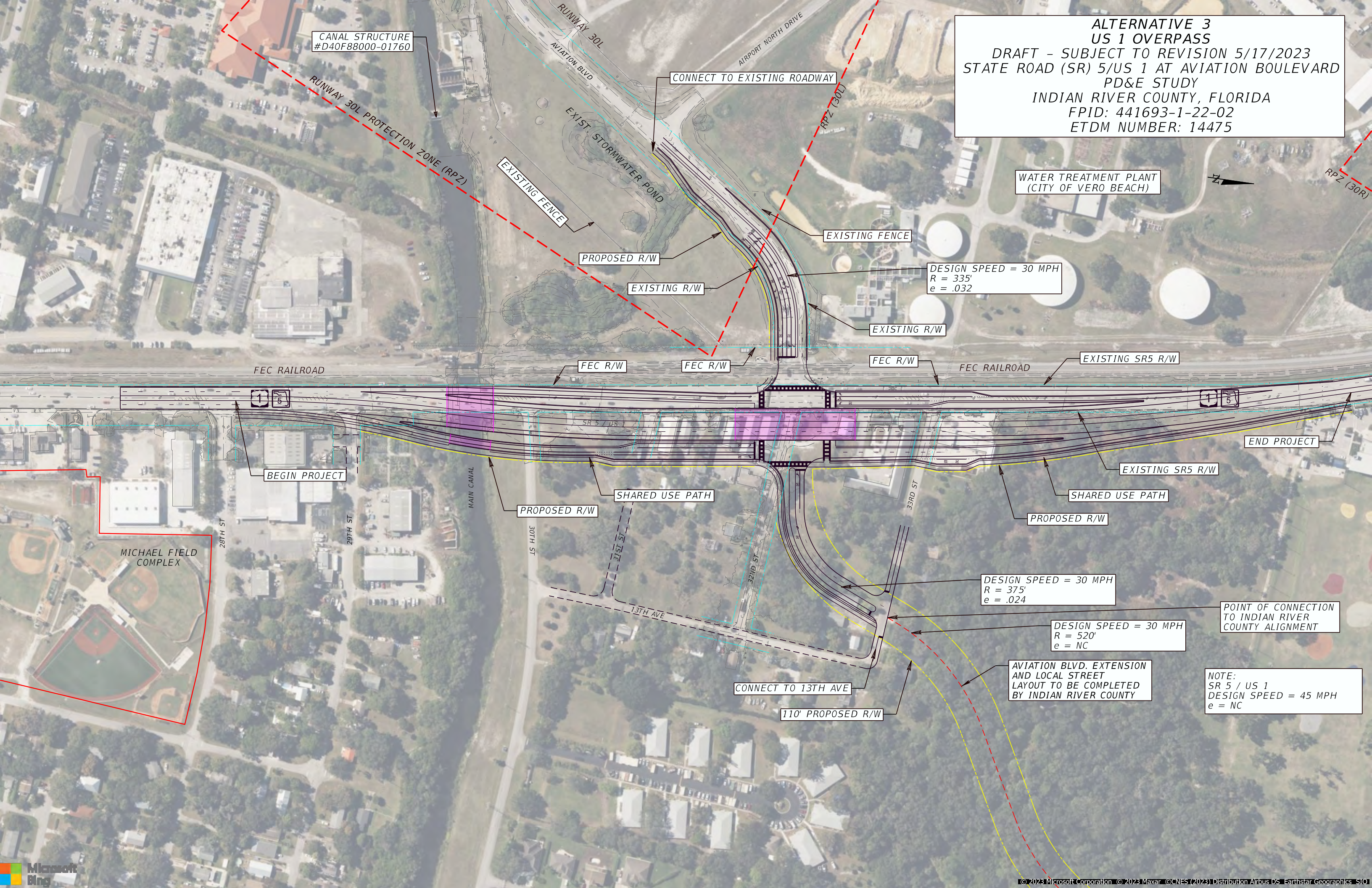
PROPOSED R/W

PROPOSED R/W

AVIATION BLVD. EXTENSION
AND LOCAL STREET
LAYOUT TO BE COMPLETED
BY INDIAN RIVER COUNTY

NOTE (FOR ALL OF SR 5/US 1):
DESIGN SPEED = 35 MPH
e = RC

**ALTERNATIVE 3
US 1 OVERPASS**
DRAFT - SUBJECT TO REVISION 5/17/2023
STATE ROAD (SR) 5/US 1 AT AVIATION BOULEVARD
PD&E STUDY
INDIAN RIVER COUNTY, FLORIDA
FPID: 441693-1-22-02
ETDM NUMBER: 14475



CANAL STRUCTURE
#D40F88000-01760

CONNECT TO EXISTING ROADWAY

WATER TREATMENT PLANT
(CITY OF VERO BEACH)

DESIGN SPEED = 30 MPH
R = 335'
e = .032



DESIGN SPEED = 30 MPH
R = 375'
e = .024

DESIGN SPEED = 30 MPH
R = 520'
e = NC

POINT OF CONNECTION
TO INDIAN RIVER
COUNTY ALIGNMENT

NOTE:
SR 5 / US 1
DESIGN SPEED = 45 MPH
e = NC

AVIATION BLVD. EXTENSION
AND LOCAL STREET
LAYOUT TO BE COMPLETED
BY INDIAN RIVER COUNTY

CONNECT TO 13TH AVE

110' PROPOSED R/W

SHARED USE PATH

SHARED USE PATH

BEGIN PROJECT

END PROJECT

FEC RAILROAD

FEC RAILROAD

FEC R/W

FEC R/W

FEC R/W

EXISTING SR5 R/W

EXISTING SR5 R/W

PROPOSED R/W

EXISTING R/W

EXISTING R/W

EXISTING FENCE

EXISTING FENCE

RUNWAY 30L PROTECTION ZONE (RPZ)

RPZ (30L)

RPZ (30R)

EXIST. STORMWATER POND

30TH ST

13TH AVE

32ND ST

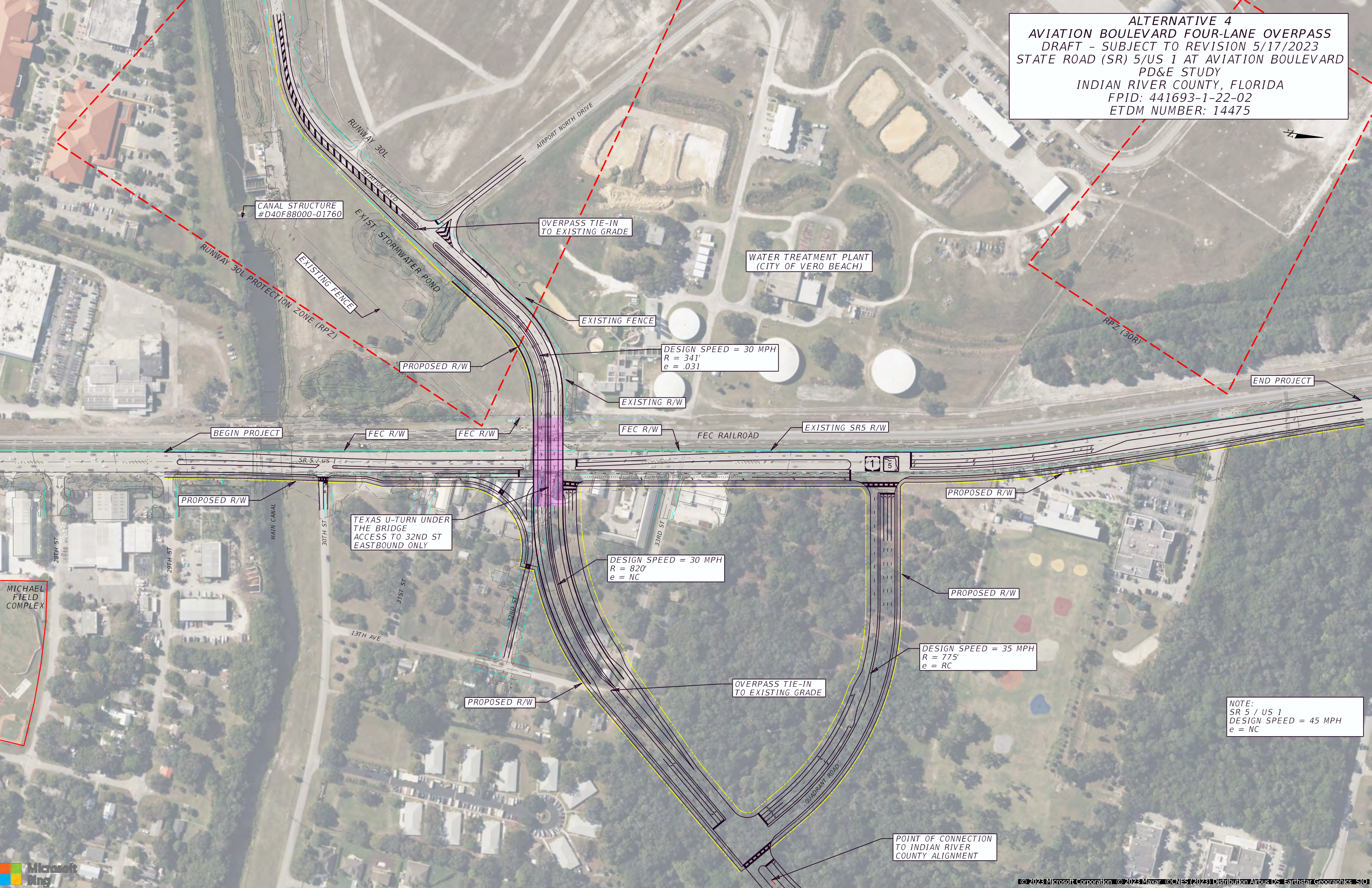
33RD ST

28TH ST

29TH ST

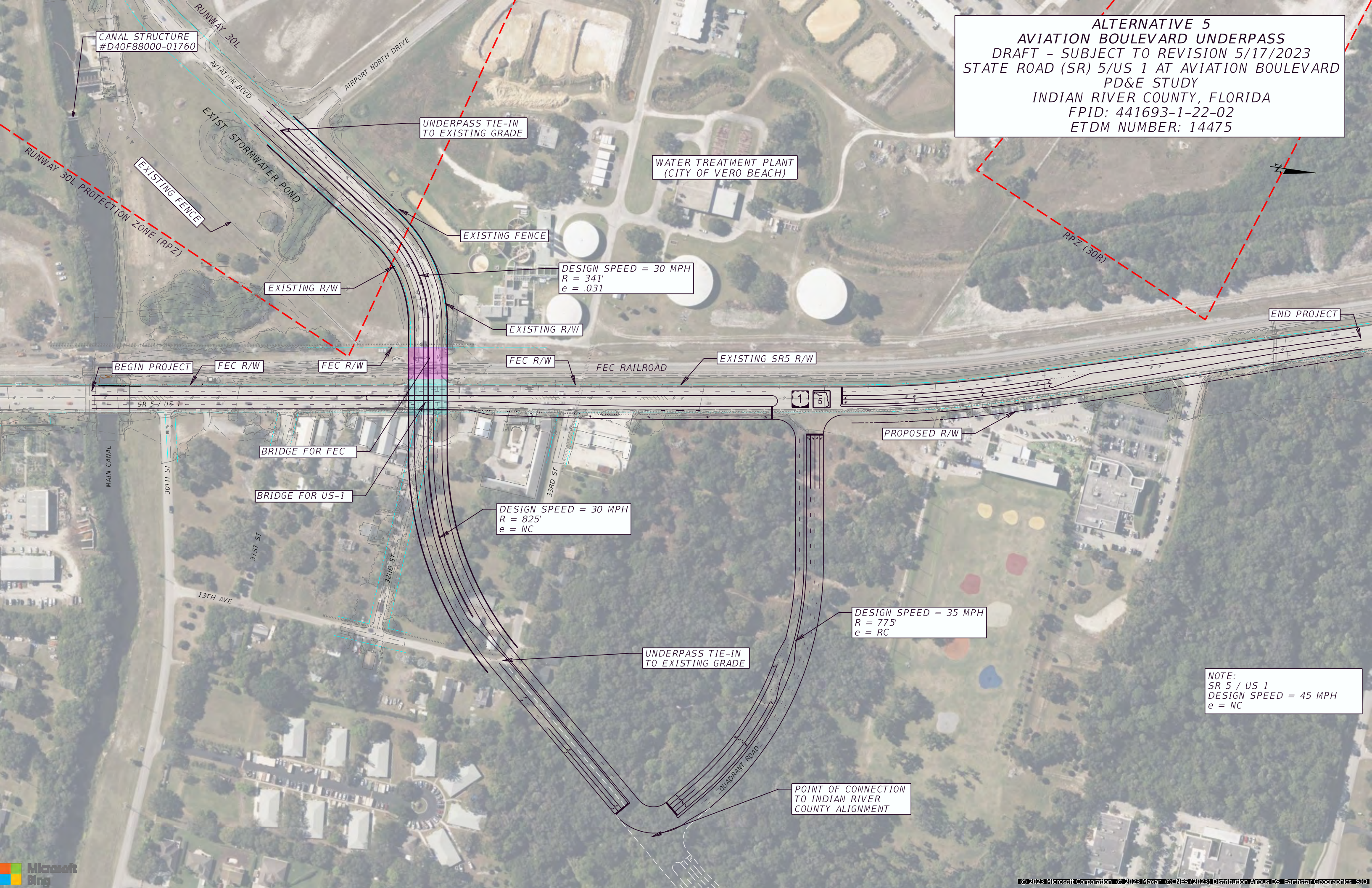
MICHAEL FIELD
COMPLEX

ALTERNATIVE 4
 AVIATION BOULEVARD FOUR-LANE OVERPASS
 DRAFT - SUBJECT TO REVISION 5/17/2023
 STATE ROAD (SR) 5/US 1 AT AVIATION BOULEVARD
 PD&E STUDY
 INDIAN RIVER COUNTY, FLORIDA
 FPID: 441693-1-22-02
 ETDM NUMBER: 14475



NOTE:
 SR 5 / US 1
 DESIGN SPEED = 45 MPH
 e = NC

ALTERNATIVE 5
AVIATION BOULEVARD UNDERPASS
 DRAFT - SUBJECT TO REVISION 5/17/2023
 STATE ROAD (SR) 5/US 1 AT AVIATION BOULEVARD
 PD&E STUDY
 INDIAN RIVER COUNTY, FLORIDA
 FPID: 441693-1-22-02
 ETDM NUMBER: 14475



NOTE:
 SR 5 / US 1
 DESIGN SPEED = 45 MPH
 e = NC

ALTERNATIVE 6
AVIATION BOULEVARD OVERPASS
 DRAFT - SUBJECT TO REVISION 5/17/2023
 STATE ROAD (SR) 5/US 1 AT AVIATION BOULEVARD
 PD&E STUDY
 INDIAN RIVER COUNTY, FLORIDA
 FPID: 441693-1-22-02
 ETDM NUMBER: 14475

CANAL STRUCTURE
 #D40F88000-01760

APPROXIMATE POINT
 OF TIE-IN

WATER TREATMENT PLANT
 (CITY OF VERO BEACH)

