FINAL

ENVIRONMENTAL ASSESSMENT

FOR

CONSTRUCTION OF A NEW ENTRY GATE COMPLEX

AT HOMESTEAD AIR RESERVE BASE

MIAMI-DADE COUNTY, FLORIDA

482nd Fighter Wing
Air Force Reserve Command

May 2010

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

LIST OF FIGURES

LIST OF PHOTOS

LIST OF TABLES

LIST OF TABLES (Continued)

LIST OF APPENDICES

LIST OF ACRONYMS

%	percent
AAF	Army Air Field
AAFES	Army and Air Force Exchange Service
ACM	asbestos-containing material
ACQR	Air Quality Control Region
ACS	American Community Survey
AD	*anno Domini*
ADT	average daily traffic
AFB	Air Force Base
AFI	Air Force Instruction
AFOSH	Air Force Occupational Safety and Health
AFRC	Air Force Reserve Command
AICUZ	Air Installation Compatible Use Zone
ARB	Air Reserve Base
ATC	Air Transport Command
AT/FP	antiterrorism/force protection
ATS	AECOM Technical Services, Inc.
BC	before Christ
BMPs	best management practices
BX	Base Exchange
CAA	Clean Air Act
CDMP	Comprehensive Development Master Plan
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CoC	Chamber of Commerce
CVIA	commercial vehicle inspection area
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	decibel
DoD	Department of Defense
DOL	U.S. Department of Labor
DOT	Department of Transportation
EA	Environmental Assessment
ECP	Environmental Condition of Property
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EJ	Environmental Justice
ERP	environmental resource permitting
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FAC	Florida Administrative Code
FANG	Florida Air National Guard

LIST OF ACRONYMS (Continued)

FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FGS	Florida Geological Survey
FIRM	Flood Insurance Rate Map
FLARNG	Florida Army National Guard
FMNH	Florida Museum of Natural History
FONSI	Finding of No Significant Impact
FPL	Florida Power and Light Company
FW	Fighter Wing
FFWCC	Florida Fish and Wildlife Conservation Commission
FWRIR	Florida Water Resource Implementation Rule
GSA	General Services Administration
gsf	gross square feet
ha	hectare
HAC	Homeless Assistance Center
HAZMAT	hazardous materials
HCS	Highway Capacity Software
HQ	Headquarters
HWMP	Hazardous Waste Management Plan
ID	identification
INRMP	Integrated Natural Resource Management Plan
LOS	level of service
Ldn	Day-Night Average Sound Level
mg/L	milligram per liter
MILCON	Military Construction
MSST	Maritime Safety and Security Team
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NO_x	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
NORAD	North American Aerospace Defense Command
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	ozone
OTU	Operations Training Unit
Pb	lead
PM_{10}	particulate matter less than 10 microns in diameter
RCRA	Resource Conservation and Recovery Act
ROW	right-of-way
SAC	Strategic Air Command

LIST OF ACRONYMS (Continued)

SDWA	Safe Drinking Water Act
SEFI	Southeast Florida Intrastate
SEIS	Supplemental Environmental Impact Statement
SFWMD	South Florida Water Management District
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	sulfur dioxide
SOCSOUTH	Special Operations Command South
SOUTHCOM	U.S. Southern Command
sq ft	square feet
SWPPP	Stormwater Pollution Prevention Plan
TAC	Tactical Air Command
TDS	total dissolved solids
TFW	Tactical Fighter Wing
TSCA	Toxic Substances Control Act
TTW	Tactical Training Wing
U.S.	United States
USACE	United States Army Corps of Engineers
USAF	United States Air Force
USC	United States Code
USCB	United States Census Bureau
USCG	United States Coast Guard
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VTCMI	Virginia Tech Conservation Management Institute
WASD	Water and Sewer Department

EXECUTIVE SUMMARY

This Environmental Assessment (EA) evaluates the resource impacts that would result from the construction of a new entry gate complex at Homestead Air Reserve Base (ARB), Florida. This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA, and Air Force Instruction (AFI) 32-7061, *The Environmental Impact Analysis Process*, as codified in Title 32, Code of Federal Regulations (CFR), Part 989.

PURPOSE AND NEED FOR ACTION

The purpose of the Proposed Action is to provide a new permanent entry gate complex for Homestead ARB that would accommodate the current mission/tenants and anticipated future increases in gate traffic. The Old Main Gate on Coral Sea Boulevard was closed when it was determined to be highly vulnerable to antiterrorism/force protection (AT/FP) concerns due to the proximity of base lodging. The current Homestead ARB entry gate on Westover Street (herein referred to as the Contractor Gate) serves as the only fully operational gate for the base. This gate was not designed to handle the current volume of base traffic, the configuration is constricted and the design is inadequate to maintain acceptable traffic flows through the gate and onto SW 288th Street. While accommodating higher traffic volumes, the Proposed Action would minimize congestion and related traffic hazards and delays.

PROPOSED ACTION AND ALTERNATIVES

This EA evaluates the impacts associated with the Proposed Action (Alternative #1), the No Action Alternative, and two alternative actions (Alternatives #2 and #3). The specific tasks included in the Proposed Action are construction of a new entry gate complex and road realignment on adjacent, vacant county-owned land. The proposed entry gate complex would consist of three small building structures (a covered gatehouse, pass and identification [ID] inspection office [visitor center], and commercial vehicle inspection area [CVIA]), adjacent parking areas, a static aircraft display, and the associated road realignment of SW 288th Street. Alternatives #2 and #3 include construction of a new gate complex and road realignment; however, under these alternatives, the covered gatehouse and CVIA would be combined into a single structure.

The No Action Alternative represents the status quo, that is, the baseline conditions. The baseline conditions are those that are compared to the Proposed Action and/or one of the alternative actions. Under the No Action Alternative, there would be no new construction or improvements to the current entry gate and the installation's need for a gate complex providing increased capacity would remain unmet.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

This EA contains the results of a systematic evaluation of the potential environmental consequences associated with the Proposed Action, the No Action Alternative, and two other alternatives, including potential direct, indirect, and cumulative impacts. Fourteen resource

categories were addressed to identify potential impacts: land use, infrastructure, socioeconomics, environmental justice (EJ), cultural resources, physical resources, coastal zone resources, water resources, biological resources, transportation, air quality, hazardous materials and waste management, safety, and noise. Consistent with CEQ regulations, the cumulative impacts of past, present, and reasonably foreseeable future actions were considered, regardless of whether those actions were initiated by governmental entities or private parties.

Land Use Resources. Land use at the North Gate Site would change from "vacant with closed roads" to "occupied with functioning roads" under the Proposed Action and Alternatives #2 and #3. This would have a beneficial impact on the subject property as it would enter into functional use while maintaining a significant amount of green space and landscaping. Overall, there would be no anticipated adverse impacts to land use resources at the site or surrounding parcels. Without implementation of the Proposed Action, the North Gate Site could remain vacant for many years. If the county were to stop regular maintenance of the property, conditions at the site would deteriorate quickly and could result in long-term adverse impacts.

Infrastructure. Under the Proposed Action and Alternatives #2 and #3, no significant impacts to the capacities of existing infrastructure systems would be expected. Impacts to the electrical power, water supply, wastewater, and communication systems during construction or operations are expected to be minimal. Solid waste generation, consisting mostly of building materials, would increase during construction activities with minor adverse effects expected. All base contractors would be required to recycle construction materials and follow the Homestead ARB Integrated Solid Waste Management Plan. There would be no adverse impacts to infrastructure associated with the No Action Alternative.

Socioeconomics. Socioeconomics includes both population and employment and earnings considerations. No adverse impacts to the population would be expected as a result of the Proposed Action or Alternatives #2 and #3. There are no residential areas on or immediately adjacent to the project area and the scale of the Proposed Action is small enough that impacts to the population would not be felt beyond the immediate vicinity. There may be temporary or minor adverse impacts to employment and earnings for the 1st National Bank of South Florida and the Homestead Job Corps as a result in the roadway realignment and Metrobus route changes. The re-routing of two roads would facilitate the inflow and outflow of employees at Homestead ARB potentially resulting in a positive indirect impact to base employment. Temporary beneficial impacts could result from increased employment opportunities in the area associated with hiring construction personal during gate installation. There would be potential adverse impacts to the local economy if Miami-Dade County has to absorb the cost of installation of new signals at the new entry gate, and road improvements or new road construction in association with the closure of the intersection of SW 127th Avenue and Bougainville Boulevard. There may also be potential adverse impacts to Miami-Dade Transit in association with the need to develop and advertise a modified route for Metrobus Route 70, as a result of income lost should that segment of the route be closed. There would be no significant adverse or beneficial impacts to socioeconomics under the No Action Alternative.

Environmental Justice. The majority of students at the Homestead Job Corps are minorities, an EJ community of concern; therefore, potential adverse impacts to EJ could occur under the

Proposed Action and Alternatives #2 and #3. Construction of any of the alternatives would have the potential for adversely impacting these students by extending the distance they would have to walk to reach locations west of Homestead ARB, and by eliminating or altering their access to Metrobus Route 70. Impacts to the route which students would have to walk to reach retail locations west of the base would be minor. Impacts to students' access to public transportation could potentially be significant. These impacts could be mitigated by determining a revised bus route that maintains access to public transportation. Under the No Action Alternative, no adverse impacts to EJ would occur.

Cultural Resources. There are no current known cultural resources within the project area. Because the site was previously developed as base housing, it is unlikely that unidentified archaeological resources would be present on the North Gate Site. There are no architectural or archaeological resources located within or immediately adjacent to the project area that could be directly or indirectly impacted by any of the project alternatives; therefore, there would be no impact to cultural resources under any of the alternatives.

Physical Resources. The Proposed Action and Alternatives #2 and #3 would require site preparation and installation of new roads on the North Gate Site, which could result in minor, temporary, adverse impacts to the soils on-site. Ground-disturbing activities such as grading, clearing, filling, and excavation could cause soil erosion and subsequently, the transport of sediment via stormwater. Operators of construction activities would have to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Florida Department of Environmental Protection (FDEP) including a Stormwater Pollution Prevention Plan (SWPPP) detailing site-specific best management practices (BMPs) to control erosion. Therefore, no adverse impacts to geology or soil would be anticipated as a result of the implementation of any of the alternatives. There would be no adverse impacts associated with the No Action Alternative.

Coastal Zone Resources. The project site does not have any natural water bodies on it or adjacent to it. The nearest bodies of water are manmade lakes, ponds and canals. There would be no direct impacts to coastal resources from any of the alternatives. Minor, indirect impacts could occur during construction but would be minimized through adherence to federal, state, and local stormwater permitting requirements and by proper management of construction and maintenance at the project site with appropriate BMPs. There would be no adverse impacts to coastal zone resources associated with the No Action Alternative.

Water Resources. Implementation of either the Proposed Action or Alternative #2 or #3 would not result in any direct adverse impacts, with the exception of possible impacts to groundwater if dewatering is required during construction. Surficial groundwater quality could be impacted if groundwater contamination (including saline) is introduced to the project area during dewatering activities. Indirect impacts could include a temporary decrease in water quality during construction because of increased run-off. Impacts would be mitigated through BMPs during construction. Modification of the existing permits or new permits may be required prior to construction and operation of the new entry gate complex. No adverse impacts to water resources would be associated with the No Action Alternative.

Biological Resources. Minor adverse direct and indirect impacts would occur to terrestrial habitats and wildlife during construction. A permanent loss of existing habitat would occur under the alternatives (less than 6 acres). This habitat loss would be slightly less for Alternatives #2 and #3 (approximately 4 acres and 5 acres, respectively) than the approximate 6 acres necessary for the Proposed Action. The impacted habitat does not represent a unique habitat and given the availability of similar existing habitat in the area, it would be unlikely that wildlife would relocate to nearby sensitive areas (remnant pine rockland habitat). No adverse impacts to biological resources would be associated with the No Action Alternative.

Endangered, threatened, or special concern species would unlikely be adversely affected by the Proposed Action or Alternative #2 or #3. Listed, candidate, or species of special concern with the potential to occur in the project area would not be affected by impacts such as reduced availability of food or altered roosting habitat during or after construction of the new entry gate complex. No adverse impacts to threatened, endangered, or special concern species would occur under the No Action Alternative.

Transportation. Beneficial impacts such as reducing congestion and traffic delays at the Homestead ARB entrance and adjacent roads would result from the Proposed Action and Alternatives #2 and #3 once construction is complete. All alternatives would result in minor adverse impacts in the form of increased travel times for area drivers due to permanent road closures. In addition, there may be significant adverse impacts to public transportation from these road closures unless a re-route option for Miami-Dade County Metrobus Route 70 is identified.

Impacts from the Proposed Action would depend on whether the final design includes a traffic signal (beneficial), a two-way stop (adverse), or an all-way stop (negligible) at the new intersection of the realigned SW 288th Street and Coral Sea Boulevard. Beneficial impacts from Alternatives #2 and #3 would be slightly greater than those of the Proposed Action because the use of a roundabout at the intersection of SW 288th Street and Coral Sea Boulevard would perform better than the traffic signal or stop options available for Alternative #1.

Adverse impacts to transportation under the No Action Alternative would continue to occur due to congestion on SW 288th and Westover Streets caused by the constricted location of the Contractor Gate. Minor adverse impacts could also occur from public transportation delays caused by traffic congestion.

Air Quality. The Proposed Action and Alternatives #2 and #3 would result in similar, minor adverse impacts from equipment emissions and dust disturbances during construction. However, these impacts would be temporary and dust emissions would be controlled using BMPs.

Under the No Action Alternative, congestion and traffic back-ups (idling vehicles) that occur at the Contractor Gate would continue to have localized adverse effects on air quality due to exhaust emissions. Increases in base traffic volumes in the future would result in greater adverse effects on local air quality.

Hazardous Materials and Waste Management. Each alternative could result in a temporary increase in hazardous materials management from the potential relocation of utilities lined with asbestos-containing material (ACM) or the use of construction equipment that utilizes various potentially hazardous materials. Although unlikely, materials, such as, fuels, lubricants, and solvents may be temporarily stored on-site where they could potentially leak or be spilled. It is not anticipated that construction or operation of the proposed facilities under any alternative would generate hazardous waste; however, all base contractors would be required to follow Homestead ARB's HAZMAT and spill prevention plans and protocols. Under the No Action Alternative, continued deterioration of the existing roadways and possible ACM pipe linings could constitute an adverse hazardous materials impact.

Safety. No impacts to general public safety are anticipated for the Proposed Action or Alternatives #2 or #3. Possible beneficial impacts for the Homestead ARB include increased safety from the installation and operation of a redesigned entry control complex. Indirect adverse impacts to safety could also result from the No Action Alternative if the county fails to continue regular maintenance and landscaping of the North Gate Site.

Noise. A temporary increase in noise would be associated with construction activities for each of the alternatives. This increase would be of a relatively short duration and would be limited to the North Gate Site and adjacent areas. Following construction, noise levels are anticipated to return to existing levels. Therefore, although temporary adverse noise impacts would occur, they are not considered significant. There would be no adverse impacts to noise associated with the No Action Alternative.

Cumulative Effects and Irreversible and Irretrievable Commitment of Resources. All alternatives would result in impacts during construction that could combine with other like projects to result in an adverse cumulative impact to biological, physical, water, coastal, transportation, noise, and air resources. The adverse impacts from these actions would be minimal based on their scale and expected duration of impacts (most adverse impacts occurring only short-term during construction). Long-term cumulative impacts (occurring even after construction) to land use, hazardous materials and waste, and safety would be beneficial because these resources would benefit from planned development. Adverse cumulative impacts to socioeconomics, EJ, and transportation from a new gate complex may occur if mitigation measures are not taken, particularly the identification of a modified bus route.

The No Action Alternative could potentially result in long-term adverse cumulative impacts to land use, hazardous materials and waste, transportation, and safety. No long-term adverse cumulative impacts would be expected to biological, physical, water, noise, and air resources.

Implementation of the Proposed Action or Alternative #2 or #3 would involve irreversible and irretrievable commitments of natural resources, labor, materials, and fiscal resources beyond those that would occur under the No Action Alternative. However, the project area (North Gate Site) was previously utilized as base housing, and this history of development minimizes irreversible and irretrievable commitments of natural resources. Labor and materials, such as fossil fuels and building materials, would be expended during the construction of a new control gate complex. Additionally, labor and natural resources would be used in the fabrication and

preparation of construction materials. These resources generally would not be retrievable; however, they are not in short supply and their commitment would not have an adverse effect on their availability. In addition, fiscal resources would be committed, as the proposed new entry gate complex and associated road re-route would require an irretrievable expenditure of federal funds.

1.0 PURPOSE AND NEED FOR ACTION

1.1 INTRODUCTION

This Environmental Assessment (EA) evaluates the impacts of constructing a new control gate complex consisting of a covered gatehouse, pass and identification (ID) inspection office (visitor center), commercial vehicle inspection area (CVIA), parking areas, a static aircraft display, and associated road realignment at Homestead Air Reserve Base (ARB), Florida. This EA has been prepared to evaluate the potential environmental consequences of the Proposed Action and alternatives, in accordance with provisions of Title 32, Code of Federal Regulations (CFR), Part 989, 40 CFR Parts 1500 through 1508 (Council on Environmental Quality [CEQ] National Environmental Policy Act [NEPA] implementing regulations), and Air Force Instruction (AFI) 32-7061, the Environmental Impact Analysis Process (EIAP).

1.2 BACKGROUND

1.2.1 Local Environment

Homestead ARB is located in southeast Florida, approximately 25 miles southwest of Miami and 8 miles east of the center of the City of Homestead (Figure 1-1).

Figure 1-1. Regional Map of the Homestead Project Area

The base lies just outside of Homestead city limits, but within Miami-Dade County, which is bounded to the north by Broward County, the south by the Florida Keys, and the east by the Atlantic Ocean (Biscayne National Park). The western third of the county is part of Everglades National Park, which continues beyond the western county line. In addition to metropolitan areas (Miami, Hialeah, Miami Beach) and undeveloped public lands (national, state, and local parks and water conservation areas), Miami-Dade County consists of approximately 97,000 acres of agricultural lands; a mixture of farmland and wetlands (Krieger 2003). The current Homestead base perimeter encompasses approximately 1,950 acres surrounded by agricultural lands, small businesses, and residences.

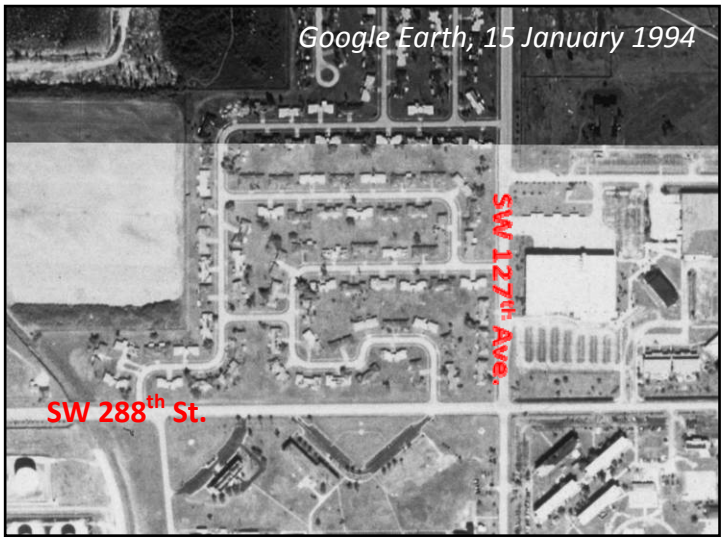

Photo 1-1. Aerial Image of the Project Area Post-Hurricane Andrew (1994)

The project area for this EA is an approximately 33-acre site north of and adjacent to SW 288th Street, across from the current Homestead ARB entry gate on Westover Street (herein referred to as the Contractor Gate). The project area, or North Gate Site (Figure 1-2), was originally residential property (former Homestead AFB enlisted housing built between 1952 and 1968 [URS 2009]; Photo 1-1); however, the now vacant parcel (with the exception of small, secondary roads damaged by Hurricane Andrew; Photo 1-2) has not been used for any specific purpose since the property was transferred to Miami-Dade County in 2004. The residential structures were demolished by the United States Air Force (USAF) sometime between 1994 and 1996 as a requirement of the deed transfer to the county. Currently, the North Gate Site is considered private property of the county; therefore, both pedestrian and vehicular access is prohibited, the secondary roads (Arizona Avenue, New Mexico Avenue, Nevada Avenue, and Reno Lane) have been barricaded, and "no trespassing" signs are posted along the perimeter. Miami-Dade County has provided regular maintenance of the property for the past few years, including periodic mowing and security patrolling by both county police and base security personnel (Andrejko 2009a).

Photo 1-2. Aerial Image of the Project Area Present Day (2009)

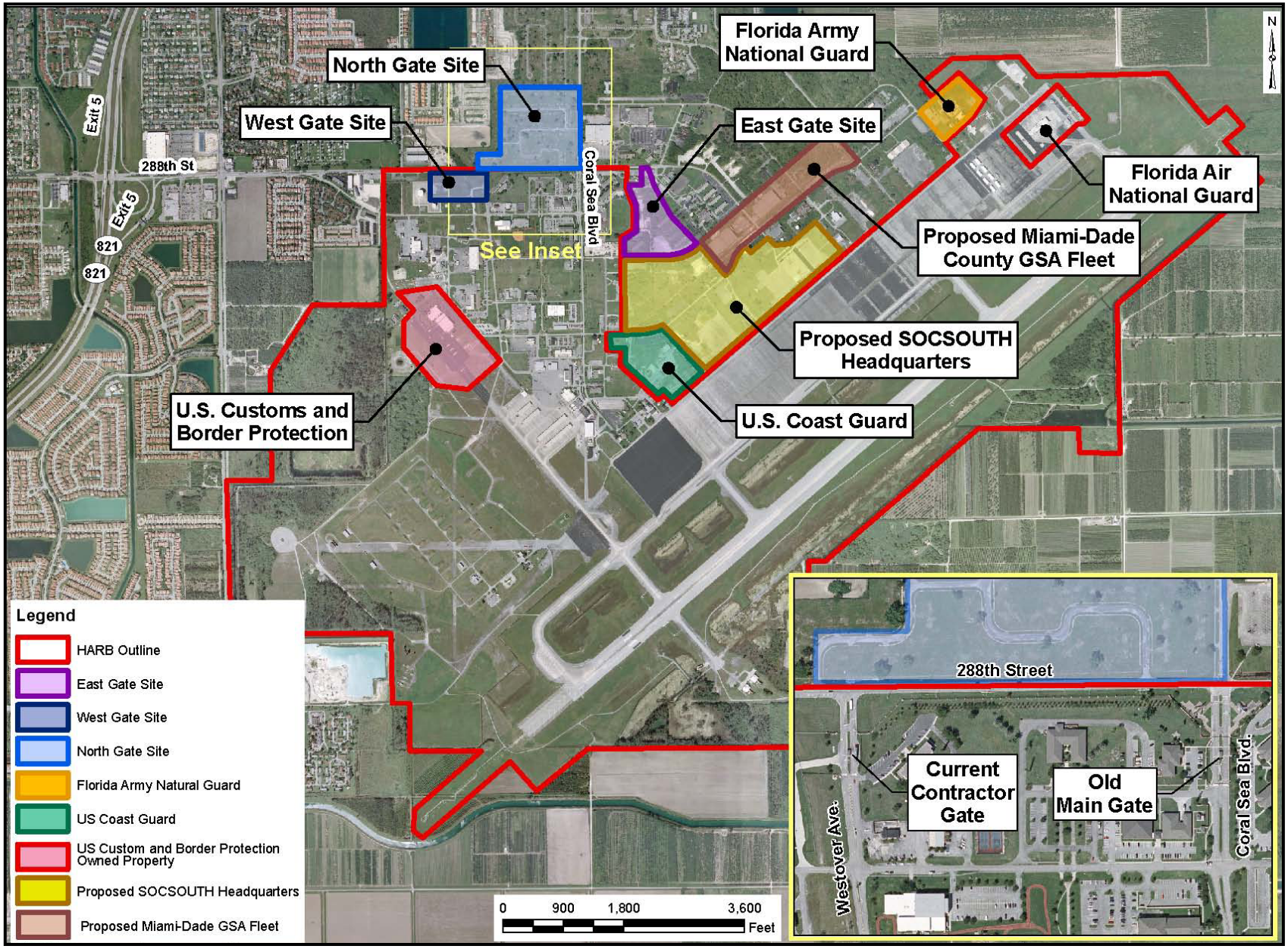

Figure 1-2. Project Vicinity Map with Homestead ARB Boundary

1.2.2 History

Homestead Army Air Field (AAF) was founded on 15 September 1942. The site was previously a private airstrip owned and built by Pan-American Ferries, Inc. Following the attack on Pearl Homestead ARB, the United States (U.S.) joined World War II and the U.S. Army Air Corps selected the Homestead site as a maintenance stop-over point. Homestead's mission has changed many times between 1942 and the present. It has been host to the 2nd Operations Training Unit (OTU) within the Air Transport Command (ATC), Strategic Air Command (SAC) and Tactical Air Command (TAC) operations, the 31st, 4531st, and 482nd Tactical Fighter Wings (TFWs) and the 31st Tactical Training Wing (TTW). The base was closed after a hurricane struck it and caused severe damage on 15 September 1945 (USAF 2008a) and again in 1992 after the category 5 storm Hurricane Andrew virtually destroyed it.

Rebuilding after Hurricane Andrew took two years and over $100 million. A portion of Homestead Air Force Base (AFB) was realigned to the Air Force Reserve Command (AFRC) as Homestead Air Reserve Station in 1994. In 2003, Homestead received additional property, including the runway and taxiway, and was renamed Homestead ARB.

The 482nd Fighter Wing (FW) is the host unit of Homestead ARB, responsible for maintaining and operating the base. The 482nd FW is a fully, combat ready unit of the AFRC, capable of deploying F-16C aircraft, pilots, and support personnel for short-notice worldwide deployment. Additionally, the 482nd FW "supports and trains civil engineering, communications, medical, logistics, aircraft maintenance, mission support, aerial transportation specialists, and a security forces squadron that can be deployed interchangeably with active-duty units to meet U.S. Air Force commitments around the world" (USAF 2008b). Homestead and the 482nd FW regularly host training sessions with combat units from around the world due to its unique geographical location and climate conditions (USAF 2008b).

Currently, Homestead ARB and the 482nd FW continues to "support contingency and training operations of the U.S. Southern Command (SOUTHCOM) and a number of tenant units...." The tenant units/functions that Homestead ARB currently supports include (USAF 2008a and 2008b):

- Headquarters (HQ) Special Operations Command South (SOCSOUTH);
- Florida Air National Guard (FANG) Detachment, 125th FW, Jacksonville, FL, operating the North American Aerospace Defense Command (NORAD) F-15 alert facility;
- Florida Army National Guard (FLARNG), 50th Area Support Group;
- U.S. Customs and Border Protection, Air and Marine Branch air interdiction mission;
- U.S. Coast Guard (USCG)'s Maritime Safety and Security Team (MSST) Miami (91114);
- U.S. Special Operations Command South, subordinate of SOUTHCOM in Doral, FL;

- Air Force Reserve "Hurricane Hunters" weather reconnaissance mission; and
- Joint relief operations with the Federal Emergency Management Agency (FEMA).

1.3 PURPOSE AND NEED

The purpose of the Proposed Action evaluated in this EA is to provide new permanent entry gate facilities for Homestead ARB that would accommodate the current mission/tenants and anticipated future increases in gate traffic. Two entry control points to Homestead ARB currently exist; both are located off of SW 288th Street (Figure 1-2 inset), but only one is fully operational. The old main gate, positioned on Coral Sea Boulevard (SW 127th Avenue becomes Coral Sea Boulevard south of the intersection with SW 288th Street/Bougainville Boulevard; Figure 2-1), was closed when its location was determined to be highly vulnerable from a security standpoint. In addition to antiterrorism/force protection (AT/FP) concerns raised due to the proximity of the gate to base lodging, this location would make it possible for a vehicle traveling south on SW 127th Avenue to barrel directly through the gate. For these reasons, the old main gate is currently used only during 'special occasions' when the base experiences heavy volumes of traffic.

The security gate on Westover Street, originally a secondary entry gate for contractors, currently serves as the only fully operational gate for base entry and exit. This "contractor gate" was not designed to handle the current volume of base traffic. The existing location of the contractor gatehouse is constricted and the design is inadequate to maintain acceptable traffic flows through the gate and on SW 288th Street.

The proposed new gate complex and road realignment are required to accommodate the current volume of traffic entering and exiting base, as well as an increased volume of traffic expected from future growth. While accommodating higher traffic volumes, the Proposed Action would minimize congestion and related traffic hazards and delays.

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

This section describes the Proposed Action that is the subject of this EA, alternatives to the Proposed Action, and the environmental impact analysis process. It concludes with a section that compares the alternatives and summarizes the conclusions of the EA.

2.1 PROPOSED ACTION (ALTERNATIVE #1)

The Proposed Action includes the construction of new integrated facilities on the North Gate Site including, a covered gatehouse, pass and ID inspection office, CVIA, associated parking lots, a static aircraft display, and realignment of SW 288th Street (Figure 2-1). The proposed control gate complex at Homestead ARB would be built as a replacement for the existing Contractor Gate on Westover Street (Figure 1-2) to better accommodate current and future capacity needs. The purpose and need for the new gate and road realignment were identified in Section 1.3.

The preliminary design of the Proposed Action was modeled after the current control gate complex at MacDill AFB in Tampa, Florida. MacDill AFB has a modern six-lane entry control point which is considered safe from both traffic and anti-terrorism standpoints, as well as aesthetically-pleasing. Due to the preliminary status of the configuration of the Proposed Action (Figure 2-1), changes would be expected once the design is finalized; however, these changes would be minor and would likely not affect major defining features of the project. The preliminary design for the new entry gate complex was presented in the Draft EA and then revised based on comments received from Miami-Dade County. The following section describes the preliminary design and then the revised design.

The primary features of the new entry gate complex include a single traffic circle leading to the new entry gate, the perpendicular intersection of the SW 288th Street re-route and SW 127th Avenue, and the closure of the direct connection between SW 127th Avenue and Bougainville Boulevard. A one-story, approximately 300-gross square foot (gsf) covered gatehouse would be constructed on the North Gate Site to serve as the new control gate for Homestead ARB. The approximate 300-gsf area does not include the areas under the canopies. Canopy elevations would likely range from 16 feet (ft) to 24 ft (exact canopy elevations would be determined during the design phase). The small control station building would house security personnel and equipment. The attached canopies would cover the guarded entry and inspection areas.

The pass and ID inspection office would be constructed less than 300 ft northwest of the gatehouse and would have an approximate area of 2,000 gsf. The current badging and ID office at Homestead ARB is situated inside the Contractor Gate, requiring many visitors who have not received their security badges, to be escorted from the gate to the ID office. The proposed pass and ID office's location outside of the entry gatehouse (Figure 2-1) would allow contractors and other visitors to obtain base entry passes prior to reaching the security gate, which would help prevent traffic jams and back-ups at the gate. Functions of the pass and ID office include issuing military and civilian line badges, fingerprinting related to security clearance, issuing temporary visitor passes and contractor badges, processing entry access lists, and providing general base information.

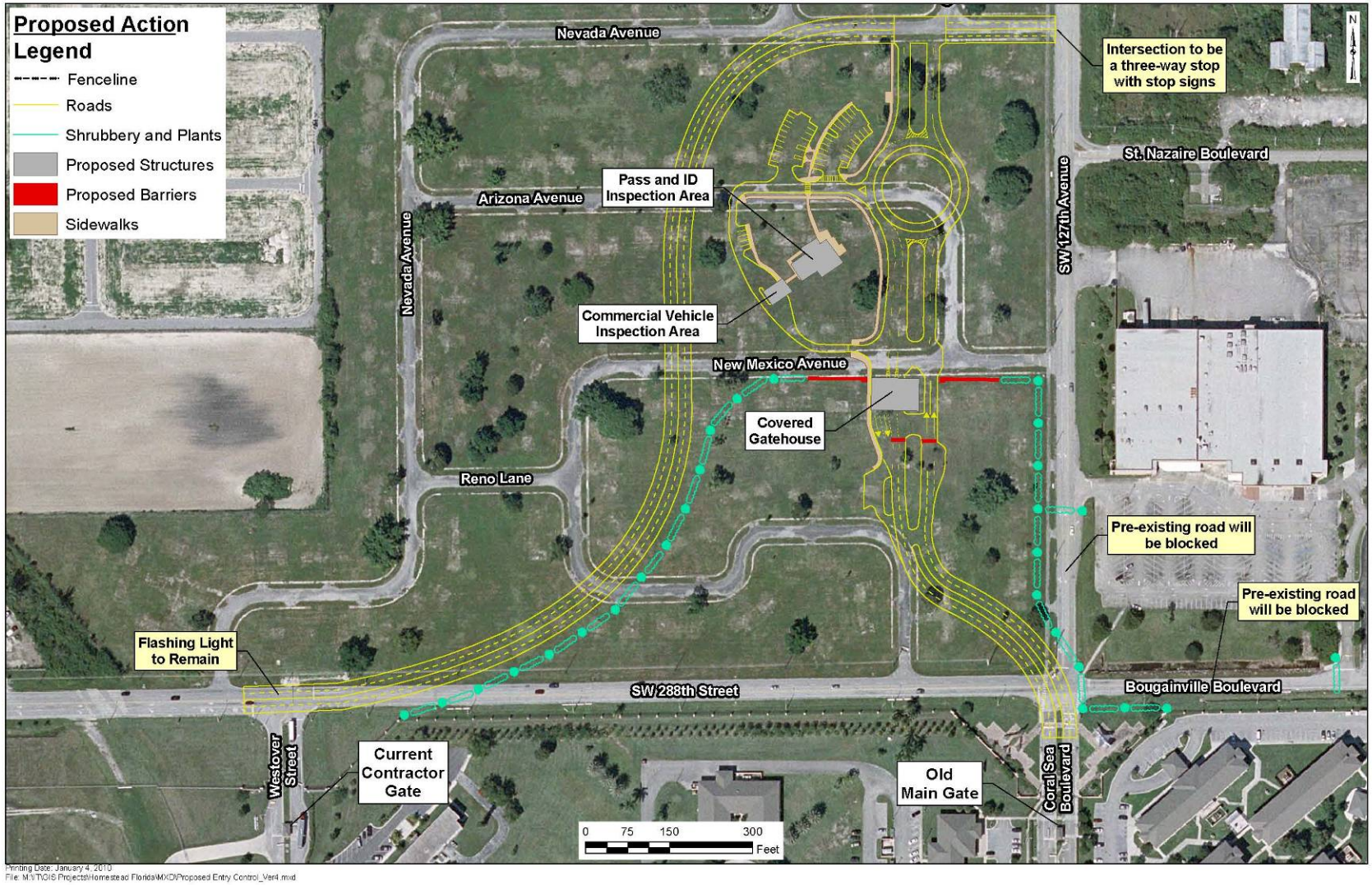

Figure 2-1. Preliminary Site Plan of the Proposed Action (Alternative #1)

A CVIA would be built adjacent to the pass and ID office; the two buildings would be connected by a sidewalk. A separate CVIA does not currently exist at Homestead ARB; therefore, this new facility would streamline entry control procedures for commercial vehicle drivers entering the base. All commercial vehicles (tractor-trailers, delivery trucks, buses, etc.) attempting to enter a USAF installation must be carefully inspected in accordance with Department of Defense (DoD) and USAF guidelines. Inspections include the interior of the vehicle cab, bed/box, trunk, trailer, under the hood, and underside of the vehicle. The inspection process can be lengthy, and would contribute to traffic back-ups if not performed in an area separate from the main gatehouse.

Paved parking areas totaling approximately 0.3 acre would also be included under the Proposed Action. The exact size and arrangement of the parking lots would be established during the design phase; however, initial site plans (Figure 2-1) indicate that there would be at least two parking lots north of the pass and ID office and a small row of parking spaces near the CVIA.

In addition to the proposed gate complex buildings/canopies and parking areas, a permanent road realignment of SW 288th Street would be required (Figure 2-1). The North Gate Site (project area) is located north of the current Homestead ARB boundary and existing Contractor Gate, across SW 288th Street (Figure 1-2). Under the Proposed Action, Homestead ARB intends to acquire ownership of the North Gate Site from Miami-Dade County and construct the new entry gate complex on the property, resulting in a necessary extension of the perimeter of Homestead ARB. Should the North Gate Site be transferred from the County to the AFRC, as is proposed by means of a deed or long-term lease, SW 288th Street would have to be re-routed in order to connect to SW 127th Avenue and avoid new base boundaries. The initial road realignment design illustrated in Figure 2-1 would require construction of approximately 6 acres of roadway, including a traffic circle, and the new portion of SW 288th Street would be approximately 2,250 ft in length. The proposed road realignment would connect SW 288th Street with SW 127th Avenue approximately 1,000 ft north of the current intersection in front of the Old Main Gate (Figure 2-1).

In response to comments received from Miami-Dade County on the Draft EA, Alternative #1 was refined to create a four-way intersection of the realigned SW 288th Street, SW 127th Avenue, and St. Nazaire Boulevard. The proposed road realignment would connect SW 288th Street with SW 127th Avenue approximately 960 ft north of the current intersection in front of the Old Main Gate (Figure 2-2). The county suggested that the use of a four way intersection, rather than two closely-spaced "T" intersections, would provide for more efficient traffic circulation of non-Homestead ARB traffic in the area and therefore have the least potential traffic impacts. The county's comments are included in Appendix A, and summarized and responded to in Appendix C. The refined Alternative #1 remains the preferred alternative and the Proposed Action. Due to the preliminary status of the configuration of the refined Proposed Action (Figure 2-2), changes would be expected once the design is finalized; however, these changes would be minor and would likely not affect major defining features of the project.

