SOCIOCULTURAL EFFECTS EVALUATION TECHNICAL MEMORANDUM

TOWN OF BAY HARBOR ISLANDS

BROAD CAUSEWAY BRIDGE REPLACEMENT
PROJECT DEVELOPMENT & ENVIRONMENT STUDY

Prepared for:

Town of Bay Harbor Islands, Florida

July 2024

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Sociocultural Effects Evaluation Technical Memorandum

July 2024

Prepared for:
Town of Bay Harbor Islands

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ACRONYMS AND ABBREVIATIONS

ACS	American Community Survey
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
ESRI	Environmental Systems Research Institute
EST	Environmental Screening Tool
ETC	Equitable Transportation Community
ETDM	Efficient Transportation Decision Making
F.A.C.	Florida Administrative Code
FDEM	Florida Department of Emergency Management
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FS	Florida Statutes
FY	Fiscal Year
GIS	Geographic Information System
ICWW	Intracoastal Waterway
LED	Light-Emitting Diode(s)
LEP	Limited English Proficiency
LTS	Level of Traffic Stress
MHW	Mean High Water
MLW	Mean Low Water
MOA	Memorandum of Agreement
Mph	Miles per hour
NACNBI	Noise Abatement Criteria
NEPA	National Environmental Policy Act
No(s).	Number(s)

NRHP	National Register of Historic Places
OEM	Office of Environmental Management
OWJ	Official With Jurisdiction
PD&E	Project Development and Environment
PER	Preliminary Engineering Report
PI	Public Information
PIP	Public Involvement Plan
PTAR	Project Traffic Analysis Report
ROW	Right-of-Way
SCE	Sociocultural Effects
SDR	Sociocultural Data Report
SHPO	State Historic Preservation Office(r)
SMF(s)	Stormwater Management Facility(ies)
SR	State Road
SS4A	Safe Streets and Roads for All
Sta.	Station
TBHI	Town of Bay Harbor Islands
TDP	Transit Development Plan
TNM	Traffic Noise Model
USCG	United States Coast Guard
USDOT	United States Department of Transportation
USDA	United States Department of Agriculture

1.0 PROJECT DESCRIPTION AND PURPOSE AND NEED

1.1 Project Description

The project involves the potential replacement of the Broad Causeway Bridge connecting the Town of Bay Harbor Islands (Town) with the City of North Miami, within Miami-Dade County. The bridge is part of the Broad Causeway, a roadway classified as "Urban Minor Arterial". This arterial also begins in Bal Harbour/Surfside and connects those commuters to the mainland. The limits of the project extend from the Broad Causeway Island (25°53'19.41"N, 80° 8'54.52"W) on the west side and (25°53'11.30"N, 80° 8'18.93"W) to east of West Broadview Drive. The improvements include the bridge approaches and Broad Causeway Island circulation. The Florida Department of Transportation (FDOT) Bridge Identification (ID) Number (No.) is 875101. A graphic depicting the location of the bridge is provided as **Figure 1-1**. The project is approximately 0.77 mile in length.

The existing bascule bridge consists of four lanes, undivided (two lanes in each direction). The four travel lanes are 10 ft. wide, without a raised median. The outside travel lanes also include shared-use markings to accommodate bicycles. In addition, pedestrians are accommodated with a raised maintenance area on each side of the bridge, with a width that varies from 22 to 36 inches (in.). There are no guardrails separating the raised maintenance area from the travel lane. Crossing over the Intracoastal Waterway (ICWW), the bridge has a horizontal clearance of 79.7 ft., a maximum vertical clearance of 18.0 ft. at Mean Low Water (MLW) and a minimum vertical clearance of 15.7 ft. at Mean High Water (MHW) at the Bascule crossing. The ICWW at the bridge crossings is deemed a navigable waterway by the United States Coast Guard (USCG). The bridge bascule is required by the USCG to open twice per hour on the quarter and three-quarter hour but only opens if vessels are waiting.

Figure 1-1 Project Location Map

Existing right-of way (ROW), owned by the Town, is anticipated to accommodate the replacement bridge and approaches. Included in the Town Charter by the 1953 Senate Bill No. 865, the State of Florida surrendered and granted to the Town any claim or control over all tidewaters and other lands, and all bayous and bay bottoms, beaches, waters, waterways and water bottoms, and all riparian rights within and adjacent to the Town limits for municipal purposes only, a strip of 300 ft. wide from Kane Concourse, westwardly across Biscayne Bay to approximately 123rd Street in the City of North Miami. This 300-ft. wide strip is shown in **Figure 1-2** as a bright yellow highlight. Therefore, the replacement bridge will be built within the 300 ft. strip over Biscayne Bay under claim or control by the Town.

Figure 1-2 Depiction of 300-ft. wide strip from Kane Concourse to North Miami

1.2 Purpose and Need

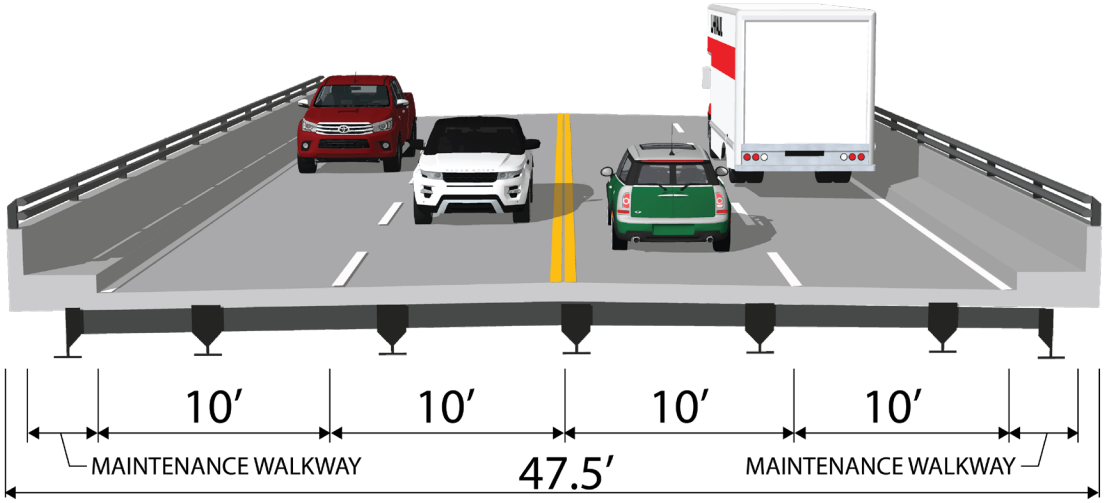
The purpose of this project is to address the structural and functional deficiencies of the existing Broad Causeway Bridge. The need for the project is to improve bridge deficiencies because the 73-year-old bridge is structurally deficient, functionally obsolete, and contains fracture critical components; improve safety since there have been several vehicular crashes in the project corridor, many involving bicycles and pedestrians that resulted in injuries; improve flow of traffic along the project corridor which has high traffic volumes and frequent bridge openings; and to maintain emergency evacuation.

1.3 PD&E Alternatives

1.3.1 No Build (Repair) Alternative

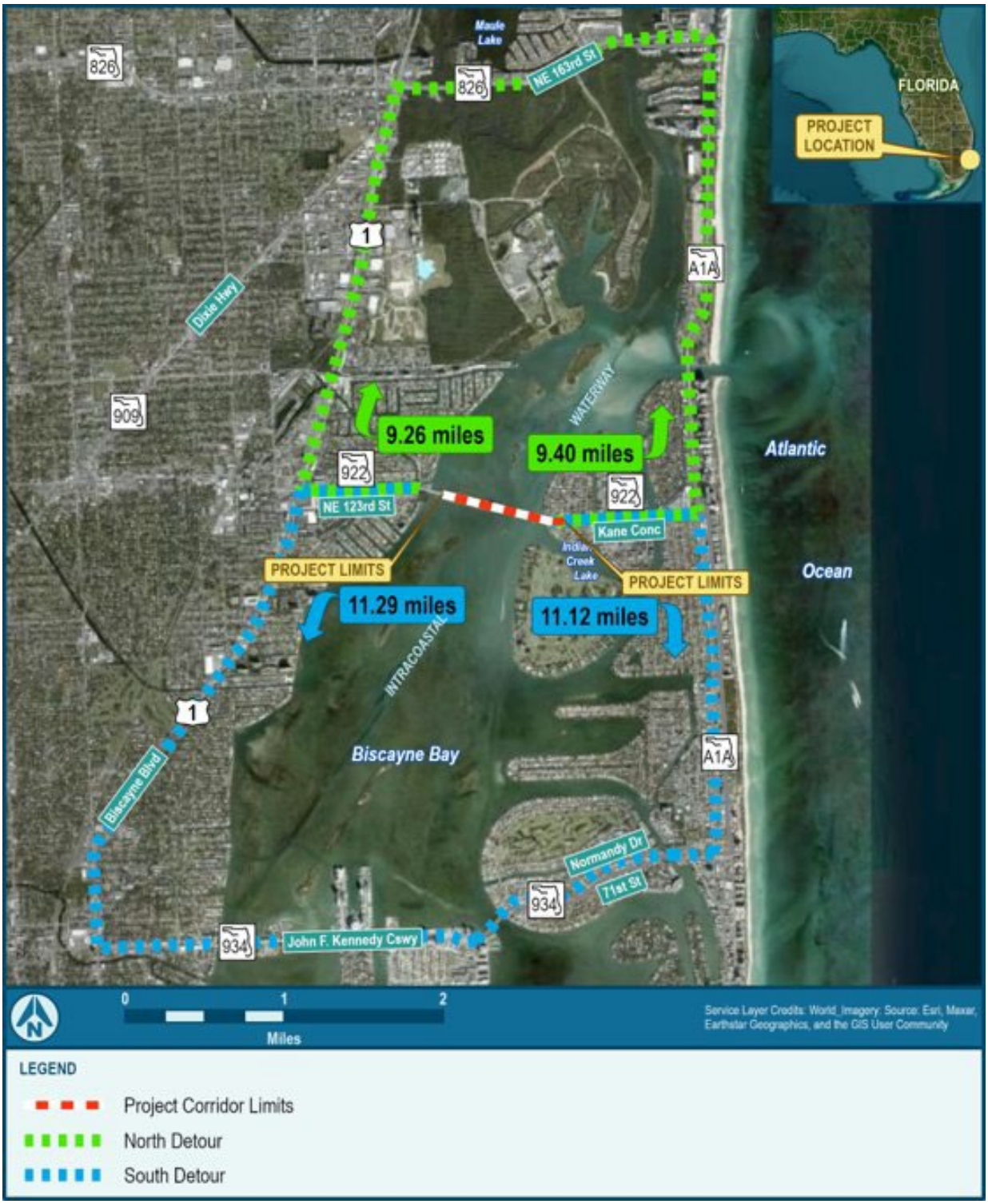
The No Build (Repair) Alternative, referred to as the No Build Alternative, consists of keeping the existing movable bridge in place and not constructing a new bridge. The Town would continue normal maintenance and make minor repairs of the existing bridge in its current configuration while keeping the bridge operating in a safe condition and maintaining the existing typical section as shown in **Figure 1-3**. Repairs would include: repairing the concrete (sealing cracks, patching spalls, etc.) in the piles, pile caps, deck, beams, and traffic railing; repairing the fender system; and repairing the drawbridge operational machinery in order to extend the service life 15 to 25 years.

Figure 1-3 Existing Bridge Typical Section



The No Build Alternative requires closure of the bridge for an undetermined amount of time based on repairs needed. At the end of the service life period, an extensive rehabilitation, decommissioning, or replacement of the bridge would be required. An 11-mile detour to the south and a 9-mile detour to the north would have to be utilized if the bridge is decommissioned or closed for extensive repairs as shown in **Figure 1-4**. The No Build (Repair) Alternative does not require stormwater management facilities (SMFs) since it does not alter the existing roadway or add additional capacity; therefore, no treatment of the runoff would occur. The existing bridge would remain in its current configuration and no additional travel lanes are proposed.

Figure 1-4 Project Detour Routes for Bridge Closures



Although the No Build Alternative does not meet the purpose and need for this project, it will remain under consideration and serve as a baseline for comparison against the other alternatives throughout the PD&E Study as required by NEPA.

1.3.2 Mid-Level Movable Bridge (40 ft. Vertical Clearance from MHW) Alternative

The Mid-Level Movable Bridge Alternative would replace the existing bridge and approach spans on the southern alignment and meet all governing design standards and regulations. The new bridge would include adequate lane widths and shoulders, and a shared use path. This alternative would replace the existing bridge with a movable bridge with a navigation clearance of 40 ft. Based on data provided by the existing bridge tender house and allowing for tidal fluctuations, this height would allow approximately 70 to 80 percent of the waterway users that currently require the bridge to open to pass without an opening. The new alignment would be located to the south of the existing bridge, allowing for traffic to be maintained along the existing bridge while the proposed bridge is constructed. Demolition of the existing bridge would be phased, so that traffic flow would be maintained within the existing corridor for most of the construction duration and progressively be transferred from the existing bridge to the new bridge. Emergency vehicles would have 24/7 access to pass through the corridor and should a hurricane warning be issued; the corridor would still be used as a Hurricane Evacuation Route during construction as it is today. See **Figure 1-5** through **Figure 1-7** for the Mid-Level Movable Bridge Alternative typical section, profile and renderings, respectively.

The Mid-Level Movable Bridge Alternative meets the purpose and need of the project, but compared to the High-Level Fixed Bridge, it would have a higher impact on EFH, seagrasses, and sovereign submerged lands due to the wider bridge footprint. The movable bridge footprint is wider because there are larger bascule piers that enclose the mechanical elements. Also, the bridge requires maintenance walkways to service the movable bridge components. It also has the highest estimated construction cost of $440.9 million. The Mid-Level Movable Bridge Alternative was advanced for further detailed analysis and public comment.

Figure 1-5 40 ft. Mid-Level Movable Bridge Alternative Typical Section

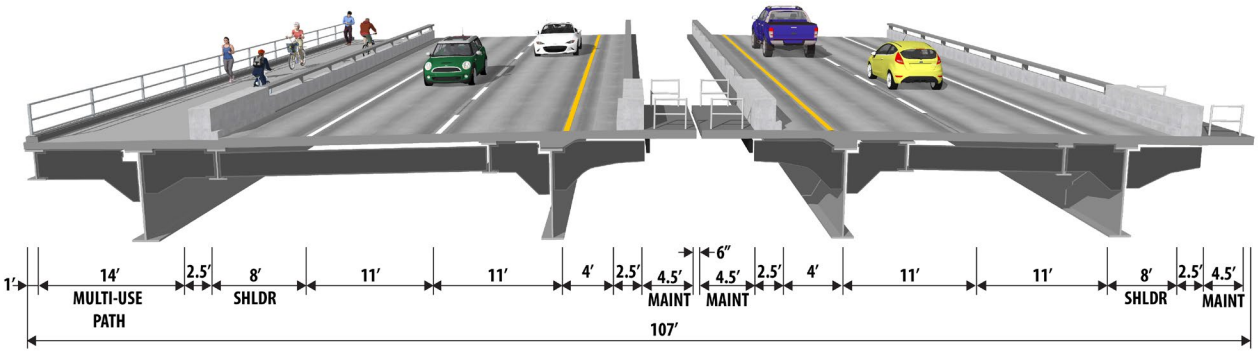


Figure 1-6 40 ft. Mid-Level Movable Bridge Alternative Profile in Comparison to the Existing Bridge

Figure 1-7 40 ft. Mid-Level Movable Bridge Alternative Rendering

1.3.3 High-Level Bridge (65 ft. Vertical Clearance from MHW) Alternative

The High-Level Fixed Bridge Alternative and approach spans would replace the existing bridge and meet all governing design standards and regulations. The new bridge would include adequate lane widths and shoulders, and a shared use path. Based on data provided by the existing bridge tender house and allowing for tidal fluctuations, a fixed structure with a vertical navigational clearance of 65 ft. would allow for all anticipated waterway users that currently use the channel to safely navigate under the proposed structure and pass under the new bridge without any delay to roadway traffic.

The new bridge would include adequate lane widths and shoulders, and a shared use path. A fixed structure with a vertical navigational clearance of 65 ft. meets the USCG permit requirements for new high-level fixed bridges along the Atlantic Intracoastal Waterway (ICW) from Virginia through Florida which can be found in the Clearance Guide at the following USCG website: https://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/Marine-Transportation-Systems-CG-5PW/Office-of-Bridge-Programs/Bridge-Guide-Clearances/. Also, along the ICW, access through the Broad Causeway bridge is constrained by the following adjacent fixed bridges:

1. To the north along the ICW is the William Layman Causeway Fixed Bridge – 65 ft.
2. To access the Atlantic Ocean is the Bakers Haulover Inlet Bridge –32 ft.
3. To the south along the ICW is the Julia Tuttle Causeway Fixed Bridge – 56 ft.

Therefore, with a vertical clearance of 65 ft., the Broad Causeway Bridge will not restrict marine vessel access through the area.

The new alignment would be located to the south of the existing bridge, allowing for traffic to be maintained along the existing bridge while the proposed bridge is constructed. Demolition of the existing bridge would be phased, so that traffic would be maintained within the existing corridor for most of the construction duration and progressively be transferred from the existing bridge to the new bridge. Emergency vehicles would have 24/7 access to pass through the corridor and should a hurricane warning be issued; the corridor would still be used as a Hurricane Evacuation Route during construction as it is today. See **Figure 1-8** through **Figure 1-10** for the High-Level Fixed Bridge Alternative typical section, profile and renderings, respectively.

The High-Level Fixed Bridge Alternative meets the purpose and need of the project but would have a steeper roadway and shared use path slopes and there would be more visual impact to businesses and residents. The estimated construction cost is $247.4 million. The High-Level Fixed Bridge Alternative was advanced for further detailed analysis and public comment.

Figure 1-8 65 ft. High-Level Fixed Bridge Alternative Typical Section

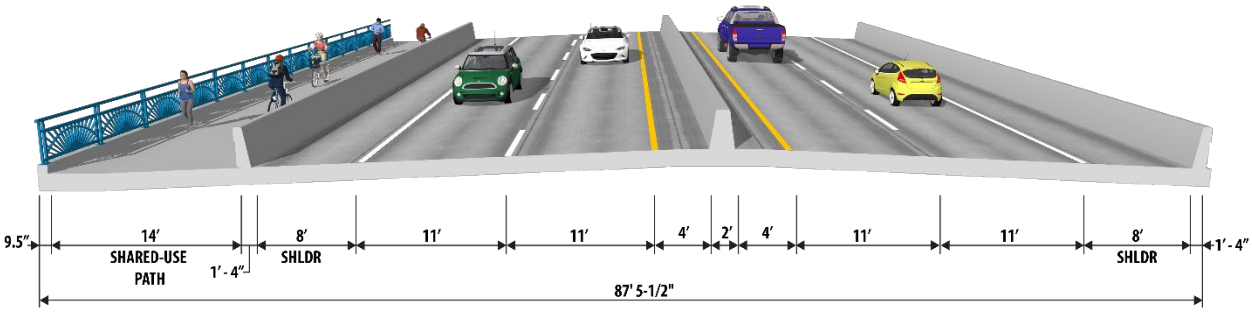


Figure 1-9 65 ft. High-Level Fixed Bridge Alternative Profile in Comparison to the Existing Bridge

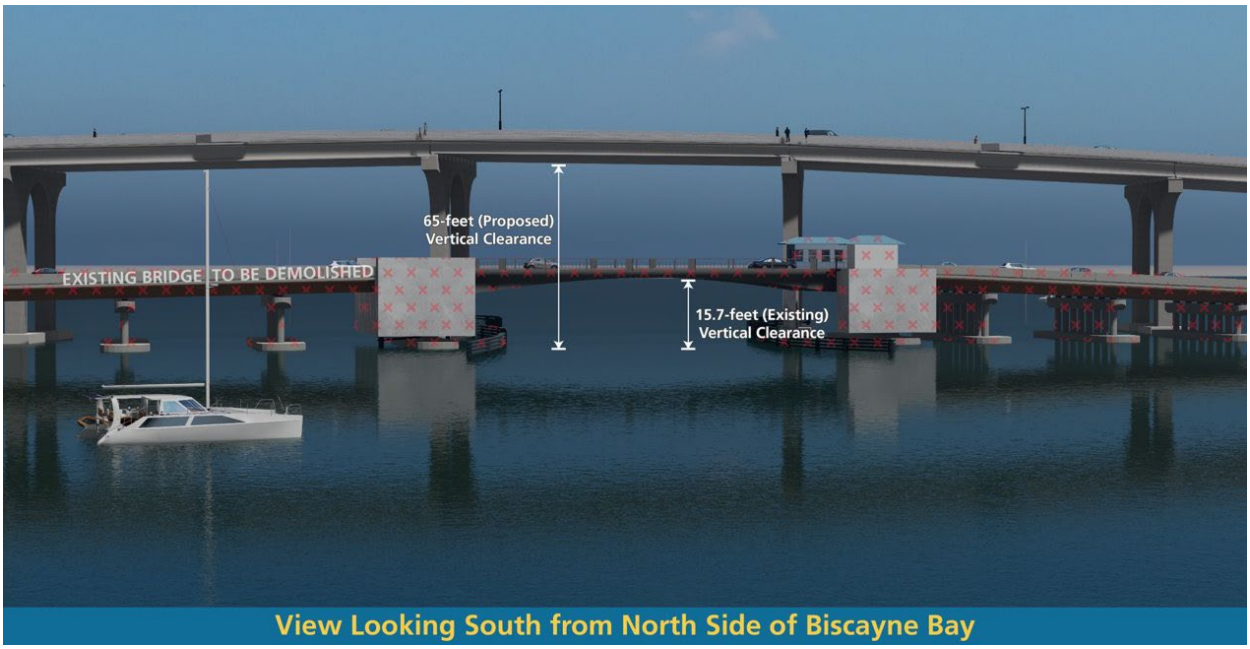


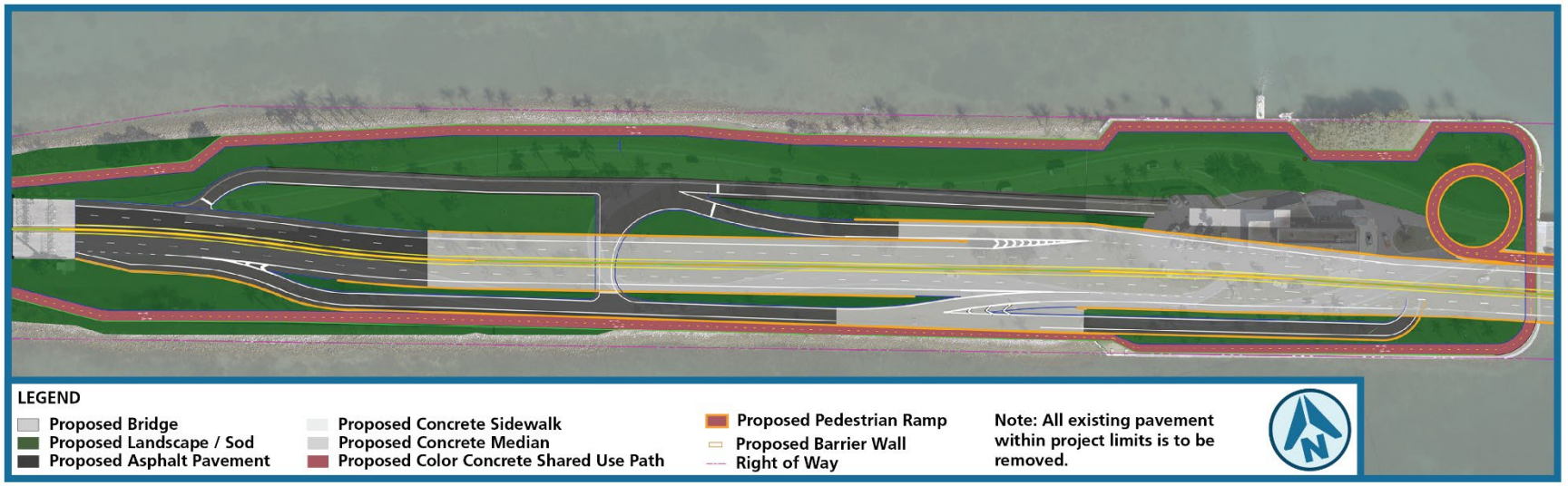
Figure 1-10 65 ft. High-Level Fixed Bridge Alternative Rendering

1.3.4 Causeway Island Circulation Options

During the PD&E Study alternative analysis, various circulation options within the causeway island were considered and presented to the Town on August 30, 2023. The circulation options presented would apply to both the 40 ft. Mid-Level Movable Bridge Alternative and the 65 ft. High-Level Fixed Bridge Alternative. The options explored increasing greenspace, elimination of movements to the existing service station and consideration of different ramp and pedestrian access points. See *Preliminary Engineering Report* (*PER) (*August 2024*)* for concept drawings, comparative analysis and meeting minutes of all options presented.

The comparative analysis after the meeting determined that the best fit circulation option for the Town's planned and/or desired uses on the causeway island was Option 2- Eastbound-Westbound Access (Modified Westbound Exit). Option 2 circulation (**Figure 1-11**) provided two-way ingress/egress to the existing service station, more greenspace than what was presented in the Initial Design (Option 1), provided safer pedestrian facilities (no pedestrian crossings on causeway island), and circulation within the causeway island proposed under the mainline (providing even more greenspace). Option 2 can be used for either Build Alternative.

Figure 1-11 Causeway Island Circulation Option 2



1.3.5 Preferred Alternative

After comparing and weighting the benefits and impacts of the No Build Alternative and two feasible Build alternatives, along with the public input received during the Hybrid Alternatives Public Workshop and Public Hearing comment period described in the *Type 2 Categorical Exclusion*, the Town identified the 65-ft. High-Level Fixed Bridge as the Preferred Alternative. As stated in the May 26, 2022, Memorandum of Understanding (MOU) between FDOT and the FHWA, the FDOT Office of Environment (OEM) will approve the final alternative when the environmental review is complete and an EA/Finding of No Significant Impact (FONSI) has been signed by OEM. Below is a general description of the Preferred Alternative followed by a summary of why this alternative addresses the purpose and need for the project and overall Town vision.

The Preferred Alternative consists of a new 65 ft. High-Level Fixed Bridge on a southern alignment that replaces the existing Broad Causeway Bridge and approach spans. The new bridge includes a 4-lane divided roadway with two, 11 ft. lanes in each direction separated by 4 ft. inside shoulders and a 2 ft. concrete barrier wall. The outside shoulders are 8 ft. wide, adjacent to concrete barrier walls. A 14 ft. shared use path along the north side of the new bridge accommodates pedestrians and bicycles with a 1.5 ft. barrier wall to safely separate travel lanes and the path. See **Figure 1-8** for an image of the proposed bridge typical section. The design and posted speed would be 30 mph, as it is today.

On the causeway island, west of the bridge, new access ramps are proposed to and from the existing service station. The Preferred Alternative provides extra greenspace along the north side of the causeway island to provide an opportunity for park and/or fitness destinations.

The existing median opening east of the bridge on State Road (SR) 922 at Broadview Terrace will remain open for U-turn only movements. A mid-block pedestrian crosswalk is proposed on Kane Concourse (SR 922) between the bridge and the existing median opening. The mid-block crossing will include a push-button crossing to allow pedestrians and bicyclists to cross the roadway. During design the mid-block crossing will be further analyzed to determine what the safest and most efficient option will be for pedestrian and bicycle crossing. Potential design options include Rapid Rectangular Flashing Beacons and overhead pedestrian signals. Extensive wayfinding signs will be included to direct pedestrian and bicycle movement in the vicinity of the bridge. A detailed description of the Preferred Alternative is located in the *PER* (August 2024).

Alternative 1, the High-Level Fixed Bridge Alternative was selected as the Preferred Alternative for the following reasons:

- The 65 ft. high-level fixed bridge allows all anticipated waterway users to able to safely navigate through the proposed structure and pass under the new bridge without any delay to roadway traffic, compared to the movable bridge in Alternative 2. Without the need to

stop automobiles, bicyclists, or pedestrians for bridge opening cycles, the traffic would be presented with free flow conditions to accommodate projected high traffic volumes that connect beach communities and Bay Harbor Islands to the mainland. Bicyclists and pedestrians would have continuous safe access without bridge opening delays.

- In emergency situations and during evacuation events, a high-level fixed bridge would play a critical role in facilitating the evacuation of approximately 40,000 residents from the municipalities of Bay Harbor Islands, Bal Harbour, Surfside, Miami Beach, and Sunny Isles Beach.
- A high-level fixed bridge does not have any mechanical moving parts or an electrical system that could malfunction and close the bridge. Without the chance of human error operating a drawbridge, the high-level fixed bridge would maintain operational reliability.
- The high-level fixed bridge alternative includes adequate lane widths and shoulders, and a shared use path. These features improve safety for both motorized and non-motorized roadway users by correcting existing roadway deficiencies.
- The high-level fixed bridge is proposed within the existing right-of way, owned by the Town, making it a feasible option for the Town to address bridge deficiencies.

