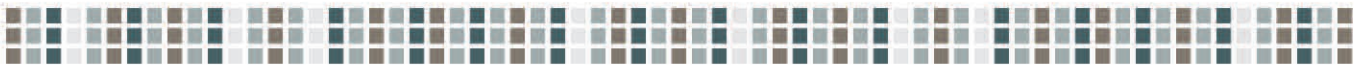
Chapter 2

Inventory of Existing Conditions



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2. Inventory of Existing Conditions

This inventory chapter provides background data on the existing facilities at Key West International Airport (EYW or the Airport). Developing an inventory of the physical, operational, and functional characteristics of EYW is the basis for identifying improvements to Airport elements for inclusion in the Master Plan Update. The data and information presented in this chapter of the Master Plan Update were collected through on-site visits and interviews, or documented within existing studies, reports, design drawings, and other Airport records.

The inventory is organized under the following section headings:

- Airport Setting
- Airfield System
- Passenger Terminal Facilities
- On-Airport Curbsides and Roadways
- Automobile Parking
- Air Cargo Facilities
- General Aviation Facilities
- Airport/Airline Support Facilities
- Other Facilities
- On- and Off-Airport Land Uses
- Inventory of Lease Documents
- Environmental Settings
- Existing Utility Infrastructure

2.1 Airport Setting

2.1.1 AIRPORT HISTORY

Key West International Airport (EYW or the Airport) is the southernmost airport in the state of Florida and the continental United States. The Airport is 160 miles southwest of Miami via State Road (SR) A1A and is the primary commercial service airport for the Florida Keys. **Exhibit 2-1** depicts the general location and vicinity of EYW. The city of Key West is the closest point in the United States to Cuba and is located 3 miles west of Naval Air Station (NAS) Key West - Boca Chica Field.

The Airport is owned by Monroe County (the County), and operated by the Board of County Commissioners under a separate County enterprise fund. The Director of Airports reports to the Board and manages the day-to-day operations of both EYW and Florida Keys Marathon Airport (MTH).

International air service was first offered by Aeromarine West Indies Airways between Key West and Havana, Cuba in 1920. However, the Airport did not officially open until 1927 as Meacham Field. It was a military base during World War II and until it was purchased by Monroe County in 1952; it was renamed Key West International Airport in 1957. The first passenger terminal at the Airport was constructed in 1957 and, since that time, the County has continued to make airside and landside improvements to serve the traveling public[1].

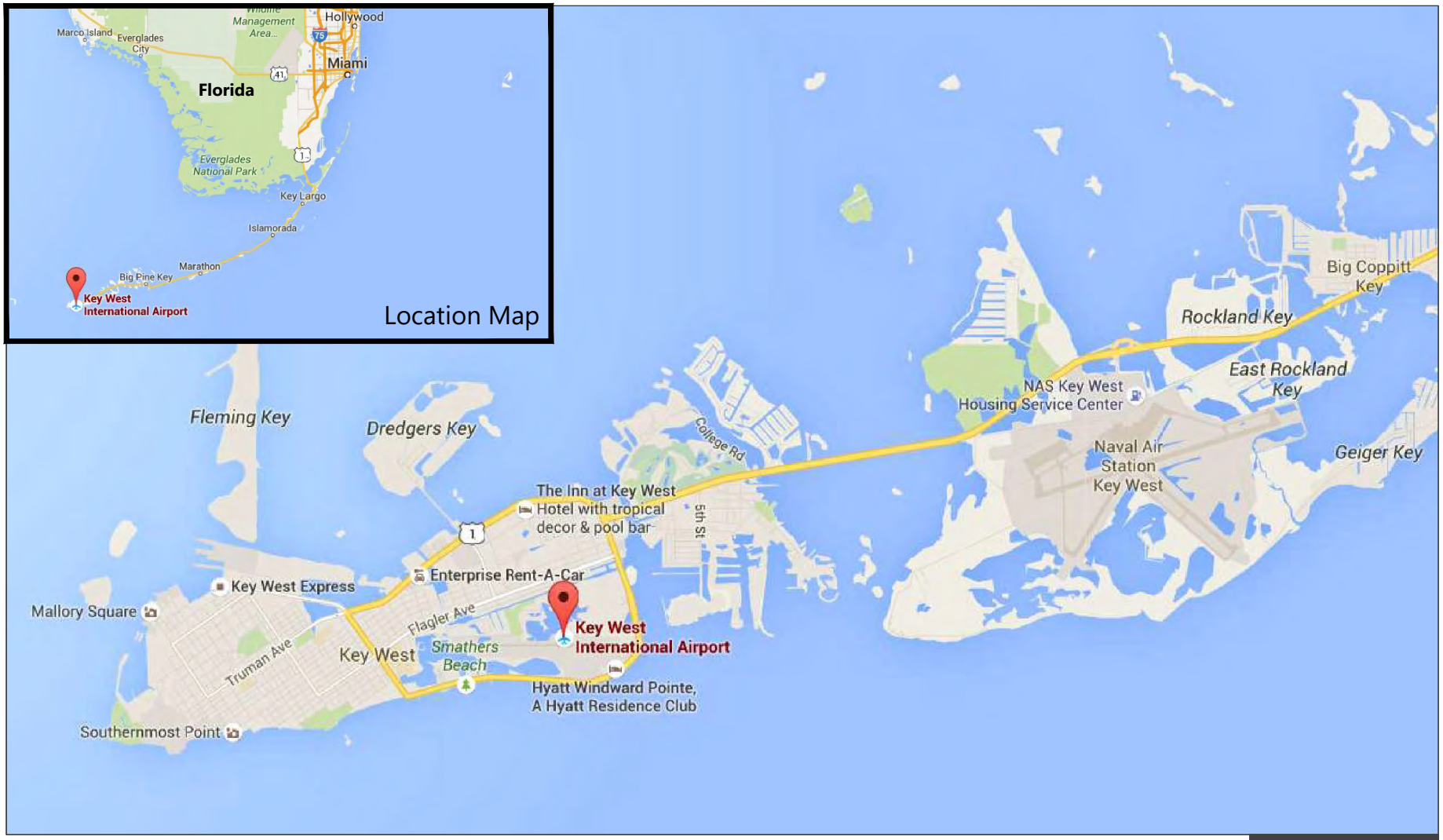
EYW was officially declared a port of entry for Cuba in 2011, enabling the accommodation of flights on a limited basis. The County initiated a U.S. Customs and Border Protection (CBP) facility expansion project in 2015 to increase Customs' processing capabilities.

2.1.2 PRIOR STUDIES

The previous Airport master plan was completed in 2003, after which the County undertook the initial steps to improve the Airport's terminal facilities. An Environmental Assessment (EA) was completed in 2005 for a passenger terminal building expansion project, which encompassed the addition of a new terminal building and renovations of existing facilities. The new terminal opened in 2009 and renovations to the 1957 terminal, which began shortly thereafter, were completed in 2010.

In addition to the terminal improvements undertaken since completion of the 2003 Master Plan, the County undertook an extensive Runway Safety Area (RSA) Improvement Project. This project required an EA, which was completed in 2007, as well as an extensive permitting process. The first phase of the RSA project was completed in 2011, which included an Engineered Materials Arresting System (EMAS) at the departure end of Runway 9. A second EMAS was constructed at the Runway 27 departure end in 2015.

[1] Source: KeysHistory.org, Florida Keys Cybermuseum, Transportation, April 2016.



SOURCE: Basemap from Google Maps Pro., March, 2016
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-1

NORTH

Airport Location and Vicinity Map

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2.1.3 Historical Aircraft Operations

Table 2-1 provides a summary of aircraft operations at the Airport in 2006 through 2015.

Table 2-1: Historical Aircraft Operations

	ITINERANT					LOCAL			
CALENDAR YEAR	**AIR CARRIER**	**AIR TAXI**	**GENERAL AVIATION**	**MILITARY**	**TOTAL**	**CIVIL**	**MILITARY**	**TOTAL**	**TOTAL OPERATIONS**
2006	7,526	21,880	34,321	1,034	64,761	12,724	9,564	22,288	87,049
2007	6,331	24,714	30,964	3,270	65,279	13,024	12,183	25,207	90,486
2008	5,810	20,870	28,214	5,002	59,896	10,995	152	11,147	71,043
2009	6,555	11,866	28,084	263	46,768	7,939	197	8,136	54,904
2010	7,317	12,338	30,769	367	50,791	6,348	114	6,462	57,253
2011	7,624	10,858	33,946	459	52,887	7,420	64	7,484	60,371
2012	7,941	12,919	32,936	372	54,168	8,702	22	8,724	62,892
2013	11,490	11,492	27,340	458	50,780	6,435	231	6,666	57,446
2014	13,850	10,259	23,981	621	48,711	4,833	41	4,874	53,585
2015	14,456	9,804	24,851	598	49,709	3,761	78	3,839	53,548
Total	**88,900**	**147,000**	**295,406**	**12,444**	**543,750**	**82,181**	**22,646**	**104,827**	**648,577**

SOURCES: Federal Aviation Administration, Operations Network and Ricondo & Associates, Inc. April 2016
PREPARED BY: American Infrastructure Development, Inc., and Ricondo & Associates, Inc. April 2016

In 2007, six Florida airports (FLL, RSW, MIA, APF, MCO, and TPA) serviced nonstop flights from EYW. A seventh location was added in 2008, with service being provided to PBI, increasing intrastate departures to 233 per week. In 2010, service to PBI and APF was halted, causing EYW's average weekly departures to fall to 168. No new flight destinations were added in 2011, keeping the average weekly departures low at 148[2]. In November 2012, Southwest Airlines introduced Boeing 737-700 jet service at the Airport, including nonstop flights between Key West and New Orleans, Orlando, and Tampa. By 2013, the average number of weekly flights at EYW increased back to 168, though still notably less than the numbers seen in the early 2000s; subsequently, Southwest Airlines ceased all service at the Airport in June 2014.

Although Southwest ceased service at the Airport in June 2014, American Airlines, Delta Air Lines, and Silver Airways have continued to add seat capacity at EYW, thus filling a large percentage capacity lost after Southwest's withdrawal. These airlines offer non-stop service between EYW and Tampa, Orlando, Fort Myers,

[2] Florida Department of Transportation, Analysis of Scheduled Commercial Air Service in Florida, Update 2014

Miami, Fort Lauderdale, Atlanta, Charlotte, and Washington, D.C. (Dulles and National Airports). Most recently, Silver Airways applied in March 2016 to the Department of Transportation for scheduled air service from Key West to Havana, Cuba.

2.1.4 Recent Capital Improvement Projects

Since completion of the previous Airport Master Plan in 2003, the County has maintained its commitment to implement projects identified in the Airport Capital Improvement Program (CIP) and on the 2003 Airport Layout Plan (ALP). In addition, a Title 14 Code of Federal Regulations Part 150 (14 CFR Part 150) Noise Compatibility Program Update was formally approved by the Federal Aviation Administration (FAA) in March 2015. **Table 2-2** presents the facility improvement and noise-related projects that have been completed at the Airport since 2003.

Table 2-2: Capital Improvement Projects Completed at the Airport since 2003

PROJECT	YEAR COMPLETED
Airport Master Plan	2003
Environmental Assessment – Passenger Terminal Building Expansion	2005
Environmental Assessment – Runway Safety Area Improvements	2007
New 2-Level Passenger Terminal Passenger Building	2009
Renovations of the Original Terminal Building	2010
Runway 9-27 RSA Improvements and Runway 9 Departure End Emergency Materials Arresting System	2011
Land Acquisition – East End Runway 9-27 Runway Protection Zone and Runway Approach	2013
14 Code of Federal Regulation (CFR) Part 150 Update – Noise Exposure Maps	2013
Baggage Claim/Arrivals Improvements	2013
Faraldo Circle Entrance Roadway Improvements	2014
Runway 9-27 RSA Improvements Phase 2 and Runway 27 Departure End Emergency Materials Arresting System	2015
14 CFR Part 150 Update – Noise Compatibility Program	2015
Airfield Drainage Improvements	2015
Commercial Apron Reconstruction	Ongoing
U.S. Customs and Border Protection Facility Improvements	Ongoing
Noise Insulation Program – Planning and Eligibility Testing Phase	Ongoing
Airfield Security Improvements	Ongoing

SOURCES: EYW Capital Improvement Plan and Passenger Facility Charge Applications, and Jacobs Engineering Group Inc.
PREPARED BY: American Infrastructure Development, Inc., and Ricondo & Associates, Inc. April 2016

2.1.5 Airport Capital Improvement Program

Projects anticipated to be implemented in coming years will be programmed in either a passenger facility charge (PFC) application or an FAA Airport Improvement Program (AIP) grant application.

2.1.6 Airport Property

Exhibit 2-2 depicts the Airport property limits. The County acquired the 9-acre Parcel "7" in 2013 to enhance safety and protect the Airport from non-compatible land use development within the runway protection zones (RPZ) and the runway approach surface. The property was acquired using local, FAA, and State funds.

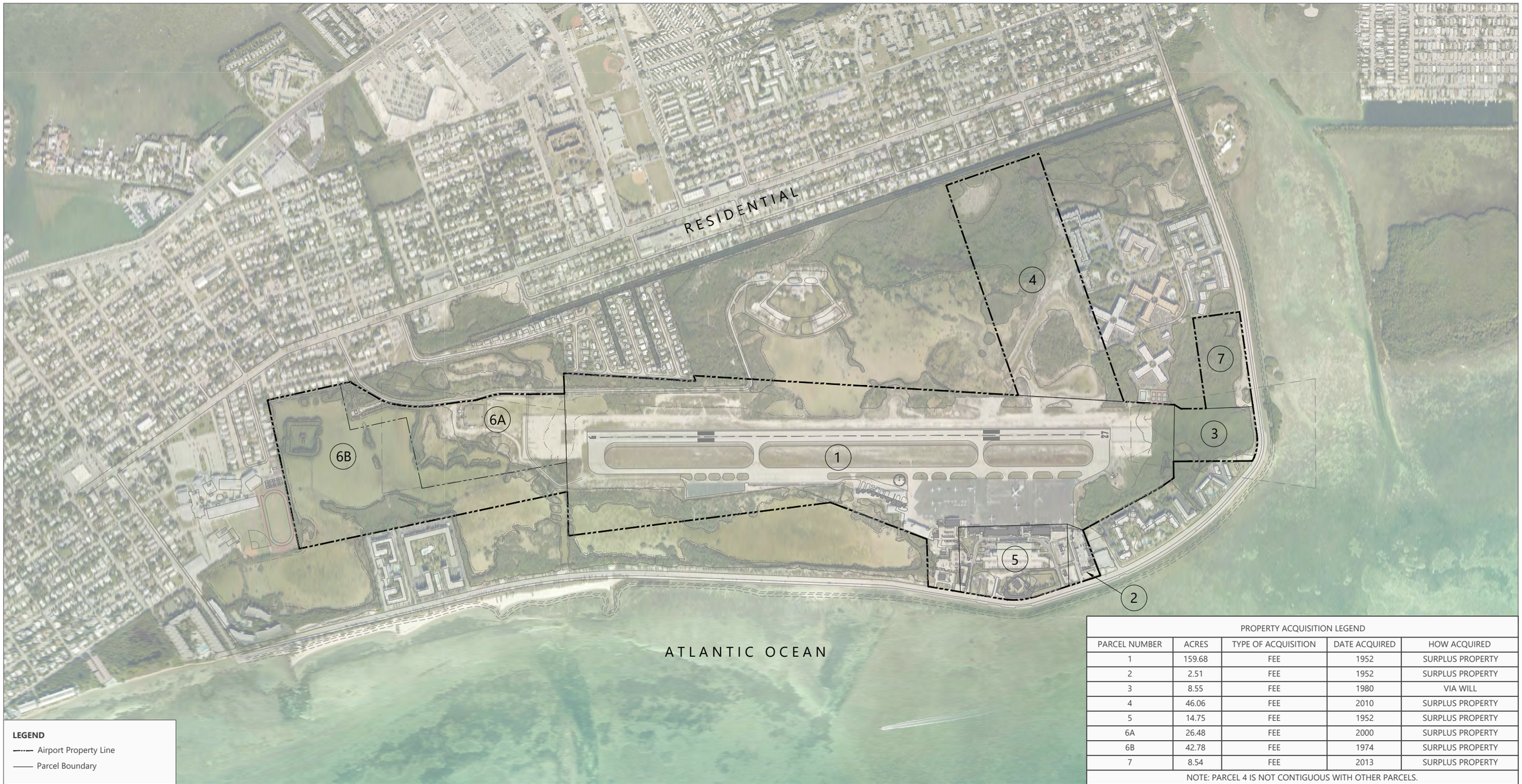
2.2 Airfield System

The airfield includes those facilities necessary to support the movement and operation of aircraft, including runways, taxiways, and apron areas, along with associated markings, lighting systems, and instrumentation. The locations of airfield facilities at EYW are shown on **Exhibit 2-3**. The Airport Reference Point, which defines the midpoint of the airfield, is located at 24°33'22.0"N latitude and 81°45'34.4"W longitude (North American Datum 83) and the Airport elevation (the highest point on the runway) is 3.35 feet above mean sea level (MSL).

2.2.1 RUNWAY LAYOUT AND TAXIWAY NETWORK

Runway 9-27, the only runway at EYW, is 5,075 feet long and 100 feet wide. Runway 9-27 consists of an asphalt overlay on asphalt concrete pavement. and is able to accommodate aircraft weighting up to 195,000 pounds, including commercial jets, turboprops, military aircraft, and large general aviation aircraft (e.g., business jets). Runway pavement strength can be expressed as single-wheel loading, dual-wheel loading, and dual-tandem-wheel loading. The aircraft gear type and configurations dictate how the aircraft weight is distributed on the pavement and determine pavement response to loading. Examination of gear configuration, tire contact areas, and tire pressure in common use areas, indicates that pavement strength is related to aircraft maximum take-off weight. Runway strength is 75,000 pounds for single-wheel aircraft, 125,000 pounds for dual-wheel, and 195,000 pounds dual-tandem wheel. The last overlay/construction work completed on Runway 9-27 was in 2003 according to the Florida Department of Transportation's (FDOT's) *Statewide Airfield Pavement Management Program, District 6 Report*, dated June 2015. The report indicates that the runway has a pavement condition index (PCI) rating between 57 and 60 or "Fair.". **Exhibit 2-4** provides the results of FDOT's 2015 airfield pavement assessment.

Runway 9-27 has an EMAS at each end, installed as part of an extensive RSA Enhancement Project undertaken by the County. The Runway 9 departure end EMAS is 340 feet long by 120 feet wide. The Runway 27 departure end EMAS is 274 feet long by 122 feet wide and is located 307 feet from the existing runway end.

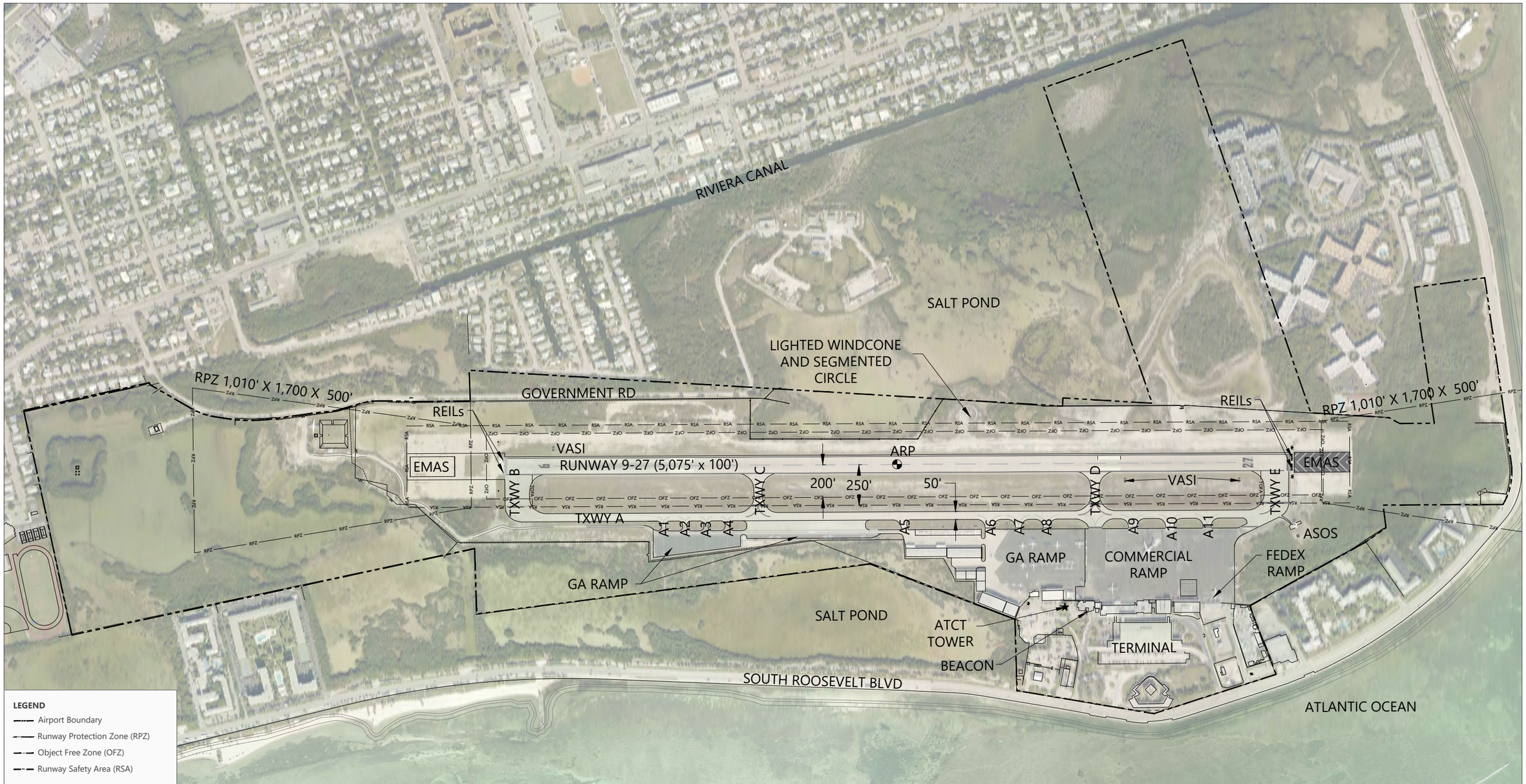


PROPERTY ACQUISITION LEGEND				
PARCEL NUMBER	ACRES	TYPE OF ACQUISITION	DATE ACQUIRED	HOW ACQUIRED
1	159.68	FEE	1952	SURPLUS PROPERTY
2	2.51	FEE	1952	SURPLUS PROPERTY
3	8.55	FEE	1980	VIA WILL
4	46.06	FEE	2010	SURPLUS PROPERTY
5	14.75	FEE	1952	SURPLUS PROPERTY
6A	26.48	FEE	2000	SURPLUS PROPERTY
6B	42.78	FEE	1974	SURPLUS PROPERTY
7	8.54	FEE	2013	SURPLUS PROPERTY
NOTE: PARCEL 4 IS NOT CONTIGUOUS WITH OTHER PARCELS.				

SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015. Property Map Details, 2003 Airport Master Plan and Airport Management – Parcel 7 Information.
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-2

Airport Property Map



SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-3

NORTH 0 600 ft.

Airfield Facilities

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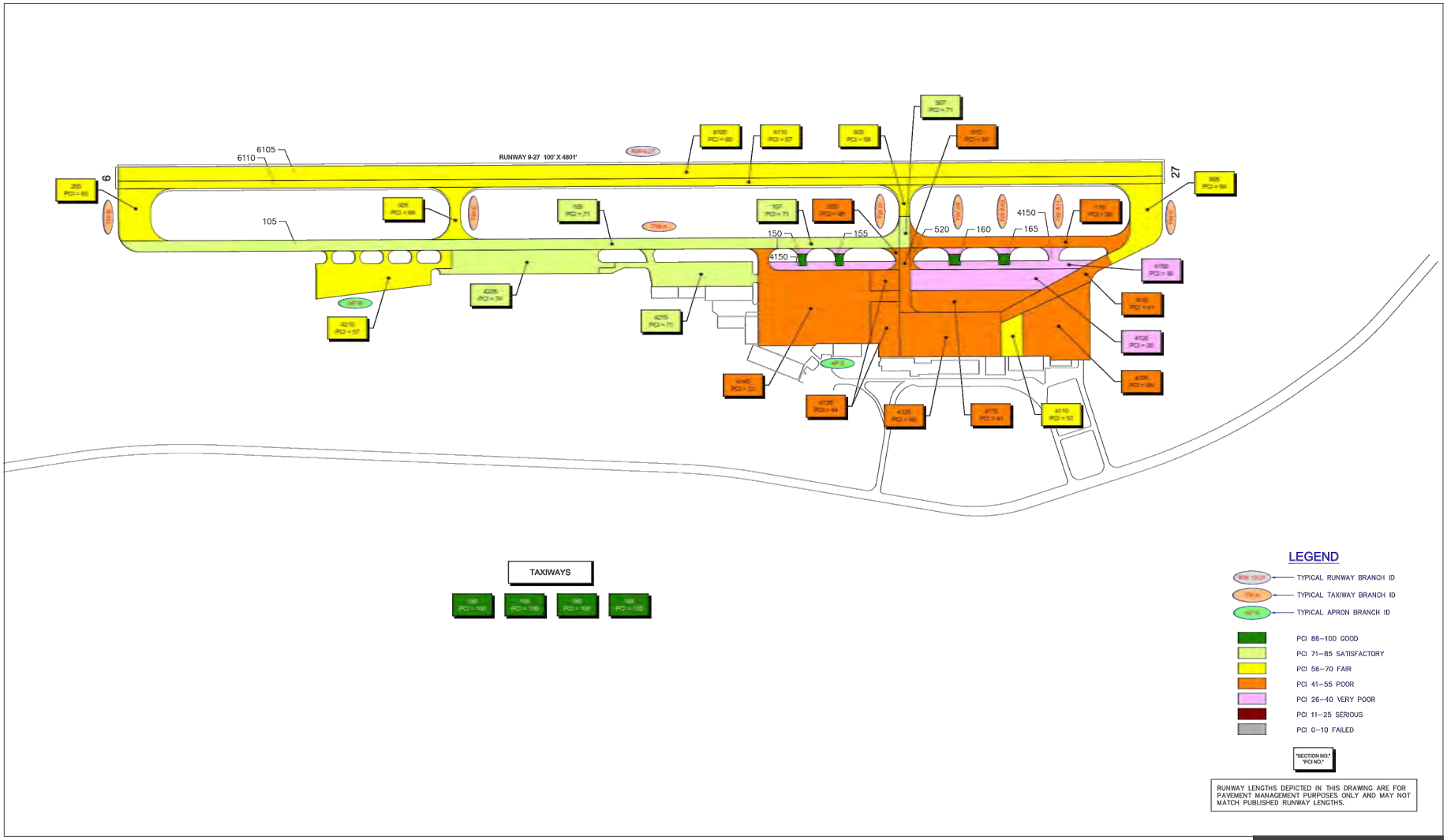

SOURCE: Basemap, Florida Department of Transportation (FDOT), Airfield Pavement Management Program, June, 2015
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-4

NORTH 0 700 ft.

Airfield and Apron Pavement Conditions

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The runway was originally 4,801 feet long but a project was completed in 2017 to increase the departure length of Runway 9 by approximately 274 feet, to 5,075 feet. This was accomplished by using the existing 309 feet of overrun pavement located between the Runway 9 threshold and the start of the EMAS. A minimum 35-foot setback from the runway threshold to the EMAS must remain; therefore, a total of 274 feet was re-classified as runway pavement. The project was completed in May 2017.

The taxiway system at the Airport provides access between the runway and various aircraft parking aprons throughout the airfield. Taxilanes are designated within and adjacent to the apron areas to facilitate the movement of aircraft between parking positions and taxiways. All of the taxiways at EYW are asphalt and have medium intensity taxiway lights (MITL). The full-length parallel Taxiway A is 50 feet wide and is located 315 feet south of the Runway 9-27 centerline. Four taxiways (B, C, D, and E) connect Taxiway A to Runway 9-27, and an additional 11 taxiways (A1 through A11) connect Taxiway A to aircraft parking areas and support facilities at EYW.

Table 2-3 provides the pavement condition of the taxiways at EYW according to FDOT's 2015 *Statewide Airfield Pavement Management Program*. Taxiway A11 will be rehabilitated as part of a Commercial Apron Reconstruction Project to be initiated in 2016.

2.2.2 AIRFIELD LIGHTING AND NAVIGATIONAL AIDS

Airfield lighting and navigational aids are necessary at all airports that accommodate aircraft operations during nighttime hours or during inclement weather. Such aids enable pilots to identify the airport from the air and help them maneuver safely on the ground during reduced visibility conditions. The following subsections detail the various airfield lighting and navigational aid components present at EYW.

2.2.2.1 Airport Rotating Beacon

The Airport beacon indicates the location and presence of the Airport at night or during low visibility conditions. The rotating beacon at EYW is 71 feet in height and located south and west of the aircraft rescue and firefighting (ARFF) station. This navigational aid consists of an optical rotating beacon that projects two beams of sequenced flashing lights, one green and one white, 180 degrees apart, which designate a civil land airport. The beacon is in good condition and is continuously operated during nighttime hours and when the airfield is operating under instrument flight rule (IFR) conditions.

2.2.2.2 Runway/Taxiway Edge Lighting

Runway edge lights enable pilots to identify the edges of the runway and assist them in determining the runway length remaining during periods of darkness and restricted visibility. The lights marking the ends of the runway emit red light toward the runway to indicate the end of the runway to a departing aircraft, and emit green light outward from the runway end to indicate the runway threshold to pilots of landing aircraft. These lighting systems are classified according to their intensity or brightness. Runway 9-27 is equipped with standard medium intensity runway lights (MIRL) along the runway edges.

Table 2-3: Existing Taxiway Inventory and Conditions

TAXIWAY	TAXIWAY WIDTH (FEET)	AGE (YEARS)	PAVEMENT CONDITION INDEX/CONDITION	TYPE
A	50	12	71 Satisfactory to D / 55 Poor from D to E	Asphalt
B	150	12	63 Fair	Asphalt
C	50	12	68 Fair	Asphalt
D	50	12	58 Fair midpoint to Runway / 71 Fair midpoint to A	Asphalt
E	150	12	64 Fair	Asphalt
A1	25	12	57 Fair	Asphalt
A2	25	12	57 Fair	Asphalt
A3	25	12	57 Fair	Asphalt
A4	25	12	57 Fair	Asphalt
A5	37.5	9	71 Satisfactory	Asphalt
A6	50	12	53 Poor	Asphalt
A7	35	0	Good	Asphalt
A8	35	0	Good	Asphalt
A9	50	0	Good	Asphalt
A10	50	0	Good	Asphalt
A11	50	12	Very Poor	Asphalt

SOURCE: Florida Department of Transportation, *Statewide Airfield Pavement Management Program, District 6 Report*, 2015.
PREPARED BY: American Infrastructure Development, Inc., and Ricondo & Associates, Inc. April 2016

Similarly, all taxiways and associated connectors are equipped with medium intensity taxiway lights (MITL) along the taxiway edges. All lighting is in good condition according to Airport staff. Although none of the existing taxilanes has a lighting system, overhead lighting fixtures in the primary ramp areas assist in visual guidance during nighttime operations.

2.2.2.3 Approach Lighting

Runway 9-27 is equipped with runway-end identifier lights (REIL) to aid in identifying the approach end of the runway. The REIL system consists of a pair of synchronized flashing lights located laterally on each side of the runway threshold. When the Airport traffic control tower (ATCT) is closed, the REILs and MIRLs for Runway 9-27 can be activated by pilots using the Common Traffic Advisory Frequency 118.200.

Visual glide slope indicators aid pilots in judging the correct approach slope of the aircraft toward the touchdown zone of a runway. Precision approach path indicators (PAPIs) and visual approach slope indicators

(VASIs) are a system of lights that may be visible for up to 5 miles during the day and up to 20 miles or more at night. VASI systems are being replaced by newer technology PAPI systems at most airports. Typically, basic VASIs consist of two sets of lights (4-box). PAPI systems use light units similar to the VASI, but are installed in a single row of either two or four light units. Each set of lights is designed to appear as either white or red, depending upon the approach angle. When the pilot is approaching the lights at the proper angle, the first set of lights appears white and the second set appears red. When both sets appear white, the pilot is flying too high, and when both appear red, the pilot is flying too low. Runway 9-27 has been upgraded since the last Master Plan was completed from a VASI system to a four-light PAPI system located on the left side of the Runway 9 approach end and the right side of the Runway 27 approach end.

2.2.2.4 Wind Cones

Wind cones provide pilots with existing wind conditions and direction. Runway 9-27 is equipped with a lighted wind cone within a segmented circle located midway and north of Runway 9-27.

Table 2-4 provides a summary of lighting and approach aids provided on Runway 9-27 at EYW.

Table 2-4: Lighting and Navigational Approach Aids

RUNWAY END	RUNWAY EDGE LIGHTS	REIL	WIND CONE	VISUAL GLIDE SLOPE INDICATOR	THRESHOLD CROSSING HEIGHT (FEET)	VISUAL GLIDE ANGLE (DEGREES)	RUNWAY MARKING TYPE
9	MIRL	Y	Y	PAPI-4	35	3	Nonprecision Instrument
27	MIRL	Y	Y	PAPI-4	35	3	Nonprecision Instrument

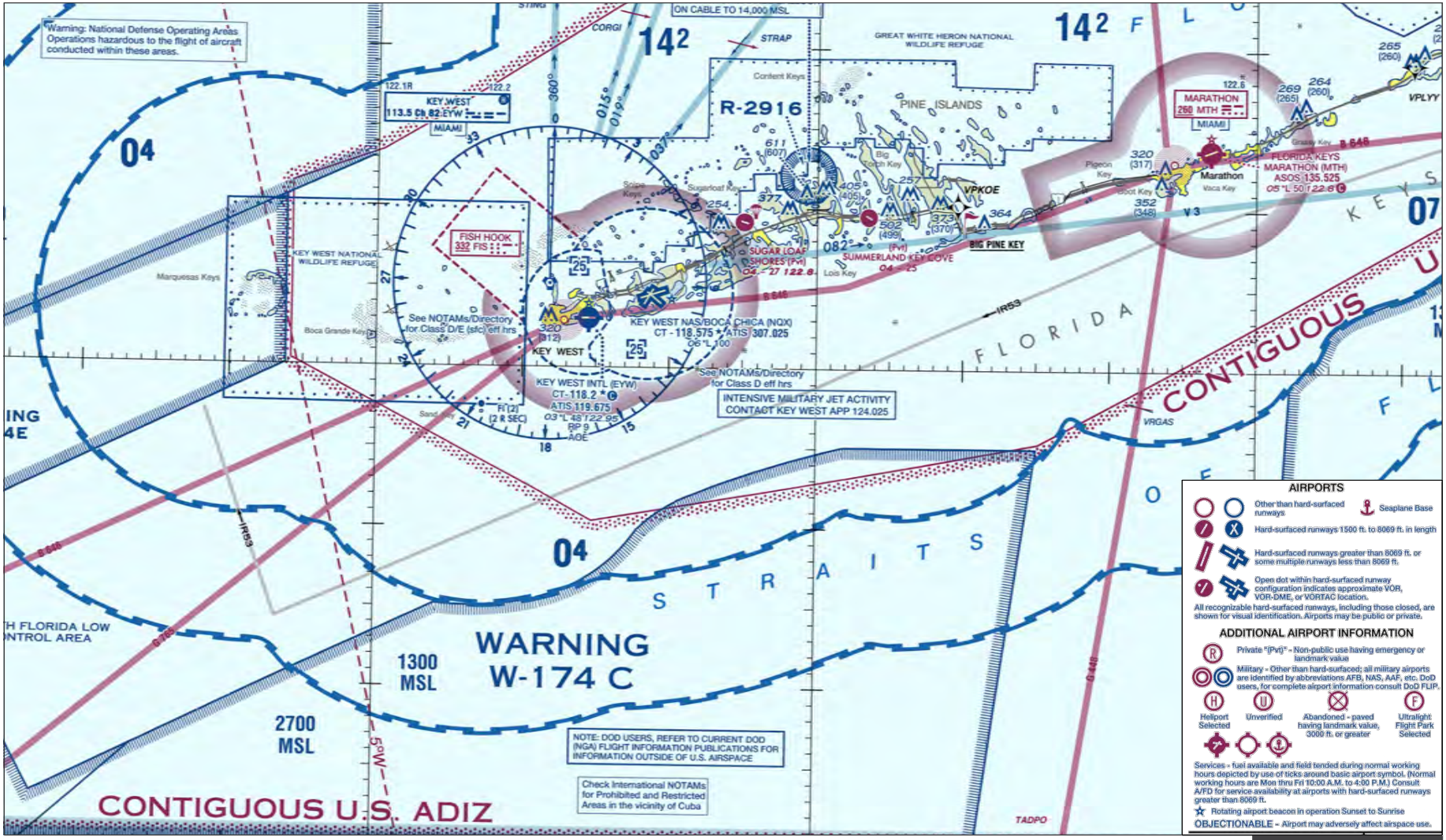
MIRL – Medium Intensity Runway Lights, REIL – Runway End Identifier Lights, PAPI – Precision Approach Path Indicators

SOURCES: Florida Department of Transportation, EYW and FAA Airport Master Records, effective 3 March 2016.
PREPARED BY: American Infrastructure Development, Inc., and Ricondo & Associates, Inc. April, 2016

2.2.3 REGIONAL AIRSPACE

The inventory of existing conditions includes navigational factors, such as military, public, and private airports; civil and military flight corridors; navigational and visual aids; military restricted and operational areas; published approaches; and known obstructions that affect approaches or departures at EYW.

Airports on the Miami Sectional Aeronautical Chart (see **Exhibit 2-5**), published by the National Oceanic and Atmospheric Administration (NOAA), located within 25 miles of EYW, are listed in **Table 2-5**. These airports include NAS Key West, 5.0 nautical miles (nm) east (bearing 73.1 degrees); Sugar Loaf Shores, 13 nm northeast (bearing 60.6 degrees); and Summerland Key, 21 nm northeast (bearing 70.5 degrees). Florida Keys Marathon Airport is located 40 nm from EYW.



SOURCE: National Oceanic and Atmospheric Administration (NOAA), Miami Sectional Chart, 2016
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-5

NORTH

Sectional Aeronautical Chart of Airport Vicinity

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-1 Sectional Aeronautical Chart of Airport Vicinity.dwgLayout: Layout1 Plotted: June 10, 2020, 01:39PM

Table 2-5: Airports within 25 Miles

AIRPORT	OWNERSHIP	DISTANCE FROM EYW
NAS Key West	U.S. Navy	5 NM East
Sugar Loaf Shores	Private	13 NM Northeast
Summerland Key	Private	21 NM Northeast

NAS = Naval Air Station
NM = nautical miles

SOURCE: *Miami Sectional Aeronautical Chart*, August 18, 2016
PREPARED BY: American Infrastructure Development, Inc., and Ricondo & Associates, Inc. April 2016

Obstructions within 25 nautical miles of the Airport include a strobe-lighted and marked balloon up to 14,000 feet northeast of the Airport; and several towers located east, north, and west of the Airport. These towers are situated at elevations ranging from 143 feet to 611 feet above MSL. The latest FAA edition (03 March 2016 to 31 March 2016) of the *Takeoff Minimums, (Obstacle) Departure Procedures and Diverse Vector Areas (Radar Vectors)* indicates that pilots departing from Runway 9 or 27 must be aware of several obstacles, as indicated in **Table 2-6**.

Table 2-6: Departure Obstacles

DEPARTURE END OF RUNWAY	BEGINNING FROM DEPARTURE END OF RUNWAY	TYPE OF OBSTACLE
9	38 feet, 199 feet, right of centerline, up to 75 feet above ground level /82 feet above mean sea level	Rod on antenna, dome on building, poles and numerous trees
9	4 feet, 220 feet, left of centerline, up to 38 feet above ground level / 45 feet above mean sea level	Obstruction light on building, pole, and numerous trees
27	27 feet, 116 feet, right of centerline up to 83 feet above ground level / 90 feet above mean sea level	Poles and numerous trees
27	202 feet, 78 feet, left of centerline up to 37 feet above ground level / 44 feet above mean sea level	Numerous bushes and trees

SOURCE: Federal Aviation Administration, *Takeoff Minimums, (Obstacle) Departure Procedures, and Diverse Vector Area (Radar Vectors) for Key West FL,* 28 APR 2016 to 26 MAY 2016
PREPARED BY: American Infrastructure Development, Inc., and Ricondo & Associates, Inc. April 2016

Interviews and conversations with the EYW FAA Air Traffic Control Manager in March 2016 provided insight as to how arrivals and departures at EYW are handled. The airspace in the vicinity of Key West International Airport is a complex system because of the proximity of NAS Key West – Boca Chica Field.

Procedures within the Airport's airspace are subject to certain restrictions because of overlapping airspace between NAS Key West and EYW. Operations within each airspace are coordinated by the NAS Key West ATCT

and radar approach/departure control personnel. Aircraft landing at EYW are then handed off from the NAS Key West ATCT to the EYW ATCT personnel once their destination is known and there is no conflict with other traffic.

ATCT staff estimates that the flow of operations is to the east 80 percent of the time on a yearly average. However, seasonal fluctuations and storms may dictate use of the runway in a westerly flow.

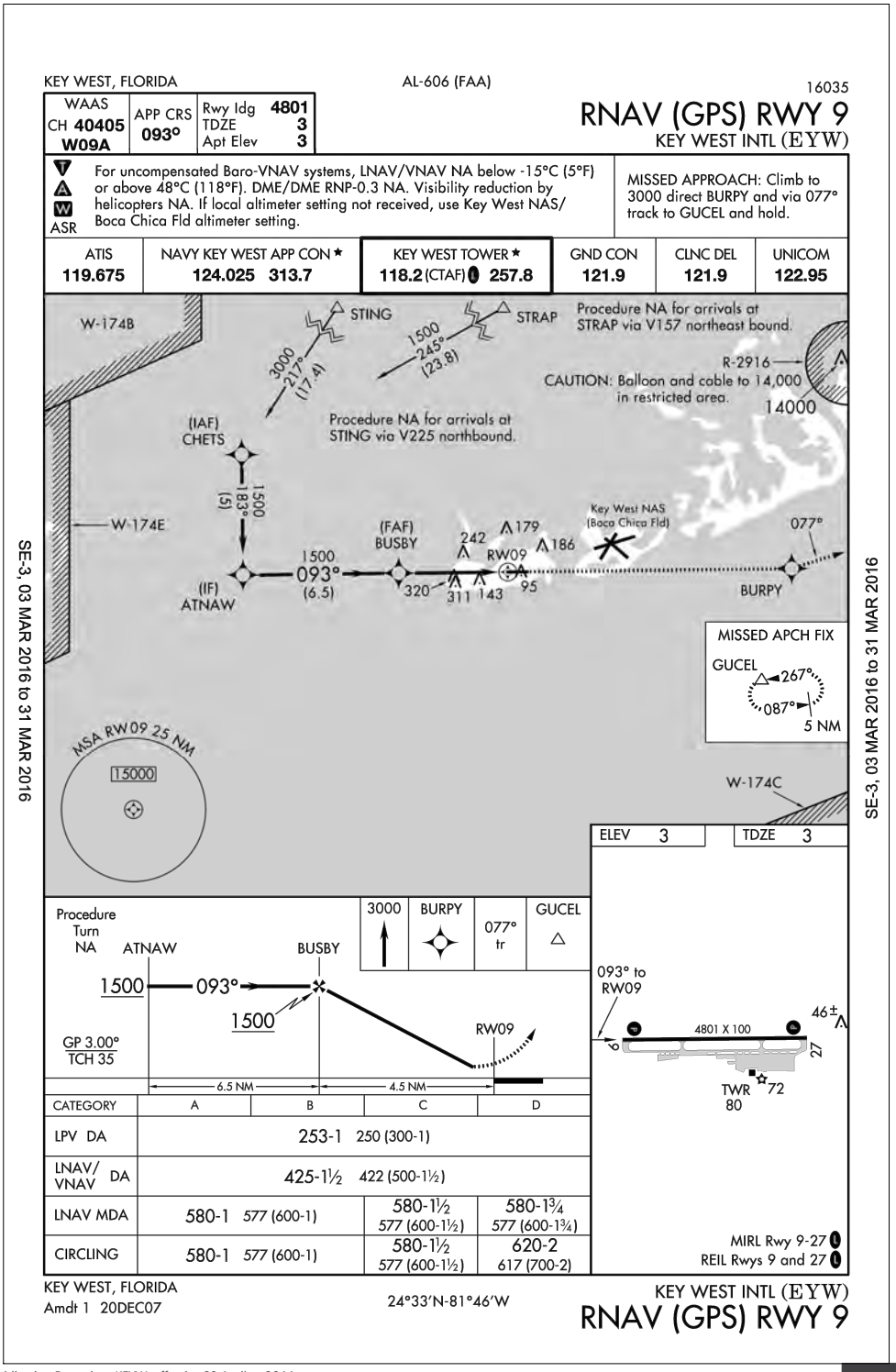
The EYW ATCT is operational from 7:00 a.m. to 9:00 p.m. daily. The NAS Key West ATCT and radar approach/departure control facilities are operational from 7:00 a.m. to midnight and are served by an Airport Surveillance Radar (ASR-8) unit. Controllers in the ATCTs interface with the Miami Air Route Traffic Control Center (ARTCC). The ARTCC provides airspace approach and departure services when NAS Key West approach control is closed. The ARTCC provides service to the combined airspace from midnight to 7:00 a.m. All ATCT and radar facilities are operational 7 days a week.