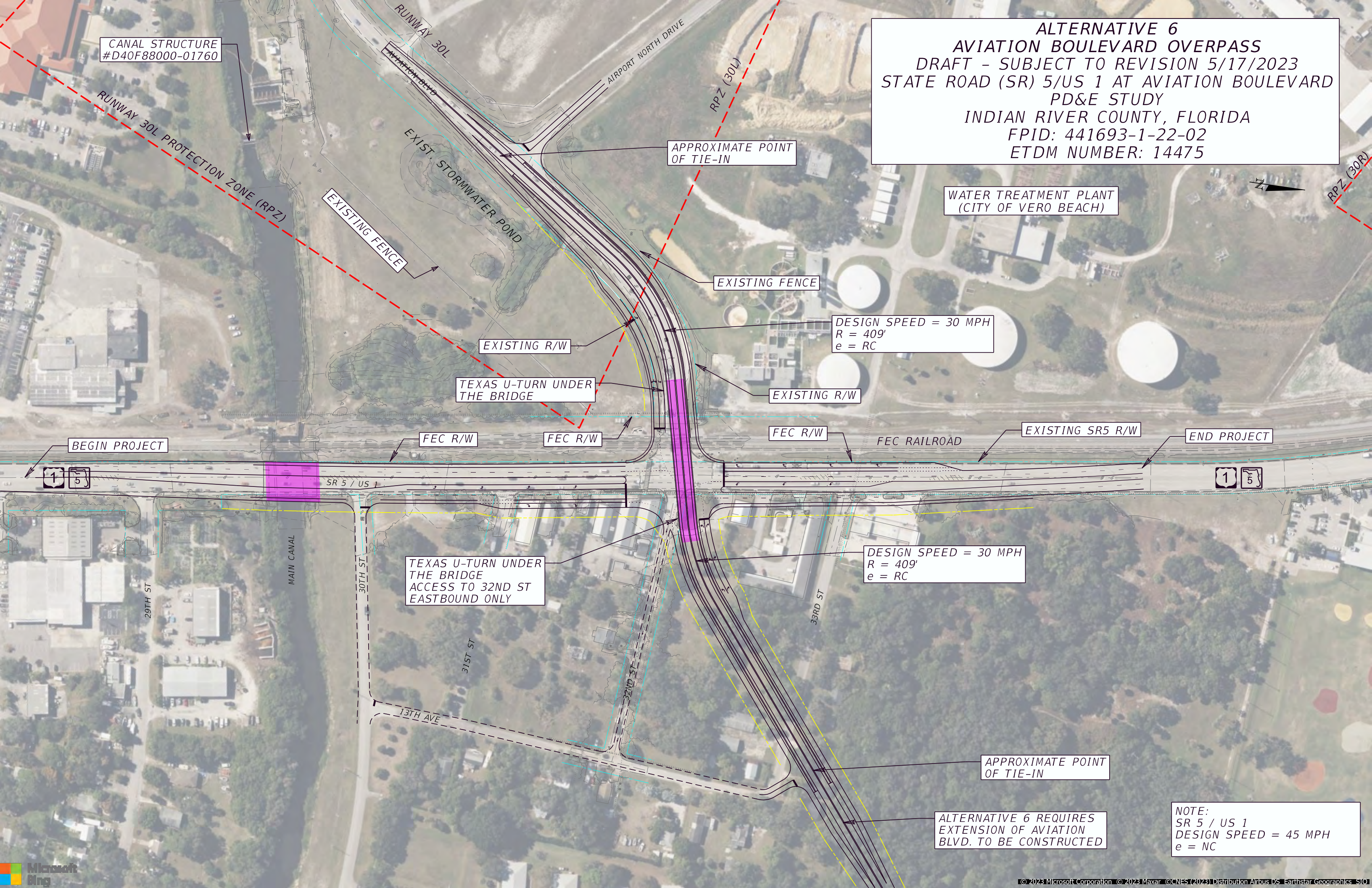
DESIGN SPEED = 30 MPH
 R = 409'
 e = RC

DESIGN SPEED = 30 MPH
 R = 409'
 e = RC

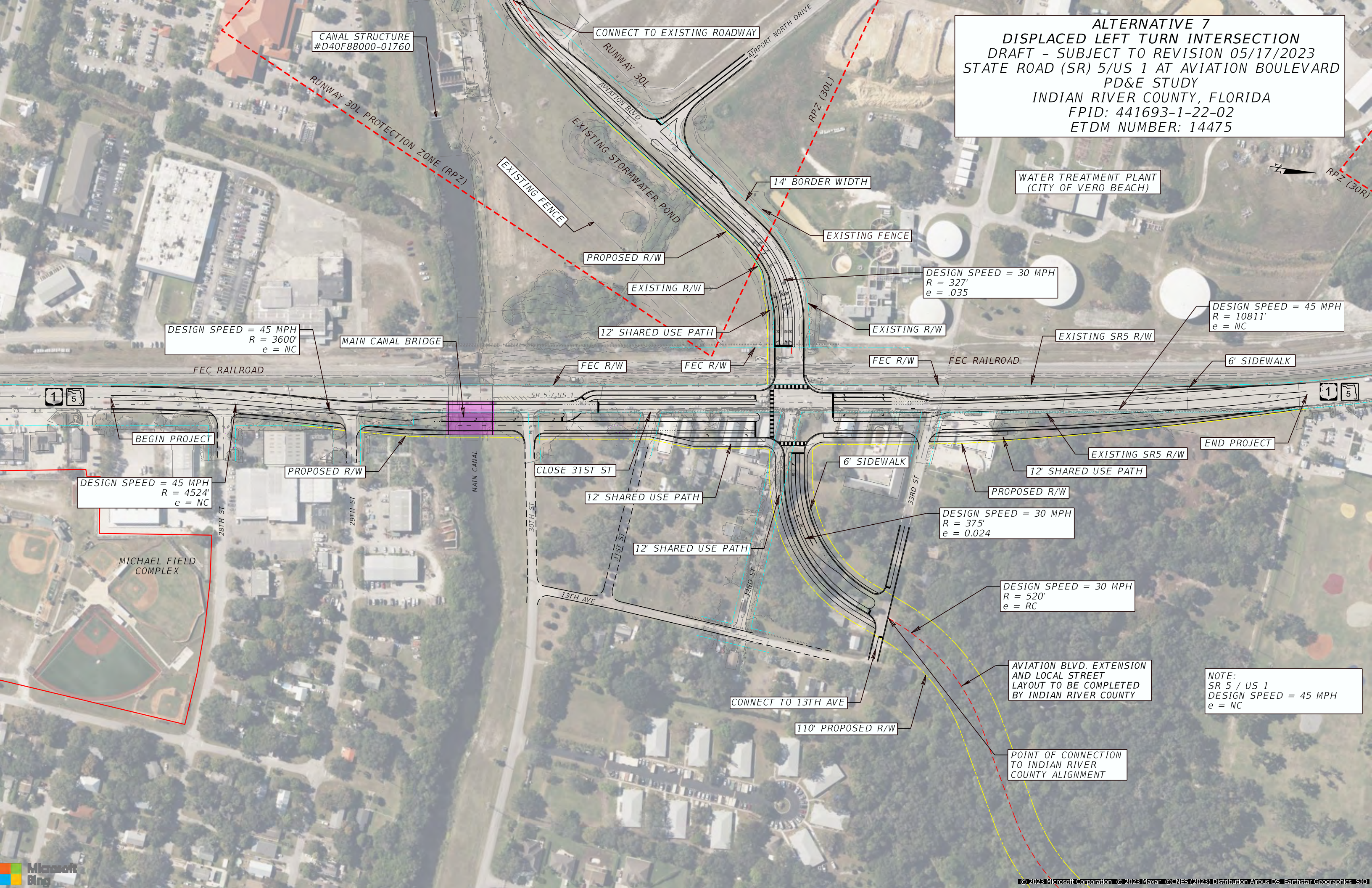
APPROXIMATE POINT
 OF TIE-IN

ALTERNATIVE 6 REQUIRES
 EXTENSION OF AVIATION
 BLVD. TO BE CONSTRUCTED

NOTE:
 SR 5 / US 1
 DESIGN SPEED = 45 MPH
 e = NC



ALTERNATIVE 7
DISPLACED LEFT TURN INTERSECTION
 DRAFT - SUBJECT TO REVISION 05/17/2023
 STATE ROAD (SR) 5/US 1 AT AVIATION BOULEVARD
 PD&E STUDY
 INDIAN RIVER COUNTY, FLORIDA
 FPID: 441693-1-22-02
 ETDM NUMBER: 14475



CANAL STRUCTURE #D40F88000-01760

CONNECT TO EXISTING ROADWAY

WATER TREATMENT PLANT (CITY OF VERO BEACH)

DESIGN SPEED = 45 MPH
 R = 3600'
 e = NC

DESIGN SPEED = 30 MPH
 R = 327'
 e = .035

DESIGN SPEED = 45 MPH
 R = 10811'
 e = NC

DESIGN SPEED = 45 MPH
 R = 4524'
 e = NC

DESIGN SPEED = 30 MPH
 R = 375'
 e = 0.024

DESIGN SPEED = 30 MPH
 R = 520'
 e = RC

NOTE:
 SR 5 / US 1
 DESIGN SPEED = 45 MPH
 e = NC

AVIATION BLVD. EXTENSION AND LOCAL STREET LAYOUT TO BE COMPLETED BY INDIAN RIVER COUNTY

POINT OF CONNECTION TO INDIAN RIVER COUNTY ALIGNMENT

ALTERNATIVE 8
MEDIAN U-TURN W/ ROUNDABOUT
 DRAFT - SUBJECT TO REVISION 05/17/2023
 STATE ROAD (SR) 5/US 1 AT AVIATION BOULEVARD
 PD&E STUDY
 INDIAN RIVER COUNTY, FLORIDA
 FPID: 441693-1-22-02
 ETDM NUMBER: 14475



DESIGN SPEED = 45 MPH
 R = 3719'
 e = NC

DESIGN SPEED = 45 MPH
 R = 4639'
 e = NC

DESIGN SPEED = 30 MPH
 R = 341'
 e = .032

DESIGN SPEED = 30 MPH
 R = 10561'
 e = NC

DESIGN SPEED = 30 MPH
 R = 333'
 e = NC (FHWAY QRI GUIDE)

DESIGN SPEED = 30 MPH
 R = 410'
 e = RC

DESIGN SPEED = 30 MPH
 ICD = 181'
 e = NC

NOTE:
 SR 5 / US 1
 DESIGN SPEED = 45 MPH
 e = NC

AVIATION BLVD. EXTENSION
 AND LOCAL STREET
 LAYOUT TO BE COMPLETED
 BY INDIAN RIVER COUNTY

Appendix B
Alternatives Screening and Evaluation Matrix

SCREENING EVALUATION MATRIX

SR 5/US 1 at Aviation Boulevard PD&E Study FM: 4441693-1-22-02

Note: Environmental impacts are planning level estimates

CRITERIA	ALTERNATIVE 1 CONVENTIONAL	ALTERNATIVE 2 ONE-WAY PAIR	ALTERNATIVE 3 US 1 OVERPASS	ALTERNATIVE 4 AVIATION BLVD OVERPASS (WITHOUT RAILROAD CROSSING)	ALTERNATIVE 5 AVIATION BLVD UNDERPASS (WITHOUT RAILROAD CROSSING)	ALTERNATIVE 6 AVIATION BLVD OVERPASS (WITH RAILROAD CROSSING)	ALTERNATIVE 7 DISPLACED LEFT TURN	ALTERNATIVE 8 MEDIAN U-TURN ROUNDAOBT
PD&E PURPOSE AND NEED IMPROVES SAFETY	Yes (3)	Yes: Reduced speeds and conflict points. Short crosswalks. Adds 1 intersection. NB US-1 curvature potential sight distance challenges. (2)	Yes: Reduced conflict points. (3)	Yes: Eliminates railroad crossing. Adds 1 full intersection. (4)	Yes: Eliminates railroad crossing. Adds 1 full intersection. (4)	Yes: Keeps at-grade railroad crossing and adds an overpass over railroad. (3)	Yes. Reduced conflict points. Adds 1 DLT intersection. (3)	Yes: Reduced speeds and conflict points with roundabout. Adds 1 directional intersection. (3)
PD&E PURPOSE AND NEED ADDRESSES TRAFFIC DEMAND	LOS D (3)	US-1 SB LOS C US-1 NB LOS D (3)	LOS C (4)	US-1 LOS B New Quadrant Rd US-1 @ QR LOS C Aviation @ QR LOS C (4)	New Quadrant Rd US-1 @ QR LOS C Aviation @ QR LOS D (3)	US-1 @ QR LOS C required. (4)	US-1 LOS D US-1 DLT LOS A (3)	US-1 LOS C, New Quadrant Road (QR) US-1 @ QR LOS B Aviation @ QR LOS C (4)
PD&E PURPOSE AND NEED ENHANCES MULTIMODAL	Shared Use Path (4)	Shared Use Path (4)	Shared Use Path (4)	Shared Use Path. Roadway 7% profile grade. (3)	Shared Use Path. Roadway 7% profile grade. (3)	Shared Use Path. Roadway 7% profile grade. (3)	Shared Use Path. Crosswalk at DLT Signal. (3)	Shared Use Path (4)
LOCAL GOVERNMENT AND PUBLIC SUPPORT	City supported. Public supported. County supported. (4)	City opposed. County neutral. (1)	City opposed. Public opposed. County wants Aviation Blvd. overpass (1)	City opposed. Public opposed. County supported. (2)	City opposed. Public opposed. County supported. (2)	City opposed. Public opposed. County supported. (2)	City neutral. County supported. (4)	City neutral. County supported. (4)
COMPATIBLE WITH FAA AND AIRPORT NEEDS	Yes (4)	Yes (4)	Elevated roadway outside RPZ. (1)	Elevated roadway inside RPZ. Reduces traffic queue in RPZ. (1)	Depressed roadway inside RPZ. (1)	Elevated roadway inside RPZ. (1)	Yes (4)	Yes (4)
COMPATIBLE WITH FEC RAILROAD NEEDS	Yes: 6 lanes at rail crossing (2)	Yes: 6 lanes at rail crossing. (2)	Yes: 6 lanes at rail crossing. (2)	Yes: Removes at-grade rail crossing. (4)	Yes: Removes at-grade rail crossing. (4)	Yes: 3 lanes at rail crossing. (3)	Yes: 6 lanes at rail crossing. Adds separated NB deflected left turn lane at RR crossing. (2)	Yes: 5 lanes at rail crossing. (3)
COMPATIBLE WITH AVIATION BLVD EXTENSION	Yes (3)	Yes (3)	Yes (3)	Yes: Extension would connect at quadrant road intersection. (3)	Yes: Extension would connect at quadrant road intersection. (3)	PD&E Alt 6 does not have independent utility. Needs Aviation Blvd extension built to have logical termini. (1)	Yes. (3)	Yes: Extension would connect at quadrant road roundabout. (3)
ACCESS MANAGEMENT COMPATIBILITY WITH LOCAL STREET NETWORK	Maintains existing access. (4)	Changes circulation on 30 th , 31 st , 32 nd , 33 rd Streets and 13 th Ave. (2)	Close access to 30 th and 33 rd Streets. Reduces property access along US-1 ramps. (1)	Closes 31 st Street. Disconnects 13 th Ave and 33 rd St from local network. Increased access with quadrant road. (1)	Closes 32 nd Streets. Maintains access to 30 th and 31 st Streets. Eliminates access to Aviation Blvd east of US-1. Increased access with quadrant road. (1)	Maintains access to 30 th , 31 st and 33 rd Streets. Eliminates access to Aviation Blvd east of US-1. (2)	Closes access to 31 st and 32 nd Streets. Adds new directional signalized median. (3)	Close access to 31 st and 32 nd Streets. Roundabout provides local traffic circulation. Increased access with quadrant road. (4)

LEGEND:



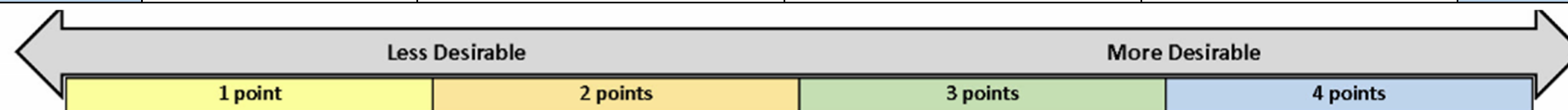
SCREENING EVALUATION MATRIX

SR 5/US 1 at Aviation Boulevard PD&E Study FM: 4441693-1-22-02

Note: Environmental impacts are planning level estimates

CRITERIA	ALTERNATIVE 1 CONVENTIONAL	ALTERNATIVE 2 ONE-WAY PAIR	ALTERNATIVE 3 US 1 OVERPASS	ALTERNATIVE 4 AVIATION BLVD OVERPASS (WITHOUT RAILROAD CROSSING)	ALTERNATIVE 5 AVIATION BLVD UNDERPASS (WITHOUT RAILROAD CROSSING)	ALTERNATIVE 6 AVIATION BLVD OVERPASS (WITH RAILROAD CROSSING)	ALTERNATIVE 7 DISPLACED LEFT TURN	ALTERNATIVE 8 MEDIAN U-TURN ROUNDBOUT
PROPERTY IMPACT TYPES	Business and residential impacts. (2)	Reduced business impacts on US-1. Impacts homes on 13 th Ave. US-1 NB lanes split parcels into 2 parts. (1)	Business and residential impacts. (2)	Business and residential impacts. Physical separation of land north/south of overpass. Modifies entrance and eliminates first row of parking at Big Shots. (1)	Business and residential impacts. Physical separation of land north/south of underpass. Modifies entrance and eliminates first row of parking at Big Shots. (1)	Business and residential impacts. Physical separation of land north/south of overpass. (1)	Business and residential impacts. (2)	Business and residential impacts. (2)
PARCELS EFFECTED AND POTENTIAL DISPLACEMENTS	21 Parcels. Potential 9 business and 2 residential displacements. (2)	35 Parcels. Potential 2 business displacements. Potential 10 residential displacements along 13 Ave. (1)	23 Parcels. Potential 9 business and 2 residential displacements. (2)	35 parcels. Potential 9 business and 6 residential displacements. Quadrant Road (3.7acres) (1)	35 Parcels. Potential 9 business and 6 residential displacements. Quadrant Road (3.7 acres) (1)	27 Parcels. Potential 9 business and 6 residential and 2 residential displacements. Quadrant Road (3.7acres) (1)	22 Parcels. Potential 9 business and 2 residential displacements. (2)	25 Parcels. Potential 9 business and 6 residential displacements. Quadrant Road (2 acres) (1)
CULTURAL: HISTORIC AND ARCHEOLOGICAL POTENTIAL	Minor (2)	Minor (2)	Minor (2)	Minor (2)	Substantial excavation required adjacent to Vero Man site, increased potential for archeological findings. (1)	Minor (2)	Minor (2)	Minor (2)
NATURAL ENVIRONMENT	Minor (3)	Moderate. Effects forested area. (2)	Minor (3)	Moderate. Effects forested area. (2)	Moderate. Effects forested area. (2)	Moderate. Effects forested area. (2)	Minor (3)	Moderate. Effects forested area. (2)
PHYSICAL: NOISE	Low (3)	Shifts US-1 NB lanes eastward 500 feet towards homes. (1)	Elevated US-1 structure. (1)	Elevated Aviation Blvd structure. (1)	Depressed Aviation Blvd structure. (1)	Elevated Aviation Blvd structure. (1)	Low (3)	Road closer to residential. (2)
PHYSICAL: CONTAMINATION	Moderate risk (2)	Moderate risk (2)	Moderate risk (2)	Moderate risk (2)	Moderate risk (2)	Moderate risk (2)	Moderate risk (2)	Moderate risk (2)
CONSTRUCTABILITY	Typical construction. One Main Canal Bridge. (4)	Requires 2 bridges over Main Canal. (3)	Requires 1 Main Canal bridge and 1 overpass. (2)	Requires 1 Main Canal bridge and 1 overpass. (2)	Requires Aviation Blvd underpass, high speed railroad track detour, railroad bridge, US 1 bridge at underpass, Main Canal Bridge. (1)	Requires Aviation Blvd Overpass. 1 Main Canal bridge. (2)	Requires two US-1 medians and 1 Main Canal bridge. (3)	Typical Construction. 1 Main Canal bridge. (4)
COST: CONSTRUCTION	Low (4)	Moderate (3)	High (2)	High (2)	Very High (1)	High (2)	Low (4)	Moderate (3)
TOTAL POINTS: (HIGHER IS DESIRABLE)	49	36	35	35	31	32	46	47
RANKING	1	4	5	6	8	7	3	2
SELECTED TO MOVE TO DETAILED PD&E PHASE	YES	Yes	Eliminate: Opposed by City. Aviation Blvd not raised.	Eliminate: Opposed by City.	Eliminate: Not viable due to constructability.	Eliminate: Not viable due to logical termini.	YES	YES

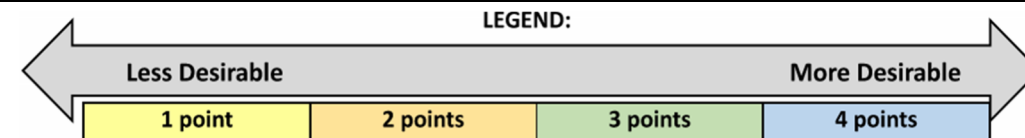
LEGEND:



ALTERNATIVE EVALUATION MATRIX

SR 5/US 1 at Aviation Boulevard PD&E Study FPID: 4441693-1-22-02

CRITERIA	NO BUILD	ALTERNATIVE 1 CONVENTIONAL	ALTERNATIVE 2 ONE-WAY PAIR	ALTERNATIVE 7 DISPLACED LEFT TURN	ALTERNATIVE 8 MEDIAN U-TURN ROUNDBOUT
LEVEL OF SERVICE	US 1 & Aviation Blvd LOS F (AM/PM) (1)	US 1 & Aviation Blvd – LOS D AM/PM (3)	US 1 & Aviation Blvd – LOS D AM/PM (3)	US 1 & Aviation Blvd – LOS D (AM) US 1 & Aviation Blvd – LOS C (PM) (4)	US 1 & Aviation Boulevard – LOS D (AM) US 1 & Access Rd– LOS C (AM) US 1 & Aviation Boulevard – LOS C (PM) US 1 & Access Rd– LOS B (PM) (4)
SAFETY	Paved median remains. No crash reduction measures. (1)	Adds a raised median. 72% crash reduction (3)	Adds a raised median. 72% crash reduction (3)	Complicated pedestrian crossing and left turns at railroad crossing. 64% crash reduction (2)	Adds a raised median. 80% crash reduction (4)
MOBILITY (TRANSIT, BICYCLE, PEDESTRIAN)	No bicycle facilities and cracked sidewalks (1)	Shared use path for bicyclists and pedestrians. Bus bay provided for transit (4)	Shared use path for bicyclists and pedestrians. Transit stops provided. (3)	Does not provide for transit southbound. Displaced left adds second pedestrian crossing maneuver. (1)	Shared use path for bicyclists and pedestrians. Bus bay provided for transit. (4)
ROADWAY ALIGNMENT	Bridge and curb remain adjacent to railroad right of way. (1)	Straight alignment. Roadway is buffered from railroad right of way. (4)	One way pair. Superelevated curved bridge. (1)	Additional deflection and bridge widening for displaced left turn. (2)	Redirection of left turns and higher traffic volumes east of SR 5/US-1 (3)
DRAINAGE	Sidewalk drainage problems (1)	Pond 1-C Score 221 (2)	Pond 2A Score 214 (3)	Pond 7C Score 225 (2)	Pond 8-A Score 219 (3)
BRIDGE AND CANAL	Aging bridge. No canal access upstream of the bridge. (1)	Canal-Bridge maintenance access provided on all sides. (4)	Canal-Bridge maintenance access provided on one side. (1)	Canal-Bridge maintenance access provided on all sides. (4)	Canal-Bridge maintenance access provided on all sides. (4)
RAILROAD	Bridge and roadway remain adjacent to railroad right of way (1)	Raised median on Aviation Blvd. Large US 1 rail-roadway buffer. 6 lanes at railroad crossing (3)	Raised median on Aviation Blvd. Minimal US 1 rail-roadway buffer. 6 lanes at railroad crossing. (2)	Raised median on Aviation Blvd. Moderate US 1 rail-roadway buffer. 6 lanes at railroad crossing. Displaced left turn at rail crossing. (1)	Raised median on Aviation Blvd. Large US 1 rail-roadway buffer. 5 lanes at railroad crossing (4)
RIGHT OF WAY PROPERTIES IMPACTED	N/A	27 Parcels, 7.68 Acres, Relocations: 4 business, (0) residential (4)	42 Parcels, 7.61 Acres, Relocations: 2 business, 10 residential (1)	29 Parcels, 6.03 Acres, Relocations: 5 business, 2 residential (3)	35 Parcels, 8.89 Acres Relocations: 5 business, 6 residential (1)
ENVIRONMENTAL	Does not improve water quality. (1)	Stormwater quality improvements. Minor impacts. (3)	Stormwater quality improvements. Some effects to forested area. (2)	Stormwater quality improvements. Minor impacts. (3)	Stormwater quality improvements. Some effects to forested area. (2)
NOISE IMPACTS	N/A	Low (3)	Shifts US-1 travel lanes eastward 500 feet towards homes (1)	Low (3)	Higher traffic levels around roundabout. Road closer to residential. (2)
MAINTENANCE	Increased maintenance (1)	1 Signal (4)	2 Signals. Additional access road maintenance. (2)	2 Signals (3)	2 Signals. Additional access road maintenance. (2)
CONSTRUCTABILITY	N/A	Construct roadway and bridge in phases. (3)	Requires temporary bridge detour. (1)	Construct roadway and bridge in phases. Adds phase for displaced left turn. (2)	Construct roadway and bridge in phases. (3)
TOTAL COST	Maintenance cost	\$37,569,000 (4)	\$39,832,000 (2)	\$39,810,000 (3)	\$45,776,000 (1)
SCORE / RANK	N/A	44 points	25 points	33 points	37 points



Appendix C
Sociocultural Data Reports:

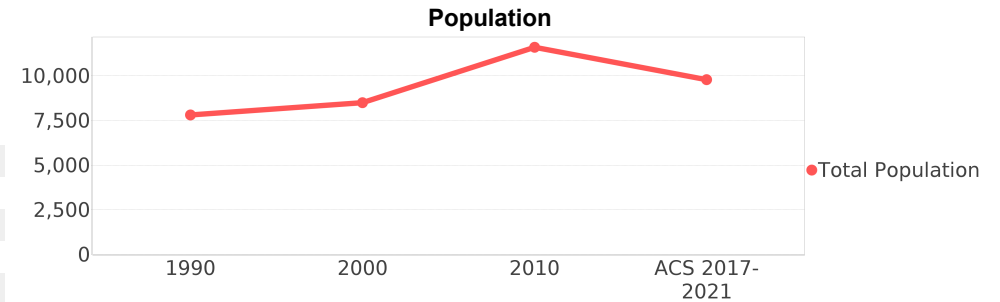
ETDM #14475 - Alternative #1

Buffer Distance: 1320 feet (Quarter Mile)
Area: 2 1.626 square miles
Jurisdiction - Cities: 3 Vero Beach
Jurisdiction - Counties: 3 Indian river



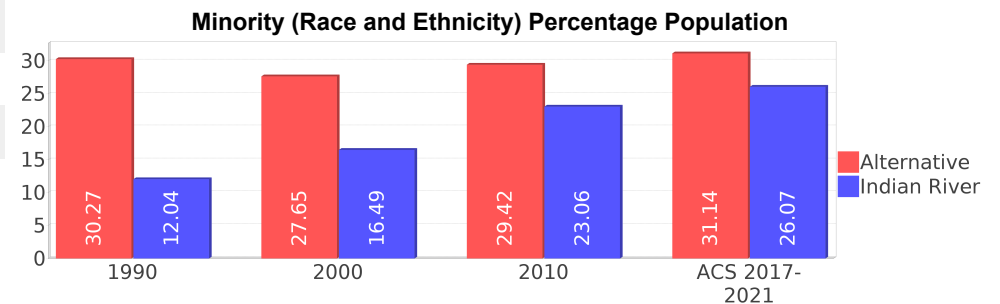
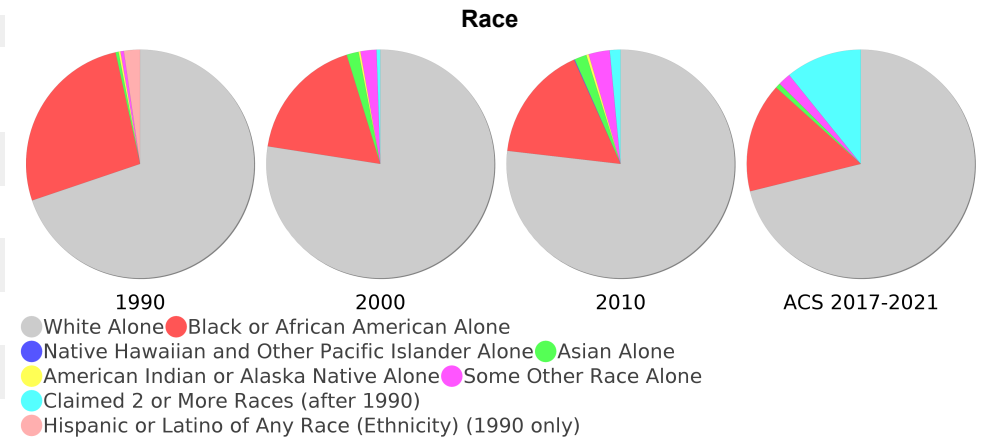
General Population Trends

Description	1990	2000	2010 ¹	ACS 2017-2021
Total Population	7,813	8,495	11,600	9,789
Total Households	3,211	3,873	5,548	4,130
Average Persons per Acre	3.08	2.94	2.40	2.41
Average Persons per Household	2.83	2.09	1.98	2.03
Average Persons per Family	2.96	2.86	2.52	3.24
Males	3,798	4,061	5,637	4,725
Females	4,015	4,434	5,963	5,064



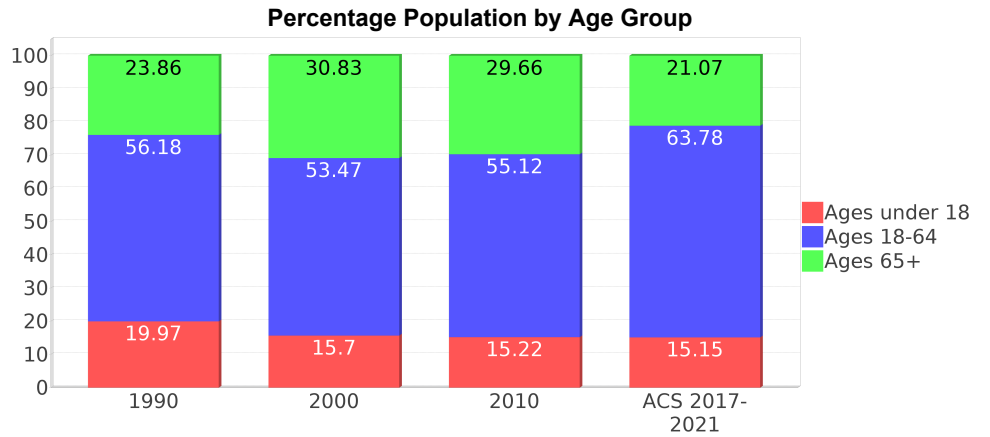
Race and Ethnicity Trends ^{5, 8, 9}

Description	1990	2000	2010 ¹	ACS 2017-2021
White Alone	5,580 (71.42%)	6,581 (77.47%)	8,912 (76.83%)	6,964 (71.14%)
Black or African American Alone	2,137 (27.35%)	1,508 (17.75%)	1,911 (16.47%)	1,520 (15.53%)
Native Hawaiian and Other Pacific Islander Alone	NA (NA)	0 (0.00%)	11 (0.09%)	0 (0.00%)
Asian Alone	34 (0.44%)	146 (1.72%)	202 (1.74%)	70 (0.72%)
American Indian or Alaska Native Alone	21 (0.27%)	22 (0.26%)	40 (0.34%)	0 (0.00%)
Some Other Race Alone	38 (0.49%)	193 (2.27%)	347 (2.99%)	176 (1.80%)
Claimed 2 or More Races	NA (NA)	45 (0.53%)	177 (1.53%)	1,059 (10.82%)
Hispanic or Latino of Any Race (Ethnicity)	183 (2.34%)	642 (7.56%)	1,147 (9.89%)	890 (9.09%)
Not Hispanic or Latino (Ethnicity)	7,630 (97.66%)	7,853 (92.44%)	10,453 (90.11%)	8,899 (90.91%)
Minority (Race and Ethnicity)	2,365 (30.27%)	2,349 (27.65%)	3,413 (29.42%)	3,048 (31.14%)