Details on the evaluation and selection of the Preferred Alternative are included in the *Categorical Exclusion*. The proposed High-Level Fixed-Bridge Alternative typical section is shown in **Figure 1-8**. The Preferred Alternative Concept Plans and Profile are included in the *PER* (August 2024).

2.0 COMMUNITY CHARCTERISTICS SUMMARY

The Sociocultural Effects (SCE) evaluation is the component of the PD&E Study that considers potential effects from the project, both positive and negative, on the human environment. During the SCE Evaluation process, particular attention is devoted to underrepresented population groups protected under environmental justice, civil rights, and other related nondiscrimination statutes and regulations.

"It is the policy of FDOT, pursuant to Title VI of the Civil Rights Act of 1964; the President's Executive Order 12898; Section 504 of the Rehabilitation Act of 1973; Age Discrimination Act of 1975; Section 324 of the Federal-Aid Highway Act of 1973; Civil Rights Restoration Act of 1987; and related statutes and regulations, that no person in the United States shall, on the basis of race, color, national origin, sex, age, disability/handicap, religion, family status, or income status, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination or retaliation under any federally or non-federally funded program or activity administered by FDOT or its sub-recipients."

The SCE process is used to identify and address the effects of a transportation improvement project on a community and its quality of life. To ensure no important factors were overlooked, a quarter-mile buffer of the project study area was used to capture all aspects of the affected community.

Summarized below are the results of the environmental data collection and analysis conducted as part of this PD&E Study. The purpose of this analysis was to determine the effects associated with the build alternatives being considered for the project. This analysis was conducted using the information obtained through the Environmental Screening Tool (EST) as part of the Efficient Transportation Decision Making (ETDM) Programming Screen phase (ETDM #14520). The Programming Screen Summary Report, prepared under separate cover, was published on May 13, 2024, and is in the project file and available on the ETDM public web site (https://etdmpub.fla-etat.org/est/).

2.1 Setting

This project is located entirely within the Town of Bay Harbor Islands, but this SCE study area for sociocultural effects also covers a small portion of North Miami, west of the project terminus.

The Town of Bay Harbor Islands is made up of two kidney-shaped islands (West Island and East Island) that cover less than a half-square mile of land, making it one of the smallest towns in Miami-Dade County. It is separated from the mainland by Biscayne Bay. The population was 5,922 at the 2020 US census. The West Island contains exclusively single-family residential housing, and the East Island has a quaint and elegant two block business district on Kane Concourse (96th Street). Along the beautifully landscaped Concourse, visitors and residents will find shopping, fine

dining, professional offices and art galleries. The East Island has multi-family residential housing along with Ruth K. Broad Bay Harbor K-8 (Kindergarten through Eighth grade) Center (school), Morris N. Broad Community Center, Miami-Dade County Bay Harbor Islands Fire Rescue Station 76, and a public library. There are numerous parks and recreational facilities on both islands.

The Broad Causeway Bridge connects the Town of Bay Harbor Islands with the communities of Village of Bal Harbour and Town of Surfside with the City of North Miami, within Miami-Dade County.

Bay Harbor Islands was originally one island covered in mangroves. Development of the two islands began in the early twentieth century when Biscayne Bay was dredged to create the Indian Creek Village community in 1929 (*Miami Daily News* 1929).

The creation of the 300-acre Bay Harbor Islands (formerly known as Bailey's Island) began when Broad Causeway namesake and New York attorney Shepard Broad joined with his business partner Benjamin N. Kane (for whom the Kane Concourse was named) to plat the Town of Bay Harbor Islands in 1946 (*Miami Daily News*, 1947,1950; Tolf, 2000). Once the island was divided, a business district was planned for the larger, eastern portion, while its western counterpart was slated for single-family residential development (*Miami Daily News* 1947).

The Town of Bay Harbor Islands was incorporated on April 27, 1947, with Shepard Broad as its first mayor (Town of Bay Harbor Islands, 2023). A two-lane wooden bridge had been constructed across the Bay Harbor Waterway by that time, and later that year, the Florida Legislature authorized the construction of the Broad Causeway.

The Broad Causeway is depicted below in its current configuration, crossing Biscayne Bay and the Intracoastal Waterway to connect the Bay Harbor Islands with North Miami (USDA 1951). The *Miami Daily News* documented its progress, including aerial photographs of the Causeway under construction (**Figure 2-1**, **Figure 2-2**; *Miami Daily News*, 1951). It officially opened on October 14, 1951, and was promoted in local newspapers as "the new…quick…scenic link between the mainland and the beach" (**Figure 2-3**; *Miami Daily News* 1951). By the following week, as many as 5,000 vehicles crossed the Causeway daily (*Miami Daily News* 1951). The 1951 aerial photograph also highlights increased residential and commercial density on the Bay Harbor Islands, including some structures that would later form the Bay Harbor Islands Historic District (8DA15015) resource group. The Citgo (1501 Broad Causeway [8D10436]) historic structure, was first opened as a Cities Service (later Citgo) Station in April 1952. Local newspapers carried advertisements for the opening, which noted its location as well as its "dramatic design and striking features" (**Figure 2-3**; *Miami Daily News* 1952). The project area continued to be developed in the late twentieth century. A detailed history of the project area can is located in the *Cultural Resources Assessment Survey* (April 2024).

Figure 2-1 Miami Daily News aerial photograph showing the Broad Causeway under construction, c. 1951 (Miami Daily News, 1951)

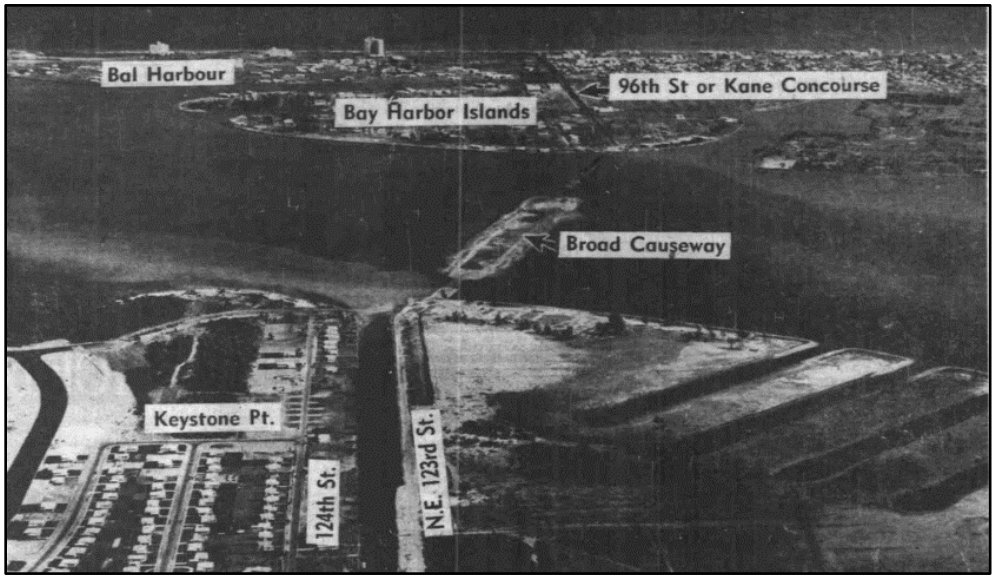


Figure 2-2 Miami Daily News aerial photograph showing the Broad Causeway under construction, c. 1951 (Miami Daily News, 1951)

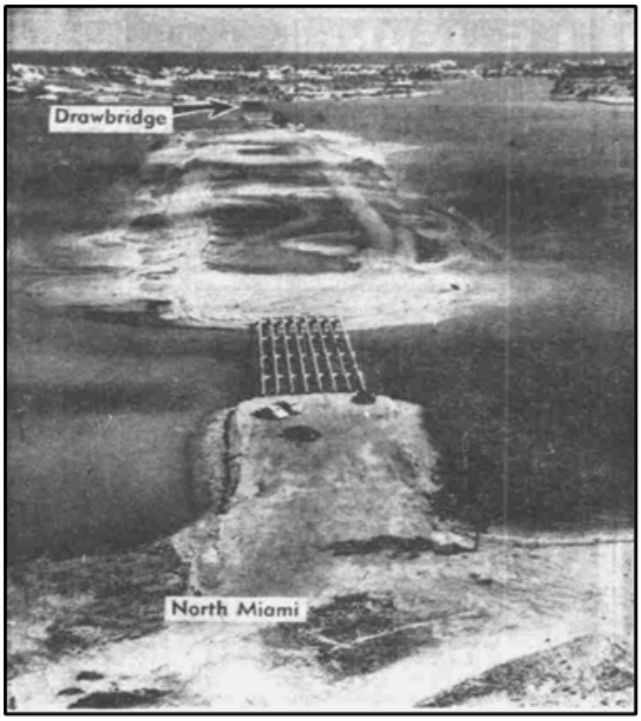


Figure 2-3 Newspaper advertisement for the grand opening of the "sparkling new Broad Causeway Cities Service Station" at 1501 Broad Causeway (Miami Daily News, 1952)

2.2 Land Use

The project bridge carries Broad Causeway over Biscayne Bay and the ICWW to connect the City of North Miami on the west with the Town of Bay Harbor Islands, Village of Bal Harbour, and Town of Surfside on the east, linking the beach communities with US 1 and I-95 to the west. The project traverses the Town of Bay Harbor Islands, a U.S. Census Designated Place in northern Miami-Dade County. The Town consists of two islands: West Island and the East Island as shown on the Existing Land Use Map (**Figure 2-4**). The West Island contains exclusively single-family residential, and the East Island contains a business/commercial district and multi-family residential housing with some public/institutional uses. The existing land use for the project corridor primarily consists of infrastructure (transportation use) and commercial (service station) land use on the causeway island identified as the Causeway District and single family residential and parks and recreation land uses on the West Island.

The Future Land Use Map (**Figure 2-5**) shows the causeway island is classified as "Infrastructure" with "Commercial/Office" where the existing service station is located. East of the causeway, the West Island is classified as "Single-Family residential" with "Parks and Recreation" and East Island is a mix of "Multi-family Residential" with "Commercial/Office" and "Public/Institutional."

Figure 2-4 Existing Land Use

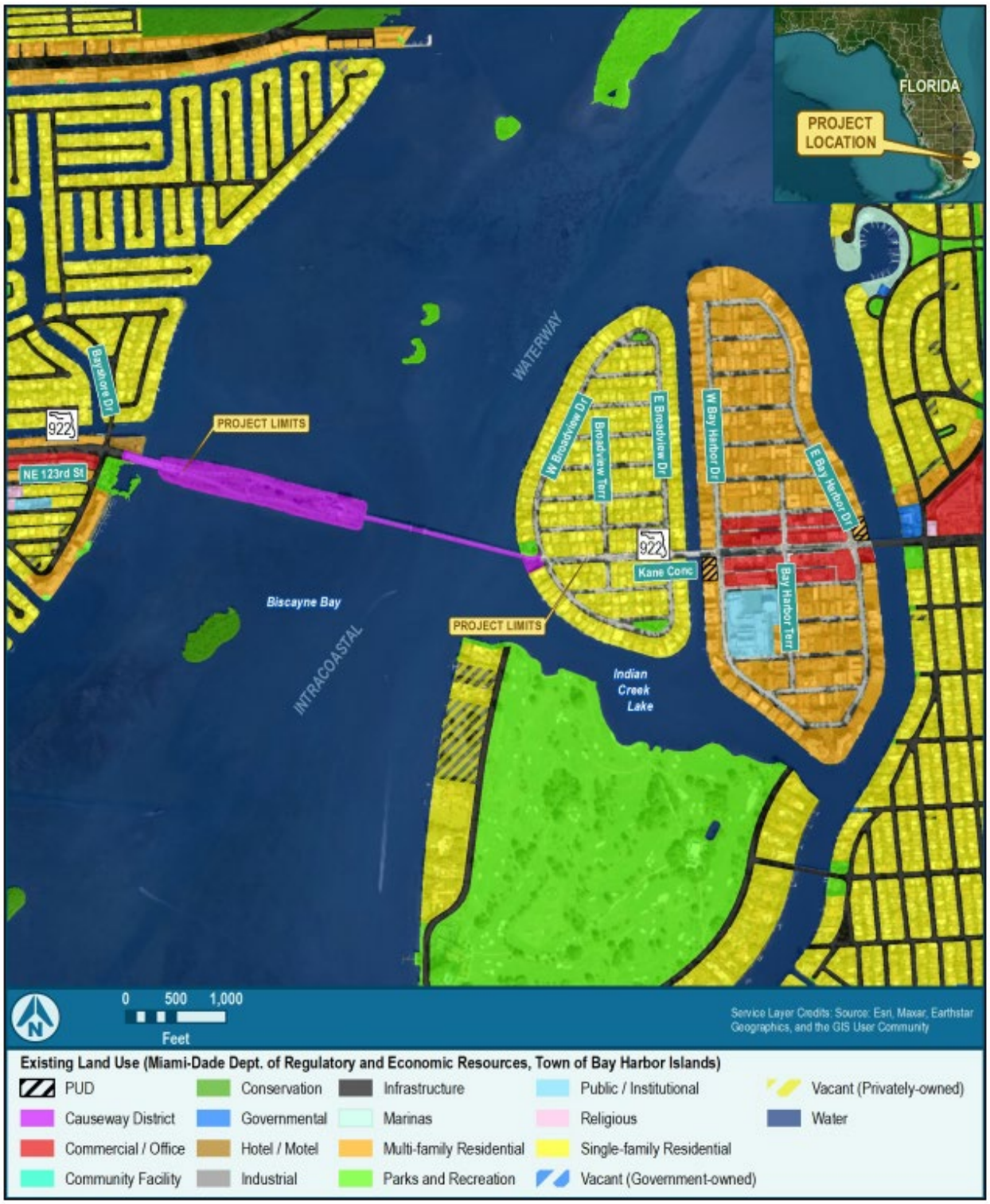


Figure 2-5 Future Land Use

2.3 Community Focal Points

Community focal points are public or private locations, facilities, or organizations that are important to local residents and communities. Community focal points include schools, religious facilities, community centers, parks, cemeteries, fire stations, law enforcement facilities, government buildings, healthcare facilities, and social service facilities. All community focal points within a quarter-mile buffer were identified and are described below and as shown in **Figure 2-6**.

Florida Parks and Recreational Facilities

- Town of Bay Harbor Islands Tot Lot
- Florida Circumnavigational Saltwater Paddling Trail
- North Bayshore William Lehman Park
- South Passive Park
- Indian Creek Golf Club (privately owned)

It should be noted that the Ruth K. Broad Bay Harbor K-8 Center (school), Morris N. Broad Community Center, Miami-Dade County Bay Harbor Islands Fire Rescue Station 76, and public library are located just outside of the quarter-mile buffer on 95th Street and West Bay Harbor Drive on the East Island.

The Town-owned Tot Lot is located on the northeast side of the bridge at 9600 W Broadview Drive. It is a gated park with shaded playground equipment which includes ADA accessible components and a picnic pavilion.

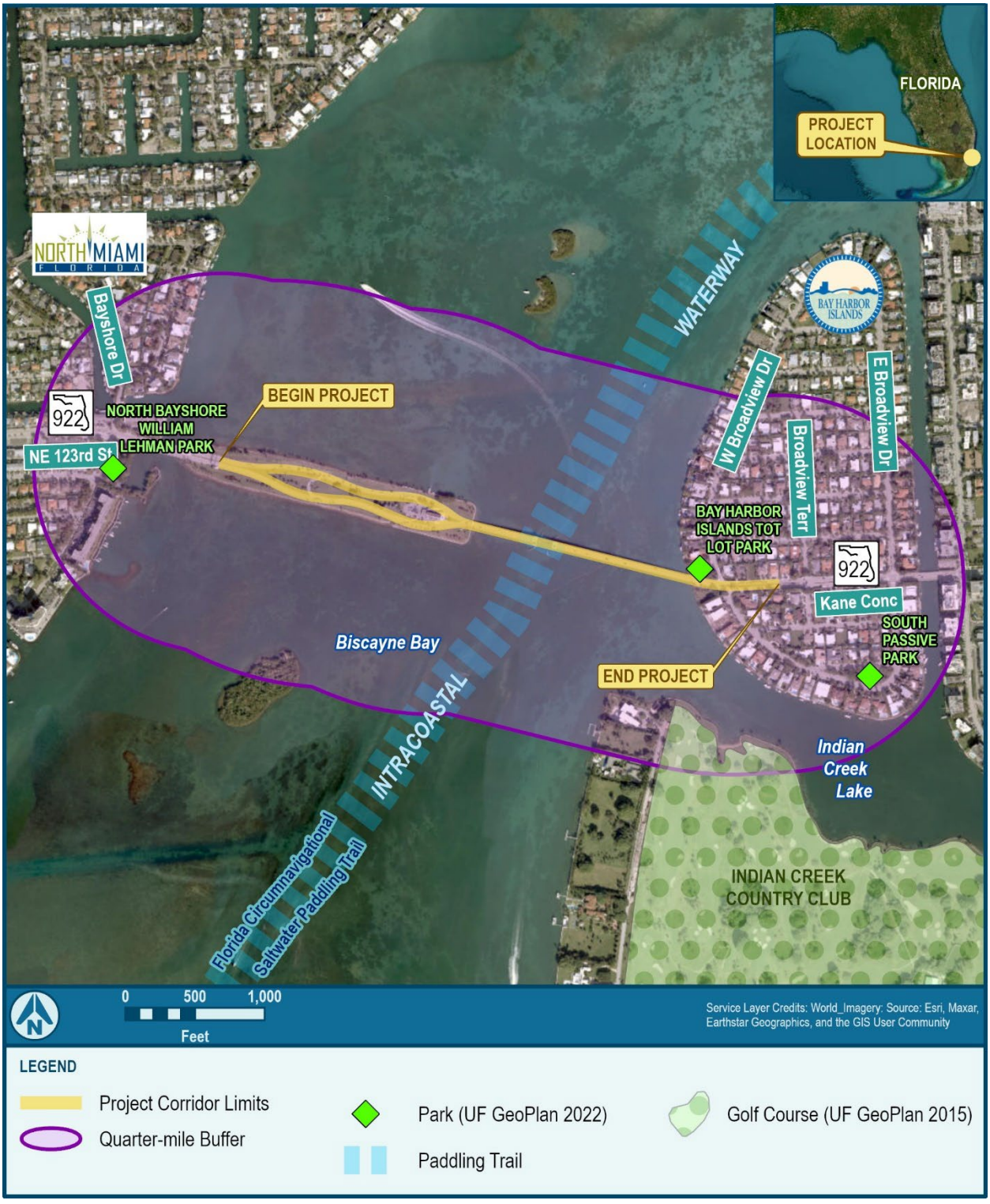
The Florida Circumnavigational Saltwater Paddling Trail begins at Big Lagoon State Park near Pensacola, extending around the Florida peninsula and Keys, and ending at Fort Clinch State Park near the Georgia state line in Fernandina Beach. The Florida Circumnavigational Saltwater Paddling Trail is a 1,515-mile sea kayaking paradise. It is the country's longest designated national recreation trail. Within the project area the trail follows the ICWW under the existing Broad Causeway Bridge.

The North Bayshore William Lehman Park (also named Helker Tract – Bayshore Park) is located west of the project limits in the city of North Miami Beach. "The park is a popular destination for its beach access. The park features a large stretch of sandy beach along the Biscayne Bay, which is perfect for swimming, sunbathing, and picnicking. Visitors can also rent kayaks and paddleboards to explore the bay and its wildlife. Another point of interest in the park is the fishing pier, which is a popular spot for anglers. The pier extends out into the bay and offers beautiful views of the surrounding area. North Bayshore William Lehman Park is also home to numerous picnic areas, pavilions, playgrounds, and sports fields. (snoflo.org)"

The South Passive Park is located on the West Island in the southern residential area. It is a 0.65-acre green space with mature trees and a park bench.

Indian Creek Golf Course is a private golf course that opened in 1930 and is located in the private Indian Creek Village community on the island south of Bay Harbor Islands. Entry to this island is by invitation only.

Figure 2-6 Map of Community Focal Points



2.4 Demographic Analysis

A demographic profile of the study area was prepared and compared against Miami-Dade County. The demographic profile utilizes data from the Environmental Screening Tool (EST) Sociocultural Data Report (SDR). **Appendix B** contains the SDR for the quarter-mile project buffer area. The SDR uses the 2018 to 2022 American Community Survey (ACS) from the U.S. Census Bureau data and reflects the approximation of the population based on the area of a quarter-mile buffer intersecting the Census block groups along the project corridor. The most current ACS and Census 2020 data were used to characterize the population with potential to be directly affected by the project. As shown in **Figure 2-7**, the specific limits of the project extend from the Broad Causeway Island on the west side and to east of West Broadview Drive and traverse six Census block groups (120860038012, 120860038011, 120860012041, 120860001201, 120860038013, 120860001202, and 120860038014). Using the quarter-mile project buffer area, the SDR identified that the total population is approximately 739 people that make up 293 households. **Table 2-1** shows comparisons of the demographic and socio-economic estimates for the study area and Miami-Dade County.

Figure 2-7 Study Area Census Block Groups Map

Table 2-1 Demographic Profile Comparison of the SCE Study Area

	¼-mile Study Area	Miami-Dade County
Overall Statistic		
Total Population	739	2,688,237
Total Households	293	952,680
Race		
White Alone	66.31%	46.84%
Black or African American Alone	3.25%	15.86%
Native Hawaiian and Other Pacific Islander Alone	0.00%	0.02%
Asian Alone	0.81%	1.55%
American Indian and Alaska Native Alone	0.68%	0.24%
Claimed Two or More Races	23.41%	29.15%
Some Other Race Alone	5.41%	6.34%
Ethnicity		
Hispanic or Latino of Any Race	48.44%	68.77%
Not Hispanic or Latino	51.56%	31.23%
Minority Population		
Minority	57.78%	86.97%
Non-Minority	42.22%	13.03%
Age Trends*		
Young (Age under 18)	26.12%	20.10%
Adult (Age 18-64)	55.34%	63.29%
Elderly (Age 65 and over)	18.0%	16.61%
Median Age	40.0	40.6
Income Trends (2020 Census)**		
Median Household Income	$113,258	$53,975
Poverty Trends (2020 Census)**		
Population below Poverty	3.68%	16.01%
Households below Poverty	3.10%	16.21%
Households receiving Public Assistance Income	1.24%	2.74%

	¼-mile Study Area	Miami-Dade County
Disability Trends		
Population (20-64 years) with a Disability	4.14%	6.64%
Language Trends		
Speak English "Less than Very Well"	15.80%	33.95%
Education Trends		
High School Graduate or Higher	93.58%	82.67%
Housing Trends		
Occupied Housing with No Vehicle	3.40%	9.74%

**Age Trends for the Study Area do not add up to 100%, but reflect the data provided in the 2018 – 2022 SDR.*
***Census 2020 Data was used to show income trends for the area.*

Race and Ethnicity

In summary, the data indicates that residents within a quarter-mile buffer of the project are 57.78% minority, which is much lower than Miami-Dade County's minority population percentage of 86.97%. The minority population within a quarter-mile buffer "Claim Two or More Races" (23.41%) and approximately 48% of the population being Hispanic or Latino ethnicity (of any race).

Age and Persons with Disabilities

The analysis indicates that roughly 18% of the population in the study area are age 65 and older, with the median age of 40 years, which is comparable to the median age in Miami-Dade County's median age of 40.6 years. It should be noted that within the study area 26.12% of the populations is 18 years or younger and the highest age percentage of the adult population is Ages 40 – 49 at 19.76%. Approximately 4.14% of the population aged 20 to 64 years has a disability compared to 6.64% in Miami.

Income/Poverty Status

The median income more than doubled for households within the study area between 2000 and 2020 at roughly $113,258 which is $59,283 higher than Miami-Dade County's median household income of $53,975 in 2020. The percent of households within a quarter mile of the project living below the poverty level has decreased from 6.35% in 2010 to 3.10% in 2020, which is 13.11% lower than Miami-Dade County's total of 16.21%.

Education Attainment

The study area population has a very high level of educational attainment, with over 93.58% high school graduates, while 56% have received a bachelor's degree or higher education.

English Language Proficiency

Approximately 15.8% of the population within a quarter mile of the project has limited English proficiency (LEP), or "Speaks English Less than Very Well", compared to 33.95% in Miami-Dade County.

Occupied Housing with No Vehicle

About 3.4% of the households within a quarter mile buffer of the project do not have access to a vehicle, compared to 9.74% of households in Miami-Dade County.

Community Cohesion

Data was collected regarding community cohesion for this project, which included identification of physical barriers, traffic patterns, social travel patterns, connectivity to transit and community features and facilities. Characteristics of the surrounding communities and local demographics are important considerations and are closely examined by the SCE process so that disproportionate impacts can be avoided.

The project bridge carries Broad Causeway over Biscayne Bay and the ICWW to connect the City of North Miami on the west with the Town of Bay Harbor Islands, Village of Bal Harbour, and Town of Surfside on the east, linking the beach communities with US 1 and I-95 to the west. The project traverses the Town of Bay Harbor Islands, a U.S. Census Designated Place in northern Miami-Dade County. The Town consists of two islands: West Island and the East Island.

Many pedestrians walk or ride their bicycle in the Town of Bay Harbor Islands between the two islands and over the existing Broad Causeway Bridge to/from North Miami.

Community Goals/Quality of Life

The Broad Causeway and Kane Concourse corridor have high traffic volumes since they connect the beach communities and Bay Harbor Islands to the mainland. The a.m. and p.m. peak hours are times of high congestion and future traffic volumes are anticipated to continue to slightly increase based on the suggested annual growth rate of 1.0% detailed in the *Project Traffic Analysis Report (PTAR) (March 2024)*. The existing bridge bascule is required by the USCG to open twice per hour on the quarter and three-quarter hour but only opens if vessels are waiting. Having the bridge open potentially twice per hour further compounds traffic congestion.

The existing bridge structure and some of the mechanical components are over 70 years old and are failing. The bridge closes periodically for repairs to these mechanical components which results in a detour as described in **Section 1.3.1**. If the bridge is stuck open because of mechanical failure or is damaged due to a hurricane, a direct emergency evacuation route for these communities would be eliminated.

Miami-Dade County's Comprehensive Development Master Plan (CDMP) identifies the following goals, objectives, and policies that have direct relevance to this project:

- Transportation Element (TE-1, TE-1A, TE-1H, TE-2D),
- Traffic Circulation Sub element (TC-3, TC-3A, TC-4B, TC-4D, TC-4F, TC-7C, TC-7D),
- Mass Transit Sub element (MT-2A, MT-2D, MT-4B, MT-6D, MT-8G),
- Recreation and Open Space Element (ROS-3A, ROS-8E, ROS-3B, ROS-3C),
- Coastal Management Element and Community Health and Design Element (CM-8H, CHD-1G, CHD-2A).

The Town of Bay Harbor Islands has conducted a Public Kick-off Meeting on February 9, 2023 (in-person) and a Hybrid Alternatives Public Workshop on September 26, 2023 (in-person) and September 28, 2023 (virtually) to date to gather public comments on the project. The community concerns and interests were focused on pedestrian and bicyclist traffic, crosswalks with pedestrian features, lighting, preventative maintenance, traffic coming from the mainland, wildlife species, cost of tolls and toll revenues, and potential project costs and funding. A full summary of comments received at these meetings, including meeting materials and comments received, can be found in the *Comments and Coordination Report* that was prepared as part of this study.

Based on the comments received to date, the project is perceived as having a positive effect on the community goals and quality of life with some voiced concerns regarding some potential negative effects including traffic from the mainland and changes in the community's character as a result of a new bridge.

2.5 Economic

As one of seven crossings of Biscayne Bay and the ICWW between the mainland and the barrier islands, Broad Causeway Bridge provides access from I-95 and US 1 to the Town of Bay Harbor Islands, Village of Bal Harbour, and Town of Surfside. The bridge on Broad Causeway is essential to maintaining the movement of people and goods along the corridor as well as providing access to local businesses in these communities. The project is in an area of high tourist activity connecting North Miami to the beach communities such as Surfside, Miami Beach, Sunny Isles Beach, and Bal Harbour. According to the Miami-Dade Beacon Council, the labor force on Bay Harbor Islands is 3,139 people and the largest number of jobs are in office and administrative

support, sales, managers, healthcare support, and financial operations with 25% being blue collar workers (perform manual labor) and 74% being white collar workers (office jobs). Based on online information from Zippia, major businesses in the North Miami area include Jackson North Medical Center, Grand Realty of America, City of North Miami Beach, ECE Consulting Group, and Klika Tech.

2.6 Mobility

The project involves the potential replacement of the Broad Causeway Bridge connecting the Town of Bay Harbor Islands with the City of North Miami, within Miami-Dade County. The roadway is classified as "Urban Minor Arterial". This arterial also extends to the communities of Bal Harbour and Surfside and connects those commuters to the mainland.