According to the EYW ATCT Manager, an airspace delineation boundary has been established to identify overlapping airspace. Specific procedures are to be followed during visual meteorological conditions (VMC) and instrument meteorological conditions (IMC). During VMC, civil aircraft departing from Runway 9 are required to make a left turn and stay west of the boundary. Military aircraft stay east of the delineation boundary used by the ATCT. During IMC, NAS Key West ATCT and radar approach/departure control personnel provide position and altitude data to all aircraft. Departures from EYW are held whenever an instrument approach under IFR conditions is being conducted to either EYW or NAS Key West runways.

EYW and NAS Key West airspace is adjacent to the Air Defense Identification Zone, United States Defense Area R-2916, and numerous warning areas outside of FAA jurisdiction and over international waters. Traffic from the north and northeast is routinely routed clear of warning areas. The U.S. Navy uses some warning areas for high-speed aerial combat training, including surface-to-air and air-to-air missile firings and anti-aircraft gunnery.

2.2.4 Published Instrument Approach Procedures

EYW currently has two published Area Navigation (RNAV) global positioning system (GPS) nonprecision approaches, one to each runway end, and a nondirectional beacon (NDB) NDB-A circling approach to either runway end, as depicted on **Exhibits 2-6A**, **2-6B**, and **2-7**. A nonprecision instrument approach is one in which the pilot uses only horizontal navigational guidance to line the aircraft up with the runway. When flying such an approach, the pilot proceeds along the specified course and descends to the minimum descent altitude (MDA) while locating the runway. If the runway (or runway environment) is in sight, the pilot may land; otherwise, the pilot must execute a missed approach.



SOURCE: FAA U.S. Terminal Publication Procedure KEYW, effective 28 April to 26 May.
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-6A

NORTH

Runway 9 GPS Approach

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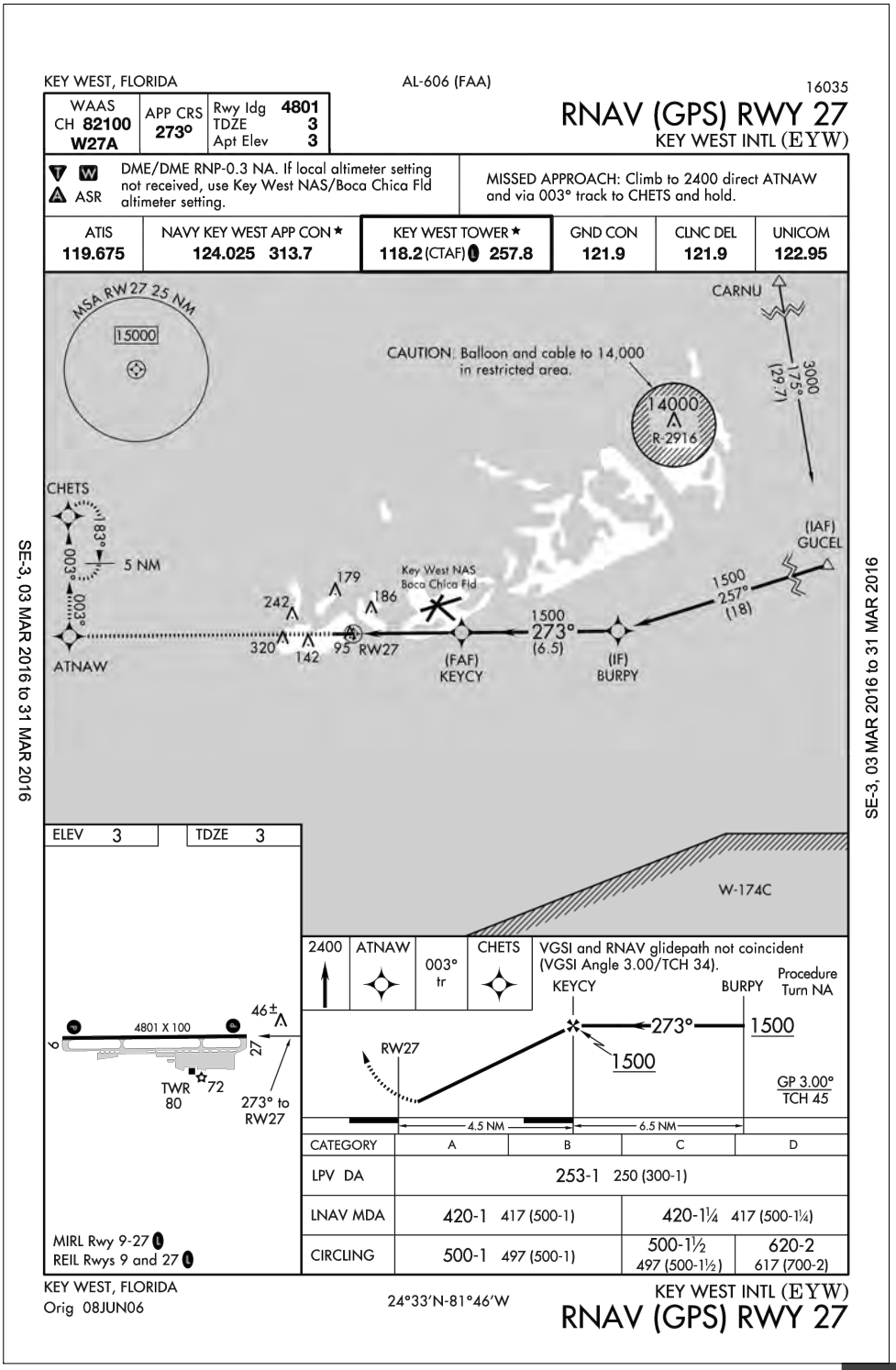


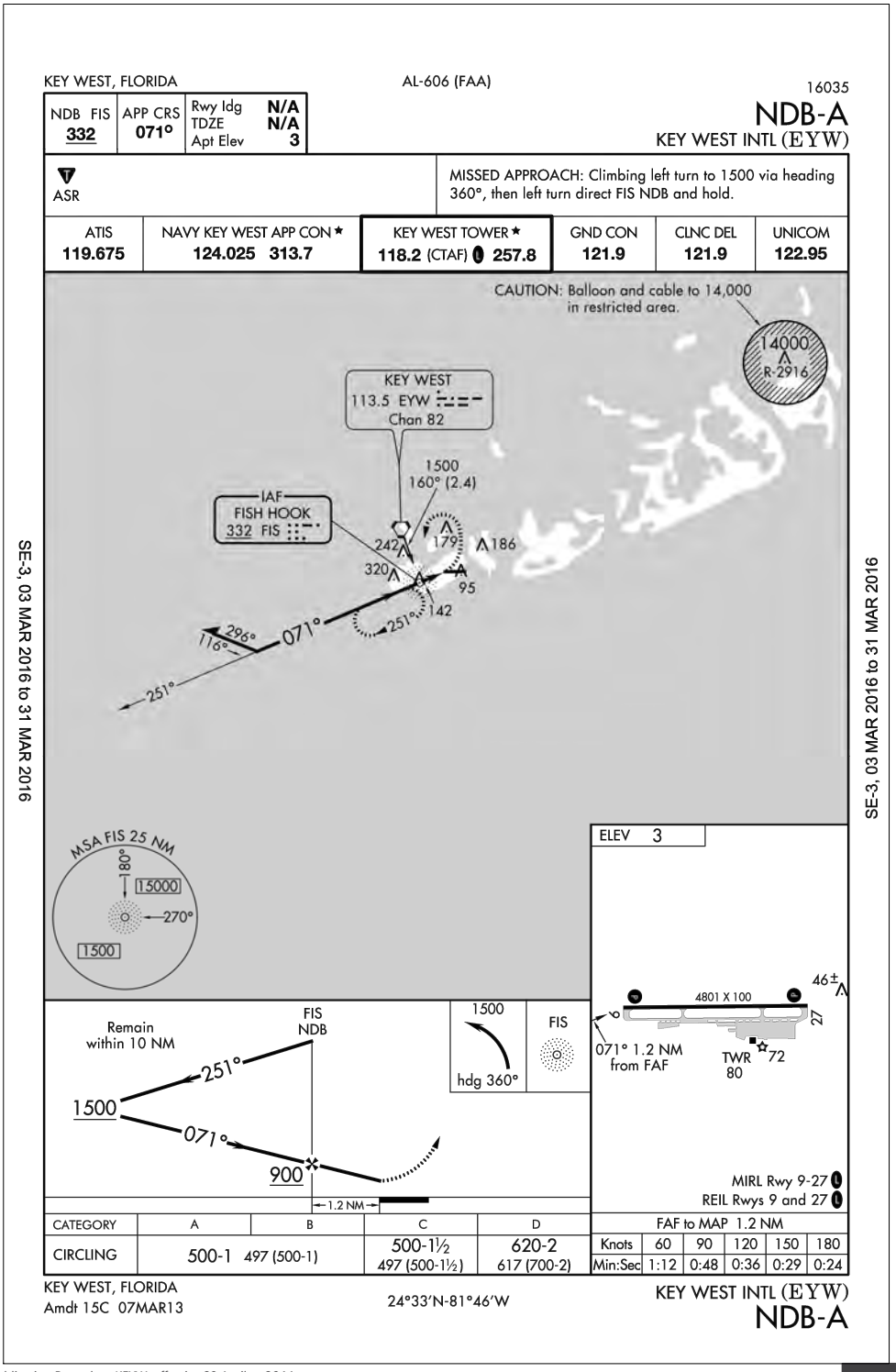
SOURCE: FAA U.S. Terminal Publication Procedure KEYW, effective 28 April to 26 May.
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-6B

NORTH

Runway 27 GPS Approach

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-6 unway 27 PS A roach.dwgLayout: Layout1 Plotted: un 10, 2020, 0 9PM



SOURCE: FAA U.S. Terminal Publication Procedure KEYW, effective 28 April to 26 May.
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-7

NORTH

Runway 9-27 NDB-A Approach

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-7 D -A A roach.dwgLayout: Layout1 Plotted: un 10, 2020, 0 :30PM

The RNAV (GPS) Runway 9 approach allows straight-in and circling approaches to Runway 9. The straight-in approach to Runway 9 has an MDA of 580 feet and visibility of 1 mile for Aircraft Approach Categories (AACs) A and B, an MDA of 580 feet and visibility of 1.5 miles for AAC C, and an MDA of 580 feet and visibility of 1.75 miles for AAC D. Circling approaches are allowed with an MDA of 580 feet and visibility of 1 mile for AACs A and B, an MDA of 580 feet and visibility of 1.5 miles for AAC C, and an MDA of 620 feet and visibility of 2 miles visibility for AAC D.

The RNAV (GPS) Runway 27 approach allows straight-in and circling approaches to Runway 27. The straight-in approach to Runway 27 has an MDA of 420 feet and visibility of 1 mile for AACs A and B and an MDA of 420 feet and visibility of 1.25 miles for AACs C and D. Circling approaches are allowed with an MDA of 500 feet and visibility of 1 mile for AACs A and B, an MDA of 500 feet and visibility of 1.5 miles for AAC C, and an MDA of 620 feet and visibility of 2 miles for AAC D.

The NDB-A approach provides for a circling approach to the Airport with an MDA of 500 feet and visibility of 1 mile for AACs A and B, an MDA of 500 feet and visibility of 1.5 miles for AAC C, and an MDA of 620 feet and visibility of 2 miles for AAC D. The NDB-A instrument approaches to EYW are conducted using the following navigational aids.

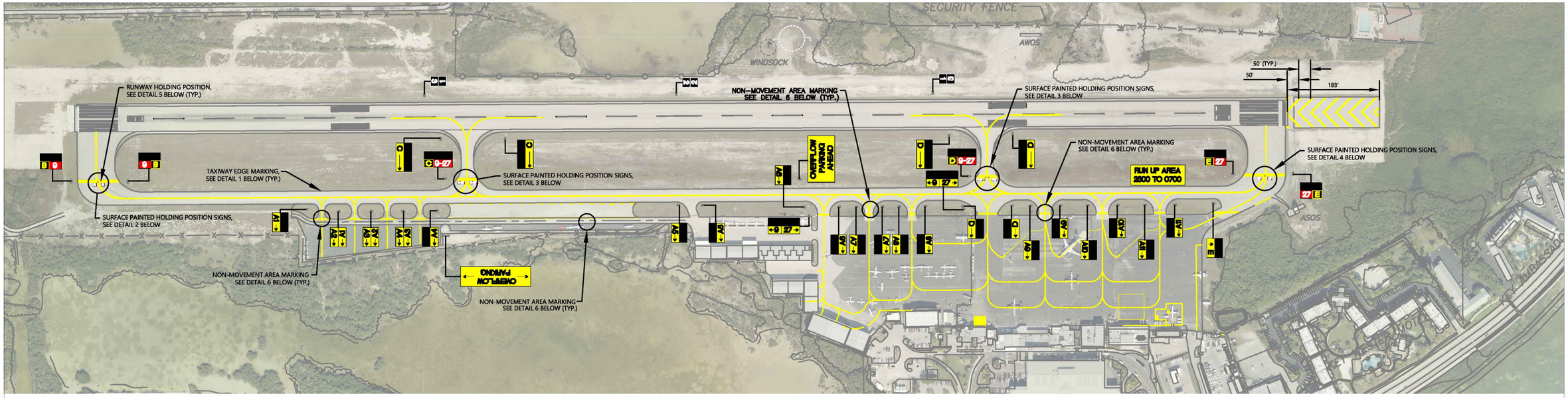
- Very High Frequency Omnidirectional Range Tactical Air Navigation (VORTAC) - Key West VORTAC, 113.5 Channel 82 EYW
- Non-Directional Beacon (NDB) - Fish Hook (FIS) NDB, 332

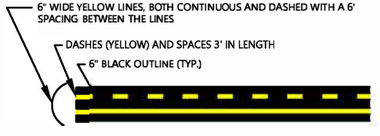
2.2.5 Airfield Signage and Marking Plans

EYW is certificated under 14 CFR Part 139, *Certification of Airports*, which requires a signage plan in the *Airport Certification Manual*. The signage plan must show the signage system needed to identify hold positions and taxiing routes in the movement area for air carrier aircraft in accordance with FAA Advisory Circular (AC) 150/5340-18D, *Standards for Airport Sign Systems*. The airfield signage plan should be updated as needed to comply with current safety standards and operating conditions. Standards for runway and taxiway markings are set in accordance with AC 150/5340-1K, *Standards for Airport Markings*. The signage and markings for the EYW airfield are provided on **Exhibit 2-8**. All airfield signs are lighted with light-emitting diodes (LEDs).

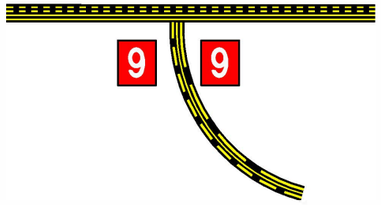
2.2.6 RAMP AND APRON AREAS

Aircraft parking aprons, also referred to as ramp areas, provide space for aircraft parking and circulation for aircraft transitioning between the apron and other facilities at the Airport. EYW has two distinct main apron areas, the commercial terminal apron and a general aviation (GA) apron, as well as two smaller apron areas designated for overflow parking during peak seasonal periods or highly attended Key West events. The commercial aircraft parking apron is located east of the centerline of Taxiway D and consists of approximately 41,000 square yards of asphalt pavement. The apron is adjacent to the passenger terminal building, the CBP facility, and the FedEx facility.

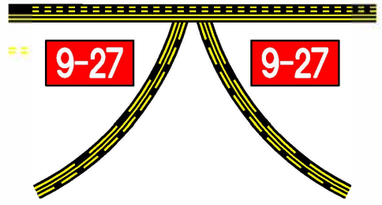




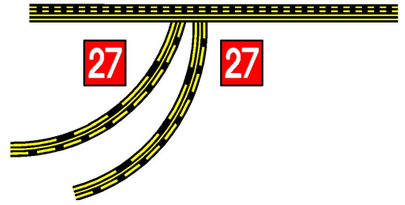
1 EXISTING — NON-MOVEMENT AREA MARKINGS
N.T.S.



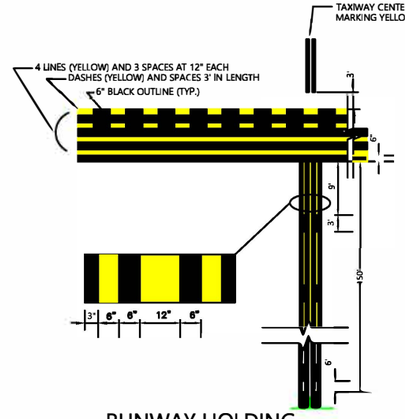
2 EXISTING — SURFACE PAINTED HOLDING POSITION SIGNS DETAIL-THERMOPLASTIC
N.T.S.



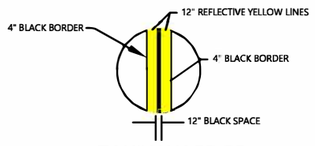
3 EXISTING — SURFACE PAINTED HOLDING POSITION SIGNS DETAIL-THERMOPLASTIC
N.T.S.



4 EXISTING — SURFACE PAINTED HOLDING POSITION SIGNS DETAIL-THERMOPLASTIC
N.T.S.



5 EXISTING — RUNWAY HOLDING POSITION MARKINGS
N.T.S.



6 EXISTING — TAXIWAY EDGE MARKING DETAIL
N.T.S.

SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015. Signage and Marking, Jacobs, Inc., March 2016.
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-8

NORTH 0 400 ft.

Signage and Marking Plan

Drawing: C:\Users\Renee\Dropbox (AID)\1-PROJECTS\EYW\JAC16024-Airport-Master-Plan\03-Drawings\WIP\EXHIBITS\Signage and Markings\EYW-SIGN-MARK-PLAN 1-8.dwgLayout: Layout1 Plotted: May 5, 2016, 09:02AM

The commercial apron is marked for 12 aircraft parking spaces, including one reserved for U.S. Customs inspections. The commercial apron lighting is provided by four high mast floodlights. An additional 8,000 square yards of commercial apron is located in front of the FedEx building and provides parking for up to four Cessna 208 Caravan cargo aircraft.

Rehabilitation of the commercial aircraft parking apron is currently in design to increase its pavement strength. The existing pavement strength is 95,000 pounds dual wheel and the Boeing 737-700W aircraft that serve the Airport on a daily basis are approximately 132,500 pounds dual wheel. The rehabilitation project is projected to be completed in 2018.

The GA ramp/apron is discussed in Section 1.5.

2.2.7 Perimeter and Service Roads

The Airport has perimeter road access to the west, north, and east areas of the airfield. Access to these areas is not paved.

2.2.8 FENCING AND SECURITY GATES

An Airport perimeter fence limits access to the airfield and features vehicle and pedestrian gates. The Air Operations Area (AOA) is a secured area that can be accessed only by those who have been properly badged through the Monroe County Sheriff's Office, Airport Security Division. The Security Identification Display Area (SIDA) is a special security area designated by airport operators to comply with FAA regulations, specifically 14 CFR Part 107.205. An identification system must be used in this area. Before allowing unescorted access to this area, the person must be trained and his/her background investigated. Typically, the flight ramp and other sensitive operational areas of a U.S. commercial airport are designated as SIDAs.

Within the SIDA, a security fence separates the commercial apron area from the GA apron, as depicted on **Exhibit 2-9**. Anyone with proper security credentials may enter/exit the two areas through Security Gate 3. The Airport Security Division of the Sheriff's Office monitors who enters and exits the gate.

Exhibit 2-9: Fence Separating Commercial Apron from General Aviation Apron

SOURCE: American Infrastructure Development, Inc. Data Collection Trip, March 2016.
PREPARED BY: American Infrastructure Development, Inc. April 2016

Airport management is currently in the process of undertaking airfield security improvements, which includes increasing the height of the perimeter fence to 10 feet and upgrading the existing "L" shape barbed wire to a "Y" shape configuration. The existing security gate locations are indicated on **Exhibit 2-10**.

2.3 Passenger Terminal Facilities

This section provides an inventory of existing terminal facilities at EYW, which include the landside terminal area and the passenger terminal facilities.

2.3.1 OVERVIEW OF LANDSIDE TERMINAL AREA

The Airport landside terminal area consists of two distinct locations. Certain facilities are located south of the Faraldo Circle arrivals roadway and other facilities are located north of the arrivals roadway. Facilities south of the arrivals roadway include:

- the passenger departures roadway,
- the passenger ticketing and check-in terminal and associated facilities,
- the main parking garage,
- Airport maintenance vehicle storage area,
- One-hour free parking lot, and
- rental car pick-up/return area.

Facilities north of the arrivals roadway include:

- the passenger departure area/gate area, including concessions, passenger arrivals and baggage claim area, and rental car counters;
- the Adam Arnold Annex Building (Annex building), which includes the U.S. CBP facility, the Monroe County Sheriff - Airport Security Division, and a Greyhound bus station;
- the FedEx cargo building; rental car servicing areas;
- the ATCT; fuel farm;
- and general aviation facilities.

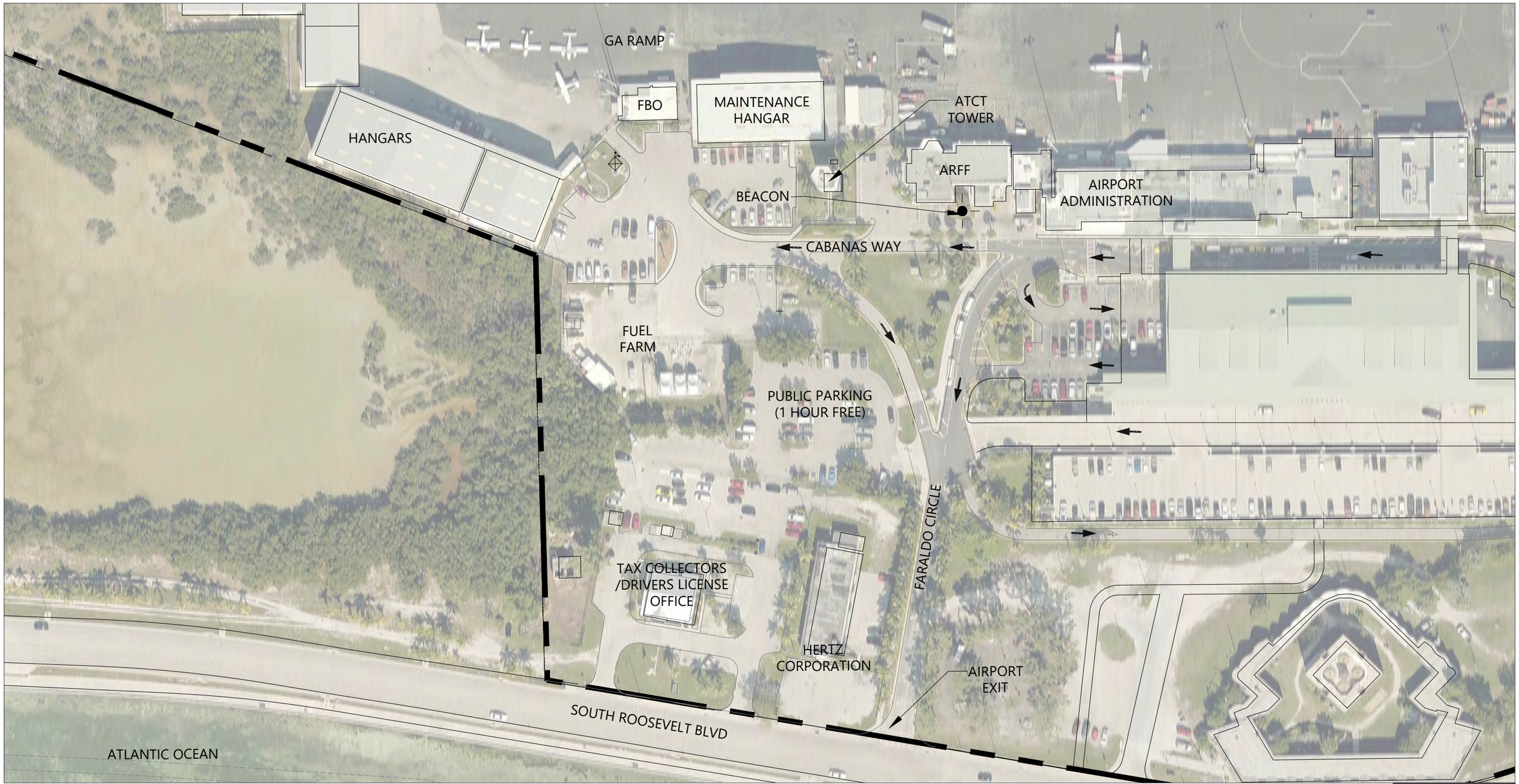
Landside terminal area facilities are depicted on **Exhibits 2-11A**, **2-11B**, and **2-11C** and are described in the sections below.

SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015. Gate locations, Perez Engineering, February 2014.
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-10

Security Gate Locations

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-10 Security ate Locations.dwgLayout: 11x17L Plotted: un 11, 2020, 0 :0 AM



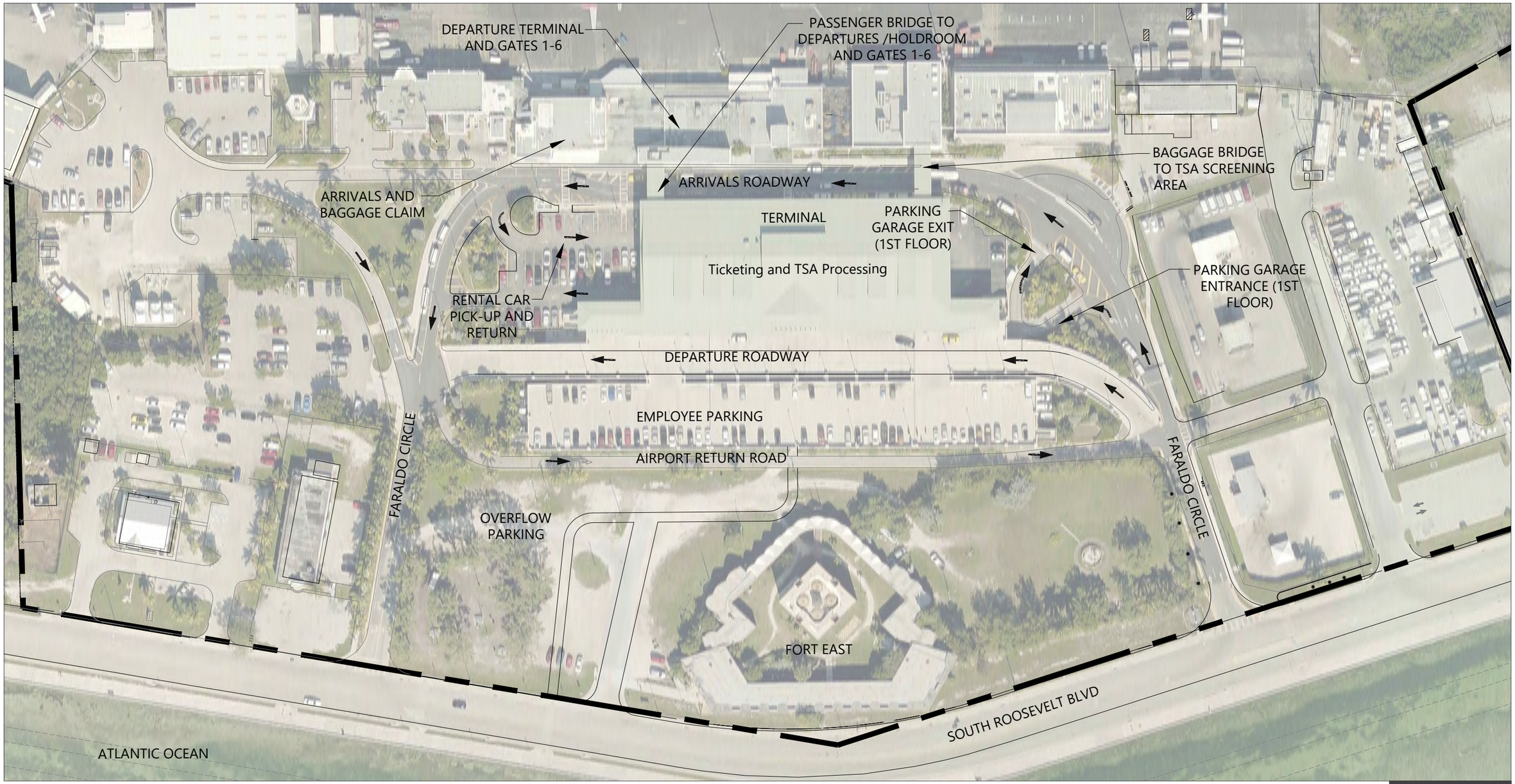
SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-11A

NORTH 0 100 ft.

West Landside Terminal Area

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-11A West Landside Terminal Area.dwgLayout: 11x17L Plotted: un 11, 2020, 0: :09AM



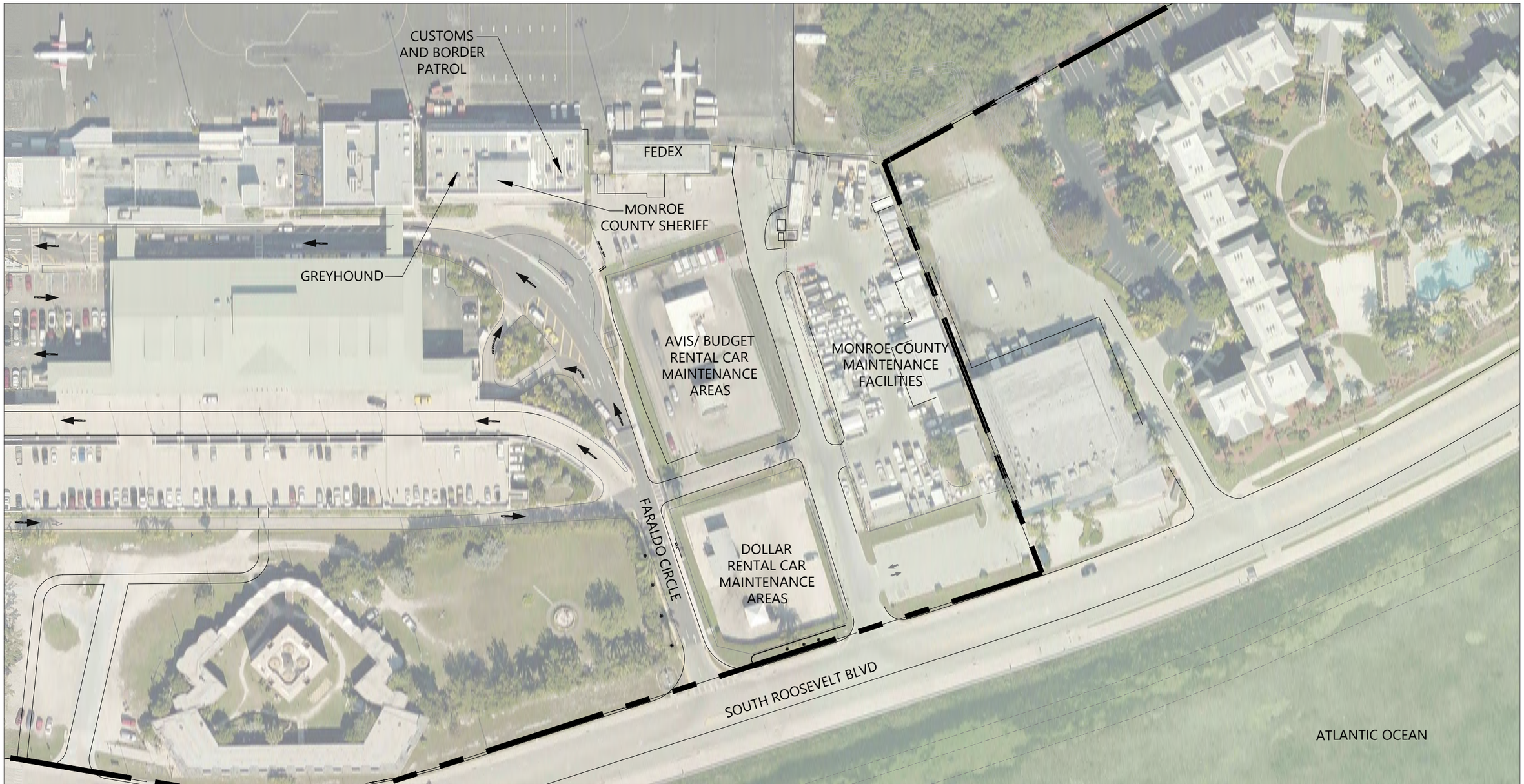
SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-11B

NORTH 0 100 ft.

Central Landside Terminal Area

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-11 Central Landside Terminal Area.dwgLayout: 11x17L Plotted: un 11, 2020, 0: :10AM



SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-11C

NORTH 0 100 ft.

East Landside Terminal Area

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-11C East Landside Terminal Area.dwgLayout: 11x17L Plotted: un 11, 2020, 0: :12AM

2.3.3 PASSENGER TERMINAL FACILITIES

The two-level passenger terminal building located north of the departures roadway was opened in 2009. The building is approximately 30,000 square feet in size. The terminal floor plan is shown on **Exhibit 2-12** and the terminal space allocation is summarized in **Appendix A**. The upper level of the terminal provides facilities for all departure check-ins and processing, including airline ticketing and passenger check-in; public space; airline offices; food, beverage, and other concessions; restrooms; Transportation Security Administration (TSA) processing of passengers and office space; a second-level passenger walkway; and an escalator and elevator for access to the secure departure holdrooms and aircraft gates.

In front of the building, there is ample covered and non-covered sidewalk for passenger drop-off. The non-secured circulation areas include ticketing, restrooms, visitor seating, and concessions.

In addition to passenger processing, checked baggage must also undergo a security screening process. Bags are placed on a baggage belt behind the ticket counters and are then transported via a conveyor belt across an elevated bridge to the secure baggage make-up and screening room located across the arrivals roadway.

The lower level 24,000 square foot passenger terminal building is located north of the arrivals roadway. The two structures are connected via an elevated walkway. The secure departures holdroom is located in the building, as is a separate arrivals area. Gates 1 through 6 provide access through doorways from the passenger terminal to the aircraft parking apron. The departures/gate area of the terminal has 200-seats with restrooms, a 160-seat restaurant/bar including an outdoor area for eating, and a small concessions/gift shop.

A separate passenger arrivals and baggage claim area is located west of the departure gates. It includes two baggage conveyor belts, rental car counters, restrooms, and a baggage service office. In front of the building, the covered and non-covered sidewalk for passenger pick-up is congested during peak times because of the demand for taxicabs.

Airline and tenant support facilities are located on the secure airside of the arrivals/departures terminals. **Exhibit 2-13** illustrates the location of facilities necessary for safe, efficient and secure airline and aircraft operations on the airside. These include baggage conveyor belts, ground service equipment (GSE) storage areas, baggage make-up areas, and TSA baggage screening and security areas, among others.

AIRPORT ADMINISTRATION OFFICES
ARRIVALS/BAGGAGE CLAIM 100
BUDGET AVIS DOLLAR THRIFTY
104 102 103
HERTZ 101
ARRIVAL CURBFRONT
COMMERCIAL VEHICLE PASSENGER PICK-UP
DELTA
SILVER
AMERICAN
DEPARTURES
LAST CHANCE
RESTROOMS
RETAIL SPACE
CONCH FLYER 144
143 CONCH FLYER
BAG MAKE-UP AREA 145
BAGGAGE BRIDGE 233
TAXI STAGING
ARRIVALS ROADWAY
RENTAL CAR
PICK-UP / RETURN
202 SECURITY CHECK-IN
RESTROOMS
CONCH FLYER RESTAURANT 221
GIFT SHOP OFFICE
LAST CHANCE GIFT SHOP 220
TSA
217 JET LAG GIFT SHOP
PUBLIC SPACE 201
ELEV. 2
ELEV. 1
BAGGAGE SCREENING ROOM 231
AIRLINE OFFICES
AMERICAN DELTA SILVER
TICKETING
DELTA SELF CHECK-IN
DEPARTURES CURBFRONT
DEPARTURES ROADWAY
EMPLOYEE PARKING

LEGEND
- Ticketing Area
- Shops and Restaurants
- Security Check In
- Baggage Make-up Area
- Departure Area
- Arrivals/Bag Claim Area
- Administration Offices

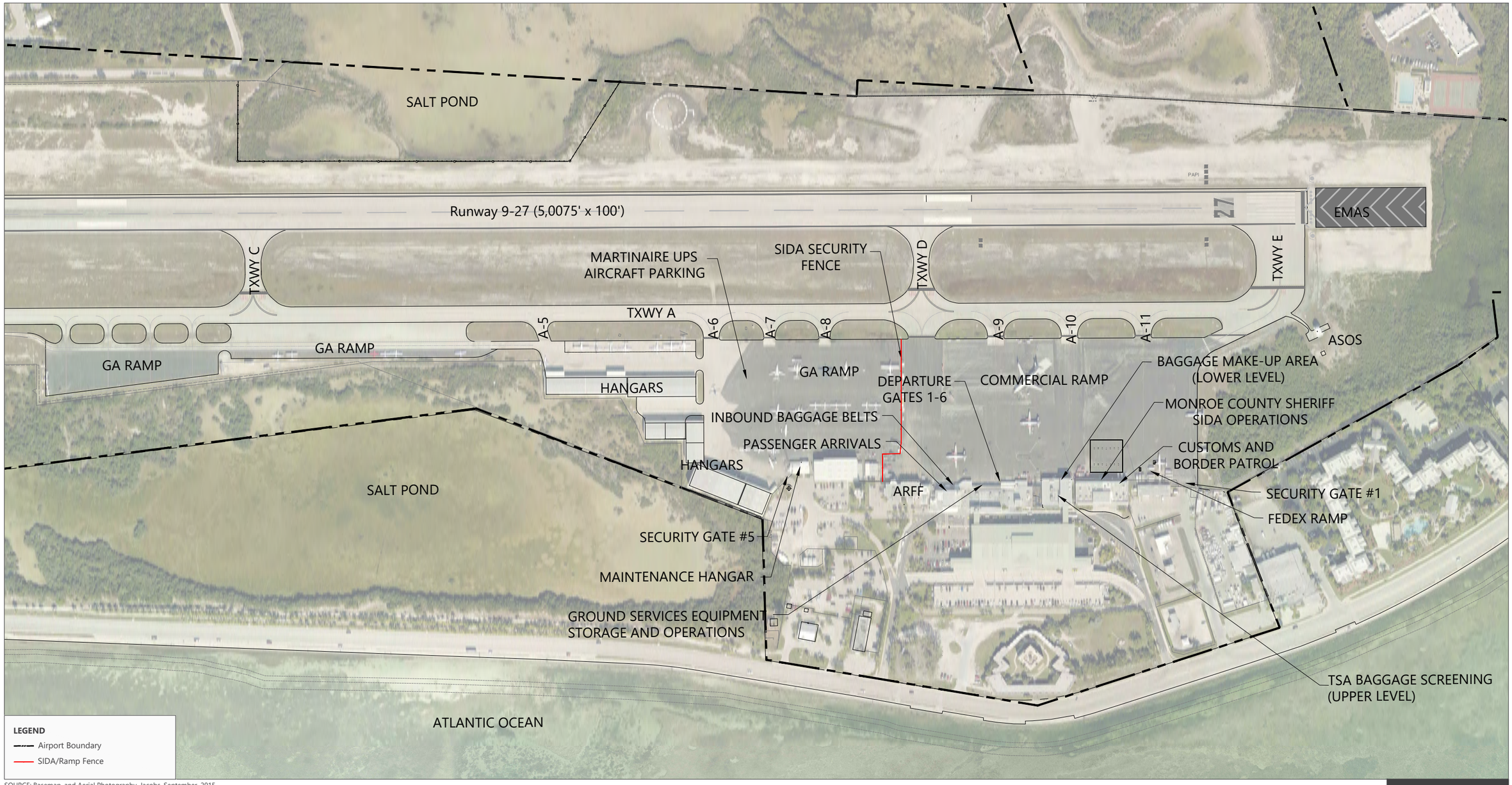
SOURCE: Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-12

NORTH 0 50 ft.

Terminal Floor Plan

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-12 Terminal loor Plan.dwgLayout: 11 17 Plotted: un 11, 2020, 0: :20AM



SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-13

NORTH 0 300 ft.

Passenger Terminal Airside Operations

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-13 Passenger Terminal Airside O erations.dwgLayout: 11x17L Plotted: un 11, 2020, 0: :21AM

2.4 On-Airport Curbsides and Roadways

This section documents the existing landside conditions at EYW; it assesses the terminal curbfront operations and Airport access roadways. Landside facilities include the nonsecure access and circulation in and around the Airport.

2.4.1 TERMINAL CURBFRONT

The departures curbfront adequately serves departures during Airport peak periods with approximately 381 linear feet available. Observations in March 2015 indicated that the arrivals curbfront can be congested during peak seasonal times. During peak hours, passengers must wait in line for a taxicab. The taxicab queue occupies approximately 70 feet of the 327 linear feet of arrivals curbfront available. All vehicles exiting the garage travel on the arrivals roadway past the arrivals curbfront. In addition, arriving passengers use a crosswalk to access rental cars located on the lower level of the parking garage.

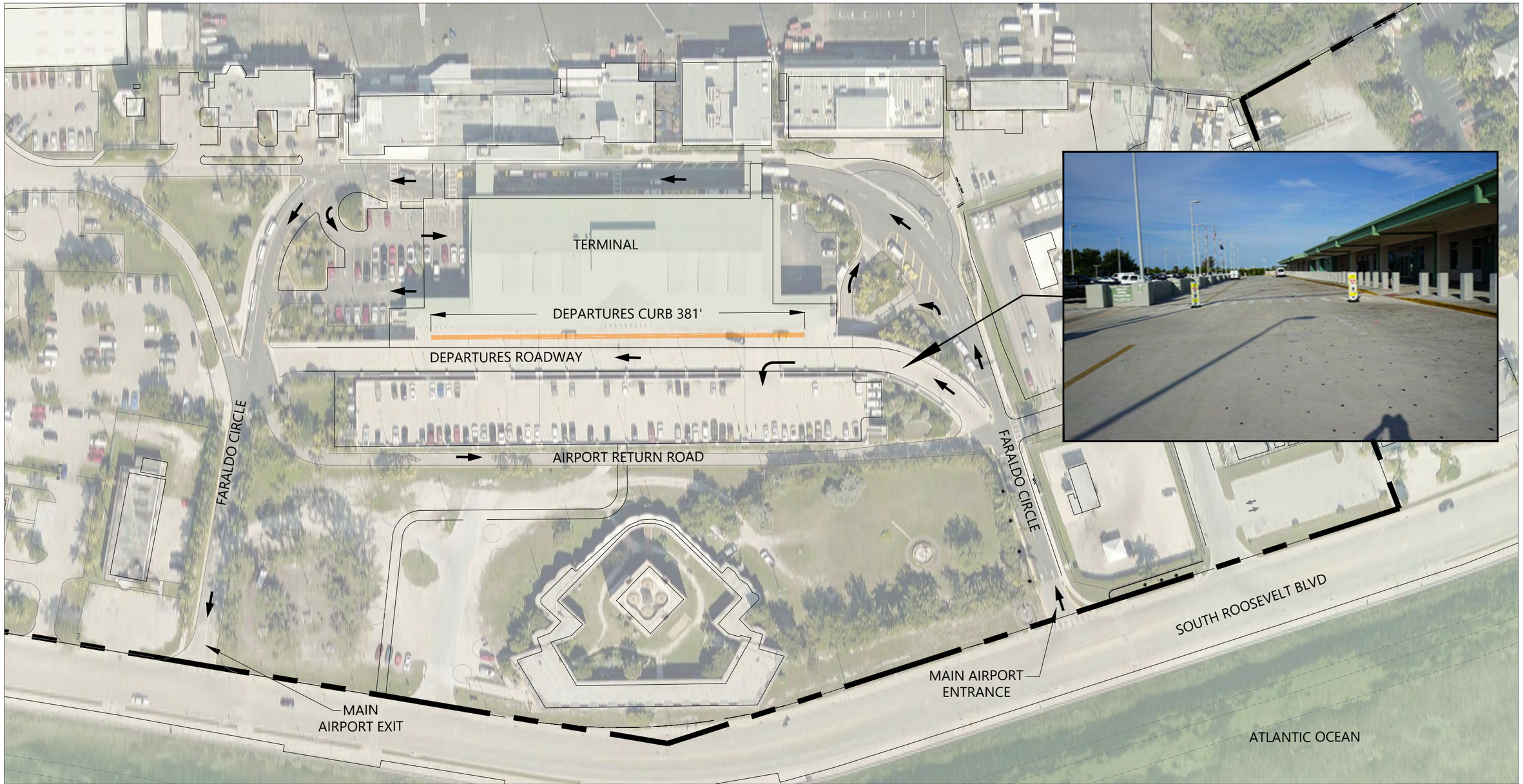
Thirteen vehicle curb spaces are provided for taxicabs to wait in line along the arrivals curbfront and on the south side of the arrivals roadway adjacent to the public parking garage. **Exhibits 2-14** and **2-15** depict the departures and arrivals roadways and associated curbfronts.

Arriving passengers being picked up by commercial vehicles, such as limousines, hotel vans, shuttles, or buses must walk approximately 150 feet from the arrivals terminal to a covered bus stop/waiting area, as depicted on **Exhibit 2-16**. Passengers must call ahead for commercial transportation other than taxicabs, as these vehicles are not allowed to wait at the bus stop.

2.4.2 ON-AIRPORT ROADWAYS

Main access to the Airport is provided via South Roosevelt Boulevard, which is a four-lane, undivided State Route (SR A1A). **Exhibit 2-17** illustrates roadways, and parking at the Airport. Faraldo Circle enters the Airport property at the southeast entrance as a two-lane, one-way roadway. Shortly after entering the Airport, the road splits to provide access to the departures terminal, automobile parking area, or the arrivals terminal. Drivers of vehicles carrying departing passengers turn left and up the ramp to the ticketing/check-in curbfront. Drivers of vehicles accessing parking or rental car returns or picking up arriving passengers remain to the right. This main loop provides access to all Airport areas, including the rental car facilities, the arrivals area, the departures area, the fixed base operator (FBO) facilities, FedEx, Airport Security, the Greyhound bus station, and airside access Gates 1 and 5.