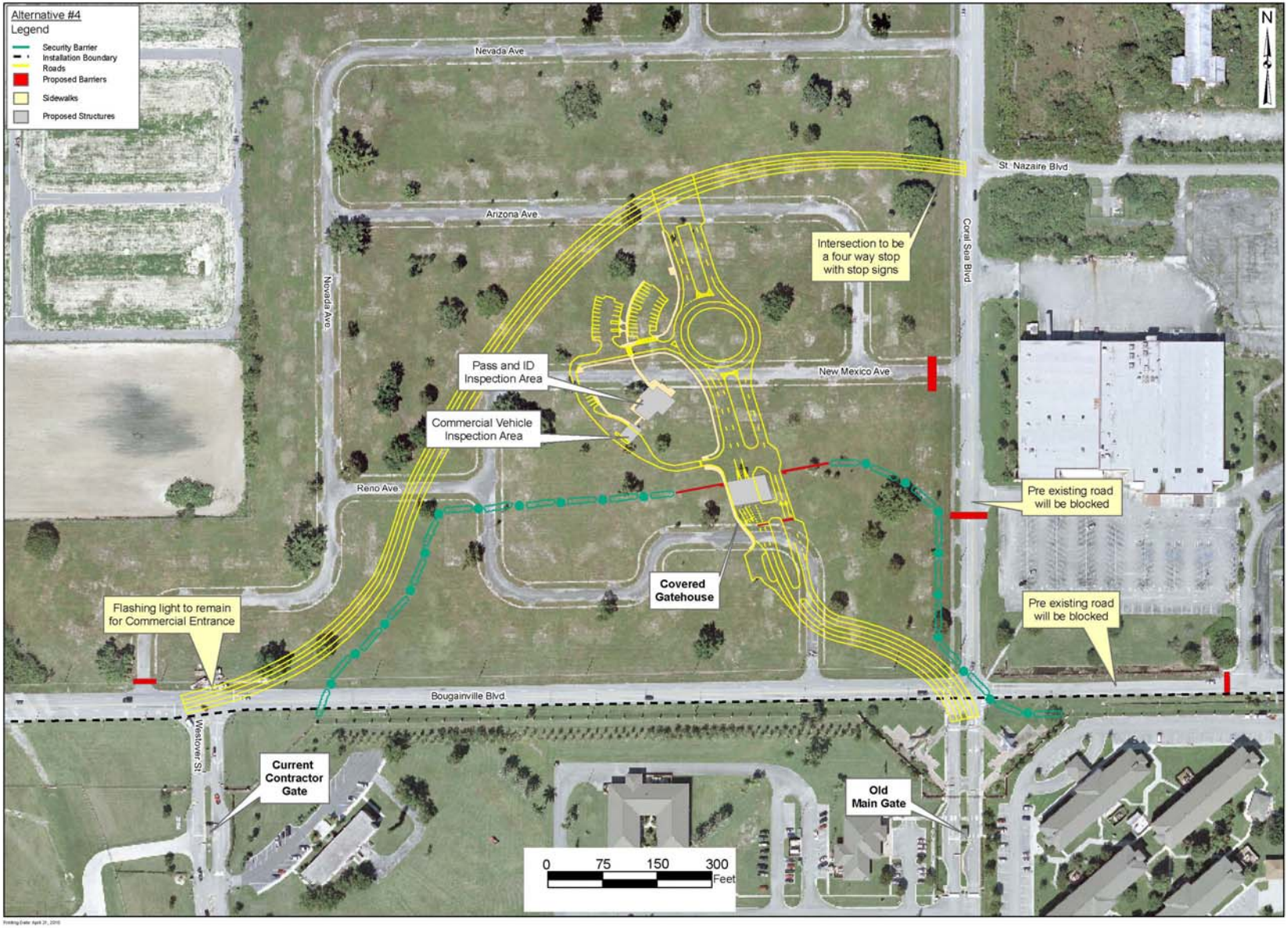

Figure 2-2. Revised Site Plan of the Proposed Action (Revised Alternative #1)

The Proposed Action would also require the permanent closure of small portions of both SW 127th Avenue and Bougainville Boulevard in order to accommodate the realignment of SW 288th Street (see areas labeled "pre-existing road will be permanently blocked" on Figure 2-1). The road closures would affect vehicles attempting to reach destinations located along Bougainville Boulevard, east of that intersection of SW 288th Street and SW 127th Avenue. Motorists would be detoured from SW 127th Avenue, east onto St. Nazaire Boulevard, and south onto Ramey Avenue, which intersects Bougainville Boulevard. This detour would not be expected to add significant travel time for drivers; however, St. Nazaire Boulevard could potentially need upgrades for more extensive use once the road closures are in effect.

A flashing light is currently in place in front of the Contractor Gate at the intersection of SW 288th Street and Westover Street. As shown on Figure 2-1, this flashing light would remain in place as part of the Proposed Action in order to slow traffic and allow the ingress and egress of select commercial vehicles, particularly fuel trucks, which would continue to use the Contractor Gate due to its proximity to the fuel tanks.

In total, the new structure footprints and associated road realignment described for the Proposed Action would permanently occupy approximately 0.3 acre and 6 acres, respectively, of the 33-acre North Gate Site. Additionally, temporary construction equipment and material staging areas would be established adjacent to the Proposed Action footprint, but these areas would be returned to their original condition upon completion of construction. Construction of the Proposed Action would be phased such that vehicular access to SW 288th Street would be maintained. Existing roadways on the North Gate Site would be left in place, new perimeter fencing would be constructed, and minor landscaping may be performed. Also, the portions of SW 127th Avenue and Bougainville Boulevard which would be permanently blocked would be left in place.

2.2 METHODOLOGY FOR ALTERNATIVE IDENTIFICATION

CEQ regulations require that, in addition to the Proposed Action, the No Action Alternative and all other reasonable alternatives be evaluated in the EA. Alternatives may be eliminated from detailed analysis based on operational, technical, or environmental standards that are applicable to the project. For example, the ability of an alternative to satisfy the operational and technical objectives of a project is a principal determinant of whether the alternative is reasonable. Any alternative, other than the No Action Alternative, that does not satisfy the purpose and need for the Proposed Action, is rejected as a reasonable alternative evaluated in the EA.

Also critical to alternative evaluation is the ability of an alternative to meet established environmental protection standards or regulatory or public expectations of environmental protection. Any alternative likely to cause a significant, non-mitigable environmental impact that would result in regulatory or public opposition is not considered a reasonable alternative and is not evaluated further in the EA. For this EA, two alternatives in addition to the No Action Alternative were identified that met the criteria for being reasonable alternatives to the Proposed Action. These alternatives are described in Sections 2.4.1 and 2.4.2.

2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, there would be no implementation of the Proposed Action. There would be no construction of a new entry gate complex and the need for enhanced control gate facilities to accommodate the volume of traffic related to the current and future mission and tenants would remain unmet. The No Action Alternative represents baseline conditions, which are used for comparison to future conditions that would exist under the Proposed Action or Alternatives #2 or #3.

2.4 ALTERNATIVES TO THE PROPOSED ACTION

NEPA and USAF guidelines require that, in addition to the Proposed Action and No Action Alternative, other alternatives are considered for evaluation.

2.4.1 Alternative #2

Alternative #2 consists of the construction of a new entry gate complex and road realignment on the south half of the North Gate Site (Figure 2-3). Early-stage design plans of Alternative #2 illustrate that this alternative would have a more compact, east-west oriented footprint and the gate complex would include two buildings, a combined covered gatehouse/CVIA and a pass and ID inspection office totaling 0.1 acre. The design also includes a traffic circle, a single 0.3 acre parking lot, and a small drainage pond. A separate lane would be installed within the realignment that would allow large commercial vehicles to avoid navigating the traffic circle. Under Alternative #2, SW 288th Street would be re-routed through the North Gate Site. The realigned segment of SW 288th Street would be less than 1,500 ft long and would have a permanent footprint of approximately 3.5 acres. Due to the permanent closure of portions of SW 127th Avenue and Bougainville Boulevard included in this alternative, vehicles attempting to access locations east of the SW 288th and SW 127th Avenue intersection on Bougainville Boulevard would be detoured onto existing roads (St. Nazaire Boulevard and Ramey Avenue; see Figure 2-1 for the location of these roads).

2.4.2 Alternative #3

Under Alternative #3, a new control gate complex and necessary road re-route would be constructed on the North Gate Site. The gate complex for this alternative would consist of two structures (totaling 0.1 acre), a combined gatehouse/CVIA building and canopy, and a pass and ID office, as well as a 0.3-acre parking lot and a small drainage pond (Figure 2-4). The required relocation of SW 288th Street would follow a similar path as the Proposed Action design, a north-south oriented alignment with a traffic circle, but would re-connect with SW 127th further south, directly across from St. Nazaire Avenue. Initial designs of Alternative #3 indicate that a traffic circle would be located on the new portion of SW 288th Avenue; however, a separate lane would be designated for large commercial vehicles so that they could by-pass the traffic circle en-route to the CVIA. The road realignment would require the addition of 4.4 acres of paved roads on the 33-acre North Gate Site.

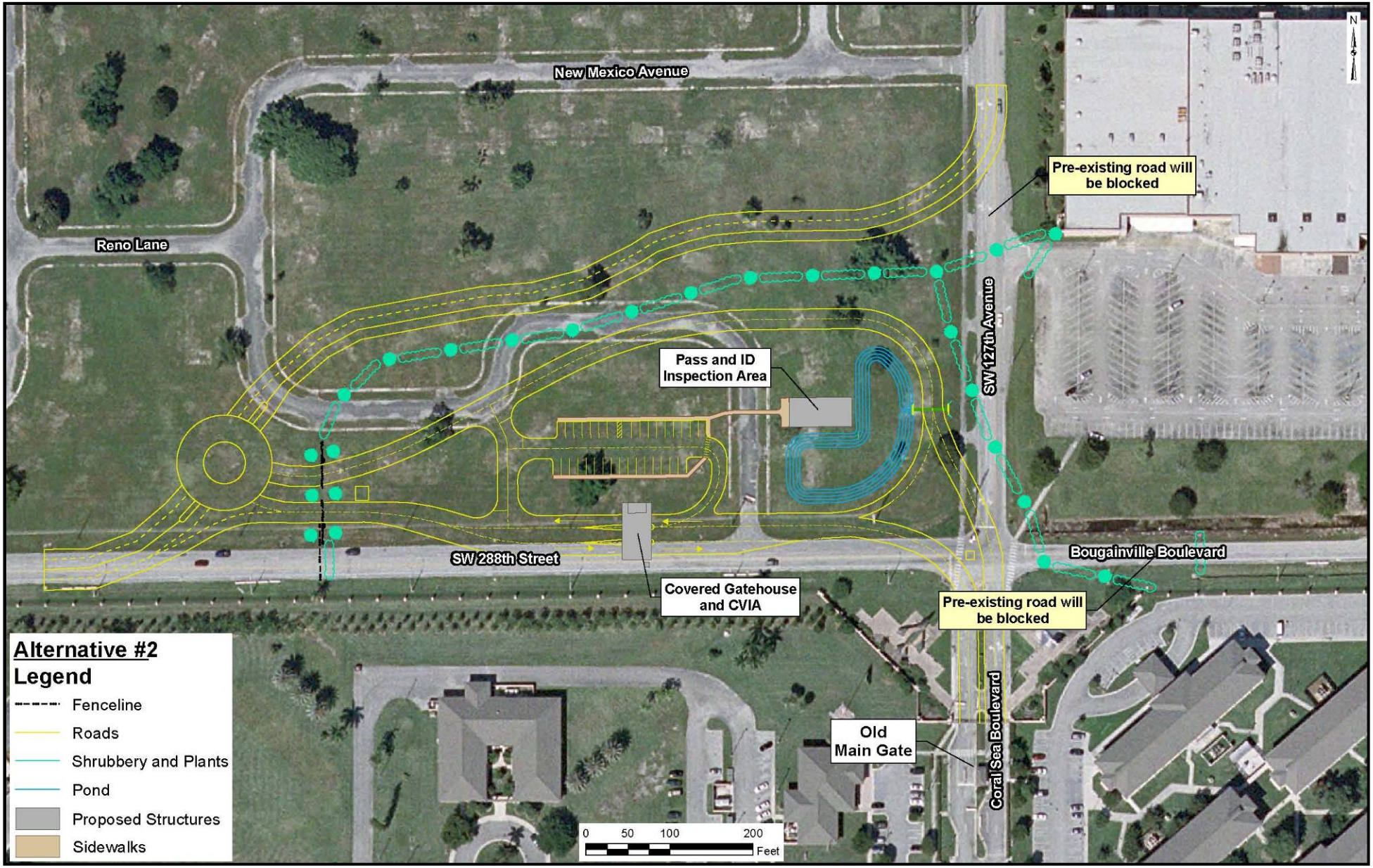

Figure 2-3. Site Plan of Alternative #2

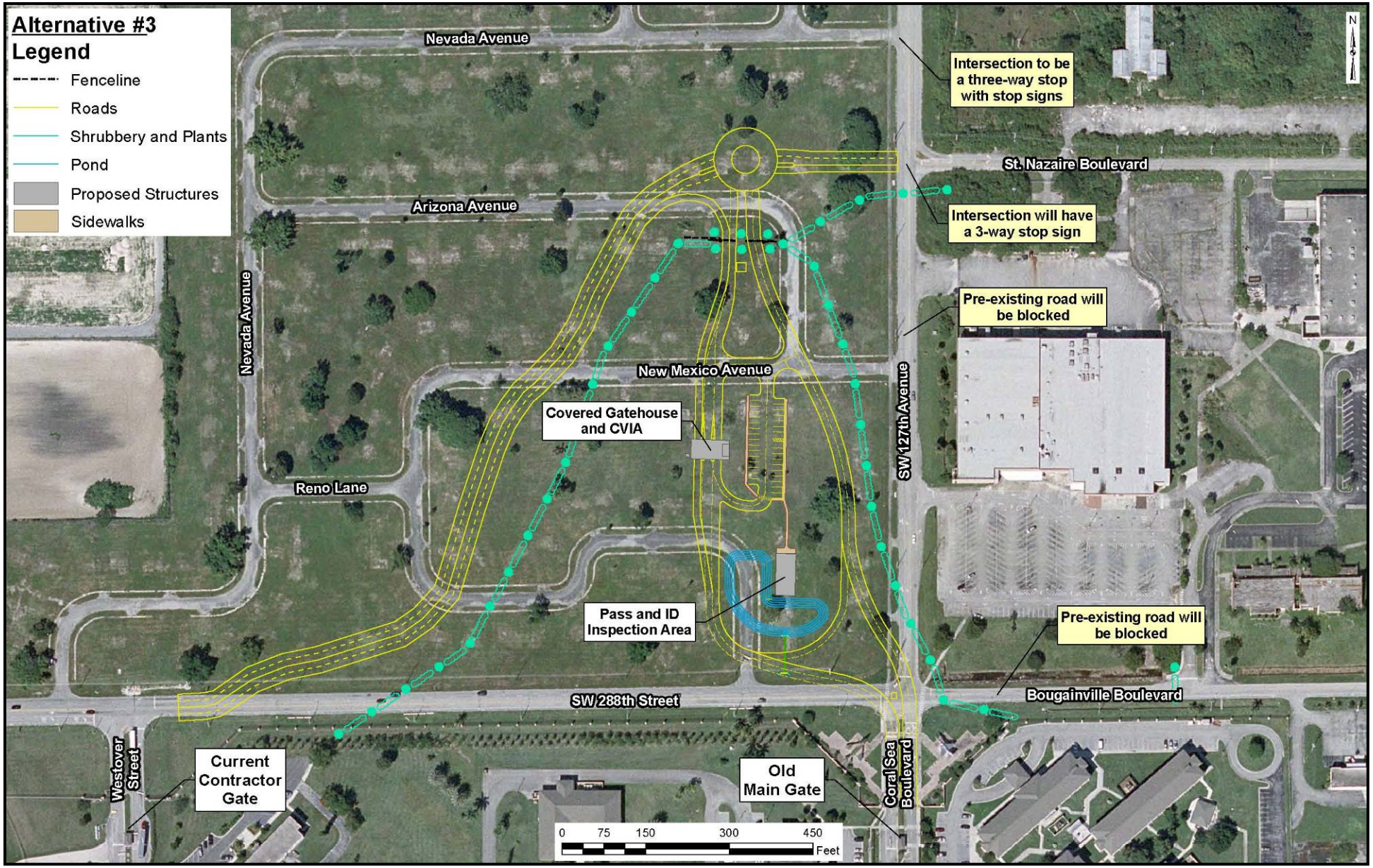

Figure 2-4. Site Plan of Alternative #3

2.5 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

As part of the alternatives analysis, multiple working drafts of road routes (including placement of traffic circles, merge lanes, and signage) were developed for the Proposed Action and were eliminated from further consideration as more viable aspects of the design were developed. In addition, two potential gate location alternatives (East Gate and West Gate Sites) were eliminated from further consideration and will subsequently not be evaluated in detail in this EA.

2.5.1 Additional Road Re-Routes

As part of the development of the Proposed Action, numerous early drafts of the road design were developed. The majority of these early drafts differ only slightly from the current Alternatives #2 and #3 (addressed in Section 2.4). In the case of Alternative #2, an early draft (Figure 2-5) included two traffic circles, one on the North Gate Site, just north of SW 288th Street, and another at the intersection of SW 288th Street and Coral Sea Boulevard, and a perpendicular intersection where the SW 288th Street re-route connects to SW 127th Avenue.

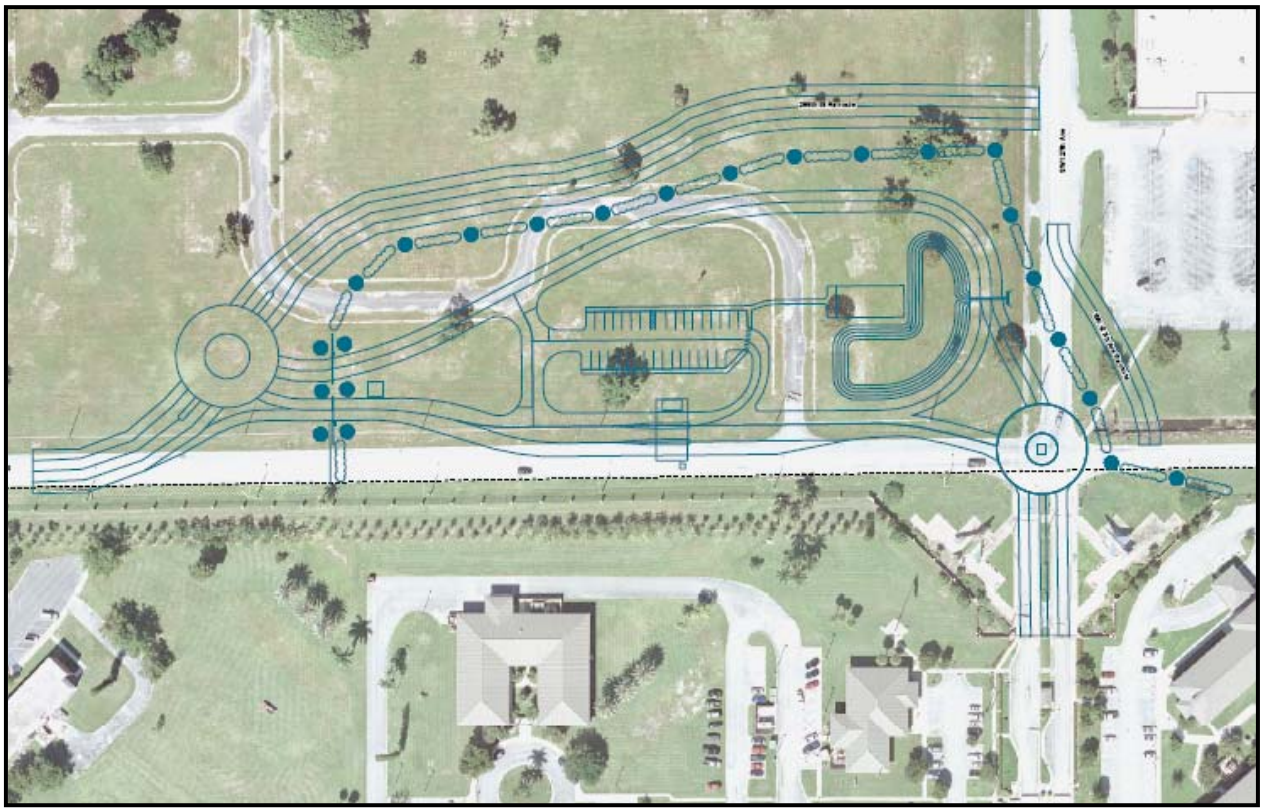

Figure 2-5. Early Design Draft of Alternative #2

The early draft of Alternative #3 (Figure 2-6) also included two traffic circles (one on the North Gate Site where the SW 288th Street re-route would connect to the new gate complex road and one at the intersection of SW 288th Street and Coral Sea Boulevard) but this draft featured a merge lane at the connection of the SW 288th Street re-route and SW 127th Avenue. These

early drafts, as well as other comparable drafts with similar re-alignment features, were eliminated from further consideration in this EA based on traffic safety (the use of multiple traffic circles, maintaining the direct connection between SW 127th Avenue and Bougainville Boulevard, etc.) constructability, schedule, and cost concerns.

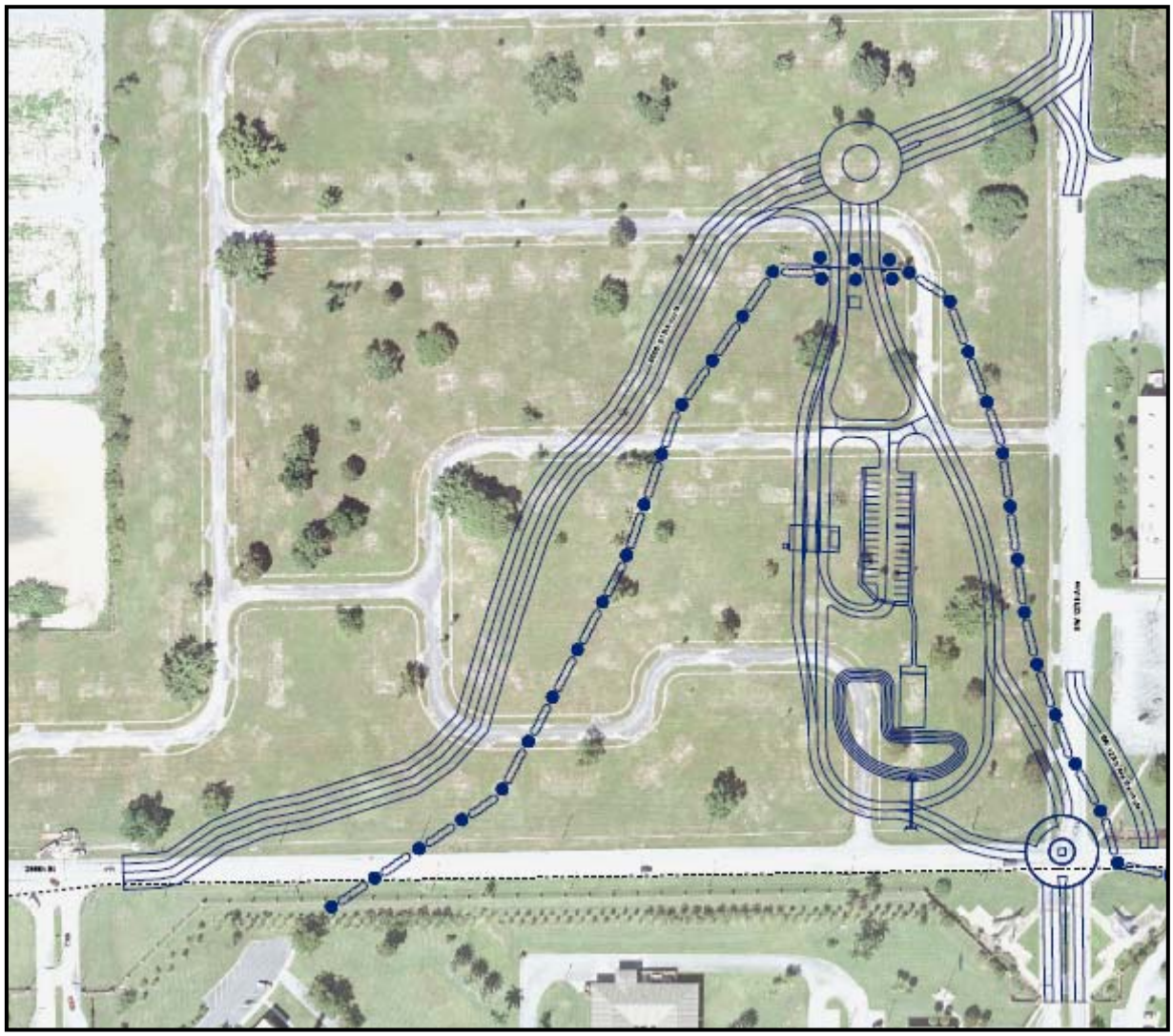

Figure 2-6. Early Design Draft of Alternative #3

2.5.2 East Gate Site

The potential East Gate Site consists of an 18.1 acre parcel of land located adjacent to the current eastern base boundary (Figure 1-2). Although the site location is centrally located, it was eliminated from further consideration based on-site preparation costs. In order to utilize the East Gate Site, a number of old, abandoned former Homestead AFB buildings which are still standing on-site, would need to be demolished. The East Gate parcel currently consists of five structures formerly used as dormitories (Buildings 446, 637, 638, 639, and 640) and a former pavilion

(Building 640a). Asbestos-containing materials (ACM) have been found in other former Homestead AFB buildings; therefore, it would be expected that asbestos abatement would be necessary during demolition. In addition, major vegetation clearing would have to be performed and Bougainville Boulevard, which is a very narrow road with drainage ditches on both sides, would require major road re-work.

2.5.3 West Gate Site

The potential West Gate Site is an approximately 8-acre previously developed area of Homestead ARB property, located south of but adjacent to SW 288th Street, between SW 132nd Avenue to the west and Westover Street to the east. Two fuel storage tanks surrounded by a berm were previously located on-site, and although the tanks have been removed, the soil in this area is known to be contaminated (U.S. Army Corps of Engineers [USACE] 2008). The West Gate Site is a fairly flat, grassy area that would have been a suitable location for the new gate complex; however, it was eliminated from consideration based on security and risk issues related to the proximity to the existing fuel storage tanks located to the west and south of the site.

2.6 PUBLIC/AGENCY INVOLVEMENT, ENVIRONMENTAL COMPLIANCE AND PERMIT REQUIREMENTS

This EA has been conducted in accordance with NEPA (Title 42, United States Code [USC], Sections 4321-4347 [42 USC 4321-4347]); the CEQ regulations for implementing NEPA (40 CFR 1500-1508); and the USAF EIAP promulgated in 32 CFR 989.

Compliance with NEPA requires that the planning and decision-making process for actions proposed by federal agencies involve a study of other relevant environmental statutes and regulations. The NEPA process, however, does not replace procedural or substantive requirements of other environmental statutes and regulations. It addresses them collectively in the form of an EA or Environmental Impact Statement (EIS), which enables the decision maker to have a comprehensive view of major environmental issues and requirements associated with the Proposed Action. According to CEQ regulations the requirements of NEPA must be integrated "with other planning and environmental review procedures required by law or by agency so that all such procedures run concurrently rather than consecutively."

It is anticipated that the Proposed Action will have to comply with elements of several federal regulations in addition to NEPA requirements, including the Clean Water Act (CWA), the Clean Air Act (CAA), Coastal Zone Management Act (CZMA), Fish and Wildlife Coordination Act of 1958, Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Safe Drinking Water Act (SDWA), Resource Conservation and Recovery Act (RCRA), Migratory Bird Treaty Act, Migratory Bird Conservation Act, and the Water Resource Development Act. The project must also consider issues related to protection of wetlands, environmental justice (EJ), and management of floodplains and invasive species.

Based on a review of the relevant federal, state, and local environmental regulations, several environmental permits may be required for the proposed project. The following sections provide a discussion of compliance activities and potentially required permits.

2.6.1 Public and Agency Involvement

2.6.1.1 Initial Consultation

Initial consultation letters were sent to, and responses received from, the Florida Department of Transportation (FDOT), the State Historic Preservation Office (SHPO), the South Florida office of the U.S. Fish and Wildlife Service (USFWS), the Florida Fish and Wildlife Conservation Commission (FFWCC), and Miami-Dade County. Information provided by these agencies was incorporated into relevant sections of this EA. Appendix A contains copies of consultation letters received from the agencies. These agencies were also provided the opportunity to submit additional comments during the 30-day review period.

Initial concerns related to the road-realignment of SW 288th Street were raised by the General Services Administration (GSA) of Miami-Dade County were further expanded upon by other Miami-Dade Departments concerned with road closures and realignment during the comment period. Specifically, initial comments were made regarding the planned closures of portions of SW 127th Avenue and Bougainville Boulevard (SW 288th Street), a potential need to upgrade, at an unknown cost, St. Nazaire Boulevard and Ramey Avenue for more extensive use should the road closures occur, and access to county-owned land south and east of the new gate complex at Homestead ARB. In the initial comments, the county indicated an expectation that they would recommend that the access roads from the new gate complex running south through the Old Main Gate be considered to be aligned slightly to the west of the proposed alignment to allow SW 127th Avenue to remain open all the way south to connect to Bougainville Boulevard. Additionally the county expected to recommend that the final re-route design allow vehicles to turn left turn from SW 127th Avenue to Bougainville Boulevard, and that Bougainville Boulevard remain open east of SW 127th Avenue. Subject to a more thorough review of more detailed designs and the receipt of other public comment, the County GSA, under the scenario proposed above, would not anticipate a problem with the closing of that portion of SW 288th Street between Westover Street and Coral Sea Boulevard as proposed on the preliminary plans.

2.6.1.2 Draft EA

Consultation letters and letters announcing the availability of the Draft EA for review were sent directly to the FDEP, South Florida Regional Planning Council, and the City of Homestead. Letters announcing the availability of the Draft EA were also sent to the Florida Turnpike Enterprise, Miami-Dade County Transit, the Homestead Job Corps, the Homestead Homeless Assistance Center (HAC), the Homestead branch of the 1st National Bank of South Florida, and the Air Quality Division of the Florida Department of Environmental Resource Management, in addition to the agencies contacted during the initial consultation.

A Notice of Availability was published in *The Miami Herald* when the Draft EA became available for public review on 7 January 2010. The 30-day public comment period began 7 January 2010 and comments were accepted through 6 February 2010. Comments received were from various departments of Miami-Dade County. Homestead ARB held a meeting on 9 April 2010 with interested County departments to discuss the comments on the Draft EA. All comments determined to be substantial were incorporated into or addressed in the final EA. The

comments received are included in Appendix A and summarized and responded to in Appendix C. Once approved, this EA will be posted on the Homestead ARB website.

2.6.2 Regulatory Compliance and Permit Requirements

2.6.2.1 NEPA Regulations

The USAF directed adherence to NEPA requirements in USAF Policy Directive 32-70, *Environmental Quality*. This directive was implemented in 32 CFR 989, EIAP. This regulation provides instructions on procedures to achieve and maintain compliance with NEPA and the CEQ regulations in conjunction with the USAF EIAP. It establishes policy, responsibilities, and procedures for integrating environmental considerations into USAF planning and decision-making and for assessing the environmental effects of USAF actions.

According to the CEQ regulations and the USAF EIAP, the purpose of an EA is to provide evidence and analysis sufficient to determine whether the Proposed Action may have significant effects that would require the preparation of an EIS. If this EA determines that the environmental effects will not be significant, a Finding of No Significant Impact (FONSI) is prepared. The EA aids the USAF in complying with NEPA when an EIS is not required.

2.6.2.2 Air Regulation

The CAA establishes federal policy to protect and enhance the quality of the nation's air resources to protect human health and the environment. The CAA requires that adequate steps be implemented to control the release of air pollutants and prevent significant deterioration of air quality. The FDEP, Bureau of Air Management delegates review authority for compliance with the CAA to the Miami-Dade County, Department of Environmental Resources Management, Air Quality Management Division who was notified of the availability of the Draft EA for public review for confirmation that the Proposed Action would not be subject to a conformity analysis.

2.6.2.3 Water Regulation

The CWA of 1977 (33 USC 1344) and the Water Quality Act of 1987 (33 USC 1251, as amended) establish federal policy to restore and maintain the chemical, physical, and biological integrity of the nation's waters and, where attainable, to achieve a level of water quality that provides for the protection and propagation of fish, shellfish, wildlife, and recreation in and on the water. According to a letter from FDEP dated 12 March 2010 (Appendix A), nonpoint source stormwater discharges related to the Proposed Action or alternatives would require a National Pollutant Discharge Elimination System (NPDES) permit, including a SWPPP detailing site-specific BMPs (Mann 2010).

The FDEP manages the NPDES program in Florida. The CWA also requires the protection of water quality by establishing limits of specific pollutants which may be discharged to surface waters. Section 404 of the CWA requires specific permitting for dredging and/or filling of wetlands. This portion of the Act is administered by the USACE with U.S. Environmental Protection Agency (USEPA) oversight.

Other laws and regulations applicable to water resources include:

- *SDWA (42 U.S.C. 300f et seq.).* This act is a federal statute which governs groundwater used as a potable water supply. It dictates a classification system and specifies the quality of groundwater that can be used for drinking water (which has also been delegated to the State of Florida) (USAF and Federal Aviation Administration [FAA] 2000).

- *State of Florida Water Resource Implementation Rule (FWRIR; Florida Statute 373.036).* This state statute provides policies and directives which dictate goals, objectives, and guidance for the development and review of programs, rules, and plans relating to water resources (USAF and FAA 2000). The FWRIR gave broader responsibility to the Florida water districts that, subsequent to statutory revisions in 1993 and 1994, included environmental resource permitting (ERP).

- *Florida Statute 62-302.700(9).* This state statute establishes the "Outstanding Florida Waters" program which designates waters that are of exceptional recreational or ecological significance. Examples in the area would include waters within Biscayne and Everglades National Parks, which are classified as Outstanding Florida Waters. Water quality with this classification should be maintained and protected under all circumstances, other than temporary impacts allowed under Section 316 of the federal CWA (USAF and FAA 2000).

- *Florida Administrative Code (FAC), Chapter 62-520.410.* This state regulation, like the SDWA, defines classes of aquifers designated for potable water use and sets standards for water quality.

The Proposed Action or alternatives would require ERP. The ERP Program regulates activities involving construction, alteration, maintenance, removal, modification, and operational activities in uplands, wetlands, and other surface waters that will alter, divert, impede, or otherwise change the flow of surface waters. Implementation of the ERP Program involves several Florida statutes and a number of rules of the FDEP, including certain rules of water management districts that have been adopted for use by the FDEP. ERP applications in Miami-Dade County are processed by the South Florida Water Management District (SFWMD), in accordance with the division of responsibilities specified in the operating agreement between the FDEP and the SFWMD.

Issuance of the ERP also constitutes a water quality certification (or waiver) under Section 401 of the CWA and a finding of consistency with the Florida Coastal Zone Management Program under Section 307 of the CZMA. The USACE CWA Section 404 permit for dredge and fill activities within waters of the U.S. is not anticipated for the Proposed Action or alternatives.

In a letter dated 3 February 2010, Miami-Dade County Department of Environmental Resource Management (DERM) indicated that modification of the existing Homestead ARB Surface Water Management General Permits (No. 13-00148-S) may be required from SFWMD prior to construction and operation of the required surface water management system. Other permits from the Environmental Resource Regulation Division may also be required with regard to stormwater management. A Class V permit would be required from DERM if dewatering is performed during the construction of the proposed action. Any proposed drainage through

contaminated areas shall also require DERM review and approval prior to seeking construction permits (Gonzalez 2010) (Appendix A).

2.6.2.4 Hazardous Material and Waste Regulation

Hazardous materials and wastes are subject to regulation under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); The Toxic Substances Control Act (TSCA); the CWA; and the CAA. Regulations pertinent to renovation and demolition activities include federal regulations (40 CFR 763) and the National Emission Standards for Hazardous Air Pollutants (NESHAP) relating to asbestos demolition and renovation. These requirements may be found at 40 CFR 61, Subpart M – National Emission Standard for Asbestos (40 CFR 61-141-157). Demolition or renovation projects may disturb ACM. Such disturbances can result in the production of asbestos-containing dust that may contaminate a structure. The FDEP has statewide authority for implementation and oversight of asbestos regulation. In Miami-Dade County the Department of Environmental Resource Management also regulates asbestos.

2.6.2.5 Biological Resources Regulations

The ESA of 1973 (16 USC 1531) requires that federal agencies, in consultation with the USFWS and the National Marine Fisheries Service, use their authority to assist in carrying out federal programs for the conservation of threatened or endangered species. These agencies also ensure that any project that is funded, authorized, or constructed by the federal government is not likely to jeopardize the continued existence of such threatened or endangered species, or result in the destruction or adverse modification of their habitat. The USFWS reviewed the Proposed Action to determine if it would affect any threatened or endangered species or critical habitat under their jurisdiction. In a letter dated 11 March 2010, the USFWS concurred with the findings of this EA that the Proposed Action would not have adverse impacts on threatened or endangered species (Souza 2010) (Appendix A).

Animals with a state designation of endangered, threatened, or of special concern are granted legal protection by the State of Florida. The FFWCC was given the opportunity to review the Proposed Action; however, they had no comment per a letter from the Florida Clearinghouse Office dated 12 March 2010 (Mann 2010) (Appendix A).

Section 24-49 of the Miami-Dade County Code regulates the preservation and protection of tree resources. Because there are a number of trees present on the subject property, a Miami-Dade County Tree Removal Permit would be required prior to the removal or relocation of any tree subject to the provisions of the code. In a letter dated 3 February 2010, DERM indicated they would provide additional information on the permitting procedures and requirements prior to site development as needed (Gonzalez 2010) (Appendix A).

2.6.2.6 Cultural Resources Regulation

Actions that could affect cultural resources are regulated under Section 106 of the National Historic Preservation Act of 1966 and the Advisory Council on Historic Preservation's Regulations for compliance with Section 106 codified as 36 CFR 800. These regulations require that the effects of federal actions on cultural resources be considered and minimized. The SHPO, which is responsible under the Act and regulates the preservation of cultural resources in Florida, concurred that no cultural resources would be affected by the Proposed Action (Appendix A).