The existing bridge consists of four lanes (two in each direction) that are 10 ft. wide, without a raised median. The outside travel lanes also include shared use markings to accommodate bicycles which is a safety concern due to substandard lane widths. There are conflicting signs on each side of the bridge where one directs bicyclists to get off the bicycle and walk and the other sign says to use the travel lane (make use of full lane). According to the FDOT's *Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Florida Greenbook 2018)*, the minimum width of a shared traffic/bicycle lane should be 14 ft. The existing lane width on Broad Causeway Bridge is only 10 ft. Therefore, bicycles are sharing 30 mph travel lanes with vehicles on lane widths that do not meet the current standards.

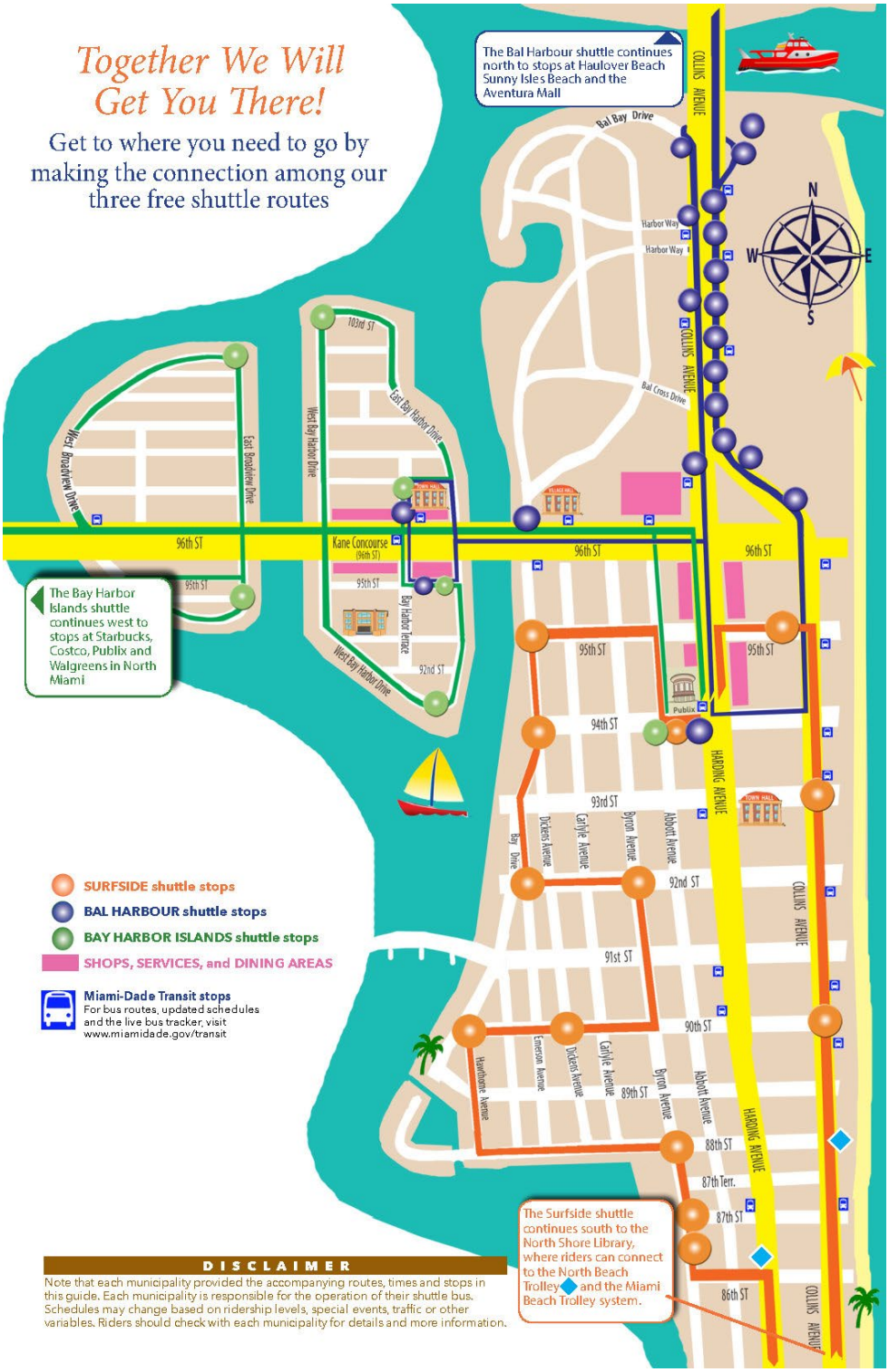
In addition, pedestrians use a raised maintenance area with a width that varies from 22 to 36 inches on each side of the bridge. The typical width of the raised maintenance area and existing barrier wall is 3.75 ft. There are no guardrails separating the raised maintenance area from the travel lane creating a serious safety concern for pedestrians using the maintenance area to cross the bridge. The west side of the bridge has a 6-inch curb to enter the raised maintenance area that does not provide ADA access. Also, the raised maintenance area is not ADA compliant since it does not provide the 36 inches minimum required or 32 inches minimum at the point of an obstruction such as a light fixture/pole. This narrow passage creates an unsafe condition for pedestrians, particularly if two pedestrians are walking across the bridge in opposite directions and need to pass each other. There are currently no sidewalks on the causeway island west of the bridge. The bridge approaches are generally consistent with the typical section of the bridge, except for west of the bridge where there are no sidewalks. The maximum pedestrian and bicyclist counts from the two locations on two separate dates are listed below in **Table 2-2** and provided in the *PTAR (March 2024)*.

Table 2-2 Multimodal Traffic Counts

Date	Time	Type	Eastbound	Westbound
Saturday, February 11, 2023	7:00 AM – 7:00 PM	Pedestrians	119	122
		Bicyclists	216	176
Tuesday, February 14, 2023	7:00 AM – 7:00 PM	Pedestrians	103	95
		Bicyclists	105	91

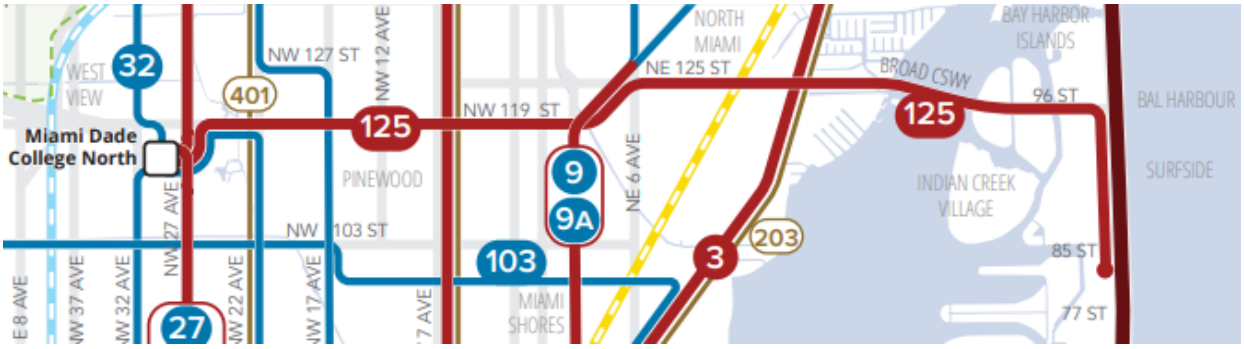
The project is located within a transportation disadvantaged service provider area [Miami-Dade Transit Transportation Disadvantaged Program]. The Miami-Dade Transit Transportation Disadvantaged Program is a state-funded program that provides free transportation passes to qualifying Non-Profit Agencies/Programs for use by their Miami-Dade County resident clients who qualify as "Transportation Disadvantaged". The complimentary Interlocal Shuttle operates within the project area and has three shuttle routes including the Bay Harbor Islands Shuttle. The Bay Harbor Island Shuttle stops begin in North Miami and travels east over the Broad Causeway Bridge to Surfside. There are also Bal Harbour and Surfside shuttle stops on separate routes. All routes and bus stops are shown on **Figure 2-8**.

Figure 2-8 Interlocal Shuttle Route Map



As shown in **Figure 2-9**, the Miami-Dade Metrobus Route 125 traverses the proposed project area with a bus stop located at Broadview Terrace and NE 96th Street. Route 125 starts at the Miami-Dade College North Campus and heads east over the Broad Causeway Bridge ending at Collins Avenue and 85th Street in the Town of Surfside. According to the Miami-Dade Transit, the Transit Development Plan (TDP) Annual Progress Report, for Fiscal Year (FY) 2022 – 2031, this municipal transit service is expected to continue to operate at current service levels.

Figure 2-9 Miami-Dade Metrobus Route 125 Map



The Miami-Dade TDP contains no transit needs or planned improvements for the project corridor, but the Transit Division of Miami-Dade County's Department of Transportation and Public Works (DTPW) noted in their Advance Notification review that this is a key connection to Miami Beach and the Town of Bay Harbor Islands and future transit needs may be different than currently planned.

According to the Miami-Dade 2040 Bicycle/Pedestrian Plan, Broad Causeway is not listed as a bike/ped priority. The *FDOT's Bike Network Plan (February 2022)* defines the project area as a "County Connector."

Crossing over the Intracoastal Waterway, the bridge has a maximum vertical clearance of 18.00 feet at Mean Low Water (MLW) and a minimum vertical clearance of 16.00 feet at MHW at the Bascule crossing. The ICWW at the bridge crossing is deemed a navigable waterway by the USCG. The bridge bascule is required by the USCG to open at quarter and three-quarter hour of each hour to allow boat traffic.

Serving as part of the emergency evacuation route network designated by the Florida Department of Emergency Management (FDEM) and Miami-Dade County, Broad Causeway Bridge plays a critical role in facilitating traffic between the beaches and the mainland of Miami during emergency evacuation periods. The project is needed to maintain emergency evacuation capabilities to approximately 40,000 residents from the municipalities of Bay Harbor Islands, Bal Harbour, Surfside, Miami Beach and Sunny Isles Beach. When winds are higher than 35 mph the

USCG requires the bridge to be closed (down position) to avoid damages to the wings. When there is an emergency evacuation situation, the USCG starts closing (down position) the bridges from south and moving north. Typically, the Broad Causeway Bridge remains closed until the USCG contacts the Town of Bay Harbor Islands to open it for certain hours. All bridge alternatives being evaluated as part of this project will maintain emergency evacuation along this route during construction.

2.7 Aesthetics

Viewshed and Compatibility

The existing bridge has a vertical clearance of 15.7 feet and can be seen from the residents and recreational areas along the shoreline. Many of the residents also currently have a view of downtown Miami or North Miami.

Landscaping is the main aesthetic feature. Mature Coconut Palms and manicured shrubs scatter the causeway island portion of the corridor while mature Royal Palms with manicured shrubs line the median of SR 922 along the eastern end of the project.

Some key architectural features include "Bay Harbor Islands" gateway signs along the eastern bridge approaches. The gateway signs are used for town decorations during the holidays and the landscaping that surrounds them is also well maintained by the Town of Bay Harbor Islands Public Works. Other architectural features include four plaques which commemorate Shepard Broad the founder and first mayor of the Town of Bay Harbor Islands as well as the original developers and particularly Benjamin N. Kane.

The project is located away from the wildlife Sensitive turtle nesting area and not near the shore, therefore, Wildlife Sensitive amber (light-emitting diode) LED luminaires are not required.

Noise and Vibration

The Broad Causeway Bridge is anticipated to be replaced on a new alignment with changes to the width and height to bring the bridge to current design standards and meet USCG requirements. Although travel capacity is not increasing, the vertical alignment and height of the bridge is changing; therefore, it could influence highway traffic noise. The Federal Highway Administration's (FHWA) Traffic Noise Model (TNM) was used to predict existing noise levels for receptors located near roadways and where traffic noise is dominant. An evaluation of substantial increases was performed for this PD&E Study. Each noise sensitive site was assigned an existing noise level based on TNM predicted existing noise levels. No eye clinics, laser facilities, senior care facilities or other facilities that are noise or vibration sensitive are reported within the project vicinity.

2.8 Relocation Potential

The existing total ROW width varies from 80 ft. along Kane Concourse to 300 ft. on the causeway island.

2.9 Disadvantaged and Underserved Communities

Disadvantaged communities were evaluated with the U.S. Department of Transportation (USDOT) Justice40 Dashboard, the USDOT Equitable Transportation Community (ETC) Explorer, and USDOT Safe Streets and Roads for All (SS4A) Underserved Communities Census Tracts map viewer, which considers six disadvantage indicators: Transportation, Health, Economy, Equity, Resilience, and Environmental. Based on the six indicators, there are disadvantaged and underserved communities in the project quarter-mile buffer area (**Figure 2-10**).

The USDOT Justice Dashboard did not show the project area within the quarter-mile buffer as a disadvantaged area. The ETC Explorer does not show the area as having disadvantaged Census Tracts. A portion of the project location within Census Tract 12.04, population in North Maimi southwest of the project limits is considered **disadvantaged** by USDOT SS4A as it meets five of the criteria:

- Historically Disadvantaged (yes)
- Transportation Disadvantaged (yes)
- Health Disadvantaged (yes)
- Economy Disadvantaged (yes)
- Equity Disadvantaged (yes)
- Resilience Disadvantaged (no)
- Environmental Disadvantaged (no)

Figure 2-10 USDOT Safe Streets and Roads for All Underserved Communities Census Tracts (Historically Disadvantaged Communities)

2.10 Climate and Economic Justice

The U.S. Council on Environmental Quality (CEQ) provides a Climate and Economic Justice Screening Tool to identify Census Tracts that are overburdened and underserved or disadvantaged. As Stated on the White House news website on February 18, 2022 "The CEQ tool is a critical component of President Biden's environmental justice commitments in Executive Order 14008, including the Justice40 Initiative, a commitment to deliver 40 percent of the overall benefits of Federal climate, clean energy, affordable and sustainable housing, clean water, and other investments to disadvantaged communities that are marginalized, underserved, and overburdened by pollution." The CEQ tool is also referenced by the U.S. Climate Resilience Toolkit. The Climate and Justice Screening Tool webpage outlines the methodology and states that the CEQ tool uses datasets as indicators of burdens. The burdens are organized into categories. A community is highlighted as disadvantaged if it is in a census tract that is (1) at or above the threshold for one or more environmental, climate, or other burdens, and (2) at or above the threshold for an associated socioeconomic burden. In addition, a census tract that is completely surrounded by disadvantaged communities and is at or above the 50% percentile for low income is also considered disadvantaged. Parameters evaluated are climate change, energy, health, housing, legacy pollution, transportation, water / wastewater, and workforce development. Based on the CEQ criteria and data, the project area as characterized by Census Tracts Number: 12086001204,12086000120, and 12086003801 are not considered disadvantaged by CEQ because it does not meet any burden thresholds or at least one associated socioeconomic threshold.

3.0 POTENTIAL EFFECTS

3.1 Social and Economic

3.1.1 Social

In evaluating the potential for disproportionately high and adverse environmental impacts to environmental justice populations, the six SCE Evaluation issues (social, economic, land use changes, mobility, aesthetic effects, and relocation potential) were taken into consideration.

The project is not expected to contribute to social isolation of any protected populations in the study area or disabled or elderly residents. It is anticipated that the proposed project will have a positive impact on community cohesiveness. The project does not add any new physical barriers that will bisect the neighborhoods or separate residences from community facilities such as churches, schools, shopping area or civic or cultural facilities. Existing pedestrian and bicycle facilities on the bridge, causeway island and bridge approaches will be reconstructed and improved to accommodate the proposed roadway features and enhance pedestrian features as detailed in **Section 3.1.4**. The proposed project will not alter the existing transit routes or facilities within the corridor.

Quality of life and safety for community and regional residents will be improved by having free flow vehicular traffic that will help relieve congestion, potentially reduce crashes, enhance local emergency response time, and facilitate emergency evacuation. Also, a new bridge would eliminate detours due to bridge malfunctions or repairs. In consideration of any mitigative or beneficial aspects to this project, the Broad Causeway Bridge project will provide enhancements to the inhabitants of the Historic District since it will improve vehicular, pedestrian and bicyclist safety by providing wider travel lanes, shoulders and a 14 ft. shared-use path. It will also improve access to the Historic District and emergency evacuation since there will no longer be delays from opening a movable bridge. Lastly, it will provide recreational facilities noted above that currently do not exist that can enhance the quality of life for inhabitants of the Historic District. All of which facilitates the continued stewardship and preservation of the Historic District.

There is also no ROW acquisition proposed for the Build Alternatives. Therefore, there are no direct impacts to social or community resources as the improvements are mainly to the bridges and approaches located on the causeway. Therefore, the project will avoid the community focal points previously identified, with the exception of the Tot Lot and Florida Circumnavigational Saltwater Paddling Trail.

A portion of the project is located adjacent to the Tot Lot, but the proposed project has no use of the property within the meaning of Section 4(f). A temporary construction area will need to be

utilized from the west side of the Tot Lot which will result in a temporary occupancy but will not result in a "use". The temporary construction area will be ~20 feet inland from the water's edge and will temporarily remove the Tot Lot picnic pavilion. This temporary construction area will be needed to construct a new seawall where the Tot Lot is located as shown in **Figure 3-1**. This seawall construction will occur after the removal of the existing bridge and will last ~12 weeks. The Tot Lot will remain open during construction so it can continue to function as a park. As such, the project anticipates meeting the conditions of 23 CFR 774.13(d)(1-5) to have a temporary occupancies of land that is so minimal as to not constitute a use within the meaning of Section 4(f). The duration will be less than the time needed for construction of the project and there will be no change in ownership of land. The scope of work is minor and there are no adverse impacts to the protected activities, features, and attributes or a temporary or permanent bases. The park will be fully restored to current condition or better and all plans have been concurred with by the OWJ for the park. The OWJ has provided concurrence for this temporary occupancy provided as an attachment.

The Florida Circumnavigational Saltwater Paddling Trail will have temporary impacts. Since the Town cannot avoid the Florida Circumnavigational Saltwater Paddling Trail at the ICWW under the existing Broad Causeway Bridge, measures to minimize harm to the trail were undertaken and a temporary detour route for the trail has been developed. **Figure 3-2** shows the proposed detour route around Bay Harbor Islands.

Figure 3-1 Tot Lot Temporary Construction Area

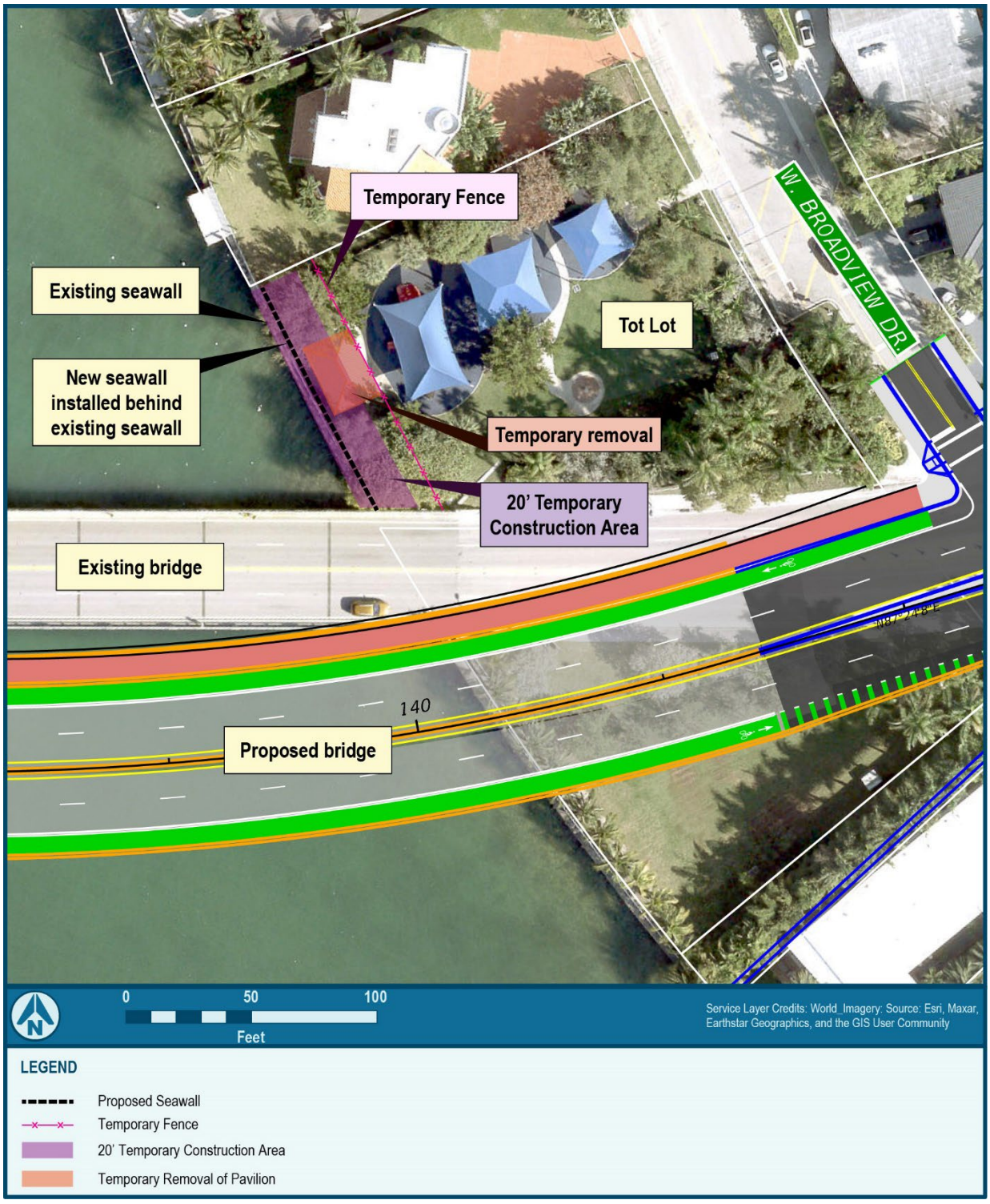


Figure 3-2 Florida Circumnavigational Saltwater Paddling Trail Proposed Detour Route

The FDOT, on behalf of the Town, sent emails to the Florida Department of Environmental Protection (FDEP), the Official with Jurisdiction (OWJ) for the paddling trail, on October 2, 2023, and November 15, 2023, concerning a determination of significance and the proposed detour route, respectively. Responses have not been received to date from the FDEP. In the absence of a determination of significance from the FDEP, the Town and FDOT have moved forward with the Section 4(f) process and have presumed that the Florida Circumnavigational Saltwater Paddling Trail "is" a significant recreational resource within the meaning of Section 4(f) (49 U.S.C. § 303) of the U.S. Department of Transportation Act regulations.

It has been determined that the Florida Circumnavigational Saltwater Paddling Trail is a Section 4(f) "No Use".

Phased construction will be completed within three major phases and is not expected to affect the general traffic flow of two lanes in each direction. No access or operation restrictions are anticipated for residents and business owners adjacent to the project limits. Emergency evacuation will be maintained during construction. Bicycle and pedestrian access will be maintained through a temporary 5 ft. sidewalk that will be constructed along the north side of the proposed bridge. The latest edition of the FDOT's *Standard Specifications for Road and Bridge Construction* will be followed.

In accordance with the Executive Order 12898, Title VI of the Civil Rights Act of 1964 and Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency", the project team has made concerted efforts to reach out to disadvantaged groups. Public participation was solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Through the public involvement process, various public meetings were held, as outlined in *Comments and Coordination Report* (July 2024) which were advertised in the *Miami Herald* and *El Nuevo,* and the Florida Administrative Register and notifications were sent to members of communities and organizations in the immediate project vicinity to obtain input regarding the project. Based on the demographics of the project area and surrounding communities, including North Miami, the Town provided Limited English Proficiency (LEP) services and sent newsletters and meeting notices to the public in English and Spanish. Translation services were available upon request for all public meetings in Spanish, Portuguese, French, and Creole.

The 40 ft. Mid-Level Movable Bridge Alternative may provide improved travel times for emergency services to and from the mainland and the Town of Bay Harbor Islands since traffic will not be required to stop as often for the drawbridge to open. This will result in better response times and aid in emergency evacuation since there will be infrequent bridge openings.

The 65 ft. High-Level Fixed Bridge Alternative is anticipated to provide improved travel times for emergency services to and from the mainland and the Town of Bay Harbor Islands since traffic

will not be required to stop periodically for the drawbridge to open. This would result in better response times and aid in emergency evacuation. This alternative will also assist with facilitating an unimpeded route during emergency evacuations, e.g., hurricane evacuations.

Furthermore, the addition of 8 ft. shoulders on both alternatives will allow disabled vehicles to pull out of the traffic lanes, allowing emergency vehicles ingress/egress down the center of the roadway. This is not possible on the existing bridge. The No Build Alternative will not provide the benefits of improved mobility, improve travel times for emergency services, improve emergency evacuation, or provide a shared use path. The bridge will continue to open at its current rate and have the potential for bridge closures due to repairs. Therefore, quality of life would not be improved with the No Build Alternative.

The project improvements would enhance connectivity and access to these noted recreational amenities by providing safe travel for bicyclists and pedestrian that connect the City of North Miami to the Town of Bay Harbor Islands. Improved access and traffic flow to the Town of Bay Harbor Islands can provide better access to the proposed public boat ramp to be located along the canal between the East and West Islands. The public boat ramp will provide access to the Florida Circumnavigational Saltwater Paddling Trail and the proposed underwater park the Town is designing. Minimal involvement regarding recreation areas and protected lands is anticipated given temporary impacts on access to and enjoyment of the paddling trail during project construction.

This project is being developed without regard to race, color, national origin, age, sex, religion, disability, or family status. A proactive public involvement approach is being implemented for the project to ensure that opportunity is given to residents and businesses within the study area and surrounding community to provide input. No minority or low-income populations have been identified that will be adversely impacted by the proposed project, as determined above. Therefore, in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a, no further Environmental Justice analysis is required.

3.1.2 Economic

The proposed replacement of Broad Causeway Bridge will result in positive economic impacts to and improve mobility in the project area by maintaining an important regional connection to jobs, essential services, and tourist destinations. Bridge replacement will improve ICWW commercial and recreational boating as the new bridges will have a higher vertical clearance that will allow passage of more vessels without requiring a bridge opening. In addition, the project will reduce escalating maintenance costs of the existing bridge that is projected to continue if no corrective action occurs. The bridge replacement will also ensure the continuation of safe access to employment centers and economic focal points located in the Town of Bay Harbor Islands and in

Bal Harbour and Surfside Beaches. In addition, providing a safe vehicular and bicycle/pedestrian facility will enhance access to and from the commercial areas to the east and west of the corridor.

There are no changes to tax base or tax revenue as a result of either Build Alternative or No Build Alternatives. The project is compatible with the economic land uses in the area since there is no change in land use and no anticipated change in property values.

Overall, the build alternatives are expected to have a beneficial impact on economic activity. The No Build (Repair) Alternative requires closure of the bridge for an undetermined amount of time based on repairs needed. At the end of the service life period, an extensive rehabilitation, decommissioning, or replacement of the bridge will be required. An 11-mile detour to the south and a 9-mile detour to the north (**Figure 1-4**) will have to be utilized if the bridge is decommissioned or closed for extensive repairs which will impact connectivity to employers.

3.1.3 Land Use Changes

The project is consistent with local land use and growth management plans. According to the Town of Bay Harbor Islands Future Land Use Map, the project corridor will continue to support the noted land uses at existing densities. The No Build Alternative will not result in land use changes.

3.1.4 Mobility

The complete streets approach of planning, designing, building, operating, and maintaining streets that enable safe access for all people who need to use them, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities was utilized to incorporate missing and substandard safe modes of transportation. The proposed design will provide improved forms of bicycle access throughout the corridor and the needed pedestrian access will be added to the project. Pedestrians and bicycles are accommodated throughout the project corridor with a 8 ft. to 14 ft. shared use path around the causeway island perimeter, as shown in **Figure 1-11**, and a 14 ft. shared use path along the northern side of the bridge typical section, as shown in **Figure 1-5** and **Figure 1-8**. Connecting the pedestrians from the bridge section to the causeway island section will be a 14 ft. shared use path spiral ramp (helix) which is described in the *PER (*August 2024*)* and shown in **Figure 3-3** and **Figure 3-4**. All proposed pedestrian features will tie to existing sidewalks at both eastern and western project limits. To provide complete connectivity for pedestrians a midblock crossing is proposed just east of West Broadview Drive at Sta 144+80 (**Figure 3-5**). The midblock crossing will connect pedestrians to the south sidewalk east of the project and will include warning signs and other special emphasis features to alert drivers of the upcoming crossing. During design the mid-block crossing will be further analyzed to determine what the safest and most efficient option will be for pedestrian and bicycle crossing. Potential design options include Rapid Rectangular Flashing Beacons and overhead pedestrian signals.

Extensive wayfinding signs will be included to direct pedestrian and bicycle movement in the vicinity of the bridge.