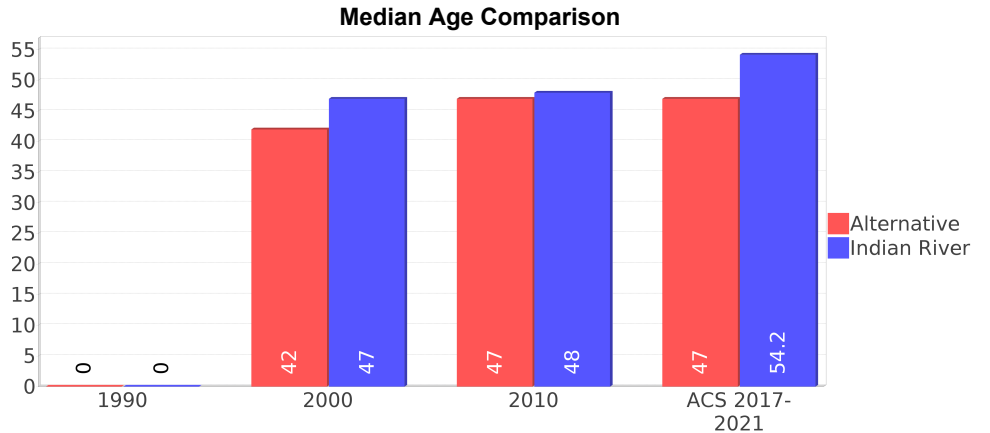
Age Trends ⁵

Description	1990	2000	2010 ¹	ACS 2017-2021
Under Age 5	5.68%	4.90%	4.76%	4.69%
Ages 5-17	14.28%	10.81%	10.46%	10.46%
Ages 18-21	5.48%	5.49%	3.62%	3.38%
Ages 22-29	13.54%	8.93%	10.26%	14.87%
Ages 30-39	14.42%	12.67%	9.76%	12.47%
Ages 40-49	9.83%	11.75%	11.38%	8.68%
Ages 50-64	12.90%	14.63%	20.10%	24.36%
Age 65 and Over	23.86%	30.83%	29.66%	21.07%
-Ages 65-74	10.75%	13.29%	11.60%	10.87%
-Ages 75-84	8.31%	10.81%	10.70%	5.16%
-Age 85 and Over	4.80%	6.73%	7.36%	5.05%
Median Age	NA	42	47	47



Income Trends ^{12, 13, 5}

Description	1990	2000	2010 ¹	ACS 2017-2021
Median Household Income	\$20,072	\$26,630	\$30,690	\$46,111
Median Family Income	\$29,688	\$43,182	\$47,642	\$51,136
Population below Poverty Level	19.38%	15.44%	22.62%	12.55%
Households below Poverty Level	22.08%	14.64%	18.91%	13.24%
Households with Public Assistance Income	7.66%	5.73%	2.18%	5.98%



Disability Trends ¹⁰

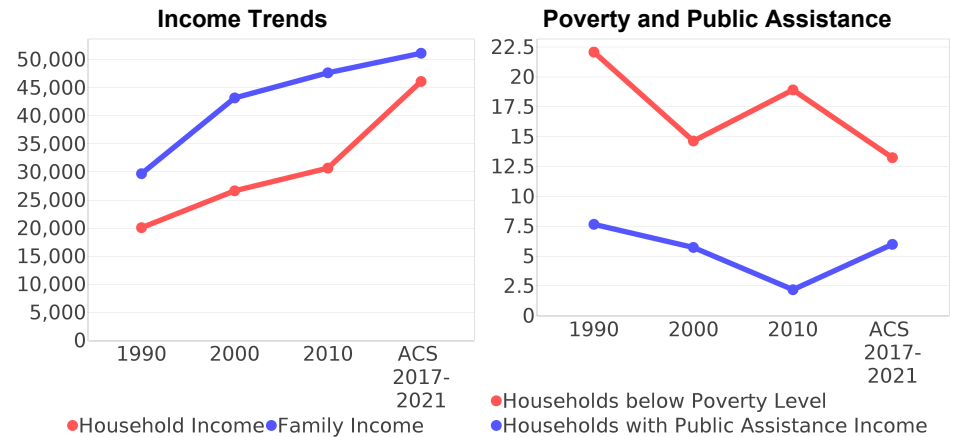
See the [Data Sources](#) section below for an explanation about the differences in disability data among the various years.

Description	1990	2000	2010 ¹	ACS 2017-2021
Population 16 To 64 Years with a disability	455 (NA)	1281 (NA)	(NA)	(NA)
Population 20 To 64 Years with a disability	(NA)	(NA)	(NA)	1106 (19.46%)

Educational Attainment Trends ^{11, 5}

Age 25 and Over

Description	1990	2000	2010 ¹	ACS 2017-2021
Less than 9th Grade	836 (15.28%)	960 (14.95%)	798 (8.64%)	245 (3.37%)
9th to 12th Grade, No Diploma	1,279 (23.37%)	917 (14.28%)	940 (10.17%)	594 (8.17%)
High School Graduate or Higher	3,357 (61.35%)	4,543 (70.76%)	7,501 (81.19%)	6,432 (88.46%)
Bachelor's Degree or Higher	689 (12.59%)	1,274 (19.84%)	2,646 (28.64%)	1,855 (25.51%)



Language Trends ⁵

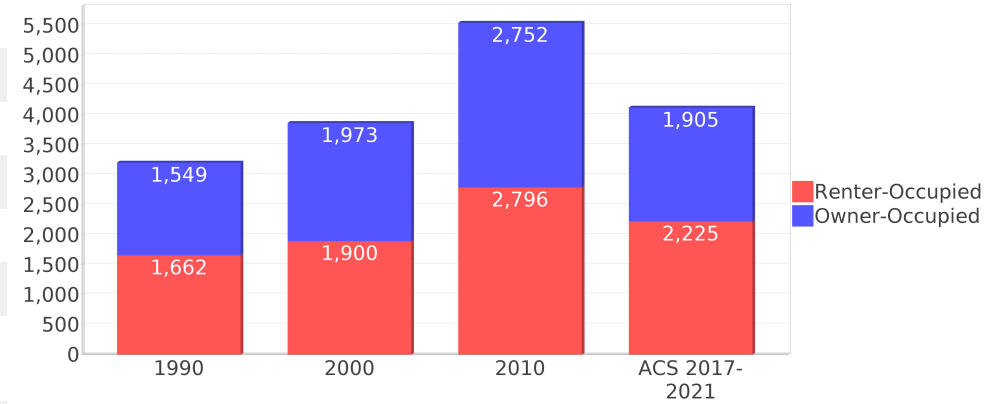
Age 5 and Over

Description	1990	2000	2010 ¹	ACS 2017-2021
Speaks English Well	222 (2.97%)	188 (2.33%)	400 (3.48%)	66 (0.71%)
Speaks English Not Well	NA (NA)	161 (1.99%)	201 (1.75%)	116 (1.24%)
Speaks English Not at All	NA (NA)	87 (1.08%)	254 (2.21%)	52 (0.56%)
Speaks English Not Well or Not at All	96 (1.29%)	248 (3.07%)	455 (3.96%)	168 (1.80%)
Speaks English Less than Very Well	NA (NA)	NA (NA)	855 (7.45%)	234 (2.51%)

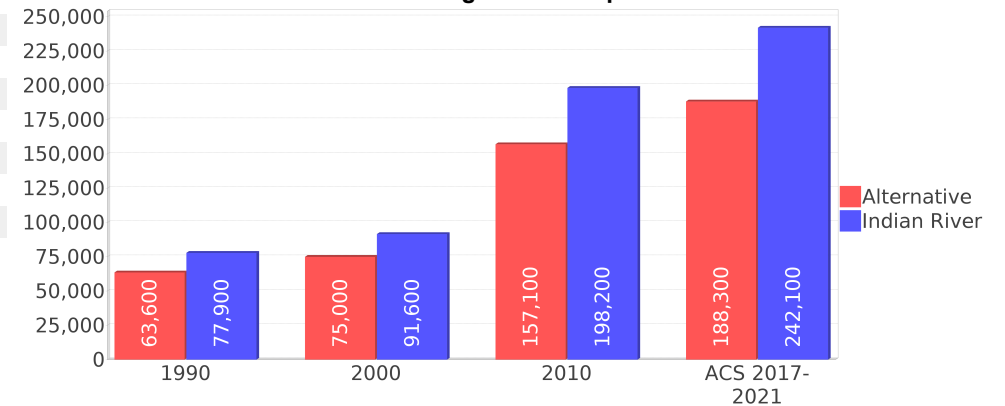
Housing Trends ⁵

Description	1990	2000	2010 ¹	ACS 2017-2021
Total	3,689	4,735	7,305	5,720
Units per Acre	0.74	0.72	0.92	0.96
Single-Family Units	1,930	2,514	3,707	2,475
Multi-Family Units	1,109	2,036	2,862	3,054
Mobile Home Units	143	175	250	191
Owner-Occupied Units	1,549	1,973	2,752	1,905
Renter-Occupied Units	1,662	1,900	2,796	2,225
Vacant Units	478	862	1,757	1,590
Median Housing Value	\$63,600	\$75,000	\$157,100	\$188,300
Occupied Housing Units w/No Vehicle	662 (20.62%)	699 (18.05%)	734 (13.23%)	715 (17.31%)

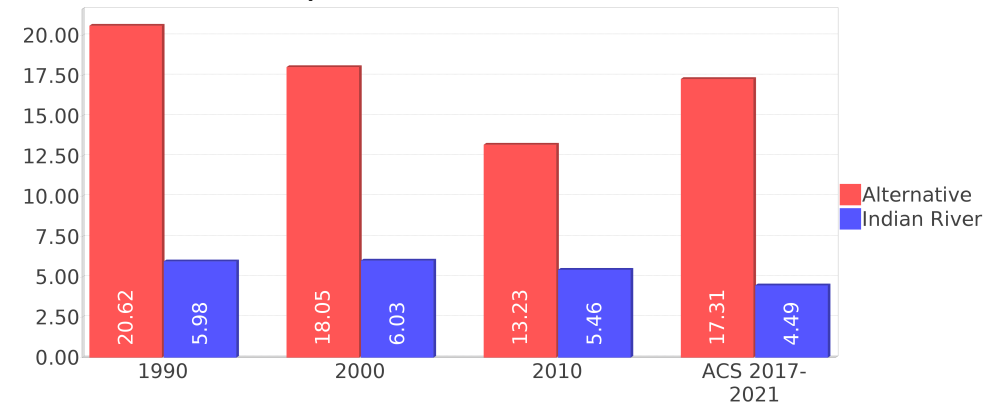
Housing Tenure



Median Housing Value Comparison



Occupied Units With No Vehicles Available



Geographic Mobility

Description	ACS 2017-2021
Median year householder moved into unit - Total	2015
Median year householder moved into unit - Owner Occupied	2006
Median year householder moved into unit - Renter Occupied	2016
Abroad 1 year ago	458
Different house in United States 1 year ago	2,685
Same house 1 year ago	6,632
Geographical Mobility in the Past Year - Total	9,775

Computers and Internet

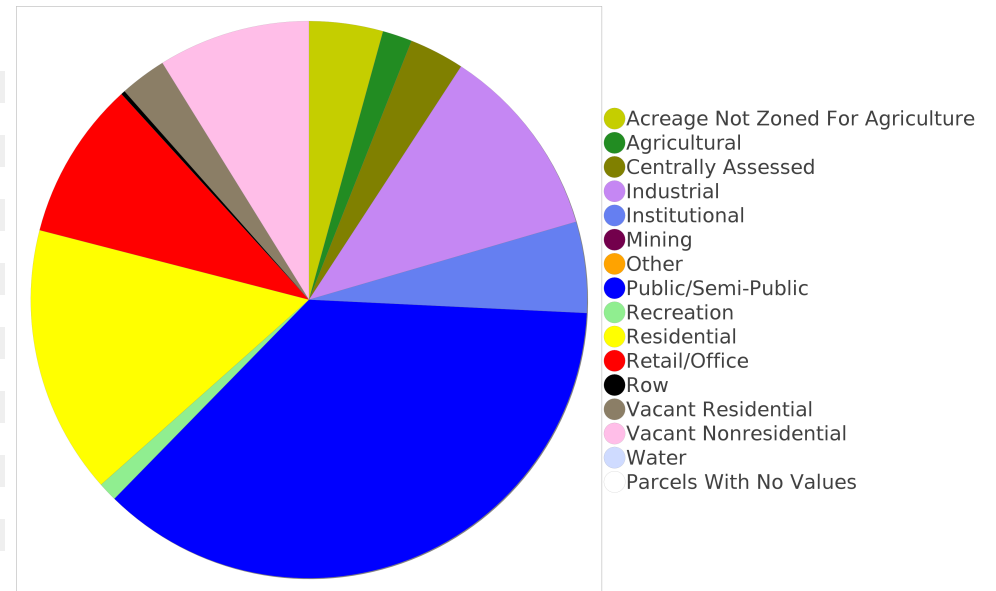
Description	ACS 2017-2021
Total Households Types of Computers in HH	4,130
Households with 1 or more device	3,518
Households with no computer	612
Total Households Presence and Types of Internet Subscriptions	4,130
Households with an internet subscription	3,323
Households with internet access without a subscription	76
Households with no internet access	731