Public transit service to the Airport is provided by the Blue and Green Routes of the City of Key West Transit System. Those traveling to or from the Airport via public transit access the bus at the covered bus stop a few steps from the arrivals terminal. The Blue Route runs clockwise around Key West and is the fastest bus accessing the tourist district around Duval Street. Buses on the Blue Route leave the Airport every 90 to 120 minutes and run from 7:03 a.m. to 8:39 p.m. The Green Route is a longer route and operates from 6:25 a.m. to 9:00 p.m. every 90 to 120 minutes. These buses operate 7 days a week.



SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-14

NORTH 0 100 ft.

Departures Roadway and Curbfront

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-1□ De□ artures □ oadway and Curb□ront.dwgLayout: 11x17 Plotted: □un 11, 2020, 0□:22AM

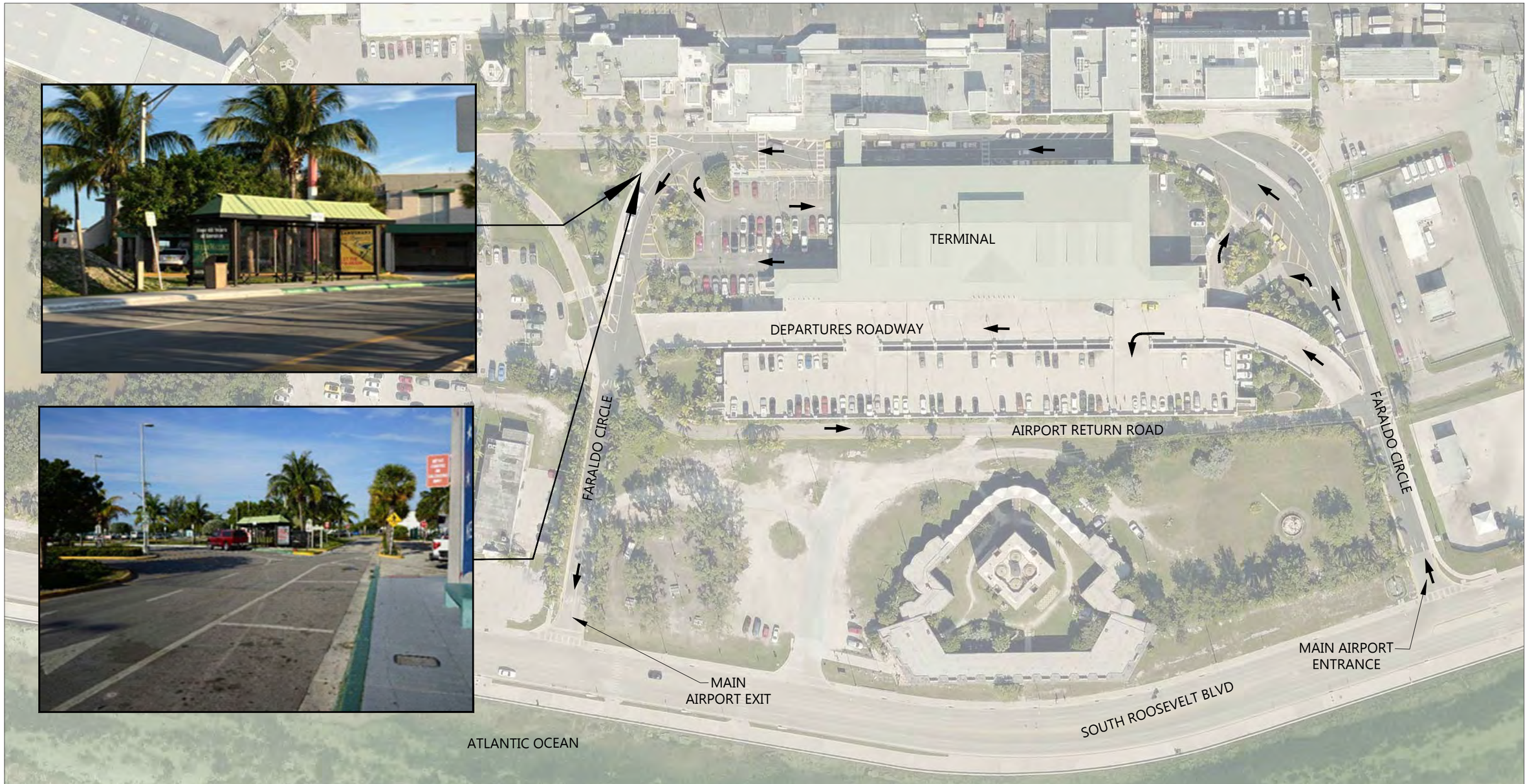
SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-15

NORTH 0 100 ft.

Arrivals Roadway and Curbfront

Drawing: P:\Projects\Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory\ Existing Conditions\CAD\Exhibit 2-15 Arrivals Roadway and Curbfront.dwgLayout: 11x17 Plotted: Jun 22, 2018, 10:44AM



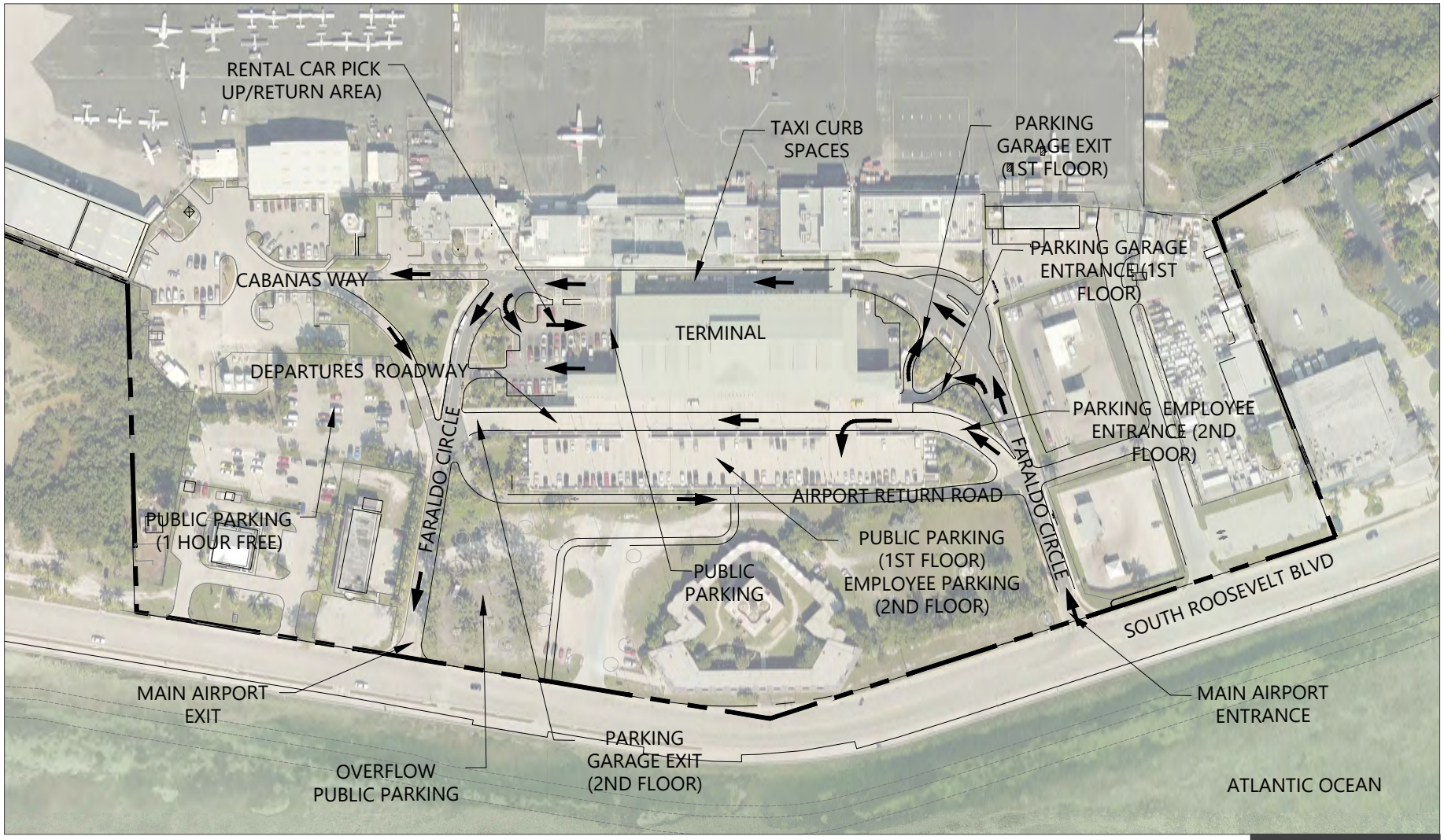
SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-16

NORTH 0 100 ft.

Commercial Vehicle Pick Up Area

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-16 Commercial ehicle Pick U Area.dwgLayout: 11x17 Plotted: un 22, 201 , 10 AM



SOURCE: Basemap and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-17

NORTH 0 150 ft.

Access and Parking

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-17 Access and Parking.dwgLayout: x11 Plotted: un 11, 2020, 0 :2 AM

In addition to the Key West public transit system, Greyhound provides bus transportation services to and from the Airport twice daily. The buses depart the Airport at approximately 8:15 a.m. and 5:45 p.m. and travel for 3.5 hours to Miami Cutler Bay. The bus route includes a single stop in Islamorada. The bus routes to Key West depart the Miami Cutler Bay station at approximately 1:10 p.m. and 6:30 p.m., travelling for 3 hours and 45 minutes back to the Airport. Passengers who use Greyhound are dropped off or picked up directly outside the Greyhound office located in the Annex building, a few steps from the arrivals terminal.

2.5 Automobile Parking

The primary public automobile parking areas at the Airport are provided in three locations, including the public parking garage, a surface lot, and grassed overflow parking. The two-floor parking garage located south of the main arrivals/departures terminal provides public and rental car parking on the ground floor, as well as employee parking on the second floor, south of the departures roadway. Both parking areas can be accessed from Faraldo Circle, as depicted on Exhibit 2-17.

According to the Airport staff, there is a need for additional parking, especially during high season and special Key West events held at different times throughout the year.

2.5.1 PUBLIC PARKING GARAGE

The public parking garage provides spaces for 150 public vehicles and 155 rental cars. In addition, an area is allocated for motorcycles and bicycles on the ground floor of the garage on the west side.

Exhibit 2-18 depicts the public garage entrance and exit. Drivers enter the garage by staying to the left on the arrivals roadway and proceed to the automated time/date stamped ticket machine. Signs are located throughout, directing drivers to parking areas.

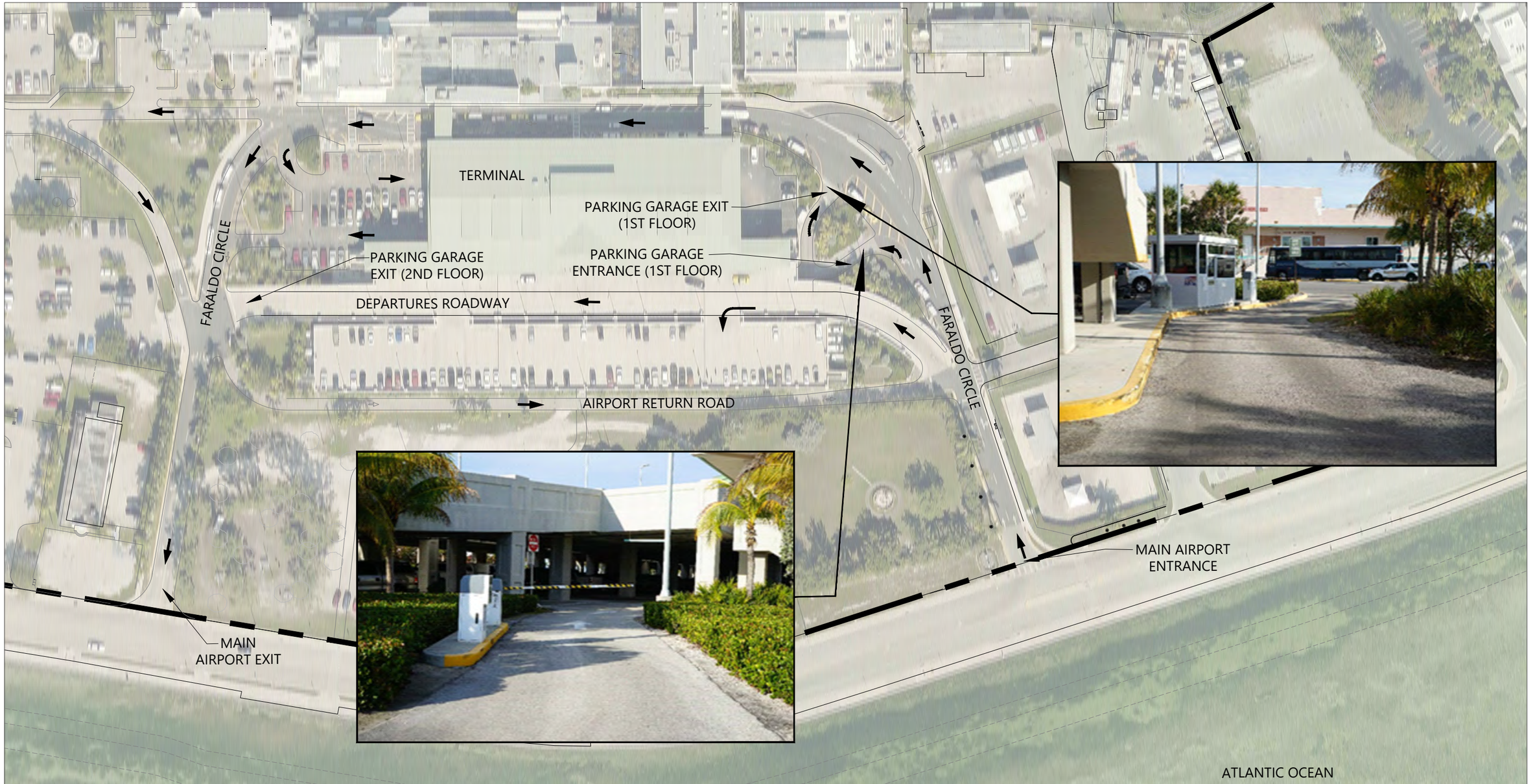
Drivers follow signs to exit the garage slightly north of the garage entrance, pay a parking fee, and then exit onto the arrivals roadway. The garage fee is handled by USA Parking, which collects the revenue generated from parking at the Airport. Fees are $1.00 for the first 30 minutes, $2.00 for 31-60 minutes, and $1.00 for each additional 30 minutes, up to $10.00 maximum for daily parking and $50.00 for weekly parking.

2.5.2 HOURLY SURFACE PARKING LOT

A one-hour free parking lot for drivers picking up passengers is provided in a small surface lot located west of the public parking garage with approximately 30 to 50 spaces available. **Exhibit 2-19** depicts the free one-hour parking lot designated for passenger pick-up only.

2.5.3 OVERFLOW SURFACE PARKING LOT

Overflow parking is provided as needed during high season or when special events are being held in Key West. The overflow lot is located within the grassed public park between the Airport exit and the Fort East Martello Museum.



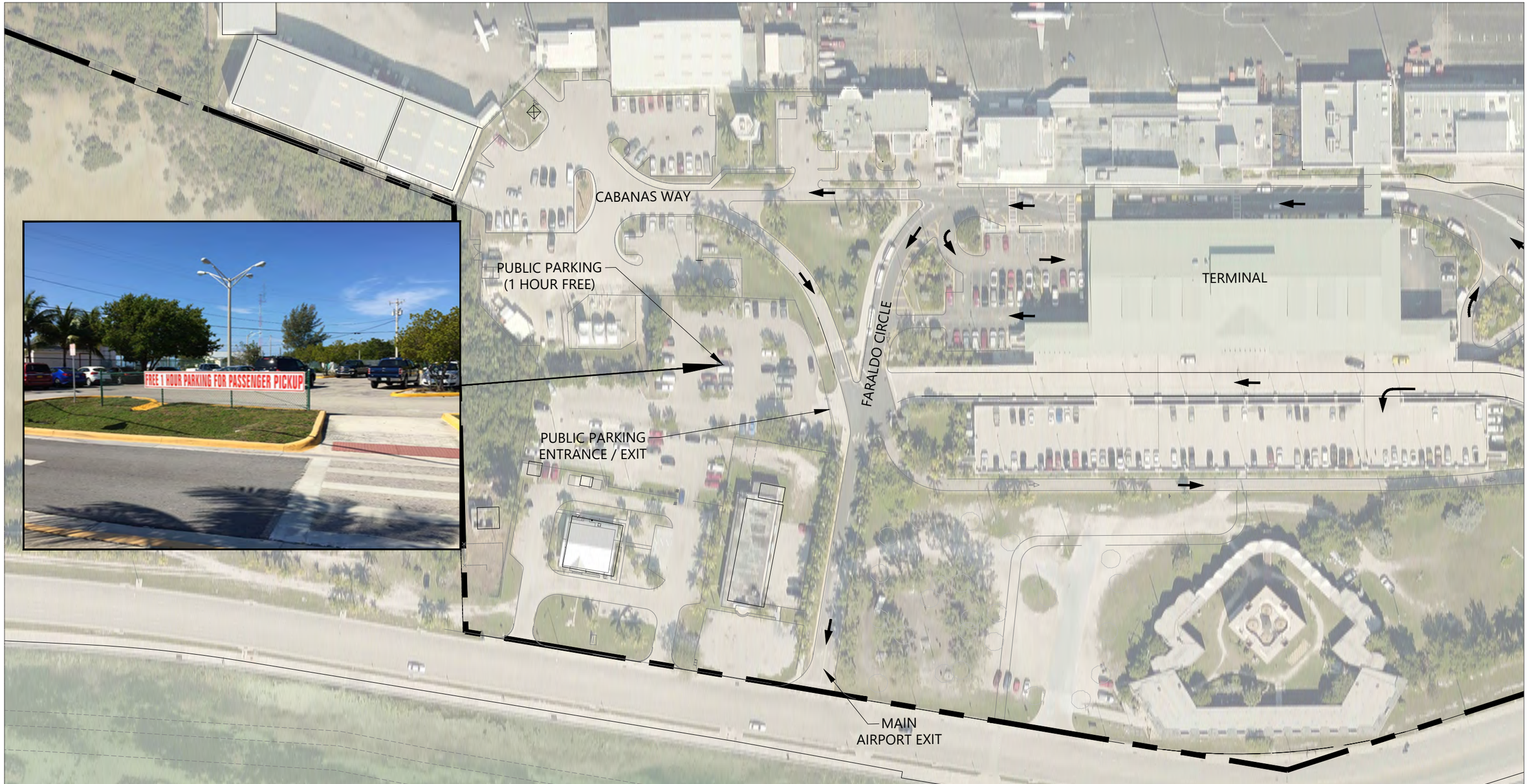
SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-18

NORTH 0 100 ft.

Public Parking Garage Entrance/Exit

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-1 Public Parking arage Entrance-Exit.dwgLayout: 11x17 Plotted: un 11, 2020, 10:02AM



SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-19

NORTH 0 100 ft.

One-Hour Parking Lot

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-19 One-Hour Parking Lot.dwgLayout: 11x17 Plotted: Jun 11, 2020, 10:10AM

2.5.5 EMPLOYEE PARKING LOT

The main employee parking lot is located on the upper level of the terminal building, outside and south of the departures roadway. There are 86 employee parking spaces available.

2.5.6 RENTAL CAR FACILITIES

The rental car facilities at the Airport include counter areas in the arrivals terminal, a pick-up/return area in the parking garage, and a rental car maintenance area. All rental cars are picked up and returned on the ground floor of the parking garage. Access to this area is provided from Faraldo Circle directly southwest of the arrivals exit.

Two rental car maintenance parcels are located northeast of the Airport entrance off South Roosevelt Boulevard. The northern parcel is operated by Avis Rent-A-Car System and the southern parcel is operated by Dollar Rent-A-Car and Thrifty Car Rental.

In 2012, The Hertz Corporation entered into a 20-year lease agreement with the County to use the former Key West Teen Center parcels located just south of the one-hour free parking lot. Hertz uses the property for rental car preparation and maintenance activities.

2.6 Air Cargo Facilities

Two cargo airlines operate at EYW, FedEx and Martinaire/UPS Air Cargo.

2.6.1 FEDEX OPERATIONS

FedEx operates Cessna 208 Caravan aircraft. FedEx pilots are contracted through Mountain Air. FedEx leases the air cargo building, which contains 2,973 square feet of space, from the County. In addition, FedEx leases 8,842 square feet of apron in front of the building and 9,535 square feet of land adjacent to the building for trucks, equipment storage, and vehicle parking. **Exhibit 2-20** presents a landside and airside view of FedEx and ramp area. FedEx trucks enter and exit the ramp area via Security Gate 1 located east of the Fedex building.

Entrances from the landside area provide access for employees based at the facility, as well as public access to the main counter for outbound deliveries and inbound pickup. There is an office for the FedEx manager, a breakroom for employees, and a warehouse area. The warehouse area of the cargo building is used to sort outbound packages in bins on tables. There are no belts of any type in use for sorting outbound cargo. Inbound cargo is offloaded directly from two aircraft to as many as 10 waiting trucks. Aircraft arrive from and depart to Fort Lauderdale-Hollywood International Airport. During the holiday season from Thanksgiving to Christmas, FedEx operates as many as four aircraft to accommodate the additional cargo.

SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-20

NORTH 0 100 ft.

FedEx Facilities

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-20 edEx acilities.dwgLayout: 11x17 Plotted: un 11, 2020, 10:13AM

Future cargo that may result from Cuba will not affect FedEx operations at EYW. According to the FedEx Operations Manager at EYW, all cargo from Cuba is to be handled at Miami International Airport, as it is the company's Latin American base of operations. Therefore, at this point in time, FedEx does not foresee the need for any additional facilities at the Airport, landside or airside.

2.6.2 MARTINAIRE/UPS OPERATIONS

Martinaire conducts cargo operations into and out of EYW on behalf of UPS. Martinaire owns and operates one Cessna Caravan CE208B aircraft. The aircraft is based during the day on the GA ramp forward of Signature Flight Support facilities. Martinaire does not occupy any building space at EYW.