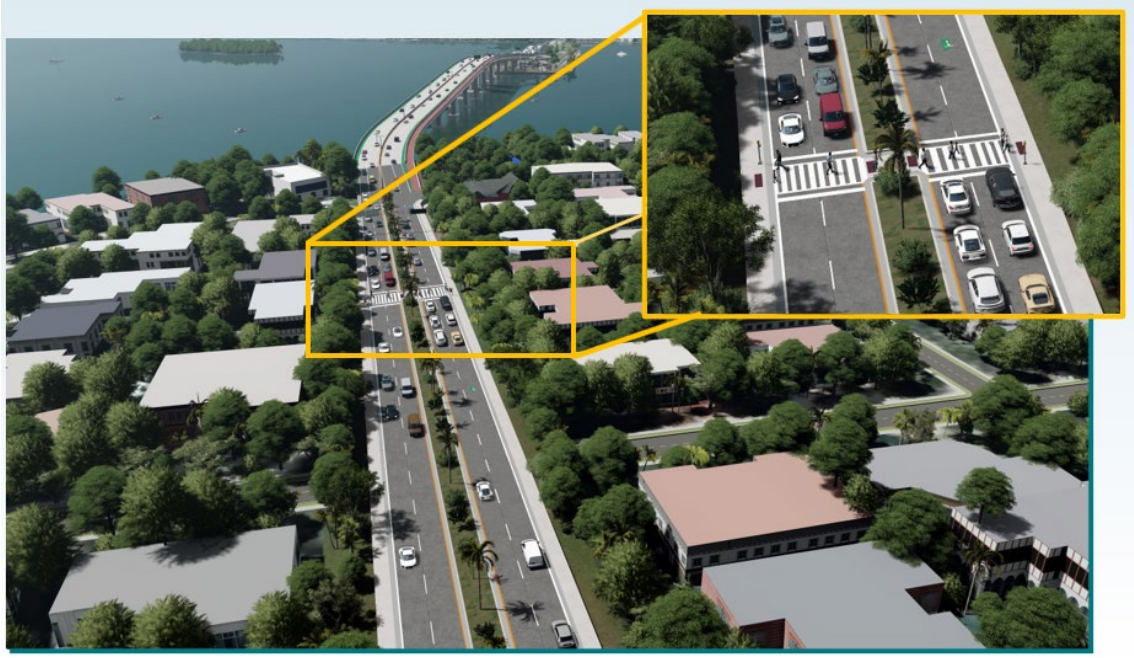
During construction, a temporary 5 ft. sidewalk will be constructed along the north side of the proposed bridge.

Under the No Build Alternative, no improvements would be made to bicycle and pedestrian facilities.

Figure 3-3 40 ft. Mid-Level Movable Bridge Alternative Spiral Ramp from Bridge to Causeway Island

Figure 3-4 65 ft. High-Level Fixed Bridge Alternative Spiral Ramp from Bridge to Causeway Island

Figure 3-5 Proposed Mid-Block Crossing East of West Broadview Drive



The multimodal operations were assessed by using the Level of Traffic Stress (LTS) metric. LTS is an approach developed by the Mineta Transportation Institute that focuses on classifying the comfort of pedestrians and bicyclists when using a roadway. The practice has been adopted by FDOT to quantify the impacts of a facilities features have on multimodal users' comfort levels. Determining LTS for a facility is based on a variety of factors and conditions, such as the presence and configuration of dedicated or mixed traffic facilities. Roadways were assigned a stress level of one to four, with LTS 1 signifying very low stress and LTS 4 signifying high stress. The design plans for the bridge reconstruction retains the shoulder that bicycles are permitted to use and develops a shared use path physically separated from the roadway.

In the existing conditions the level of traffic stress for a pedestrian and bicyclist crossing the bridge is LTS 4 (which is defined as a route that is impassible by a wheeled mobility device or a level tolerated only by those with limited route choice and/or a cycling enthusiast). After reviewing each characteristic in future build conditions, the level of traffic stress for pedestrians and bicyclist is expected to be LTS 1, which is a level that can be tolerated by all users. The installation of a shared use path separated from the roadway is expected to provide a safe and comfortable facility for all users willing to use the shared path which improved the LTS score. Additionally, if bicyclists would prefer to use the roadway, they are permitted to ride within the newly installed 8-foot shoulder. The width of the shoulder concludes cyclists utilizing the shoulder along the roadway is expected to be LTS 3 (which is a level tolerated by confident cyclists who still prefer having their own dedicated space for riding).

Transit routes already functioning within the corridor, including the Bay Harbor Islands Shuttle a transportation disadvantaged service provider, will remain active and uninterrupted during construction of the new bridge. No additional transit service or bus access facilities are anticipated with either of the build alternatives or with the No Build Alternative.

As previously mentioned, replacement of the bridge will improve commercial and recreational boating as the build alternative will have a higher vertical clearance and will allow passage of more vessels without requiring a bridge opening.

The proposed project improvements are intended to enhance overall mobility in the area by maintaining an important regional connection between the islands and mainland of northern Miami-Dade County and enhance access to businesses/destinations for bicyclists and pedestrians through the potential provision of new shared use path. Also, having free flow of traffic will help relieve congestion and facilitate emergency evacuation. Having free-flow traffic will provide better on time reliability of the Maimi-Dade Transit and Bay Harbor Islands Shuttle routes that are currently operating in the project area. The enhancements to pedestrian accommodations will provide better and safer access to bus and shuttle stops.

Under the No Build Alternative, the bridge will continue to open on the quarter and three-quarter hour if vessels are waiting. There will still be unsafe pedestrian and bicycle facilities. Therefore, mobility will not be improved with the No Build Alternative.

3.1.5 Aesthetic Effects

Viewshed and Compatibility

The existing bridge is the main artery into the Town and the community has voiced concerns of the positive and negative impacts a 65 ft. High-Level Fixed Bridge will have during construction and after the new bridge is opened. The proposed option was refined through various alternative meetings with the Town officials and community to provide alternatives that will address more than the Town's transportation needs. Currently, the Town owns and maintains just one park within the project limits (Tot Lot). The build alternatives would accommodate extra greenspace along the causeway island and provides the needed space the Town is looking for to potentially develop a park or a fitness destination.

Context sensitive solutions will be considered to ensure that the project accounts for the community's input on design preferences. However, the width and height profiles of the new bridge will alter viewsheds of the area from both the bridge and from the residents and recreational areas along the shoreline. **Figure 1-6** and **Figure 1-9** shows the profile of the 40-ft. Mid-Level Movable Bridge and the 65-ft. High-Level Fixed Bridge compared to the existing 15.7-ft. bascule bridge. **Figure 1-7** and **Figure 1-10** show renderings for each alternative of what the bridge will look like from the west island.

The improvements are intended to enhance the physical use and appeal of the bridge/corridor for pedestrians and bicyclists. Due to the increased vertical profile the 65 ft. Fixed-Bridge Alternative, there will be a completely different view shed for its users. The increased height will be highlighted on the 14 ft. shared use path where overlooks will be located on the east and west edges of the ICWW. The overlooks will give the users a place to rest or a place to take pictures and enjoy the 360-degree panoramic views of the Town of Bay Harbor Islands, Downtown Miami, and the ICWW.

Another special feature of the shared use path is the spiral ramp that will bring the users down to the causeway island from the 40 ft. Movable Bridge or 65 ft. Fixed Bridge. To provide safety measures on the spiral ramp, specific signage for pedestrians and bicyclists will be installed to indicate the direction of flow. Additionally, speed feedback signs can be implemented to alert users of their speed to promote caution while using the ramp. The spiral ramp will meet ADA requirements and have less of a design and construction footprint than a standard horizontal ramp on the causeway island. A smaller footprint would result in more greenspace for the Town to expand the causeway island with park features for their residents in the future.

The historical and aesthetic significance of the existing bridge was an important consideration in developing the build alternatives and are discussed further in the *Cultural Resources Assessment Survey* (April 2024). The Broad Causeway Bridge improvement project involves alternatives that could potentially change the visual setting of the area and affect the National Register of Historic Place eligible (NRHP-eligible) service station on the causeway island. The number of parcels included in the historical Area of Potential Effect (APE) is based primarily on the potential visual impacts, i.e., if a new bridge replaces the existing bridge. Because the anticipated changes could potentially affect existing historic districts and other cultural resources, the historical APE was developed through a viewshed analysis using the Geodesic Viewshed tool in the Environmental Systems Research Institute (ESRI) Arc GIS Pro proprietary software. The APE was then refined to only include parcels within a ½ mile radius that orient towards the project area.

The proposed bridge provides the opportunity for improved aesthetics and allows the Town to create a park or community facilities within the causeway island which today does not include any pedestrian space. During the design process, it will be necessary to gather input from community representatives and officials to identify specific details related to proposed landscapes and hardscapes.

Lighting and Treatments

The existing causeway island lighting will be replaced with new decorative LED luminaires mounted on new aluminum poles. The decorative LED luminaire to use will be coordinated with the Town. A USCG compliant navigation lighting system will be provided over the Intracoastal Waterway. The lighting poles on the proposed bridge will be mounted on pilasters and will include the shared-use path and the outside shoulders.

Lighting and aesthetic treatments, including gateway features, will be evaluated during the design phase. Bridge features such as aesthetics, landscaping and lighting will be coordinated with the community.

During construction, there may be temporary visual impacts that will be minimized through standard construction best management practices. The No-Build Alternative would have no aesthetic effects.

Noise and Vibration

In order to assess highway traffic noise levels associated with the project, a highway traffic noise study was completed in accordance with Title 23, Code of Federal Regulations, Part 772 (23 CFR 772), Procedures for Abatement of Highway Traffic Noise and Construction Noise following methodology and procedures established by the FDOT in the PD&E Manual, Part 2, Chapter 18, Highway Traffic Noise, and the FDOT *Traffic Noise Modeling and Analysis Practitioners Handbook (December 2018)*.

The Broad Causeway Bridge is anticipated to be replaced on new southern alignment with changes to the width and height to bring the bridge to current design standards and USCG requirements. Although capacity is not increasing, the vertical alignment and profile (height) of the bridge is changing; therefore, it could influence highway traffic noise. The FHWA's Traffic Noise Model (TNM) was used to predict existing noise levels for receptors located near roadways and where traffic noise is dominant. An evaluation of substantial increases was performed for this PD&E Study phase analysis. Each noise sensitive site was assigned an existing noise level based on TNM predicted existing noise levels. No eye clinics, laser facilities, or senior care facilities [or other features that have a higher propensity to be impacted by noise and vibration effects] are reported within the project vicinity. Within the project limits, 390 receptors were used to evaluate noise levels at noise sensitive sites. The noise sensitive land uses along Broad Causeway for which there is a NAC include:

- Activity Category B (residences) – 370 receptors representing 399 residences;
- Activity Category C – 16 receptors representing three parks and a school;
- Activity Category D – 1 receptor representing a library; and
- Activity Category E – 3 receptors representing a hotel, a motel and an outside dining area.

The *Noise Study Report* (July 2024) documents the noise levels predicted at 390 receptor points representing 399 residences and 8 special land uses (i.e. non-residential land uses). For the year 2050 Build condition, noise levels are predicted to approach, meet, or exceed the Noise Abatement Criteria (NAC) at 30 residences and one special land use within the project limits. Additionally, a substantial increase of 15 dB(A) is not predicted to occur at any residence or special land use. These impacted noise sensitive sites were evaluated to determine the feasibility and cost reasonableness of providing barriers to reduce traffic noise.

The noise barrier evaluation identified that noise barriers are not a reasonable and feasible form of abatement due to openings in the noise barrier to accommodate access requirements for driveways to residential parcels along Kane Concourse. Therefore, noise barriers are not recommended as part of this project**.**

Bridges are built with heavy construction equipment and there is potential for noise and vibration impacts. Early identification of potential noise and vibration sensitive sites along the project is important in minimizing these impacts. The noise barrier evaluation identified that noise barriers are not a reasonable and feasible form of abatement due to openings in the noise barrier to accommodate access requirements for driveways to residential parcels along Broad Causeway. Therefore, noise barriers are not recommended as part of this project**.** No eye clinics, laser facilities, or senior care facilities [other features that have a higher propensity to be impacted by noise and vibration effects] are reported within the project vicinity. Construction noise and vibration impacts to these sites will be minimized by adherence to the controls listed in the latest

edition of the FDOT's Standard Specifications. The use of a vibratory hammer will occur during daytime hours only.

The No Build Alternative would have no impacts to noise and vibration sensitive sites.

3.1.6 Relocation Potential

Included in the Town Charter by the 1953 Senate Bill No. 865, the State of Florida surrendered and granted to the Town any claim or control over all tidewaters and other lands, and all bayous and bay bottoms, beaches, waters, waterways and water bottoms, and all riparian rights within and adjacent to the Town limits for municipal purposes only, a strip of 300 ft. wide from Kane Concourse, westwardly across Biscayne Bay to approximately 123rd Street in the City of North Miami. The 65-ft. High-Level Fixed Bridge would be built within the 300 ft. area over Biscayne Bay under claim or control by the Town (**Figure 1-2**). The 40-ft. Mid-Level Movable Bridge would utilize the 300 ft. area but would extend outside of that buffer another 65 ft. due to the width of the typical section. This would not need additional ROW but would encroach into Sovereign Submerged Lands requiring a permanent easement.

Both build alternatives will avoid property relocation and ROW acquisitions; although, project impacts could include temporary driveway access closures and/or permanent driveway access modifications. The No Build Alternative would have no ROW or relocation impacts.

As the project advances to design, if relocations are found to be necessary, 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

Potential impacts to the community were minimized by maximizing use of the existing right-of-way for the bridge, roadway, and drainage. The USDOT Justice40 Dashboard does not identify the project area as disadvantaged.

Temporary construction impacts will occur as a result of the project and will be further examined in the Design Phase of the project. Effects could include construction-related traffic congestion, and construction noise. Maintenance of Traffic, including multi-modal considerations, will be further examined in the Design Phase of the project.

The width and height profiles of the new bridge may alter viewsheds of the area from both the bridge and from the residents and recreational areas along the shoreline. Context sensitive solutions will be considered to ensure that the project matches local aesthetics and accounts for the community's input on design preferences. During the design phase, bridge features such as aesthetic treatments, including gateway features, landscaping and lighting will be coordinated with the community.

4.2 Project Commitments

During construction, the Town will comply with all provisions in the most recent version of the FDOT *Standards Specifications for Road and Bridge Construction*. In addition, the Town is committed to the following:

1. During the design phase, the Town will coordinate bridge features such as aesthetic treatments, landscaping, gateway features, and lighting with the community.
2. The Town will coordinate with FDEP Office of Greenways and Trails during design regarding the temporary detour of the Florida Circumnavigational Saltwater Paddling Trail during construction of the new Broad Causeway Bridge.
3. As the Official with Jurisdiction, the Town commits to keeping the Tot Lot open during construction.
4. The FDOT will adhere to the stipulations included in the Memorandum of Agreement (MOA) between the FDOT and the State Historic Preservation Officer (SHPO).
5. The Town commits to providing uninterrupted access to the causeway island service station, during operating hours, during construction via the existing entry or an alternate entry point. If an alternate entry point is needed, detour signage and directions will be provided to the public to maintain access to the Section 4(f) protected property.

5.0 ENVIRONMENTAL JUSTICE, CIVIL RIGHTS, AND RELATED ISSUES

A Public Hearing was conducted on June 24, 2024, and public comments received have been taken into consideration. Therefore, Town of Bay Harbor Islands has made a final decision on the proposed action.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations, signed by the President on February 11, 1994, directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.

Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All, builds upon Executive Order 12898 issued in 1994 to address environmental justice in minority and low-income populations, by expanding commitments for all and significantly strengthening whole-of-government efforts toward reducing injustices and inequities.

All public meetings for the project have been advertised in accordance with the FDOT PD&E Manual, allowing opportunities for public participation activities by minority and low-income populations. Based on US DOT Policy Guidance, the FDOT has identified four factors to help determine if LEP services would be required. Based on review of these factors and the fact that the LEP population within a quarter mile of the project accounts for approximately from 14.18% of the population for this project, LEP services have been provided. All fact sheets, newsletters, newspaper ads, and meeting handouts have been provided in English and Spanish and translation services for public meeting have been made available by request for Spanish, Portuguese, French or Creole. Translation services were available in Spanish and Creole at the Public Hearing. No comments have been received during this study regarding conflicts with Title VI of the Civil Rights of 1964 or related statue.

Based on the analysis, the project will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further Environmental Justice analysis is required. Overall, the project is anticipated to improve the quality of life for all area residents and businesses by providing improved traffic flow, improving safety, and enhancing mobility and pedestrian accommodations.

5.1 Protected Populations in the Study Area

The USDOT Justice40 Dashboard and USCEQ Climate and Economic Justice Screening Tool do not identify the project area as disadvantaged. However, the USDOT ETC Explorer does not show the area as having disadvantaged Census Tracts. A portion of the project location within Census Tract 12.04, population in North Maimi southwest of the project limits is considered disadvantaged by USDOT SS4A as it meets five of the criteria: Historically Disadvantaged, Transportation Disadvantaged, Health Disadvantaged, Economy Disadvantaged, and Equity Disadvantaged.

Both build alternatives will avoid property relocation and ROW acquisitions; although, project impacts could include temporary driveway access closures and/or permanent driveway access modifications. The No Build Alternative would have no ROW or relocation impacts.

No protected populations have been identified that would be disproportionately affected. The project is not expected to contribute to social isolation of any special populations of elderly, handicapped, minority or transit-dependent groups.

5.2 Coordination and Participation

A *Public Involvement Program* (PIP) (February 2023) has been developed to engage all populations and is being carried out as an integral part of the project. The purpose of this program is to establish and maintain communication with the public at-large and individuals and agencies concerned with the project and its potential impacts.

Various public outreach and agency coordination activities took place throughout the PD&E study process to help develop, refine, and evaluate the various interchange alternatives. A summary of the meetings, including meeting notifications, presentations, display materials, comments, sign-in sheets and media coverage are provided in the *Comments and Coordination Report* (July 2024).

5.3 Summary of Potential Effects

As previously stated, the project is not expected to contribute to social isolation of any protected populations in the study area or disabled or elderly residents. It is anticipated that the proposed project will have a positive impact on community cohesiveness. The project does not add any new physical barriers that will bisect the neighborhoods or separate residences from community facilities such as churches, schools, recreation areas, shopping areas or civic or cultural facilities. The proposed project will not alter the existing routes or transit facilities within the corridor.

The project is consistent with local land use and growth management plans. The project will continue to support the noted land uses at existing densities.

The proposed replacement of Broad Causeway Bridge will result in positive economic impacts to and improve mobility in the project area by maintaining an important regional connection to jobs, essential services, and tourist destinations. Bridge replacement will improve commercial and recreational boating as the new bridges will have a higher vertical clearance and will allow passage

of more vessels without requiring a bridge opening. In addition, the project will reduce escalating maintenance costs of the existing bridge that is projected to continue if no corrective action occurs.

The proposed design will provide improved forms of bicycle access throughout the corridor and the needed pedestrian access that is completely missing today will be added to the project.

The existing bridge is the main artery into the Town and the community has voiced concerns of the positive and negative impacts a new bridge will have during construction and after the new bridge is opened. The proposed option was refined down through various alternative meetings with the Town officials and community to provide a product that will address more than the Town's transportation needs. However, the width and height profiles of the new bridge may alter viewsheds of the area from both the bridge and from the residents and recreational areas along the shoreline. Also, the viewshed of the NRHP-eligible service station of the causeway island would be altered.

For the year 2050 Build condition, noise levels are predicted to approach, meet, or exceed the Noise Abatement Criteria (NAC) at 30 residences and one special land use within the project limits. These impacted noise sensitive sites were evaluated to determine the feasibility and cost reasonableness of providing barriers to reduce traffic noise. Additionally, a substantial increase of 15 dB(A) is not predicted to occur at any residence or special land use.

There is also no property relocations or ROW acquisition proposed for the build alternatives; although, project impacts could include temporary driveway access closures and/or permanent driveway access modifications. Therefore, there are no direct impacts to social or community resources as the improvements are mainly to the bridges and approaches located on the causeway.

As documented in this evaluation, the replacement of the existing Broad Causeway Bridge over the ICWW will have minimal long-term and temporary negative impacts on the study area due to potential noise and vibration from construction, and visual impacts associated with the new vertical profile of the bridge, storage of construction materials, and establishment of temporary construction facilities and upon completion, is projected to increase quality of life through the improved bridge crossing and increased bicycle and pedestrian safety.

5.4 Mitigation and Enhancement Actions

No mitigation has been identified for social and economic resources and facilities.

Enhancement actions include:

- Existing pedestrian and bicycle facilities on the bridge, causeway island and bridge approaches will be reconstructed and improved to accommodate the proposed roadway features and enhanced pedestrian features.

- The build alternatives are anticipated to provide improved travel times for emergency services to and from the mainland and the Town of Bay Harbor Islands since traffic will not be required to stop periodically for the drawbridge to open or as often for the drawbridge to open depending on the alternative chosen. This will result in better response times and aid in emergency evacuation since there will be infrequent or no bridge openings. Furthermore, the addition of 8 ft. shoulders on both alternatives will allow vehicles to pull out of the traffic lanes, allowing emergency vehicles ingress/egress down the center of the roadway. This is not possible on the existing bridge.
- Due to the increased vertical profile the build alternatives will provide a completely different view shed for its users, the increased height will be highlighted on the 14 ft. shared use path where overlooks will be located on the east and west edges of the ICWW. The overlooks will give the users a place to rest if using the shared use path as an exercise destination or a place to take pictures and take in the 360-degree panoramic views of the Town of Bay Harbor Islands and Downtown Miami.
- The existing causeway island lighting will be replaced with new decorative LED luminaires mounted on new aluminum poles. Lighting and aesthetic treatments, including gateway features, will be evaluated. During the design phase, bridge features such as aesthetics, landscaping and lighting will be coordinated with the community.

5.5 Findings Regarding Disproportionate Adverse Effects

In accordance with the Executive Order 12898, Title VI of the Civil Rights Act of 1964 and Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency", the project team has made concerted efforts to reach out to disadvantaged groups. Public participation was solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Through the public involvement process, various public meetings were held, as outlined in *Comments and Coordination Report* (July 2024), which were advertised in the *Miami Herald* and *El Nuevo,* and the Florida Administrative Register and notifications were sent to members of communities and organizations in the immediate project vicinity to discuss the project. Based on the demographics of the project area and surrounding communities, including North Miami, the Town provided Limited English Proficiency (LEP) services and sent newsletters and meeting notices to the public in English and Spanish. Translation services were available upon request for all public meetings in Spanish, Portuguese, French, and Creole. Translation services were available in Spanish and Creole at the Public Hearing. There have been no reported Title VI concerns with this project.

There is also no property relocations or ROW acquisition proposed for the build alternatives. The proposed design will provide improved forms of bicycle access throughout the corridor and the needed pedestrian access will be added to the project.

Based on the analysis and public involvement conducted to date, the project will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further Environmental Justice analysis is required. Overall, the project is anticipated to improve the quality of life for area residents and businesses by providing improved traffic flow, improving safety, and enhancing mobility and pedestrian accommodations.

6.0 REFERENCES

1. Council on Environmental Quality (CEQ) Publishes Draft Climate and Economic Justice Screening Tool, Key Component in the Implementation of President Biden's Justice40 Initiative, CEQ, The White House.

   https://www.whitehouse.gov/ceq/news-updates/2022/02/18/ceq-publishes-draft-climate-and-economic-justice-screening-tool-key-component-in-the-implementation-of-president-bidens-justice40-initiative/ (accessed December 20, 2023).

2. Climate and Economic Justice Screening Tool, U.S. Climate Resilience Toolkit.

   https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5 (accessed December 20, 2023).

3. Equitable Transportation Community (ETC) Explorer, US Department of Transportation

   https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/ETC-Explorer---State-Results/ (accessed December 20, 2023).

4. FDOT's Bike Network Plan (October 2022).

   https://www.arcgis.com/home/webmap/viewer.html?webmap=3639641d82e34aafae60ecbba824c08b&extent=-80.8647,25.4056,-79.7365,26.0076

5. FDOT Bridge Management System Inspection Report and Comprehensive Inventory Data Report (CIDR), FDOT District 6, Miami, Florida, January 2023.

6. FDOT GIS. https://www.fdot.gov/statistics/gis/default.shtm

7. FDOT's Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (*Florida Greenbook 2018*).

   https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/floridagreenbook/2018-florida-greenbook.pdf?

8. FDOT PD&E Manual. https://www.fdot.gov/environment/pubs/pdeman/pdeman-current

9. FDOT "Standard Specifications for Road and Bridge Construction", January 2023.

10. FDOT, 2018. Traffic Noise Modeling and Analysis Practitioner's Handbook. https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/final-practitioners-handbook---december-2018-version.pdf?sfvrsn=95bb91d6_2. December 31, 2018.

11. Miami-Dade 2040 Bicycle/Pedestrian Plan (Miami-Dade MPO GPC V #7). https://miamidadetpo.org/library/plans/miami-dade-2040-bicycle-pedestrian-plan.pdf (accessed December 20, 2023).

12. Miami-Dade Transit Development Plan (TDP). https://www.miamidade.gov/transit/library/2023-2032-tdp-annual-update.pdf (accessed December 20, 2023).
13. *Miami Daily News*. "$975 Tolls Taken in Day on Causeway." *Miami Daily News*, October 24, 1951: 6-A.
14. —. "5 Causeways Now Link Mainland, Ocean Front." *Miami Daily News*, December 2, 1951: 2-F.
15. —. "Bay Harbor Islands Starts Building." *Miami Daily News*, May 11, 1947: 14-C.
16. —. "New Causeway Taking Shape at North End of Biscayne Bay." *Miami Daily News*, February 21, 1951: 1B.
17. —. "Open Sunday Afternoon October 14th." *Miami Daily News*, October 12, 1951: 22-A.
18. —. "Tomorrow, Free Orchids for the Ladies." *Miami Daily News*, April 18, 1952: 20-A.
19. —. "New Causeway to Honor Mayor." *Miami Sunday News*, November 12, 1950: 1C.
20. *Miami Sunday News*. "Last Bay Front Subdivision North of Miami "Community of Homes," Developers Declare." *Miami Sunday News*, April 8, 1951: 14-C.
21. Safe Streets and Roads for All (SS4A) Underserved Communities Census Tracts (Historically Disadvantaged Communities).

    https://www.arcgis.com/apps/dashboards/99f9268777ff4218867ceedfabe58a3a (accessed December 20, 2023).
22. https://snoflo.org/parks/florida/north-bayshore-william-lehman-park (accessed December 20, 2023).
23. Tolf, Robert. "In Bal Harbour, Shop 'til You Drop, Then Rest." *Sun Sentinel, South Florida*, August 13, 2000: 9J.
24. U.S. Department of Agriculture [USDA]. "Image MIA0003-09-015.sid." *FDOT A Plus*. May 7, 1951. https://fdotewp1.dot.state.fl.us/AerialPhotoLookUpSystem/ (accessed October 16, 2023).
25. U.S. Department of Transportation (USDOT) Justice40 Dashboard. https://www.transportation.gov/equity-Justice40 (accessed December 20, 2023).

Associated Project Documents and Reports

1. Comments and Coordination Report, MRG, July 2024.
2. Cultural Resource Assessment Survey Report, AtkinsRéalis, April 2024.

3. Type 2 Categorical Exclusion, AtkinsRéalis, 2024.
4. Noise Study Report, AtkinsRéalis, July 2024.
5. Preliminary Engineering Report, AtkinsRéalis, August 2024.
6. Project Traffic Analysis Report, AtkinsRéalis, March 2024.
7. Public Involvement Program, MRG, February 2023.