Household Languages

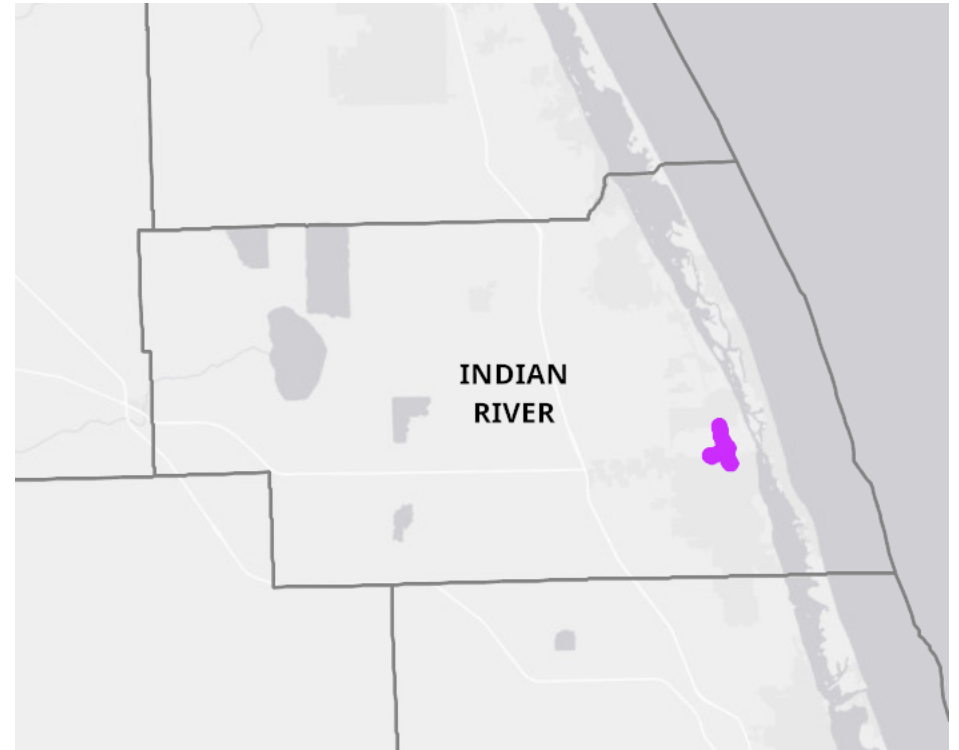
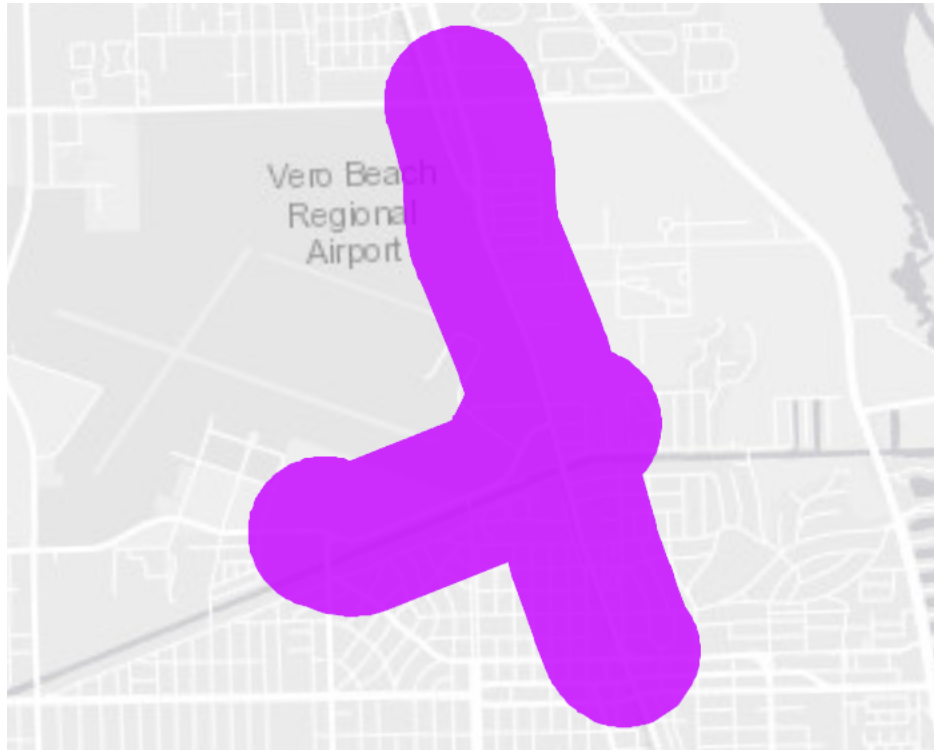
Description	ACS 2017-2021
Total Households by Household Language	4,130
Household Not Limited English Speaking Status	4,060
Spanish: Limited English speaking household	46
Indo-European languages: Limited English speaking household	24
Asian and Pacific Island languages: Limited English speaking household	0
Other languages: Limited English speaking household	0

Existing Land Use [15](#), [56](#)

Land Use Type	Acres	Percentage
Acreage Not Zoned For Agriculture	35	3.36%
Agricultural	14	1.35%
Centrally Assessed	26	2.50%
Industrial	92	8.84%
Institutional	43	4.13%
Mining	0	0.00%
Other	0	0.00%
Public/Semi-Public	298	28.64%
Recreation	9	0.87%
Residential	127	12.21%
Retail/Office	75	7.21%
Row	2	0.19%
Vacant Residential	22	2.11%
Vacant Nonresidential	72	6.92%
Water	0	0.00%
Parcels With No Values	<0.5	<0.05%



Location Maps



Community Facilities

The community facilities information below is useful in a variety of ways for environmental evaluations. These community resources should be evaluated for potential sociocultural effects, such as accessibility and relocation potential. The facility types may indicate the types of population groups present in the project study area. Facility staff and leaders can be sources of community information such as who uses the facility and how it is used. Additionally, community facilities are potential public meeting venues.

Assisted Rental Housing Units

Facility Name	Address	Zip Code
ORANGE BLOSSOM VILLAGE	3300 12TH CT	32960

Community and Fraternal Centers

Facility Name	Address	Zip Code
VERO BEACH COMMUNITY CENTER	2266 14TH AVE	32960
CHAMBER OF COMMERCE - INDIAN RIVER COUNTY	1216 21ST ST	32960
ELKS LODGE 1774	1350 26TH ST	32960
ITALIAN AMERICAN CIVIC ASSOCIATES INC	1600 25TH ST	32960
MASONIC LODGE - VERO 250 F & AM	1959 14TH AVE	32960
FLORIDA IRISH AMERICAN SOCIETY INC	1314 20TH ST	32960
BOYS & GIRLS CLUB - INDIAN RIVER COUNTY	2926 PIPER DR	32960
GARDEN CLUB OF INDIAN RIVER COUNTY	2526 17TH AVE	32960
VERO BEACH COMMUNITY CENTER	2266 14TH AVE	32960
CHAMBER OF COMMERCE - INDIAN RIVER COUNTY	1216 21ST ST	32960

Cultural Centers

Facility Name	Address	Zip Code
INDIAN RIVER CITRUS MUSEUM/HERITAGE CENTER	2140 14TH AVE	32960
THE RAILROAD MUSEUM	2336 14TH AVE	32960
INDIAN RIVER COUNTY LAW LIBRARY	2000 16TH AVE	32960
INDIAN RIVER CITRUS MUSEUM/HERITAGE CENTER	2140 14TH AVE	32960
INDIAN RIVER COUNTY LIBRARY	1600 21ST ST	32960
THE RAILROAD MUSEUM	2336 14TH AVE	32960

Fire Department and Rescue Station Facilities

Facility Name	Address	Zip Code
INDIAN RIVER COUNTY FIRE PREVENTION & LIFE SAFETY	1800 27TH ST-BLD B	32960

Government Buildings

Facility Name	Address	Zip Code
U S POST OFFICE - VERO BEACH	2050 13TH AVE	32960
INDIAN RIVER COUNTY CIRCUIT AND COUNTY COURTS - INDIAN RIVER COUNTY COURTHOUSE	2000 16TH AVE	32960
U S POST OFFICE - VERO BEACH	2050 13TH AVE	32960
INDIAN RIVER COUNTY HEALTH DEPARTMENT	1900 27TH ST	32960
INDIAN RIVER COUNTY TAX COLLECTOR	1800 27TH ST	32960

Facility Name	Address	Zip Code
INDIAN RIVER COUNTY PROPERTY APPRAISER	1800 27TH ST	32960
CITY OF VERO BEACH CITY HALL	1053 20TH PLACE	32960

Florida Parks and Recreational Facilities

Facility Name	Address	Zip Code
POCAHONTAS PARK	2140 14TH AVE	32960
MCANSH PARK	20TH AVE & SAN JUAN AVE	32960
BLOCK MANOR PARK	27TH AVE	32960
POCAHONTAS PARK	2140 14TH AVE	32960
HOSIE SCHUMANN PARK	1760 39TH ST	32960
MICHAEL FIELD	1250 27TH ST	32960

Religious Centers

Facility Name	Address	Zip Code
NEW BETHEL AME	1905 38TH LANE	32960
VERO BEACH FIRST BAPTIST CHURCH	2206 16TH AVE	32960
NEW BETHEL AME	1905 38TH LANE	32960
FAITH TEMPLE EVANGELISTIC	4176 OLD DIXIE HIGHWAY	32967
CHURCH OF GOD BY FAITH	1705 38TH STREET	32960
FIRST CHURCH OF CHRIST SCIENTIST	1602 23RD STREET	32960
TRINITY EPISCOPAL CHURCH	2365 PINE AVENUE	32960

Veteran Organizations and Facilities

Facility Name	Address	Zip Code
INDIAN RIVER COUNTY VETERANS SERVICE OFFICE	2525 SAINT LUCIE AVENUE	32960
INDIAN RIVER COUNTY VETERANS SERVICE OFFICE	2525 SAINT LUCIE AVENUE	32960

Mobile Home Parks

Facility Name	Address	Zip Code
PALM VILLA MHP	1255 26TH STREET	32960
VERO MOBILE HOME PARK	1228 24TH ST	32960
PALM VILLA MHP	1255 26TH STREET	32960
VERO MOBILE HOME PARK	1228 24TH ST	32960

Block Groups

The following Census Block Groups were used to calculate demographics for this report.

1990 Census Block Groups

120610503013, 120610504004, 120610504003, 120610502005, 120610502006, 120610502001, 120610503012, 120610503024, 120610503013, 120610504004, 120610504003, 120610504005, 120610502005, 120610502006, 120610501001, 120610502004, 120610502001, 120610503012

2000 Census Block Groups

120610503012, 120610502004, 120610502005, 120610504003, 120610502006, 120610502001, 120610504004, 120610503013, 120610503024, 120610503012, 120610502004, 120610502005, 120610501001, 120610504005, 120610504003, 120610502006, 120610502001, 120610504004, 120610503013

2010 Census Block Groups

120610502002, 120610503011, 120610502001, 120610504023, 120610504021, 120610503012, 120610502002, 120610503011, 120610502001, 120610501001, 120610504011, 120610503024, 120610504023, 120610504021, 120610503012, 120610502003

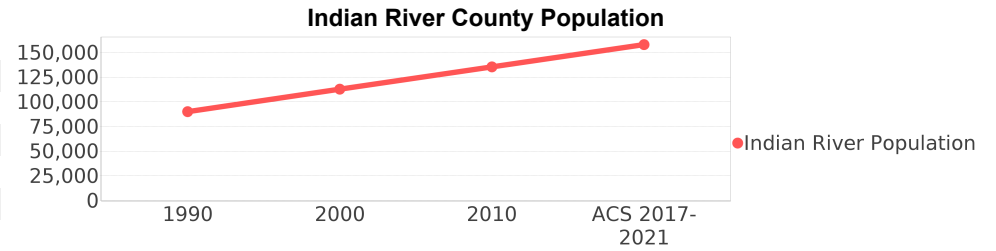
Census Block Groups

120610503051, 120610504023, 120610502011, 120610503052, 120610504021, 120610502012, 120610503051, 120610501011, 120610504023, 120610503032, 120610502021, 120610502011, 120610503052, 120610504011, 120610504021, 120610502012

Indian River County Demographic Profile

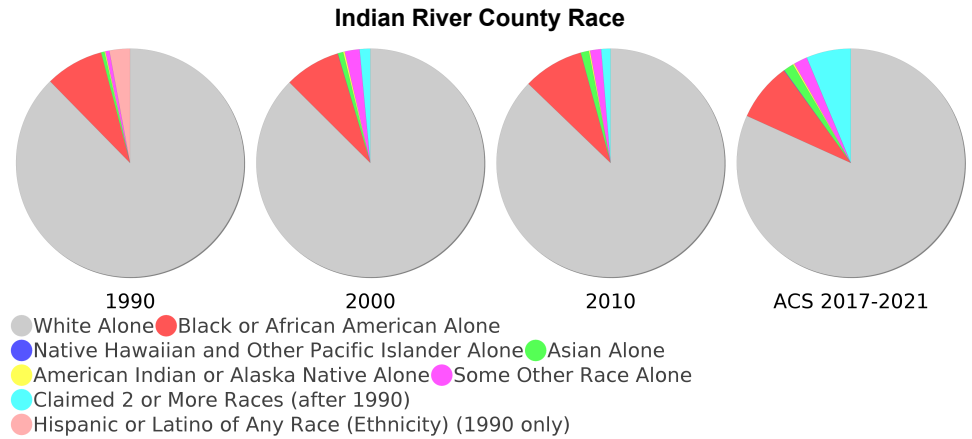
General Population Trends - Indian River ⁵

Description	1990	2000	2010 ¹	ACS 2017-2021
Total Population	90,208	112,947	135,518	158,002
Total Households	38,057	49,137	57,560	63,377
Average Persons per Acre	0.274	0.343	0.411	0.48
Average Persons per Household	2.37	2.249	2.00	2.47
Average Persons per Family	2.784	2.782	2.931	3.22
Males	43,578	54,594	65,606	76,681



Race and Ethnicity Trends - Indian River ^{5, 8, 9}

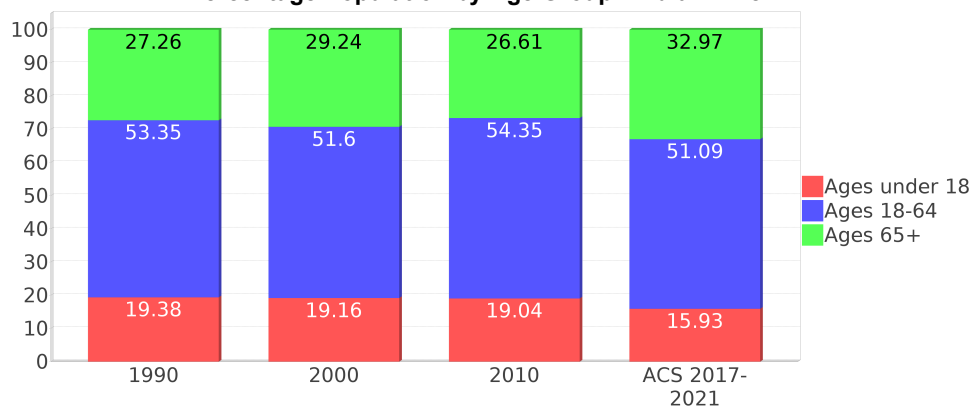
Description	1990	2000	2010 ¹	ACS 2017-2021
White Alone	81,418 (90.26%)	98,775 (87.45%)	118,153 (87.19%)	129,185 (81.76%)
Black or African American Alone	7,660 (8.49%)	8,945 (7.92%)	11,634 (8.58%)	13,030 (8.25%)
Native Hawaiian and Other Pacific Islander Alone	(NA)	38 (0.03%)	32 (0.02%)	117 (0.07%)
Asian Alone	452 (0.50%)	864 (0.76%)	1,551 (1.14%)	2,289 (1.45%)
American Indian or Alaska Native Alone	136 (0.15%)	237 (0.21%)	241 (0.18%)	344 (0.22%)
Some Other Race Alone	521 (0.58%)	2,380 (2.11%)	2,106 (1.55%)	3,056 (1.93%)
Claimed 2 or More Races	(NA)	1,708 (1.51%)	1,801 (1.33%)	9,981 (6.32%)
Hispanic or Latino of Any Race (Ethnicity)	2,704 (3.00%)	7,300 (6.46%)	14,264 (10.53%)	20,375 (12.90%)
Not Hispanic or Latino (Ethnicity)	87,504 (97.00%)	105,647 (93.54%)	121,254 (89.47%)	137,627 (87.10%)
Minority (Race and Ethnicity)	10,859 (12.04%)	18,629 (16.49%)	31,248 (23.06%)	41,196 (26.07%)



Age Trends - Indian River ⁵

Description	1990	2000	2010 ¹	ACS 2017-2021
Under Age 5	5.45%	4.61%	4.84%	4.00%
Ages 5-17	13.93%	14.55%	14.20%	11.93%
Ages 18-21	3.97%	3.60%	4.15%	3.49%
Ages 22-29	9.01%	6.53%	7.29%	7.28%
Ages 30-39	13.11%	11.25%	9.16%	9.24%
Ages 40-49	10.40%	13.15%	12.93%	9.38%
Ages 50-64	16.87%	17.06%	20.81%	21.69%
Age 65 and Over	27.26%	29.24%	26.61%	32.97%
-Ages 65-74	17.12%	14.68%	12.50%	17.63%
-Ages 75-84	8.28%	11.68%	10.23%	10.65%
-Age 85 and Over	1.86%	2.88%	3.89%	4.69%
Median Age	NA	47	48	54.2

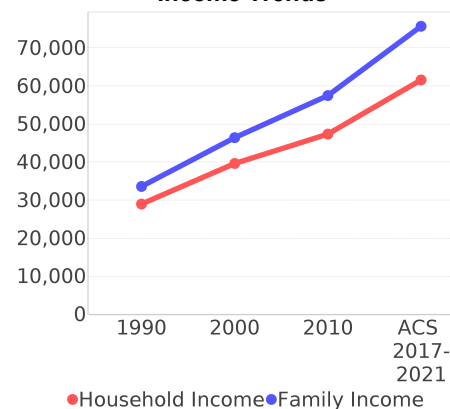
Percentage Population by Age Group - Indian River



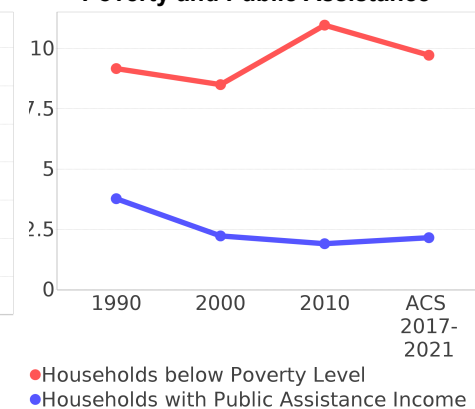
Income Trends - Indian River ⁵

Description	1990	2000	2010 ¹	ACS 2017-2021
Median Household Income	\$28,961	\$39,635	\$47,341	\$61,594
Median Family Income	\$33,569	\$46,385	\$57,477	\$75,680
Population below Poverty Level	8.75%	9.30%	12.63%	10.67%
Households below Poverty Level	9.17%	8.50%	10.97%	9.72%
Households with Public Assistance Income	3.77%	2.22%	1.90%	2.15%

Income Trends



Poverty and Public Assistance



Disability Trends - Indian River ¹⁰

See the Data Sources section below for an explanation about the differences in disability data among the various years.