2.6.2.7 Coastal Zone Management

The CZMA (16 USC 1451-1464), as amended, requires federal agencies carrying out activities subject to the Act to provide a "consistency determination" to the relevant state agency. The geography of Florida and the federal CZMA of 1972 dictated that the entire state be designated as coastal zone and subject to oversight by the state's federally approved coastal management plan. Homestead ARB is, therefore, located within Florida's designated coastal zone. Under provisions of the CZMA, any federal activity that has the potential to impact Florida's coastal resources is reviewed for consistency with the 23 Florida statutes that comprise the legislative framework of the FCMP, which is implemented by the FDEP (FDEP 2007). The consistency determination for the Proposed Action would be conducted during the review of the ERP. Additionally, the USAF has its own regulations regarding coastal zone consistency which are addressed in AFI 32-7060, *Interagency Intergovernmental Coordination for Environmental Planning* (HQ AFRC 2006a). In a letter dated 3 February 2010 (Appendix A), DERM determined that the proposed project does not occur in tidal waters, in wetlands, or in wetlands containing halophytic vegetation and therefore a Class I Coastal Construction Permit and a Class IV Wetland Permit would not be required for this project. DERM noted that other permits may be required from the U.S. Army Corps of Engineers, DERM, and SFWMD and recommended Homestead ARB contact and consult with these agencies directly (Gonzalez 2010).

2.7 COMPARISON OF ALTERNATIVES

The purpose of this section is to summarize and compare the environmental impacts of each alternative, thereby defining the issues and providing a clear basis for choice among the alternatives by the decision-maker. The environmental resources potentially affected by the alternatives and the consequences for each of these resources are described in Chapter 3, Affected Environment and Environmental Consequences. The present section discusses and provides a tabular matrix (Table 2-1) that summarizes the conclusions reached in Chapter 3.

Table 2-1.
Summary of Potential Environmental Consequences

Resources	Proposed Action	Alternatives #2 and #3	No Action Alternative
Land Use Resources	+	+	–/○
Infrastructure	-/○	-/○	○
Socioeconomics	+/○	+/○	○
Environmental Justice	–/○	–/○	○
Cultural Resources	○	○	○
Physical Resources	○	○	○
Coastal Zone Resources	○	○	○
Water Resources	○	+	○
Biological Resources	○	○	○
Transportation	+/–	+/–	–
Air Quality	○	○	–
Hazardous Materials and Waste Management	○	○	–
Safety	+	+	–
Noise	○	○	○

○ = No net change.
+ = Beneficial or not discernible.
– = Adverse but not significant.

In Chapter 3, impacts to each environmental component are evaluated to determine whether the impact would be beneficial or adverse. For adverse impacts, the level of impact on the resource is estimated (e.g., negligible, low, moderate, high) and considered in conjunction with the context (e.g., local versus regional, short-term versus long-term) and intensity (based on 10 criteria provided in the CEQ Regulations) of the effect in determining whether the impact is significant. The conclusions of the evaluation are summarized in Table 2-1. As shown in the table, no potentially significant adverse impacts were identified for the No Action, Proposed Action, or Alternatives #2 or #3.

It is the conclusion of this EA that implementation of the Proposed Action would not result in a significant adverse effect on the human environment. Therefore, preparation of a FONSI is appropriate for this action, and preparation of an EIS is not required.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the existing conditions of the project area and the environmental consequences from implementation of the Proposed Action and other alternatives. Existing conditions and affected environment are described based on 14 component resources that are relevant to the assessment of impacts from the Proposed Action. These resources and the order of their evaluation are as follows: land use resources, infrastructure, socioeconomics, EJ, cultural resources, physical resources, coastal zone resources, water resources, biological resources, transportation, air quality, hazardous materials and waste management, safety, and noise. The effects of the Proposed Action and other alternatives on the baseline conditions of each environmental resource are evaluated below. Within each section, the consequences of the No Action Alternative are discussed first in order to provide a description of impacts currently occurring under existing, baseline conditions. The consequences of the Proposed Action then are described and compared to the consequences under the No Action Alternative in order to determine the relative magnitude and significance of impacts under the Proposed Action. Subsequently, the consequences of the other alternatives, when significantly different from those of the Proposed Action are discussed in sequential order.

The CEQ regulations implementing NEPA require evaluation of the significance of an impact based on both its context and intensity. The evaluation of the significance of an impact involves consideration of several contexts, including the consideration of local and regional effects and short-term and long-term effects. The significance of an impact also is evaluated with regard to its intensity or severity. The regulations provide ten considerations relevant to assessing the significance of impacts (40 CFR 1508.27):

- Is the impact adverse or beneficial?
- Does the impact affect public health or safety?
- Does the area affected have unique characteristics such as historic or cultural sites, farmlands, parklands, wetlands, wild and scenic rivers, or ecologically critical areas?
- Is the impact highly controversial?
- Is the impact highly uncertain or unknown?
- Does the effect of the action establish a precedent for future actions with significant effects?
- Is the impact related to other impacts that are individually insignificant but cumulatively significant?
- Does the impact adversely affect scientific, cultural, or historical resources?
- Does the impact adversely affect an endangered or threatened species or its habitat?
- Does the impact threaten a violation of federal, state, or local laws or regulations for the protection of the environment?

The following sections discuss the level of impact each alternative would have on each environmental resource. In addition, any alternative expected to have more than minor adverse effects on a specific resource is evaluated further with regard to the significance of the effects based on context and intensity. The evaluation includes consideration of mitigation measures, if relevant, so that the final assessment of impact is based on the remaining effects after mitigative factors have been taken into consideration. In addition, the possibility of significant impacts

from cumulative effects that are not individually significant also is considered. Chapter 4 further addresses possible cumulative impacts from the Proposed Action in conjunction with other actions.

3.1 LAND USE RESOURCES

Land use focuses on the existing and planned future land uses for Homestead ARB and surrounding areas.

3.1.1 Existing Conditions

The North Gate Site (Figure 1-2) was originally residential property (former Homestead AFB enlisted housing; Photo 1-1). Currently, the 33-acre site is vacant with the exception of small, secondary roads damaged by Hurricane Andrew; Photo 1-2. The site has not been used for any specific purpose since becoming the property of Miami-Dade County in 2004. Both pedestrian and vehicular access to the North Gate Site is prohibited, the secondary roads have been barricaded, and "no trespassing" signs are posted along the perimeter. Miami-Dade County has provided regular maintenance of the property for the past few years, including periodic mowing and security patrolling by both County police and base security personnel (Andrejko 2009a).

Surrounding parcels include Homestead ARB, the Base Exchange (BX) mart, the Homestead Job Corps, the Homestead branch of the Miami-Dade County Homeless Trust, as well as agricultural, commercial, and residential properties (Figure 3-1). The BX mart is currently owned by Homestead ARB. It is understood that Homestead ARB plans to transfer ownership of the BX mart to Miami-Dade County for storage of emergency supplies. Job Corps is a U.S. Department of Labor (DOL) program offering free education and career development training for at-risk youth at locations nationwide (DOL 2009). The Homestead Job Corps is located at 12350 SW 285th Street northeast of Homestead ARB; its campus is bisected by Bougainville Boulevard. A county supported HAC is located at 28500 SW 125th Avenue northeast of the North Gate Site. The non-profit HAC serves the needs of the homeless by providing shelter, food, clothing, access to sanitary facilities, counseling, legal aid, vocational training, employment placement, child care, and assistance in contacting other service providers and agencies (Miami-Dade County 2009a). Residential neighborhoods, commercial storage property, agricultural land, and a borrow pit are located west and north of the project site.

3.1.2 Discussion of Impacts

3.1.2.1 No Action Alternative

Under the No Action Alternative the land use resources at the site and in its vicinity would remain the same as under existing conditions. Without implementation of the Proposed Action, the North Gate Site could remain vacant for many years. If the county were to stop regular maintenance of the property, conditions at the site would deteriorate quickly. However, assuming the county continues the periodic landscaping and patrolling activities discussed under the Existing Conditions, there would be no significant adverse impacts on land use resources at the site or surrounding parcels under the No Action Alternative.

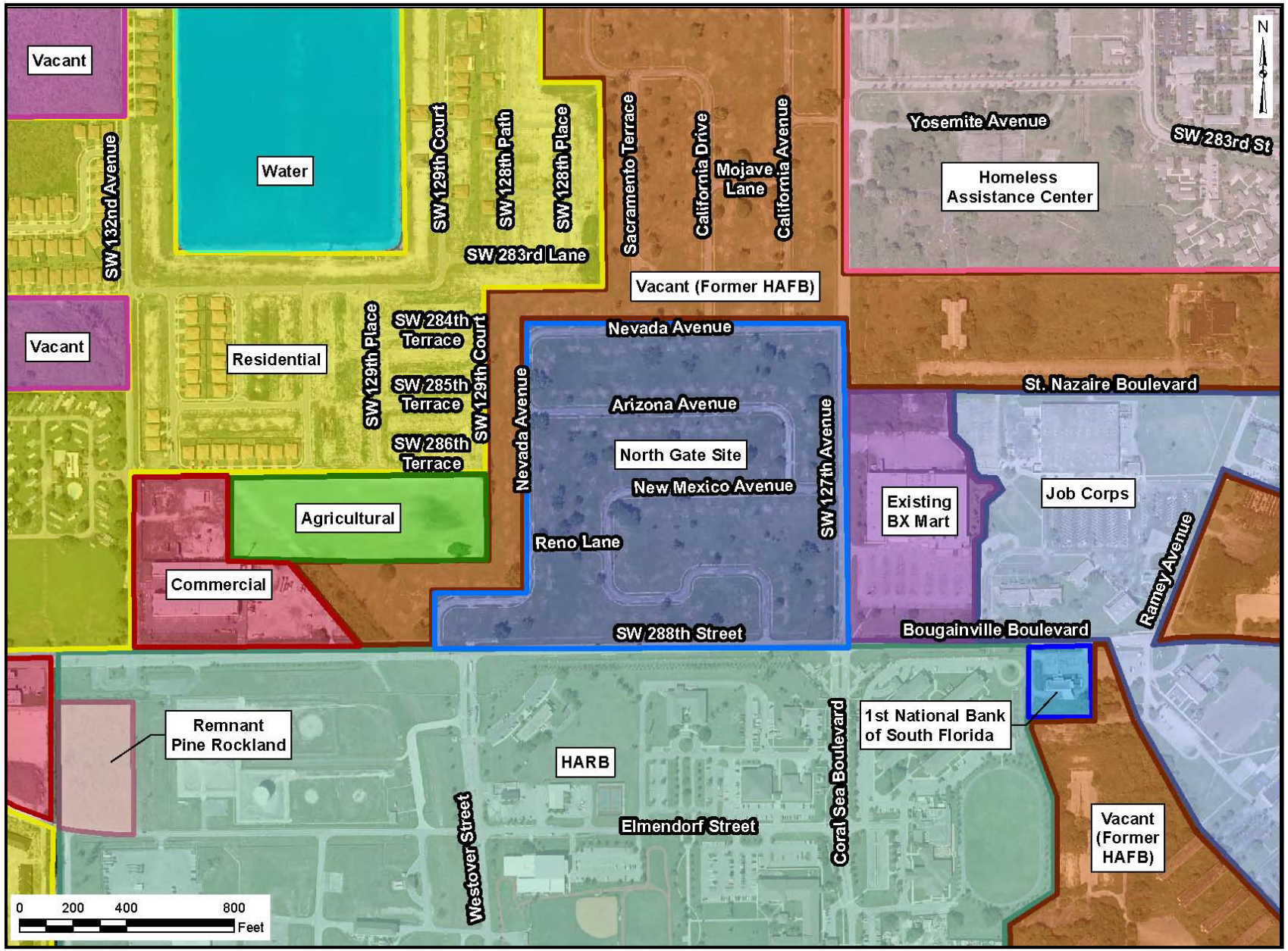

Figure 3-1. Land Use Surrounding the North Gate Site

3.1.2.2 Proposed Action (Alternative #1)

The Proposed Action would replace the Contractor Gate at Homestead ARB with a new entry gate complex which includes construction of new buildings and structures on the North Gate Site, as well as the realignment of SW 288th Street. Subsequently, land use under the Proposed Action would significantly change from "vacant with closed roads" to "occupied with functioning roads." Miami-Dade County's adopted 2015 and 2025 Land Use Plan map designates the project site and adjacent areas to the east and south as "Institutions, Utilities, and Communications" (Miami-Dade County 2009b). According to the County's Comprehensive Development Master Plan (CDMP), this category, which already includes the existing Homestead ARB, allows for a wide range of institutions, offices, communications, and utilities. Therefore, it was determined in a 12 March 2010 letter from the Planning and Zoning Department of Miami-Dade County (Appendix A) that the Proposed Action is consistent with the intent of the CDMP (LaFerrier 2010).

Implementation of the Proposed Action would have a beneficial impact on land use because it would convert the North Gate Site into functioning property while maintaining a significant amount of green space and landscaping. Homestead ARB would be responsible for maintenance of the area once the project begins. Overall, the Proposed Action would have no significant adverse impact on land use resources at the site or surrounding parcels.

3.1.2.3 Alternatives #2 and #3

Alternatives #2 and #3 would have similar impacts to land use resources as the Proposed Action.

3.2 INFRASTRUCTURE

3.2.1 Existing Conditions

The infrastructure of Homestead ARB includes utility systems (electrical, potable water, wastewater, storm drainage, solid waste collection, heating and cooling, and liquid fuels) and a communications system. Florida Power and Light Company (FPL) provides electrical power to Homestead ARB. There is no natural gas supply at Homestead ARB. Florida City Gas supplies natural gas to portions of the local area, including parts of unincorporated Miami-Dade County. Potable drinking water and wastewater treatment and disposal are provided to the base and surrounding areas by Miami-Dade Water and Sewer Department (WASD). A private contractor currently collects and disposes of solid waste at the base. Homestead ARB established and operates a solid waste recycling and disposal program that meets USAF goals for waste diversion from landfills. All heating and cooling at Homestead ARB is currently provided by fresh air HVAC systems; however, because these fresh air systems are undesirable in the highly humid Florida climate, base engineers have proposed replacing them with a utility central management system to provide a long-range cost savings.

The North Gate Site was previously part of Homestead AFB and when it was originally used for enlisted housing beginning in the 1960s, the property likely had similar infrastructure to what is described above for the base. Currently, the project area consists of regularly-mowed grassy

areas with several small, ornamental shade trees, a few palm trees, and the original residential access roads. The possibility exists that water utility pipes, potentially lined with ACM, remain beneath the surface of the project site. Although nothing remains aboveground, there is the possibility that similar abandoned infrastructure/utilities remain underground on the property.

3.2.2 Discussion of Impacts

Effects on infrastructure are evaluated for their potential to impact existing levels of service and additional needs for utility and communication systems. Impacts may arise from physical changes and construction activities, or from energy needs necessitated by either direct or indirect changes related to installation activities of the new gate complex and road alignment.

3.2.2.1 No Action Alternative

Under the No Action Alternative, the conditions of infrastructure systems and their ability to meet demand at Homestead ARB would continue as discussed above, and there would be no significant adverse impacts.

3.2.2.2 Proposed Action (Alternative #1)

Following implementation of the Proposed Action, no significant impact on the capacities of the infrastructure systems would be expected. Old underground water utility lines may still be present on the North Gate Site and could potentially contain ACM pipe linings (Andrejko 2009a). Should ACM-containing utilities be discovered during excavation activities related to construction of the Proposed Action, Homestead ARB would be responsible for ACM abatement associated with pipeline/utility removal. Increases in the electrical power, water supply, wastewater, and communication systems, due to a potential increase in personnel and additional infrastructure would be expected to be negligible. During construction, electrical, water supply, wastewater, and communication systems would be connected with existing systems, but this would have only a temporary impact on existing infrastructure components. Water and sewer service would be provided to the project site by the closest mains to the site: a 24-inch water transmission main located along SW 288th Street and a 12-inch sanitary sewer main along SW 127th Avenue and St. Nazaire Boulevard. Homestead ARB currently maintains a private sanitary sewer collection system including four pump stations; however, the Proposed Action could require the addition of a new private sewer pump station on the project site. If water or sewer mains are identified within the segments of SW 288th Street and Bougainville Boulevard that would be realigned or closed, then appropriate rights-of-way (ROWs) would be granted by Homestead ARB to allow Miami-Dade WASD continued access to the mains for operation and/or maintenance (Gonzalez 2010).

Solid waste generation, consisting mostly of building materials, would increase during construction activities with minor adverse effects expected. All base contractors would be required to recycle construction materials and follow the Homestead ARB Integrated Solid Waste Management Plan. Miami-Dade County Solid Waste Management reviewed the Proposed Action and determined that construction of a new entry gate complex would not have an impact on solid waste services in the area (McDuffie 2010).

3.2.2.3 Alternatives #2 and #3

The impacts to infrastructure from Alternatives #2 and #3 would be the same as those described under the Proposed Action.

3.3 SOCIOECONOMICS

The study area is located immediately north of the current main entrance for Homestead ARB, located in Miami-Dade County, Florida. The following sections describe the socioeconomic conditions of Miami-Dade County, Homestead ARB and the surrounding area, which includes the Cities of Homestead immediately adjacent to the base's western boundary, Florida City 6.3 miles southwest, Leisure City 2.3 miles due west, and Naranja 2.4 miles northwest. Where appropriate, comparisons are made with conditions for the county as well as the State of Florida. The socioeconomic resource areas potentially affected by the Proposed Action include population and employment and earnings.

3.3.1 Existing Conditions

3.3.1.1 Population

Homestead ARB is located approximately 25 miles southeast of Miami, the largest city and the county seat of Miami-Dade County. According to the U.S. Census Bureau (USCB) data from 2008, Miami-Dade County had an estimated population of 2,385,876 making it the most populated county in the State of Florida (USCB 2008).

According to the 2000 Demographic Characteristics Profile, the surrounding area populations are as follows: Homestead with a population of 31,909; Leisure City: 22,152; Florida City: 7,843; and Naranja: 4,034 (USCB 2000). A 2006 USCB population estimate for the City of Homestead was 53,767, a difference of 21,858 people, representing a substantial increase in population with an overall rate of growth for Homestead at 68.5 percent (%; USCB 2006). In March 2008, the City of Homestead predicted its population would increase to 84,000 by 2011 due to an on-going housing boom. The region was predicted to experience a 43% growth rate between 2005 and 2015 (Vision Council 2008). By comparison, 2008 estimates put the overall rate of growth for Miami-Dade County at 6.4% and the State of Florida at 14.7% (USCB 2006).

There are more than 2,600 employees currently working on Homestead ARB. The USAF identifies 57 active duty personnel, 215 civilians, 110 contractors, 220 air reserve technicians and 1,275 traditional reservists employed at the 482nd FW. In addition, there are 79 members of the USCG, 59 Army and Air Force Exchange Service (AAFES) personnel, 250 SOCSOUTH personnel, 121 Customs and Border Protection personnel, 243 FANG and FLARNG personnel, and 18 other miscellaneous DoD personnel employed at Homestead ARB (Andrejko 2009b). Because reservists, civilians, and contractors typically do not reside on base, it is assumed that most of these employees are members of the surrounding communities.

Population by race for the City of Homestead, Miami-Dade County, and Florida is presented in Table 3-1. The most recent demographic information from the USCB is from 2000. The

USCB's American Community Survey (ACS) provides estimated demographic data for 2006-2008. This data differs from the 2006 census population estimate for Homestead listed above. However, the 2006 census estimate does not include a demographic breakdown. Given the projected growth in the area, the ACS estimates are more realistic estimates for the population demographics than the actual 2000 census counts. Therefore, the ACS estimates were used for the demographic comparisons presented in Table 3-1.

Table 3-1.
Population Estimates by Race (2006-2008)

	Florida	Miami-Dade County	City of Homestead
Total Population	18,182,321	2,385,876	49,818
Race			
White	13,948,307	1,748,844	37,522
African American	2,779,331	464,917	8,757
American Indian & Alaska Native	53,215	4,185	12
Asian	405,635	35,829	546
Native Hawaiian or Other Pacific Islander	10,683	1,150	0
Two or more races	325,868	97,812	2,168
Ethnicity			
Not Hispanic or Latino	14,457,148	913,145	19,593
Hispanic or Latino	3,725,173	1,472,731	30,225

Source: USCB American Community Survey 2006-2008 (USCB 2008).

3.3.1.2 Employment and Earnings

Employment information for the state, county, and City of Homestead is provided in Table 3-2. According to USCB 2006-2008 American Community Survey data, the number of persons over the age of 16 not in the work force was lower in Homestead than the county or the state. Miami-Dade County has employment rates similar to those seen throughout the state, while the City of Homestead has slightly higher rates. The state and county unemployment rate was lower than that of the city.

The 1999 median household income was $38,819 for the State of Florida, with slightly fewer than 12.5% of individuals living below the poverty level. Miami-Dade County had a median income of $35,966 with a 22.8% poverty level, and City of Homestead $26,775 has a median income with 31.8% of persons listed at or below the poverty level (USCB 2006).

The estimated 2008 median household income was $48,637 for the State of Florida, with slightly fewer than 12.6% of individuals living below the poverty level. Miami-Dade County had a median household income of $44,364 with 16.1% of individuals living below the poverty level, and the City of Homestead had a median household income of $32,752 income with 33.3 % of

families living below the poverty level (USCB 2008). These numbers indicate an overall increase over time in both income and poverty levels at the state and city level. At the county level, income increased overall while the poverty level decreased. The population of Miami-Dade County is projected to increase through 2020 at a rate of approximately 19% from 2005 estimates (Miami-Dade County 2009c).

Table 3-2.
Labor and Employment (2006-2008)

	Florida	%	Miami-Dade County	%	City of Homestead	%
Total Population Over 16	14,638,681	---	1,907,892	---	33,873	---
Composition						
Civilian Employed	8.914,541	60.9	1,179,502	61.8	22,772	67.2
Armed Forces	55,087	0.4	1,411	<0.1	69	0.2
Unemployed	567,607	3.9	69,722	3.7	1,772	5.2
Not in the work force	5,669,053	38.%	726,979	38.1	11,032	32.6

Source: USCB 2008.
* Population 16 years and over.

Homestead has historically been and continues to be an agricultural community which serves as a significant source of revenue for the area, however according to the Homestead/Florida City Chamber of Commerce; the area has moved into a technological economy and is targeting a variety of industries such as biomedical, film/entertainment, financial services, information technology, and telecommunications. Tourism is another key business in the Homestead area and vital to the economic stability and growth. New retail development in the area has provided hundreds of local jobs with employers such as Wal-Mart, Home Depot, and Office Depot. Future development to the land adjacent to Homestead ARB is also expected to contribute to the economic stability of the area (Chamber of Commerce [CoC] 2007).

Two businesses adjacent to the project site have the potential for being impacted by the Proposed Action: the 1st National Bank of South Florida and the Homestead Job Corps.

1st National Bank of South Florida

The 1st National Bank of South Florida serves the City of Homestead and the surrounding communities. A branch of the 1st National Bank is located at 12520 SW 288th Street, east of Homestead ARB. Current access to this branch is primarily via SW 288th Street and SW 127th Avenue. Due to the location of the branch, the majority of the customers are likely employees of Homestead ARB and the neighboring Homestead Job Corps. It appears to be a small branch with limited operating hours, open Mondays and Fridays from 9 AM to 4 PM and Tuesdays through Thursdays from 9 AM to 2 PM.

Homestead Job Corps

Job Corps is a DOL program offering free education and career development training for at-risk youth at locations nationwide (DOL 2009). The Homestead Job Corps is located at 12350 SW 285th Street northeast of Homestead ARB. Current access to the Homestead Job Corps is either via SW 288th Street and Ramey Avenue (the directions listed on the Homestead Job Corps website for access to the campus from the Florida Turnpike (Highway 821) or via SW 127th Avenue, SW 285th Street, and Ramey Avenue. Although some students and most of the staff commute to the campus daily, the majority of Homestead Job Corps students reside in on-campus housing (DOL 2008; Diaz 2009).

3.3.2 Discussion of Impacts

3.3.2.1 No Action Alternative

Under the No Action Alternative, the existing conditions would remain as discussed above, and there would be no significant adverse impacts to socioeconomics.

3.3.2.2 Proposed Action (Alternative #1)

Potential direct and indirect impacts to the socioeconomics resulting from construction and operation of the new entry gate complex are anticipated to be the same for all alternatives. Impacts are therefore evaluated with respect to the Proposed Action.

3.3.2.3 Population

Under all alternatives, there are no anticipated adverse population impacts because there are no residential areas on or immediately adjacent to the project area. The scale of the Proposed Action is small enough that population-related impacts would not be felt beyond the immediate vicinity.

3.3.2.4 Employment and Earnings

Under all alternatives there are no anticipated impacts to employment and earnings. The re-routing of two roads would facilitate the inflow and outflow of employees at Homestead ARB. The Proposed Action would have a beneficial indirect impact of increasing employee efficiency (from decreasing delays in reaching the base) and morale (due to reduced wait times). Temporary, direct benefits may arise from the increased employment opportunities for construction personnel during gate installation.

There would be potential adverse impacts to the local economy if Miami-Dade County has to absorb the cost of installation of new signals at the new entry gate, and road improvements or new road construction in association with the closure of the intersection of SW 127th Avenue and Bougainville Boulevard. With the closure of that intersection, traffic destined for points east of SW 127th Avenue would be routed onto St. Nazaire Boulevard which may necessitate roadway improvements to handle the additional traffic load. Roadway improvements or new

road construction may be required to allow for continued Metrobus Route 70 service to points east of SW 127th Street, including the Homestead Job Corps and 1st National Bank of South Florida. To accommodate a re-route, the County may need to improve the road running north-south between St. Nazaire Boulevard and Bougainville Boulevard, or to construct a new road connecting the open portion of SW 127th Street to Bougainville Boulevard through the area currently serving as a parking lot for the BX Mart. Because construction of such a road is not in the Miami-Dade Metropolitan Planning Organization's Year 2010 Transportation Improvement Plan, MDT's 2009 Ten-Year Improvement Plan for FY 2010-2019, or in the 2035 Long Range Transportation Plan (Garcia 2010), there may be adverse financial impacts to the county or MDT to cover the costs of such road improvements. There may also be potential adverse financial impacts to Miami-Dade Transit in association with the costs to develop and advertise a modified route for Metrobus Route 70, or in association with income lost should a re-route not be possible and that segment of the route be closed.

1st National Bank of South Florida

Access to the SW 288th Street branch of the 1st National Bank of Florida would become less direct with the Proposed Action (see Section 3.10). The change in accessibility may add a few minutes of transit time for bank customers and employees. The new route travels around and through the adjacent Job Corps and backtracks west by approximately 700 ft to the bank. The change in the transit route has the potential for direct adverse impacts on the branch bank due to the change in accessibility. Bank customers may be unfamiliar with the route and unwilling to take extra time to visit a branch that is not on their direct route to and from work and home. However, the nearest alternative branch is located approximately 3.66 miles northwest in the town of Princeton, a travel time of approximately 12 minutes from the SW 288th Street branch. Traveling a few extra minutes around the alternative route would still likely be a shorter transit route for most customers than traveling to the Princeton branch. Additionally, the 1st National Bank of South Florida has online banking capabilities which can help reduce the need for regular bank visits.

Another potential impact regarding accessibility for the bank is the potential impact to Miami-Dade Transit's Metrobus Route 70 as discussed in Section 3.10.3.5. Depending on how the route is altered to accommodate the roadway changes, it is possible the bus stop located along Bougainville Avenue near the bank would be moved or eliminated, potentially impacting accessibility for bank customers and employees. The online banking capabilities may again help offset these impacts to customers. Therefore, while there are some potential adverse impacts to the 1st National Bank of South Florida, it is not anticipated that these impacts would cause long-term disruption to the bank's business operations as a result of the Proposed Action.

Homestead Job Corps

Implementation of the Proposed Action should not significantly impact operations or accessibility at the Homestead Job Corps. The principal address and the main administrative buildings for the Homestead Job Corps are located on SW 285th Street (St. Nazaire Boulevard), the route to which the traffic would be diverted based on the road re-alignment. The Homestead Job Corps website directions to reach the campus are currently routed from 288th Street to

Ramey Avenue and would have to be modified, but accessibility should not be significantly affected. Potential changes to Metrobus Route 70 (Section 3.10.3.5) do have the potential for impacting some accessibility for employees or students at the Job Corps. It is likely that Homestead ARB and Miami-Dade Transit would be able to consult and determine an alternate bus route to ensure accessibility to the campus is maintained. Therefore, accessibility and business operations for the Homestead Job Corps should be minimally impacted from implementation of the Proposed Action.

3.4 ENVIRONMENTAL JUSTICE

EJ must be considered for federal actions under the NEPA review process and in accordance with the USAF EIAP (32 CFR 989.33). Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (issued 11 February 1994), requires that each federal agency shall make achieving EJ part of its mission by identifying and addressing, as appropriate, disproportionately high or adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. A Presidential Memorandum directed to the heads of all federal departments and agencies, which recognized the importance of utilizing existing federal statutes and regulations, accompanied the Executive Order. The Memorandum states "each federal agency shall analyze the environmental effects, including human health, economic, and social effects of federal actions, including effects on minority communities and low-income communities, when such analysis is required by NEPA."

EJ analysis focuses on residents living within the areas where there would be potentially adverse environmental impacts, which for the purposes of this EA are those areas bordering Homestead ARB. Data collection efforts involving the identification of minority and low-income populations that might be affected by implementation of the Proposed Action or the alternatives are central to the identification and consideration of EJ issues. The 2000 census of Population and Housing reports the numbers of residents having minority and poverty status. Minority populations included in the census are identified as Black; American Indian, Eskimo, or Aleut; Asian or Pacific Islander; Hispanic; or Other. Poverty level is determined by the census using a set of money income thresholds that vary by family size and composition to determine poverty status. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level." For the purposes of this EA, low-income populations are considered to be the percent of population for all ages for whom poverty status has been determined by the USCB.

3.4.1 Existing Conditions

Two communities are located in close proximity to the project site and have the potential of being adversely impacted by the proposed actions. The HAC located northeast of the project site at 28500 SW 125th Avenue and the Homestead Job Corps campus, located at 12350 SW 285th Street east of the project site.

The county supported, non-profit HAC serves the needs of the homeless by providing shelter, food, clothing, access to sanitary facilities, first aid, and case management (including counseling,

legal aid, vocational training, employment placement, child care, and assistance in contacting other service providers and agencies) (Miami-Dade County 2009a). The Homestead branch of the HAC has the capacity to provide shelter for up to 300 individuals and is typically full. The average length of stay is 47 days. The shelter includes a kennel to care for the dogs of shelter residents (Person and Morrison 2009). Because this is a low-income community it is an environmental justice community of concern.

Job Corps is a DOL program offering free education and career development training for at-risk youth at locations nationwide. Job Corps is the largest career technical training and education program in the U.S. providing over 100,000 students (ages 16 to 24) a year with hands-on training in over 100 career fields (DOL 2009). For acceptance into the Homestead Job Corps, students must qualify as "disadvantaged" (Diaz 2009), this may include, though is not limited to low-income students. Before entry into the program, students are interviewed by a Job Corps representative to determine their eligibility. Over 50% of the students who participate in the program are ages 18 to 20. More than 90% of the students are Black/African-American or Hispanic/Latino (54% and 36%, respectively). Currently 51% of the students are female and 49% are male. The Homestead Job Corps has several dormitories that can support up to 420 students, 208 male and 212 female, and on average they are close to fully occupied. Up to an additional 100 students (50 male and 50 female) may commute to campus on a daily basis. Currently, 81% (405 students) are in residence on the campus while 19% (94 students) commute to campus (Diaz 2009). Because the majority of the students on campus are minority populations, potential impacts to the Homestead Job Corps must be considered in regard to EJ concerns.

Homestead Job Corps provides meals, wellness counseling (weight loss, pregnancy prevention, smoking prevention, and other programs), and basic medical, dental, and vision services to the students for no charge in addition to providing a small bi-monthly living allowance up to approximately $100 a month. The average length of stay for an individual student is approximately six months (187.5 days) though some programs can last up to two years. Upon graduation from the program, Job Corps provides a small transition stipend, job placement assistance, and career and relocation counseling services (Diaz 2009 and DOL 2008).

When not participating in classes or job training, students have a variety of recreational activities available on campus including arts and crafts, cultural and social events, intramural sports, sporting events, outdoor activities, and movies and videos. Job Corps also sponsors weekend trips to local attractions, professional sports games or venues (concerts, special events), and for recreational activities (movie theaters, bowling alleys, local beaches). Transportation for these sponsored trips is via Job Corps buses or vans. Students also have an opportunity to participate in student government by holding elected positions or serving on committees (Diaz 2009 and DOL 2008).

During their recreational time students are also free to leave the campus. Some students have their own vehicles; others leave campus with off-site visitors. There are public bus stops within easy walking distance, but some students opt to walk to off-campus retail locations such as a convenience store and other shopping centers which are located approximately 0.8 miles to 1.2

miles west of the center of the Homestead Job Corps campus. Students who walk to nearby, off-site locations often walk along the south side of SW 288th Street.

3.4.2 Discussion of Impacts

3.4.2.1 No Action Alternative

Under the No Action Alternative, the existing conditions would continue as discussed above and there would be no significant adverse impacts to EJ.

3.4.2.2 All Alternatives

Potential impacts to EJ would be the same for the Proposed Action, Alternative #2, and Alternative #3; therefore, the impacts are evaluated concurrently in reference to the Proposed Action.

Construction of the new entry gate complex has the potential for adversely impacting the students of the Homestead Job Corps by extending their walking distance to locations west of Homestead ARB, and by rerouting Metrobus Route 70. Adverse impacts to the HAC are not anticipated beyond potential timing changes in the Metrobus route.

Walking Access

Homestead ARB personnel often observe Job Corps students walking along SW 288th Street, possibly en route to either the convenience store or the pizza restaurant located at 13300 and 13376 SW 288th Street, respectively. These retail locations are approximately 0.8 to 0.9 miles, respectively, from the intersection of Ramey Avenue and Bougainville Boulevard near the center of the Homestead Job Corps campus. Further west, a Wendy's restaurant, a Publix supermarket, and a Subway restaurant are located approximately 0.3, 0.5, and 0.6 miles, respectively, from the convenience store. Under the Proposed Action, the walking distance to the convenience store/pizza restaurant would increase from approximately 0.85 miles to approximately 1.25 miles if the students follow the existing roadways. This essentially increases the walking distance by half, though it is still an easy distance to walk. Currently, it takes students approximately 15 minutes to reach the convenience store on foot; under the Proposed Action, the walk could take as long as 23 minutes. To reach the Subway restaurant on the new route would be approximately 1.85 miles and a walk time of approximately 35 minutes. These calculations were determined under the assumption that the students would walk up Ramey Avenue to St. Nazaire Boulevard then across New Mexico Avenue walking directly in front of the new gate entrance road (an extension of Coral Sea Boulevard) and following the rerouted SW 288th Street to their destination. Under Alternatives #2 and #3 students would traverse similar routes with similar walk times.

It is highly likely, however, that the students would not follow the existing roadways but would try to find shortcuts to reach the convenience store. One possible shortcut is through the parking lot of the BX mart or through the empty field north of that facility in order to avoid the walk north up Ramey Avenue to St. Nazaire Boulevard. This would shorten the distance traveled but

could also present potential safety risks to the students in the form of truck or other traffic in the parking lot (depending on its ultimate use) or wildlife, protrusion, or depression hazards in the empty lot, particularly if it became over grown.

The largest potential impact to the Job Corps students would be during the construction period. Most likely, SW 288th Street would remain open throughout the course of the construction of the new North Gate complex, or at least until the SW 288th Street re-route is complete. However, because a construction plan has not yet been completed, it is also possible that there would be a period in which the entire North Gate Site as well as SW 288th Street would be closed from pedestrian access and traffic would be diverted along Nevada Avenue. Under this worst-case scenario, to reach the convenience store students would have to walk up to St. Nazaire Avenue and around the site for a total maximum potential distance of 1.3 miles and a walking time of up to 25 minutes. These conditions could potentially persist for several months though a construction schedule has not been completed.

Public Transportation Access

The implementation of a new gate complex on the project site would necessitate changes to Miami-Dade Transit's Metrobus Route 70 which includes numerous bus stops along SW 288th Street, 124th Avenue/Ramey Avenue which bisects the Job Corps Campus, and St. Nazaire Boulevard which runs along the north side of the Job Corps Campus as discussed in Section 3.10.1.2. Currently, Job Corps students can easily access public transportation via the numerous bus stops in the vicinity of the campus, and according to Miami-Dade Transit, approximately 56 passengers (primarily Job Corps students) use these bus stops daily (Garcia 2010). Depending on the outcome of consultation between Homestead ARB and Miami-Dade Transit regarding re-routing Route 70, the accessibility of the public transportation for the Job Corps students may change and could adversely impact the student's leisure time activities.

Adverse impacts to the Job Corps students as a result of re-routing Metrobus Route 70 could include a longer transit time if the new route is longer than the old route, a change in accessibility and destination options if the route is substantially changed and stops are moved, or a loss of service if an alternative route to the Job Corps is unable to be identified. Extending the transit times, or changing possible destination points could cause minor adverse impacts to the Job Corps students, but should not impact their access to public transportation. Loss of service would cause significant adverse impacts by eliminating the students' options to public transportation access. For some students, this may be their only means of traveling to and from campus, either for classes or for leisure time activities outside of those arranged by the Job Corps. Because this is a community of concern in regard to EJ, Homestead ARB will work closely with Miami-Dade Transit to determine options to avoid the necessity of removing this segment of the bus route.

The HAC is also located along Metrobus Route 70; however, the portion of the route that serves the center would not be directly impacted by the Proposed Action. Modifications to the route to accommodate the road realignments and closures may cause indirect impacts to the service provided to passengers boarding and disembarking at the HAC. Such impacts may result from timing changes in the route, however these impacts would be anticipated to be minimal.