7.0 APPENDICES

APPENDIX A – CONCEPT PLANS

APPENDIX B – SOCIOCULTURAL DATA REPORT

APPENDIX A – CONCEPT PLANS

STATE OF FLORIDA

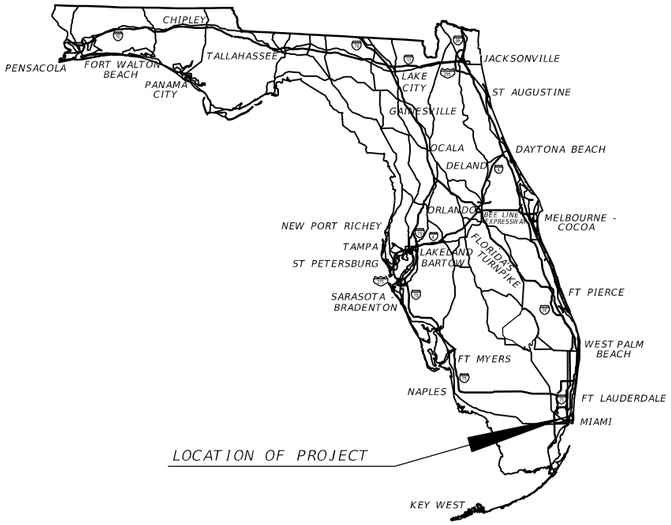
DEPARTMENT OF TRANSPORTATION

CONCEPT PLANS

FINANCIAL PROJECT ID 452428-1-21-01

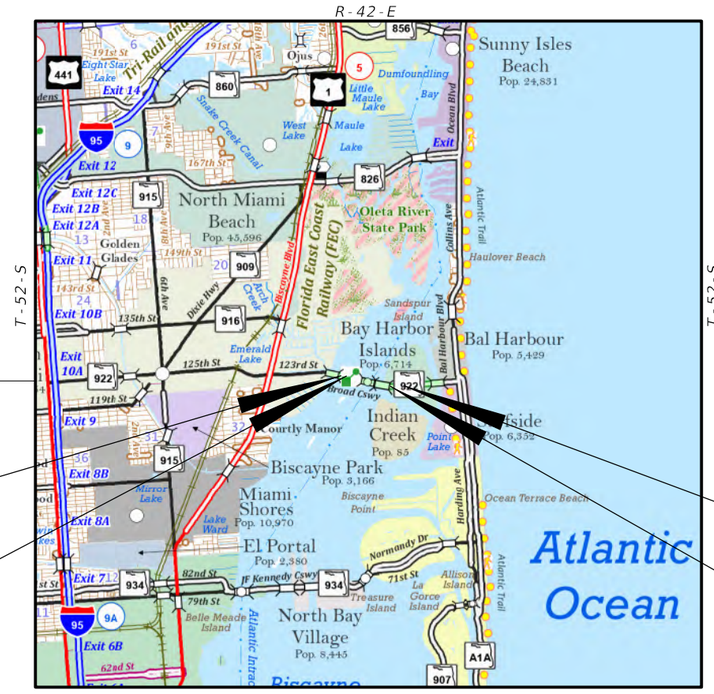
MIAMI-DADE COUNTY

BROAD CAUSEWAY / KANE CONCOURSE



INDEX OF ROADWAY PLANS

R-42-E



CITY OF NORTH MIAMI

BEGIN PROJECT:
STA. 105+21.37
℄ CONST. FL-922

BEGIN BRIDGE:
STA. 109+71.97
℄ CONST. FL-922

END PROJECT:
STA. 145+56.01
℄ CONST. FL-922

END BRIDGE:
STA. 141+39.63
℄ CONST. FL-922

R-42-E

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2024-25 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

Standard Plans for Bridge Construction are included in the Structures Plans Component

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, June 2023 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks

ROADWAY PLANS
ENGINEER OF RECORD:

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P.E. LICENSE NUMBER 60921
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800 WATERFORD WAY, SUITE 700
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FDOT PROJECT MANAGER:

KIMBERLY TAVERAS

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
	24	1

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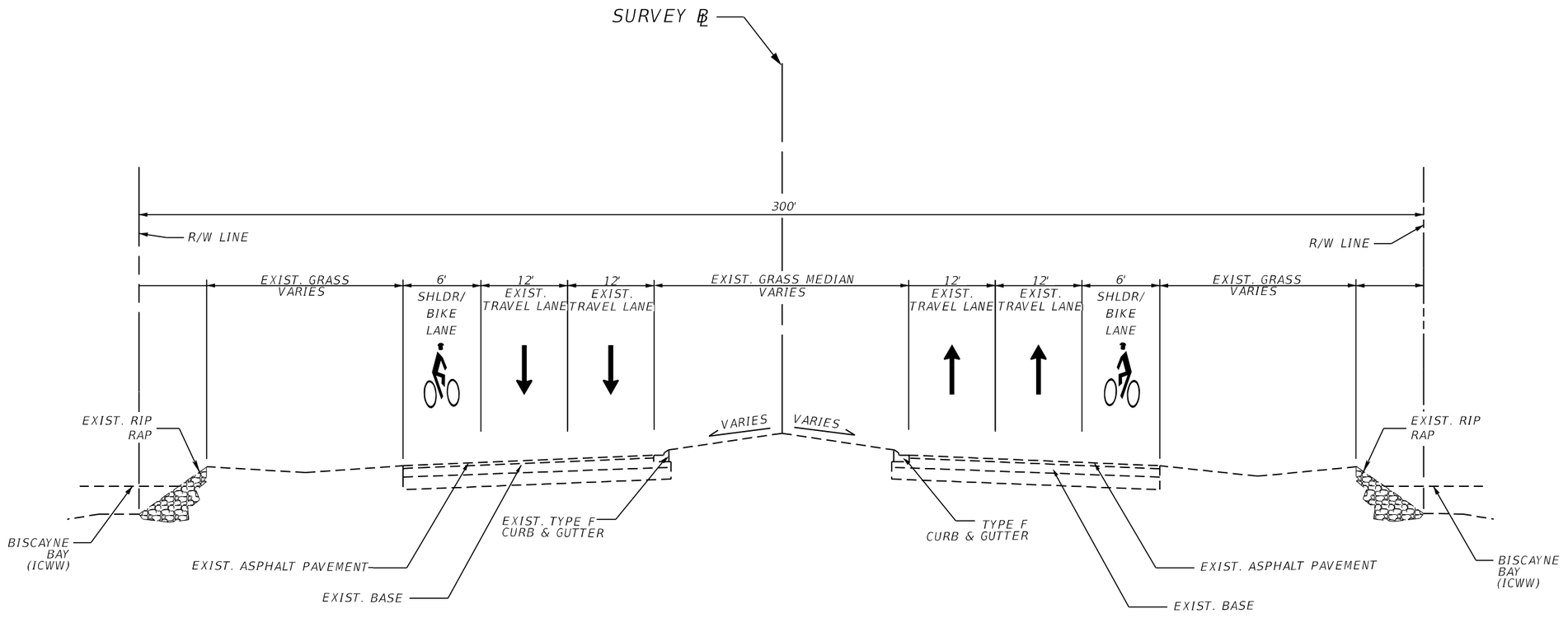

EXIST. TYPICAL SECTION NO. 1
BROAD CAUSEWAY BRIDGE/SR-922
STA. 105+21.37 TO STA. 123+85.28

NOT TO SCALE

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY, SUITE 700 MIAMI, FL 33126	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	EXISTING TYPICAL SECTION	2
					SR-922	MIAMI-DADE	452428-1-21-01		

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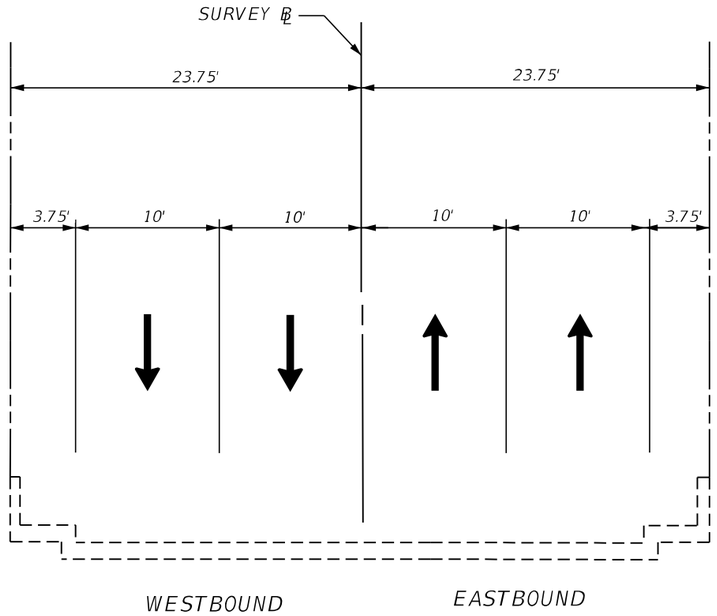

EXIST. TYPICAL SECTION NO.2
BROAD CAUSEWAY BRIDGE NO. 875101
STA. 123+85.28 TO STA. 140+15.28

NOT TO SCALE

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY, SUITE 700 MIAMI, FL 33126	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	EXISTING TYPICAL SECTION	3
					SR-922	MIAMI-DADE	452428-1-21-01		

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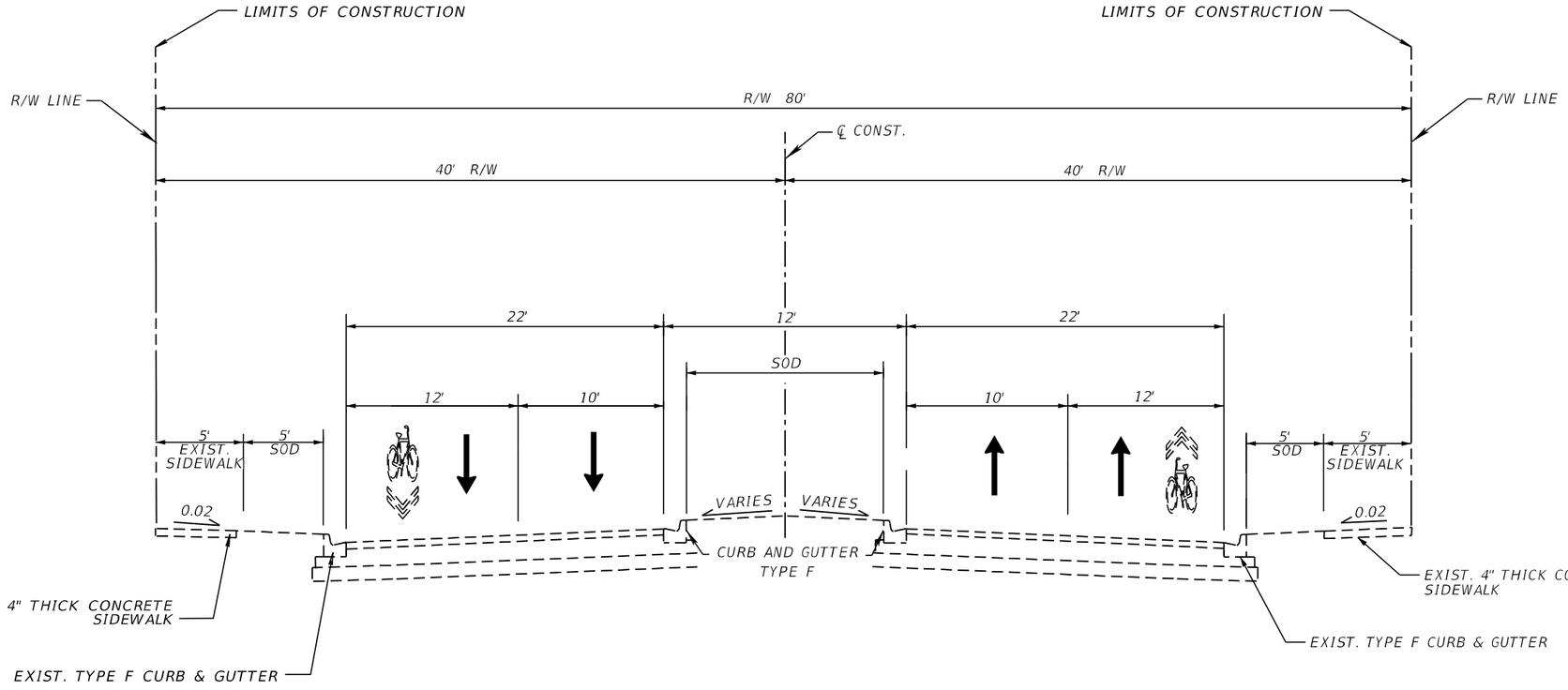
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



EXIST. TYPICAL SECTION NO. 3
KANE CONCOURSE
STA. 141+41.25 TO STA. 145+56.01

NOT TO SCALE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

EXISTING TYPICAL SECTION

SHEET NO. 4

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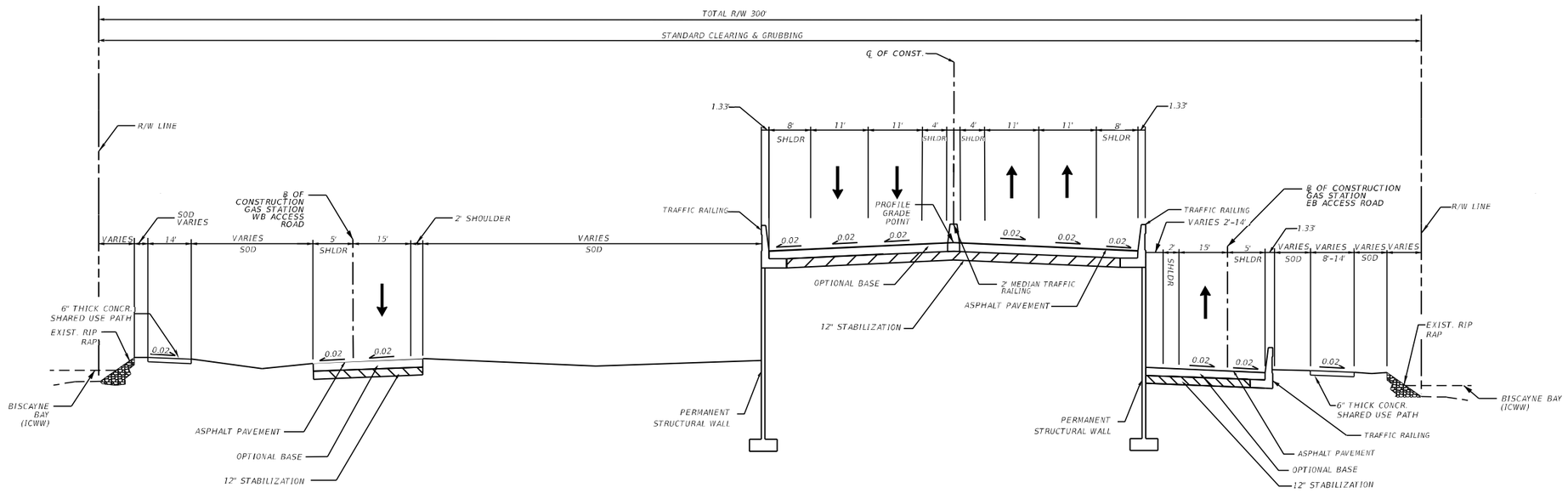

PROP. TYPICAL SECTION NO. 1
BROAD CAUSEWAY WALL PORTION WEST OF ICWW
MSE ROAD TRANSITION FROM EXISTING GRADE TO PROP. BRIDGE ELEVATION
STA. 105+21.37 TO STA. 111+79.50

NOT TO SCALE

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PROPOSED TYPICAL SECTION	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY, SUITE 700 MIAMI, FL 33126	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		5
					SR-922	MIAMI-DADE	452428-1-21-01		

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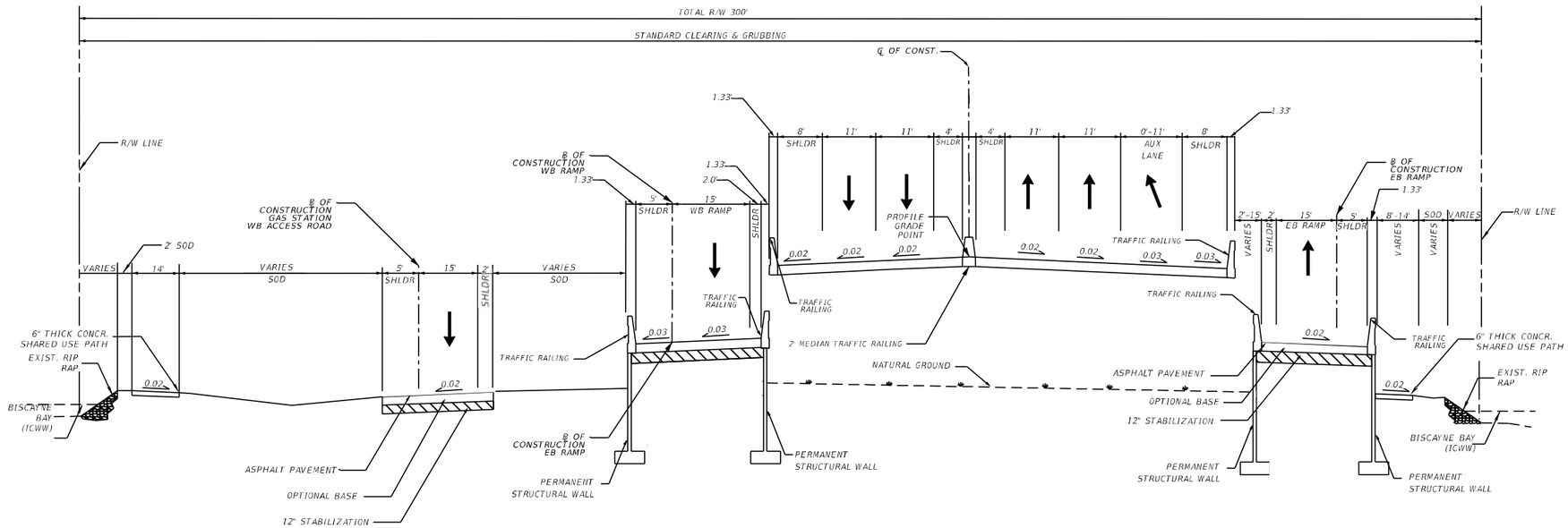

PROP. TYPICAL SECTION NO. 2
BROAD CAUSEWAY WESTBOUND AND EASTBOUND RAMP OF ICWW
STA. 111+79.50 TO STA. 124+00.00

NOT TO SCALE

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PROPOSED TYPICAL SECTION	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY, SUITE 700 MIAMI, FL 33126	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		6
					SR-922	MIAMI-DADE	452428-1-21-01		

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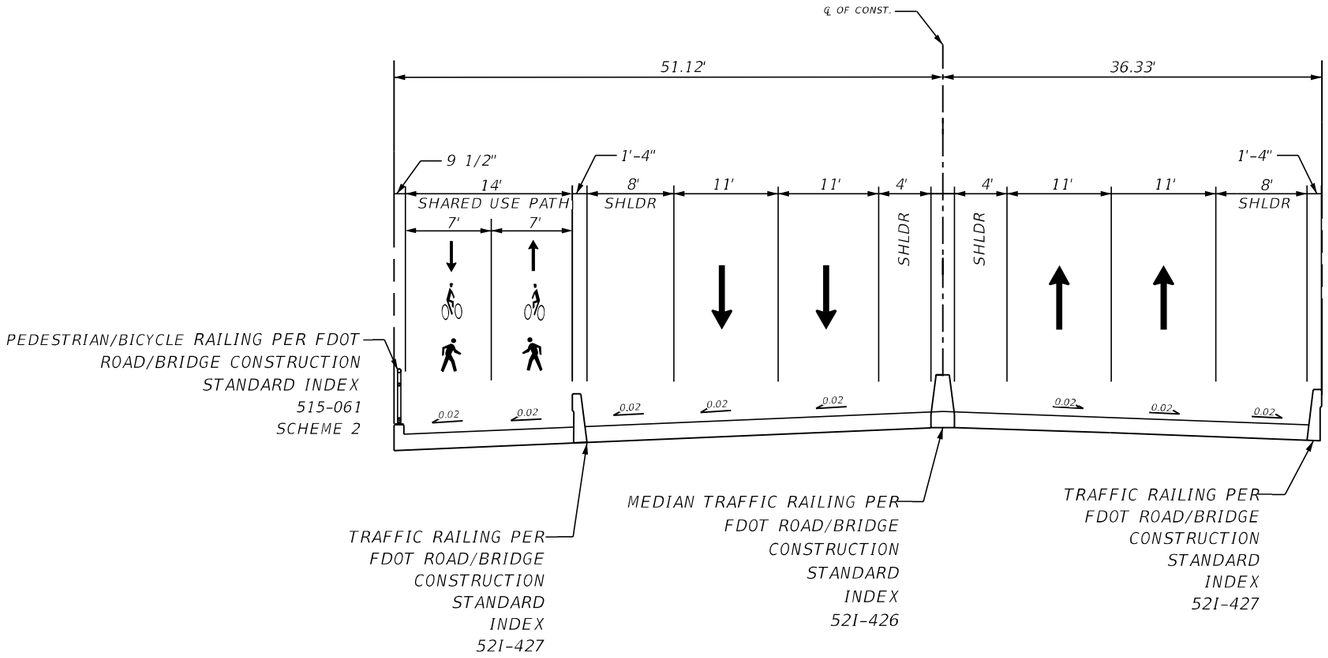
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



PROP. TYPICAL SECTION NO. 3
BROAD CAUSEWAY BRIDGE OVER ICWW
STA. 124+00.00 TO STA. 141+41.25

NOT TO SCALE

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PROPOSED TYPICAL SECTION	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY, SUITE 700 MIAMI, FL 33126	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		7
					SR-922	MIAMI-DADE	452428-1-21-01		

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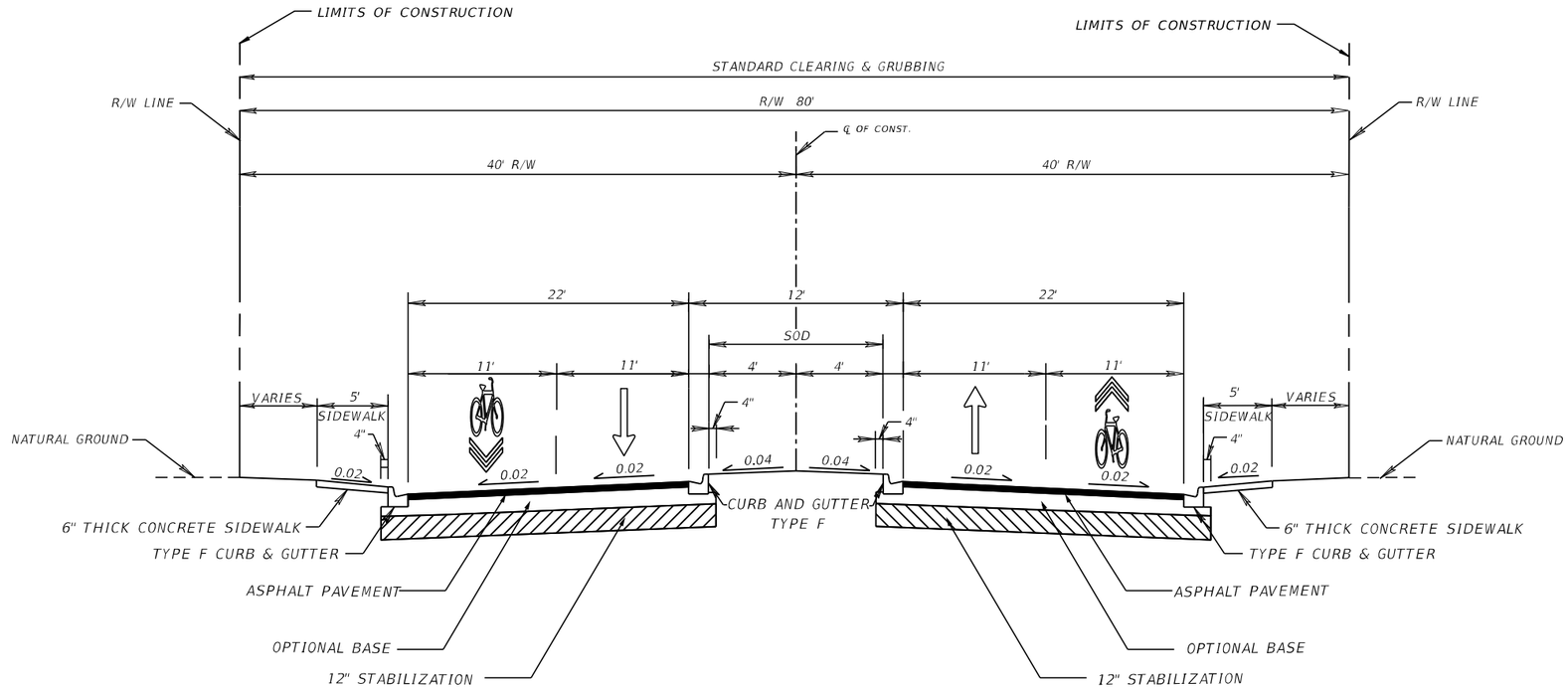

PROP. TYPICAL SECTION NO. 4
KANE CONCOURSE EAST OF ICWW
ROAD RECONSTRUCTION
STA. 141+41.25 TO STA. 145+56.01

NOT TO SCALE

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PROPOSED TYPICAL SECTION	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY, SUITE 700 MIAMI, FL 33126	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		8
					SR-922	MIAMI-DADE	452428-1-21-01		

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C1
PI STA. = 106+50.05
Δ = 07°42'20" (RT)
D = 02°36'16"
T = 148.16
L = 295.87
R = 2,200.00
PC STA. = 105+01.89
PT STA. = 107+97.76
e = NC

C2
PI STA. = 109+15.26
Δ = 07°03'09" (LT)
D = 03°00'17"
T = 117.50
L = 234.70
R = 1,906.78
PC STA. = 107+97.76
PT STA. = 110+32.46
e = NC

C3
PI STA. = 119+45.69
Δ = 02°28'13" (RT)
D = 00°57'18"
T = 129.36
L = 258.68
R = 6,000.00
PC STA. = 118+16.33
PT STA. = 120+75.01
e = NC

C4
PI STA. = 127+15.55
Δ = 03°16'15" (LT)
D = 00°57'18"
T = 171.31
L = 342.52
R = 6,000.00
PC STA. = 125+44.24
PT STA. = 128+86.76
e = NC

C5
PI STA. = 139+78.96
Δ = 16°49'15" (LT)
D = 05°05'51"
T = 166.19
L = 329.98
R = 1,124.00
PC STA. = 138+12.77
PT STA. = 141+42.76
e = NC

C6
PI STA. = 206+43.97
Δ = 04°01'32" (RT)
D = 03°55'28"
T = 51.31
L = 102.58
R = 1,460.00
PC STA. = 205+92.66
PT STA. = 206+95.24
e = NC

C7
PI STA. = 207+45.58
Δ = 15°36'59" (RT)
D = 15°36'24"
T = 50.34
L = 100.06
R = 367.13
PC STA. = 206+95.24
PT STA. = 207+95.30
e = NC

C8
PI STA. = 208+41.77
Δ = 22°41'49" (LT)
D = 24°44'52"
T = 46.47
L = 91.71
R = 231.52
PC STA. = 207+95.30
PT STA. = 208+87.01
e = NC

C9
PI STA. = 222+43.89
Δ = 91°36'17" (LT)
D = 122°21'46"
T = 48.15
L = 74.86
R = 46.82
PC STA. = 221+95.74
PT STA. = 222+70.60
e = NC

C10
PI STA. = 313+97.96
Δ = 18°38'57" (LT)
D = 08°11'06"
T = 114.94
L = 227.84
R = 700.00
PC STA. = 312+83.02
PT STA. = 315+10.86
e = NC

C11
PI STA. = 22+87.31
Δ = 87°09'04" (RT)
D = 74°47'41"
T = 72.89
L = 116.52
R = 76.60
PC STA. = 22+14.42
PT STA. = 23+30.94
e = NC

C12
PI STA. = 1120+45.00
Δ = 359°22'07" (LT)
D = 124°33'22"
T = 0.25
L = 288.52
R = 46.00
PC STA. = 1120+44.74
PT STA. = 1123+33.26
e = NC

C13
PI STA. = 2117+65.40
Δ = 359°48'54" (LT)
D = 108°06'19"
T = 0.09
L = 332.84
R = 53.00
PC STA. = 2117+65.31
PT STA. = 2120+98.15
e = NC

C14
PI STA. = 3119+89.08
Δ = 318°34'18" (LT)
D = 95°29'35"
T = 22.69
L = 333.61
R = 60.00
PC STA. = 3119+66.39
PT STA. = 3123+00.00
e = NC