Description	1990	2000	2010 ¹	ACS 2017-2021
Population 16 To 64 Years with a disability	4,599 (6.26%)	12,827 (12.06%)	NA (NA)	NA (NA)
Population 20 To 64 Years with a disability	NA (NA)	NA (NA)	NA (NA)	8,440 (10.89%)

Educational Attainment Trends - Indian River ^{11, 5}

Age 25 and Over

Description	1990	2000	2010 ¹	ACS 2017-2021
Less than 9th Grade	4,729 (7.08%)	5,292 (6.26%)	5,026 (5.00%)	3,447 (2.81%)
9th to 12th Grade, No Diploma	10,989 (16.45%)	10,299 (12.18%)	8,739 (8.69%)	7,428 (6.06%)
High School Graduate or Higher	51,080 (76.47%)	68,940 (81.56%)	86,756 (86.31%)	111,741 (91.13%)
Bachelor's Degree or Higher	12,779 (19.13%)	19,533 (23.11%)	26,870 (26.73%)	39,249 (32.01%)

Language Trends - Indian River ⁵

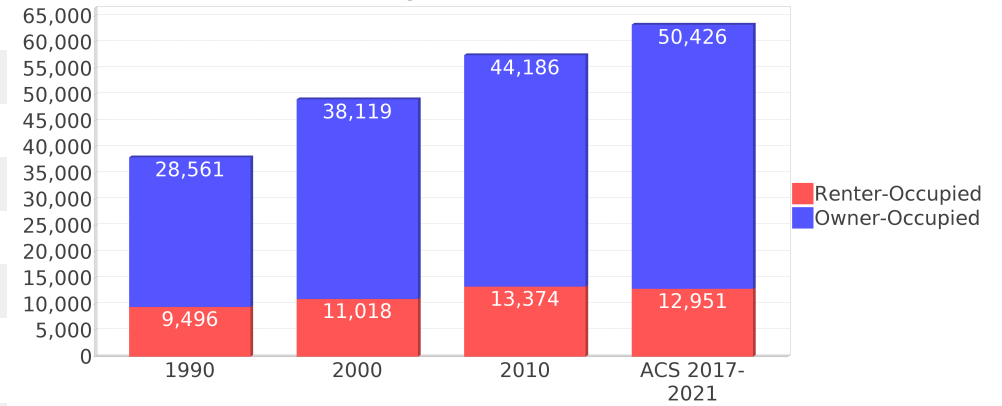
Age 5 and Over

Description	1990	2000	2010 ¹	ACS 2017-2021
Speaks English Well	1,252 (1.47%)	2,307 (2.14%)	3,537 (2.74%)	4,014 (2.65%)
Speaks English Not Well	NA (NA)	1,595 (1.48%)	3,225 (2.50%)	1,895 (1.25%)
Speaks English Not at All	NA (NA)	849 (0.79%)	1,813 (1.41%)	591 (0.39%)
Speaks English Not Well or Not at All	871 (1.02%)	2,444 (2.27%)	5,038 (3.91%)	2,486 (1.64%)
Speaks English Less than Very Well	NA (NA)	4,751 (4.41%)	8,575 (6.65%)	6,500 (4.29%)

Housing Trends - Indian River ⁵

Description	1990	2000	2010 ¹	ACS 2017-2021
Total	47,128	57,902	75,425	82,555
Units per Acre	0.143	0.176	0.229	0.25
Single-Family Units	24,382	36,240	50,814	57,527
Multi-Family Units	8,429	14,792	18,224	19,089
Mobile Home Units	4,960	6,786	6,372	5,855
Owner-Occupied Units	28,561	38,119	44,186	50,426
Renter-Occupied Units	9,496	11,018	13,374	12,951
Vacant Units	9,071	8,765	17,865	19,178
Median Housing Value	\$77,900	\$91,600	\$198,200	\$242,100
Occupied Housing Units w/No Vehicle	2,274 (5.98%)	2,963 (6.03%)	3,140 (5.46%)	2,846 (4.49%)
Median year householder moved into unit - Total	NA	NA	NA	2013
Median year householder moved into unit - Owner Occupied	NA	NA	NA	2011
Median year householder moved into unit - Renter Occupied	NA	NA	NA	2016
Abroad 1 year ago	NA	NA	NA	1,093
Different house in United States 1 year ago	NA	NA	NA	19,356
Same house 1 year ago	NA	NA	NA	136,723
Geographical Mobility in the Past Year - Total	NA	NA	NA	136,723

Housing Tenure - Indian River



Data Sources

ACS vs Census Data

(1) The 2010 Census data is represented by a combination of decennial and ACS (2006-2010) data. The General Population Trends, Race and Ethnicity Trends, Age Trends are entirely from decennial. The Income Trends, Language Trends are entirely from the ACS. The Housing Trends section is derived from both: Decennial (Total # Housing Units, Housing Units per Acre, Owner-Occupied Units, Renter-Occupied Units, Vacant Units); ACS (Single Family Units, Multi-family Units, Mobile Homes, Median Housing Value, Occupied Housing Units w/No Vehicle).

Area

(2) The geographic area of the community based on a user-defined community boundary or area of interest (AOI) boundary.

Jurisdiction

(3) Jurisdiction(s) includes local government boundaries that intersect the user-defined community or AOI boundary.

Goals, Values and History

(4) Information under the headings Goals and Values and History is entered manually by the user before the Sociocultural Data Report (SDR) is generated. This information is usually not available for communities with boundaries that are based on Census-defined places (i.e., not user-specified).

Demographic Data

(5) Demographic data reported under the headings General Population Trends, Race and Ethnicity Trends, Age Trends, Income Trends, Educational Attainment Trends, Language Trends, and Housing Trends is from the U.S. Decennial Census for 1990 and 2000 and the American Community Survey (ACS) 5-year estimates for 2006-2010 and ACS 2017-2021. The data was gathered at the block group level for user-defined communities, Census places, and AOIs, and at the county level for counties. Depending on the dataset, the data represents 100% counts (Census Summary File 1) or sample-based information (Census Summary File 3 or ACS). For more information about using demographic data, please see the training videos located here: <https://www.fdot.gov/environment/pubs/sce/sce1.shtm>.

About the Census Data

(6) The block group analysis for project alternatives and AOIs do not always correspond precisely to block group boundaries. This report does not adjust the geographic area or data of affected block groups. It includes demographic summaries from any block group that overlaps the project alternative buffer or AOI boundary. Therefore, population that falls out of the SDR analysis area may be included in the results. Note that there may be areas where there is no population.

(7) Use caution when comparing the 100% count data (Decennial Census) to the sample-based data (ACS). In any given year, about one in 40 U.S. households will receive the ACS questionnaire. Over any five-year period, about one in eight households will receive the questionnaire, as compared to about one in six that received the long form questionnaire for the Decennial Census 2000. (Source: https://www.census.gov/content/dam/Census/programs-surveys/acs/news/10ACS_keyfacts.pdf) The U.S. Census Bureau provides help with this process: <https://www.census.gov/programs-surveys/acs/guidance/comparing-acs-data.html>

(8) Race and ethnicity are separate questions on the Census questionnaire. Individuals can report multiple race and ethnicity answers; therefore, numbers in the Race and Ethnicity portion of this report may add up to be greater than the total population. In addition, use caution when interpreting changes in race and ethnicity over time. Starting with the 2000 Decennial Census, respondents could select one or more race categories. Also in 2000, the placement of the question about Hispanic origin changed, helping to increase responsiveness to the Hispanic-origin question. Because of these and other changes, the 1990 data on race and ethnicity are not directly comparable with data from later censuses. (Source: <https://www.census.gov/library/publications/2001/dec/c2kbr01-01.html>)

(9) The "Minority" calculations use both the race and ethnicity responses from Census and ACS data. In this report, "Minority" refers to individuals who list a race other than White and/or list their ethnicity as Hispanic/Latino. In other words, people who are multi-racial, any single race other than White, or Hispanic/Latino of any race are considered minorities. We use the following formula: $MINORITY = TOTALPOP - WHITE_NH$ where TOTALPOP is the Total Population and WHITE_NH is the population with a race of White alone and an ethnicity of Not Hispanic or Latino. Translating this to the field names used in the census ACS source data, the formula looks like this: $MINORITY = B01003_E001 - B03002_E003$. (Note, the WHITE_NH population is not reported separately in this report.)

(10) Disability data is not included in the 2010 Decennial Census or the 2006-2010 ACS. This data is available in the ACS 2017-2021 ACS. Because of changes made to the Census and ACS questions between 1990 and ACS, disability variables should not be compared from year to year. For example: 1) with the 1990 data, the disabilities are listed as a "work disability" while this distinction is not made with 2000 or ACS data; 2) the ACS data includes the institutionalized population (e.g. persons in prisons and group homes) while this population is not included in 1990 or 2000; and 3) the age groupings changed over the years.

(11) The category Bachelor's Degree or Higher under the heading Educational Attainment Trends is a subset of the category High School Graduate or Higher.

(12) Income of households. This includes the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. Because many households consist of only one person, average household income is usually less than average family income.

(13) Income of families. In compiling statistics on family income, the incomes of all members 15 years old and over related to the householder are summed and treated as a single amount.

(14) Age trends. The median age for 1990 is not available.

Land Use Data

(15) The Land Use information Indicates acreages and percentages for the generalized land use types used to group parcel-specific, existing land use assigned by the county property appraiser office according to the Florida Department of Revenue land use codes.

Community Facilities Data

- (16) Assisted Rental Housing Units - Identifies multifamily rental developments that receive funding assistance under federal, state, and local government programs to offer affordable housing as reported by the Shimberg Center for Housing Studies, University of Florida.
- (17) Mobile Home Parks - Identifies approved or acknowledged mobile home parks reported by the Florida Department of Business and Professional Regulation and Florida Department of Health.
- (18) Migrant Camps - Identifies migrant labor camp facilities inspected by the Florida Department of Health.
- (19) Group Care Facilities - Identifies group care facilities inspected by the Florida Department of Health.
- (20) Community Center and Fraternal Association Facilities - Identifies facilities reported by multiple sources.
- (21) Law Enforcement Correctional Facilities - Identifies facilities reported by multiple sources.
- (22) Cultural Centers - Identifies cultural centers including organizations, buildings, or complexes that promote culture and arts (e.g., aquariums and zoological facilities; arboreta and botanical gardens; dinner theaters; drive-ins; historical places and services; libraries; motion picture theaters; museums and art galleries; performing arts centers; performing arts theaters; planetariums; studios and art galleries; and theater producers stage facilities) reported by multiple sources.
- (23) Fire Department and Rescue Station Facilities - Identifies facilities reported by multiple sources.
- (24) Government Buildings - Identifies local, state, and federal government buildings reported by multiple sources.
- (25) Health Care Facilities - Identifies health care facilities including abortion clinics, dialysis clinics, medical doctors, nursing homes, osteopaths, state laboratories/clinics, and surgicenters/walk-in clinics reported by the Florida Department of Health.
- (26) Hospital Facilities - Identifies hospital facilities reported by multiple sources.
- (27) Law Enforcement Facilities - Identifies law enforcement facilities reported by multiple sources.
- (28) Parks and Recreational Facilities - Identifies parks and recreational facilities reported by multiple sources.
- (29) Religious Center Facilities - Identifies religious centers including churches, temples, synagogues, mosques, chapels, centers, and other types of religious facilities reported by multiple sources.
- (30) Private and Public Schools - Identifies private and public schools reported by multiple sources.
- (31) Social Service Centers - Identifies social service centers reported by multiple sources.
- (32) Veteran Organizations and Facilities

County Data Sources

ACS vs Census Data

(1) The 2010 Census data is represented by a combination of decennial and ACS (2006-2010) data. The General Population Trends, Race and Ethnicity Trends, Age Trends are entirely from decennial. The Income Trends, Language Trends are entirely from the ACS. The Housing Trends section is derived from both: Decennial (Total # Housing Units, Housing Units per Acre, Owner-Occupied Units, Renter-Occupied Units, Vacant Units); ACS (Single Family Units, Multi-family Units, Mobile Homes, Median Housing Value, Occupied Housing Units w/No Vehicle).

About the Census Data

(34) Use caution when comparing the 100% count data (Decennial Census) to the sample-based data (ACS). In any given year, about one in 40 U.S. households will receive the ACS questionnaire. Over any five-year period, about one in eight households will receive the questionnaire, as compared to about one in six that received the long form questionnaire for the Decennial Census 2000. (Source: https://www.census.gov/content/dam/Census/programs-surveys/acs/news/10ACS_keyfacts.pdf) The U.S. Census Bureau provides help with this process: <https://www.census.gov/programs-surveys/acs/guidance/comparing-acs-data.html>

(35) Race and ethnicity are separate questions on the Census questionnaire. Individuals can report multiple race and ethnicity answers; therefore, numbers in the Race and Ethnicity portion of this report may add up to be greater than the total population. In addition, use caution when interpreting changes in race and ethnicity over time. Starting with the 2000 Decennial Census, respondents could select one or more race categories. Also in 2000, the placement of the question about Hispanic origin changed, helping to increase responsiveness to the Hispanic-origin question. Because of these and other changes, the 1990 data on race and ethnicity are not directly comparable with data from later censuses. (Source: <https://www.census.gov/library/publications/2001/dec/c2kbr01-01.html>)

(36) The "Minority" calculations use both the race and ethnicity responses from Census and ACS data. In this report, "Minority" refers to individuals who list a race other than White and/or list their ethnicity as Hispanic/Latino. In other words, people who are multi-racial, any single race other than White, or Hispanic/Latino of any race are considered minorities. We use the following formula: $MINORITY = TOTALPOP - WHITE_NH$ where TOTALPOP is the Total Population and WHITE_NH is the population with a race of White alone and an ethnicity of Not Hispanic or Latino. Translating this to the field names used in the census ACS source data, the formula looks like this: $MINORITY = B01003_E001 - B03002_E003$. (Note, the WHITE_NH population is not reported separately in this report.)

(37) Disability data is not included in the 2010 Decennial Census or the 2006-2010 ACS. This data is available in the ACS 2017-2021 ACS. Because of changes made to the Census and ACS questions between 1990 and ACS, disability variables should not be compared from year to year. For example: 1) with the 1990 data, the disabilities are listed as a "work disability" while this distinction is not made with 2000 or ACS data; 2) the ACS data includes the institutionalized population (e.g. persons in prisons and group homes) while this population is not included in 1990 or 2000; and 3) the age groupings changed over the years.

(38) The category Bachelor's Degree or Higher under the heading Educational Attainment Trends is a subset of the category High School Graduate or Higher.