3.5 CULTURAL RESOURCES

Cultural resources include prehistoric and historic sites, structures, artifacts, districts, and any other physical evidence of human activities considered important to a culture or community for scientific, traditional, religious, or other reasons. Prehistoric archaeological resources are evidences of human activity that predate the advent of written records in the region. Historic archaeological resources include campsites, roads, battlegrounds, and other resources from the period of recorded history in the region. Architectural resources include structures or districts of historic or aesthetic significance, such as buildings, bridges, and dams. To be considered for protection, such architectural structures normally must be more than 50 years old. However, more recent structures, such as those constructed during the Cold War era, may warrant protection if they manifest the potential to gain significance in the future. Traditional resources are identified by Native American tribes or other groups and include properties of religious or cultural importance to an Indian tribe or Native Hawaiian organization.

According to the National Historic Preservation Act of 1966 as amended (16 USC 470), all of the cultural resources described above may be considered historic properties. Section 106 of the Act is designed to address the effects of federal or federally funded projects on both built (buildings, bridges, and levees) and underground (archaeological) resources. Historic properties are cultural resources that are listed in, or eligible for listing in, the National Register of Historic Places (NRHP). Once a resource is NRHP-listed, or designated as eligible or potentially eligible for listing, the federal agency must consult with the SHPO before proceeding with a project that may potentially impact the resource. Under federal law, impacts to cultural resources may be considered adverse if the resources have been determined eligible for listing in the NRHP or have significance for Native American groups.

3.5.1 Existing Conditions

Homestead ARB and the nearby community of Homestead are located in the Redland district of southern Florida. Archeological evidence of Paleo-Indian (13000 to 8000 BC), Archaic (8000 to 1000 BC), and Glades (500 BC to AD 1500) populations can be found in southern Florida (USAF 2000). By the time the Spanish arrived in Florida in the early 16th century, a number of Native American tribes existed in Florida. Near the Miami and the Everglades, the two principal tribes were the Tequesta and the Calusa (Wilkinson 2009). Currently, two federally recognized tribes have lands in Southern Florida, the Miccosukee Tribe of Indians of Florida, and the Seminole Tribe of Florida. The Redland district was known as “homestead country” in the 1890s when it was opened to homesteaders which inspired the name for the City of Homestead when it was established in 1913 with the arrival of the railroad (City of Homestead 2008).

The project site, originally part of Homestead AFB, was the location of base enlisted housing (constructed between 1952 and 1968; URS 2009) until the base and the neighborhood were largely destroyed by Hurricane Andrew. Currently the project area consists of vacant lots with only the neighborhood roadway network remaining in place, though the roadway is not maintained and is slowly degrading. Structures adjoining the project area include an old base commissary on the east side of SW 127th Avenue and Homestead ARB south of SW 288th

Street. Vacant land, also former neighborhood areas, adjoins the project area to the north and west.

The Final Supplement Environmental Impact Statement (SEIS) published in December 2000 for the disposal of portions of the former Homestead AFB explained that few archaeological surveys have been conducted on Homestead ARB and that most of those surveys concluded that the topographic and geographic conditions of the base result in a low probability of archaeological resources being present (USAF and FAA 2000). The 2000 SEIS reported that prior to the construction of drainage canals, the area was generally a sawgrass prairie, which remained flooded the majority of the year. In such conditions, it is unlikely that there was any significant human activity within the area beyond hunting or fishing parties. Any artifacts or evidence of activity from such parties would have been scarce and conditions may not have resulted in preservation. Archaeological surveys on Homestead ARB in 1975 and 1986 found no archaeological resources. Research conducted for the 2000 SEIS concluded that there are no known sacred or traditional Native American sites on the installation.

3.5.2 Discussion of Impacts

According to record searches including the Florida Master Site File and NRHP database, there are no current known cultural resources within the project area. Because the site was previously developed for the residential neighborhood, it is unlikely that any unidentified archaeological resources would be present.

Homestead ARB initiated consultation with the Florida SHPO, the Miccosukee Tribe of Indians of Florida, and the Seminole Tribe of Florida on 9 November 2009. In a letter on 13 November 2009, Laura A. Kammerer, the Deputy SHPO replied that the project should have no anticipated impact on historic properties (Appendix A).

There are no architectural or archaeological resources located within or immediately adjacent to the project area that could be directly or indirectly impacted by any of the project alternatives. Therefore, there are no anticipated impacts to cultural resources as a result of the Proposed Action or the other alternatives.

3.6 PHYSICAL RESOURCES

The physical environment includes the site location, geology and soils of the area, and the site elevation with respect to flood zones. These aspects of the physical environment are discussed below.

3.6.1 Existing Conditions

3.6.1.1 Site Location

The approximately 33-acre project area is located north of SW 288th Street adjacent to Homestead ARB. This installation is located in southeast Florida and covers an area of approximately 1,950 acres (Figure 1-1). Homestead ARB lies within south Miami-Dade County,

which is bounded on the north by Broward County, on the south by the Florida Keys, and on the east by Biscayne National Park in the Atlantic Ocean. The western third of the county is part of Everglades National Park which continues beyond the western county line. Outside of the main metropolitan areas, the county is covered primarily by a mixture of farmland and wetlands. The region is in the physiographic province of the Atlantic Coastal Ridge, a topographically low relief sand over limestone deposition, created as a result of saltwater and freshwater processes about 125,000 years ago (USGS 1996).

3.6.1.2 Geology

The majority of southern Florida including the study area consists of limestone and dolostone formed by carbonate sediments of shell throughout the Cenozoic Era (Florida Geological Survey [FGS] 1998a). The lithologic unit described as Miami Limestone (previously referred to as Oolitic Limestone), is the most recent. Formed in the Pleistocene age, it consists of oolitic facies that are white to orange-gray with some fossils, and bryozoan facies which are sandier and more fossiliferous (FGS 1998b). Directly beneath the Miami Limestone is the Fort Thompson Formation, a thick, highly permeable, shelly limestone deposited in the late Pleistocene. The Fort Thompson Formation and Miami Limestone combine to create the Biscayne Aquifer which is the primary freshwater source from Fort Lauderdale to Key Largo (Harris et al. 2004). The Tamiami Formation, below the Fort Thompson Formation is described as a limestone consisting of cream, white and greenish-gray shells, sand, silt and both clayey and sandy marls. It may be up to 100 ft thick (Harris et al. 2004). The lower confining unit is the Miocene/Pliocene aged Peace River Formation, primarily described as dolostone and the Oligocene/Miocene aged Arcadia Formation which consists of dolomite, quartz sand and silt. Collectively, these deposits of limestone with dolostone, sand and clay are known as the Hawthorn Group (Scott 1988).

3.6.1.3 Soil

The soils within the project area are classified as Udorthents; limestone sub-stratum Urban-land complex (Figure 3-2). An urban land complex describes built-up areas consisting of fill material covered by pavement, lawns, vacant lots, parks, playgrounds, and other structures. Udorthents in the project area have a slight slope and are somewhat poorly drained mixtures of sand, shell, and rock fragments and are typically light gray to white in color. Soil units adjacent to the project area are described as Krome, a very gravelly loam and Cardsound. The Cardsound soils are typically nearly level, well drained soils of dark brown gravelly loam about 7 inches thick covering a hard porous limestone (Natural Resources Conservation Service [NRCS] 2009).

3.6.1.4 Flood Zone

The project area is located at an elevation of approximately 7 ft above mean sea level (FEMA 2009a). The project area is located in Zone X, outside of the 100-year floodplain. FEMA defines this as an area where 100-year sheet flow flooding averages less than one foot, where danger of 100-year stream flooding is less than 1 square mile, or an area that is protected at the 100-year level by flood risk reduction structures (FEMA 2009b).

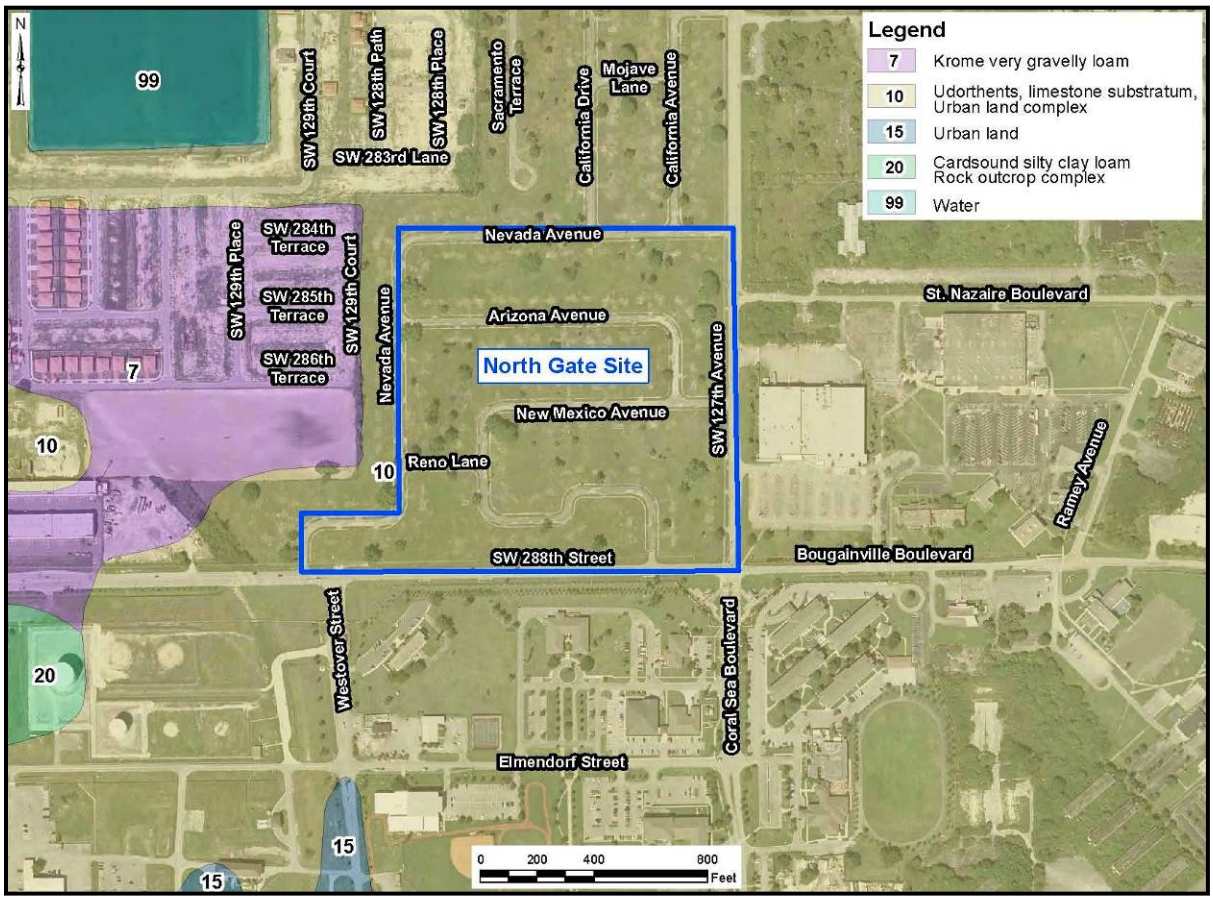

Figure 3-2. Soil Types in the Project Vicinity

3.6.2 Discussion of Impacts

3.6.2.1 No Action Alternative

The No Action Alternative for the geology and soils resources of the study area would not differ from the existing conditions except the roads that are presently on-site would continue to deteriorate. Since no construction or demolition would occur, there would be no adverse direct, indirect, or cumulative impacts to the geology and soils within the project area and no adverse direct, indirect, or cumulative impacts to the hazards associated with the floodplain within the project area under the No Action Alternative.

3.6.2.2 Proposed Action (Alternative #1)

During the demolition of existing roads and installation of new roads at the site, minor temporary adverse direct impacts to the soils at the location would be anticipated. Ground-disturbing activities such as grading, clearing, filling, and excavation could cause soil erosion and, subsequently, the transport of sediment via stormwater.

Operators of construction activities would have to obtain a NPDES permit from the FDEP for demolition and construction activities. The NPDES permit would include a SWPPP containing site-specific BMPs to be implemented for temporary and permanent erosion and sediment control (FDEP 2009a). These BMPS may include mitigation measures such as mulching, revegetation, erosion control blankets/mats (to protect bare soils from erosion); silt fencing, fiber rolls, and other sediment control measures to further prevent the movement of sediment off-site.

According to Florida Statute Section 403.0891, "state, regional, and local stormwater management plans and programs," FDOT is required to inventory and map primary stormwater management systems that it builds, operates, or maintains. In addition, Florida's Urban Stormwater Program sets performance standards for erosion and sediment control during construction. The FDEP which manages the Florida Stormwater, Erosion, and Sedimentation Control Program ensures that construction projects offer long-term protection and operation through proper design, construction and maintenance of erosion and sediment controls (FDEP 2009b).

Spills and/or leaks of fuels from vehicles/equipment could also impact soils during demolition, mobilization, installation, and setup activities. The site-specific SWPPP should also include BMPs for vehicle/equipment fueling and maintenance, and spill prevention and control measures to be implemented to further reduce potential impacts on soils during these activities (FDEP 2009b).

No adverse indirect or cumulative impacts to the geology or soil are anticipated as a result of implementing this alternative. No or minimal direct, indirect or cumulative impacts to the hazards associated with the floodplain should be expected. Site design measures would include properly sized storm drain inlets, allowing for adequate drainage of stormwater run-off and non-stormwater discharges (i.e., fire hydrant testing), which would minimize any potential impacts to the flood zone.

3.6.2.3 Alternatives #2 and #3

All design alternatives would have similar impacts to the geology and soils. All design alternatives would have similar impacts to the flood zone.

3.7 COASTAL ZONE RESOURCES

The CZMA encourages states and tribes to preserve, protect, develop, and where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats (USEPA 2007). As discussed in Section 2.6.2.7 determination of consistency with the CZMA determination would be issued through the ERP process.

3.7.1 Existing Conditions

Although the entire State of Florida has been designated as a coastal zone (National Oceanic and Atmospheric Administration [NOAA] 2004; USAF 2009), not all areas of the state contain

resources typically associated with the coastal zone (i.e., wetlands, floodplains, estuaries, beaches, etc.). The North Gate Site is above the mean high water line in Miami-Dade County and it does not have any natural bodies of water or streams on or immediately adjacent to it. The nearest bodies of water are man-made ponds, small lakes, and canals.

The Proposed Action is located in a highly developed area with extensive drainage modifications. Due to the urban and agricultural nature of the area, drainage, channeling, and removal of natural water features, such as streams or wetlands, have been utilized to control stormwater run-off. Surface run-off, including stormwater run-off and non-stormwater discharge, flows via stormwater inlets and canals into various surface water storage areas and reservoirs. These waters are then released or pumped into additional drainage canals which eventually drain east to Biscayne Bay. Coastal habitats are located approximately 2 miles from the project site. Therefore, coastal habitats, such as, mangrove forests, sea grass beds, coral reefs and marine open water are not present on or adjacent to the North Gate Site.

3.7.2 Discussion of Impacts

3.7.2.1 No Action Alternative

Under the No Action Alternative there would be no impacts to the coastal zone because no changes would occur to the North Gate Site.

3.7.2.2 Proposed Action (Alternative #1)

Under the Proposed Action, there would be no direct impacts to coastal resources. The project site does not have any natural water bodies on it, or adjacent to it. The nearest water bodies are human-made lakes, ponds and canals. Although impervious surface area would be slightly increased by the new gate structure, drainage patterns in the area would not be changed by the Proposed Action. Minor indirect impacts could occur during construction through potentially harmful stormwater run-off containing suspended sediment and chemical contaminants. This run-off could impact nearby wetlands and other surface waters that could discharge to coastal waters. The area of construction is very small and construction would be limited over a short period of time. Additionally, impacts from stormwater run-off would be minimized through adherence to federal, state and local stormwater permitting requirements and by proper management of construction and maintenance at the project site with appropriate BMPs.

In a letter dated 3 February 2010 (Appendix A), DERM determined that the proposed project does not occur in tidal waters, in wetlands, or in wetlands containing halophytic vegetation and therefore a Class I Coastal Construction Permit and a Class IV Wetland Permit would not be required for this project. DERM noted that other permits may be required from the U.S. Army Corps of Engineers, DERM, and SFWMD and recommended Homestead ARB contact and consult with these agencies directly (Gonzalez 2010).

3.7.2.3 Alternatives #2 and #3

The direct, indirect and cumulative impacts of all the other alternatives would be similar to the Proposed Action as they are all located on the same site.

3.8 WATER RESOURCES

Water resources include surface waters, groundwater, and floodplains. Water is a non-renewable resource required for subsistence of human and ecological communities, as well as for economic growth and recreational/aesthetic activities. Groundwater consists of subsurface natural aquifers, which are often used as a potable, agricultural or industrial water sources. Floodplains are areas of low-lying land adjacent to rivers, streams or coastal waters, which have the potential for inundation due to precipitation. Stormwater is also considered as part of water resources because storm run-off and infiltration is important to the quality of receiving surface water and groundwater. As discussed in Section 2.6, water resources are governed by many state, federal and local laws including the CWA, SDWA, FWRIR, and the Florida Outstanding Waters Program.

3.8.1 Existing Conditions

3.8.1.1 Surface Waters

There are no surface waters located on the proposed project site. Major surface waters in the project vicinity include three artificial lakes, two reservoirs, and several canals and ditches created to collect stormwater run-off from the developed parts of the base (Figure 3-3). The FDEP has classified all water bodies on Homestead ARB and those adjacent to it or the project area as Class III Surface Waters designated for recreation and maintenance of a healthy, well-balanced fish and wildlife population. Drainage for all of the gate sites and the base has been significantly altered from the historical surface flow, which was characterized by poorly defined channels that drained to Biscayne Bay. The surface water drainage system for the base and surrounding areas is extensive, due to the flat topography, extensive impervious area, and shallow groundwater table.

A ditch is located adjacent to the southeastern corner of the North Gate Site. A small arm of the Boundary Canal is located on the north side adjacent to the West Gate Site and no surface water features are immediately adjacent to the East Gate Site. A borrow pit is located northwest of the project area. The Twin Lakes (7.7 acres and 8.0 acres) are located in the southern part of the base, south of the runway. These lakes are connected to the Boundary Canal that surrounds approximately three quarters of the base. The Boundary Canal wraps from the southern portion of Homestead ARB around the eastern and western sides of the base where it terminates on the northwestern boundary at the West Gate Site and on the eastern portion of the base near FLARNG. Reservoir and artificial lakes on base currently show characteristics of a natural setting, such as banks with old tree snags and vegetation debris. These edges are used by many bird species for resting and feeding (USAF 2009).

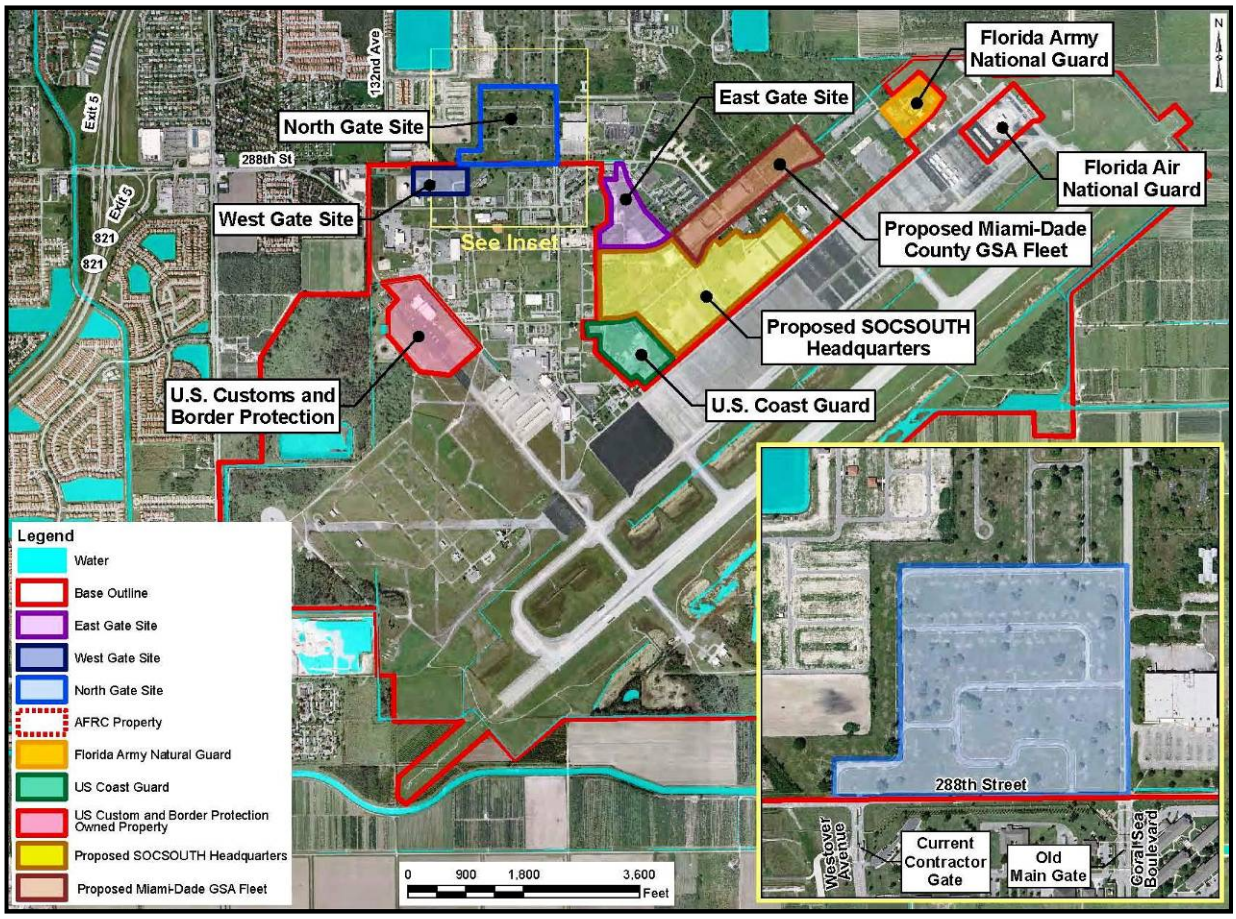

Figure 3-3. Major Surface Water Bodies in the Project Vicinity

3.8.1.2 Stormwater

Stormwater run-off from the base is regulated by the NPDES permit program and NPDES FLR05A352 has been issued by the state for an outfall at Outfall Canal, G-95 alternatively known as Military Canal. The NPDES permit also requires a SWPPP. This general permit has no required parameters for stormwater quality. Homestead ARB has voluntarily initiated a cooperative program with the State of Florida in which 16 sites on base are sampled regularly to monitor water quality. Potential stormwater pollution sources include spills from petroleum, oils and lubricants from various base operations, particularly the base service station and parking lots, and from landscape maintenance that includes the use of fertilizers and pesticides. A construction NPDES permit would likely be required during construction activities to limit sediment run-off and increases of turbidity to receiving waters.

Stormwater from the project area drains to the existing base drainage network. Like most areas in south Florida a complex and extensive stormwater management system has been developed for the base. The drainage from the project area that drains to the base's system eventually reaches the reservoir on the south side of the base. Stormwater run-off at the base is collected by a system of gravel-filled swales, drainage ditches, catch basins, French drains, and underground pipes. Run-off is then discharged into perimeter canals around the Homestead ARB perimeter,

which flow to the southeast corner of the base into a stormwater reservoir. A regulated pump station then pumps the water off-site and into Military Canal, which flows east approximately 2 miles into Biscayne Bay. Some stormwater run-off from outside the Homestead ARB boundary also drains into ditches that flow into the perimeter canals.

3.8.1.3 Groundwater

Groundwater consists of water bodies below the surface which are often used as sources of drinking or industrial water. Descriptive parameters of groundwater include depth from the surface, capacity, water quality, surrounding geologic condition and recharge rate (HQ AFRC 2006b). There are three groundwater sources in the Homestead area, the Biscayne aquifer, the Intermediate Confining Unit, and the Floridian aquifer (HQ AFRC 2006a, 2006b; USAF 2009).

The Floridian aquifer lies below the Intermediate Confining Unit and the Biscayne aquifer in the Homestead area. The Floridian aquifer is generally 165 ft to 220 ft deep, with the Intermediate Confining Unit lying over it at approximately 1 ft to 10 ft deep and the Biscayne aquifer over that between 65 ft to 80 ft deep. In the Homestead area, the Floridian aquifer (both layers) is influenced by saltwater intrusion, and therefore exceeds primary drinking water standards and cannot be used as potable water (HQ AFRC 2006a, 2006b; USAF 2009). The Intermediate Confining Unit isolates the Floridian aquifer from the Biscayne aquifer. It is made up of interbedded siltstone, claystone and sand (USAF 2009).

The Biscayne aquifer is close to the surface, (an average of 1 ft to 5 ft below surface) and is influenced by rainfall, channel flows, surface water and pumping. It has an average transmissivity of five million gallons per day per foot, a permeability of greater than 8,640 ft per day and a flow velocity of 2.6 ft per day (USAF and FAA 2000). During the dry season, water in the Biscayne aquifer can be higher than the levels in the canals, so the aquifer can discharge to the surface waters in the area. Additionally, canal levels can drop low enough that saltwater is drawn up them from the coast, contributing to coastal seepage (USAF 2009). Groundwater flows generally toward Biscayne Bay and most of the water in the aquifer eventually discharges to Biscayne Bay (USAF and FAA 2000).

The Biscayne aquifer is designated as a class G1 aquifer, which supplies potable water, with less than 3,000 milligram per liter (mg/L) of total dissolved solids (TDS), and as a class G2 aquifer (with less than 10,000 mg/L of TDS) by the FDEP (USAF and FAA 2000). It has also been designated as a sole source potable water supply for Broward, Miami-Dade, Monroe, and Palm Beach Counties under Section 1425 of the SDWA (44 FR 58797). This means that at least 50% of the drinking water in the area is supplied by this aquifer, and that there are additional protections under the USEPA for this resource, as there are limited other sources of potable water in the area. Additionally, any proposed projects in the area must be reviewed by the USEPA if they are receiving federal financial assistance (HQ AFRC 2006b). Homestead ARB has obtained its potable water from off base since 1992 due to salinity in this portion of the Biscayne aquifer and potable water has been supplied by the Miami-Dade County WASD since 2005 (USAF 2009).

3.8.1.4 Flood Zone

Flood plains are areas of low lying land that are adjacent or near bodies of water that are prone to flooding during rain events. Flood risk is influenced by topography, soils, the size of the watershed and the frequency and intensity of rain fall. Additionally, the proximity to the coast and the many surface waters create the potential for flood prone areas in the Homestead ARB vicinity. FEMA issues maps which indicate the level of risk of flooding for specific areas called Flood Insurance Rate Maps (FIRMs). The 100-year flood zone is the area which has a 1% chance of flooding every year and the 500-year flood zone has a 0.2% chance of flooding (HQ AFRC 2006b). The FEMA issued FIRMs (revised in September 2009) containing Homestead ARB and adjacent areas show that the project area is outside of the 500-year flood zone (FEMA 2009a).

3.8.2 Discussion of Impacts

3.8.2.1 Surface Waters, Stormwater, Groundwater, and Water Quality

No Action Alternative

The No Action Alternative would not have any direct consequences for the surface waters, stormwater, groundwater, or water quality near the North Gate Site, or for any other water resource on the Homestead ARB. With no alternate future land uses identified, the project site would likely remain unoccupied and unused for any specific purpose by the county. Regular patrolling and periodic landscaping would continue; however, a potential indirect effect is that landscaping and roads could deteriorate in the future if the current maintenance schedule is abandoned for any reason. This potential deterioration of site conditions could result in harmful run-off from disintegrating roads entering waters in the project vicinity, such as the large pond to the west of the North Gate Site, stormwater drainage canals, and/or groundwater.

Proposed Action (Alternative #1)

Implementation of the Proposed Action would result in the new gate structure being built on the parcel previously occupied by base housing. The only direct impact to water resources would be surficial groundwater if dewatering is required during construction, which could impact groundwater quality if groundwater contamination (including saline) is introduced to the project area during dewatering activities. Dewatering and construction could increase turbidity to stormwater. Indirect impacts may include a temporary decrease in water quality during construction because of increased run-off. However, these impacts would be mitigated through BMPs during construction. Furthermore, a SWPPP may be required during construction activities that would further control and mange potential stormwater and surface water quality impacts. Water quality would likely improve after construction because of an update to the stormwater system.

In a letter dated 3 February 2010, DERM indicated that modification of the existing Homestead ARB Surface Water Management General Permits (No. 13-00148-S) may be required from SFWMD prior to construction and operation of the required surface water management system.

Additionally, other permits from the Environmental Resource Regulation Division may also be required with regard to stormwater management. A Class V permit would be required from DERM if dewatering is performed during the construction of the proposed action. Any proposed drainage through contaminated areas shall also require DERM review and approval prior to seeking construction permits. With compliance with permitting requirements, it is anticipated that potential adverse impacts would be minor and temporary (Gonzalez 2010).

Alternatives #2 and #3

The direct, indirect, and cumulative impacts from Alternatives #2 and #3 would be similar to those that would occur under the Proposed Action as these alternatives are on the same parcel of land, near the same water bodies, and would be managed in the same way. However, the footprints of the alternatives would be slightly smaller than that of the Proposed Action, which could result in fewer adverse impacts. Also, the addition of a stormwater detention pond as part of the entry gate complex under Alternatives #2 and #3 could provide additional treatment for stormwater before it enters groundwater or surface water.

3.8.2.2 Flood Zone

No Action Alternative

The No Action Alternative would not have any direct consequences for the flood zones on the Homestead ARB. The North Gate Site would continue to be an abandoned base housing site. No changes to the flood zone, or areas adjacent to the flood zone would occur, so drainage patterns and flood designations would remain the same.

Proposed Action (Alternative #1)

Implementation of the Proposed Action would result in the new gate structure being built on the parcel previously occupied by base housing. This parcel is not within the 100-year or 500-year flood plan. Therefore, there are no additional building or siting regulations which must be followed. The gate structure would not change drainage patterns in the area and would not impact flood zone designations on adjacent parcels.

Alternatives #2 and #3

The direct, indirect, and cumulative impacts for Alternatives #2 and #3 would be the same as those that would occur under the Proposed Action because all alternatives are on the same parcel of land which is not in a flood zone.

3.9 BIOLOGICAL RESOURCES

Biological resources potentially affected by the Proposed Action include plants, animals, and other biota in the vicinity of the proposed project (Figure 2-1). The biota of a particular area is collectively considered an ecological community. The community is used as an organizational concept in ecology and is employed below in describing the biological resources of the study

area to differentiate between terrestrial and wetland/aquatic communities. In addition, the potential for threatened, endangered, or other rare species to occur within these communities is discussed.

According to the Integrated Natural Resource Management Plan (INRMP) for the base (USAF 2009), the natural hydrologic conditions, land surface conditions, and vegetation communities have been significantly altered and degraded through land use changes, land management practices, and exotic species proliferation. As a result of these alterations, the base and adjacent areas cannot be meaningfully separated into natural vegetative communities (USAF 2009). However, according to the Homestead ARB INRMP, "the base is located within the South Florida ecosystem and "to a degree," it continues to support some important natural functions and features that are associated with this larger ecosystem."

3.9.1 Terrestrial Communities

3.9.1.1 Existing Conditions

The major upland habitat types native to the Southern Florida region include dry prairie, pineland, and tropical hardwood hammock (USAF and the FAA 2000). Naturally occurring habitat types are rare in the Homestead ARB vicinity as most of the land is classified as agricultural, developed open space, or developed (Figure 3-4).

The North Gate Site is not being actively used, does not contain any structures, but retains a system of decaying, secondary streets. The area around the project site consists of developed space of various categories (Figure 3-4), some of which is currently not in use. As a result, the surrounding area contains active and inactive developed land, agricultural land, and commercial, residential and military property (Homestead ARB) (Figures 3-1 and 3-4).

Currently, the major land cover other than developed urban areas in the vicinity of Homestead ARB is agriculture. Some small scattered areas of natural habitat do occur on the Homestead ARB. The Florida pine rockland community is an example of a sensitive terrestrial natural habitat that occurs on base. A small remnant of this community is located less than 0.5 miles from the North Gate Site, just within the Homestead ARB property line southeast of the corner of SW 288th Street and SW 132nd Avenue (Figure 3-1; USAF 2009). Another remnant is located near Phantom Lake, farther from the project area (HQ AFRC 2006a). Predominately, however, the terrestrial areas on Homestead ARB that are not covered by buildings or pavement are semi-improved to improved and are intensively landscaped and maintained. The upland vegetation within these areas consists principally of lawn grasses and ornamental shrubs and trees.

The proposed gate would be placed near the corner of SW 288th Street and Coral Sea Boulevard, in an area which was formerly base enlisted housing (Photo 1-1), originally built between 1952 and 1968 (URS 2009). The neighborhood was damaged during Hurricane Andrew in 1992, cleared of structures by 1996, and never rebuilt (Photos 1-2 and 3-1). The project area has been heavily disturbed by past development. Presently, the North Gate Site and adjacent areas contain

no naturally occurring terrestrial communities. The site is covered by grasses and other herbaceous vegetation that is mowed periodically.

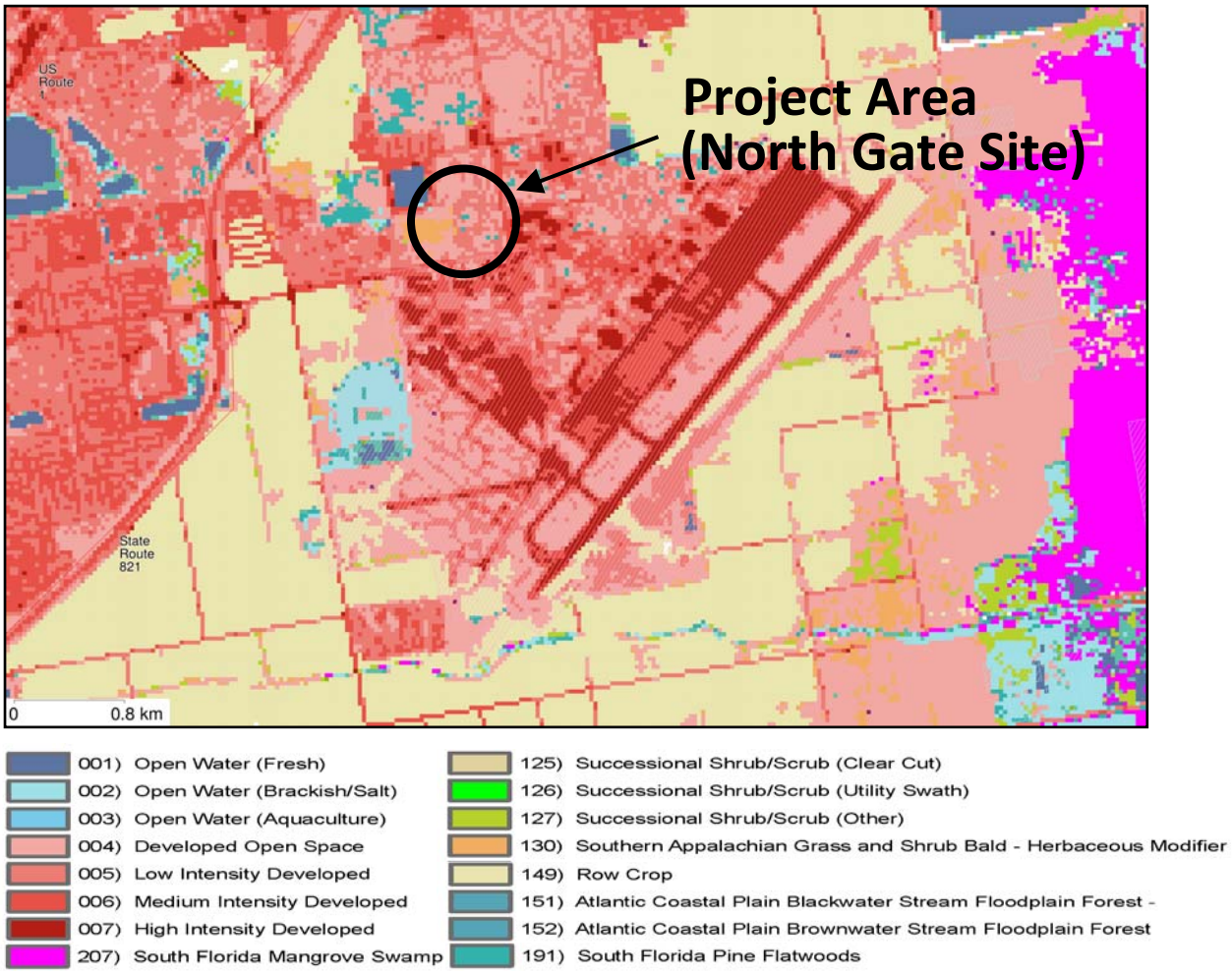

Figure 3-4. Land Use in the Project Vicinity (USGS 2009)

Photo 3-1. View of Vegetation Occurring on the North Gate Site

Terrestrial wildlife habitat on the proposed North Gate Site is limited in quality, with cover provided only by ornamental shrubs, grasses, common weeds, and a few mature trees (oak, Brazilian pepper, palm). Habitat components needed to support a diverse community of wildlife are not present. The wildlife most likely to occur here are birds that commonly forage on lawns and other open grassy areas, including the northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), and common grackle (*Quiscalus quiscula)*. Some of these birds could potentially nest in the few trees and shrubs present in this habitat. Other animals that may utilize the inactive land of the project site could include the raccoon (*Procyon lotor),* Virginia opossum (*Didelphis virginiana),* cotton rat *(Sigmodon hispidus*), eastern cottontail rabbit (*Sylvilagus floridanus*), and yellow rat snake (*Elaphe obsoleta*). Additional studies of the flora and fauna found on the base were completed during the preparation of the Homestead ARB INRMP (USAF 2009). Scattered areas of native plants on the base included locust berry (*Byrsonima lucida*), mahogany (*Swietenia mahagoni*), silver palm (*Coccothrinax argentata*), Christmas berry (*Crossopetalum ilicifolium*), Krug's holly (*Ilex krugiana*), pineland jacquemontia, wedgelet fern (*Sphenomeris clavata*), gumbo limbo (*Bursera simaruba*), Florida trema (*Trema micranthum*), Bahama ladder brake fern (*Pteris bahamensis*), Porter's spurge (*Chamaesyce porteriana*), Florida lantana (*Lantana depressa*), small-leaved melanthera (*Melanthera parvifolia*), satin leaf (*Chrysophyllum oliveform*), Florida slash pine (*Pinus elliottii*) pineland croton (*Croton linearis*), blue porter weed (*Stachytarphetta jamaicensis*), West Indian lilac (*Tetrazygia bicolor*), Small's milkpea (*Galactia smallii*), Sand flax (*Linum arenicola)*, and pine pink orchid (*Bletia purpurea*). Most of these native plants are unlikely to occur on the project site. Plants likely to be found on the North Gate Site include some of the exotic and landscaped plants identified on base, such as Australian pine (*Casuarina equisetifolia*), Brazilian pepper (*Schinus terebinthifolius*), Napier grass (*Pennisetum purpureum*), Bermuda grass (*Cynodon dactylon*), Bahia grass (*Paspalum notatum*), St.Augustine grass (*Stenotaphrum secundatum*) and Burma reed (*Neyraudia reynaudiana*) (USAF 2009).