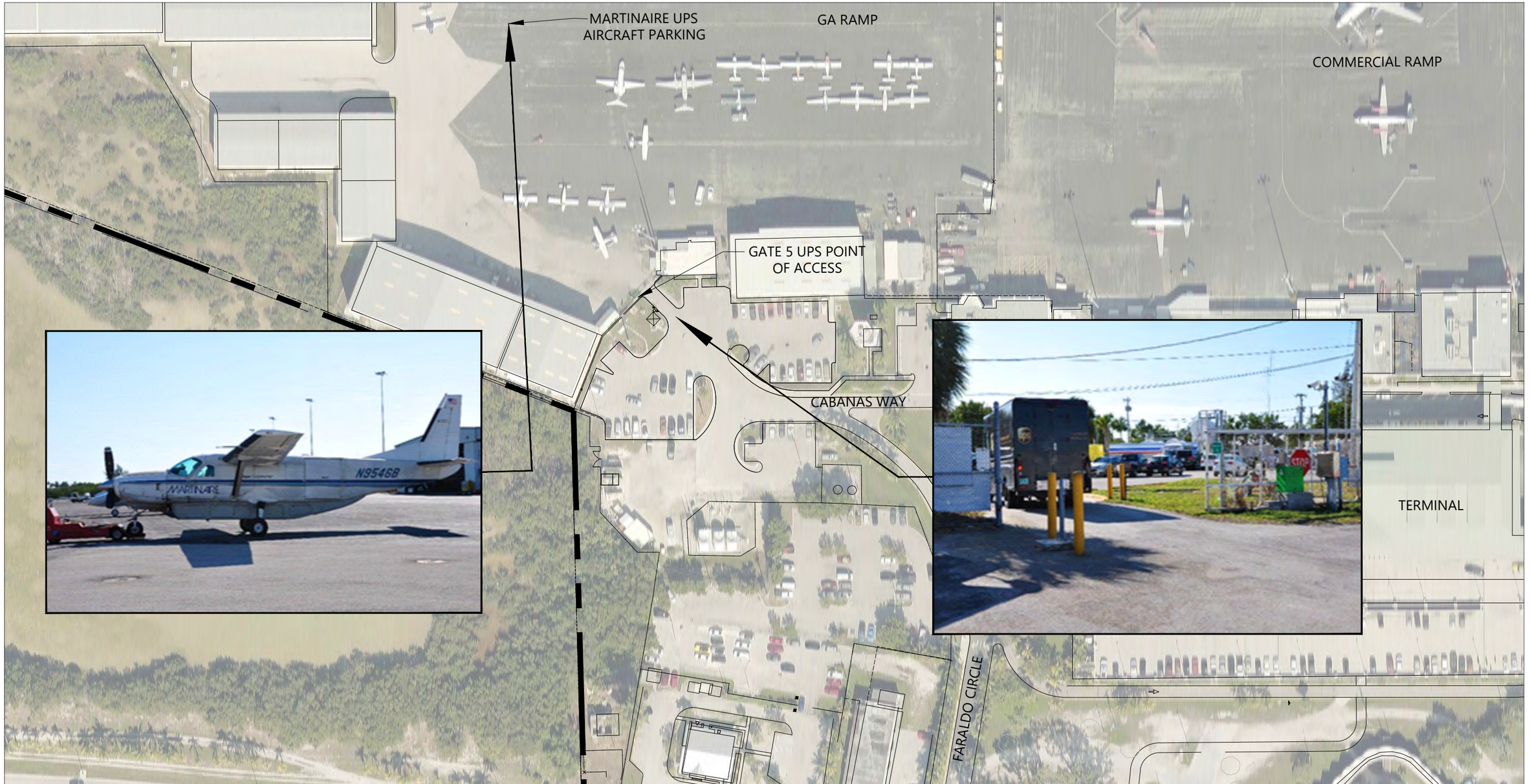
Martinaire departs to Miami International Airport with UPS' outbound cargo between 7:30 p.m. and 8:00 p.m., Monday through Friday. The airline arrives at EYW with inbound UPS cargo from Miami Tuesday through Saturday between 8:00 a.m. and 8:30 a.m. UPS trucks enter the ramp area through Gate 5 and proceed to the aircraft to load and offload cargo. The trucks then exit the ramp area through Gate 5. **Exhibit 2-21** provides an overview of the Martinaire Cessna Caravan and access to the ramp (Gate 5).

2.7 General Aviation Facilities

General aviation landside facilities support both based and itinerant aircraft operations at EYW. Components of general aviation landside facilities include FBO facilities; conventional, box, and T-hangars; apron areas; and automobile parking areas. GA consists of all flying activity with the exception of military and commercial service. GA users at EYW include individuals flying for business or personal reasons and aircraft maintenance. The locations of all GA facilities at EYW are illustrated on **Exhibit 2-22**.

2.7.1 FIXED BASE OPERATOR

Signature Flight Support is the sole FBO at EYW. Signature provides aviation fuel, aircraft ground handling, oxygen service, aircraft parking (ramp or tiedown), hangars, hangar leasing/sales, ground power units (GPUs), aircraft maintenance, and avionics sales and service. Signature Flight Support operates from two main buildings, including a small FBO office building, which has a footprint of approximately 2,200 square feet, and the FBO's maintenance hangar, which has a footprint of approximately 8,000 square feet. The hangar was constructed in 1994 and was refurbished in March 2015 to repair saltwater damage (as a result of flooding), rust, and corrosion, and to install a new roof. The FBO office (terminal) was constructed in 1988 and refurbished in 2013. It is in good condition, but the FBO is outgrowing the space. Both buildings are owned and operated by Signature Flight Support and the land is leased from the County.



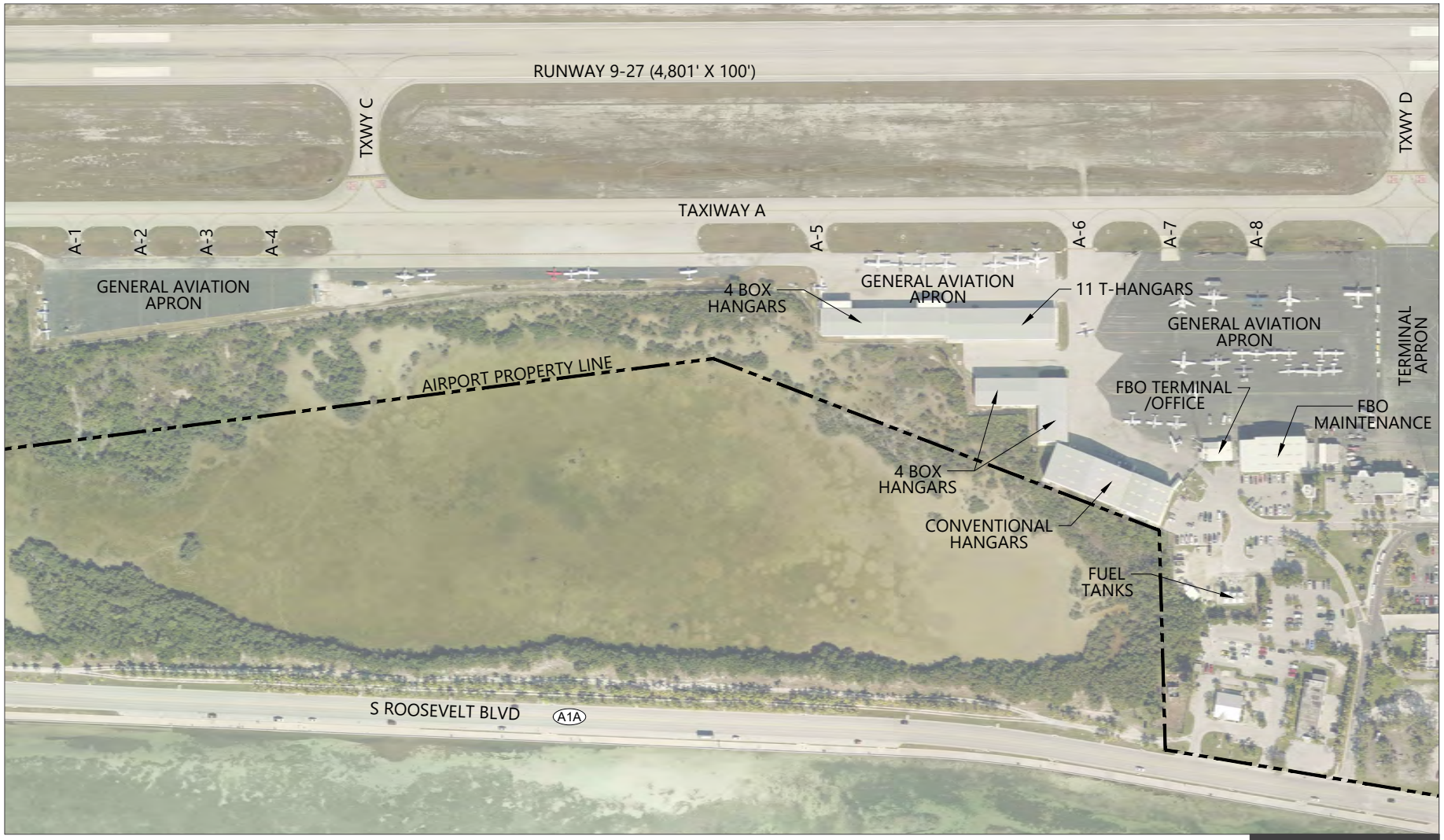
SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-21

NORTH 0 100 ft.

Martinaire/UPS Air Cargo Operations

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-21 Martinaire Air Cargo O: erations.dwgLayout: 11x17 Plotted: un 11, 2020, 10:16AM



SOURCE: Basemap and Aerial Photography, Jacobs, September, 2015.
PREPARED BY: McFarland Johnson, April 2016.

EXHIBIT 2-22

NORTH 0 300 ft.

General Aviation Facilities

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-22 A acilities.dwgLayout: Pa er Plotted: un 11, 2020, 10:2 AM

The FBO facility includes the following amenities/space:

- Passenger lobby
- Pilot lounge
- Flight planning center
- Conference room/lounges
- Wireless Internet
- Workstations

Signature Flight Support signed a 20-year lease with Monroe County in January 2016 for several facilities at EYW, which include the entire main GA apron, FBO hangar, FBO office building, and one conventional hangar along the main GA apron. Signature Flight Support leases a larger conventional hangar from the Key West Hangar Association. Additionally, Signature leases the tiedowns in front of the box and T-hangars between Taxiways A5 and A6.

Signature Flight Support also has three fuel tanks and five fuel trucks at EYW. There are two 12,000-gallon Jet A fuel tanks and one 12,000-gallon 100LL tank. These tanks are located south of the FBO office and are not accessible from the airside. Three 5,000-gallon fuel trucks serve Jet A and two 1,000-gallon fuel trucks serve 100LL. In an average busy season (October through April), approximately 300,000 to 400,000 gallons of Jet A and 100LL are sold to GA and commercial operators.

2.7.2 AIRCRAFT RAMP

The main GA apron spans approximately 26,500 square yards and is located west of the terminal apron, south of Taxiway A, and between Taxiways A6 and D. It includes tiedown areas and access to conventional hangars. Tiedown areas can accommodate either 29 small aircraft or 16 small aircraft and 5 larger aircraft. The pavement of the main GA ramp is in poor condition, according to the 2015 Airfield Pavement Condition Index Rating, prepared by FDOT Airfield Pavement Management Program (refer to Exhibit 2-4).

Additionally, an apron parallel to Taxiway A between Taxiways A1 and A6 spans approximately 17,700 square yards and provides tiedown and access to T-hangars and small box hangars. This apron is split into three areas. The eastern two apron areas have satisfactory pavement conditions while the most western apron has fair pavement condition. The fair portion is located between Taxiways A1 and C. The easternmost portion of this apron, which is being leased by Signature Flight Support, has space for approximately 10 small aircraft tiedowns. The two apron areas west of Taxiway A5 have space for approximately 42 small aircraft and are lit by overhead lights.

2.7.3 AIRCRAFT STORAGE HANGARS

2.7.3.1 T-Hangars and Box Hangars

There are 11 nested T-hangars and 8 small box hangars in four buildings that are accessible from the main GA ramp or the apron west of Taxiway A6. These hangars were constructed in 2005 and are in good condition. The Key West Hangar Association owns the T-hangars and box hangars.

2.7.3.2 Conventional Hangars

Two large conventional hangars are located along the GA apron west of the FBO facilities and are owned by the Key West Hangar Association. Both of these hangars were constructed in 2005 and are in good condition. The larger hangar consists of approximately 12,000 square feet and is leased by Signature Flight Support. The smaller conventional hangar is approximately 6,200 square feet.

2.8 Airport/Airline Support Facilities

2.8.1 ADMINISTRATION OFFICES

The Airport Administration offices are located in the old terminal building complex, adjacent to and above the arrivals/baggage claim area. The offices are dated and in need of refurbishment or replacement. Some Airport Administration offices provide a view of the airside facilities. The departures holdroom/Gates 1 through 6 and the arrivals terminal can be accessed from these offices.

2.8.2 FUEL STORAGE FACILITIES

The fuel farm, depicted on **Exhibit 2-23**, is owned and operated by Signature Flight Support. It consists of three 12,000-gallon aboveground tanks. Two of these tanks contain Jet A fuel and the third contains 100LL fuel. The fuel farm includes three fueling racks that can be used simultaneously by five trucks. Three of the fuel trucks contain 5,000 gallons of Jet A fuel, while the remaining two trucks contain 1,000 gallons of 100LL fuel.

Exhibit 2-23: Fuel Farm

SOURCE: American Infrastructure Development, Inc. Data Collection Trip, March 2016.
PREPARED BY: American Infrastructure Development, Inc. April 2016

2.8.3 AIRCRAFT RESCUE AND FIREFIGHTING FACILITY

The ARFF index determination and equipment requirements for a commercial service airport are determined by the standards set forth in 14 CFR Part 139, *Certification of Airports*. As stated in 14 CFR Part 139.315, the ARFF index is determined by the length of the air carrier aircraft and the number of average daily departures of air carrier aircraft. EYW is an ARFF Index B airport, which includes aircraft at least 90 feet long but less than 126 feet long. The FAA conducts annual inspections to ensure that the Airport, personnel, and ARFF equipment comply with all 14 CFR Part 139 requirements.

The EYW ARFF facility, also referred to as the Monroe County Fire Rescue/Key West Station 7, provides fire suppression, emergency medical services, and ARFF services. The ARFF facility has 13 trained fire fighters with three or four firefighters on duty per shift, 24 hours per day/365 days per year.

The ARFF facility is located directly east of the ATCT and is depicted on **Exhibit 2-24**. The facility has three vehicle bays and is equipped with two ARFF vehicles, a quick response vehicle and a backup inspections vehicle. Vehicles carry water and aqueous film forming foam chemicals, as well as dry chemical fire retardants, such as Purple-K and nitrogen as the firefighting propellant, and halotron.

Exhibit 2-24: Aircraft Rescue and Firefighting Facility

SOURCE: American Infrastructure Development, Inc. Data Collection Trip, March 2016.
PREPARED BY: American Infrastructure Development, Inc. April 2016

Table 2-7 presents an inventory of EYW ARFF equipment and quantities of agents capable of being carried by that equipment.

EYW has five public access automated external defibrillators (AEDs) in addition to the AEDs carried on the response vehicles. The AED locations are:

- The departures check-in terminal, across from the Conch Flyer restaurant.
- The "sterile" side of the TSA screening area.
- The first column as one enters the departures terminal.
- On the far wall in the departures gate area near Last Call restaurant and bar.
- The arrivals terminal between the two baggage carousels.

Table 2-7: Aircraft Rescue and Firefighting Equipment

ARFF VEHICLE	WATER (GAL)	AFFF (GAL)	DRY CHEMICAL (POUNDS)	HALOTRON	PPK
ARFF 2007 Oshkosh Striker 4x4	1,500	210	500		
ARFF 107 1998 Oshkosh T-1500 4x4	1,500	210		500	
ARFF 207 2012 Ford F-350 4x4 Quick Response Vehicle	100	3			450
UTILITY 7 2008 Ford F-550 4x4 Back-up Inspection Vehicle	0	0	0	0	0

AFFF – Aqueous Film Forming Foam, PPK – Purple-K Fire extinguisher

SOURCE: S. Steves, Airport Operations and Security Manager, email 11/02/2015
PREPARED BY: American Infrastructure Development, Inc. April 2016

2.8.4 MONROE COUNTY SHERIFF'S OFFICE / AIRPORT SECURITY DIVISION

Security services at the Airport are provided under contract to the County by the Monroe County Sheriff's Office, Airport Security Division. The Monroe County Sheriff's Office is located in the Annex building. This building, constructed in 1997, also accommodates the CBP offices and the Greyhound bus station. The Sheriff's Office provides security for the Airport, as well as badging services for airside visitors. The Sheriff's Office contains offices, a breakroom, and a security office.

The Airport Security Division provides security at the Airport 24 hours per day, 7 days per week. Airport security technicians (ASTs) monitor cameras and computerized door access alarms in the Airport Security Department Control Room. Additional sheriff's deputies and ASTs are stationed at the fixed guard post between the general aviation and commercial ramp areas to check cargo and to check authorized access to the secure area of the commercial ramp during the main hours of operation. ASTs and deputies patrol the perimeter of the Airport, assist passengers when necessary and enforce the ground transportation rules of the Airport.

The Airport Security Division has six deputy sheriffs, 16 ASTs, and two deputy sheriff sergeant/supervisors, all under the authority of the Director of Airport Security.

2.8.5 U.S. CUSTOMS AND BORDER PROTECTION FACILITY

The U.S. CBP facility is housed within the Annex building. The CBP facility consists of 9,392 square feet of interior space for offices, a breakroom, and waiting areas, among other uses. The facility has access to a portion of the apron for aircraft inspections.

The existing EYW Customs facilities do not meet current Federal Inspection Services standards. The facility has the capacity to process GA/charter aircraft passengers entering the United States, but does not have the capacity needed to process passengers from commercial flights. Ten international passengers per hour can be processed at the facility. The County is in the process of expanding the Customs facility to upgrade it to

current standards. Specific upgrades include increasing the size of the facility to 14,754 square feet, expanding the hold room for up to 70 passengers from the existing 10 passenger maximum capacity, and increasing security, alarm systems, and other post-9/11 security enhancements.

The continued influx of aircraft from non-U.S. destinations in the Caribbean adds momentum for the modification of the Customs facilities. In September 2012, EYW was approved for passenger service to Cuba. Currently, Havana Air is the only airline providing service to Cuba, with three flights per week out of Key West. Havana Air uses a nine passenger turboprop aircraft. Airport management is expecting the number of flights to and from Cuba to increase as airline routes are approved by the FAA. Customs at EYW is open Monday through Saturday from 8:00 a.m. to 8:00 p.m. and closed on Sunday.

Exhibit 2-25 depicts an airside view of the CBP and the Monroe County Sheriff's Office, Airport Security Division.

Exhibit 2-25: Monroe County Sheriff's Office Airport Security Division and U.S. CBP

SOURCE: American Infrastructure Development, Inc. Data Collection Trip, March 2016
PREPARED BY: American Infrastructure Development, Inc. April 2016

2.8.6 FAA AIRPORT TRAFFIC CONTROL TOWER

The ATCT at EYW is located to the west of the ARFF building and is operational daily from 7:00 a.m. to 9:00 p.m. Six parking spaces are provided at this facility. The EYW ATCT is part of the FAA's contract tower program and is operated by RVA Robinson Aviation, Inc., with five employees. Interviews with the ATCT Manager indicated the need for renovations and upgrades to the ATCT facilities. **Exhibit 2-26** illustrates the EYW ATCT.

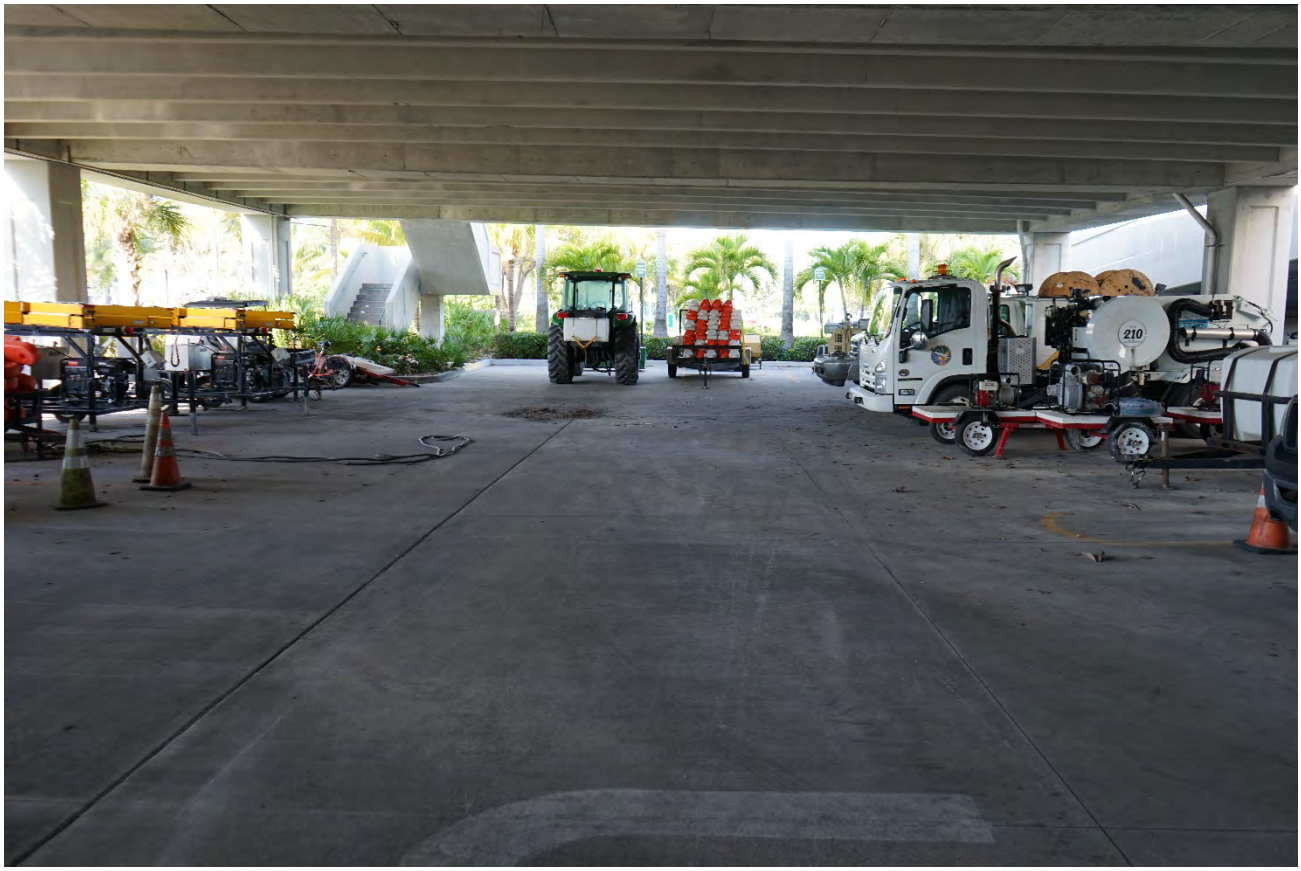
Exhibit 2-26: Airport Traffic Control Tower

SOURCE: American Infrastructure Development, Inc. Data Collection Trip, March 2016.
PREPARED BY: American Infrastructure Development, Inc. April 2016

2.8.7 AIRPORT MAINTENANCE FACILITIES

Airport management has allotted an area in the lower southwestern corner of the terminal parking garage for the storage of Airport maintenance equipment. Equipment includes one airfield pickup truck, two County trucks, one sweeper, trailers, and miscellaneous cones and other equipment. Airfield mowing is contracted to private companies. **Exhibit 2-27** depicts the location of maintenance equipment.