Metadata

- (39) Community and Fraternal Centers https://etdmpub.florida-estat.org/meta/gc_communitycenter.xml
- (40) Correctional Facilities in Florida https://etdmpub.florida-estat.org/meta/gc_correctional.xml
- (41) Cultural Centers in Florida https://etdmpub.florida-estat.org/meta/gc_culturecenter.xml
- (42) Fire Department and Rescue Station Facilities in Florida https://etdmpub.florida-estat.org/meta/gc_firestat.xml
- (43) Local, State, and Federal Government Buildings in Florida https://etdmpub.florida-estat.org/meta/gc_govbuild.xml
- (44) Florida Health Care Facilities https://etdmpub.florida-estat.org/meta/gc_health.xml
- (45) Hospital Facilities in Florida https://etdmpub.florida-estat.org/meta/gc_hospitals.xml
- (46) Law Enforcement Facilities in Florida https://etdmpub.florida-estat.org/meta/gc_lawenforce.xml
- (47) Florida Parks and Recreational Facilities https://etdmpub.florida-estat.org/meta/gc_parks.xml
- (48) Religious Centers https://etdmpub.florida-estat.org/meta/gc_religion.xml
- (49) Florida Public and Private Schools https://etdmpub.florida-estat.org/meta/gc_schools.xml
- (50) Social Service Centers https://etdmpub.florida-estat.org/meta/gc_socialservice.xml
- (51) Assisted Rental Housing Units in Florida https://etdmpub.florida-estat.org/meta/gc_assisted_housing.xml
- (52) Group Care Facilities <https://etdmpub.florida-estat.org/meta/groupcare.xml>
- (53) Mobile Home Parks in Florida https://etdmpub.florida-estat.org/meta/gc_mobilehomes.xml
- (54) Migrant Camps in Florida <https://etdmpub.florida-estat.org/meta/migrant.xml>
- (55) Veteran Organizations and Facilities https://etdmpub.florida-estat.org/meta/gc_veterans.xml
- (56) Generalized Land Use https://etdmpub.florida-estat.org/meta/lu_gen.xml
- (57) Census Block Groups in Florida https://etdmpub.florida-estat.org/meta/e2_cenacs_cci.xml
- (58) 1990 Census Block Groups in Florida https://etdmpub.florida-estat.org/meta/e2_cenblkgrp_1990_cci.xml
- (59) 2000 Census Block Groups in Florida https://etdmpub.florida-estat.org/meta/e2_cenblkgrp_2000_cci.xml
- (60) 2010 Census Block Groups in Florida https://etdmpub.florida-estat.org/meta/e2_cenblkgrp_2010_cci.xml

Appendix D
Public Meeting Summaries



Public Meeting Agenda

The public kick-off meeting was conducted both virtual via GoToWebinar and in-person. The registration links and information were provided in advance and included a QR code for easy access. Project information was posted at <https://www.fdot.gov/projects/SR5AviationBlvdPDE>.

Questions and comments could be submitted prior to the meeting through the project website or by emailing the project manager.



Thursday, October 20, 2022 (Virtual), 5:30 p.m.

To Join: <https://attendee.gotowebinar.com/register/5981862648391829006>. Participants also had the option to join by phone by dialing 1 (562) 247-8321, Access Code 913-692-913.

The virtual meeting began at 5:35 p.m. FDOT Project Manager Vandana Nagole, P.E., opened the meeting by introducing the project team, and reviewing the agenda. Consultant Public Involvement Coordinator Nannette Rodriguez went over the meeting format and rules of engagement. A project presentation video was played. After the project presentation the following project team members addressed comments and questions from meeting attendees: FDOT Project Manager Vandana Nagole, Consultant Project Manager Bill Evans, and Consultant Project Engineer John Cerreta. Attendees had the option to submit comments and questions using the raise hand feature to be unmuted or typing their comment or question into the question panel of the GoToMeeting panel. The presentation and a recording of the meeting are available on the project website. A copy of the project presentation is included in Appendix A.

Wednesday, October 26, 2022 (In-person), 5:30 p.m., Heritage Center, 2140 14th Avenue, Vero Beach, FL 32960.

The in-person meeting was an open house format and began at 5:30 p.m. A project presentation played on a loop. The following project boards were displayed for attendees: Welcome, Title VI, Schedule, Traffic, Typical Sections, Aviation Typical Sections, and Existing Conditions. A copy of the display boards is included in Appendix B. The project team engaged with attendees and answered their questions through 7:30 p.m. Parking was available to accommodate all the attendees, including the disabled. Signs were placed at the major intersecting roads to direct attendees to the meeting location and from the parking lot to the meeting room.

Public Notification

Meeting invitations included a letter and a project flyer. They were sent via email to elected officials, appointed officials, ETAT members, and interested persons. 180 property owners and 226 current tenants were mailed a letter in English/Spanish and a project flyer in English/Spanish via first-class mail. The invitations included dates, times and locations for the kick-off meetings. Copies of the mailing lists, letters and flyer are included in Appendix C.



Media Notification

The public kick-off meetings were advertised in advance with a display ad in the TCPalm Indian River Journal on Sunday, October 9, 2022. A public kick-off meeting notification was placed in the Florida Administrative Register (FAR) October 11, 2022 Edition, Volume 48 /Number 198. A press release was distributed by the Florida Department of Transportation (FDOT) to major local media outlets on October 12, 2022. Copies of the newspaper ad, Florida Administrative Weekly Register and the press release are included in Appendix D.

News articles regarding the project were published by TCPalm (linked below) and are included in Appendix D:

<https://www.tcpalm.com/story/opinion/columnists/laurence-reisman/2022/10/24/florida-department-of-transportation-eyes-plan-pass-over-brightline-u-s-1-near-vero-beach-airport/10558458002/>

<https://www.tcpalm.com/story/news/local/2022/10/26/overpass-intersection-improvements-planned-u-s-1-and-aviation-blvd/10600975002/>

Meeting Attendance

Thursday, October 20, 2022 (Virtual)

There were 23 attendees (excluding the 11 team members). Laurence Reisman, TC Palm Reporter, attended. No elected officials attended.

Wednesday, October 26, 2022 (In-Person)

- Two elected officials were in attendance:
 - City of Vero Beach, Vice Mayor Rey Neville
 - City of Vero Beach, Council Member Honey Minuse
- Five agency representatives were in attendance:
 - City of Vero Beach, Planning and Development Director, Jason Jeffries
 - IRC MPO, Staff Director Brian Freeman
 - IRC MPO CAC member Joan Edwards
 - Indian River Historical Society President Mark Holt
 - Old Vero Ice Age Sites Committee Chair Randy Old
- One reporter was in attendance:
 - TC Palm, Thomas Weber



A copy of the sign-in sheets and virtual meeting attendee report is included in Appendix E.

Meeting Handouts

A Comment Form and Acquisition Process Brochure was distributed to attendees. Copies of the meeting handouts are included in Appendix F.

Public Comments

Thursday, October 20, 2022 (Virtual)

- Comments and Questions received and addressed by project team, five (5):
 1. Is there anticipated to be any taking or purchase of land on the US 1 portion of the project?
 2. Please explain more about the overpass option.
 3. I'm concerned about the delays at the RR.
 4. We need a RR overpass somewhere in Vero.
 5. Does FDOT do a cost benefit analysis of the options and how might that look?



Wednesday, October 26, 2022 (In-Person)

- Verbal Comments and questions received by the project team included:
 - Like overpass, in favor
 - Does not like overpass
 - Wants overpass at 41st Street
 - Hospital wants to see improvements
 - Wants connection to hospital if it is going to tie into Aviation Boulevard (County Project)
 - City is concerned about loss of tax base from the commercial property on US 1
 - Bike safety, consider bike lane
 - 37th Street intersection is dangerous
- Two (2) written comments were received from the public:
 1. Project limit should not end at 27th Avenue, look at extending to at least entrance to Vero Beach airport of all the way to 43rd Street
 2. Suggested an overpass south of 41st Street

An additional six (6) comments were received by email. The comments received will be included in the alternatives analysis decision-making process. Comments and responses are included in Appendix H.



END OF MEETING SUMMARY

This meeting summary was prepared by Karen Harrell, Public Involvement Coordinator. If you feel that clarifications are necessary, or if this differs from your understanding, please notify Karen by telephone at 352-257-1651 or by email at Karen.Harrell@qcausa.com within five (5) working days upon receipt of this summary.



City of Vero Beach Departmental Correspondence

To: Monte K. Falls, P.E., City Manager

From: Jason H. Jeffries, AICP, Planning Director *JHJ*

Subject: SR 5 / US 1 at Aviation Blvd. Intersection Project

Date: April 11, 2023

The City of Vero Beach held a Public Information Meeting on February 8, 2023 with affected property owners regarding roadway projects proposed at the intersection of US Highway 1 and Aviation Boulevard:

- Indian River County is proposing a roadway project to extend Aviation Boulevard from US Highway 1 to 41st Street.
- Florida Department of Transportation (FDOT) is undergoing a Project Development and Environment (PD&E) Study that is analyzing different alignment alternatives to upgrade the intersection of US Highway 1 and Aviation Boulevard. The alignment alternatives range from additional roadway lanes to a proposed overpass bridge at the intersection. The project is in the Transportation Improvement Program (TIP) for the Indian River County Metropolitan Planning Organization (MPO) and is funded by FDOT.

Following the project presentations, comments and questions were received from property owners and citizens in attendance at the meeting. Follow-up emails were also sent for submittal of written comments concerning the projects. Attached are the written comments received regarding the FDOT intersection project.

The existing US1 and Aviation Boulevard intersection operates at the maximum capacity and intersection improvements are needed to address projected traffic demand with the overall growth of the area around the hospital and Vero Beach airport. The City of Vero Beach is a member of the MPO and City staff has supported the need for intersection improvements, but has consistently raised concerns about an overpass at this intersection to the MPO.

Attachments:

1. Public Information Meeting, February 8, 2023 Minutes
2. Written Comment Sheets from Affected Property Owners
3. Proposed Resolution of Support for At Grade Intersection Improvements

RESOLUTION NO. 2023-_____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VERO BEACH, FLORIDA, SUPPORTING AN “AT GRADE” INTERSECTION FOR INTENDED ROADWAY IMPROVEMENTS AT THE INTERSECTION OF U.S. HIGHWAY 1 AND AVIATION BOULEVARD IN VERO BEACH, FLORIDA; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Florida Department of Transportation (“FDOT”), pursuant to the request of the Indian River County Metropolitan Planning Organization, is in the process of reviewing and approving alternative plans for the intersection improvements to the intersection of U.S. Highway 1 and Aviation Boulevard, Vero Beach, Florida; and,

WHEREAS, FDOT has publicized several alternatives, which include a proposed overpass or flyover for the intersection, which would adversely impact local property owners due to needed rights-of-way for the improvements along U.S. Highway 1 and Aviation Boulevard for the project; and,

WHEREAS, several alternative plans show a proposed “at grade” intersection with no overpass or flyover and with most of the improvements being constructed within existing rights-of-way or through limited amounts of additional property needed from private or public property owners; and,

WHEREAS, an earlier intersection study completed in 2000 recommended construction of an overpass or grade separations along U.S. Highway 1 from the South Relief Canal to 53rd Street, selected the intersection of U.S. Highway 1 and 41st Street as the feasible location for a railroad grade separation, north of the proposed U.S. Highway 1 and Aviation Boulevard location, which would have a reduced impact on local property owners as compared to the same improvements at U.S. Highway 1 and Aviation Boulevard; and,

WHEREAS, the City held a public information meeting on February 8, 2023, for affected property owners near the intersection of U.S. Highway 1 and Aviation Boulevard and requested comments regarding the proposed project; and,

WHEREAS, comments from the property owners expressed opposition to the grade separation or overpass alternatives and noted the negative impacts such improvements would have on private and City-owned properties and the Airport,

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF VERO BEACH, FLORIDA, AS FOLLOWS:

Section 1 – Adoption of “Whereas” clauses.

The foregoing “Whereas” clauses are hereby adopted and incorporated herein as forming the legislative findings, purpose, and intent of this Resolution.

Section 2 – Support of “at grade” improvements.

The City Council of the City of Vero Beach supports only “at grade” improvements at the intersection of U.S. Highway 1 and Aviation Boulevard.

Section 3.

Use of grade separation or overpasses should follow the recommendations of the 2000 report for S.R.5/U.S. 1 & FEC Railroad Grade Separation Management Plan, or the feasibility analysis should be updated before considering other intersection locations for railroad grade separation or overpasses.

Section 4 – Effective date.

This Resolution shall become effective upon final adoption by the City Council.

This Resolution was heard on the ____ day of _____ 2023, at which time it was moved for adoption by Councilmember _____, seconded by Councilmember _____, and adopted by the following vote:

- Mayor John E. Cotugno _____
- Vice-Mayor Linda Moore _____
- Councilmember Tracey Zudans _____
- Councilmember John M. Carroll, Jr. _____
- Councilmember Rey Neville _____

ATTEST:

**CITY COUNCIL:
CITY OF VERO BEACH, FLORIDA**

Tammy K. Bursick
City Clerk
(Seal)

By: _____
John E. Cotugno
Mayor

Date: _____

STATE OF FLORIDA
COUNTY OF INDIAN RIVER

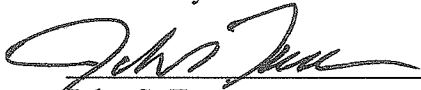
The foregoing instrument was acknowledged before me by means of physical presence or online notarization this _____ day of _____ 2023, by **John E. Cotugno**, the Mayor, and attested by **Tammy K. Bursick**, the City Clerk, of the City of Vero Beach, Florida. Both are personally known to me.

Seal:

Sign: _____
Notary Public, State of Florida at Large
Print Name: _____
Notary Commission No.: _____
My Commission Expires: _____

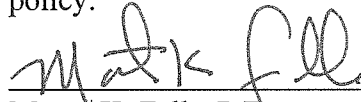
ADMINISTRATIVE REVIEW
(For Internal Use Only—Sec. 2-77 COVB Code)

Approved as to form and legal
sufficiency:



John S. Turner
City Attorney

Approved as conforming to municipal
policy:



Monte K. Falls, P.E.
City Manager

US 1 & AVIATION BOULEVARD MINUTES.
WEDNESDAY, FEBRUARY 8, 2023 2:00 P.M.
VERO BEACH COMMUNITY CENTER, 2266 14TH AVENUE, VERO BEACH, FLORIDA

1) INTRODUCTIONS – MONTE FALLS, CITY MANAGER

Mr. Monte Falls, City Manager, welcomed everyone to today's meeting. He introduced who was attending the meeting from the City of Vero Beach and Indian River County. He reminded everyone to sign-in if they have not already done so.

2) Presentation of Aviation Extension Project – County?

The Representative from the County briefly spoke about the project and explained the extension of Aviation Boulevard.

3. PRESENTATION OF US 1 & AVIATION INTERSECTION – WILLIAM EVANS, WGI

Mr. William Evans, WGI, gave a Power Point presentation on the project development and environment study (attached to the original minutes). He told the audience that there would be public meetings held in the future to discuss the public alternatives (fall 2023), public hearings (summer 2024), and PD&E Study completion (December 2024).

4. Property Owner Comments & Questions

Dr. William Mallon, owner of Big Shots and the Center for Advanced Eye Care, commented on what a negative impact that this would have on his businesses. He said any one of these Alternatives that they discussed would be a disaster.

The Representative from Camp Haven said if they were able to vote for an alternative it would be Alternative #2.

Councilmember Tracey Zudans wondered if they could come up with some different Alternatives other than Alternatives 1-6 that would not have such an impact on the businesses and residents of this area.

Mr. Evans commented that it would be up to the Metropolitan Planning Organization (MPO) to come up with a different alternative. The money to do this project comes from the Florida Department of Transportation (FDOT) in which the gasoline tax that everyone pays in this area will be funding this project.

Dr. Mallon asked how they fight this process. He said they are talking about destroying what he built and he is not going to tolerate it.