Fauna recorded in the various surveys of the Homestead ARB (since the SEIS from 2000) included American alligator (*Alligator mississippiensis*), exotic spectacled caiman (*Caiman crocodilus*), American crocodile (*Crocodylus acutus*), rough grass snake (*Opheodrys aestivus*), corn snake (*Elaphe guttata*), checkered garter snake (*Thamnophis marcianus*), Florida slider (*Trachemys scripta*), Florida softshell turtle (*Apalone ferox*), snapping turtle (*Chelydra serpentina*), Florida chorus frog (*Pseudacris nigrita verrucosa*), tree frogs (*Hyla* spp.), and two-toed amphiuma (*Amphiuma means*). Mammals included the raccoon, marsh rabbit (*Sylvilagus palustris*), and white-tailed deer (*Odocoileus virginianus*) (HQ AFRC 2006a, USACE 2009, and USAF 2009). Common birds in terrestrial habitats on the base included the northern mockingbird, common grackle, mourning dove, northern cardinal (*Cardinalis cardinalis*), red-shouldered hawk (*Buteo lineatus*), and red-winged blackbird (*Agelaius phoeniceus*) (USACE 2009).

3.9.1.2 Discussion of Impacts

No Action Alternative

Under the No Action Alternative, a new entry gate complex would not be constructed on the North Gate Site and there would be no adverse direct or indirect impacts to terrestrial

communities in the project area. Conditions on the project site would remain as described in Section 3.9.1.1 except that the vegetation community could slowly revert to a more overgrown condition through the process of succession if maintenance practices (mowing and weed control) were suspended.

Proposed Action (Alternative #1)

Construction of new structures and associated roads would temporarily displace some small animals utilizing the North Gate Site. Construction-related activities, noise, and the presence of heavy equipment and machinery would be expected to cause most mobile wildlife to avoid the project area during construction and thereby avoid any adverse impact. Populations of some displaced animals likely would recover following the construction period and the replanting of ornamental grasses and shrubs. The addition of new buildings and more impervious surfaces to the North Gate Site could result in minor, adverse impacts to wildlife. However, the habitat that would be permanently lost to the footprint of the Proposed Action (approximately 6 acres) is not unique and represents less than 20% of the entire North Gate Site.

Indirect adverse impacts from the Proposed Action could occur if wildlife were to relocate to more sensitive neighboring habitats, such as the pine rockland habitat west of the North Gate Site. Increased numbers of wildlife moving to sensitive areas could result in further strain to an already fragile ecosystem. Given the size of the project site (33 acres) and limitations of the existing habitat, it is unlikely that displaced populations would be large enough to strain nearby sensitive habitats should the animals relocate there. Furthermore, the wildlife currently present on the North Gate Site would be likely to seek out other similar surrounding or adjacent habitats, not the limited and very different pine rockland habitat or the marsh habitat located south of the airstrip.

Section 24-49 of the Miami-Dade County Code regulates the preservation and protection of tree resources. Because there are a number of trees present on the subject property, a Miami-Dade County Tree Removal Permit would be required prior to the removal or relocation of any tree subject to the provisions of the code. In a letter dated 3 February 2010, DERM indicated they would provide additional information on the permitting procedures and requirements prior to site development as needed. It is likely Homestead ARB would implement some landscaping associated with the new gate complex, therefore overall impacts to trees would be anticipated to be minor (Gonzalez 2010).

Alternatives #2 and #3

Impacts to terrestrial communities under Alternatives #2 and #3 would be similar to those described for the Proposed Action, with the exception that the footprints of Alternatives #2 and #3 would permanently impact approximately 1 acre to 2 acres less land than the Proposed Action. Additionally, both of these alternatives include a small stormwater detention pond that could be used by wildlife and colonized by aquatic and wetland vegetation. However, these ponds are not likely to provide quality habitat because they would be constructed with steep banks and would be too deep to be desirable to most wading birds or semi-aquatic wildlife, and they are likely to be maintained to prevent vegetation growth. Stormwater retention ponds can

be designed to represent natural water features, but it is unlikely that the small ponds designed would have features such as a littoral shelf.

3.9.2 Wetland/Aquatic Communities

3.9.2.1 Existing Conditions

Wetlands are defined as: "…those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and other areas" (USACE 1987). Wetland and aquatic communities make up a large percentage of the general habitat types in South Florida; however, the North Gate Site (project area) does not contain any wetland or aquatic communities.

3.9.2.2 Discussion of Impacts

No direct or indirect impacts to wetland/aquatic communities would occur under the Proposed Action or Alternatives #2 and #3 because the North Gate Site does not contain wetlands, nor is it adjacent to any water bodies.

3.9.3 Endangered, Threatened, and Special Concern Species

3.9.3.1 Existing Conditions

Section 7 of the federal ESA, as amended, requires each federal agency to ensure that "any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species ... unless such agency has been granted an exemption for such action..." Threatened, endangered and special concern species are also regulated under the ESA, the Marine Mammal Protection Act, the Migratory Bird Treaty Act, and the Bald Eagle Protection Act. In addition to the federally regulated species, species designated by the state of Florida as endangered, threatened, or as a species of concern are also granted legal protection.

Nineteen plant and 28 animal species that are federally-listed are known to occur within Miami-Dade County (USFWS 2008). The preferred habitats of these species were evaluated and it was determined that the majority of these species would not occur in the habitats present on the project site. It was established that only the northern crested caracara (*Caracara cheriway)*, the eastern indigo snake (*Drymarchon corais couperi)*, the Florida leafwing butterfly, and two plant species, Small's milkpea and sand flax could potentially occur on-site. Those federally listed animal and plant species that could occur on the North Gate Site based on their preferred habitat are listed in Table 3-3.

Table 3-3.
Federally Listed & Candidate Species Known to Occur in Miami-Dade County, Florida with Preferred Habitats Similar to the North Gate Site

Common Name	Scientific Name	Federal Status	Habitat
Birds			
northern crested caracara	*Caracara cheriway*	T	Improved pastures, mesic temperate hammock, mesic pine flatwoods, hydric pine flatwoods, dry prairie, wet prairie. Last documented 1987-1991.
wood stork	*Mycteria americana*	E	Hydric pine flatwoods, wet prairie, freshwater marsh, seepage swamp, flowing water swamp, pond swamp, mangrove, salt marsh, seagrass.
Reptiles			
eastern indigo snake	*Drymarchon corais couperi*	T	Pine flatwoods, scrubby flatwoods, high pine, dry prairie, tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, coastal dunes, and human-altered habitats (USFWS 2007a).
Invertebrates			
Florida leafwing butterfly	*Anaea troglodyta floridalis*	C	Pine palmetto scrub and edge communities (Iowa State University Entomology 2007).
Plants			
Small's milkpea	*Galactia smallii*	E	Pine rockland communities, porous limestone soils with a thin layer of sand (Virginia Tech Conservation Management Institute [VTCMI] 1996).
sand flax	*Linum arenicola*	C	Pine rockland and pineland clearing communities and adjacent roadsides, solution pits and shallow soils of ephemeral pools (USFWS 2007b).

Source: modified from USFWS 2008 (unless otherwise noted).
T=Threatened; E= Endangered; C=Candidate.

There are 198 plant and 25 animal species listed by the State of Florida and known to exist in Miami-Dade County (USAF 2009). Given the habitat preferences of the listed plant species, none of the 21 state-listed plants would likely occur within the project area. The animal species with a possibility of occurring on the North Gate Site based on their preferred habitat type are listed in Table 3-4.

Of all the federally and state-listed species known to occur in Miami-Dade County, two federally listed plants, 21 state-listed plants, and one regularly occurring listed animal (the American crocodile) are known to have occurred on Homestead ARB (USAF 2009). The species listed in the Tables 3-3 and 3-4 are discussed in more detail in the following sections.

Table 3-4.
State-Listed Species Known to Occur in Miami-Dade County, Florida with Preferred Habitats Similar to the North Gate Site

Common Name	Scientific Name	Federal Status	Habitat
Birds			
southeastern American kestrel	*Falco sparverius paulus*	T	Pine flatwoods.
Florida sandhill crane	*Grus canadensis pratensis*	T	Pastures, prairies and emergent wetlands.
Florida burrowing owl	*Athene cunicularia floridana*	SSC	Grasslands and other open areas.
Mammals			
Florida mastiff bat	*Eumops glaucinus floridanus*	E	Buildings and tree cavities in hardwood hammocks.
Florida mouse	*Podomys floridanus*	SSC	Scrub and sand hill communities.
Reptiles			
Florida pine snake	*Pituophis melanoleucus mugitus*	SSC	Habitats with open canopies and dry sandy soils, sand hills, pastures, sand pine scrub, and scrubby flatwoods.

Source: modified from USAF 2009.
E=Endangered; T=Threatened; SSC=Species of Special Concern.

Northern crested caracara

The northern crested caracara is listed as federally threatened. It's a large, boldly patterned raptor with a crest and unusually long legs. It is diurnal, non-migratory, and feeds mainly on carrion. This species is found in the prairie area of the south-central region of Florida (USFWS 2007c). The Florida population of this species commonly occurs in dry or wet prairie areas with scattered cabbage palms (*Sabal palmetto*) (USFWS 2007c). The USFWS South Florida Multi-Species Recovery Plan does not include Miami-Dade County as one of the counties where this species is currently found (USFWS 2007c). Although a few caracaras were recently sighted northwest of Homestead ARB near the coast at the South Dade Landfill, this species is unlikely to occur on base as it prefers uninhabited and open areas.

Wood stork

The wood stork (*Mycteria americana*) is a long-legged wading bird that breeds in colonies. The southeastern population no longer nests in Florida, but they are known to forage in shallow areas in the Everglades. They are often seen on or flying over the base annually in winter and have been seen foraging in the wetlands to the south east of the runway, but it is unlikely that nesting would occur there (HQ AFRC 2006a and USAF 2009)

Eastern indigo snake

The federally threatened eastern indigo snake is a large, shiny, non-venomous snake that is found throughout central and southern Florida (USAF 2009). It is black in color with some reddish or cream areas around the chin, throat and cheeks. Their diet consists of various vertebrates including fish, frogs, toads, lizards, small turtles, snakes, birds, and small mammals (Hallam et al. 1998). During cold and dry conditions, they require a form of shelter, such as a land crab, armadillo or rodent burrow, a hollow log, a stump hole, or root channels, but they are most often found in or near gopher tortoise burrows (Hallam et al. 1998, USAF 2009). In its southern range, the species uses a wider array of habitats, and is more active throughout the year, presumably because it does not get as cold (Hallam et al. 1998). Home ranges used by individual snakes in south-central Florida average about 19 hectares (ha) to 74 ha (47 to 183 acres) for females and males, respectively (USFWS 2004).

Indigo snakes have been reported in the Homestead ARB area on several occasions, but species specific surveys on the base itself in 1992, 1993, 1997, 1998, and 2001 did not report any sightings. Appropriate habitat for the eastern indigo does occur on Homestead ARB, but it would be considered marginal in quality, and would be in boundary areas away from development (USAF 2009).

Florida leafwing butterfly

A candidate species for federal-listing, the Florida leafwing butterfly is a brush-footed butterfly with a hooked forward wing, a small tail on the hind wing, and a scalloped outline (Opler et al. 2009). The top of the Florida leafwing is bright red-orange with dark, crescent-shaped markings along margin and across wings. The leafwing habitat is primarily in pine-palmetto scrub and edges in extreme south peninsular Florida and the Florida Keys (Opler et al. 2009).

Southeastern American kestrel

The southeastern American kestrel is state-listed as threatened and federally protected under the Migratory Bird Species Act. Its preferred habitat includes open pine forests and clearings (USAF 2009). This bird is commonly found on Homestead ARB during the winter months as part of its migration pattern (HQ AFRC 2006a and USAF 2009).

Florida mastiff bat

The Florida mastiff bat is state-listed as endangered. It often occurs in urban and residential areas, roosting in buildings, shrubs, palms, and hollow trees (USAF 2009).

Florida sandhill crane

The Florida sandhill crane is state-listed as threatened. Sandhill crane habitat includes freshwater marshes, pastures and grasslands, and agricultural areas. This bird has been seen flying over Homestead ARB, but does not appear to use the base directly (USAF 2009).

Florida burrowing owl

The Florida burrowing owl is listed by the state of Florida as a species of special concern. It is also federally protected under the U.S. Migratory Bird Treaty Act, even though the Florida population is non-migratory. The burrowing owl is a small ground dwelling brown and white owl with long legs and no ear tufts. They nest in loose colonies in burrows abandoned by other animals, or they dig their own if soils conditions allow. Their diet consists of invertebrates and small mammals. Several groups of owls have perennial nesting sites near the runway and near the administrative buildings on Homestead ARB (USAF 2009, HQ AFRC 2006a, 2006b).

Florida mouse

The Florida mouse is a species of special concern in the State of Florida. The Florida mouse is found in dry upland communities with sandy soils, usually in the burrows of the gopher tortoise (USAF 2009). This mouse inhabits high, dry sandy ridges where black-jack oak, turkey oak, and scrub palmetto are abundant (Booth 1972).

Florida pine snake

The Florida pine snake, a state species of special concern, is generally associated with gopher tortoise burrows; however, no gopher tortoises have been found on Homestead ARB (USAF 2009). The Florida pine snake is not common anywhere, but could be found in dry sandy soils (Florida Museum of Natural History [FMNH] 2009). It is found most often in open pine-turkey oak woodlands and abandoned fields, and also in scrub, sandhills, and longleaf pine forest (FMNH 2009).

Federally and State-listed Plants

Several plant surveys have been conducted on former Homestead AFB property since 1993, but only one federally endangered species was encountered, the Small's milkpea (USAF 2009). A federal candidate species, the sand flax, which is state-listed as endangered, was also found (USFWS 2009). Both these species were found in remnant pine rockland tract within former Homestead AFB property on the east side of Homestead ARB (USAF 2009). A recent survey for the SOCSOUTH HQ site, which is located southeast of the alternative site, found large populations of the Small's milkpea and the sand flax (Bradley 2009). These species also occur just northeast of the North Gate Site (Bradley 2009). Small's milkpea is a small, perennial vine with pink flowers which most often grows prostrate or very close to the ground in pine rocklands or rockland hammocks (Nature Serve 2009). It has not been found within the current boundaries of Homestead ARB, but has been found adjacent (USAF 2009 and Bradley 2009). Sand flax is a wiry perennial plant approximately 1-ft tall with yellow flowers, often found adjacent to pine rocklands (USFWS 2009). Sand flax in known to occur within the current boundaries of Homestead ARB, but is unlikely to occur on the project site due to habitat preferences (USAF 2009).

State-listed plants known to occur on Homestead ARB include wedgelet fern *(Sphenomeris clavata),* Porter's spurge *(Chamaesyce porterian),* locust berry (*Byrsonima lucida*), mahogany

(*Swietenia mahagoni*), silver palm (*Coccothrinax argentata*), Christmas berry (*Crossopetalum ilicifolium*), Krug's holly (*Ilex krugiana*), pineland jacquemontia (*Jacquemontia curtissii)*, small-leaved melanthera *(Melanthera parvifolia)*, Bahama ladder brake fern (*Pteris bahamensis)*, and tetrazygia (*Tetrazygia bicolor)*. Non-native plant invasion appears to be the most significant threat to the rare native plants on the base (HQ AFRC 2006a).

3.9.3.2 Discussion of Impacts

No Action Alternative

Under the No Action Alternative, no construction or disturbance of any kind would occur on the North Gate Site and therefore, there would be no adverse direct or indirect impacts to threatened or endangered species. The proposed gate parcel would remain vacant and would continue to provide low-quality habitat, as described in Section 3.9.1.1, which is unlikely to be used by endangered, threatened, or special concern species.

Proposed Action (Alternative #1)

Implementation of the Proposed Action could reduce terrestrial habitat within the footprint of the new entry gate complex. Several threatened, endangered, or special concern species have a small potential to occur on the North Gate Site given their known habitat preferences. However, use by these species of the limited habitat on this small, low quality, grassy parcel would not be expected, and these species are unlikely to be directly affected by the Proposed Action. Endangered or threatened species also would be unlikely to be adversely affected by indirect effects from the Proposed Action. Listed, candidate, or special concern species with the potential to occur in the project area would not be affected by impacts such as reduced availability of food or altered nesting habitat during or after construction of the new entry gate complex.

The only federally listed animal species with a potential to occur on the North Gate Site is the threatened eastern indigo snake. Given its large home range and the small area and limited habitat of the site, the probability of an individual indigo snake occurring in the project area is discountable. Thus, the proposed project may affect but is unlikely to adversely affect the indigo snake. In addition, two plant species with federal status, the endangered Small's milkpea and the candidate sand flax, have been observed in the vicinity of the project site. Given the land use history of the North Gate Site (previously developed residential neighborhood) and the lack of the rockland habitats required by these plants on the site, the potential for occurrence of either of these plants within the project area is discountable. Therefore, the proposed project may affect but is unlikely to adversely affect the Small's milkpea and sand flax.

Alternatives #2 and #3

Impacts to threatened and endangered species under Alternatives #2 and #3 would be similar to those described for the Proposed Action. Differences would be that the footprints of Alternatives #2 and #3 would permanently impact approximately 1 acre to 2 acres less land than the Proposed Action. Additionally, both of these alternatives include a small stormwater detention pond that

could be used by aquatic wildlife and colonized by aquatic and wetland vegetation. However, these ponds are not likely to provide quality habitat for rare species because they would be generally constructed with steep banks and would be too deep to be desirable for foraging by most wading birds, including the wood stork. The ponds that would be constructed under these alternatives potentially could increase the attractiveness of the site as habitat for the eastern indigo snake. However, the small size of the ponds and the site relative to the habitat area required by the snake and the proximity of the site to development, minimize the likelihood that an indigo snake would occur there. Thus, the potential for the indigo snake to be adversely affected by Alternatives #2 and #3 is discountable, and other endangered or threatened species would not be affected.

3.10 TRANSPORTATION

3.10.1 Existing Conditions

3.10.1.1 Roadways

Roads in the vicinity of Homestead ARB change names frequently. Consequently, different maps may employ different road names for the same street. Often, a map may list one road name, but the mailing address for a business is listed under an alternate name for the same roadway. For clarity, the Metrobus route maps use dual road names for some roads. To maintain consistency within the document, roads in the project vicinity will be referenced as they labeled on Figure 3-5.

On most maps, SW 288th Street becomes Bougainville Boulevard east of SW 127th Avenue. The current Contractor Gate and entrance to Homestead ARB is located on Westover Street. On some maps, west of Westover Street, SW 288th Street becomes Biscayne Drive; however, businesses along that portion of the roadway continue to use the SW 288th Street address. For the purposes of this EA the roadway will be referred to as SW 288th Street west of the intersection with SW 127th Avenue and Bougainville Boulevard east of the intersection with SW 127th Avenue. Bordering the eastern side of the project area is SW 127th Avenue. At the intersection with SW 288th Street, as it enters Homestead ARB at the Old Main Gate, SW 127th Avenue becomes Coral Sea Boulevard. Currently, this street is barricaded at the Old Main Gate so there is no through traffic onto base via Coral Sea Boulevard.

Three other roadways are important for the environmental analysis. Southeast of the northeastern corner of the project site is St. Nazaire Boulevard (also known as SW 285th Street). Approximately 1,500 ft east of the beginning of St. Nazaire Boulevard at SW 127th Avenue, St. Nazaire Boulevard intersects with Ramey Avenue (also known as SW 124th Avenue), which terminates at Bougainville Boulevard. Approximately 1,250 ft west of Westover Street, SW 288th Street intersects with SW 132nd Avenue (alternately known as Pine Island Road). All relevant roadways and the designations used in this EA are depicted in Figure 3-5.

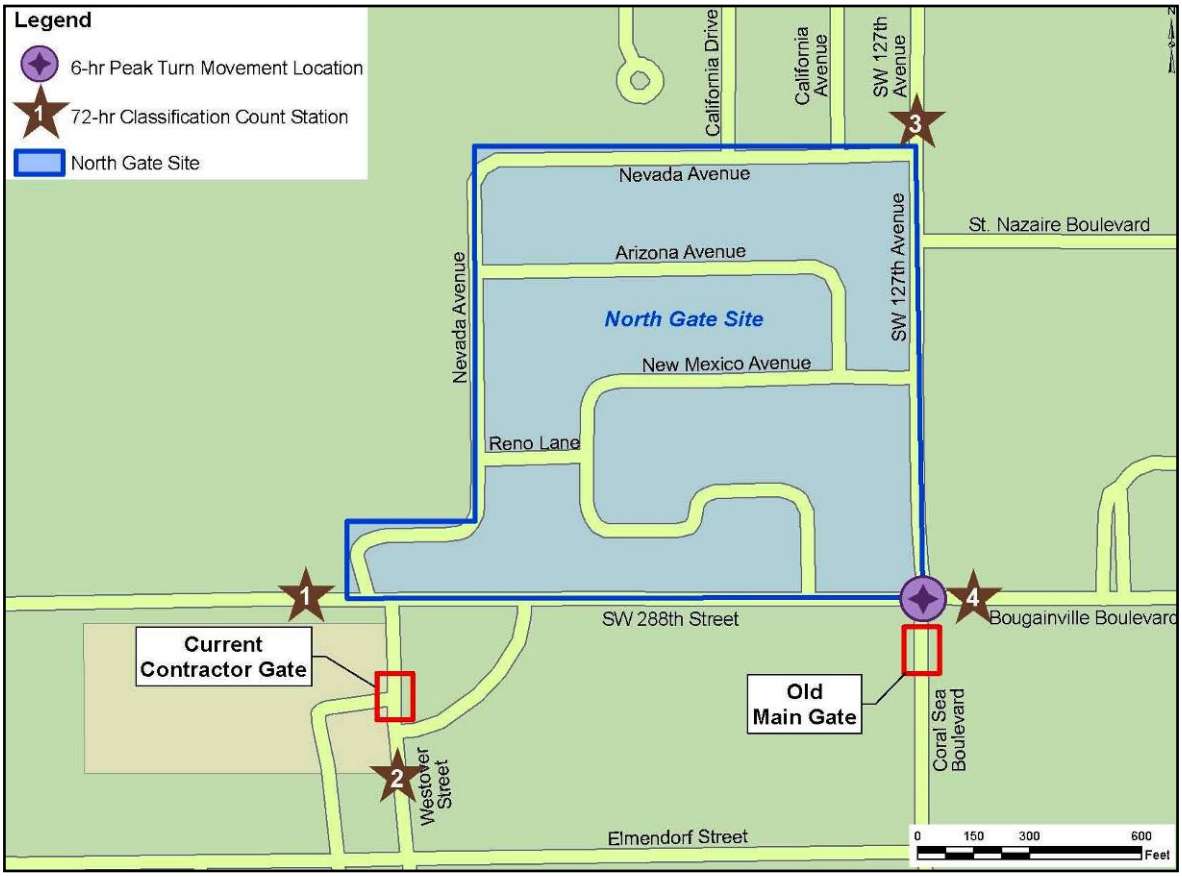

Figure 3-5. Traffic Study Count Location Map

3.10.1.2 Public Transportation

Miami-Dade County's Metrobus Route 70 traverses and includes numerous bus stops along SW 132nd Avenue, SW 288th Street, Ramey Avenue, and St. Nazaire Boulevard. Bus stops that could potentially be impacted by the Proposed Action are depicted on Figure 3-6 and described below:

- Ramey Avenue at the entrance to the northern portion of the Job Corps Campus (with an average of 13 daily boardings or alightings);
- Slightly west of the intersection of Ramey Avenue and SW 288th Street/Bougainville Boulevard near the 1st National Bank of South Florida (with an average of 37 daily boardings or alightings); and
- On the northeast and southwest corners of SW 288th Street/Bougainville Boulevard and SW 127th Avenue, outside of the Old Main Gate (with an average of 6 daily boardings or alightings) (Garcia 2010).

Buses traverse this route approximately every half-hour from 6 AM to 10 PM on weekdays, every hour from 6 AM to 10 PM on Saturdays, and every hour from 6 AM to 9 PM on Sundays. Currently MDT provides daily bus service to approximately 46 passengers in the project area. The majority of these transit users are students at the Homestead Job Corps (LaFerrier 2010; Garcia 2010).

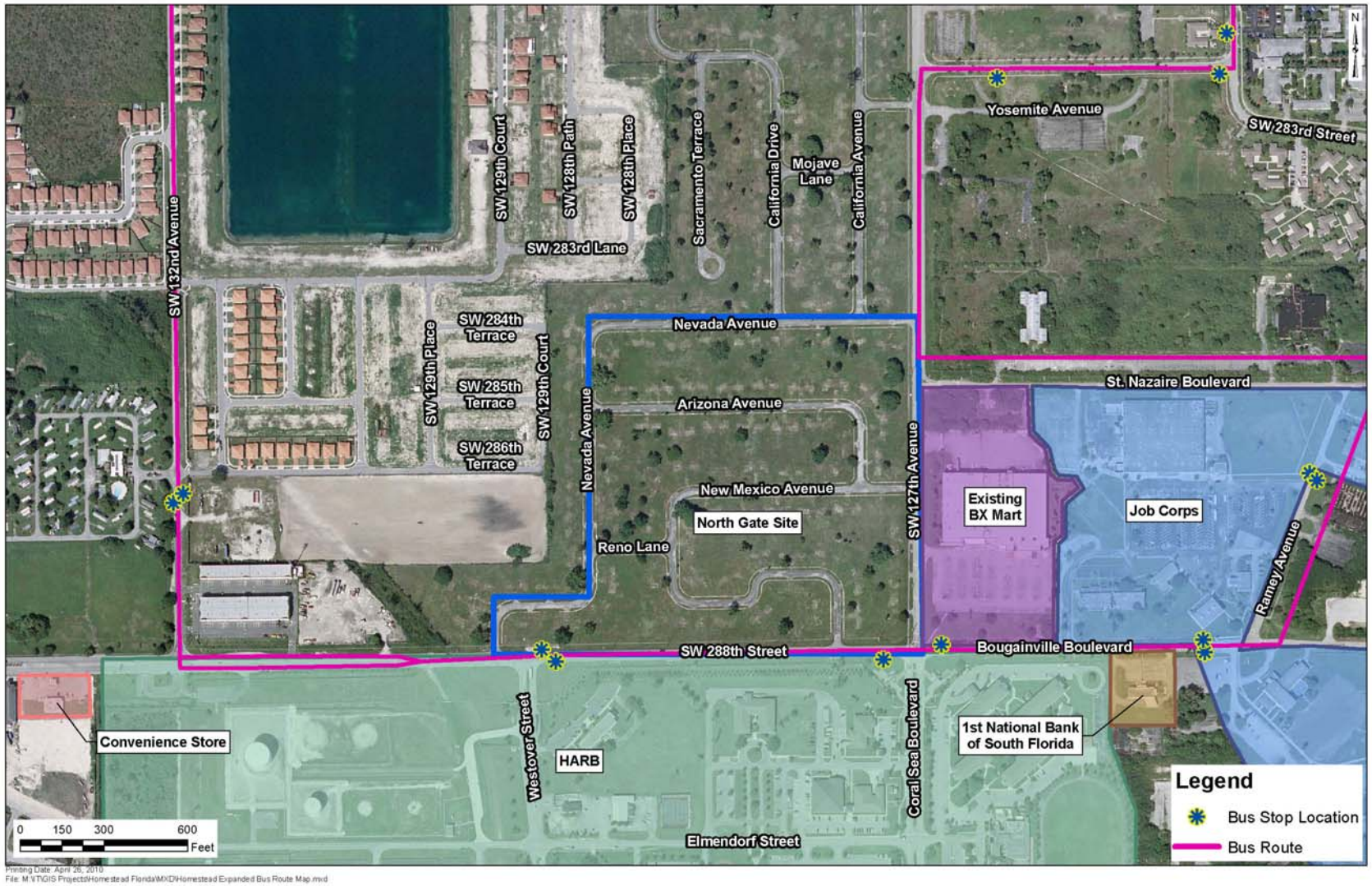

Figure 3-6. Existing Miami-Dade County Transit Metrobus Route 70 and Bus Stops in the Project Vicinity

3.10.2 Traffic Study

The purpose of this EA is to evaluate alternatives for new entry gate facilities at Homestead ARB that would accommodate the current mission/tenants and anticipated future increases in gate traffic. A traffic analysis was conducted to evaluate the potential impacts to transportation from each alternative. Though the exact gate complex configuration and features presented for the Proposed Action and each alternative is preliminary and subject to minor changes, a general analysis of traffic flow and intersection configurations provides quantitative data through which the impacts to transportation can be analyzed and compared.

3.10.2.1 Traffic Study Methodology

Four automated tube traffic count locations were selected near the project area based on existing traffic patterns (Figure 3-5). These count stations collected data for over 72 hours during the work week (Tuesday through Thursday) using pneumatic tube counters. Two sites were placed along SW 288th Street/Bougainville Boulevard, one along SW 127th Avenue, and one on Westover Street on Homestead ARB property. The western-most count site (Station #1) was installed on SW 288th Street west of Nevada Avenue and Westover Street. Station #2 was positioned on base, just inside the Contractor Gate on Westover Street to capture daily base ingress and egress values. A third station (station #3) was located on SW 127th Avenue, north of its intersection with Nevada Avenue and approximately 0.25 miles north of the 6-hour peak turn movement location shown on Figure 3-5. The final count site was setup on Bougainville Boulevard, approximately 200 ft from the intersection with SW 127th Avenue (station #4). These locations were carefully chosen to best identify the existing traffic patterns and also to identify future traffic patterns with the proposed road realignment.

In addition to the four 24-hour tube count stations, one manual count station was utilized to determine the turn percentages at the intersection of SW 288th Street/Bougainville Boulevard and SW 127th Avenue. Manual counts were collected during three 2-hour peak periods (morning, noon, and evening) on a single weekday.

3.10.2.2 Turning Movement Calculation Methodology

The turn percentages at the entrance (the intersection of SW 288th Street and Westover Street) were calculated using the area's ingress and egress traffic volumes, the entrance volumes to the base, and the turning percentages at the intersection of SW 288th Street/Bougainville Boulevard and SW 127th Avenue. These locations were chosen because it is anticipated that these calculated turn percentages would likely correspond to the turn percentages that would occur at the new entrance intersection. Those percentages were used to determine the AM peak volumes for the Highway Capacity Software (HCS) HCS+ version 5.21 model inputs.

3.10.2.3 Traffic Analysis Existing Conditions

Analysis of the traffic data revealed that the predominant traffic flow into the area is the east-west movement along SW 288th Street/Bougainville Boulevard. The other significant traffic flow into the area is the north-south movement along SW 127th Avenue. Average daily traffic

(ADT) volumes for SW 288th Street at Station #1 were 4,875 in the eastbound direction and 4,526 in the westbound direction. At Station #2 (on base), ADT volumes were 2,241 and 2,490 in the southbound and northbound directions, respectively. The ADT volumes decrease significantly with ADT volumes of 610 and 585 for eastbound and westbound, respectively, at Station #4 on Bougainville Boulevard. Station #3 on SW 127th Avenue had ADT volumes of 2,668 and 3,185 in the southbound and northbound directions, respectively. Most vehicle-through traffic from SW 288th Street appears to turn onto SW 127th Avenue rather than continuing east along Bougainville Boulevard. Those vehicles that continue east are most likely FLARNG personnel en route to and from their facility located southeast of Homestead ARB, 1st National Bank of South Florida staff and customers, and Job Corps staff, students, and visitors.

Three distinctive peaks were noted throughout the day with the morning peak (AM Peak) consistently the heaviest concentration during the day. Because the AM Peak was observed to be the heaviest period in the day, the AM Peak was selected as the most conservative (worst-case) scenario to model capacity and delay for the proposed alternative configurations. It should also be noted that the roadway network AM Peak began over an hour after the entrance AM Peak (measured at Station #2) commenced. The entrance AM Peak was observed to begin between 6:15 AM and 6:45 AM while the network AM Peak began between 7:30 AM and 7:45 PM.

The existing intersection of SW 288th Street and Westover Avenue was analyzed using the HCS all-way stop-controlled model to provide a baseline comparison for the analysis of different entrance configurations. The initial analysis shows that using stop signs to regulate the traffic flow at this intersection provides an unacceptable traffic control situation in the eastbound approach. The eastbound and westbound approaches of SW 288th Street would have approach delays of 59.15 and 28.48 seconds per hour, respectively and an overall intersection delay of 38.83 seconds per hour. These delays translate to a level of service (LOS) of F and D for the approaches and E for the overall intersection. Table 3-5 below is the summary of the model output and the complete output file is in Appendix B.

Table 3-5.
LOS Summary All-Way Stop at the Existing Entrance

Street & Flow Direction	Lane	Delay (sec/vehicle)	Movement LOS	Approach Delay/LOS	Overall Delay/LOS
288th EB	THRU	77.11	F	F	38.83 E
288th EB	RT	12.71	B		
Westover NB	LT	18.14	C	C	
Westover NB	RT	11.65	B		
288th WB	THRU	34.00	D	D	
288th WB	LT	14.60	B		

EB = eastbound; WB = westbound; NB = northbound; RT = right turn; LT = left turn.

3.10.3 Discussion of Impacts

3.10.3.1 No Action Alternative

Since no new entry gate complex would be constructed at the North Gate Site, the existing conditions described in Section 3.10.1 would continue. Impacts to transportation under the No Action Alternative would continue to be adverse due to the congestion on SW 288th and Westover Streets caused by the inadequacy of the Contractor Gate. Anticipated future increases in gate traffic would exacerbate the congestion and would pose an increasing traffic safety concern. Adverse impacts to public transportation may include delays in Metrobus Route 70 due to the increased congestion along SW 288th Street near Westover Street.

3.10.3.2 Proposed Action (Alternative #1)

To determine the potential impacts to transportation as a result of the Proposed Action it was necessary to analyze two intersections. The first was the intersection of the realigned SW 288th Street and SW 127th Avenue which would be moved north to the current intersection of Nevada Avenue and SW 127th Avenue. Coral Sea Boulevard would be extended northward to intersect with SW 288th Street for the new entry gate complex. The second intersection for analysis was the Contractor Gate at the existing SW 288th Street and Westover Street intersection, approximately 200 ft to the west of the intersection of the existing SW 288th Street/Bougainville Boulevard and SW 127th Street. The traffic study was conducted relative to the initial proposed configuration for Alternative #1 (Figure 3-7). With respect to the revised Alternative #1, the majority of the conclusions from the initial study would still apply. A new traffic study analyzing the revised four-way stop at the intersection of the realigned SW 288th Street, SW 127th Avenue, and St. Nazaire Boulevard would be conducted as part of the final design process for the new entry gate complex. As this revised intersection was proposed by the county as the preferred form, it is anticipated that there would be no significant impacts associated with this alignment.

Additionally, because the final configuration of the new entry complex has not yet been determined, it was necessary to analyze three possible traffic control configurations for the entrance intersection to determine the full range of potential impacts.

The intersection of the realigned SW 288th Street to SW 127th Avenue was analyzed using the HCS all-way stop-controlled model. Analysis shows that using stop signs to regulate the traffic flow at this intersection provides an acceptable traffic control situation. The southbound (along SW 127th Avenue) and eastbound (along SW 288th Street) approaches would have approach delays of 16.0 seconds and 17.8 seconds, respectively, and an overall delay of 16.87 seconds. These delays translate to a LOS of C. LOS ratings are based on the delay per vehicle per second and range from “A” (no delays) to “F” (unacceptable delays and congestion). An LOS rating of C is considered to be stable traffic flow, though it is susceptible to congestion. Table 3-6 below is the summary of the model output and the complete output file is in Appendix B.