Exhibit 2-27: Airport Maintenance Equipment and Storage Location



SOURCE: American Infrastructure Development Inc. Data Collection Trip, March 2016.
PREPARED BY: American Infrastructure Development, Inc. April 2016

2.9 Other Facilities

2.9.1 U.S. POSTAL SERVICE MAILBOX

The general public can drop off mail at a U.S. Postal Service (USPS) mailbox located outside and east of the arrivals terminal along Faraldo Circle**.** The USPS does not have any flights into or out of EYW. Mail is sorted at the main USPS facility in Key West and trucked via SR A1A.

2.9.2 AUTOMATED TELLER MACHINES

There are three automated teller machines located at the Airport, one in the ticket counter area of the terminal, one in the departure terminal/gate area, and one in baggage claim.

2.9.3 DRIVERS LICENSES AND MOTOR VEHICLE SERVICE CENTER

The Florida Department of Highway Safety and Motor Vehicles leases a building on the Airport for issuing drivers' licenses. The building is located at 3439 South Roosevelt Boulevard and can only be accessed from this road. The building was formerly referred to as the Florida Highway Patrol Building.

2.9.4 MONROE COUNTY DEPARTMENT OF PUBLIC WORKS YARD

The Department of Public Works yard is located east of the Avis and Budget vehicle maintenance and preparation lease areas. The County leases a total of 50,387 square feet of the property from the Airport enterprise. According to the lease, of the 50,387 square feet leased, 25,193 square feet are dedicated to the Road Department, 12,597 square feet are dedicated to fleet management, and 12,597 square feet are provided for facilities maintenance.

2.9.5 EAST MARTELLO TOWER

The east Martello Tower is located on 2.7 acres near the entrance to the Airport at 3501 South Roosevelt Boulevard. It is a publicly owned historic site and is located on Airport property. The property is leased from the County by the Key West Art and Historical Society. It houses a museum containing historical records, military memorabilia, and other local artifacts.

2.9.6 THE "PINES" PARK

The "Pines" is a small public park owned by the County and located on approximately 1 acre of Airport property. The park provides unpaved space for vehicle parking and concrete benches and tables for picnicking under several large Australian pine trees. The park is open from 7:00 a.m. to 11:00 p.m. daily.

2.10 On- and Off-Airport Land Uses

Existing land use mapping, aerial photography, comprehensive plans, and other documentation pertaining to current and future land use in the vicinity of the Airport (up to 1 mile from the Airport property boundary) was reviewed. Existing zoning districts were also reviewed to determine locations where potential incompatible land uses could be developed. Further, local planning agencies were contacted to obtain their future land use or zoning plans and to identify the potential for future residential, commercial, and industrial development in the vicinity of the Airport.

2.10.1 EXISTING ON-AIRPORT LAND USES

The following land uses are present on the Airport, as shown in the 2003 EYW On-Airport Land Use Plan:

- **Airfield:** This land use encompasses all movement areas of the Airport, including runways, taxiways, and respective object free areas.
- **Aviation Related Development:** This land use encompasses the ramp area near Taxiways A1 through A4, the T-hangar and box hangar units, and the terminal ramp, building, parking lots, and rental car facilities.

- **Non-Aviation Related Development:** This land use encompasses a small area near the terminal and includes the Florida Drivers' License office and a vacant building.
- **Community Facilities:** Community facilities are located south of the terminal area and include a public park and the historic Fort East Martello Museum.
- **Environmental Use:** These land uses generally correspond with the conservation area and include the salt ponds, mangroves, and other vegetation around the Airport.

The existing on-Airport land uses are illustrated on **Exhibit 2-28**.

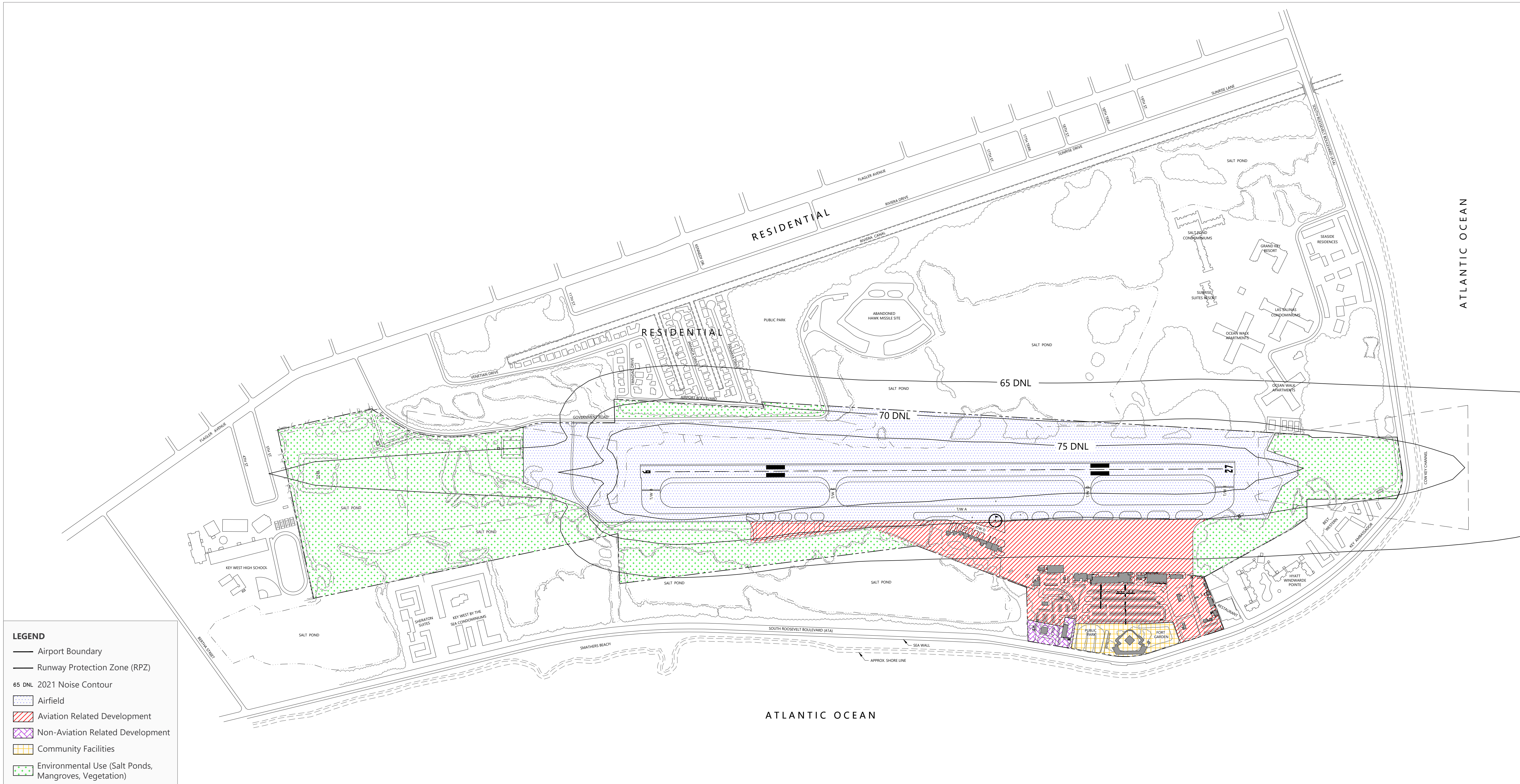
2.10.2 EXISTING OFF-AIRPORT LAND USES AND ZONING

It is important to identify the local land use and zoning restrictions and potential conflicts to the existing conditions as well as any proposed uses or development in an airport vicinity. Land use defines the type of activity that occurs on a parcel, such as natural areas (wildlife habitats, wetlands, coastal regions, conservation areas, etc.), working landscapes (farms, forests, recreation areas, mineral extraction lands, etc.), and constructed areas (residential, commercial, industrial, public space, etc.). Zoning ordinances, on the other hand, are meant to separate potentially conflicting land uses.

2.10.2.1 Existing Off-Airport and Uses

Existing land uses around the Airport, based on the 2013 14 CFR Part 150 Noise Compatibility Study, include the following, as shown on **Exhibit 2-29**:

- **Airport:** The entire Airport property is within this land use.
- **Mobile Homes:** Mobile homes and recreational vehicles are located approximately 0.75 mile north of Runway 9.
- **Single Family Residential:** Most of the residential area north and west of the Airport is in this category. Single family residential properties are located within the area exposed to aircraft noise of 65 to 70 decibels (dB) , some of which were deemed incompatible land use in the 2013 Part 150 Noise Study.
- **Multi-Family Residential:** This land use includes condominiums north of the Runway 27 approach area and south of the Runway 9 approach area. Some of these areas are located within the area exposed to aircraft noise of 65 to 70 dB and were deemed incompatible land use in the 2013 Part 150 Noise Study.
- **Transient Residential:** This land use includes hotels south of the Runway 27 approach areas. Some of these areas are located within the area exposed to aircraft noise of 65 to 70 dB and were deemed incompatible land use in the 2013 Part 150 Noise Study.



SOURCE: Basemap, 2003 Airport Layout Plan, URS, Inc.
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-28

Existing On-Airport Land Use Plan (2003)

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-2 Existing On-Air ort Land Use Plan 2003.dwgLayout: Layout1 Plotted: un 11, 2020, 10:27AM

SOURCE: KWIA Noise Exposure Maps, 2013
PREPARED BY: McFarland Johnson, Inc., March, 2016.

EXHIBIT 2-29

NORTH 0 2,400 ft.

Existing Off-Airport Land Use Map (2013)

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-29 & 31 - Land Use Ma s.dwgLayout: Existing Plotted: un 11, 2020, 10:30AM

- **Commercial:** These properties include the restaurants south of the Runway 27 threshold and sporadic parcels throughout the area. A large set of Commercial properties are also located in areas along the north side of the island along North Roosevelt Boulevard and Northside Drive.
- **Industrial:** There are few industrial parcels in proximity of the Airport.
- **Institutional:** These areas are within the approach area of Runway 9, beyond the wetlands area and associated with local schools, which are considered institutional use. Additionally, a few small parcels of institutional land use are located north of the Runway 9 approach area associated with Grace Lutheran School and religious institutions.
- **Recreational:** These areas are located north and south of the Airport associated with the wetlands, parks, and wildlife refuge.
- **Vacant:** These land uses are along the coast of the island, north and south of the Runway 27 threshold, and other small parcels are sporadically located throughout the area.
- **Miscellaneous:** This land use includes sporadic parcels throughout the island.
- **Transportation/Utility/Rights-of-Way:** This land use includes large roads and sporadic parcels throughout the island.

The existing adjacent land uses are compatible with the Airport and its current operations.

2.10.2.2 Existing Off-Airport Zoning

The City of Key West created an official zoning map in 2004. This map shows that, within 1 mile of the runway ends, the following zoning types are located, as shown on **Exhibit 2-30**:

- A – Airport
- C-FW – Conservation – Freshwater Wetlands
- C-OW – Conservation – Outstanding Waters of the State
- C-TW – Conservation – Tidal Wetlands of the State
- C-UH – Conservation – Upland Hammock
- CL – Limited Commercial
- CT – Salt Pond Commercial Tourist
- LDR-C – Coastal Low Density Residential
- M – Military
- MDR – Medium Density Residential
- MDR-1 – Medium Density Residential 1
- MDR-C – Coastal Medium Density Residential
- PS – Public Services
- RO – Residential/Office

- SF – Single Family

Additionally, the entire Airport property is located within the Category 1 Storm Surge Area (coastal high hazard area), which puts it at risk of flooding during extreme weather conditions, rising ocean levels, and storms common to the area (especially during hurricane season).

2.10.2.3 Air Installation Compatible Use Zones

Of additional note and consideration is the Air Installation Compatible Use Zones (AICUZ) for NAS Key West - Boca Chica Field located approximately 4 nautical miles northeast of the Airport. The following areas, as identified in the AICUZ, extend onto Airport property:

- **Noise Zone 2:** This zone encompasses 65 to 75 dB day-night average sound levels (DNLs). This zone extends east of the terminal and Runway 27.
- **AICUZ Footprint:** This zone is defined by the 2007 AICUZ Update for NAS Key West. It covers approximately the eastern half of EYW.
- **55 DNL:** This zone encompasses the 55 dB DNLs. Almost the entire Airport property is encompassed by this zoning.

These zones do not affect the Airport. The hotels and businesses located south and east of the Airport may be affected by Noise Zone 2. If the zoning in this area ever changes, aviation-related businesses and zoning/land uses may be a better fit for the area. None of the Accident Potential Zones for NAS Key West extend onto Airport property.

Official Zoning Map of the City of Key West, Florida

Legend

A	Airport	**HHDR**	Historic High Density Residential	**MDR**	Medium Density Residential
C-FW	Conservation- Freshwater Wetlands	**HMDR**	Historic Medium Density Residential	**MDR-1**	Medium Density Residential 1
C-OW	Conservation- Outstanding Waters of the State	**HNC (1 - 3)**	Historic Neighborhood Commercial 1 - 3	**MDR-C**	Coastal Medium Density Residential
C-TW	Conservation- Tidal Wetlands of the State	**HPRD**	Historic Planned Redevelopment and Development District	**PRD**	Planned Redevelopment and Development District
C-UH	Conservation- Upland Hammock	**HPS**	Historic Public and Semi-public Services	**PS**	Public Services
CG	General Commercial	**HPS (1 & 2)**	Historic Public and Semi-public Services 1 & 2	**RO**	Residential / Office
CL	Limited Commercial	**HRCC**	Historic Residential Commercial Core	**SF**	Single Family
CM	Conservation- Mangrove	**HRCC (1 - 4)**	Historic Residential Commercial Core 1-4		SF Special, Ordinances 122-236 and 122-238
CT	Salt Pond Commercial Tourist	**HRO**	Historic Residential / Office		
HCL	Historic Limited Commercial	**LDR-C**	Coastal Low Density Residential		
HCT	Historic Commercial Tourist	**M**	Military		
HDR	High Density Residential				

Zoning delinations based on Future Land Use Map (FLUM).

Original map created by D. Sullins Stewart with the City of Key West Planning Department dated 1993.

1996 Revisions provided by the City of Key West Planning Department.

FLUM adopted as zoning map by ordinance 97-10, July 3, 1997.

2004 Revisions provided by the City of Key West Planning Department based on ordinances 99-18, 00-14, and 03-04.

Base map provided by the Monroe County Property Appraiser.

Parcel map updated on: June 24, 2004

Plot prepared on: December 14, 2004

THIS PROPERTY LOCATION MAP HAS BEEN COMPILED FOR INTERNAL OFFICE USE AS AN AID IN THE PREPARATION OF THE MONROE COUNTY TAX ROLL. IT IS NOT A SURVEY AND THE OWNERSHIP INFORMATION DEPICTED THEREON SHOULD NOT BE RELIED UPON FOR TITLE PURPOSES. NEITHER THE CITY OF KEY WEST NOR THE OFFICE OF THE PROPERTY APPRAISER ASSUMES RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS.

Attested:

See Key West City Clerk's Office for Official Version

Ty Symroski, City Planner — Date

Revisions:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

SOURCE: Basemap, Jacobs, September 2015.
PREPARED BY: McFarland Johnson, Inc., April, 2016.

EXHIBIT 2-30

NORTH 0 2,800 ft.

Existing Off-Airport Zoning Map

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-30 Land Use oning.dwgLayout: Pa er Plotted: un 11, 2020, 10:32AM

2.10.3 FUTURE OFF-AIRPORT LAND USES AND ZONING

2.10.3.1 Future Off-Airport Land Uses

The following land uses types, in accordance with the Future Land Use Map presented in the *Key West Comprehensive Plan*, are located within 1 mile of the runway ends at EYW:

- **Low Density Residential:** This land use consists of a maximum of one dwelling unit per acre. These land uses occur mostly west and north of the Airport and include one small area east of the Airport.
- **Medium Density Residential:** This land use consists of a maximum of eight dwelling units per acre. These land uses occur mostly north of the Airport, but small areas also occur west, southwest, and northeast of the Airport.
- **High Density Residential:** This land use consists of a maximum of 16 to 22 dwelling units per acre, depending on the subtype of high-density residential use. Two small areas of this land use are located north of the Airport and one area is immediately northeast of the Runway 27 threshold.
- **General Commercial:** This land use consists of a maximum of 16 dwelling units per acre and can either be motels, some tourist facilities, public schools, general retail and sales, highway oriented sales and services, and other commercial activities. Certain residential uses are allowed. General commercial areas are located southeast of the Airport (east of the terminal facility), two small areas are located west of the Airport, and most of these land uses are located north of the Airport along the North Roosevelt Boulevard waterfront.
- **Public Service:** This land use consists of areas associated with EYW and allowable public and semi-public facilities and other similar activities. FAA regulations govern placement and specifications of structures within this land use.
- **Conservation:** This land use consists of a maximum of one dwelling unit per 10 acres and site alteration is limited to 10 percent of the entire site. Conservation areas are mostly east, north, and south of the airfield, on and off Airport property.
- **Military:** Military uses consist of any area under military jurisdiction. Two small military parcels are located within 1 mile of the Airport on the northeastern tip of and the beginning of the bridge to Dredgers Island north of Key West.

Land uses surrounding EYW are consistent with the applicable zoning regulations in place. One of the constraining factors is the location of conservation areas on all sides of the Airport. The future land uses are illustrated on **Exhibit 2-31**.

2.10.3.2 Future Off-Airport Zoning

There is currently no future zoning map, but the City of Key West is in the process of developing a future zoning map. It is anticipated that this map will consolidate the number of zones and will be made available in the future.

SOURCE: Basemap, Jacobs, September 2015.
PREPARED BY: McFarland Johnson, Inc., March, 2016.

EXHIBIT 2-31

NORTH 0 2,400 ft.

Future Off-Airport Land Use Map (2030)

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-29 & 31 - Land Use Ma s.dwgLayout: uture Plotted: un 11, 2020, 10:29AM

2.11 Inventory of Lease Documents

An inventory of existing leaseholds was obtained from Airport staff. **Tables 2-8** and **2-9** and **Exhibits 2-32** and **2-33** summarize the lease information obtained to date.

Table 2-8: Airport Leaseholds

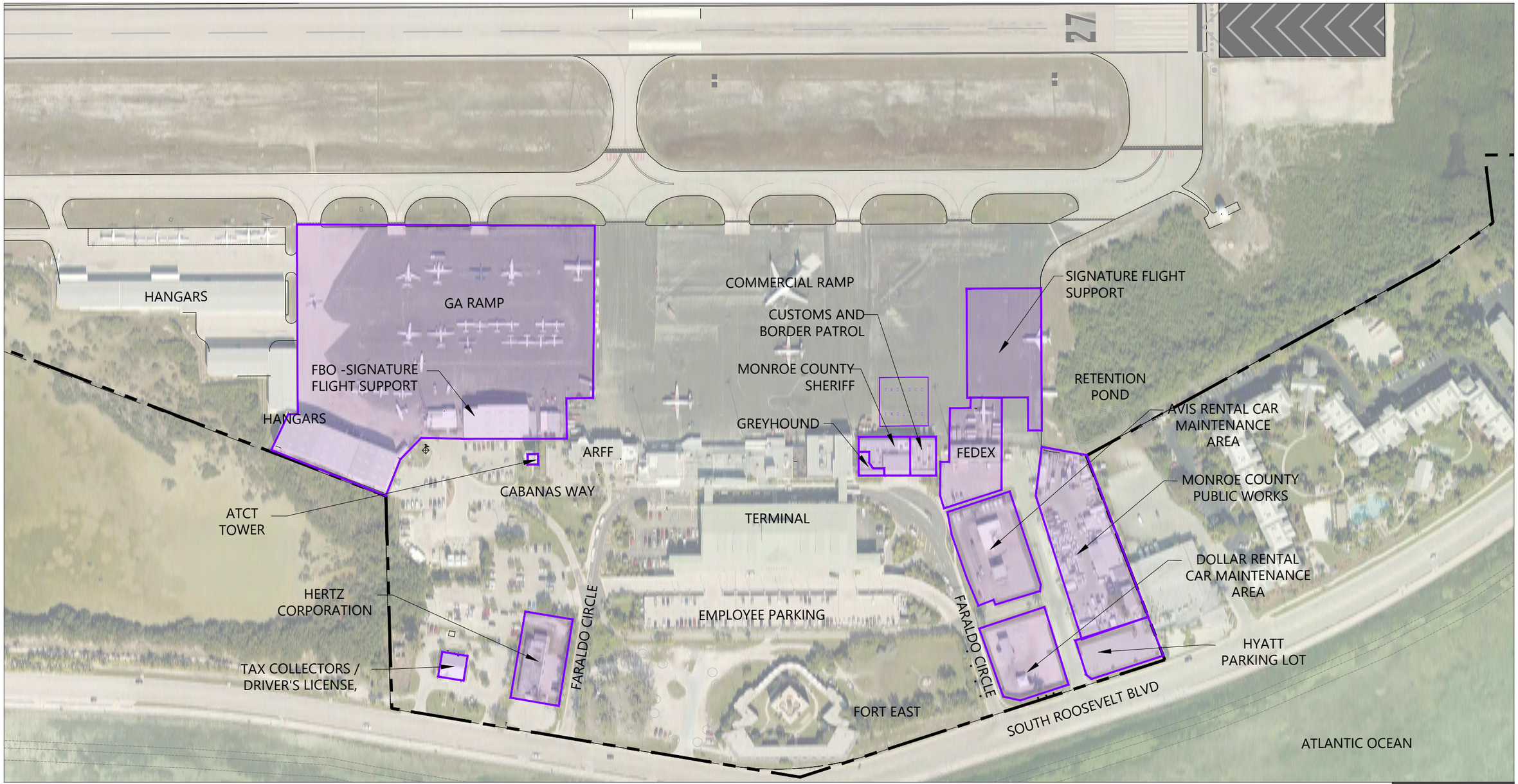
DESCRIPTION	SQ. FT.	LEASED TO
Avis Maintenance Area	29,100	Avis Rent A Car System
Dollar Maintenance Area	22,688	Dollar Rent A Car
Monroe County Sheriff's Office	7,748	Monroe County Sheriff
Customs Pavement	9,987	U.S. Customs and Border Protection
Florida Highway Patrol/Drivers' License	2,592	Tax Collector's Office
Airport Traffic Control Tower	454	FAA
Air Cargo Building	2,973	FedEx
Aircraft Apron	8,842	FedEx
Parking Lot	9,235	FedEx
Former Florida Keys Youth Center	18,800	The Hertz Corporation
Parking Lot	14,850	Hyatt and Hyatt Inc.
FBO - Signature Building and Ramp	283,568	Piedmont Hawthorne Aviation, LLC
Greyhound Lines Inc.	1,340	Greyhound Lines Inc.
Monroe County Public Works	49,715	Monroe County
Customs and Border Protection space	4,247	U.S. Customs and Border Protection

SOURCE: Airport Lease Documents
PREPARED BY: American Infrastructure Development, Inc., and Jacobs Engineering Group Inc. April 2016.