Mr. Evans said that there is always the no build project where they would stop the study and do nothing.

Dr. Mallon commented that there are other places where they could put this overpass.

The question was asked about the process of going through the Florida Eastcoast Railroad about their regulations for the overpass.

Mr. Evans explained that they will need to coordinate with them, which is something that they do all the time on different projects.

The Representative from Camp Haven asked if there was a chance that FDOT would relocate Camp Haven somewhere else and pay for it.

Mr. Evans explained how a right of way acquisition works.

There was a question asked on what the impact would be on US Hwy 1 if they come off 41st Street as an Alternative.

The Representative from Indian River County spoke and said that there is a project going on near 41st Avenue, which may or may not could tie into this project.

Mr. Jason Jeffries, Planning Director, reminded everyone to sign in before they leave. He said there is a comment sheet for them to fill out if they would like to.

The Power Point presentation will be posted on the City of Vero Beach's website.

Today's meeting adjourned at 2:45 p.m.

/tb

SIGN IN SHEET

NAME

EMAIL ADDRESS

Kathryn Beatty Self

tropikat55@yahoo.com

GARY BEATTY

GLB1475C AOL.COM

J.W. SAAP

NONE

Rich Szpytky

IRC PW

MARK MILLER

Jerry Gable

Jerry gable @ campmaven.net

CHUCK DADLEY

chuckb@campmaven.net

GORDON STEWART

GLSTEWART@STEWARTMG.COM

SIGN IN SHEET

NAME

EMAIL ADDRESS

Brian Freeman

bfreeman@iregov.com

Dan Marwood

Dan. Marwood@dot.state.fl.us

Victor RAMOS

VICTOR.RAMOS@DOT.STATE.FL.US

Bill DeBraul

bdebraul@iregov.com

Nedra Westrik

nwestrik@iregov.com

Vandana Nagole

vandana.nagole@dot.state.fl.us

Tracy Zdans

tzdanz@carb.org

SIGN IN SHEET

NAME

EMAIL ADDRESS

Nannette Rodriguez
Kathleen Walter

Project Team
Quest

LYNN ZOLEZZI

lynnzolezzi@wginc.com

Paul Coppola

Higher 10@AOL.com.

LARRY REWNA

LARRY REWNA & TOMMY LN

MATT HAYNES

MATT@MAINSTREETUROBATCH.ORG

Mike Madsen

MJMJ1105@AOL.COM

Jim Schorner

Jim @ JSCHORNER.COM

SIGN IN SHEET

NAME

EMAIL ADDRESS

Bill McMan

CARPETMACK3931@ATT.N

Bill man

Key NEVILLE

RNEVILLE@COV.B.ORG

Carol Dolan

cardsdolan@yahoo

RON LAMBERT

RON@LAMBERTCOMMERCIAL.COM

CITY OF VERO BEACH PUBLIC INFORMATION MEETING
COMMENT SHEET

Wednesday, February 8, 2023

SR 5 / US 1 at AVIATION BOULEVARD INTERSECTION PROJECT
VERO BEACH, FLORIDA

NAME GORDON STEWART - BOARD PRESIDENT OF CAMP HAVEN

MAILING ADDRESS 130 COQUILLE WAY VERO BEACH 32963
Street City State Zip Code

PHONE NUMBER 772-559-3377

EMAIL GSTEWART@STEWARTMG.COM

BUSINESS NAME CAMP HAVEN (SDIC3 CHARITY FOR HOMELESS)

PROPERTY LOCATION 3256 U.S. Hwy 1

COMMENTS ANY OPTION EXCEPT FOR OPTION 2 WOULD
BE DEVASTATING TO OUR OPERATION. OUR NEW BLDG.
WOULD BE DEMOLISHED - OUR KITCHEN ARE FOR
MEN AS WELL AS OUR ADMINISTRATION OFFICES, STORAGE,
ETC. RESIDENT ROOMS, ETC.

IN SHORT APPROXIMATELY 25 MEN WOULD BE
HOMELESS AND BACK ON THE STREET IN TENTS

Mail Comments to:

Jason H. Jeffries, Planning Director
City of Vero Beach
Planning and Development Department
Post Office Box 1389
Vero Beach, FL 32961-1389
e-mail: planning@covb.org



NOTE: Information provided, including name and address, is subject to public disclosure under the Public Records Law.

Written comments will be accepted until February 24, 2023

CITY OF VERO BEACH PUBLIC INFORMATION MEETING
COMMENT SHEET

Wednesday, February 8, 2023

SR 5 / US 1 at AVIATION BOULEVARD INTERSECTION PROJECT
VERO BEACH, FLORIDA

NAME Kathryn Self

MAILING ADDRESS 5680 162nd Place Vero 32967
Street City State Zip Code

PHONE NUMBER 772-538-7227

EMAIL trpikat55@yahoo

BUSINESS NAME _____

PROPERTY LOCATION _____

COMMENTS Myself + my brother, Gary Beatty
own just under 7 acres around the proposed
location for the ABE road route. Our
realtor receives 2 to 3 inquiries per week
from investors interested in buying ~~the~~ parcels
of our properties. When they learn ~~that~~
the route hasn't been chosen yet, they back
away. (Without knowing the official route,
they can't move forward with surveys, etc.

Mail Comments to:

Jason H. Jeffries, Planning Director
City of Vero Beach
Planning and Development Department
Post Office Box 1389
Vero Beach, FL 32961-1389
e-mail: planning@covb.org



NOTE: Information provided, including name and address, is subject to public disclosure under the Public Records Law.

Written comments will be accepted until February 24, 2023

CITY OF VERO BEACH PUBLIC INFORMATION MEETING
COMMENT SHEET

Wednesday, February 8, 2023

SR 5 / US 1 at AVIATION BOULEVARD INTERSECTION PROJECT
VERO BEACH, FLORIDA

NAME GORDON L. STEWART, BOARD PRESIDENT

MAILING ADDRESS 130 COQUILLE WAY VERO BEACH 32963
Street City State Zip Code

PHONE NUMBER 772-559-3377

EMAIL GLSTEWART@STEWARTMG.COM

BUSINESS NAME CAMP HAVEN (501C3 CHARITY)

PROPERTY LOCATION 3256 U.S. Hwy 1 - VERO BEACH

COMMENTS WE DO NOT HAVE ANY SUPPORT FOR THIS PROJECT AS PROPOSED. WE COULD LIVE WITH EXTENDING AVIATION BLVD ACROSS US1 AND CONTINUING ACROSS ON 32ND STREET, THEN EVENTUALLY TURNING NORTH TO 37TH STREET. ANY TAKING OF OUR PROPERTY ON U.S.1 WOULD BE DEVASTATING TO OUR CHARITY. WE HAVE RECEIVED TREMENDOUS SUPPORT FROM THE COMMUNITY FOR OUR MISSION AND SEVERAL LOCAL FOUNDATIONS HELPED US BUILD A NEW BUILDING THAT WOULD BE DEMOLISHED. THOUSANDS (ACTUALLY HUNDREDS OF THOUSANDS) OF DOLLARS HAS BEEN DONATED TOWARD THE BETTERMENT OF OUR FACILITY AND THERE IS NO LIKE-KIND PROPERTY THAT EXISTS IN VERO FOR US TO MOVE TO. SUCH A TAKING OF OUR BUILDINGS AND PROPERTY WOULD BE EXTREMELY DETRIMENTAL TO OUR OPERATION AND THE HOMELESS MEN WE SERVE.

Mail Comments to:

Jason H. Jeffries, Planning Director
City of Vero Beach
Planning and Development Department
Post Office Box 1389
Vero Beach, FL 32961-1389
e-mail: planning@covb.org



NOTE: Information provided, including name and address, is subject to public disclosure under the Public Records Law.

THIS OPPORTUNITY TO RESPOND WAS RECEIVED MARCH 15, 2023

CITY OF VERO BEACH PUBLIC INFORMATION MEETING
COMMENT SHEET
Wednesday, February 8, 2023

SR 5 / US 1 at AVIATION BOULEVARD INTERSECTION PROJECT
VERO BEACH, FLORIDA

NAME CARY L. BEATTY

MAILING ADDRESS 3116 US 1 STE 136 VERO BEACH, FL. 32960
Street City State Zip Code

PHONE NUMBER 772) 538-7397

EMAIL GLB1475@AOL.COM

BUSINESS NAME RDC PHOENIX LLC

PROPERTY LOCATION US 1 & 31ST ST.

COMMENTS AS PROPERTY OWNERS AND TAXPAYERS FOR OVER 100 YEARS NEAR THE INTERSECTION OF US 1 AT 32ND ST., WE REALIZE THAT AS THE CITY GROWS IMPROVEMENTS TO ROADWAYS ARE INEVITABLE. THEREFORE I WILL SUPPORT LIMITED WIDENING OF US 1 TO ACCOMMODATE FUTURE GROWTH. HOWEVER, I AM DIAMETRICALLY OPPOSED TO AN OVERPASS ON US 1 OR ON AVIATION BLVD. AND ITS FUTURE EXTENSION.

Mail Comments to:



Jason H. Jeffries, Planning Director
City of Vero Beach
Planning and Development Department
Post Office Box 1389
Vero Beach, FL 32961-1389
e-mail: planning@covb.org

NOTE: Information provided, including name and address, is subject to public disclosure under the Public Records Law.

CITY OF VERO BEACH PUBLIC INFORMATION MEETING
COMMENT SHEET
Wednesday, February 8, 2023

SR 5 / US 1 at AVIATION BOULEVARD INTERSECTION PROJECT
VERO BEACH, FLORIDA

NAME Paul Coppola

MAILING ADDRESS P.O. Box 2384, Vero Beach, FL, 32961
Street City State Zip Code

PHONE NUMBER 914 - 447 - 7507

EMAIL Higher10@AOL.com

BUSINESS NAME Vero Express Car Wash

PROPERTY LOCATION 3306 US 1,

COMMENTS We will loose our Business and
want to be Relocated if possible

We want and need to negotiate work out #
Costs, the time line as well and get most for
our Business and Land -

We are OK with the proposal #1 AS with
the City of Vero.

We are A Willing Partner on this project and
want to see it happen

Thank you

Paul
Coppola

Mail Comments to:

Jason H. Jeffries, Planning Director
City of Vero Beach
Planning and Development Department
Post Office Box 1389
Vero Beach, FL 32961-1389
e-mail: planning@covb.org



NOTE: Information provided, including name and address, is subject to public disclosure under the Public Records Law.



Public Workshop Agenda

The alternatives public workshop was conducted both virtual via GoToWebinar and in-person. The registration links and information were provided in advance and included a QR code for easy access. Project information was posted at <https://www.fdot.gov/projects/SR5AviationBlvdPDE>. Questions and comments could be submitted prior to the meeting through the project website or by emailing the project manager.



Wednesday, October 10, 2023 (Virtual), 5:30 p.m.

To Join: <https://attendee.gotowebinar.com/register/7646300060107852636>. Participants also had the option to join by phone by dialing 1 (562) 247-8422 , Access Code 364-875-367.

The virtual meeting began at 5:30 p.m. FDOT Project Manager Vandana Nagole, P.E., opened the meeting by introducing the project team, and reviewing the agenda. Consultant Public Involvement Coordinator Michael Cobelo went over the meeting format and rules of engagement. A comprehensive presentation of the alternative concepts was provided by Consultant Project Manager William Evans. After the project presentation the following project team members addressed comments and questions from meeting attendees: FDOT Project Manager Vandana Nagole and Consultant Project Manager Bill Evans. Attendees had the option to submit comments and questions using the raise hand feature to be unmuted or typing their comment or question into the question panel of the GoToMeeting panel. The presentation and a recording of the meeting are available on the project website. A copy of the project presentation is included in Appendix A.

Thursday, October 11, 2023 (In-Person), 5:30 p.m., Community Center-Vero Beach, 2266 14th Avenue, Vero Beach, FL 32960. The in-person meeting was an open house format and began at 5:30 p.m. A project presentation played on a loop. The following project boards were displayed for attendees: Welcome, Title VI, Schedule, Future Traffic Operations, Alternative Concepts 1, 2, 7 and 8, Eliminated Alternatives 3 and 4, Typical Sections, Alternative Evaluation Matrix, Screening Evaluation Matrix, FEC Railroad Crossing Closure and Existing Conditions. A copy of the display boards is included in Appendix B. The project team engaged with attendees and answered their questions through 7:30 p.m. Parking was available to accommodate all the attendees, including the disabled. Signs were placed at the major intersecting roads to direct attendees to the meeting location and from the parking lot to the meeting room.

Public Notification

Meeting invitations included a letter and a project flyer. They were sent via email to elected officials, appointed officials, ETAT members, and interested persons. 180 property owners and 226 current tenants were mailed a letter in English/Spanish and a project flyer in English/Spanish via first-class mail. The invitations included dates,



times and locations for the alternatives public workshops. Copies of the mailing lists, letters and flyer are included in Appendix C.

Media Notification

The alternatives public workshops were advertised in advance with a display ad in the TCPalm Indian River Journal on Thursday, September 28, 2023. An alternatives public workshop notification was placed in the Florida Administrative Register (FAR) on Friday, September 29, 2023 Edition, Volume 49 /Number 190. A public notice was posted on the FDOT public notice website one Tuesday, September 26, 2023. A press release was distributed by the Florida Department of Transportation (FDOT) to major local media outlets on Tuesday, October 3, 2023. Copies of the newspaper ad, Florida Administrative Weekly Register (FAR), FDOT public notice website ad and the press release are included in Appendix D.

A News article regarding the project was published by TCPalm (linked below) and is included in Appendix D:
<https://www.tcpalm.com/story/news/local/indian-river-county/2023/10/17/vero-beach-avoids-overpass-fdot-rejects-proposals-at-u-s-1-aviation-blvd/71169115007/>

Meeting Attendance

Wednesday, October 10, 2023 (Virtual)

There were 16 attendees (excluding the 9 team members).
No elected officials or media attended.

Thursday, October 11, 2023 (In-Person)

There were 44 attendees (excluding the 18 team members).

- Four elected officials were in attendance:
 - City of Vero Beach, Vice Mayor Rey Neville
 - City of Vero Beach, Councilmember, Tracey Neville
 - City of Vero Beach, Councilmember, John Carroll
 - Indian River County, Commissioner, Joe Earman
- Two agency representatives were in attendance:
 - City of Vero Beach, Planning and Development Director, Jason Jeffries
 - City of Vero Beach, City Manager, Monte Falls
- One reporter was in attendance:
 - TC Palm, Nick Slater



A copy of the sign-in sheets and virtual meeting attendee report is included in Appendix E.



Meeting Handouts

A Comment Form and Acquisition Process Brochure was distributed to attendees. Copies of the meeting handouts are included in Appendix F.

Public Comments

Wednesday, October 10, 2023 (Virtual)

- Comments and Questions received and addressed by project team, six (6):
 1. Will the Public Hearing in May/June 2024 be held in Vero Beach?
 2. When do you think construction might start and how long will it take?
 3. I live on 11th Avenue off 30th Street by the big lake and hospital. Any intentions to connecting to the hospital at this time?
 4. What's the best way to express your opinion about the options presented?
 5. Is there an alternative that FDOT is in favor of?
 6. How much does public input weigh into what alternative is selected?



Thursday, October 11, 2023 (In-Person)

- The project team addressed verbal comments and questions received at the in-person meeting.
- 31 written comments were received from the public:
 1. Three (3) attendees were in favor of Alternative 1.
 2. 27 attendees were in favor of Alternative 2. Many of the written comment forms referred to Camp Haven.
 3. One (1) attendee was in favor of Alternative 8.

One (1) additional comment was received by email. The comments received will be included in the alternatives analysis decision-making process. Comments and responses are included in Appendix H.

END OF MEETING SUMMARY

This meeting summary was prepared by Karen Harrell, Public Involvement Coordinator. If you feel that clarifications are necessary, or if this differs from your understanding, please notify Karen by telephone at 352-257-1651 or by email at Karen.Harrell@qcausa.com within five (5) working days upon receipt of this summary.