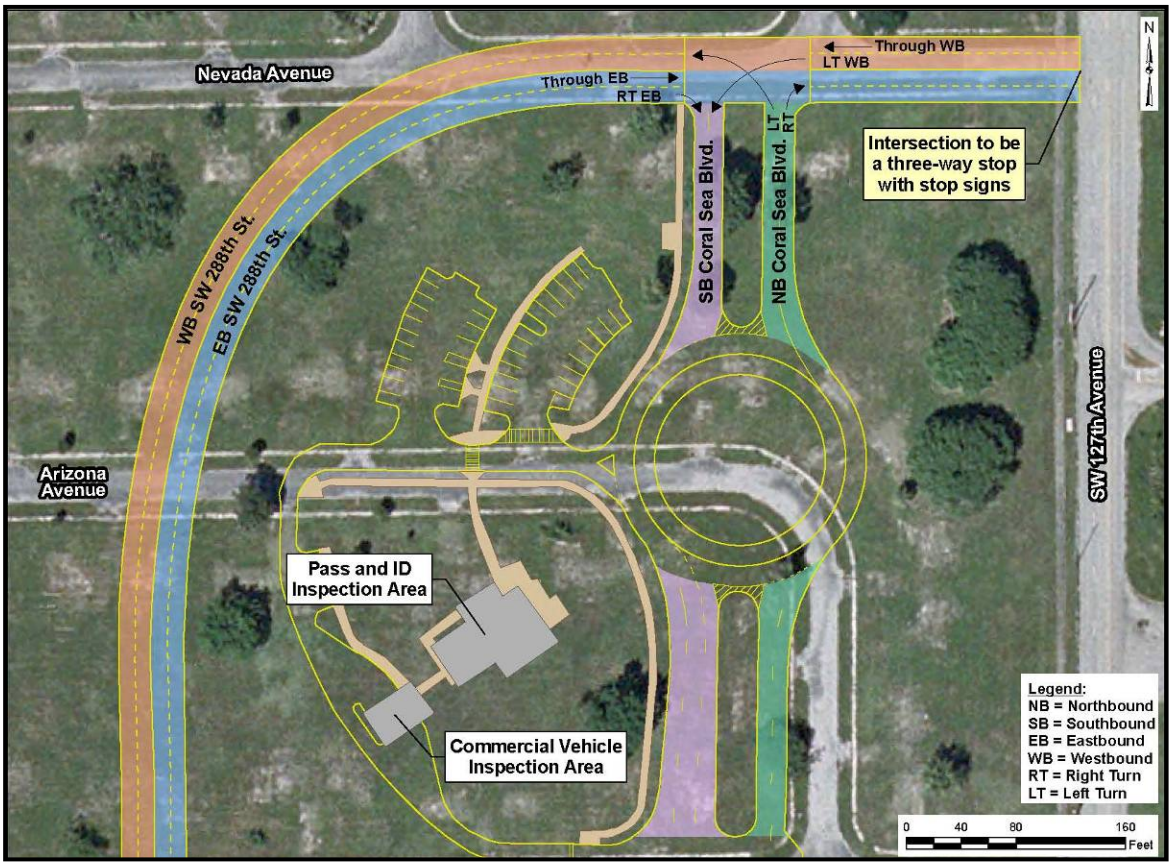

Figure 3-7. Proposed Traffic Movement Diagram based on the Preliminary Design for Alternative #1 (Additional traffic analyses would be conducted for the revised configuration during the final design phase.)

Table 3-6.
LOS Summary All-Way Stop at SW 127th Avenue

Street & Flow Direction	Lane	Delay (seconds per vehicle)	Movement LOS	Approach LOS	Overall Delay/LOS
127th SB	Thru	17.42	C	C	17.81 C
127th SB	RT	9.55	A		
127th NB	Thru/LT	10.60	B	B	
288th EB	LT	23.16	C	C	
288th EB	RT	9.66	A		

EB = eastbound; SB = southbound; NB = northbound; RT = right turn; LT = left turn.

The next intersection analyzed was the proposed main entrance onto Homestead ARB which would be located along the realigned SW 288th Street. This intersection has significant turn (vehicles entering the base) and through (vehicles not entering the base) volumes which makes it difficult to use stop-control traffic devices. Three different control configurations were analyzed.

Two-Way Stop Control Intersection Analysis

Since the primary traffic movements along the realigned SW 288th Street are through vehicles that are not entering the installation, a two-way stop control configuration with stop signs posted inside the new gate on both sides of northbound Coral Sea Boulevard was modeled. The eastbound and westbound through traffic on SW 288th Street would cross the intersection unimpeded, but the left and right turns entering and leaving the base experience long delays. The left turn vehicles coming from the north (southbound SW 127th Avenue traffic that turns right onto the realigned SW 288th Street then turns left onto Coral Sea Boulevard) would have some queuing as those vehicles would have to yield to the eastbound traffic to be able to make the turn southbound onto Coral Sea Boulevard to the new gate. Table 3-7 below is the summary of the model output and the complete output file is in Appendix B.

The delay associated with the northbound left turns along Coral Sea Boulevard would create a queue of nearly 25 vehicles (625 ft). This is not recommended as the lengthy queue would interfere with gate operations.

Table 3-7.
Two-Way Stop Summary at New Entrance

Street & Flow Direction	Lane	Delay (seconds per vehicle)	Movement LOS	Overall Delay/LOS
288th WB	LT	10.1	B	216.3 F
Coral Sea Blvd NB	LT	325.6	F	
Coral Sea Blvd NB	RT	13.9	B	

WB = westbound; NB = northbound ; RT = right turn; LT = left turn.

All-Way Stop Control Intersection Analysis

An all-way stop control configuration, with stop signs posted on both the eastbound and westbound sides of SW 288th Street and on northbound Coral Sea Boulevard, performs marginally well. The poorest performance is for eastbound through vehicles and westbound left turn vehicles on the realigned SW 288th Street. Eastbound through traffic experiences an undesirable delay of 64.43 sections per vehicle with an LOS rating of F. Table 3-8 below is the summary of the model output and the complete output file is in Appendix B.

Table 3-8.
All-Way Stop Summary at New Entrance

Street & Flow Direction	Lane	Delay (seconds per vehicle)	Movement LOS	Approach Delay/LOS	Overall Delay/LOS
288th EB	THRU	64.43	F	54.15 F	34.53 D
288th EB	RT	11.81	B		
Coral Sea Blvd NB	LT	17.65	C	15.47 C	
Coral Sea Blvd NB	RT	11.45	B		
288th WB	LT	14.13	B	20.73 C	
288th WB	THRU	23.77	C		

EB = eastbound; WB = westbound; NB = northbound; RT = right turn; LT = left turn.

Although the overall LOS rating for the intersection is marginally acceptable for this configuration, the critical movement is at failure for the eastbound through vehicles. This approach is not recommended as the delay for the eastbound through movements is unacceptable.

Signalized Intersection Analysis

Since both configurations of a stop-controlled intersection resulted in unfavorable results, the next approach was to explore a signalization option at this intersection. There are eight warrants or conditions that are evaluated when considering implementation of a signalized intersection: eight-hour vehicular volume, four-hour vehicular volume, peak hour conditions or volume, pedestrian volume, school crossing, coordinated signal system, crash experience, or roadway network. Conditions at the new gate intersection for the proposed alternative meet three of these warrants, eight-hour vehicular volume, four-hour vehicular volume, and peak hour conditions. Therefore, there are grounds for consideration of a signalized intersection.

The signal timing planning module of the HCS model showed that a 3-phase, 60-second cycle timing plan would be the most optimal approach given the measured conditions. There are three approaches at the entrance intersection: westbound and eastbound along SW 288th Street, and northbound along Coral Sea Boulevard. In the 3-phase signal cycle, the left turn and through traffic from westbound SW 288th Street would be one phase while traffic from the other two directions is stopped. During the second phase, right turn and through traffic from eastbound SW 288th Street would proceed while the traffic from the other two directions is stopped. Finally in the third phase, left and right turn traffic from northbound Coral Sea Boulevard (exiting the base) would progress while through and left turn traffic on SW 288th Street (both directions) is stopped. The cycle length for all three phases to complete would be 60 seconds. With this configuration, the intersection should perform well with an overall LOS rating of B. Table 3-9 below is the summary of the model output and the complete output file is in Appendix B.

Table 3-9.
Signalization Summary at New Entrance

Street & Flow Direction	Lane	Delay (seconds per vehicle)	Movement LOS	Approach Delay/LOS	Overall Delay/LOS
288th EB	THRU	17.7	B	13.9	
288th EB	RT	3.3	A	B	
Coral Sea Blvd NB	LT	31.9	C	28.9	17.9
Coral Sea Blvd NB	RT	22.6	C	C	B
288th WB	LT	40.2	D	16.1	
288th WB	THRU	5.0	A	B	

EB = eastbound; WB = westbound; NB = northbound; RT = right turn; LT = left turn.

Summary of Impacts for the Proposed Action (Alternative #1)

Two intersections and three potential intersection traffic control configurations for the new gate complex were analyzed to determine the potential impacts to transportation as a result of the Proposed Action. The intersection of SW 127th Avenue and the realigned SW 288th Street works adequately with an all-way stop at that location. Lane configurations may need further investigation as the short distance between the two new intersections (the intersection of SW 288th Street and SW 127th Avenue and the intersection of SW 288th Street and Coral Sea Boulevard) may cause weaving to position the vehicles in the optimal lane for the desired movement (left turn, right turn, or through movement). Possible configurations include a right turn lane and a shared right and through lane in the southbound approach on SW 127th Avenue. Since the left turn volume is more than double the right turn volumes along the realigned SW 288th Street eastbound approach, the configuration of a left turn lane and a shared left and right turn lane may ease the weaving of traffic into the left hand lane of that approach. If a dual left lane is used, the northbound lane along SW 127th Avenue would require two receiving lanes which would merge into one to handle the incoming vehicles.

Both the two-way stop and all-way stop models at the new main entrance intersection produced high delays and LOS F results and therefore are not recommended to be used at this location. This is due to the high volumes of westbound left turns and opposing eastbound through volumes that are projected at this intersection. Under the Proposed Action, signalization at that location would best serve the egress and ingress gate traffic without comprising the through movements. The main entrance intersection met three of the eight warrants to justify signalization at this location.

Whichever option is used for either of the intersections, consideration for heavy trucks is critical especially for the main entrance intersection. Nearly 12% of the gate traffic traveling onto base were trucks and half of those trucks were heavy trucks with multiple axles. Intersection geometry must accommodate the turn radii of a 50-ft long tractor trailer truck (WB-50 vehicle).

3.10.3.3 Alternatives #2 and #3

The Proposed Action includes a roundabout intersection approximately 200 ft south of the entrance intersection which helps vehicles move westward into the security/permit parking area without impeding egress and ingress gate traffic. An analysis of a two-lane roundabout placed along the realigned SW 288th Street as depicted in Alternatives #2 and #3 was performed using SIDRA version 4.0 software. This analysis showed that a roundabout at the intersection of SW 288th Street and Coral Sea Boulevard would function better than a traffic signal at this intersection. An intersection overall LOS of A could be obtained using a roundabout as compared to the LOS of C obtained with the signalized intersection as described for the Proposed Action. Table 3-10 presents the summary of the model output. The complete model output files can be found in Appendix B.

Table 3-10.
Roundabout Summary at New Entrance

Street & Flow Direction	Lane	Delay (seconds per vehicle)	Movement LOS	Approach Delay/ LOS	Overall Delay/ LOS
SW 288th EB	THRU	7.6	A	6.5	
SW 288th EB	RT	3.5	A	A	
Coral Sea Blvd NB	LT	21.0	C	17.6	8.5
Coral Sea Blvd NB	RT	11.3	B	C	A
SW 288th WB	LT	4.7	A	4.9	
SW 288th WB	THRU	5.0	A	A	

EB = eastbound; WB = westbound; NB = northbound; RT = right turn; LT = left turn.

The roundabout would work regardless of the orientation of the entrance facility as the traffic volumes would remain the same. The model analysis showed that a roundabout at the entrance intersection outperforms a signalized configuration since the roundabout has a lower overall delay and better level of service. Use of a roundabout is also preferential for truck traffic due to the decrease in stop delays and slow acceleration associated with stop-controlled or signalized intersections.

3.10.3.4 Impacts to Roadways from All Alternatives

Under all alternatives, portions of SW 288th Street/Bougainville Boulevard and SW 127th Avenue would be permanently blocked. Private and public transportation would be required to use alternate routes. This change in accessibility may add a few minutes of transit time for private vehicles eastbound on SW 288th Street to reach destinations on Bougainville Boulevard, or for vehicle traveling westbound on Bougainville Boulevard to reach destinations east of 127th Avenue. The added travel distance through the North Gate Site would be expected to add only a few minutes to the travel time for private vehicles and would therefore have a minor adverse impact.

3.10.3.5 Impacts to Public Transportation from All Alternatives

Miami-Dade County Metrobus Route 70 would have to be re-routed around the New Gate Site. Impacts to the bus route would be similar for each alternative; therefore, these impacts are analyzed together.

The two bus stops at the current intersection of SW 288th Street and SW 127th Avenue (Figure 3-7) were likely placed for convenience at the Old Main Gate entrance for Homestead ARB. These bus stops could be relocated and placed adjacent to the new North Gate with no anticipated adverse impacts to public transportation for this portion of Route 70.

Moving the intersection of SW 288th Street and SW 127th Avenue to the north and closing portions of both roads would cut off the Bougainville Boulevard, Ramey Avenue, and St. Nazaire Boulevard portions of Mertobus Route 70 (Figure 3-8).

Metrobus access for the 1st National Bank of South Florida and the Job Corps would be disrupted, which would have the potential of adversely impacting these businesses and the Job Corps students by removing their access to public transportation as discussed in Section 3.4.2 unless an alternative route could be designed. Implementation of an adjusted route could potentially adversely impact timing and accessibility on other portions of the route to ensure that the regular half-hour on weekdays and the regular hour on weekends schedules are maintained. Homestead ARB would need to consult with Miami-Dade Transit (MDT) to determine ways to mitigate the potentially significant adverse impacts to Metrobus Route 70 both during design and construction of the new entry gate complex.

Possibilities for re-routing Route 70 could include: converting a portion of the parking lot of the BX mart to a surface street, routing the bus through the parking lot at the Homestead Job Corps, routing the bus along South Lo Boulevard, or improving the road that runs along the east side of the BX and connects St. Nazaire and Bougainville Boulevards,. These possible route diversions are depicted in Figure 3-8 and discussed in the following sections. In each case, the routes would diverge from the original route at the same point that SW 288th Street is realigned. The diverted routes would rejoin the original route north of Nevada Avenue.

Possible Redirected Bus Route A

Because of Homestead ARB's intention to turn the BX mart over to the county, and the county's expressed interest in converting the facility into an emergency supply processing facility, it is likely the parking lot on the south side of the facility would not be needed at its current capacity. It is possible that a portion of the parking lot could be converted into a city street to allow traffic to connect from SW 127th Street to Bougainville Boulevard. In this scenario, a northbound bus would traverse east along SW 288th Street to southbound SW 127th Avenue, route south to the current parking lot entrance for the BX mart traveling through the portion of the lot converted to a surface street and exiting onto Bougainville Boulevard while resuming the original route (Figure 3-8). This scenario would allow the continued use of the bus stops adjacent to the 1st National Bank of South Florida and the Job Corps. This possible scenario may add a few minutes to the route, particularly if a signalized intersection is employed at the North Gate entrance. The eastern exit of the parking lot connecting to Bougainville Boulevard is currently barricaded. The barricades would need to be removed if this alternative were to be used. It is anticipated that this alternative would cause minimal to no adverse impacts to the timing along the route. In a letter dated 11 March 2010, MDT indicated this was the most desirable of the possible routes presented in the Draft EA. For such a route to be viable, a road would have to be constructed that would avoid sharp turns in short distances to accommodate the turning radius of the 40-ft buses. MDT proposed a more gradual veering turn might be acceptable. Because construction of such a road is not in the Miami-Dade Metropolitan Planning Organization's Year 2010 Transportation Improvement Plan, MDT's 2009 Ten-Year Improvement Plan for FY 2010-2019, or in the 2035 Long Range Transportation Plan, there may be adverse financial impacts to the county or MDT to cover the costs of such road improvements (Garcia 2010).

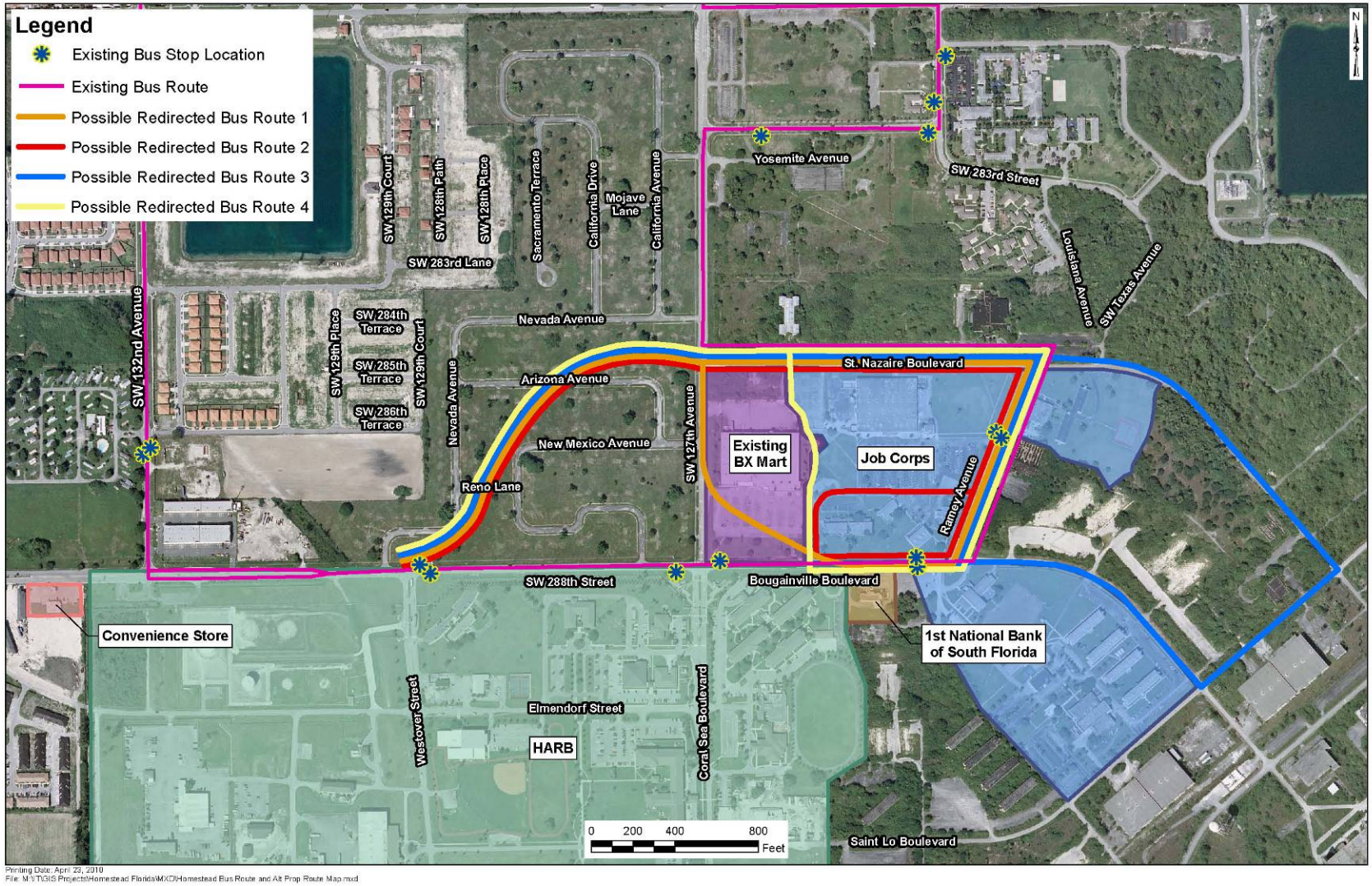

Figure 3-8. Possible Redirected Metrobus Routes

Possible Redirected Bus Route B

Another alternative route may be for the Metrobus to traverse east on St. Nazaire Boulevard, turn south along Ramey Avenue, turn west at the southern entrance to the Job Corps parking lot and traverse that street around to Bougainville Boulevard. The bus would travel along Bougainville Boulevard back to Ramey Avenue (Figure 3-8). This routing would allow the preservation of the bus stops adjacent to the 1st National Bank of South Florida and the Job Corps, and perhaps increased the Job Corps accessibility to the route. Homestead ARB and Miami-Dade Transit would need to enter consultation with the Job Corps to determine the feasibility of this possible route. It is possible Job Corps would welcome the increased accessibility to buses, especially if a bus stop could be added to the interior of the campus. However, it is also possible that routing the buses through the campus could cause adverse impacts to the operations of the campus and cause safety concerns rendering the scenario untenable. This routing alternative would likely add a few minutes to the route schedule causing potential minor impacts to the whole route. It is possible these additional minutes could be absorbed into the schedule without causing significant disruption to the route. In the 11 March 2010 letter, MDT indicated that use of a circular loop would increase the time required to operate the buses and would adversely impact the timing and operations on the entire bus route. MDT also expressed concern that operating a route through the campus would present safety issues, disrupt campus operations, or that campus functions might disrupt the bus service (Garcia 2010).

Possible Redirected Bus Route C

The final alternative to preserve route access for the 1st National Bank of South Florida and the Job Corps is for the bus to route from St. Nazaire Boulevard down Ramey Avenue to Bougainville Boulevard, east to South Lo Boulevard, and back up to St. Nazaire Boulevard (Figure 3-8). In this scenario, the bus stop adjacent to the 1st National Bank of South Florida would need to be relocated to the intersection of Ramey Avenue and Bougainville Boulevard. Currently public through traffic on South Lo Boulevard is barred by the county; therefore, Homestead ARB, Miami-Dade Transit, and Miami-Dade County representatives would need to discuss the feasibility of this alternative. This scenario would add the greatest amount of time to the route and cause the greatest potential adverse impacts to the scheduling of the remainder of the route. In the 11 March 2010 letter, MDT expressed concern that this suggested route would cause significant adverse impacts to the bus route schedule due to the additional time and travel distance required, a distance over which no new stops would be added or needed (Garcia 2010).

Possible Redirected Bus Route D

In consultation with various Miami-Dade County departments on 9 April 2010, MDT suggested an additional possible revised bus route. In this case, buses would enter St. Nazaire Boulevard from the realigned SW 288th Street and turn into an improved roadway that runs east of the BX Mart. This road connects to Bougainville Boulevard upon which point the bus would resume the original route. This possible route adjustment would allow the continued operation of the majority of the existing bus stops and would not cause significant adverse impacts to the timing of the bus route. Because improvement of the existing road (which is not capable of supporting bus traffic) is not in the Miami-Dade Metropolitan Planning Organization's Year 2010

Transportation Improvement Plan, MDT's 2009 Ten-Year Improvement Plan for FY 2010-2019, or in the 2035 Long Range Transportation Plan (Garcia 2010), there may be adverse financial impacts to the county or MDT to cover the costs of such road improvements.

Ultimately the decision regarding adjustments to Metrobus Route 70 in response to the proposed action will be the choice and responsibility of the County. These possibilities are presented here simply as part of the impacts analysis. Additionally, other possible route adjustments may be identified in the future.

3.11 AIR QUALITY

Air quality is defined in a regulatory sense in terms of attainment status relative to national and state standards and other factors. The CAA, which was last amended in 1990, requires the USEPA to set the primary and secondary National Ambient Air Quality Standards (NAAQS) for widespread pollutants considered harmful to public health and the environment. The USEPA has set NAAQS for six principal pollutants, called "criteria" pollutants. They are ozone (O_3), particulate matter less than 10 microns in diameter (PM_{10}), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen oxides (NO_x), and lead (Pb).

Under the CAA, state and local agencies may establish ambient air quality standards and regulations of their own, provided these are at least as stringent as the federal requirements. The USEPA has designated the FDEP as the lead agency for enforcing federal laws and regulations dealing with air pollution in Florida. Air quality rules in Florida are specified in the Florida Administrative Code (FAC) Chapter 62-204, Air Pollution Control – General Provisions.

The USEPA designates areas of the U.S. based on how they meet the NAAQS: *Nonattainment* – does not meet the national primary or secondary ambient air quality standard for the pollutant; *Attainment* – meets the standard for the pollutant; *Unclassifiable* – cannot be classified on the basis of available information as meeting or not meeting the standard. A *maintenance area* is a geographic region designated as "nonattainment" and subsequently re-designated as "attainment" subject to the requirements of a maintenance plan.

According to federal law, each state has to develop a State Implementation Plan (SIP) that explains how they will implement the CAA requirements. The Florida SIP consists of USEPA approved Florida air quality rules and revisions contained in FAC Chapter 62, specific air quality maintenance plans, and supporting documentation.

3.11.1 Existing Conditions

Homestead ARB is located in Miami-Dade County, Florida in the Southeast Florida Intrastate (SEFI) Air Quality Control Region (ACQR). The SEFI ACQR is in attainment for meeting the national and state ambient air quality standards for the criteria pollutants. No activities have occurred on the site since the demolition of the former residential neighborhood on the North Gate Site was completed. Since no activities are currently being conducted on the project site and because access to the property is being controlled, there are no air quality emissions being generated at the proposed location.

3.11.2 Discussion of Impacts

Air emissions resulting from the No Action Alternative, Proposed Action, and Alternatives #2 and #3 were evaluated in accordance with federal and state air pollution regulations. The air quality impacts from a proposed activity or action are considered significant if they:

- Increase ambient air pollution concentrations above any NAAQS;
- Contribute to an existing violation of any NAAQS;
- Interfere with or delay timely attainment of NAAQS; or
- Impair visibility within any federally mandated Prevention of Significant Deterioration Class I area.

3.11.2.1 No Action Alternative

Under the No Action Alternative, the structures associated with the proposed entry gate complex would not be constructed and air emissions would remain the same as described under existing conditions. The current Contractor Gate was not originally designed to handle the volume of base traffic it experiences today, and the congestion and traffic back-ups (idling vehicles) that occur at this gate have localized adverse effects on air quality due to exhaust emissions. Given the likelihood of increased base traffic volumes in the near future, if the existing Contractor Gate remains the only fully operational entrance/exit for Homestead ARB, vehicle emissions likely would result in increased adverse effects on local air quality. Regional air quality effects under the No Action Alternative would be negligible.

3.11.2.2 Proposed Action (Alternative #1)

Following implementation of the Proposed Action, increases in air emissions in the project area would be expected during the construction period. These minor, temporary emissions could include 1) exhaust emissions from operations of various types of non-road construction equipment such as loaders, excavators, cranes, etc. and 2) fugitive dust due to earth disturbance. Exhaust emissions would be from mobile sources for which emissions performance standards are applicable to source manufacturers, and they are not regulated under the CAA air permit regulations. Therefore, it is not necessary to quantify these emissions given the lack of ambient emissions thresholds that could be used to make the determination of air quality impact significance from these mobile sources. The principal air quality concern associated with the proposed activities would be emission of fugitive dust near construction areas. The private autos used to access the work area would also contribute to air pollution in the project surrounding areas when traveling along local roads. However, site-specific construction effects are temporary and dust emissions would be controlled using standard BMPs.

3.11.2.3 Alternatives #2 and #3

Similar to the Proposed Action, air emissions during the construction period would be the primary air quality impact under Alternatives #2 and #3. Although the exact duration of construction for each alternative is unknown at this time, they are anticipated to be very similar; therefore, the impacts to air quality from Alternatives #2 and #3 would be the same as those

discussed under the Proposed Action. Site-specific construction effects are temporary and dust emissions would be controlled using standard BMPs.

3.12 HAZARDOUS MATERIALS AND WASTE MANAGEMENT

Hazardous material is any material that is not a waste; has been designated in the 49 CFR 172.101 Hazardous Materials Table; and has been determined by the U.S. Department of Transportation (DOT) to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Hazardous waste is defined under RCRA as any solid, liquid, contained gaseous, or semisolid waste, or any combination of wastes that could pose a substantial hazard to human health or the environment. Waste may be classified as hazardous because of its toxicity, reactivity, ignitability, or corrosivity. Certain types of wastes are "listed" or identified as hazardous in 40 CFR 263.

Hazardous Materials

Procedures and standards that govern the management of hazardous materials throughout the USAF, including Homestead ARB, are established in AFI 32-7086, *Hazardous Materials Management*. These procedures apply to all Homestead ARB personnel who authorize, procure, issue, use, or dispose of hazardous materials; and to those who manage, monitor, or track any of those activities.

Hazardous Wastes

The 482 MSG/CEV maintains a *Hazardous Waste Management Plan* (HWMP) for Homestead ARB as directed by AFI 32-7042, *Solid and Hazardous Waste Compliance* and USAF pamphlet 32-0743, *Hazardous Waste Management Guide*. The plan includes discussions on the waste stream inventory, waste analysis plan, hazardous waste management procedures, training, emergency response, and pollution prevention. The roles and responsibilities of appropriate Homestead ARB personnel are defined in this plan.

Also, contractors working at Homestead ARB must:

- Obtain 482 MSG/CEV approval for all hazardous materials/wastes used/generated on the installation;
- Ensure hazardous wastes are managed per 40 CFR and transported in accordance with 49 CFR to a certified disposal facility;
- Ensure proper labeling, handling, segregation, collection, and storage of hazardous waste;
- Ensure all personnel are properly trained for handling the hazardous waste they generate; and
- Ensure the 482 MSG/CEV is given notice when scheduling waste disposal requiring a manifest(s), before it is transported off installation.

Homestead ARB is a small-quantity generator of hazardous waste generating less than 1,000 kilograms of hazardous waste per month (USAF 2009). Activities at Homestead ARB that require the use and storage of hazardous materials are mainly associated with aviation and vehicle maintenance activities. Hazardous wastes generated on Homestead ARB are typically associated with operations and maintenance of the aircraft and vehicles including waste paint, solvent-contaminated rages, and dye penetrants (USAF 2009).

3.12.1 Existing Conditions

The North Gate Site is property of the county and pedestrian/vehicular access is prohibited. No activities have occurred on the site since the demolition of homes was completed. Given the land use history, controlled access, and periodic surveillance of the site, no hazardous materials or hazardous waste are present at the proposed location.

3.12.2 Discussion of Impacts

Hazardous materials and hazardous waste resulting from the No Action Alternative, the Proposed Action, and Alternatives #2 and #3 were evaluated in accordance with federal and state regulations.

3.12.2.1 No Action Alternative

Under the No Action Alternative, management of hazardous materials and wastes at Homestead ARB would continue as discussed above. Activities at the current entry complex do not generate hazardous wastes, and hazardous materials usage is confined to small quantities of liquids associated with office related tasks. Under the No Action Alternative, continued deterioration of the existing roadways on the North Gate Site and possible ACM pipe linings could constitute an adverse hazardous materials impact.

3.12.2.2 Proposed Action (Alternative #1)

Following implementation of the Proposed Action, a temporary increase in hazardous materials management on the North Gate Site would be expected during the construction period. According to base personnel, old water utility lines still present beneath the surface of the North Gate Site could potentially have ACM linings (Andrejko 2009a). The deed transfer of property requires "due care during property development activities that may uncover pipelines or other buried ACM" (USAF Real Property Agency 2005). In addition, during demolition of the residential structures between 1994 and 1996, lead-based paint chips and scrapings could have potentially been deposited into the surficial soil and this contaminated soil could be encountered during construction activities. Other hazardous materials could include various fuels, lubricants, solvents and oils associated with operation and maintenance of construction equipment. These activities would be subject to the reporting and monitoring requirements discussed above and all base contractors would be required to follow Homestead ARB's HAZMAT and spill prevention plans and protocols. Construction effects would be temporary and hazardous materials management activities would decrease back to the level experienced under the No Action Alternative.

A small amount of hazardous waste could be generated during site preparation/demolition if existing infrastructure on the North Gate Site (i.e., old roads, paint shavings, pipes) are found to contain ACM, lead-based paint, or other hazardous substances. If encountered, these materials would be collected and disposed of appropriately according to regulations. However, given the small footprint of the Proposed Action and the unlikelihood that demolition of existing infrastructure would be required during construction, it is not anticipated that implementation of the new entry gate complex would generate any hazardous waste.

3.12.2.3 Alternatives #2 and #3

Hazardous materials and hazardous waste management impacts from Alternatives #2 and #3 would be expected during the construction period. The exact nature and specific duration of the construction periods have not yet been determined, but would be expected to be similar to those of the Proposed Action. Therefore, impacts to hazardous materials and hazardous waste management under these alternatives would be the same as those described for the Proposed Action. Construction-related impacts would be temporary and hazardous materials management activities would return to the level described under existing conditions. Implementation of Alternatives #2 or #3 could also result in the discovery of small amounts of hazardous waste related to existing infrastructure on the North Gate Site. The small footprints of these alternatives and the fact that the removal of existing underground utilities is not anticipated at this time indicate that construction of either Alternative #2 or #3 would not generate any hazardous wastes.

3.13 SAFETY

The subject of safety encompasses many issues that directly affect the protection of human life and property. The predominant safety issues relevant to the Proposed Action at Homestead ARB involve the short term construction activities. Day-to-day operations at Homestead ARB are conducted in accordance with applicable USAF safety regulations, USAF technical orders, and standards prescribed by Air Force Occupational Safety and Health (AFOSH) requirements. These regulations prescribe measures, processes, and procedures to ensure safe operations and to protect the public, military, and property. These regulations govern all aspects of daily activity at the installation, and their applicability ranges from standard industrial and construction safety requirements (e.g., wearing of hard hats and safety clothing) to complex procedures concerning aircraft operations and maintenance of munitions.

Force protection is a security program designed to protect USAF personnel, civilian employees, family members, facilities, and equipment, in all locations and situations. The program is accomplished through the planned and integrated application of antiterrorism measures, physical security, operations security, and personal protective services. It is supported by intelligence, counterintelligence, and other security programs.

In response to terrorist attacks and the need to improve force protection, the DoD in the late 1990s required the development of antiterrorism/force protection (AT/FP) guidelines for new construction. That requirement was partially implemented in 1999 when the DoD promulgated AT/FP Construction Standards (DoD 1999) to ensure that force protection standards are

incorporated into the planning, programming, and budgeting for the design and construction of Military Construction (MILCON) funded facilities. These standards are integrated at Homestead ARB into the new construction and major renovation projects to which they apply. Force protection at Homestead ARB also is maintained through the use of entry gates to control access to the base. Vehicles enter and exit the base through one security checkpoint.

3.13.1 Existing Conditions

The project area is a 33-acre parcel previously used as enlisted housing for base personnel. The area was conveyed to the county by the USAF in 2004. The residential structures located in this area were demolished between 1994 and 1996. The North Gate Site is considered property of the county; therefore, both pedestrian and vehicular access is prohibited, secondary roads (Arizona Avenue, New Mexico Avenue, Nevada Avenue, and Reno Lane) have been barricaded, and "no trespassing" signs are posted along the perimeter. Miami-Dade County has provided regular maintenance of the property for the past few years, including periodic mowing and security patrolling by both county police and base security personnel (Andrejko 2009a). The parcel was used for parking during the November 2009 air show at Homestead ARB. No other known types of activities have occurred on-site since the demolition of homes was completed.

Current safety concerns at the proposed site include trespassers. Homeless persons have utilized the area in the past, particularly before the county began periodic maintenance activities. However, routine maintenance and regular patrolling of the North Gate Site has significantly reduced unauthorized access to the site. No additional safety issues exist at the proposed location.

3.13.2 Discussion of Impacts

3.13.2.1 No Action Alternative

Due to the extensive safety programs and measures currently in place at Homestead ARB, there is a low level of hazard to military and civilian personnel on the base and in the region. Under the No Action Alternative, safety procedures at Homestead ARB would continue as discussed above. General operational safety would continue to be maintained through adherence to existing safety regulations prescribing measures, processes, and procedures to ensure safe operations in all aspects of daily activity at the base. There could be indirect adverse impacts to safety under the No Action Alternative if the county fails to maintain and landscape the North Gate Site. Without regular maintenance and cultivation, the project area would become covered by dense growths of invasive, non-native plants which could present a fire hazard. In addition, an overgrown site would result in security concerns at the existing Contractor Gate.

3.13.2.2 Proposed Action (Alternative #1)

Implementation of the Proposed Action would result in an increased short-term risk associated with construction contractors performing work. Contractors would be required to establish and maintain safety programs in accordance with the requirements discussed above. Access to construction work areas would be controlled with fencing and appropriate signs would be posted to further reduce safety risks to outside personnel and the public. In the final design phase, Homestead ARB would need to consult with the Miami-Dade Fire Rescue Department to ensure the project design conforms with fire department access road requirements. With compliance to these regulations, no adverse impacts regarding fire hazards or public safety are expected to occur as part of the Proposed Action. Anticipated beneficial impacts for Homestead ARB include increased safety as a result of installation and operation of a redesigned entry control complex.

Current flight-safety practices, including airfield clearance requirements, airspace safety provisions and maintenance of safety zones at each end of the airfield, would not be affected by the Proposed Action. Airfield clearance requirements would not be affected. No aircraft safety zones (i.e., clear zones and accident potential zones) are within the vicinity of the Proposed Action. Therefore, significant safety impacts are not anticipated as a result of the Proposed Action.

3.13.2.3 Alternatives #2 and #3

As with other environmental resources, safety-related effects from Alternatives #2 and #3 would be temporary in nature, occurring primarily during the construction period. The exact designs and specific construction durations are unknown at this time, but given the similarities between the Proposed Action and Alternatives #2 and #3, they would be expected to be very similar. Therefore, impacts to safety from Alternatives #2 and #3 would be the same as those described for the Proposed Action. Significant direct or indirect impacts to safety are not anticipated as a result of the Alternatives #2 or #3.

3.14 NOISE

Noise is defined as unwanted sound that either prevents or interferes with daily human activities. The response of individuals to noise varies depending on the type of noise, the duration of the noise, the time of day, the location, and the type of activity underway that is being interrupted. The primary source of noise at Homestead ARB is aircraft operations. Table 3-11 relates decibel (dB) values to sounds commonly heard in our environment. The dB values presented in Table 3-11, and throughout this EA, are A-weighted levels. An A-weighted sound level of a noise represents the approximate frequency response characteristic of the average young human ear. The A-weighted sound level has been used extensively for the measurement of community and transportation noises.

The Air Installation Compatible Use Zone (AICUZ) program has been developed in an effort to protect local citizens from the noise exposure and accident potential associated with flying

activities and to prevent degradation of the USAF's capability to achieve its mission by promoting compatible land use planning.

Table 3-11.
Typical Decibel Levels of Familiar Sounds

dB	Sound
140	Airplane taking off
130	Power drill
120	Jet plane at ramp
110	Leaf blower, motorcycle
100	Loud rock band
90	Lawn mower, truck (50 ft)
80	City traffic, vacuum cleaner (5 ft)
70	Freeway traffic, freight train (100 ft)
60	Normal conversation
50	Light traffic (100 ft), large office
40	Quiet residential area
30	Soft whisper
20	Whispering (5 ft)
10	Normal breathing
0	Faintest audible sound

3.14.1 Existing Conditions

The North Gate Site is property of the county and pedestrian/vehicular access is prohibited. Secondary roads on-site have been barricaded, and "no trespassing" signs are posted along the perimeter. Miami-Dade County has provided regular maintenance of the property for the past few years, including periodic mowing and security patrolling by both county police and base security personnel (Andrejko 2009a). The site has been vacant since the residential neighborhood was demolished between 1994 and 1996; therefore, the noise at the project site consists of local traffic along perimeter roads (SW 288th Street and SW 127th Avenue) and nearby aircraft operation associated with Homestead ARB.