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

PROJECT LAYOUT

SHEET NO. 9

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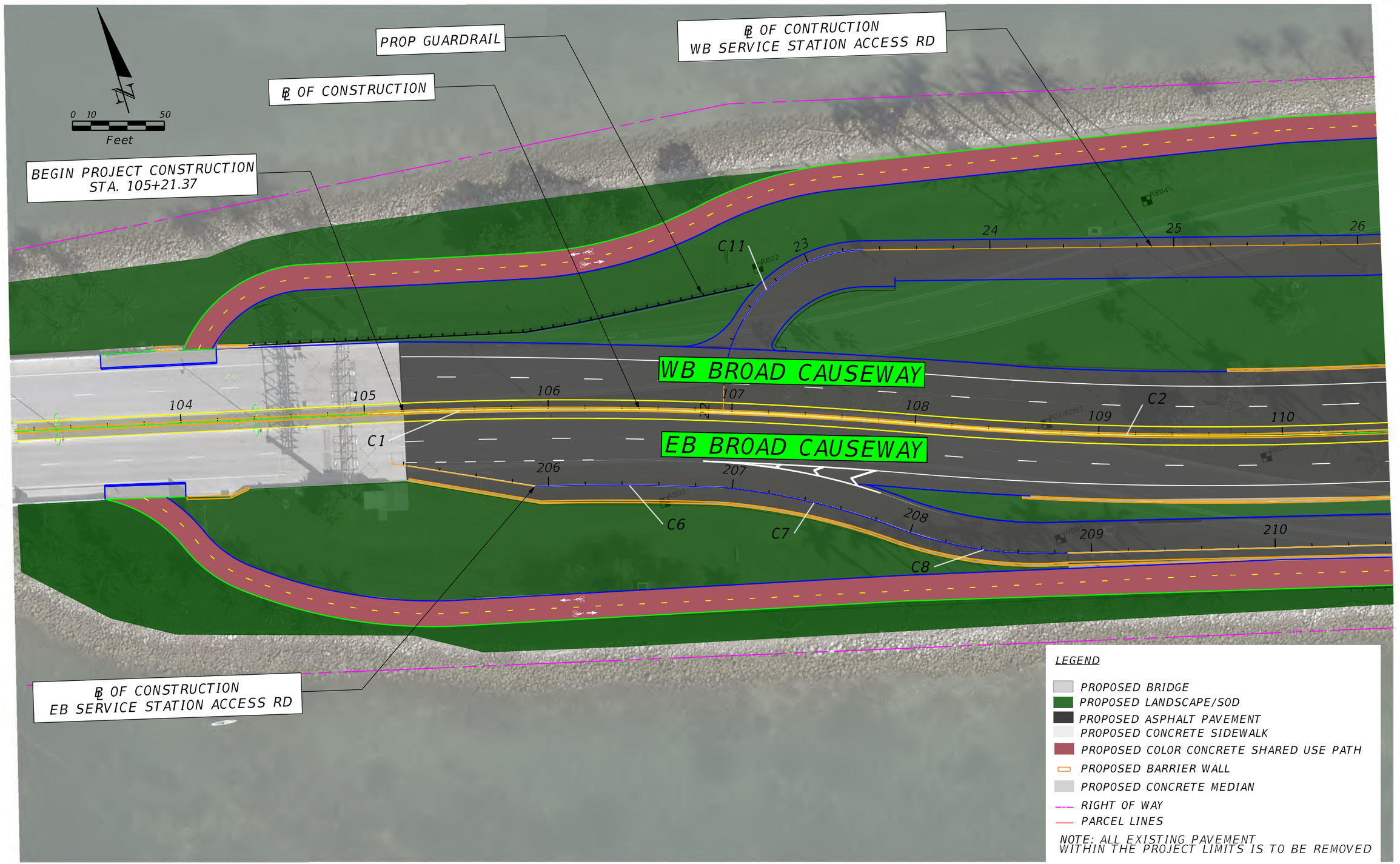

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY SUITE 700 MIAMI, FL 33126	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PLAN SHEET (1)	10
					SR-922	MIAMI-DADE	425428-1-21-01		

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℄ OF CONSTRUCTION

WB SERVICE STATION ACCESS RD

℄ OF CONSTRUCTION WB RAMP
BEGIN BRIDGE STA 315+68.25

℄ OF CONSTRUCTION
WB SERVICE STATION ACCESS RD

N

0 10 50
Feet

WB BROAD CAUSEWAY

EB BROAD CAUSEWAY

BEGIN BRIDGE CONSTRUCTION STA. 111+61.75

℄ OF CONSTRUCTION EB
SERVICE STATION ACCESS RD

BEGIN BRIDGE STA 215+00.00

EB RAMP

END EB RAMP STA 218+15.36

LEGEND

- PROPOSED BRIDGE
- PROPOSED LANDSCAPE/SOD
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED COLOR CONCRETE SHARED USE PATH
- PROPOSED BARRIER WALL
- PROPOSED CONCRETE MEDIAN
- RIGHT OF WAY
- PARCEL LINES

NOTE: ALL EXISTING PAVEMENT
WITHIN THE PROJECT LIMITS IS TO BE REMOVED

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
,

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	425428-1-21-01

PLAN SHEET (2)

SHEET NO. 11

7/30/2024 4:33:29 PM MONS7230
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REVISIONS				JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY SUITE 700 MIAMI, FL 33126	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SHEET (3)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR-922	MIAMI-DADE	452428-1-21-01		12

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INTRACOASTAL WATERWAY

EXIST. BRIDGE TO BE REMOVED

EXIST. BRIDGE TO BE REMOVED

N

0 10 50

Feet

WB BROAD CAUSEWAY

126 127 128 129 130 131 132 133

EB BROAD CAUSEWAY

C4

INTRACOASTAL WATERWAY

℄ OF CONSTRUCTION

LEGEND

- PROPOSED BRIDGE
- PROPOSED LANDSCAPE/SOD
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED COLOR CONCRETE SHARED USE PATH
- PROPOSED BARRIER WALL
- PROPOSED CONCRETE SIDEWALK
- RIGHT OF WAY
- PARCEL LINES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

PLAN SHEET (4)

SHEET NO. 13

5/3/2024 3:16:28 PM USER: MONS7230
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THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

EXIST. BRIDGE TO BE REMOVED

WB BROAD CAUSEWAY

EB BROAD CAUSEWAY

℄ OF CONSTRUCTION

134 135 136 137 138 139 140

S76°13'8"E

C5

0 10 50
Feet

LEGEND

- PROPOSED BRIDGE
- PROPOSED LANDSCAPE/SOD
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED COLOR CONCRETE SHARED USE PATH
- PROPOSED BARRIER WALL
- PROPOSED CONCRETE MEDIAN
- RIGHT OF WAY
- PARCEL LINES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

PLAN SHEET (5)

SHEET NO. 14

7/23/2024 11:27:43 AM MONS7230
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BAY HARBOR ISLANDS TOT LOT

W. BROADVIEW DR.

℄ OF CONSTRUCTION

EXIST. BRIDGE TO BE REMOVED

KANE CONCOURSE

KANE CONCOURSE

141 142 143 144 145 146 147 148

END PROJECT CONSTRUCTION
STA. 145+56.01
MATCH EXISTING

N86°57'37"E

END BRIDGE CONSTRUCTION
STA. 140+80.50

W. BROADVIEW DR.

N

0 10 50
Feet

LEGEND

- PROPOSED BRIDGE
- PROPOSED LANDSCAPE/SOD
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED COLOR CONCRETE SHARED USE PATH
- PROPOSED BARRIER WALL
- PROPOSED CONCRETE MEDIAN
- RIGHT OF WAY
- PARCEL LINES

NOTE: ALL EXISTING PAVEMENT WITHIN THE PROJECT LIMITS IS TO BE REMOVED

REVISIONS				LICENSE NUMBER:	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SHEET (6)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	,	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR-922	MIAMI-DADE	425428-1-21-01		15

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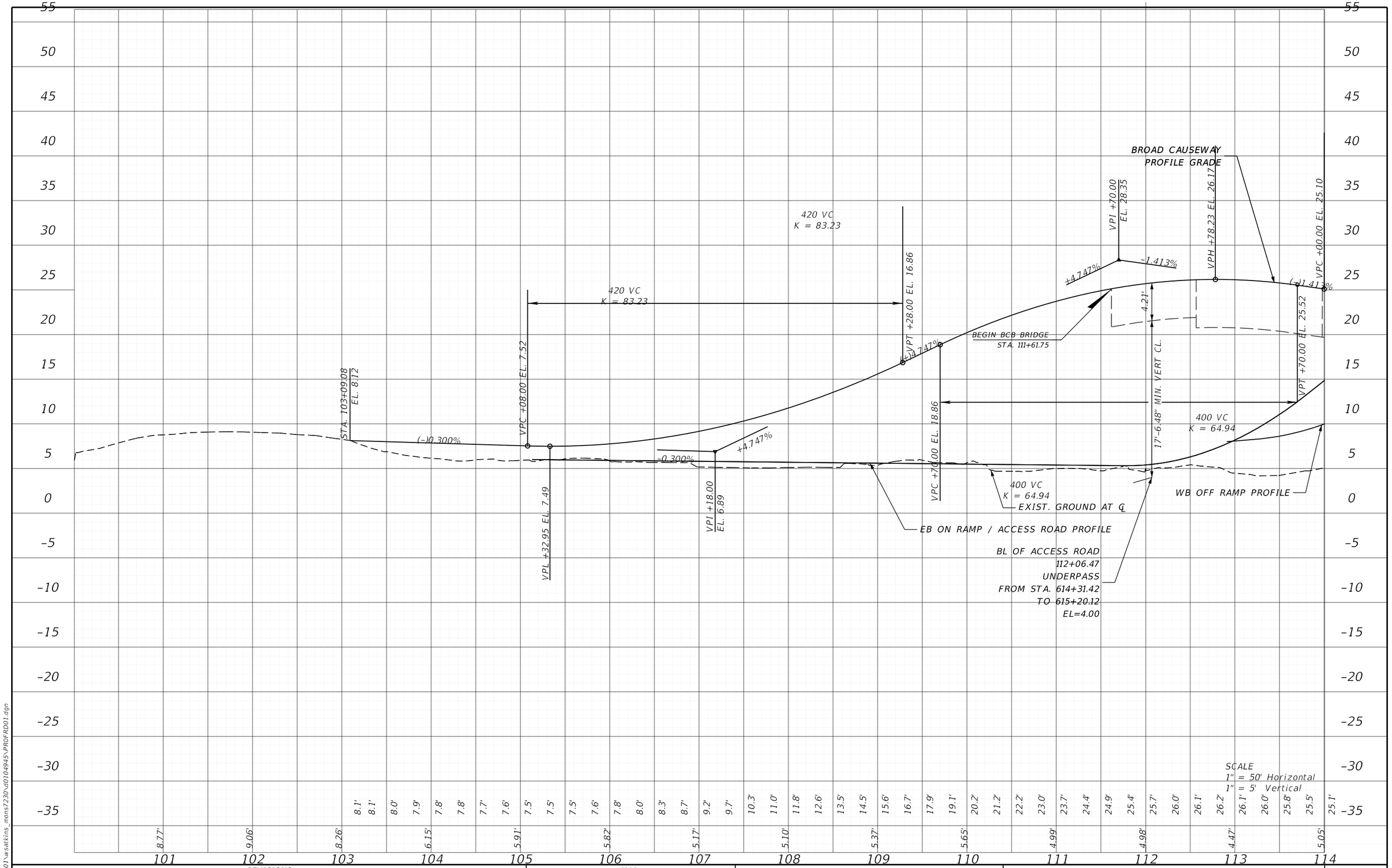

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

N/A

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

BROAD CAUSEWAY PROFILE

SHEET NO. 16

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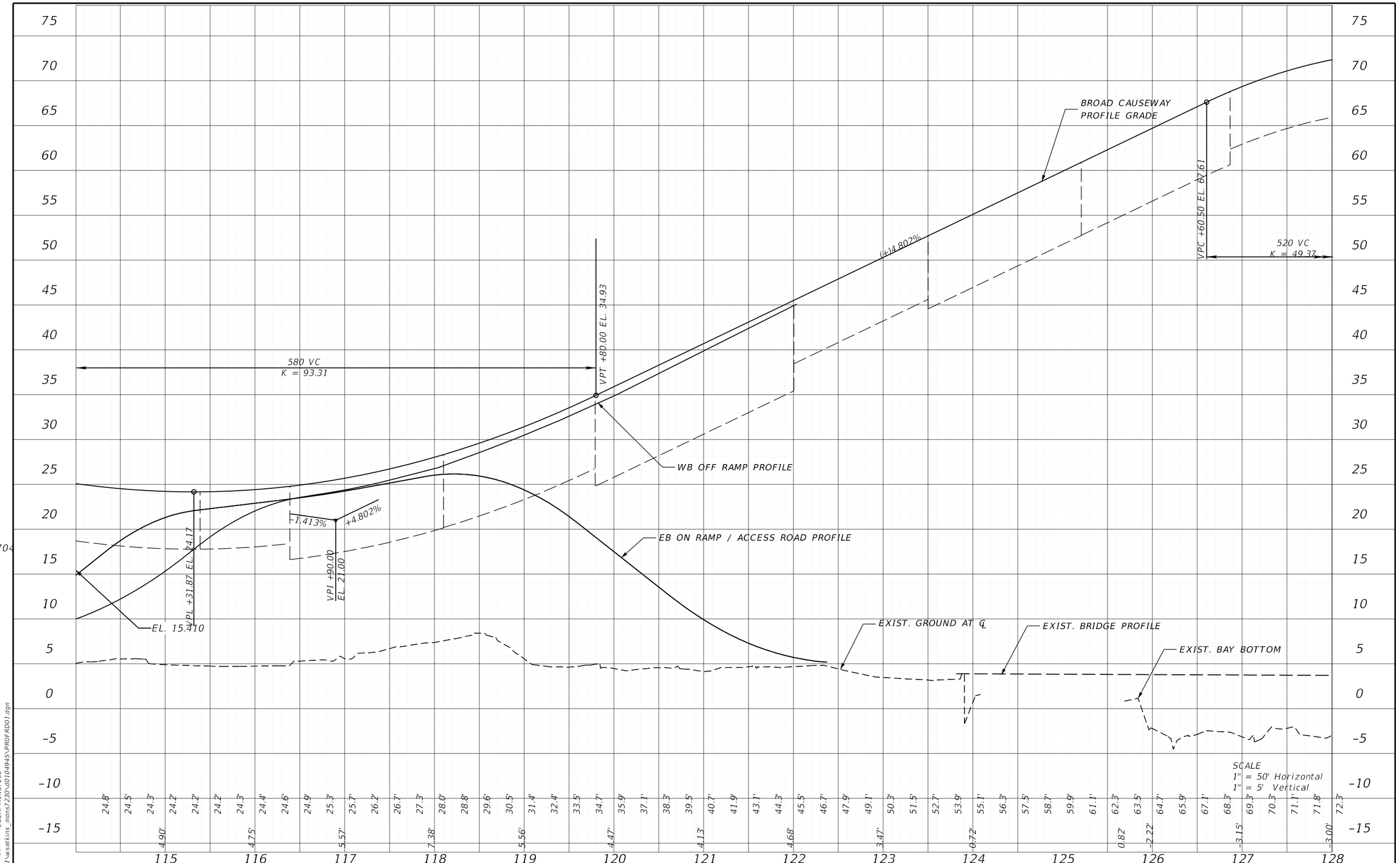

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

N/A

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

BROAD CAUSEWAY PROFILE

SHEET NO. 17

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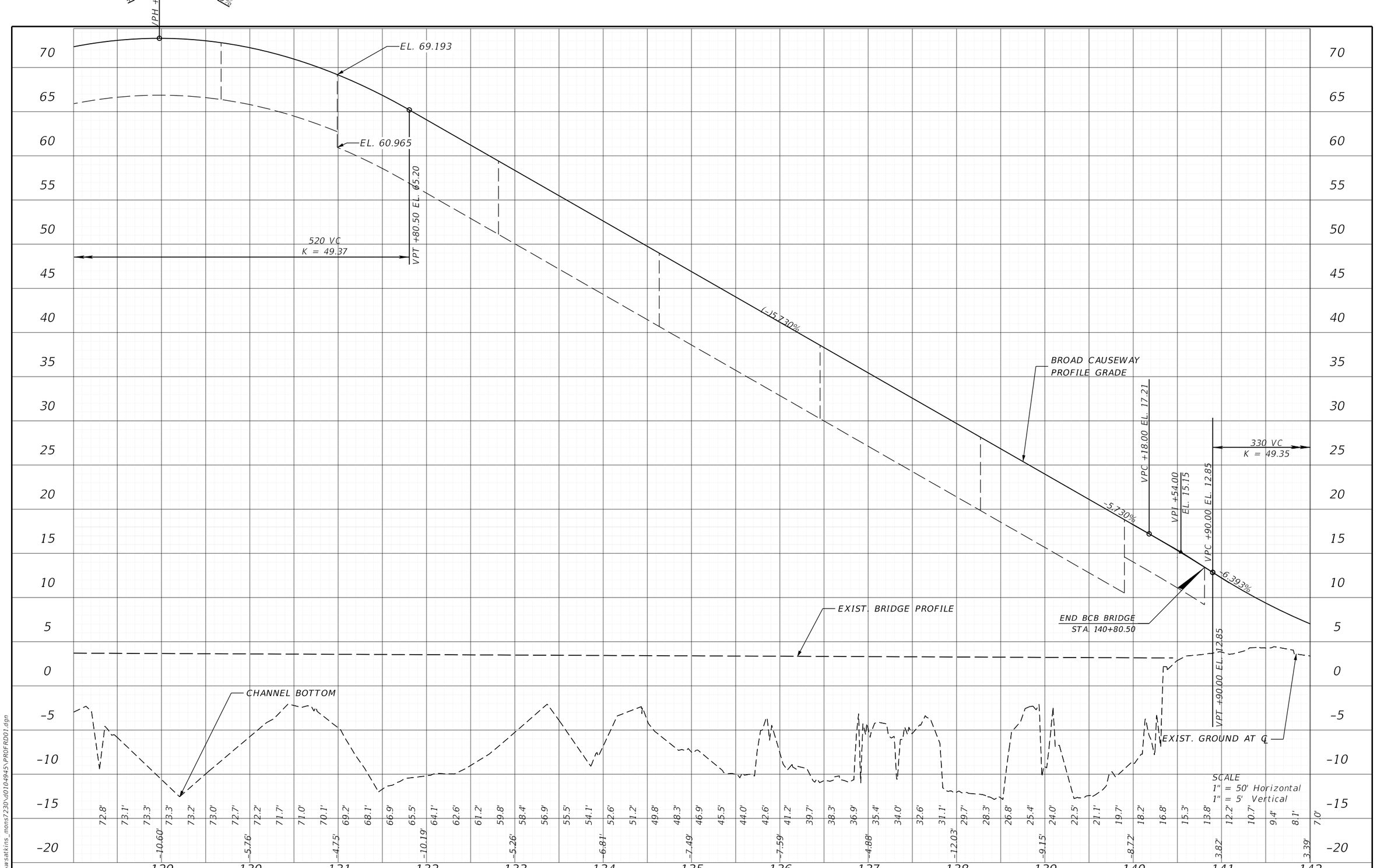

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

BROAD CAUSEWAY PROFILE

SHEET NO. 18

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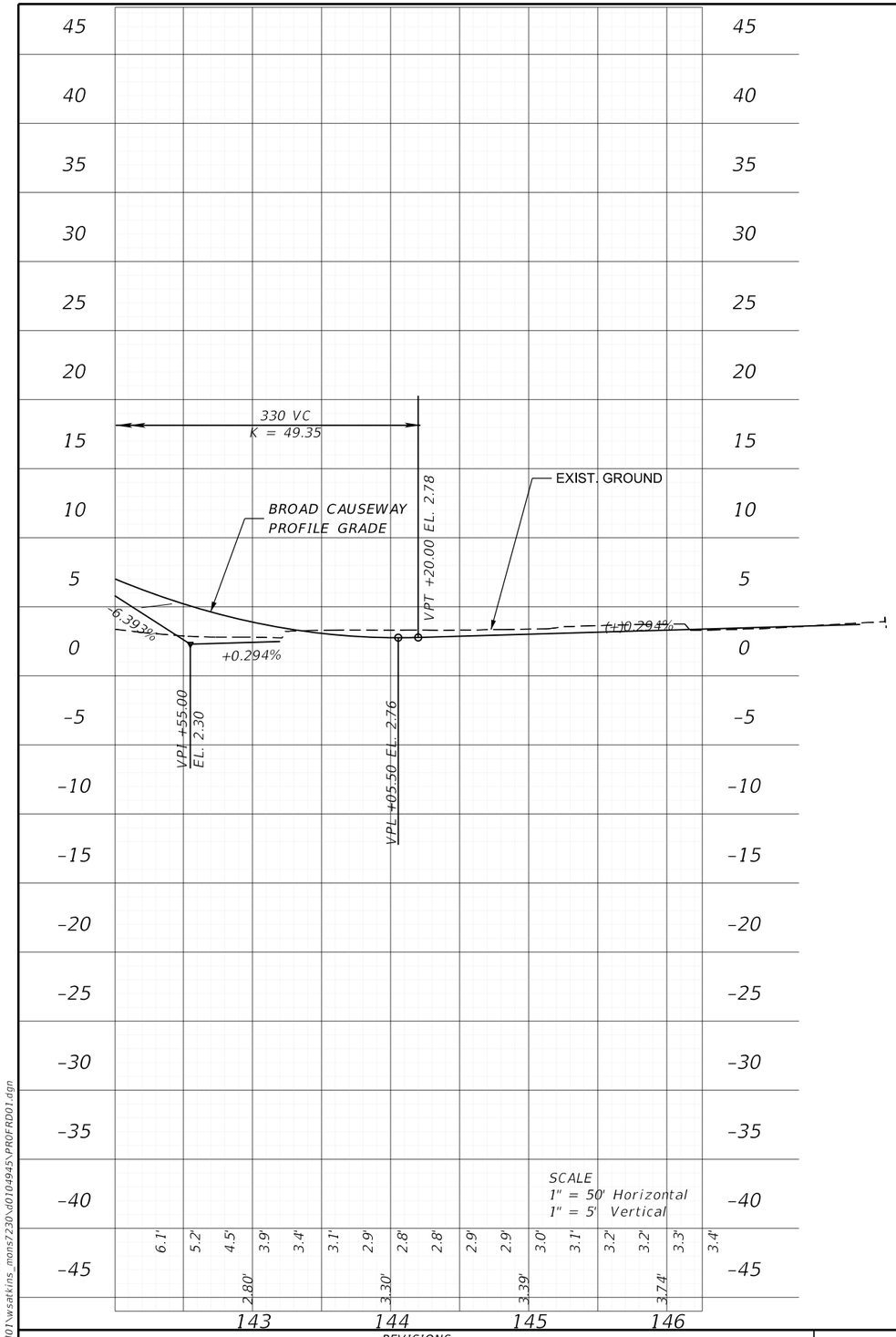

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

BROAD CAUSEWAY PROFILE

SHEET NO. 19

BROAD CAUSEWAY
PROFILE GRADE

STA. 312+83.25
EL. 8.00

(+)0.804%

VPC +18.00 EL. 8.28

204 VC
K = 28.35

VPT +22.00 EL. 17.26

(+8.000%

+8.000%

+0.804%

VPI +20.00
EL. 9.10

VPC +31.36 EL. 18.01

116 VC
K = 18.10

VPT +47.36 EL. 23.57

VPI +89.36
EL. 22.65

+1.593%

(+)1.593%

VPC +75.00 EL. 24.01

80 VC
K = 80.35

VPT +55.00 EL. 25.69

+1.593%

VPI +15.00
EL. 24.65

+2.588%

(+)2.588%

STA. 318+00.00
EL. 26.85

(+)3.613%

STA. 318+51.43
EL. 28.71

(+)3.853%

STA. 318+92.75
EL. 30.30

(+)3.116%

WB OFF RAMP
PROFILE

EXIST. GROUND AT ℄ OF RAMP

SCALE
1" = 50' Horizontal
1" = 5' Vertical

312	313	314	315	316	317	318
	4.41' 8.1' 8.3'	8.7' 9.3' 10.1' 11.2'	6.35' 12.4' 13.9' 15.6' 17.5'	6.54' 19.4' 21.0' 22.2' 23.1'	3.83' 23.6' 24.0' 24.5' 25.0'	0.56' 25.6' 26.2' 26.8' 27.8' 28.7' 29.6'	3.42'

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

WB OFF RAMP PROFILE

SHEET NO. 20

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

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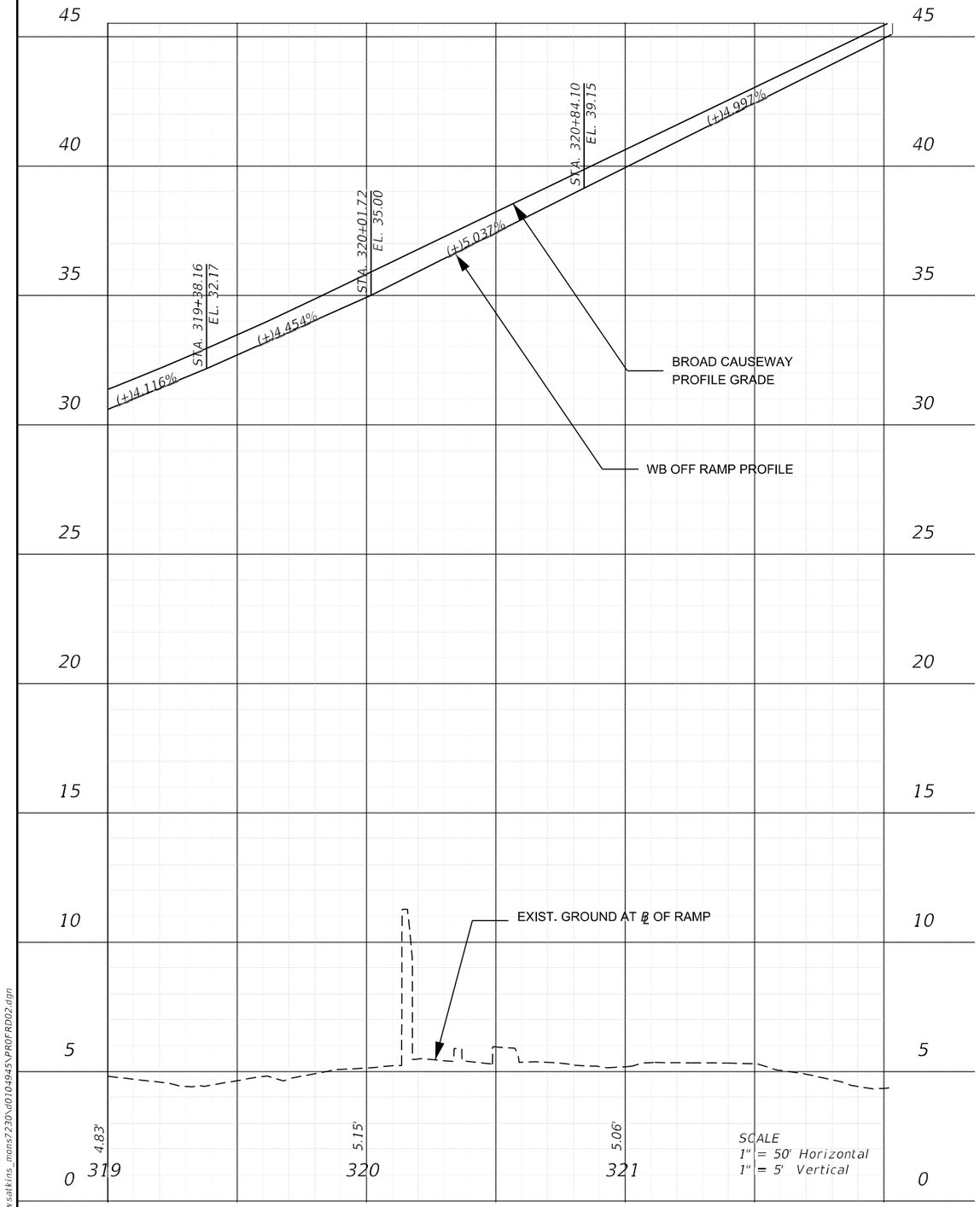

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DATE	DESCRIPTION	DATE	DESCRIPTION	JOHN A. SALATINO, P.E. LICENSE NUMBER: 60921 ATKINSREALIS 800 WATERFORD WAY, SUITE 700 MIAMI, FL 33126	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		21
					SR-922	MIAMI-DADE	452428-1-21-01		

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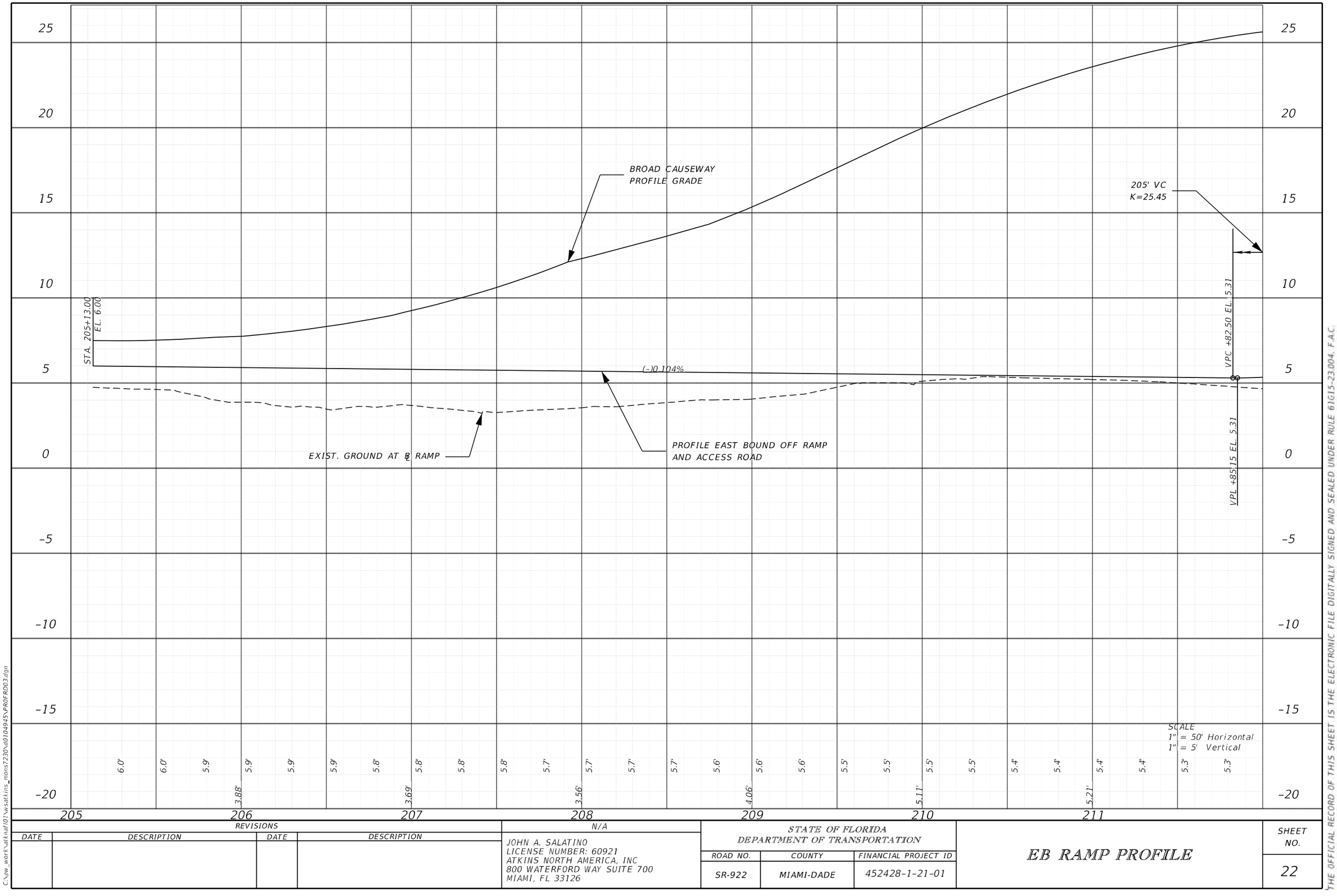