Table 2-9: Terminal Leaseholds

AREA	DESCRIPTION	SQ. FT.	LEASED TO
101	Counter Space	328	Hertz Rent a Car
102	Counter Space	220	Dollar Rent A Car
103	Counter Space	221	Thrifty Car Rental
104	Counter Space	320	Budget/Avis Rent A Car System
118	Departure Gate	235	Delta Air Lines
120	Departure Gate	235	Silver Airways
121	Departure Gate #5	298	American Airlines
123	Gift Shop	370	Last Chance
133	Office Space	172	American Eagle
134	Office Space	172	Delta Air Lines
135	Office Space	168	Silver Airways
138	Baggage Claim	37	Silver Airways
140	Baggage Claim	37	Delta Air Lines
141	Baggage Claim	37	American Airlines
143	Dining Room, Cocktail Lounge	1863	Conch Flyer
144	Conch Flyer Restaurant	1920	Conch Flyer
144A	Kitchen, Storage and Prep Area	508	Conch Flyer
200-1	Ticketing and Queue	304	American Airlines
200-2	Ticketing and Queue	304	American Airlines
200-3	Ticketing and Queue	304	American Airlines
200-4	Ticketing and Queue	304	Delta Air Lines
200-5	Ticketing and Queue	304	Delta Air Lines
200-11	Ticketing and Queue	304	Silver Airways
205	Office Space	108	TSA
216	Restaurant Vestibule	431	Conch Flyer
217	Retail	440	Jet Lag
218	Office Space	452	TSA
219	Kitchen, Storage and Prep Area	865	Conch Flyer
200-1	Ticketing and Queue	304	American Airlines
220	Gift Shop	498	Last Chance
221	Conch Flyer Restaurant	1963	Conch Flyer
221A	Restaurant Bar	940	Conch Flyer
221B	Restaurant Office	116	Conch Flyer
223	Office Space	161	American Eagle
223-A	Office Space	32	American Eagle
126	Rental Space	141	Available (7'-8" x 18'-6")
223-B	Office Space	18	American Eagle
223-C	Office Space	104	American Eagle
223-D	Office Space	99	American Eagle
224	Office Space	161	Delta Air Lines
224-A	Office Space	31	Delta Air Lines
224-B	Office Space	99	Delta Air Lines
224-C	Office Space	124	Delta Air Lines
228-A	Office Space	70	Silver Airways
228-B	Office Space	108	Silver Airways

SOURCE: Jacobs Engineering Group Inc., *2014 Master Terminal Space Allocation for Rates and Charges*
PREPARED BY: American Infrastructure Inc. and Jacobs Engineering Group Inc. April 2016



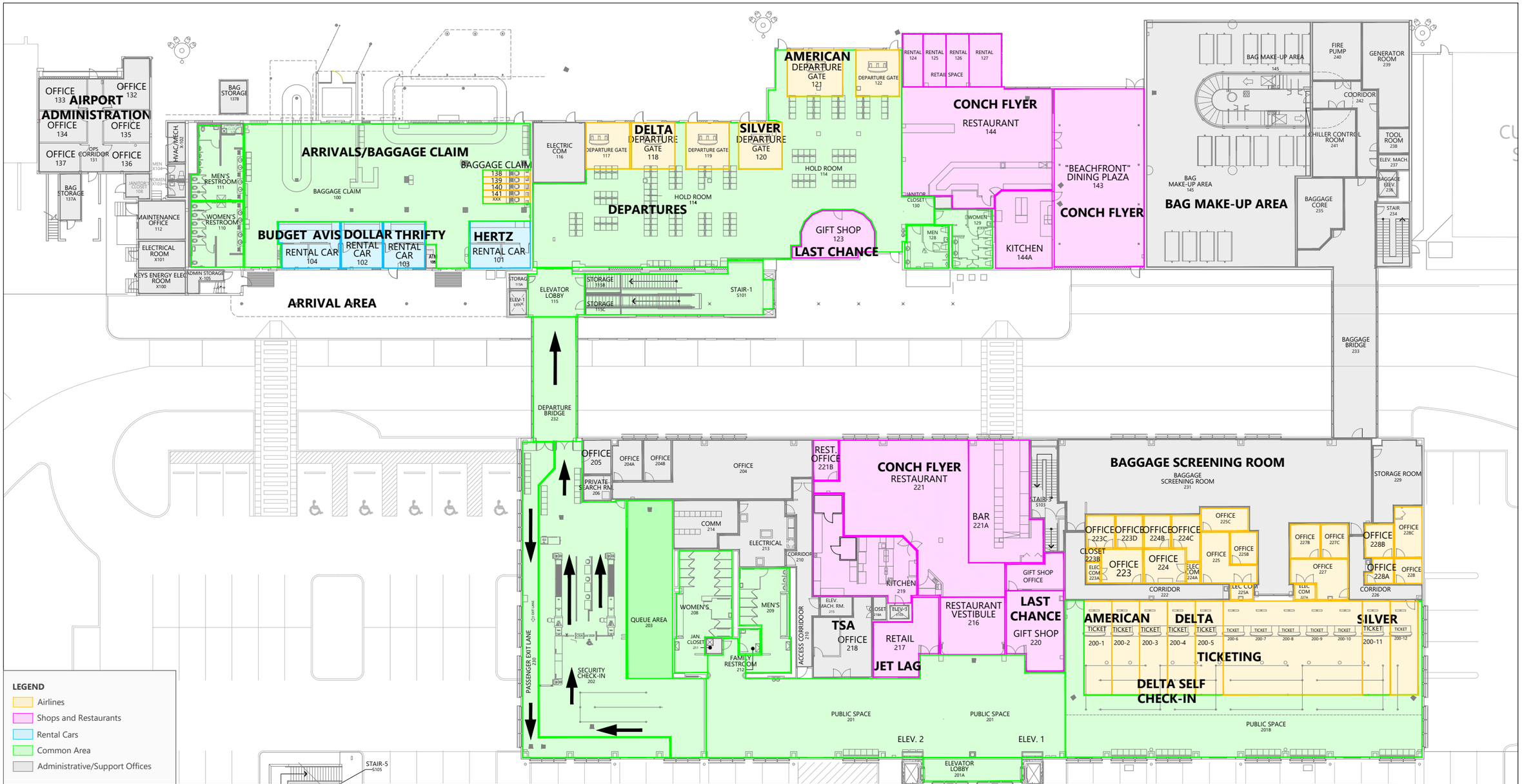
SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015. Lease Details, Airport Administration, March 2016.
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-32

NORTH 0 200 ft.

Airport Leaseholds

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-32 Airport Leaseholds.dwgLayout: 11x17L Plotted: June 11, 2020, 10:03AM



SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015
PREPARED BY: American Infrastructure Development, Inc., April, 2016.

EXHIBIT 2-33

NORTH 0 30 ft.

Terminal Leaseholds

Drawing: P:\Project-Orlando\Monroe County\Task 200 - EYW Master Plan\203- Inventory & Existing Conditions\CAD\Exhibit 2-33 Terminal Leaseholds.dwgLayout: 11 17 Plotted: un 11, 2020, 10 AM

2.12 Environmental Setting

The following sections describe the existing environmental conditions at the Airport. The most significant environmental elements at EYW are the wetlands, threatened and endangered species, and floodplains.

2.12.1 WETLANDS

A major limiting factor to expansion of the Airport is the surrounding wetlands. The wetlands are characterized by a combination of salt ponds and mangrove marshes. Some of the wetlands are tidally influenced as the result of a direct connection to the Atlantic Ocean, while others are isolated and fluctuate with rainfall.[3]

Development within the wetland areas is limited because of stringent permit requirements of the U.S. Army Corps of Engineers, the South Florida Water Management District, and the Florida Department of Environmental Protection. Mitigation is required for any impacts to these wetlands. However, a consent order discussed in the 2003 Key West International Airport Master Plan Update, prepared by URS, permits the trimming of mangroves within the approach surface of Runway 27 and the runway object free area[4].

2.12.2 THREATENED AND ENDANGERED SPECIES

Federally "listed" species are those that are categorized as "endangered" or "threatened," as determined by the stipulations of the Endangered Species Act. They include both animal and plant species. The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service are responsible for their protection. Those listed species identified in and around Airport property are provided in **Appendix B**.

In accordance with the 2007 Environmental Assessment for Proposed Runway Safety Area Improvements at the Key West International Airport, prepared by Monroe County Board of County Commissioners and URS Corporation Southern, the U.S. FWS had not listed the area surrounding Runway 9-27 as a potential habitat for any federally listed threatened or endangered species in the U.S. FWS Geographic Information System (GIS) database. According to the U.S. FWS, the disturbed nature and location of the Airport land surrounding the runway preclude its use as a habitat by any threatened or endangered species[5].

2.12.3 FLOODPLAINS

The floodplains at EYW are a major impediment to future expansion of the Airport. According to the Federal Emergency Management Agency's Flood Insurance Rate Maps, the southern portion of the Airport is classified

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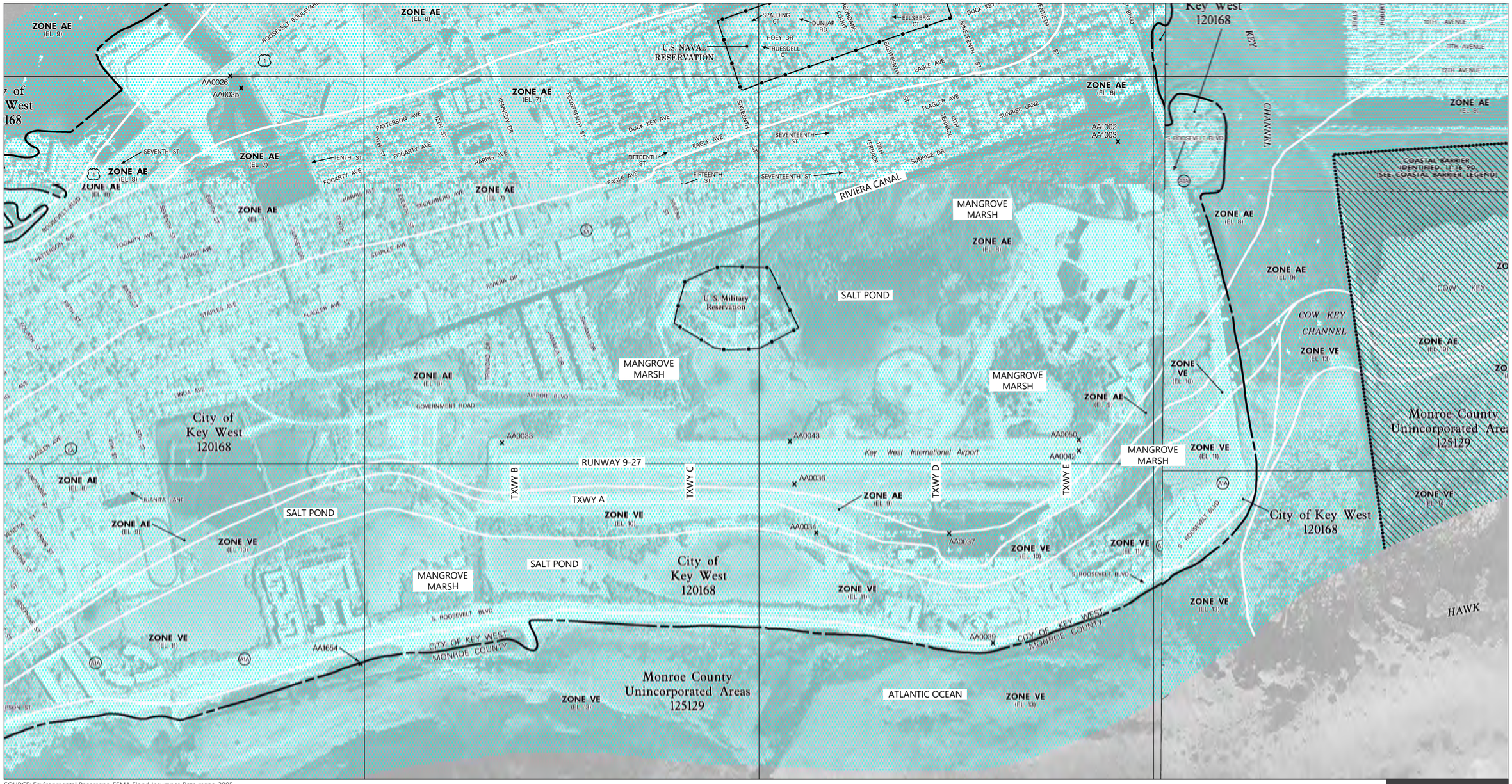
3 Source: *Monroe County Board of County Commissioners and URS Corporation Southern, Environmental Assessment for Proposed Runway Safety Area Improvements at the Key West International Airport*, 2007.

4 Source: *URS, Key West International Airport Master Plan Update*, 2003

5 Source: *Monroe County Board of County Commissioners and URS Corporation Southern, Environmental Assessment for Proposed Runway Safety Area Improvements at the Key West International Airport*, 2007.

as zone VE (coastal flood zone with velocity hazard), while the northern half of the Airport and the majority of the airside are classified as zone AE (base flood zone elevations determined). Both of these zones are at risk of a 100-year flood (1 percent annual chance,) but zone VE is also at risk of velocity related hazards, including storm surge. **Exhibit 2-34** shows the surrounding floodplains. Zones VE and AE are Special Flood Hazard Areas subject to flooding by the 1 percent annual chance flood.



SOURCE: Environmental Basemaps, FEMA Flood Insurance Rate maps, 2005
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-34

NORTH

Flood Zones

2.13 Existing Utility Infrastructure

The utility systems serving the Airport include electric power, water, sanitary sewer, storm sewer, and communications. The following sections provide a brief overview of the utilities available to aviation and non-aviation parcels at the Airport.

2.13.1 ELECTRIC POWER

Electric power for the Airport is currently supplied by the Keys Energy Services, formerly known as the City Electric System. The City of Key West purchased the electric utility in 1943 and the City Council created a Utility Board to oversee the utility. As of March 2016, the City of Key West maintains ownership of the power service.

Power service is available throughout the aviation and non-aviation parcels at the Airport. Power is also readily accessible to areas that Airport management may wish to further develop or change the existing land use. The main transformer and power distribution hub for the Airport is located on a tall grassed mound just southeast of the ATCT. From there, power is distributed to the terminal, the ATCT, the FAA electrical vault, and throughout the aviation and non-aviation parcels at the Airport. The FAA vault provides power to the windsock, the Automated Surface Observing System (ASOS), and other airside equipment. The main Airport transformer is depicted on **Exhibit 2-35**.

Exhibit 2-35: Main Airport Transformer

SOURCE: American Infrastructure Development, Inc., Data Collection Trip, March 2016.
PREPARED BY: American Infrastructure Development, Inc. April 2016

2.13.2 WATER

Existing water services for the Airport are provided by the Florida Keys Aqueduct Authority (FKAA). The primary water source for the FKAA is the Biscayne Aquifer and the wellfield is located near Everglades National Park. During the higher demand dry season, the FKAA may draw up to 4 percent of its water supply from the Floridan Aquifer.[6]

An existing 12-inch FKAA water main runs along the frontage of the Airport within the right-of-way of SR A1A. The Airport's water supply enters the Airport via an 8-inch water main along the main entrance of the Airport (Faraldo Circle). Potable water is distributed throughout the landside and a portion of the airside facilities via a series of 4-inch and 6-inch lines. An 8-inch fire water line branches off the 8-inch water main and provides firewater flow to the terminal and surrounding facilities. All facilities at the Airport are supplied with potable water, including the FBO terminal, the ARFF facility, the ATCT, the hangars, and the CBP facility, among others. Water is not currently distributed to the general aviation apron west of Taxiway C, nor any areas north of Taxiway A.

2.13.3 SANITARY SEWER

Existing sanitary sewer services for the Airport are provided by Operations Management International (OMI). OMI has been contracted by the City of Key West to operate and maintain the Richard A. Heyman Environmental Pollution Control Facility located on the south end of Fleming Key. The facility was updated in 2001 to guarantee advanced treatment standards, which coincided with construction of the first deep injection well for the treatment plant's effluent. Currently, all effluent from the plant is injected into the aquifer via a series of wells and the previous effluent outfall to the ocean was permanently closed.

The sanitary waste from the Airport is collected by two separate gravity-fed sewer systems. Each system drains to its dedicated lift station, which conveys sanitary flows to the treatment plant via force main. The eastern system drains to a lift station located just east of the FedEx building and collects the waste from the rental car facilities, the Public Works facilities, the FedEx building, and the CBP building. The western system is larger and serves the majority of the rest of the Airport. The western lift station is located east of the fuel farm and collects sanitary flows from the terminal, the ATCT, the hangars, the Florida Highway Patrol building, and the Florida Keys Youth Center building, among others.

Additionally, there is a small stand-alone septic system within the vehicle maintenance parcel just east of the Faraldo Circle entrance to the Airport. This parcel is also served by the eastern gravity sewer system. It is unclear if the existing septic system is still in use.

2.13.4 STORM SEWER

Existing storm sewer at the Airport consists of a network of drainage pipes throughout the landside and much of the airside. Because of the low elevation of the Airport, the high groundwater table, and space constraints,

[6] Source: *http://www.fkaa.com/our_water_source.htm*

the drainage system is unique. In general, stormwater runoff from developed areas does not flow directly into the ocean or into wetland systems leading to the ocean. Instead, each basin treats runoff in ponds and discharges the treated stormwater via gravity flow or pumped flow into deep injection wells. The injection wells allow stormwater to flow into the aquifers below the island of Key West. Prior to reaching the injection wells, the stormwater is treated a second time through oil/water separators. The use of injection wells also saves space at the Airport, as the Atlantic Ocean is an Outstanding Florida Waterway (OFW) and, as such, requires a higher level of treatment for ponds that discharge directly to an OFW. The Airport uses approximately 19 injection wells and has at least 19 discharge points from its storm sewer system.[7] **Exhibit 2-36** provides a view of the access hatch to one of the many injection wells on the Airport.

Exhibit 2-36: Injection Well – Access Hatch

SOURCE: American Infrastructure Development, Inc. Data Collection Trip, March 2016.
PREPARED BY: American Infrastructure Development, Inc. April 2016

2.13.5 COMMUNICATIONS

Existing communications services for the Airport are provided by Comcast and AT&T for Internet and AT&T for telephone. In general, the Internet and voice communications are available throughout the Airport, including the ATCT, the terminal, and the Airport Administration building, among others. AT&T communication lines enter the Airport at the public park west of the Fort East Martello Museum, and are routed to the main communications room in the Airport Administration building. Comcast communication lines enter the Airport from overhead lines near the Adam Arnold Annex building, and are routed to the main

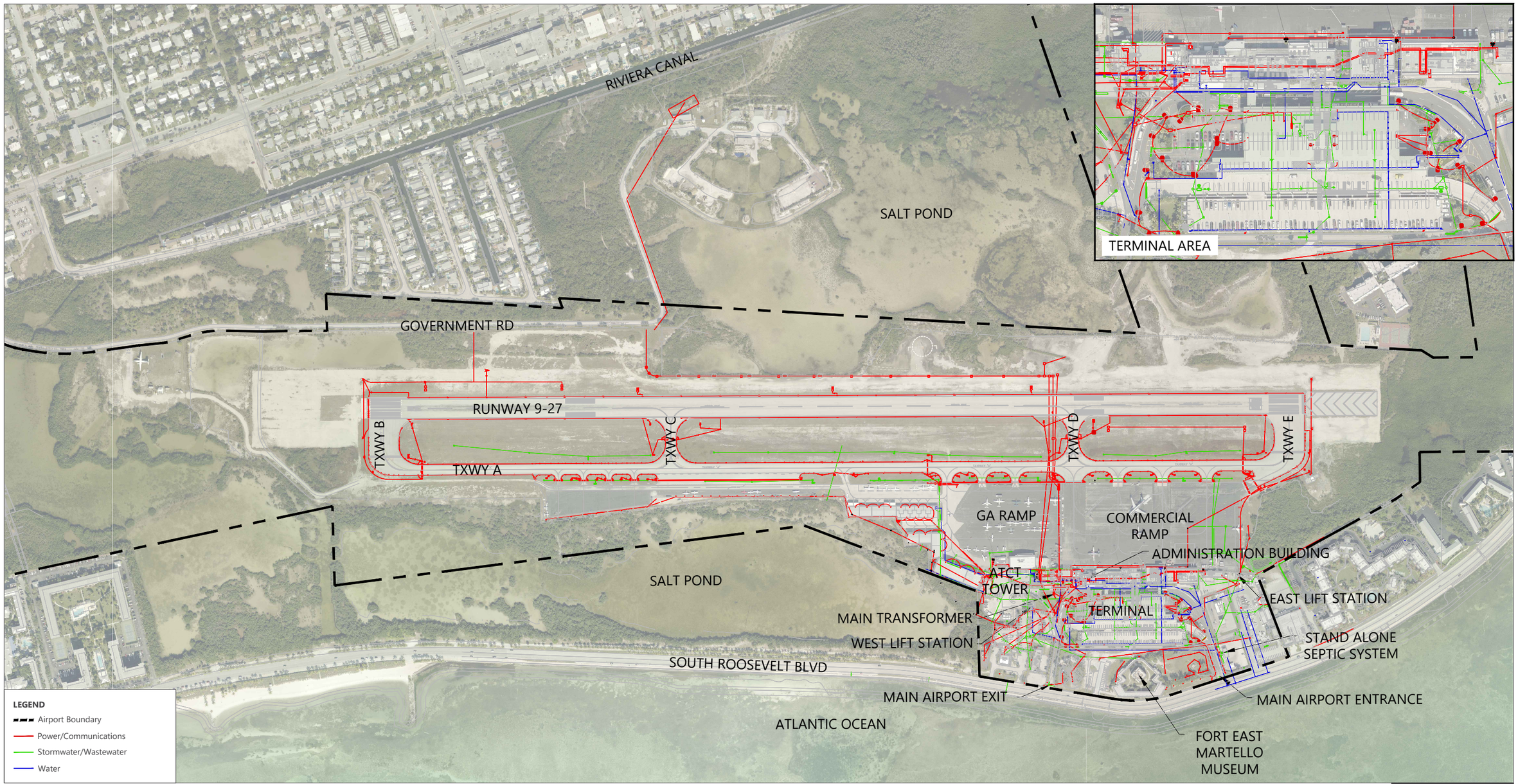
[7] Source: URS, *Airport Layout Plan for Underground Utilities, 2011.*

communications room in the terminal[8]. An existing FAA conduit run connects the FAA vault to FAA equipment around the airfield, such as the windsock and ASOS.

2.13.6 UTILITY SYSTEMS MAP

Exhibit 2-37 depicts the utility information for the Airport.

[8] Source: Telephone conversation with Chris Hawkes, Airport Systems Technician, Key West International Airport, and Elton Smith, Civil Engineer, American Infrastructure Development, on 3/15/2016.



SOURCE: Basemap, and Aerial Photography, Jacobs, September, 2015; Utility Mapping, URS, 2011
PREPARED BY: American Infrastructure Development, Inc., March, 2016.

EXHIBIT 2-37

NORTH 0 500 ft.

Utility Systems