3.14.2 Discussion of Impacts

Operational and temporary construction impacts were considered in assessing the effects of the No Action Alternative, Proposed Action, and Alternatives #2 and #3 on noise. Operational impacts are defined as noise impacts associated with operations at the proposed location. Temporary construction impacts are defined as impacts that occur only during the construction of the facility.

3.14.2.1 No Action Alternative

Under the No Action Alternative, existing noise levels would remain the same as under current conditions. The No Action Alternative would have no significant adverse impact on the noise environment at the proposed location.

3.14.2.2 Proposed Action (Alternative #1)

Implementation of the Proposed Action would result in a temporary increase in noise associated with construction activities. The increase would be of a relatively short duration and would be limited to the area immediate to the construction zones.

Two types of construction noise would exist during construction: 1) site-work and demolition and 2) building construction. Site-work and demolition includes grading, paving, and pavement demolition activities. Building construction includes noises associated with typical building construction. Noise levels typical of equipment used in each category were used to determine a Day-Night Sound Level (Ldn). Noise impacts would actually vary over time as the Proposed Action progresses through different construction phases. The equipment and noise levels for each category are presented in Table 3-12.

Table 3-12.
Noise Levels of Construction Equipment

Project Category	Equipment	Sound Level (dB)*
Building Construction	Backhoe	93
	Hammer	95
	Portable Saw	102
Site-Work and Demolition	Bulldozer	96
	Backhoe	93

* Noise levels from "Construction Noise Hazard Alert" (The Center for Protection of Workers' Rights 2001). Presented in decibels in A-weighted scale and assumes human receivers adjacent to equipment. Sound levels shown are the upper end of the range.

In order to create a Ldn for each category it was assumed that no construction work would occur between the hours of 10:00 PM and 7:00 AM. Therefore, the 10-dB penalty associated with noise occurring in these hours was not applied. In addition, the workday was assumed to be nine hours long. Table 3-13 presents the exposure factors used to calculate an Ldn for each category; the resultant Ldn for each category is also shown.

Table 3-13.
Construction Noise Model Exposure Factors

Project Category	Exposure Duration by Source	Ldn (dB)*
Building Construction	Backhoe only for 1 hr Portable Saw only for 2 hrs Hammer only for 2 hrs Hammer and saw for 2 hrs No major noise activities for 2 hrs	93
Site-Work and Demolition	Backhoe and bulldozer for 4 hrs Backhoe only for 3 hrs No major noise activities for 2 hrs	91

*Assumes equipment noise is constant through hours of operation noted.

In addition to the noise impacts listed above, increased heavy truck traffic during construction and demolition would contribute to the overall noise associated with the Proposed Action. No specific noise attenuation is recommended since these construction noise impacts are temporary and would be of relatively short duration. Therefore, although some temporary adverse noise impacts are anticipated to occur, they are not considered significant. Following the completion of construction, noise levels would be expected to return to existing levels.

3.14.2.3 Alternatives #2 and #3

While approximate construction durations for the Proposed Action and Alternatives #2 and #3 are not known at this time, given the minor differences between alternatives, it would be expected that the overall construction periods for all alternatives would be very similar. Therefore, since noise impacts associated with this project are primarily temporary and related to construction activities, direct and indirect noise impacts under Alternatives #2 and #3 would be the same as those described for the Proposed Action.

4.0 CUMULATIVE IMPACTS AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

4.1 CUMULATIVE EFFECTS

4.1.1 Definition of Cumulative Effects

Cumulative effects are impacts that result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions regardless of the agency (federal or non-federal) or person undertaking such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7). The cumulative effects of an action may be undetectable when viewed in the individual context of direct and indirect impacts, but nonetheless can add to other disturbances and eventually lead to a measurable environmental change.

4.1.2 Past, Present, and Reasonably Foreseeable Actions

Homestead ARB has been an active military installation since its establishment in 1942. It underwent continuous growth and development until Hurricane Andrew in 1992. After Hurricane Andrew some areas of the base and surrounding areas, such as the North Gate Site, were not rebuilt. The South Florida region experienced tremendous growth in recent years. The growth of the region has resulted in tremendous development that pushed into and strained wetland and coastal areas. However, programs for protecting wetland and coastal areas within the state have also increased.

The population of Miami-Dade County is projected to increase through 2020 at a rate of approximately 19% from 2005 estimates (Miami-Dade County 2009c). Miami-Dade County high-growth population forecasts estimate about 20,000 acres of undeveloped land south of Eureka Drive (Miami) could be converted to residential, commercial, and industrial use by 2015 (USAF and FAA 2000). Details regarding the specifics of individual private development programs are difficult to acquire or estimate. For the base, several projects are planned, programmed, and/or funded. The projects range from about 1,200 square feet (sq ft) to 35,000 sq ft in size (HQ AFRC 2006a). Most of these projects would be built within current base boundaries but some would be on former Homestead AFB property. Projects range from bollards and security fencing to an indoor lodging facility. All of the currently proposed projects would be constructed on disturbed/developed land similar to the project site.

The SFWMD oversees several projects within Miami-Dade County that involve water storage and water quality. These projects include the North Lake Belt Storage, Central Lake Belt Storage, Biscayne Bay Coastal Wetlands, and two wastewater reuse pilot studies (SFWMD 2009). These projects serve to meet the following goals: to acquire land; increase protection of Florida's biodiversity; protect, restore, and maintain the quality and natural functions of land, water, and wetland systems; ensure sufficient quantities of water are available to meet current and future needs of citizens and natural systems; and increase natural resource-based public recreation and education.

Miami-Dade County's comprehensive plan states the following among its land use goals:

- High intensity, well-designed urban centers shall be facilitated by Miami-Dade County at locations having high countywide multimodal accessibility.

- Miami-Dade County shall give priority to infill development on vacant sites in currently urbanized areas, and redevelopment of substandard or underdeveloped environmentally suitable urban areas contiguous to existing urban development where all necessary urban services and facilities are projected to have capacity to accommodate additional demand.

- Business developments shall preferably be placed in clusters or nodes in the vicinity of major roadway intersections, and not in continuous strips or as isolated spots, with the exception of small neighborhood nodes.

- The county should identify sites having good potential to serve as greenbelts, and should recommend retention and enhancement strategies, where warranted. Such greenbelts should be suggested on the basis of their ability to provide aesthetically pleasing urban spaces, recreational opportunities, or wildlife benefits.

- Miami-Dade County shall seek to prevent discontinuous, scattered development at the urban fringe particularly in agricultural areas.

- Miami-Dade County shall take steps to reserve the amount of land necessary to maintain an economically viable agricultural industry (Miami-Dade County 2008).

These goals for Miami-Dade County reflect an effort to attract business and growth, but with a planning approach that reduces urban sprawl, provide aesthetic spaces, and protects environmentally sensitive resources. While these goals can be enforced through zoning and permitting, development can occur that would not conform to these goals.

4.1.3 Analysis of Cumulative Impacts

Any land development, or roadway expansion activities that have occurred in the near past could have impacted resources in a manner similar to what is described in this document. The impacts from Hurricane Andrew in 1992 would have negatively impacted resources such as land use and socioeconomics that would be positively impacted by any of the alternatives. The predicted growth of the county would bring additional development to the areas surrounding Homestead ARB, which would have impacts to land use, cultural, socio-economics, physical, biological, water, coastal resources, transportation, air, hazardous materials and waste, safety and noise resources. Significant development can cause adverse cumulative impacts to natural resources from increased pollutants in surface water run-off to wetlands and water resources, directly impact wetlands through fill and alteration of hydrological regimes, directly impact sensitive habitats through habitat destruction. Between 8% and 16% of available land south of Eureka Drive (Miami) could be covered by impervious or landscaped surfaces by 2015 (USAF and FAA 2000). This land change would be predominantly in biological communities that have already been disturbed by human activity or invaded by exotic species.

Four changes planned in immediate proximity to Homestead ARB include operational changes to the BX mart, construction of the new SOCSOUTH HQ, expansion of the HAC, and potential future development of a fleet storage and maintenance facility for the County. The existing BX mart complex adjacent to the eastern side of the North Gate Site would be modified to accommodate new operations as an emergency supply distribution center for Miami-Dade County. This change currently does not involve any major construction but would involve increased traffic to the currently closed BX mart. Potential cumulative impacts related to socioeconomics and transportation would include indirect impacts to the County's plans to develop the BX Mart as an emergency supply distribution center. Should the County choose to build a new road through the current BX Mart parking lot to accommodate Metrobus Route 70, there could be either beneficial or adverse indirect impacts to both socioeconomics and transportation resources depending on the County's original plans for the BX Mart parking lot in association with the planned emergency supply distribution center.

The new SOCSOUTH building would primarily consist of a 125,000-sq ft building on approximately 28 acres. Additional improvements would be made over a 90-acre site that Homestead ARB intends to acquire from Miami-Dade County. The SOCSOUTH HQ and any associated impacts would be limited to the identified 90-acre project area. The new location of the SOCSOUTH HQ would be outside of the current Homestead ARB boundary, but located on former Homestead ARB property. SOCSOUTH personnel, who currently enter the installation through the same entry point as all base personnel and tenants, would no longer need to use the Homestead ARB entry gate because their new HQ would include its own gate. However, to reach the new SOCSOUTH gate, which would be located east of Homestead ARB, the SOCSOUTH vehicles would travel east on the realigned SW 288th Street, and/or south along SW 127th Avenue. Therefore, the traffic flow in the area during typical shift changes when personnel enter or leave Homestead ARB and SOCSOUTH would be similar to the existing conditions, with a likely increase in the amount of traffic due to the new facility.

Miami-Dade County is also considering the potential future development of a fleet storage and maintenance facility located east of Homestead ARB. The associated traffic for this facility would likely traverse either or both new intersections (SW 288th Street/Coral Sea Boulevard and SW 288th Street/SW 127th Avenue) before turning east onto St. Nazaire Boulevard and terminating at the new facility. The increased traffic would have the potential to create adverse impacts to traffic flow through these intersections depending on the type of control mechanisms chosen.

Indirect cumulative adverse impacts to socioeconomics and transportation may occur if road improvements to St. Nazaire Boulevard and other streets are necessary when the new SOCSOUTH HQ is completed and/or when the County develops the planned fleet storage and maintenance facility. Traffic for both of these facilities would need to travel roadways east of SW 127th Street and the traffic volumes may require roadway improvements to avoid potential adverse impacts to transportation as a result of the closure of the SW 127th Street/Bougainville Boulevard intersection. St. Nazaire Boulevard and other local streets may need to be improved and/or expanded to accommodate the new traffic associated with these facilities, and as stated above, such improvements are not currently covered in the County plans or budgets.

One project in the immediate vicinity will be an expansion of the HAC, operated by Community Partnership for Homeless. Currently on site there are 55 residential units that serve as transitional housing for homeless families and veterans. These residential units are operated by Camillus House. The remaining HAC property will be developed to include an additional 145 residential units, an organic farm, and a farmer's market. Construction is expected to commence in the spring of 2010 with a completion date of May 2011 (Raymond 2010). There may be cumulative adverse impacts associated with this planned expansion should construction of the new entry gate complex begin while construction of this expansion is still underway. There could be cumulative impacts to physical resources, water resources, biological resources, air quality, hazardous materials and waste management, noise, and transportation in association with the combined construction activities. However, given the distance separating the two projects, these impacts should be minor and would be short-term.

The significance of impacts from population growth would be largely determined on a project by project basis. For example, impacts could be negative for biological resources because of loss of natural habitats but they could also be cumulatively neutral or positive if remaining natural areas are preserved and/or re-created as part of development projects. Miami-Dade County has a comprehensive land-use plan in place that will help control negative impacts from growth to resources. This plan accounts for the increased population and development and provides essential planning for the necessary infrastructure to manage the increases in population and development with limited adverse effects. The county also has environmental programs in place to help protect the natural environment. Additionally, environmental permitting for south Florida is very rigorous, which could also help control negative impacts to the natural environment and other resources such as cultural.

The Proposed Action and Alternatives #2 and #3 would result in impacts during construction that could combine with other like projects to result in adverse cumulative impacts to biological, physical, water, transportation, coastal, transportation, noise, and air resources. The adverse impacts from these actions would be minimal based on their scale and expected duration of impacts (most adverse impacts occurring only short-term during construction). Long-term (not occurring only during construction) cumulative impacts to land use, hazardous materials and waste, and safety would be beneficial from the implementation of any of the alternatives because these resources would benefit from new, planned development. Adverse cumulative impacts to socioeconomics, EJ, and transportation from a new gate complex may occur if mitigation measures are not taken (identification of a modified bus route).

Impacts resulting from development of the area surrounding Homestead ARB would occur with or without implementation of the Proposed Action or Alternatives #2 or #3. These actions would be constructed on an area of land that was previously developed and is currently maintained similar to the way it would be managed after construction of any of the new gate alternatives. Therefore, the overall contribution to cumulative impacts from these alternatives would be negligible.

The No Action Alternative would potentially result in long-term adverse cumulative impacts to land use, hazardous materials and waste, transportation, and safety. No long-term adverse cumulative impacts would be expected to biological, physical, water, noise, and air resources.

4.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible commitments of resources are those that essentially cannot be reversed, such as the extinction of a species or the consumption of fossil fuels. Irretrievable commitments of resources are those that are lost for a period of time, but that may be recoverable over the long term, such as the cutting of a pine plantation.

Implementation of the Proposed Action or Alternative #2 or #3 would involve irreversible and irretrievable commitments of natural resources, labor, materials, and fiscal resources beyond those that would occur under the No Action Alternative. However, the project area (North Gate Site) was previously utilized as base housing, and this history of development minimizes irreversible and irretrievable commitments of natural resources. Labor and materials, such as fossil fuels and building materials, would be expended during construction of a new control gate complex. Additionally, labor and natural resources would be used in the fabrication and preparation of construction materials. These resources generally would not be retrievable; however, they are not in short supply and their commitment would not have an adverse effect on their availability. In addition, fiscal resources would be committed, as the proposed new entry gate complex and associated road re-route would require an irretrievable expenditure of federal funds.

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6.0 LIST OF PREPARERS

Table 6-1.
Environmental Assessment Preparation Team

EA Section	Team Member
Environmental Manager	Michael Andrejko, USAF
Environmental Team Leader	Lawrence Ventura, USAF
Project Manager	Erika Schreiber, AECOM Technical Services, Inc. (ATS)
Proposed Action/Alternatives	Erika Schreiber, ATS Bobbie Hurley, ATS
Land Use/Socioeconomics, Environmental Justice, Physical Setting	Carol Freeman, ATS Nicole Spangler, ATS Laura Sanchez, ATS
Water Resources/Coastal Zone Resources/Biological Resources	Zoe Knesl, ATS Leslie Howard, ATS
Air Quality, Hazardous Materials and Waste Management, Safety, Noise	Katie Broom, ATS
Infrastructure	Tony Collins, ATS
Transportation	Karl Rothermel, ATS Carol Freeman, ATS
Cumulative Impacts	Leslie Howard, ATS
Administrative Support	Bonnie Freeman, ATS
Technical Editor	Nikki Thomas, ATS

APPENDIX A

Consultation Correspondence

MIAMI-DADE COUNTY

Carlos Alvarez, Mayor

Planning and Zoning
111 NW 1st Street • Suite 1210
Miami, Florida 33128-1902
T 305-375-2800

miamidade.gov

March 12, 2010

Erika Schreiber, EA Project Manager
AECOM Technical Services, Inc.
10 Patewood Drive
Building VI, Suite 500
Greenville, SC 29615

RE: New Entry Gate Complex at Homestead Air Reserve Base - Draft Environmental Assessment

Dear Ms. Schreiber:

Pursuant to your request to the Miami-Dade County General Services Administration (GSA) and in accordance with the Planning and Zoning Department's (DP&Z) responsibility for review, evaluation and coordination of proposals that implement local plans, staff of Miami-Dade County has reviewed the above referenced Draft Environmental Assessment (EA) for the subject New Entry Gate Complex at the Homestead Air Reserve Base (Homestead ARB) project and offers the following comments:

The Draft EA evaluates the impacts of the proposed construction of a new entry gate complex on a ±33-acre site at the northwest corner of SW 288 Street and SW 127 Avenue, north of the existing Homestead ARB Contractor Gate. The new entry gate complex is evaluated under a no build scenario that establishes baseline conditions for the project and three build alternatives (Alternative Nos. 1, 2 & 3). Alternative No. 1 is the proposed action and comprises a covered gatehouse (±300 sq.ft.), a pass and ID inspection office (±2,000 sq.ft.), a commercial vehicle inspection area (CVIA), associated parking lots (±0.3 acres), a static aircraft display, the realignment of SW 288 Street, and the blockage/closure of segments of the existing alignments of SW 127 Avenue and SW 288 Street/Bougainville Boulevard. Alternative Nos. 2 and 3 both include a combined gatehouse/CVIA, a pass and ID inspection office, a commercial vehicle inspection area, associated parking lots, a small drainage pond, the realignment of a segment of SW 288 Street, and blockage/closure of SW 127 Avenue south of St. Nazaire Boulevard and SW 288 Street/Bougainville Boulevard east of Westover Street (theoretical SW 129 Avenue). The new entry gate complex would serve as the new control gate for the Homestead ARB replacing the Contractor Gate located on Westover Street south of SW 288 Street. Consistent with the Draft EA, SW 288 Street is considered as SW 288 Street west of SW 127 Avenue and as Bougainville Boulevard east of SW 127 Avenue.

The project site identified in the Draft EA as the North Gate site, is currently vacant and is currently owned by Miami-Dade County, but is proposed to be transferred to the control of the Air Force Reserve by means of a deed or long-term lease. Existing land uses on adjacent properties include single family residences and vacant land to the west and north, a warehouse (the BX mart) and the Job Corp facility to the east beyond SW 127 Avenue, a commercial bank and the Homestead ARB and associated facilities to the south and southeast beyond SW 288 Street/Bougainville Boulevard. The County owns property to the west, north, and generally east and southeast of the project site. These properties include land containing various structures and vacant land proposed for future government and other institutional uses, as well as possible economic development, consistent

with the 2004 Economic Development Conveyance of these lands from the Air Force to the County.

The Adopted 2015 and 2025 Land Use Plan (LUP) map of the County's Comprehensive Development Master Plan (CDMP) designates the project site and the abutting lands to the east and south as "Institutions Utilities and Communications". The area to the west is designated "Low Density Residential" (2.5 to 6 Dwelling units per acre) and the area to the north is designated "Low Density Residential" and "Institutions Utilities and Communications".

The CDMP interpretive text for the "Institutions Utilities and Communications" land use category states "The full range of institutions, communications and utilities may be allowed under this land use category. Offices are also allowed in this map category... The Homestead Air Reserve Base is also included in this category on the Land Use Plan map. The range of uses that may occur on the Base as it is redeveloped shall emphasize military aviation and related uses, national security, recreation uses, educational and other institutional uses. All future uses on the former Base will be consistent with the Record of Decision issued by the Secretary of the Air Force as it pertains to County use of the Base property". The proposed entry gate complex is consistent with the intent of the foregoing CDMP text.

The County's CDMP Transportation Element Objective TC-3 and Policies TC-3A require the County to emphasize safe and efficient management of traffic flow, and to assure provision of an adequate, properly designed and safe transportation system. The entry gate complex, including the proposed realignment to a segment of SW 288 Street and the blockage/closure of existing segments of SW 288 Street, Bougainville Boulevard and SW 127 Avenue would reduce the efficiency of the area's roadway network and directly impact a Miami-Dade Transit (MDT) Metrobus route, discussed below. The Draft EA proposes three new alignments for the impacted MDT bus route and identifies "Proposed Alternative Bus Route 1" as the alignment of least impact to the route (Draft EA Figure 3-8 on page 3-46 & bus route alternatives assessment on page 3-47). This alternative requires the conversion of a portion of the BX Mart parking lot to a "city street" to connect SW 127 Avenue and Bougainville Boulevard. The Draft EA does not identify a source of funding or the agency/entity responsible for the construction of this street. Furthermore, the suggested street is not a County programmed or planned roadway improvement and is not included in the schedule of roadway improvements listed in the County's adopted 2010 Transportation Improvement Program or Long Range Transportation Plan to the Year 2035. Additionally, the traffic movements that the suggested street would provide could be accommodated by the existing SW 127 Avenue south of St. Nazaire Street and Bougainville Boulevard, as discussed below. Therefore, while staff generally supports the "Proposed Alternative Bus Route 1", staff is not in support of the suggested "city street".

Based upon relevant CDMP and Land Use Plan map provisions, and the information provided in the Draft EA, the DP&Z finds the subject New Entry Gate Complex at Homestead ARB generally consistent with the Goals, Objectives and Policies of the CDMP, subject to the following recommended changes.

Staff recommends Alternative No. 3, with modifications, as the preferred alternative. As presented, Alternative No. 3 proposes to realign SW 288 Street to intersect SW 127 Avenue at the existing SW 127 Avenue/St. Nazaire Boulevard "T" intersection, converting it to a four-way intersection. Alternative No. 3 also proposes to block/close SW 127 Avenue south of St. Nazaire Boulevard, SW 288 Street from east of Westover Avenue (theoretical SW 129 Avenue) to SW 127 Avenue, and Bougainville Boulevard from SW 127 Avenue to just east of the BX Mart and

Job Corp south entrance. The staff recommended modifications to Alternative No. 3 include keeping Bougainville Boulevard and SW 127 Avenue south of St. Nazaire Boulevard open to non-Homestead ARB traffic. The existing SW 127 Avenue and SW 288 Street/Bougainville Boulevard intersection would be removed and SW 288 Street from SW 127 Avenue to Westover Avenue would be blocked/closed as proposed. The SW 127 Avenue and Bougainville Boulevard connection would form a 90-degree corner east of Coral Sea Boulevard and would be physically separated from Coral Sea Boulevard (by blockade or other means). This would allow for southbound traffic on SW 127 Avenue to go eastbound onto Bougainville Boulevard and for westbound traffic on Bougainville Boulevard to go northbound onto SW 127 Avenue. The recommended modification would provide for more efficient traffic circulation of non-Homestead ARB traffic within the area, and would serve as the least impact realignment alternative to Metrobus Route 70 while eliminating the need to build a street through the BX Mart parking lot as suggested in the Draft EA transit alternatives analysis. See attached Figure 2-3, Site Plan of Alternative # 3 as Modified by DP&Z, for an illustration of recommended modification to the alternative.

The Draft EA was reviewed and commented on by Miami-Dade County permitting and permit review agencies, and other pertinent agencies. The agency comments are summarized below and enclosed for your review and consideration:

The Miami-Dade Public Works Department (PWD) identifies additional data that should be incorporated into the Traffic Study included as Appendix B of the Draft EA, and does not recommend Alternative No. 1 as the preferred alternative.

MDT operates Metrobus Route 70 within the vicinity of the project's site providing daily service to approximately 46 transit passengers in the vicinity of the project site, primarily students of the Homestead Job Corp Center. Route 70 operates along SW 127 Avenue, St. Nazaire Boulevard, Ramey Avenue and SW 288 Street/Bougainville Boulevard and would need to be realigned if the SW 288 Street segment east of Westover Avenue is closed, as proposed in Alternative Nos. 1, 2 and 3. Based on the proposed Alternatives, the realignment would take the route up to 0.6 miles away from impacted bus stops, resulting in an inconvenience to the area transit users. Therefore, the MDT requires the project planning and construction phases to be closely coordinated with its Service Planning Division to mitigate impacts to transit amenities and bus operations adjacent to the project site. MDT recommends Proposed Alternative Bus Route 1 as the preferred transit realignment alternative, having the least impact to Metrobus Route 70. However, MDT points out that the new street through the BX Mart, depicted in Proposed Alternative Bus Route 1, includes short distance turns that may be inadequate for MDT's 40-foot buses. MDT recommends a connection between SW 127 Avenue and Bougainville Boulevard that is more conducive to its bus operations and expresses concern about the funding and construction of the street through the BX Mart parking lot as suggested in the Draft EA.

The Miami-Dade Department of Environmental Resources Management (DERM) notes that the proposed project is required to connect to the public water and sewer systems in accordance with Miami-Dade County Code, subject to the availability of adequate collection, transmission and treatment capacity at time of project development. DERM also notes that the Homestead Air Reserve Base (HARB) has a private sanitary sewer system, including 4 pump stations, permitted by DERM that connects to the Miami-Dade Water and Sewer Department's (MDWASD) South District Waste Water Treatment Plant. DERM indicates that modification of the South Florida Water Management District (SFWMD) issued Surface Water Management General Permit No. 13-00148-S may be required prior to construction and operation of the

required surface water management system. Additionally, other permits may also be required from DERM's Environmental Resources Regulation Division. DERM further indicates that a Class V dewatering permit is required for any dewatering work during project construction. DERM identifies sites subject to contamination assessment/remediation adjacent to the project site, and requires coordination with its Tree Program staff for tree preservation. DERM also advises that other permits from the US Army Corps of Engineers, the Florida Department of Environmental Protection and the SFWMD may be required for the proposed project.

MDWASD notes that water and sewer service could be provided to the project site by a 24-inch water transmission main along SW 288 Street/Bougainville Boulevard, and a 12-inch sanitary sewer force main along SW 127 Avenue and St. Nazaire Boulevard, which are the closest mains to the site. MDWASD also notes that a private sewer pump station will be required for this project and recommends that the future development of the project be coordinated with its Engineering Office. The Final EA should adequately address the provision of water and sewer service to the project site. Additionally, the proposed closure/blocking of SW 288 Street/Bougainville Boulevard segments should be assessed for impacts to the MDWASD water main along these roadways.

The Miami-Dade County Homeless Trust expresses concerns regarding the project's impacts on Metrobus Route 70 and how any route realignment would affect the people served by its facilities in the vicinity of the project.

The Miami-Dade Parks and Recreation Department, Miami-Dade Aviation Department (MDAD), and Miami-Dade Fire Rescue Department (MDFR) submitted responses indicating no significant impact on their operations and services. MDFR provides its minimum access road requirements to advise the project.

Should you or any member of your staff have any questions regarding this information, please feel free to call Mr. Mark R. Woerner, Chief, Metropolitan Planning Section, DP&Z, at (305) 375-2835 or Mr. Robert Warren, Real Estate Advisor, Real Estate Section, GSA, at (305) 375-5843. For questions regarding specific agency comments, please contact the appropriate agencies directly. Copies of the comments provided by the Miami-Dade County agencies are enclosed for your review and consideration.

Sincerely,

Marc C. LaFerrier, AICP
Director, Planning and Zoning Department

MCL:SB:MRW:PHC:gr

Enclosures

cc: Wendy Norris, Director, Miami-Dade County General Services Administration
Lauren Milligan, Florida Department of Environmental Protection
Karen Hamilton, South Florida Regional Planning Council
Herminio Lorenzo, Director, Miami-Dade Fire Rescue Department

Bertha Goldenberg, Assistant Director, Regulatory Compliance & Planning, Miami-Dade Water and Sewer Department
Jose Gonzalez, P.E., Assistant Director, Department of Environmental Resources Management
Maria Nardi, Chief, Planning and Research Division, Park and Recreation Department
Susanna Guzman-Arean, Chief, Strategic Planning and Performance Management, Miami-Dade Transit
John Garcia, Principal Planner, Miami-Dade Transit
Leandro Ona, P.E, Chief, Highway Division, Miami-Dade Public Works Department
Raul Pino, Land Development Division, Miami-Dade Public Works Department
Jose Ramos, Chief, Aviation Planning Division, Miami-Dade Aviation Department
David Raymond, Director, Miami-Dade County Homeless Trust
Robert Warren, Real Estate Advisor, Real Estate Section, Miami-Dade County General Services Administration
Napoleon Somoza, Principal Planner, Metropolitan Planning Section, Planning and Zoning Department
Garett Rowe, Senior Planner, Metropolitan Planning Section, Planning and Zoning Department

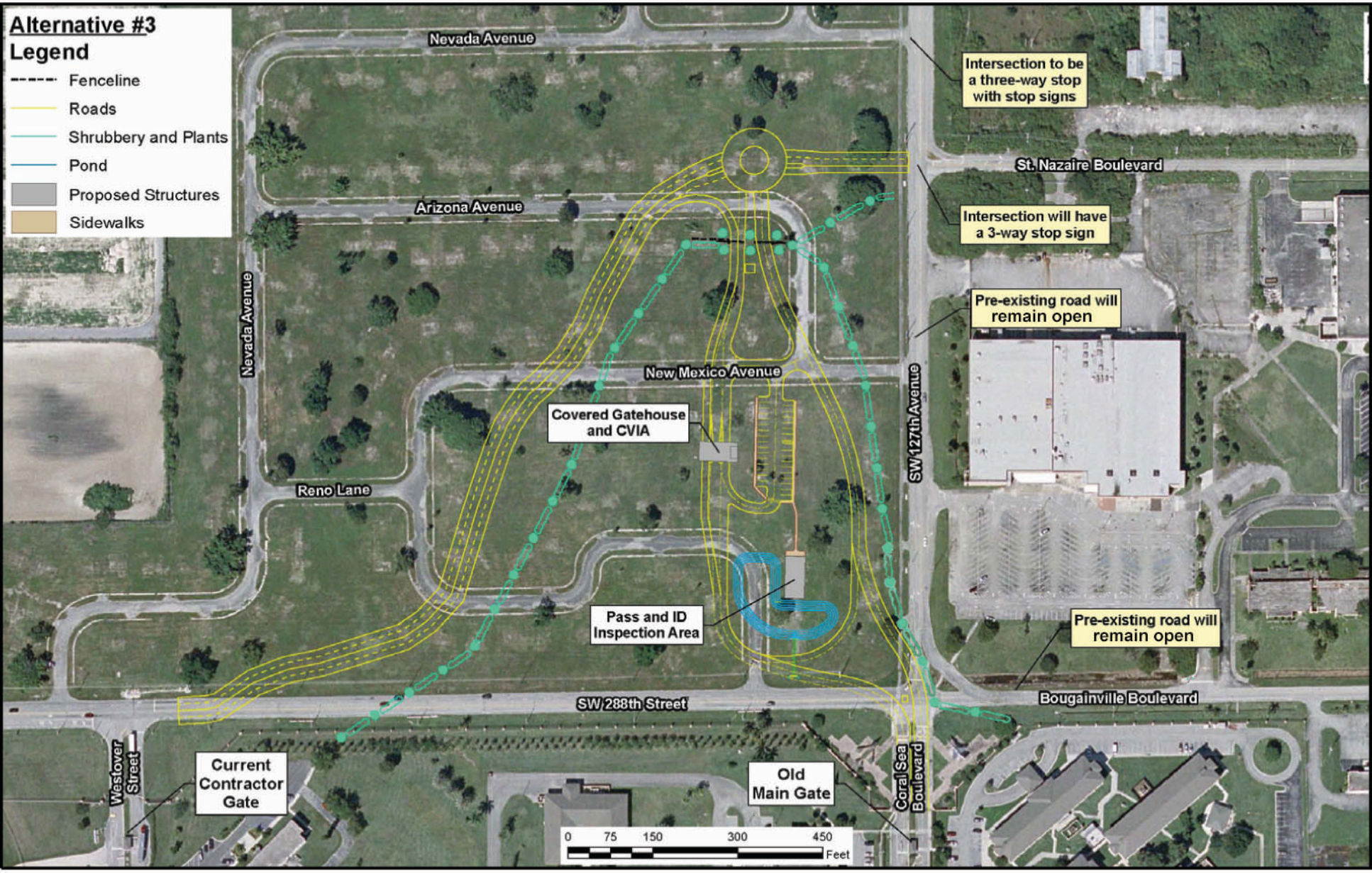

Figure 2-3. Site Plan of Alternative #3 as Modified by DP&Z

Rowe, Garett A. (DPZ)

From: Somoza, Napoleon (DP&Z)
Sent: Tuesday, February 23, 2010 8:00 PM
To: Rowe, Garett A. (DP&Z)
Subject: FW: New Entry Gate Complex at HARB - Notice of Availability Draft EA
Attachments: FW: Copy of letter requesting response by the County to HARB EA

Garett,
Please see PWD's comments on the HARB Entry Gate.
N.S.

From: Shen, Joan (PWD)
Sent: Tuesday, February 23, 2010 11:03 AM
To: Woerner, Mark (DP&Z); Somoza, Napoleon (DP&Z)
Cc: Calas, Esther (PWD); Miranda, Gaspar (PWD); Ona, Leandro (PWD); Khan, Muhammad (PWD); Eymil, Yelenys (PWD)
Subject: RE: New Entry Gate Complex at HARB - Notice of Availability Draft EA

Good morning, Mark,

Please find below comments on revised traffic study for the subject location.

1. As previously commented from the Public Works Department, it is still highly recommended that the existing intersection of SW 127 Avenue and St. Nazaire Boulevard should be modified to accommodate all the traffic. A roundabout or a traffic signal can be considered at this intersection. This option is expected to serve the roadway network and traffic circulation efficiently, since St. Nazaire Boulevard provides access to county owned land and a few privately owned parcels to the east. Proposed Alternative # 1 as shown on page 2-2 may result in spill back at Coral Sea Boulevard along westbound direction and is too close to SW 127 Avenue. As such, Alterative # 1 is not recommended.

2. Future year's traffic analysis should also be included to incorporate any traffic growth based on the increased airbase employees or any other developments within the surrounding area.

3. Please note that two-way stop control capacity analysis in the Appendix B for Coral Sea Boulevard and the proposed SW 288 Street, westbound through volume should be 298 vehicles instead of zero.

4. Only summaries of the traffic data are provided, following raw traffic counts are still missing in the revised documents. Please add it to the report.

    a. Raw five day machine counts.
    b. Manual turning movement counts (six hours).

Thank you for the opportunity to review the traffic study, please feel free to contact me if you have any questions.

Dr. Joan Shen, P.E., PTOE, Manager
Traffic Engineering Division
Miami-Dade County Public Works Department
111 NW 1st Street, Suite 1510, Miami, FL 33128
Phone: 305-375-2030, Fax: 305-372-6064
http://www.miamidade.gov/pubworks/

"Delivering Excellence Every Day"

From: Eymil, Yelenys (PWD) **On Behalf Of** Calas, Esther (PWD)
Sent: Tuesday, February 09, 2010 11:31 AM
To: Shen, Joan (PWD); Ona, Leandro (PWD)
Cc: Calas, Esther (PWD); Miranda, Gaspar (PWD)
Subject: FW: New Entry Gate Complex at HARB - Notice of Availability Draft EA

Joan/Leo,

Please review and advise.

Thank you

From: Pass, Shirley (DP&Z)
Sent: Tuesday, February 09, 2010 9:46 AM
To: Mendelsberg, Scott (MDFR); Heredia, Carlos (MDFR); Sommerhoff, Curtis (DEM); Harman, Sunil (Aviation); Henderson, David (MPO); Guzman-Arean, Susanna (MDT); Garcia, John (MDT); Goldenberg, Bertha M. (WASD); Valdes, Maria A. (WASD); Nardi, Maria (MDPR); Koper, Randy (MDPR); Ona, Leandro (PWD); Shen, Joan (PWD); Hefty, Lee (DERM); Abreu, José (Aviation); Lorenzo, Herminio (MDFR); Mesa, Jose L. (MPO); Kapoor, Harpal (MDT); Renfrow, John (WASD); Kardys, Jack (MDPR); Calas, Esther (PWD); Espinosa, Carlos (DERM)
Cc: Rowe, Garett A. (DP&Z)
Subject: New Entry Gate Complex at HARB - Notice of Availability Draft EA

Good morning:

Attached, you will find a documentation regarding the above referenced subject. This documentation will be forwarded to your attention via interoffice mail.

Thank you,

Shirley A. Pass, Executive Secretary
Miami-Dade County
Department of Planning and Zoning
111 NW First Street, 12th Floor
Miami, Florida 33128
Phone: (305) 375-2835 Fax: (305) 375-1091

"Delivering Excellence Every Day"

Memorandum

MIAMI-DADE COUNTY

Date: March 11, 2010

To: Garett A. Rowe,
Principal Planner
Department of Planning & Zoning

From: John Garcia
Principal Planner
Miami-Dade Transit
Office of Performance Management - Transit Planning Section

Subject: Comments for Draft Environmental Assessment for the Construction of a new entry gate complex at Homestead Air Reserve Base

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Current Transit Service

There is direct transit service along SW 288th Street (Bougainville Boulevard), Ramey Avenue (SW 124th Avenue Road) and Saint Nazaire Boulevard by Metrobus Route 70. Service headways for Route 70 are 30 minutes during the weekday peak periods and 60 minutes during the weekday midday/off-peak periods and on weekends. Service spans for weekday service run from approximately 5:30am to 10:30pm while Saturday service operates from approximately 5:45am to 10:15pm and Sunday service from 5:45am to 9:20pm.

Eight bus stops (4 northbound and 4 southbound) are located within the site plan of Alternative # 1. Existing stops at SW 288th Street at Westover Avenue may be able to be relocated further west of the T-intersection with any roadway rerouting if the site is compliant to ADA Accessibility requirements. Other bus stops exist at SW 288th Street at SW 127th Avenue, SW 288th Street at Ramey Avenue (SW 124th Avenue Road) and Ramey Avenue at SW 285th Street. Current ridership data at each stop details 6 daily boardings or alightings at the 288 Street/127 Avenue stop, 37 ons/offs at 288 Street/Ramey Avenue and 13 ons/offs at Ramey Avenue/285 Street.

Future Transportation/Transit Improvements

The Miami-Dade Metropolitan Planning Organization's (MPO) Year 2010, Transportation Improvement Plan (TIP) does not propose any improvements in the immediate vicinity of this project. The 2035 Long Range Transportation Plan (LRTP) also does not propose any improvements in the immediate vicinity of this project.

Miami-Dade Transit's 2009 ten-year Transit Development Plan (TDP) for FY 2010 – 2019 does not identify any planned or proposed improvements to the Route 70 in the 2019 Recommended Service Plan.