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

N/A

JOHN A. SALATINO
LICENSE NUMBER: 60921
ATKINS NORTH AMERICA, INC
800 WATERFORD WAY SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

EB RAMP PROFILE

SHEET NO. 22

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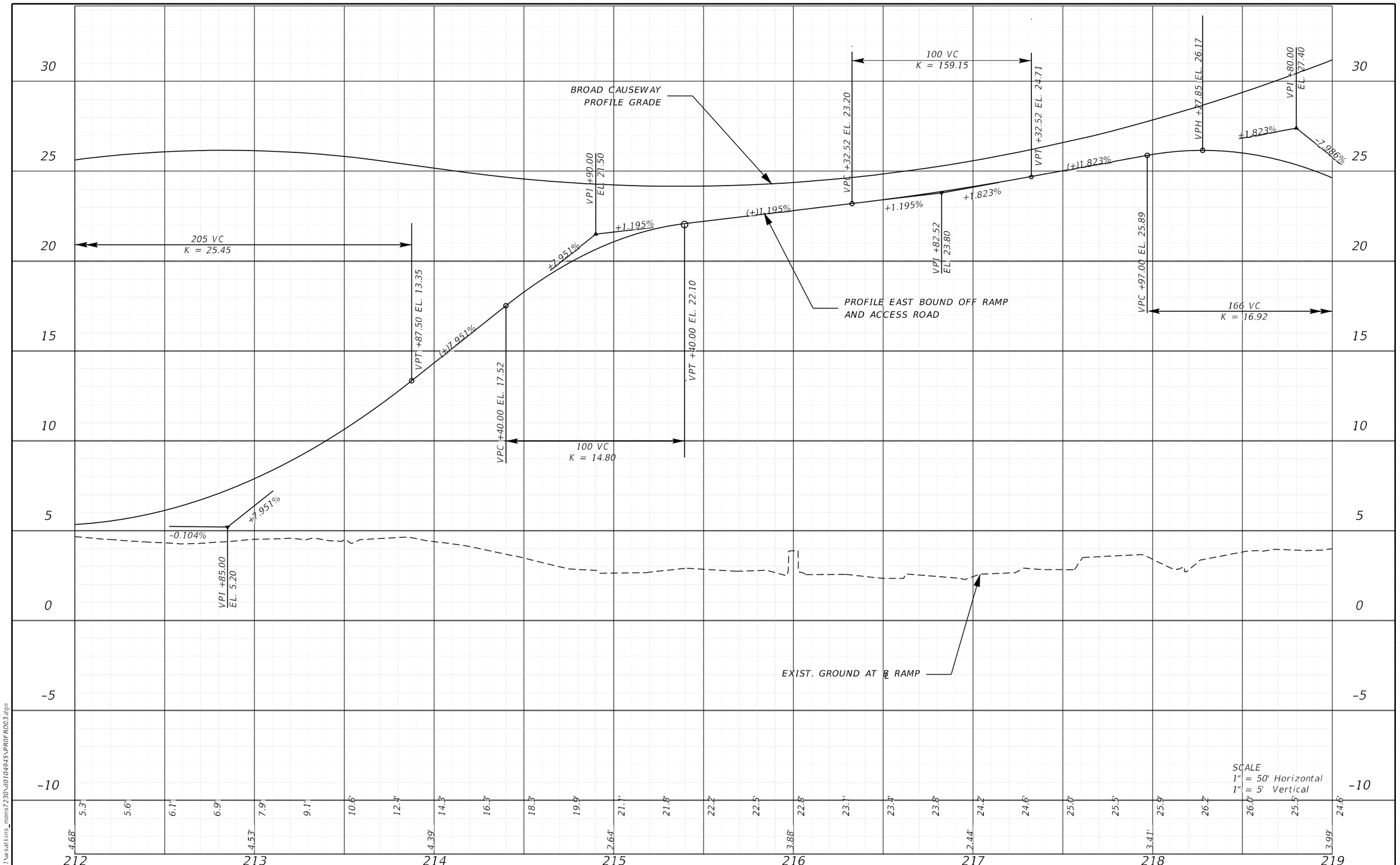

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

N/A

JOHN A. SALATINO, P.E.
LICENSE NUMBER: 60921
ATKINSREALIS
800 WATERFORD WAY, SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

EB RAMP PROFILE

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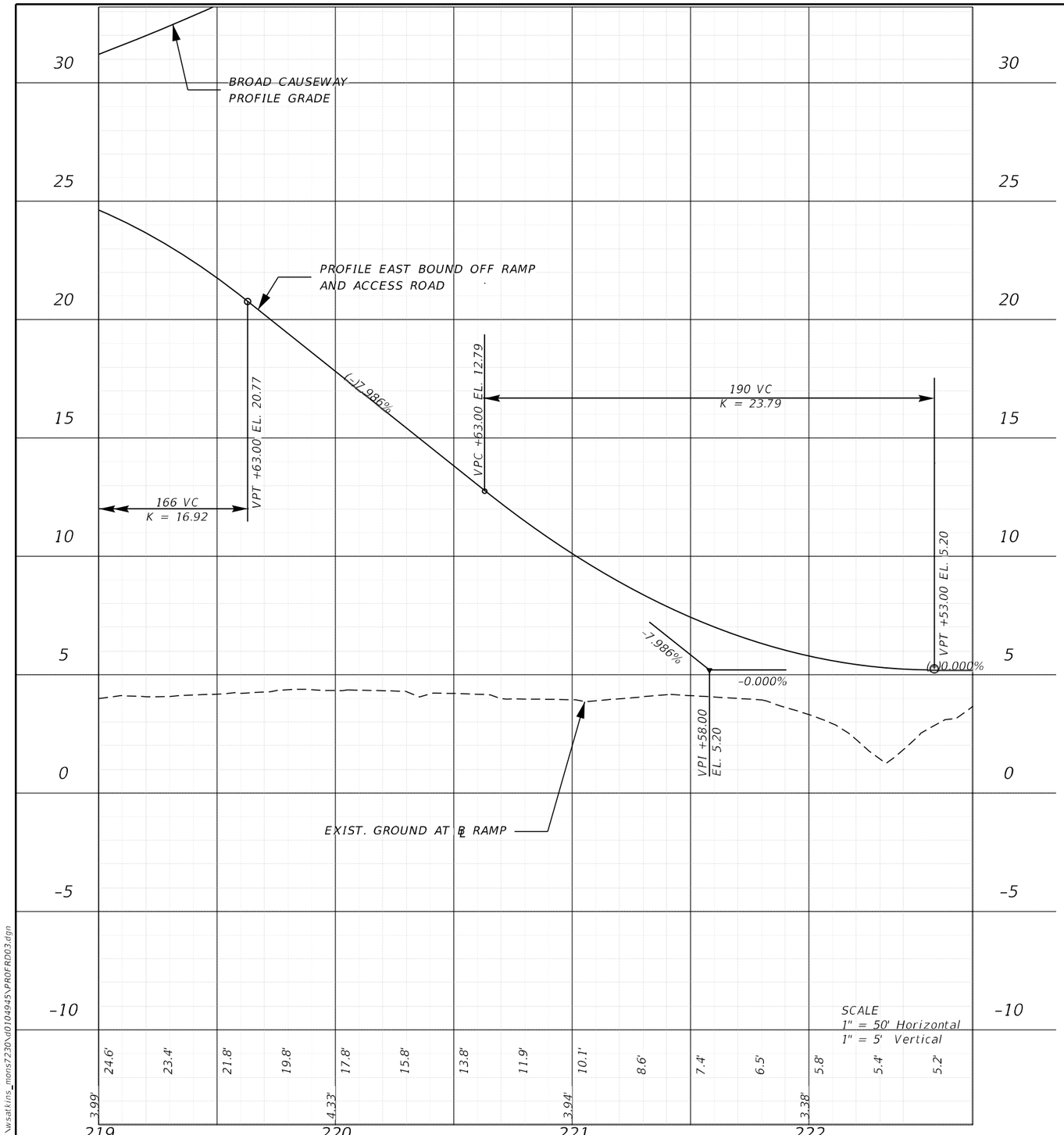

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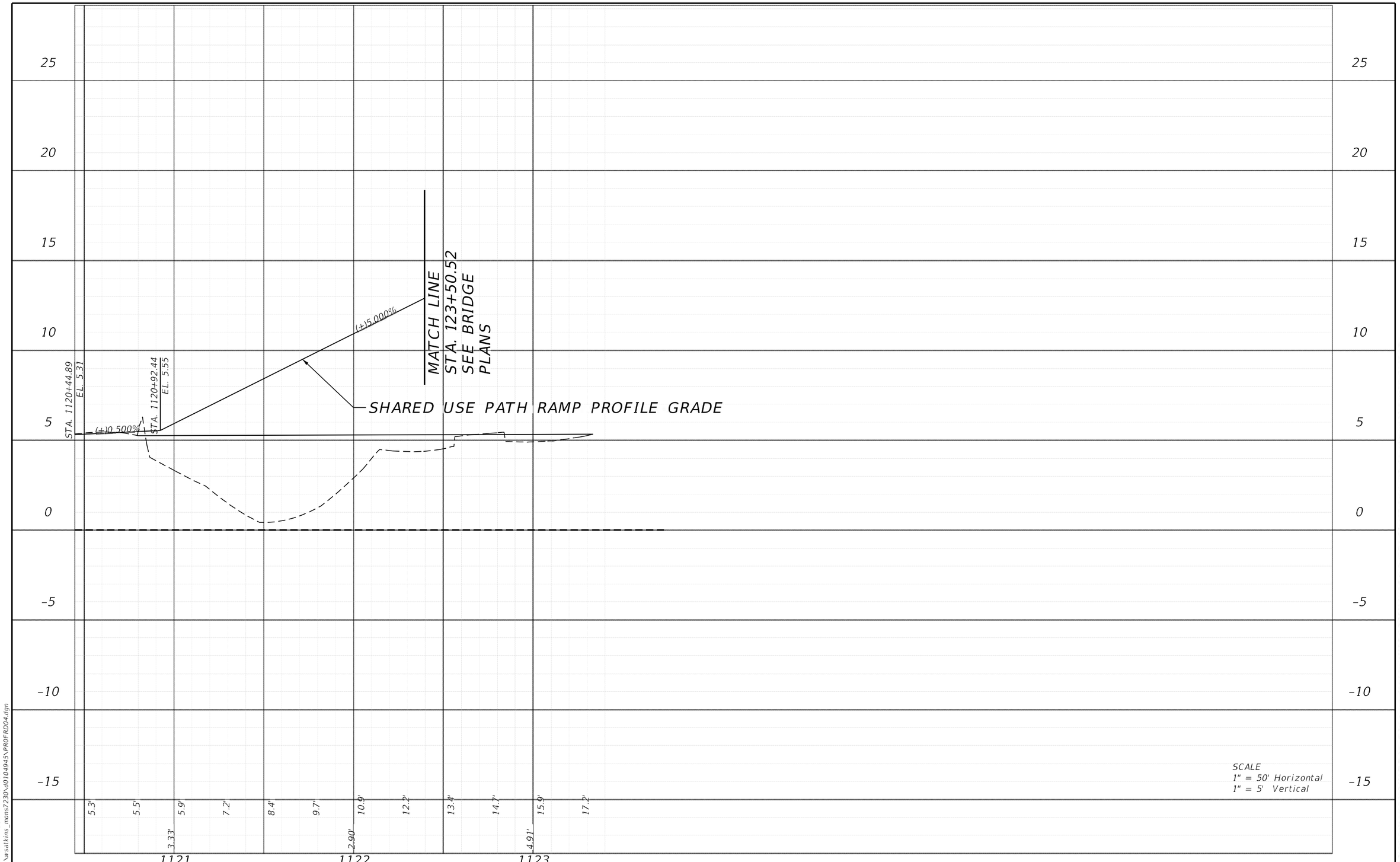

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

N/A

JOHN A. SALATINO
LICENSE NUMBER: 60921
ATKINS NORTH AMERICA, INC
800 WATERFORD WAY SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

PEDESTRIAN RAMP LANDING

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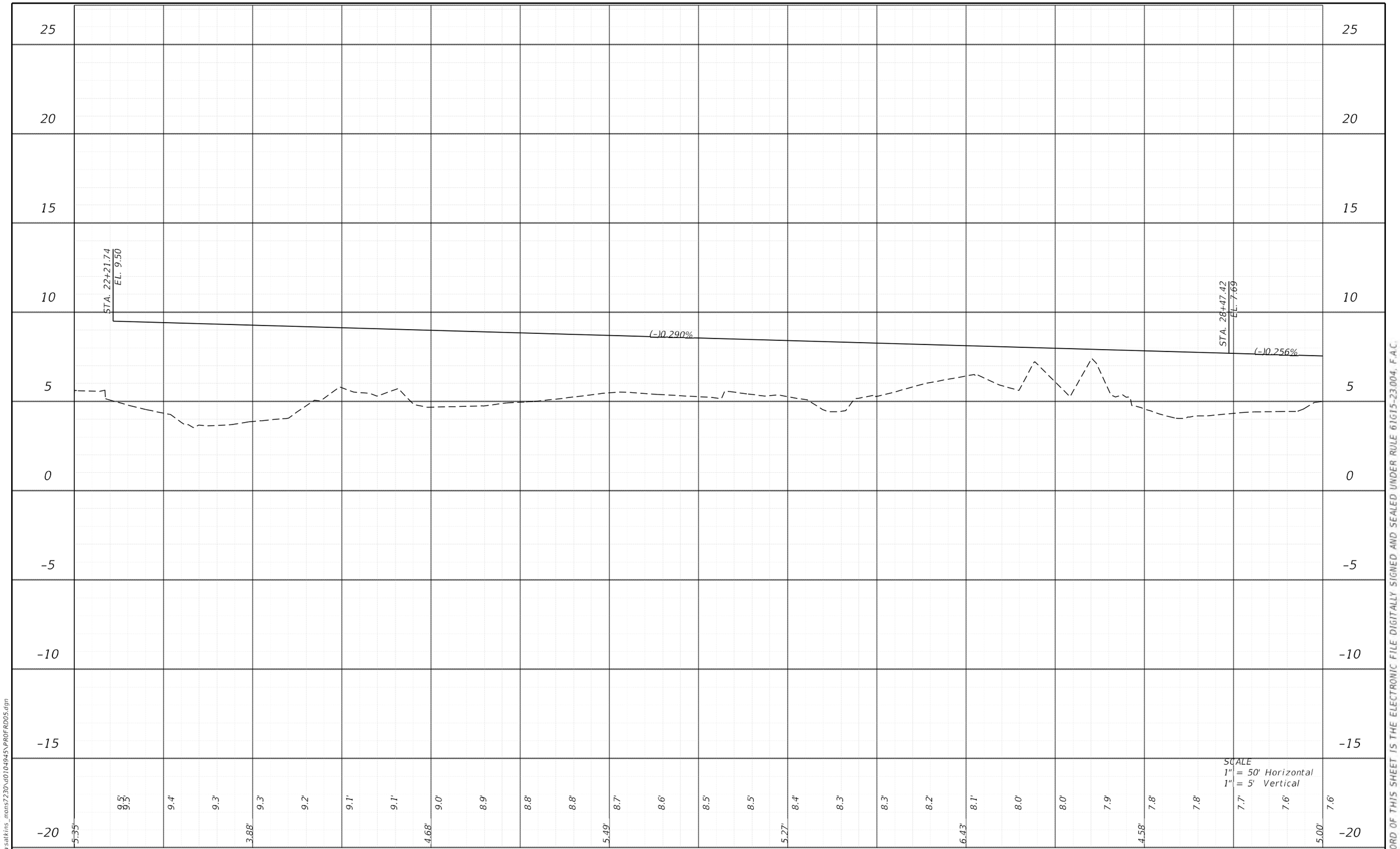

SCALE
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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

N/A

JOHN A. SALATINO
LICENSE NUMBER: 60921
ATKINS NORTH AMERICA, INC
800 WATERFORD WAY SUITE 700
MIAMI, FL 33126

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-922	MIAMI-DADE	452428-1-21-01

WB SERVICE STATION ACCESS ROAD

SHEET NO.
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APPENDIX B – SOCIOCULTURAL DATA REPORT

BCB Social Buffer - BCB

Area: [2] 0.604 square miles

Jurisdiction - Cities: [3] Bay Harbor Islands, Indian Creek Village, North Miami

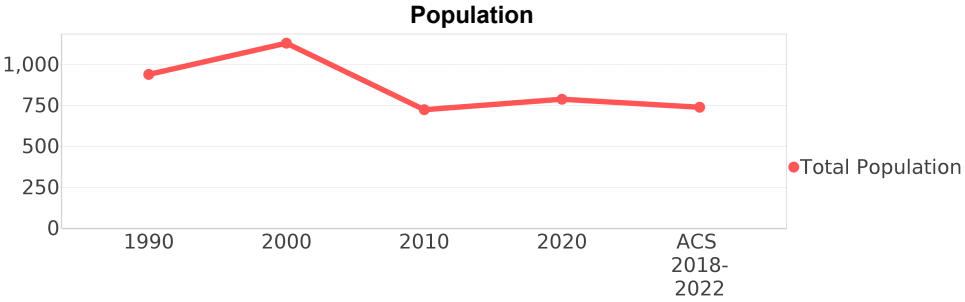
Jurisdiction - Counties: [3] Miami-Dade

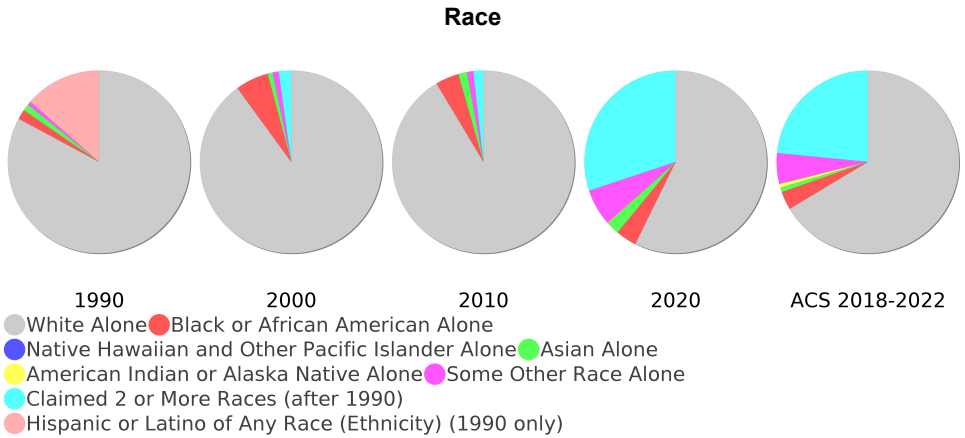
General Population Trends

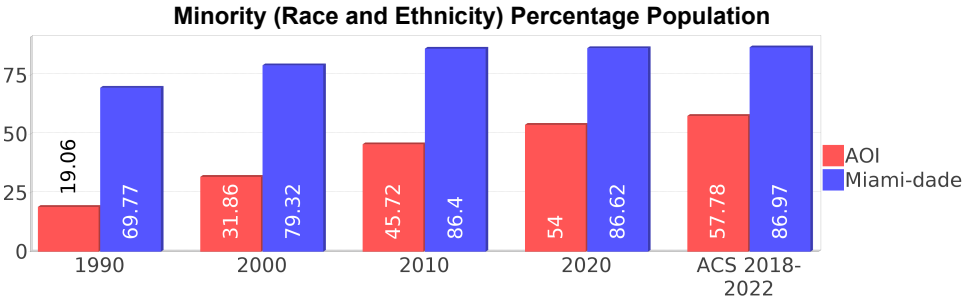
Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Total Population	939	1,130	724	787	739
Total Households	421	485	320	323	293
Average Persons per Acre	13.37	18.65	19.90	11.99	22.59
Average Persons per Household	2.13	2.20	2.32	2.48	2.58
Average Persons per Family	2.66	2.84	3.00	3.39	3.51
Males	417	538	341	379	329
Females	522	591	383	407	409

Race and Ethnicity Trends [5, 8, 9]

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
White Alone	897 (95.53%)	1,013 (89.65%)	659 (91.02%)	449 (57.05%)	490 (66.31%)
Black or African American Alone	19 (2.02%)	66 (5.84%)	30 (4.14%)	29 (3.68%)	24 (3.25%)
Native Hawaiian and Other Pacific Islander Alone	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Asian Alone	13 (1.38%)	10 (0.88%)	11 (1.52%)	18 (2.29%)	6 (0.81%)
American Indian or Alaska Native Alone	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.13%)	5 (0.68%)
Some Other Race Alone	7 (0.75%)	12 (1.06%)	8 (1.10%)	51 (6.48%)	40 (5.41%)
Claimed 2 or More Races	NA (NA)	25 (2.21%)	13 (1.80%)	236 (29.99%)	173 (23.41%)
Hispanic or Latino of Any Race (Ethnicity)	147 (15.65%)	270 (23.89%)	283 (39.09%)	344 (43.71%)	358 (48.44%)
Not Hispanic or Latino (Ethnicity)	792 (84.35%)	860 (76.11%)	441 (60.91%)	443 (56.29%)	381 (51.56%)
Minority (Race and Ethnicity)	179 (19.06%)	360 (31.86%)	331 (45.72%)	425 (54.00%)	427 (57.78%)

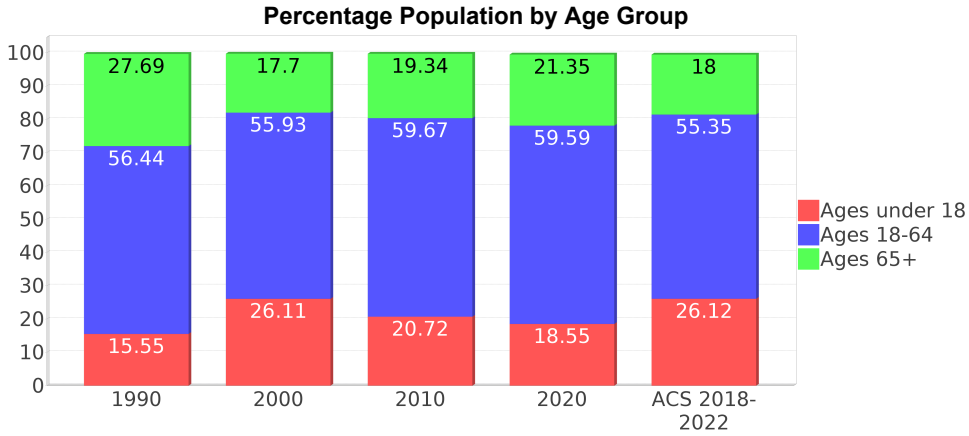






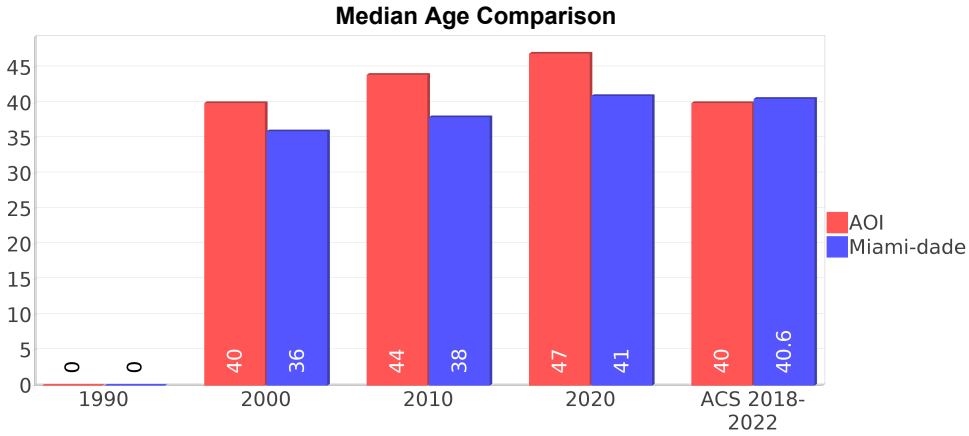
Age Trends [5]

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Under Age 5	5.43%	6.28%	5.52%	4.07%	9.07%
Ages 5-17	10.12%	19.82%	15.19%	14.49%	17.05%
Ages 18-21	3.19%	1.68%	2.76%	3.94%	1.62%
Ages 22-29	7.03%	7.43%	6.91%	7.88%	5.14%
Ages 30-39	13.31%	16.90%	13.12%	10.42%	12.31%
Ages 40-49	13.84%	14.96%	16.16%	14.10%	19.76%
Ages 50-64	19.06%	14.96%	20.72%	23.25%	16.51%
Age 65 and Over	27.69%	17.70%	19.34%	21.35%	18.00%
-Ages 65-74	15.23%	6.99%	9.94%	11.69%	9.20%
-Ages 75-84	9.69%	8.41%	6.08%	6.86%	6.22%
-Age 85 and Over	2.66%	2.12%	3.18%	2.80%	2.44%
Median Age	NA	40	44	47	40



Income Trends [12], [13], [5]

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Median Household Income	$39,342	$44,046	$86,906	$113,258	$78,289
Median Family Income	$56,028	$50,838	$90,759	$113,773	$81,691
Population below Poverty Level	8.95%	10.80%	6.35%	3.68%	5.28%
Households below Poverty Level	9.74%	8.45%	6.56%	3.10%	6.14%
Households with Public Assistance Income	2.14%	0.82%	0.31%	1.24%	4.44%



Disability Trends [10]

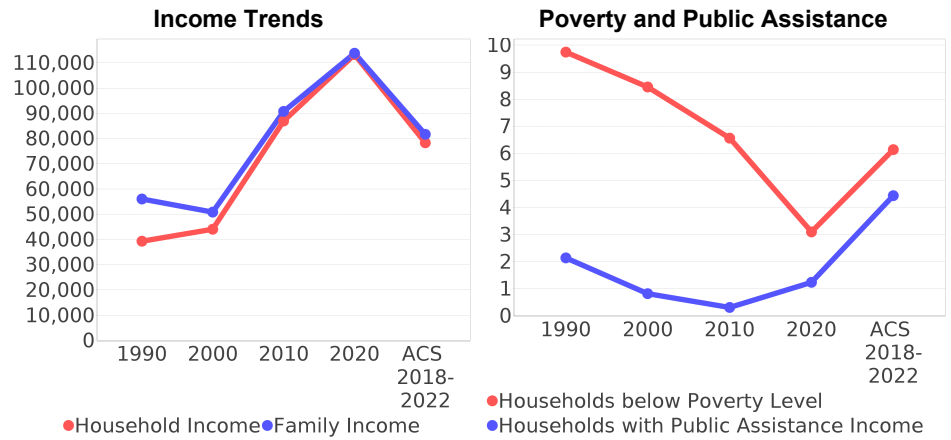
See the Data Sources section below for an explanation about the differences in disability data among the various years.

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Population 16 To 64 Years with a disability	22 (2.71%)	104 (9.83%)	(NA)	(NA)	(NA)
Population 20 To 64 Years with a disability	(NA)	(NA)	(NA)	17 (4.36%)	17 (4.14%)

Educational Attainment Trends [11], [5]

Age 25 and Over

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Less than 9th Grade	47 (6.19%)	42 (5.37%)	12 (2.45%)	10 (2.14%)	7 (1.36%)
9th to 12th Grade, No Diploma	83 (10.94%)	62 (7.93%)	17 (3.47%)	15 (3.21%)	25 (4.86%)
High School Graduate or Higher	628 (82.74%)	677 (86.57%)	459 (93.67%)	441 (94.43%)	481 (93.58%)
Bachelor's Degree or Higher	292 (38.47%)	339 (43.35%)	255 (52.04%)	302 (64.67%)	290 (56.42%)



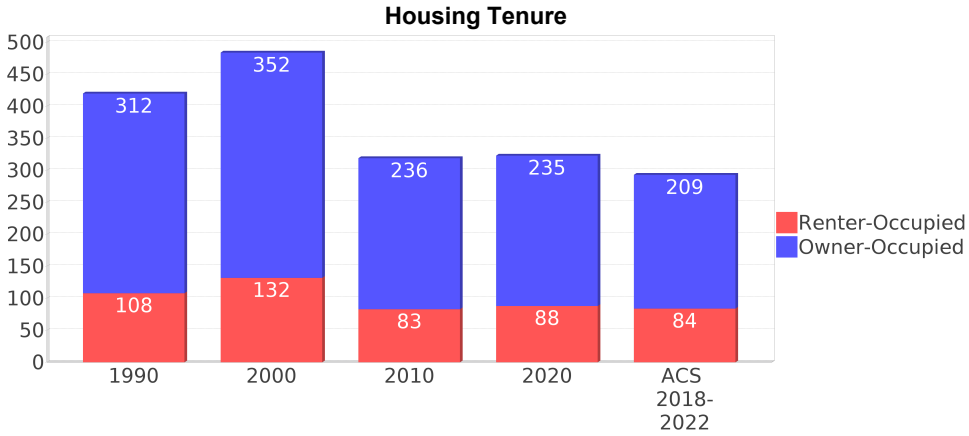
Language Trends [5]

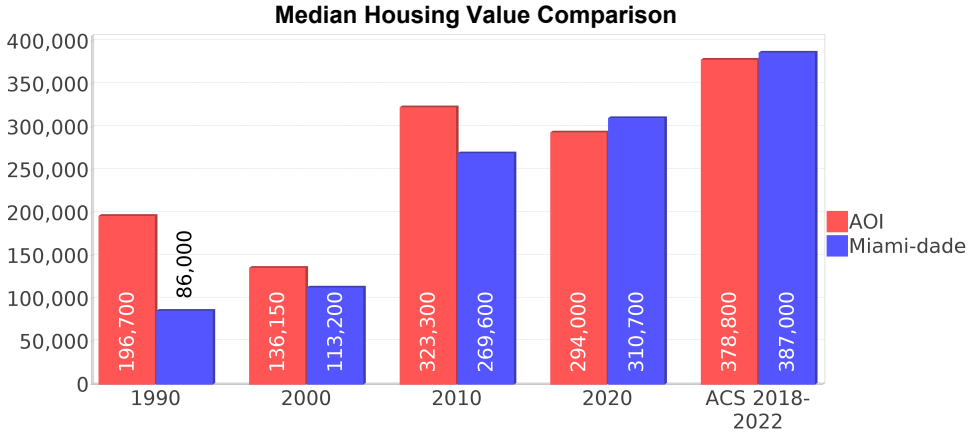
Age 5 and Over

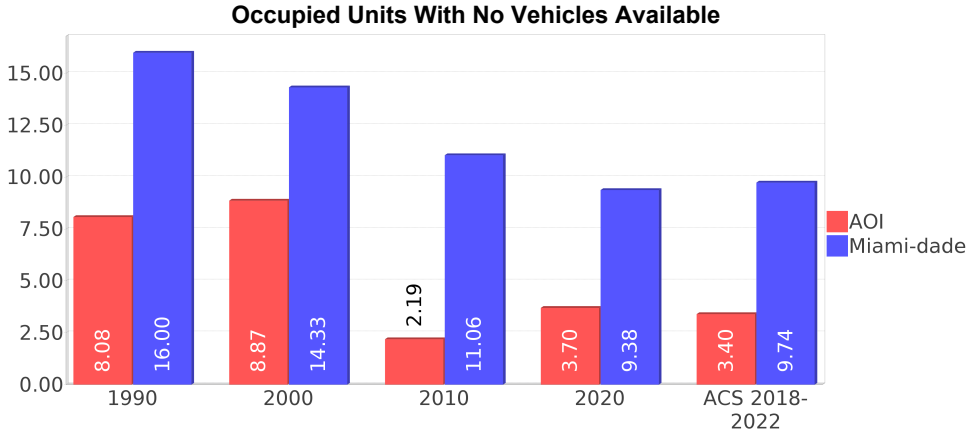
Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Speaks English Well	40 (4.42%)	100 (9.45%)	59 (9.04%)	51 (8.08%)	68 (10.13%)
Speaks English Not Well	NA (NA)	34 (3.21%)	31 (4.75%)	19 (3.01%)	30 (4.47%)
Speaks English Not at All	NA (NA)	31 (2.93%)	16 (2.45%)	9 (1.43%)	7 (1.04%)
Speaks English Not Well or Not at All	29 (3.20%)	NA (NA)	47 (7.20%)	28 (4.44%)	37 (5.51%)
Speaks English Less than Very Well	NA (NA)	166 (15.69%)	107 (16.39%)	81 (12.84%)	106 (15.80%)

Housing Trends [5]

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Total	477	535	390	387	345
Units per Acre	4.94	4.70	3.43	3.39	3.02
Single-Family Units	239	273	141	153	142
Multi-Family Units	174	261	220	194	198
Mobile Home Units	3	0	0	2	3
Owner-Occupied Units	312	352	236	235	209
Renter-Occupied Units	108	132	83	88	84
Vacant Units	56	50	70	63	51
Median Housing Value	$196,700	$136,150	$323,300	$294,000	$378,800
Occupied Housing Units w/No Vehicle	34 (8.08%)	43 (8.87%)	7 (2.19%)	12 (3.70%)	10 (3.40%)







Geographic Mobility

Description	2020[1]	ACS 2018-2022
Median year householder moved into unit - Total	2010	2012
Median year householder moved into unit - Owner Occupied	2005	2008
Median year householder moved into unit - Renter Occupied	2015	2017
Abroad 1 year ago	7	5
Different house in United States 1 year ago	49	62
Same house 1 year ago	650	665
Geographical Mobility in the Past Year - Total	707	733

Computers and Internet

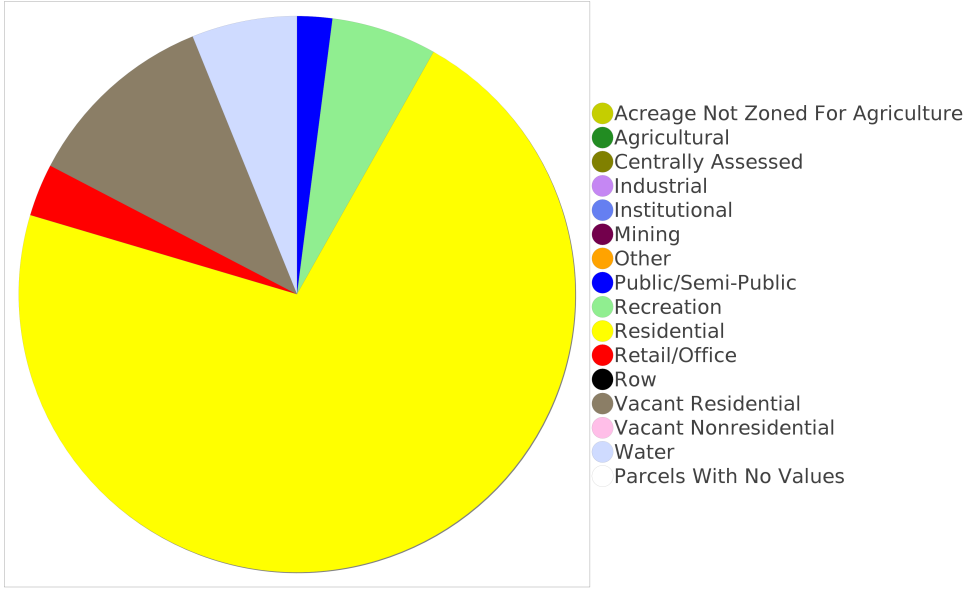
Description	2020[1]	ACS 2018-2022
Total Households Types of Computers in HH	278	293
Households with 1 or more device	275	282
Households with no computer	3	11
Total Households Presence and Types of Internet Subscriptions	278	293
Households with an internet subscription	268	279
Households with internet access without a subscription	1	2
Households with no internet access	8	10

Household Languages

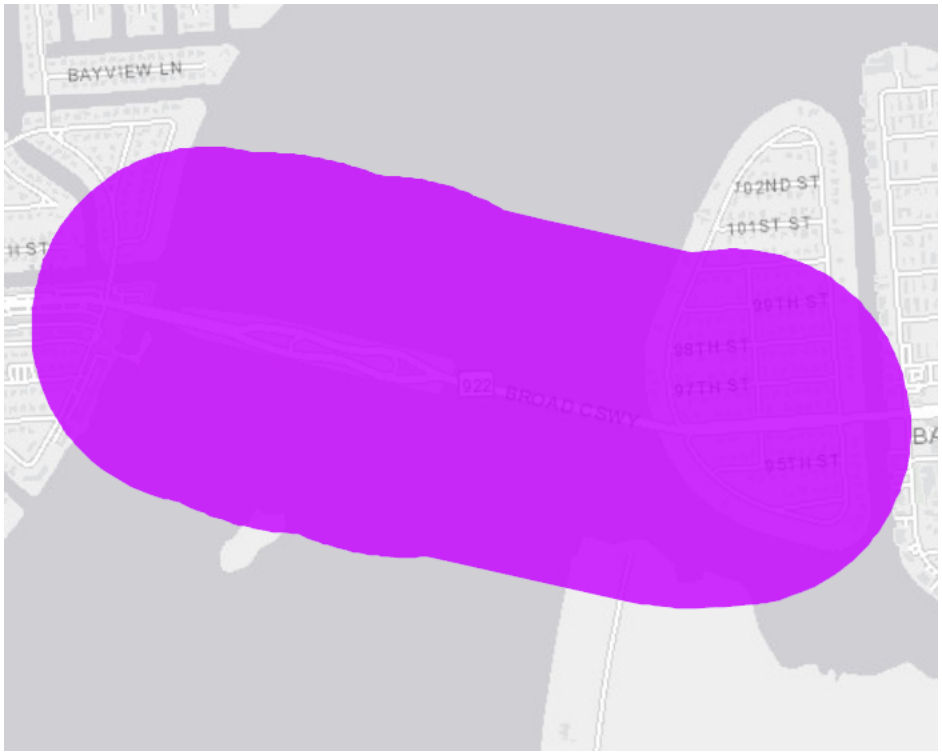
Description	2020[1]	ACS 2018-2022
Total Households by Household Language	278	293
Household Not Limited English Speaking Status	256	258
Spanish: Limited English speaking household	20	30
Indo-European languages: Limited English speaking household	2	5
Asian and Pacific Island languages: Limited English speaking household	0	0
Other languages: Limited English speaking household	0	0

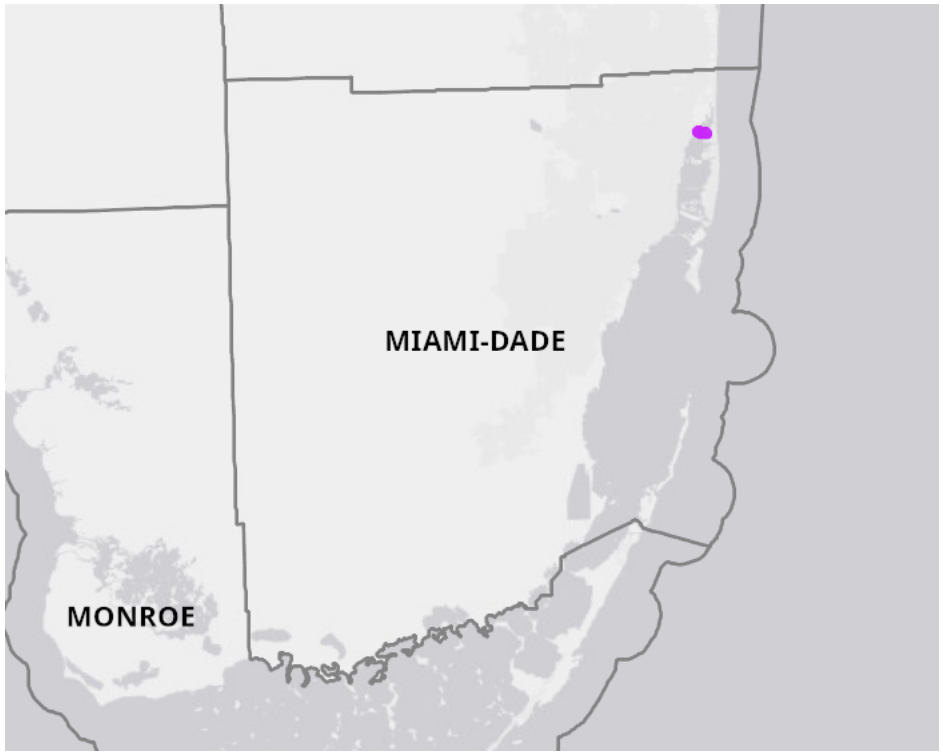
Existing Land Use [15], [56]

Land Use Type	Acres	Percentage
Acreage Not Zoned For Agriculture	0	0.00%
Agricultural	0	0.00%
Centrally Assessed	0	0.00%
Industrial	0	0.00%
Institutional	0	0.00%
Mining	0	0.00%
Other	0	0.00%
Public/Semi-Public	2	0.52%
Recreation	6	1.55%
Residential	70	18.10%
Retail/Office	3	0.78%
Row	0	0.00%
Vacant Residential	11	2.84%
Vacant Nonresidential	<0.5	<0.13%
Water	6	1.55%
Parcels With No Values	<0.5	<0.13%



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.

Florida Parks and Recreational Facilities

Facility Name	Address	Zip Code
BROAD CAUSEWAY PARK	1700 BROAD CSWY	33154
SOUTH PASSIVE PARK	94TH ST	33154
NORTH BAYSHORE WILLIAM LEHMAN PARK	12200 N BAYSHORE DR	33181
BAY HARBOR ISLANDS TOT LOT PARK	9600 W BROADVIEW DR	33154

Block Groups

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

1990 Census Block Groups

120250038006, 120250012041, 120250001032, 120250038007, 120250038005

2000 Census Block Groups

120860038013, 120860012041, 120860001102, 120860038014, 120860038011, 120860038012

2010 Census Block Groups

120860001203, 120860001202, 120860038011, 120860012041, 120860038013, 120860038014

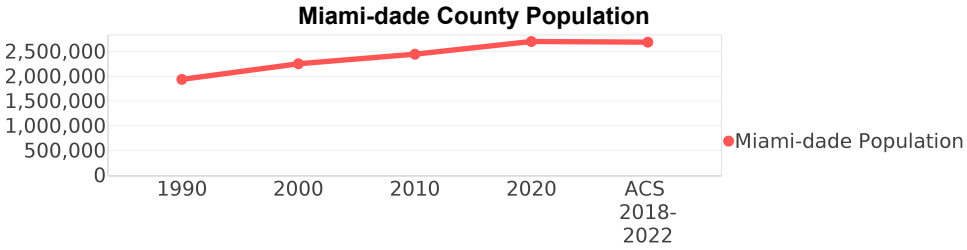
Census Block Groups

120860038012, 120860038011, 120860012041, 120860001201, 120860038013, 120860001202, 120860038014

Miami-dade County Demographic Profile

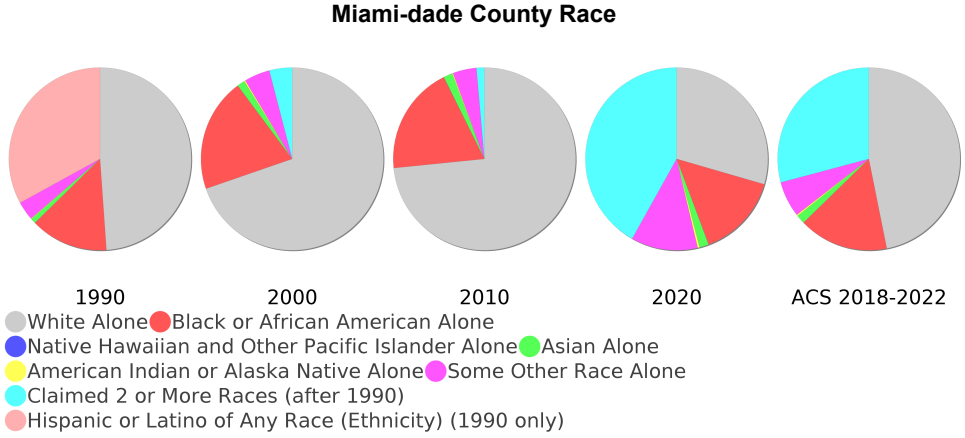
General Population Trends - Miami-dade [5]

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Total Population	1,937,094	2,253,362	2,445,374	2,701,767	2,688,237
Total Households	692,355	776,774	827,556	967,414	952,680
Average Persons per Acre	1.528	1.774	1.925	2.13	2.21
Average Persons per Household	2.798	2.84	3.00	2.75	2.77
Average Persons per Family	3.413	3.488	3.591	3.71	3.47
Males	928,411	1,086,558	1,182,784	1,299,331	1,318,559
Females	1,008,683	1,166,804	1,262,590	1,402,436	1,369,678



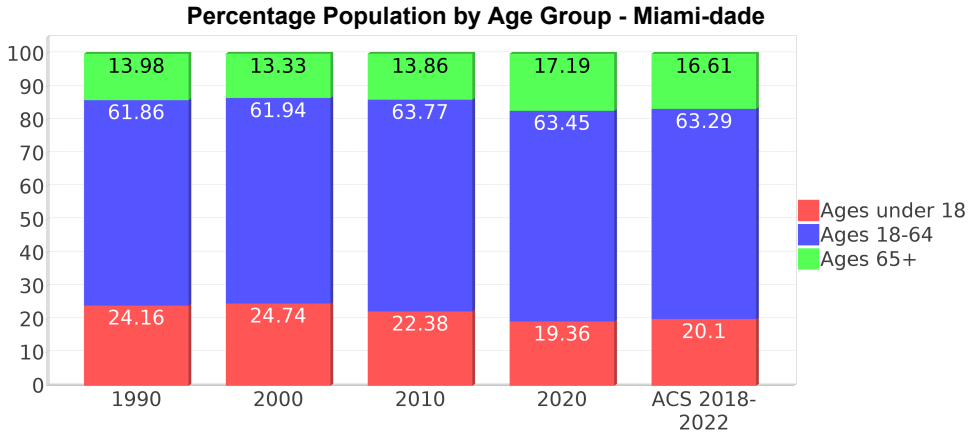
Race and Ethnicity Trends - Miami-dade [5, 8, 9]

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
White Alone	1,413,015 (72.95%)	1,570,990 (69.72%)	1,794,730 (73.39%)	796,893 (29.50%)	1,259,156 (46.84%)
Black or African American Alone	397,993 (20.55%)	452,333 (20.07%)	470,326 (19.23%)	400,002 (14.81%)	426,417 (15.86%)
Native Hawaiian and Other Pacific Islander Alone	438 (0.02%)	605 (0.03%)	649 (0.03%)	641 (0.02%)	544 (0.02%)
Asian Alone	25,869 (1.34%)	30,692 (1.36%)	38,813 (1.59%)	44,124 (1.63%)	41,646 (1.55%)
American Indian or Alaska Native Alone	3,066 (0.16%)	4,841 (0.21%)	3,572 (0.15%)	9,107 (0.34%)	6,450 (0.24%)
Some Other Race Alone	96,713 (4.99%)	102,436 (4.55%)	102,938 (4.21%)	319,419 (11.82%)	170,507 (6.34%)
Claimed 2 or More Races	(NA)	91,465 (4.06%)	34,346 (1.40%)	1,131,581 (41.88%)	783,517 (29.15%)
Hispanic or Latino of Any Race (Ethnicity)	953,407 (49.22%)	1,291,681 (57.32%)	1,565,410 (64.02%)	1,856,938 (68.73%)	1,848,739 (68.77%)
Not Hispanic or Latino (Ethnicity)	983,687 (50.78%)	961,681 (42.68%)	879,964 (35.98%)	844,829 (31.27%)	839,498 (31.23%)
Minority (Race and Ethnicity)	1,351,487 (69.77%)	1,787,468 (79.32%)	2,112,884 (86.40%)	2,340,250 (86.62%)	2,337,839 (86.97%)



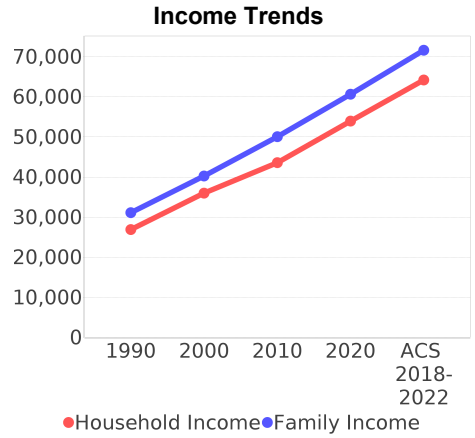
Age Trends - Miami-dade [5]

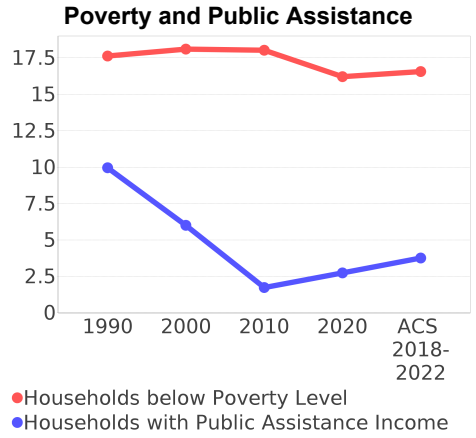
Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Under Age 5	7.21%	6.43%	6.20%	4.80%	5.54%
Ages 5-17	16.95%	18.31%	16.18%	14.56%	14.56%
Ages 18-21	5.60%	5.24%	5.83%	5.07%	4.86%
Ages 22-29	13.10%	10.97%	10.98%	10.24%	10.26%
Ages 30-39	16.06%	16.33%	14.14%	13.87%	13.97%
Ages 40-49	12.47%	14.49%	15.67%	13.82%	14.03%
Ages 50-64	14.63%	14.90%	17.15%	20.44%	20.17%
Age 65 and Over	13.98%	13.33%	13.86%	17.19%	16.61%
-Ages 65-74	7.54%	7.23%	7.34%	9.29%	8.96%
-Ages 75-84	4.88%	4.41%	4.71%	5.53%	5.20%
-Age 85 and Over	1.55%	1.69%	1.81%	2.36%	2.45%
Median Age	NA	36	38	41	40.6



Income Trends - Miami-dade [5]

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Median Household Income	$26,909	$35,966	$43,605	$53,975	$64,215
Median Family Income	$31,113	$40,260	$50,065	$60,666	$71,621
Population below Poverty Level	17.94%	17.97%	17.18%	16.01%	15.26%
Households below Poverty Level	17.62%	18.10%	18.02%	16.21%	16.56%
Households with Public Assistance Income	9.96%	6.01%	1.74%	2.74%	3.76%





Disability Trends - Miami-dade [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]	2020[1]	ACS 2018-2022
Population 16 To 64 Years with a disability	78,949 (5.28%)	324,062 (15.60%)	NA (NA)	NA (NA)	NA (NA)
Population 20 To 64 Years with a disability	NA (NA)	NA (NA)	NA (NA)	109,429 (6.70%)	107,583 (6.64%)

Educational Attainment Trends - Miami-dade [11], [5]

Age 25 and Over

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Less than 9th Grade	228,426 (17.83%)	219,066 (14.68%)	202,413 (12.23%)	178,065 (9.25%)	161,141 (8.40%)
9th to 12th Grade, No Diploma	219,856 (17.16%)	260,287 (17.45%)	178,335 (10.77%)	171,699 (8.92%)	171,425 (8.93%)
High School Graduate or Higher	833,013 (65.01%)	1,012,436 (67.87%)	1,274,809 (77.00%)	1,576,177 (81.84%)	1,586,271 (82.67%)
Bachelor's Degree or Higher	240,460 (18.77%)	323,399 (21.68%)	434,574 (26.25%)	590,305 (30.65%)	624,330 (32.54%)

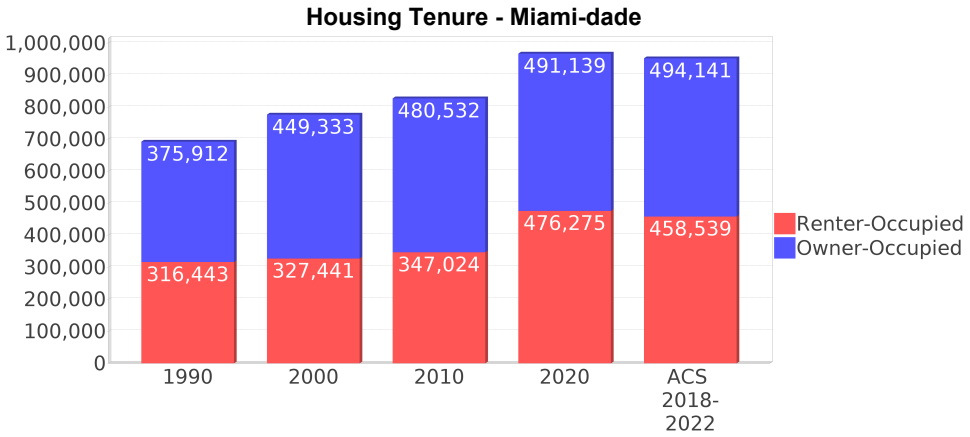
Language Trends - Miami-dade [5]

Age 5 and Over

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Speaks English Well	221,943 (12.34%)	285,783 (13.55%)	302,397 (13.18%)	340,210 (13.35%)	339,887 (13.38%)
Speaks English Not Well	NA (NA)	261,782 (12.42%)	294,777 (12.85%)	322,484 (12.65%)	315,163 (12.41%)
Speaks English Not at All	NA (NA)	184,249 (8.74%)	217,650 (9.49%)	217,705 (8.54%)	206,953 (8.15%)
Speaks English Not Well or Not at All	341,005 (18.96%)	446,031 (21.15%)	512,427 (22.34%)	540,189 (21.20%)	522,116 (20.56%)
Speaks English Less than Very Well	NA (NA)	731,814 (34.71%)	814,824 (35.52%)	880,399 (34.55%)	862,003 (33.95%)

Housing Trends - Miami-dade [5]

Description	1990	2000	2010[1]	2020[1]	ACS 2018-2022
Total	771,288	852,278	980,580	1,074,685	1,075,278
Units per Acre	0.608	0.671	0.772	0.85	0.88
Single-Family Units	365,600	448,569	508,364	511,392	529,492
Multi-Family Units	301,870	387,550	457,465	507,581	531,281
Mobile Home Units	15,359	15,338	14,234	12,890	13,897
Owner-Occupied Units	375,912	449,333	480,532	491,139	494,141
Renter-Occupied Units	316,443	327,441	347,024	476,275	458,539
Vacant Units	78,933	75,504	153,024	107,271	122,598
Median Housing Value	$86,000	$113,200	$269,600	$310,700	$387,000
Occupied Housing Units w/No Vehicle	110,809 (16.00%)	111,323 (14.33%)	91,558 (11.06%)	90,752 (9.38%)	92,824 (9.74%)
Median year householder moved into unit - Total	NA	NA	NA	2012	2013
Median year householder moved into unit - Owner Occupied	NA	NA	NA	2005	2007
Median year householder moved into unit - Renter Occupied	NA	NA	NA	2015	2016
Abroad 1 year ago	NA	NA	NA	45,317	41,883
Different house in United States 1 year ago	NA	NA	NA	271,359	273,330
Same house 1 year ago	NA	NA	NA	2,359,939	2,345,895
Geographical Mobility in the Past Year - Total	NA	NA	NA	2,676,615	2,661,108



Data Sources

ACS vs Census Data

(1) The 2010 and 2020 Census data is represented by a combination of decennial and ACS data. The 2010 decennial is combined with the 5-year ACS data for 2006-2010 and the 2020 decennial is combined with the 5-year ACS data for 2016-2020. The General Population Trends, Race and Ethnicity Trends, and Age Trends are entirely from the decennial. The Income Trends, Disability Trends, Educational Attainment Trends, and 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 . 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 ETDM project analysis areas, user-defined communities, Census places, and AOI boundaries do not always correspond precisely to block group boundaries. To estimate the actual population more accurately, the SDR analysis adjusts the geographic area and data of affected block groups using the following methodology:

Delete overlapping census blocks with extremely low populations (2 or fewer people)
Remove the portion of the block group that lies outside of the analysis area
Recalculate the demographics assuming an equal area distribution of the population

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 2018-2022 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

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Metadata

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

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