MDT Comments/Recommendations

With the primary features of Alternative 1, namely the closure of the direct connection between SW 127th Avenue and Bougainville Boulevard, Miami-Dade Transit (MDT) service to the stops east of SW 127th Avenue will need to be discontinued. The impact to passengers (primarily the Homestead Jobs Corp Center students) will be a longer distance to walk to reach the existing bus stops located on Ramey Avenue (SW 124th Avenue Road). Field inspections revealed that there are no sidewalks available and only a portion of the roadways have a bike lane. During a morning peak period observation, numerous students were seen walking to and from buildings as well as others being dropped off or waiting for the next Route 70 Metrobus. The additional walking distance to the stop on Ramey Avenue at 285th Street from the proposed Alternative 1 street deviation is approximately 0.4 miles with the stop at Bougainville Boulevard at Ramey Avenue being almost 0.6 miles. The stop currently at SW 288th Street at 127th Avenue may be relocated to a location near the new driveway into the entry gate if the site is compliant to ADA Accessibility requirements. Any passengers would then be required to walk through the entry gate which would add an estimated 0.2 miles to reach the old main gate. It is also recommended that adequate provisions be made to accommodate special treatments for temporary traffic deviations (including buses) along the project corridor and at crossing streets, for the duration of this project. Any removal or replacement of transit amenities or route realignments must be closely coordinated with MDT's Service Planning Division. These accommodations are required during the construction stages due to the expected impact to bus operations in the area. MDT has no further comments at the present time.

As for the proposed Alternative Bus Route deviations discussed on pages 3-45 to 3-48 on the Draft EA document; # 1 is the most operationally feasible because it would only require an additional minute of run time and be the option that most resembles the Route 70's existing alignment. MDT's foremost concern would be the design of the proposed conversion of a roadway through the BX Mart parking lot as depicted on Figure 3-8. Metrobus service is mainly operated with 40-foot vehicles and the initial short distance turns off of SW 127th Avenue appear too sharp to be properly executed. A more reasonable accommodation may be a more gradual veering turn along the landscaped buffer between the existing BX Mart parking area and Bougainville Boulevard. This new roadway could run parallel along the illustrated fencing or shrubbery barrier in the site plans. The other obstacle to this option would be how the road conversion is funded and completed. Miami-Dade County's Public Works Department would have to fund and construct this new roadway connection unless it was included in this project's scope of work. Proposed Alternate Bus Route # 1 is not operationally feasible without a new roadway connection between SW 127th Avenue and Bougainville Boulevard.

Issues with Proposed Alternate Bus Route # 2 center on the additional time required to operate buses twice (up and back) along St. Nazaire Boulevard and Ramey Avenue for each direction of travel. It is not recommended to require a circular loop to serve a specific destination or bus stop(s) when the increased the time required to complete this loop may impact the overall operation of the entire route. Service to the Job Corps campus is sufficiently provided with individual stops both on Ramey Avenue and Bougainville Boulevard. Lastly, as identified in the Draft EA, operating within the Job Corps campus may increase safety concerns, disrupt the operations of the campus, or have the operational functions of the campus disrupt or impede the service of the Route 70.

Proposed Alternate Bus Route # 3 is least feasible because of the added running time that would be required to extend service to South Lo Boulevard. This additional travel distance with no new or available bus stops is not recommended. An extension this lengthy would severely impact the scheduling and operation of the entire route.

c: Albert A. Hernandez, Asst, Director, Engineering, Planning & Development, MDT
Susanna Guzman-Arean, Chief, Strategic Planning & Performance Management, MDT
Maria C. Batista, Principal Planner, MDT
Robert Pearsall, Manager, Service Planning, MDT

Memorandum

Date: February 3, 2010

To: Wendi Norris, Director
General Services Administration

From: Jose Gonzalez, P.E., Assistant Director
Environmental Resources Management

Subject: Homestead Air Reserve Base
Review of Draft Environmental Assessment for the Construction of a New Entry Gate at Homestead Air Reserve Base
At S.W. 288th Street and S.W. 127th Avenue
(AU) (30 Acres)
02-57-39

The Department of Environmental Resources Management (DERM) has reviewed the information submitted for the proposed development and offers the following comments regarding requirements of Chapter 24 of the Code of Miami-Dade County, Florida (the Code):

Potable Water Service and Wastewater Disposal
Public water and sanitary sewers can be made available to the subject property. Therefore, connection of the proposed development to the public water supply system and sanitary sewer system shall be required in accordance with Code requirements.

A 24-inch water distribution main abuts this property along SW 288 Street. This water main is owned and operated by Miami-Dade Water and Sewer Department. The source for this water supply is the REX utilities water treatment plant, which is owned and operated by Miami-Dade Water and Sewer Department. This plant has sufficient capacity to provide current water demand. The plant is currently producing water that complies with all the local, state and federal requirements.

Homestead Air Reserve Base has a private sanitary sewer collection system permitted by DERM under permit PSO-1033, including four (4) private sanitary sewer pump stations and a sanitary sewer collection system. Said private system discharges wastewater flow directly to the South District Wastewater treatment plant owned and operated by Miami-Dade Water and Sewer Department. The sewage collection system is currently working within the mandated criteria set forth in the First and Second Partial Consent Decree. Additionally, at this time, the South District Wastewater Treatment Plant has sufficient capacity to treat current discharge as well as the increase resulting from this proposal.

Notwithstanding the foregoing, and in light of the fact that the County's sanitary sewer system has limited sewer collection, transmission, and treatment capacity, no new sewer service connections can be permitted, unless there is adequate capacity to handle the additional flows that this project would generate. Consequently, final development orders for this site may not be granted if adequate capacity in the system is not available at the point in time when the project will be contributing sewage to the

system. Lack of adequate capacity in the system may require the approval of alternate means of sewage disposal. Use of an alternate means of sewage disposal may only be granted in accordance with Code requirements, and shall be an interim measure, with connection to the public sanitary sewer system required upon availability of adequate collection/transmission and treatment capacity.

Pollution Remediation

DERM has found no records of current contamination assessment or remediation issues on these properties (Folio #'s 30-7902-000-0021 and 30-7902-000-0210) nor are there historical records of contamination assessment or remediation issues regarding non-permitted sites associated with these properties.

Please be advised that the proposed North Gate Site roadway system integrates with the roads entering Homestead Air Reserve Base, which is a Superfund site with contamination issues as follows:

1. To the south is folio # 30-7902-000-0190 with records of current contamination assessment/remediation issues associated with various fuel spills; and

2. To the east is folio # 30-7901-000-0120 (Parcel 11) with records of soil and groundwater contamination and accompanying soil and groundwater use restrictions that require DERM review of any proposed construction, dewatering, drainage or related plans.

Except for the above, there are no other abutting properties with current contamination assessment or remediation issues.

Stormwater Management

Modification of the Surface Water Management General Permits No. 13-00148-S may be required from the South Florida Water Management District (SFWMD) prior to the construction and operation of the required surface water management system. Other permits by the Environmental Resource Regulation Division may be required.

A Class V Permit will be required from DERM if dewatering is performed during the construction of the proposed project. DERM recommends the implementation of best management practices to retain stormwater and any groundwater from de-watering activities onsite, in order to prevent impacts to neighboring properties.

Any proposed drainage in a contaminated area shall also require DERM review and approval prior to seeking construction permits.

Wetlands

The subject properties contained within the boundaries of the proposed alternative do not contain wetlands as defined by Section 24-5 of the Code; therefore, a Class IV Wetland Permit will not be required for this project.

The applicant should be advised that permits from the Army Corps of Engineers (305-526-7181), the Florida Department of Environmental Protection (561-681-6600) and the South Florida Water Management District (1-800-432-2045) may be required for the proposed properties. It is the applicant's responsibility to contact these agencies.

Tree Preservation
The subject properties contain tree resources. Section 24-49 of the Code provides for the preservation and protection of tree resources. A Miami-Dade County Tree Removal Permit is required prior to the removal or relocation of any tree that is subject to the Tree Preservation and Protection provisions of the Code. Said permit shall meet the requirements of Sections 24-49.2 and 24-49.4 of the Code.

The applicant is required to comply with the above tree permitting requirements and is advised to contact DERM staff for additional information regarding permitting procedures and requirements prior to site development.

Coastal
DERM has determined that the proposed project does not occur in tidal waters or in wetlands containing halophytic vegetation as defined by Section 24-5 of the Code. Therefore, a Class I Coastal Construction Permit will not be required for development of the subject property.

Concurrency Review Summary
DERM has conducted a concurrency review for this application and has determined that the same meets all applicable LOS standards for an initial development order, as specified in the adopted CDMP for potable water supply, wastewater disposal, and flood protection. Therefore, the application has been approved for concurrency subject to the comments and conditions contained herein.

This concurrency approval does not constitute a final concurrency statement and is valid only for this initial development order, as provided for in the adopted methodology for concurrency review. Additionally, this approval does not constitute any assurance that the LOS standards would be met by any subsequent development order applications concerning the subject property.

In summary, DERM offers no objections to the proposed development provided that the applicant properly addresses all Code requirements contained herein.

If you have any questions concerning the comments, or wish to discuss this matter further, please contact Christine Velazquez at (305) 372-6764.

Memorandum

MIAMI-DADE COUNTY

Date: February 22, 2010

To: Mark R. Woerner, Chief
Metropolitan Planning Section
Department of Planning and Zoning

From: Bertha M. Goldenberg, P.E.
Assistant Director
Regulatory Compliance & Planning
Miami-Dade Water and Sewer Department (MDWASD)

Subject: Comments – Draft Environmental Assessment
New Entry Gate Complex at Homestead Air Reserve Base (HARB)

Project Location: The subject property is located at the northwest corner of S.W. 127th Avenue and S.W. 288th Street, in unincorporated Miami-Dade County, Florida with folio number 3079020000021.

We have reviewed the area for the proposed HARB project mentioned above and find that MDWASD currently has no water service to the subject property. The nearest point of connection for water is a twenty four (24)-inch water transmission main that runs parallel to S.W. 288th Street (Bouganville Blvd) for all three alternatives that are being proposed for this project. The developer will have to dedicate a public right of way and connect to the twenty four (24)-inch water transmission main with a twelve (12)-inch water main and extent it to the subject property.

Furthermore, MDWASD has no sanitary sewer service that intersect the subject project at any of the three alternatives that are being proposed for this project. The nearest point of connection for sewer is an existing twelve (12)-inch sanitary sewer force main along S.W. 127th Avenue and Saint Nazaire Street. A private pump station will be required for all three alternatives that are being proposed for this project.

Please note that at the current time, MDWASD has no proposed projects in the vicinity of the New Entry Gate Complex at Homestead Air Reserve Base that is being considered for this project. Also note that the information provided is intended for planning use only and can change at a future time. We recommend that HARB contact MDWASD Engineering for future development of this project.

If you have any questions, please contact me at (786) 552-8120 or Maria Valdes at (786) 552-8198.

Warren, Robert (GSA)

From: Norris, Wendi (GSA)
Sent: Thursday, January 21, 2010 10:26 AM
To: Warren, Robert (GSA)
Subject: FW: Copy of letter requesting response by the County to HARB EA
Attachments: HARB new gate letter re Draft EA.pdf

FYI

Wendi J. Norris, Director
Miami-Dade County **General Services Administration**
111 NW 1 ST, Suite 2410, Miami, FL 33128
phone: (305) 375-2495 fax: (305) 375-4968
www.miamidade.gov/gsa

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Please consider the environment before printing this email.

From: Raymond, David (HT)
Sent: Thursday, January 21, 2010 10:13 AM
To: 'Alicia Apfel'; jwindsor@pmnexus.com; 'Carlos Toledo'; Robert Behar; H. Daniel Vincent (dvincent@cphi.org); rperson@cphi.org; Dr.Paul@camillus.org; 'Karen Mahar'; Kapoor, Harpal (MDT)
Cc: Morlote, Mario F. (CEO); Norris, Wendi (GSA)
Subject: FW: Copy of letter requesting response by the County to HARB EA

Hi All:

Please see attached document and click on link below. I have quickly reviewed and found the main issue for us is bus route 70. I am not sure how this would be re-routed and what impact that would have. The report identifies the Homeless Assistance Center but I did not see any reference to the 200+ people in our homeless family and veterans at the Camillus complex or our new project. I am not sure how the road re-routing will impact on our construction of the new Housing complex? Will they have construction going on at the same time as ours? Just a few thoughts, but please review and get back to me by January 27 so I can send all comments back to GSA by the 1st.

HI Harpal,

It would be great to know how the bus route would be impacted.

Thank you all,
David

From: Norris, Wendi (GSA)
Sent: Tuesday, January 19, 2010 4:36 PM
To: Espinosa, Carlos (DERM); Calas, Esther (PWD); LaFerrier, Marc C. (DP&Z); Loftus, James K. (MDPD); Lorenzo, Herminio (MDFR); Woods-Richardson, Kathleen (SWM); Kapoor, Harpal (MDT); Renfrow, John (WASD); Raymond, David (HT)
Cc: Atala, Antonio (DP&Z); Dorsey, Mark (DP&Z); Velazquez, Christine (DERM); Camero, Jose (GSA); Warren, Robert (GSA); Salomon, Leland (GSA); Capote, Maria T. (WASD); Heredia, Carlos (MDFR); Cohen, Jeff (PWD); Bernstein, Harvey (PWD); Delgado, Julio (PWD); Hernandez, Armando (PWD); Lacau, Luis (PWD); Austin, Mara G. (WASD); Forbes, Clinton (MDT)
Subject: FW: Copy of letter requesting response by the County to HARB EA

Directors, we received the attached letter from the Environmental consultant working for the Air Force to prepare an assessment of their proposed new gate complex at the Homestead Air Reserve Base(HARB). The new gate complex will be built on approximately 30 acres of land currently owned by the County at SW 288th Street and SW 127th Avenue, directly across the street from the Air Base. This property is part of the vacant land the County will exchange with the Air Force Reserve in order to receive ownership of the BX building and land.

My staff has identified your departments as having an interest in the report not limited to:

Department of Environmental Resources Management(DERM) - various sections of the physical environmental

Public Works Department(PWD) - various sections concerning road closing, road re-alignment, and new road

Planning and Zoning(DP&Z) – commenting on the closing of major County arterial roadways(section line roads)

Police Department(MDPD) – access in emergency situations to surrounding properties

Fire Department(MDFD) – access in emergency situations to surrounding properties

Solid Waste Department(SWD) – access for everyday trash pickup to surrounding properties

Transit(MDT) – issue of realignment of an existing bus route along SW 288th. Street and SW 127th. Avenue

Water and Sewer(WASD) – ability to provide service to any new construction in the new gate area

Homeless Trust(HT) – as the property owner immediately to the northeast of the new gate on SW 127th Avenue.

Following is the direct link to the 103 page Draft Environmental Assessment for the new gate complex at the HARB:

http://www.homestead.afrc.af.mil/shared/media/document/AFD-100106-043.pdf?bcsi_scan_4D7E231455658879=0&bcsi_scan_filename=AFD-100106-043.pdf

The general link to the Homestead Air Reserve Base Environmental section is:

http://www.homestead.afrc.af.mil/library/susops/index.asp

Although we are trying to get an extension, all comments are due the first week of February. **Please send all of your comments no later than February 1, 2010 to Robert Warren** at rwarren@miamidade.gov so we can provide a comprehensive County response. If you have no feedback, please indicate as such.

Thank you in advance for your cooperation.

Wendi J. Norris, Director
Miami-Dade County **General Services Administration**
111 NW 1 ST, Suite 2410, Miami, FL 33128
phone: (305) 375-2495 fax: (305) 375-4968
www.miamidade.gov/gsa

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Memorandum

MIAMI-DADE COUNTY

Date: February 18, 2010

To: Mark R. Woerner, AICP, Chief,
Metropolitan Planning Section
Department of Planning and Zoning

From: Maria Nardi, Chief
Planning and Research Division
Park and Recreation Department

Subject: New Entry Gate Complex
Homestead Air Reserve Base
Draft Environmental Study

This Department has reviewed the information on the above-mentioned project and determined that it will have no negative impact on properties under this Department's jurisdiction.

If there are any further questions, please contact Randy Koper of the Planning and Research Division at (305) 755-7860.

cc: Maria Nardi, Chief, Planning and Research Division

Memorandum

MIAMI-DADE COUNTY

Date: February 17, 2010

To: Mark R. Woerner, AICP, Chief, Metropolitan Planning Section
Department of Planning & Zoning

From: Sunil Harman, Acting Assistant Director, Capitals Facilities Development &
Division Director, Aviation Planning, Land-Use & Grants
Aviation Department

Subject: Proposed Entry Gate at HARB-Draft EA
MDAD DN-10-02-308

As requested by the Department of Planning and Zoning, the Miami-Dade Aviation Department (MDAD) has reviewed the US Department of the Air Force's draft Environmental Assessment (EA) for the construction of a new entry gate complex at the Homestead Air Reserve Base (HARB). The US Department of the Air Force's draft environmental assessment for the construction of a new entry gate complex at the HARB. The draft EA evaluates the impacts of the proposed construction of a new entry gate complex at HARB under a no build scenario that establishes base line conditions for the project and three build alternatives (Alternatives Nos. 1, 2 & 3). Alternative No. 1 is the proposed action (preferred alternative) and comprises a covered gatehouse (± 300 sq. feet) a pass and ID inspection office (± 2,000 sq. feet), a commercial vehicle inspection area (CVIA), associated parking lots (± 0.3 acres), a static aircraft display, the realignment of SW 288 Street, and the closure of segments of the existing alignments of SW 127 Avenue and SW 288 Street/Bougainville Boulevard. Alternative Nos. 2 and 3 both include a combined gatehouse/CVIA, a pass and ID inspection office, a commercial vehicle inspection area, associated parking lots, a small drainage pond, the realignment of a segment of SW 288 Street, and closure of segments of SW 127 Avenue and Bouganville Boulevard south of the SW 288 Street realignment.

Based upon our review of the project information provided to us, it was determined that the proposed Alternative Nos. 1, 2 and 3 would be compatible with operations from Homestead General Aviation Airport.

Should you have any questions, please feel free to contact me at 305-876-8080.

SH/rb

C: J. Abreu
M. Southwell
L. Stover
C. Jose
J. Ramos
R. Bergeron
File

Rowe, Garett A. (DPZ)

From: Pass, Shirley (DP&Z)
Sent: Tuesday, February 09, 2010 12:46 PM
To: Rowe, Garett A. (DP&Z)
Cc: Woerner, Mark (DP&Z)
Subject: FW: New Entry Gate Complex at HARB - Notice of Availability Draft EA
Attachments: Memo from Wendi Norris requesting response to HARB project.htm; Response to GSA regarding HARB project.htm; Miami-Dade Fire Department Access roads__Requirements_.pdf

FYI

Shirley A. Pass, Executive Secretary
Miami-Dade County
Department of Planning and Zoning
111 NW First Street, 12th Floor
Miami, Florida 33128
Phone: (305) 375-2835 Fax: (305) 375-1091

"Delivering Excellence Every Day"

From: Heredia, Carlos (MDFR)
Sent: Tuesday, February 09, 2010 11:32 AM
To: Pass, Shirley (DP&Z)
Cc: Lorenzo, Herminio (MDFR); Mendelsberg, Scott (MDFR); Valdes, Doris (MDFR)
Subject: RE: New Entry Gate Complex at HARB - Notice of Availability Draft EA

Good Morning Shirley,

In response to the above referenced subject, please be advised that on January 19, 2010, Wendi Norris, GSA Director, transmitted a letter via e-mail requesting response by County agencies for the construction of a new entry gate complex at the Homestead Air Reserve base (copy attached).

On January 29, 2010, MDFR transmitted a copy of the MDFR Access Road Requirements to GSA illustrating guidelines and access specifications for entry gates (copy attached).

Since there are no plans to physically review, GSA agreed that they would be satisfied with the guidelines which will be incorporated into a proposed comprehensive County response.

However, as noted on the memo from Mark Woerner dated February 5, 2010, there appears to be alternative designs for the entry gate. In an effort to provide an accurate and detailed response, MDFR will require copies of the site plans illustrating the entry gate including its operating process.

In the meantime, I have attached a copy of the MDFR Access Road Requirements that may be used by your professional staff to verify compliance with MDFR requirements.

Regards,
Carlos Heredia

-----Original Message-----
From: Norris, Wendi (GSA)

Sent: Tuesday, January 19, 2010 4:36 PM
To: Espinosa, Carlos (DERM); Calas, Esther (PWD); LaFerrier, Marc C. (DP&Z); Loftus, James K. (MDPD); Lorenzo, Herminio (MDFR); Woods-Richardson, Kathleen (SWM); Kapoor, Harpal (MDT); Renfrow, John (WASD); Raymond, David (HT)
Cc: Atala, Antonio (DP&Z); Dorsey, Mark (DP&Z); Velazquez, Christine (DERM); Camero, Jose (GSA); Warren, Robert (GSA); Salomon, Leland (GSA); Capote, Maria T. (WASD); Heredia, Carlos (MDFR); Cohen, Jeff (PWD); Bernstein, Harvey (PWD); Delgado, Julio (PWD); Hernandez, Armando (PWD); Lacau, Luis (PWD); Austin, Mara G. (WASD); Forbes, Clinton (MDT)
Subject: FW: Copy of letter requesting response by the County to HARB EA

Directors, we received the attached letter from the Environmental consultant working for the Air Force to prepare an assessment of their proposed new gate complex at the Homestead Air Reserve Base(HARB). The new gate complex will be built on approximately 30 acres of land currently owned by the County at SW 288th Street and SW 127th Avenue, directly across the street from the Air Base. This property is part of the vacant land the County will exchange with the Air Force Reserve in order to receive ownership of the BX building and land.

The general link to the Homestead Air Reserve Base Environmental section is:

http://www.homestead.afrc.af.mil/library/susops/index.asp

Although we are trying to get an extension, all comments are due the first week of February. **Please send all of your comments no later than February 1, 2010 to Robert Warren** at rwarren@miamidade.gov so we can provide a comprehensive County response. If you have no feedback, please indicate as such.

Thank you in advance for your cooperation.

Wendi J. Norris, Director
Miami-Dade County **General Services Administration**
111 NW 1 ST, Suite 2410, Miami, FL 33128
phone: (305) 375-2495 fax: (305) 375-4968
www.miamidade.gov/gsa

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-----Original Message-----
From: Pass, Shirley (DP&Z)
Sent: Tuesday, February 09, 2010 9:46 AM
To: Mendelsberg, Scott (MDFR); Heredia, Carlos (MDFR); Sommerhoff, Curtis (DEM); Harman, Sunil (Aviation); Henderson, David (MPO); Guzman-Arean, Susanna (MDT); Garcia, John (MDT); Goldenberg, Bertha M. (WASD); Valdes, Maria A. (WASD); Nardi, Maria (MDPR); Koper, Randy (MDPR); Ona, Leandro (PWD); Shen, Joan (PWD); Hefty, Lee (DERM); Abreu, José (Aviation); Lorenzo, Herminio (MDFR); Mesa, Jose L. (MPO); Kapoor, Harpal (MDT); Renfrow, John (WASD); Kardys, Jack (MDPR); Calas, Esther (PWD); Espinosa, Carlos (DERM)
Cc: Rowe, Garett A. (DP&Z)
Subject: New Entry Gate Complex at HARB - Notice of Availability Draft EA

Good morning:

Attached, you will find a documentation regarding the above referenced subject. This documentation will be forwarded to your attention via interoffice mail.

Thank you,

Shirley A. Pass, Executive Secretary
Miami-Dade County
Department of Planning and Zoning
111 NW First Street, 12th Floor
Miami, Florida 33128
Phone: (305) 375-2835 Fax: (305) 375-1091

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Miami-Dade Fire Rescue
Access Road Requirements

The requirements identified in this document are minimum standards. The Authority Having Jurisdiction (AHJ), based on specific fire fighting/and or Emergency Medical Service (EMS) needs, may require necessary modifications to these minimum standards on a case-by-case basis.

Fire department access roads must be provided for every community, facility, building, or portion of a building. Set-up sites, fire lanes, and slopes in a project must be able to accommodate a truck with dimensions as follows.

Overall length:	46 feet, 10 inches
Bumper to bump:	32 feet
Wheelbase length:	256 inches

Requirements for changes of elevation on Fire Department access roads

- Angle of approach: 11 degrees max = (1: 5.14 ratio) =(19.4%)
- Brake-over angle: 7 degrees max = (1: 8.14 ratio) =(12.3%)
- Angle of departure: 8 degrees max = (1: 7.12 ratio) =(14%)
- Driving inclines 11 degrees max = (1: 5.14 ratio) =(19.4%)

Required dimensions for fire department access roads

- All pertinent dimensions of fire department access roads such as drivable roadway width, turn radii, cul-de-sacs, and T or Y turn-arounds must be identified on a site plan. All sidewalks and green space shall be identified separate from roadway dimensions.

- The minimum dimensions for fire department access roads shall be 20 feet unobstructed width (two-way traffic) and not less than 13 feet 6 inches of unobstructed vertical clearance NFPA 1 18.2.2.5.1. The AHJ

will accept one-way traffic lanes to be a minimum of 15 feet unobstructed width.

- Dead-end fire department access roads exceeding 150 feet shall be provided with approved provisions for the turning around of fire apparatus NFPA 1 18.2.2.5.4. An approved turn-around shall be by means described below.
    - A minimum 50 feet outside radius cul-de-sac of which must be a suitable surface as described in *Emergency vehicle support capability* and approved by the AHJ.
    - Cul-de-Sac right of way minimum turn radius for residential requires a 50 feet minimum radius. The street and paving design must conform to criteria requiring either curb and gutter design allowing a minimum of 43 feet of finished pavement radius or a swale and sidewalk design with maximum 5 feet sidewalk and maximum 5 feet swale yielding 40 feet finished pavement radius.
    - Cul-de-Sac right of way minimum turn radius for commercial requires a 67 feet right of way for curb and gutter design with a maximum of 5 feet sidewalk to yield 60 feet of finished pavement radius or requires a 70 feet right of way for swale and sidewalk design with a maximum of 5 feet sidewalk and 5 feet swale yielding 60 feet minimum finished pavement radius.
    - A T-Turn or Y-Turn with an extension of the "T or Y" to be a minimum of 46 feet from the edge of each side of the roadway (not the center of the roadway) which must be a suitable surface as described below and approved by the AHJ.

Building access

- A fire department access road shall extend to within 50 feet of a single exterior door providing access to the interior of any and all buildings NFPA 1 18.2.2.2

- Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (450 feet if fully sprinklered) from a fire department access road as measured by an

approved route around the exterior of the building or facility NFPA 1 18.2.2.3.1

Gated communities or properties

- Gates to communities or properties shall be a minimum 15 feet clear width if the approach to and/or departure from the gate is not within a turn radius.
- Gates that are within a turn radius shall be a minimum 20 feet clear width
- Fire Department access to gated communities shall be by Knox Key Switch model 3502 ONLY or Knox padlock model 3753 on manual gates where permitted

Emergency vehicle support capability

- Fire department access roads shall be designed and maintained to support a minimum of 32 tons and shall be provided with a surface suitable for all-weather driving capabilities NFPA 1 (18 2.2.5.2)

Non-Paved Fire Department Access Roads

- Fire Department access roads permitted to traverse through non-paved areas via "grass pavers" or other approved means that will allow grass, foliage, or other landscaping material to grow shall be clearly delineated with signs complying with NFPA 1 Florida Edition (18.2.2.5.8). The edges of non-paved Fire Department access roads shall also be delineated in a manner that will make the access road apparent under all conditions.

Arial apparatus set-up sites

- Sites shall be provided at the corner of each building over three stories in height and at the approximate center of buildings in excess of 125 feet in length for fire fighting operations.
- Sites shall be no closer than 10 feet and no further than 30 feet from any building. Each site shall be a minimum 21 feet wide and 36 feet long with a cross slope no greater than 5 percent.
- Sites shall comply with the requirements of the emergency vehicle support capabilities above and also capable of withstanding any point forces resulting from outriggers

Fire hydrants, sprinkler systems, and other fire related devices

- Clearance from landscaping, parking, or other obstructions around fire hydrants and fire department connections to sprinkler systems shall be a minimum of seven and one-half feet in front of and to the sides of each appliance NFPA 1 18.3.4.1, 18, 3.4.2
- Any required fire sprinkler post indicator valve and/or fire department connection shall be located not less than 40 feet from the protected building
- The fire department connection shall be within 150 feet of the closest fire hydrant.

NOTICE

Miami-Dade County Fire Rescue Department

Effective September 1, 2005, in accordance with NFPA 1: 10.12.1, 10.12.2 and 10.12.3

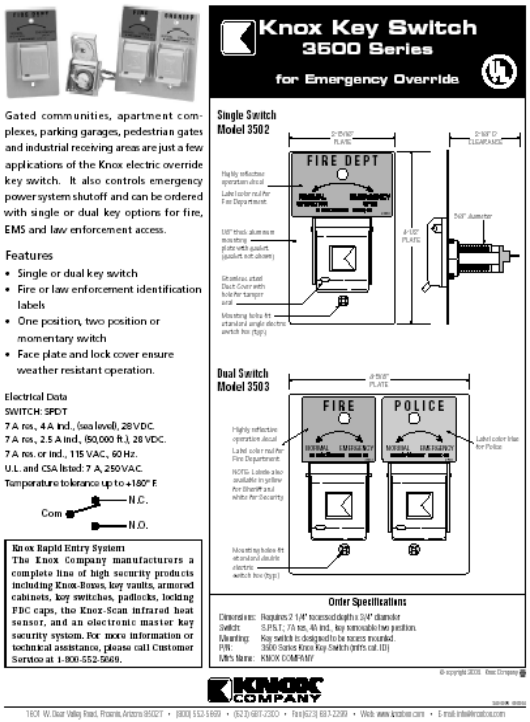
- **NEW AUTOMATIC GATED ENTRYWAYS** to residential communities or multi-family complexes and commercial properties with keyed automatic entryways may use only a Knox key switch (model 3502) to allow responding emergency personnel access to the property. No other system or model will be permitted.

- **EXISTING AUTOMATIC GATED ENTRYWAYS** to residential communities or multi-family complexes and commercial properties that employ any method of access to emergency personnel other than a functional toggle switch in a Supra Max box will be required to upgrade to a Knox key switch system (model 3502). No other system or model will be permitted.

- **MANUAL GATED ENTRYWAYS** to commercial properties, where padlocks are used and are allowed by code, shall also use a Knox padlock (model 3753) along with the owner's padlock to allow responding emergency personnel access to the property. No other system or model will be permitted.

Knox key switch (model 3502) or padlock (model 3753) can be purchased from the Knox Company at website http://www.knoxbox.com/store/ or telephone number **(800) 552-5669 extension #1**.

The customer service representative must be told the key switch or padlock being ordered is for use in "Miami-Dade Fire Rescue" jurisdiction (system code #PS-31-291-08-05).



Knox Key Switch
3500 Series
for Emergency Override

Gated communities, apartment complexes, parking garages, pedestrian gates and industrial receiving areas are just a few applications of the Knox electric override key switch. It also controls emergency power system shutoff and can be ordered with single or dual key options for fire, EMS and law enforcement access.

Features
- Single or dual key switch
- Fire or law enforcement identification labels
- One position, two position or momentary switch
- Face plate and lock cover ensure weather resistant operation.

Electrical Data
SWITCH: SPDT
7 A res., 4 A ind., (sea level), 28 VDC.
7 A res., 2.5 A ind., (50,000 ft.), 28 VDC.
7 A res. or ind., 115 VAC., 60 Hz.
U.L. and CSA listed: 7 A, 250 VAC.
Temperature tolerance up to +160° F

Com — N.C. / N.O.

Knox Rapid Entry System
The Knox Company manufacturers a complete line of high security products including Knox-Boxes, key vaults, armored cabinets, key switches, padlocks, locking FDC caps, the Knox-Scan infrared heat sensor, and an electronic master key security system. For more information or technical assistance, please call Customer Service at 1-800-552-5669.

Single Switch
Model 3502

Dual Switch
Model 3503

Order Specifications

Dimensions: Requires 2 1/4" recessed depth x 3/4" diameter
Switch: S.P.S.T., 7A res., 4A ind., key removable two position.
Mounting: Key switch is designed to be recess mounted.
P/N: 3500 Series Knox Key Switch (prefix cat. ID)
Mfr's Name: KNOX COMPANY

KNOX COMPANY

1601 W. Deer Valley Road, Phoenix, Arizona 85027 • (800) 552-5669 • (623) 687-2200 • Fax (623) 687-2299 • Web: www.knoxbox.com • E-mail: info@knoxbox.com

Key Switch

Padlock

Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

March 12, 2010

Ms. Erika A. Schreiber, Project Manager
AECOM Technical Services, Inc.
Building VI, Suite 500
10 Patewood Drive
Greenville, SC 29615

RE: Department of the Air Force – Draft Environmental Assessment, Construction of a New Entry Gate Complex at Homestead Air Reserve Base – Homestead, Miami-Dade County, Florida.
SAI # FL201001115084C

Dear Ms. Schreiber:

The Florida State Clearinghouse has coordinated a review of the referenced Draft Environmental Assessment (EA) under the following authorities: Presidential Executive Order 12372; Section 403.061(40), *Florida Statutes*; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended. The following state agency comments are provided for consideration in finalizing the EA.

The Florida Department of Environmental Protection's (DEP) Southeast District staff confirms that project managers will need to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the DEP, including a Stormwater Pollution Prevention Plan (SWPPP) detailing site-specific best management practices to control erosion. For further information and assistance, please contact the DEP's NPDES Stormwater Section in Tallahassee at (850) 245-7522.

Staff of the South Florida Water Management District (SFWMD) has reviewed the proposed project and determined that it does not appear to involve wetlands, as defined by Rule 62-340, *Florida Administrative Code*, or other surface waters. The history of storage, handling and reported spills of petroleum products in this area warrants pre-screening of any excavated soil for hydrocarbon contaminants by a licensed environmental professional. Should contaminated soil be detected, the necessary county and state reporting and remediation procedures should be conducted. A Water Use Permit will be required for any proposed construction dewatering activities. Potential issues of concern

related to any proposed construction dewatering activities include saltwater intrusion and movement of dissolved phase hydrocarbons in the groundwater.

Florida Department of Transportation (FDOT) District Six staff has reviewed the proposed project and recommends that Figure 3-3, "Major Surface Water Bodies in the Project Vicinity" be revised, as area water bodies are not identified on the figure. It appears that the incorrect figure may have been included in this section.

Based on the information contained in the Draft EA and the comments provided by our reviewing agencies, the state has determined that, at this stage, the proposed project is consistent with the Florida Coastal Management Program (FCMP). To ensure the project's continued consistency with the FCMP, the concerns identified by our reviewing agencies must be addressed prior to project implementation. The state's continued concurrence will be based on the activity's compliance with FCMP authorities, including federal and state monitoring of the activity to ensure its continued conformance, and the adequate resolution of issues identified during this and subsequent reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting process.

Thank you for the opportunity to review the proposed project. Should you have any questions regarding this letter, please contact Mr. Chris Stahl at (850) 245-2169.

Yours sincerely,

Sally B. Mann

Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/cjs
Enclosures

cc: Tim Gray, DEP, Southeast District
Jim Golden, SFWMD
Martin Markovich, FDOT

Project Information	
Project:	FL201001115084C
Comments Due:	02/25/2010
Letter Due:	03/12/2010
Description:	DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT, CONSTRUCTION OF A NEW ENTRY GATE COMPLEX AT HOMESTEAD AIR RESERVE BASE - HOMESTEAD, MIAMI-DADE COUNTY, FLORIDA.
Keywords:	USAF - NEW ENTRY GATE COMPLEX AT HOMESTEAD AIR RESERVE BASE - MIAMI-DADE CO.
CFDA #:	12.200

Agency Comments:
SOUTH FL RPC - SOUTH FLORIDA REGIONAL PLANNING COUNCIL
No Comments Received
COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS
DCA has reviewed the DEA and found the project consistent with the Homestead, Miami-Dade County Comprehensive Plan and has no concerns or comments.
FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
NO COMMENT BY JOE WALSH ON 1/20/10.
STATE - FLORIDA DEPARTMENT OF STATE
No Comment/Consistent
TRANSPORTATION - FLORIDA DEPARTMENT OF TRANSPORTATION
FDOT's District Six staff recommends that Figure 3-3, "Major Surface Water Bodies in the Project Vicinity" be revised, as the water bodies referenced in the text are not identified on the figure. It appears that the incorrect figure may have been included in this section. The FDOT Aviation Office has no comments.
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP staff confirms that project managers will need to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the DEP, including a Stormwater Pollution Prevention Plan (SWPPP) detailing site-specific best management practices (BMPs) to control erosion. For further information and assistance, please contact the DEP's NPDES Stormwater Section in Tallahassee at (850) 245-7522.
SOUTH FLORIDA WMD - SOUTH FLORIDA WATER MANAGEMENT DISTRICT
The proposed project does not appear to involve wetlands, as defined by Rule 62-340, F.A.C., or other surface waters. The history of storage, handling and reported spills of petroleum products in this area warrants pre-screening of any excavated soil for hydrocarbon contaminants by a licensed environmental professional. Should contaminated soil be detected, the necessary county and state reporting and remediation procedures should be conducted. A Water Use Permit will be required for any proposed construction dewatering activities. Potential issues of concern related to any proposed construction dewatering activities include saltwater intrusion and movement of dissolved phase hydrocarbons in the groundwater.

For more information or to submit comments, please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD, M.S. 47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

STEPHANIE C. KOPELOUSOS
SECRETARY

DATE: February 23, 2010

TO: Curlene Thomas

FROM: Craig James, District VI Environmental Administrator

COPIES: Catherine Owen, Erica Collins, David Korros

SUBJECT: ICAR: USAF Homestead Air Reserve Base New Entry Gate Complex - Draft Environmental Assessment
SAI #: FL201001115084C

COUNTY: Miami-Dade

The Untied States Air Force (USAF) has prepared a Draft Environmental Assessment for the construction of a new entry gate complex at the Homestead Air Reserve Base located in Miami-Dade County, Florida.

Based on the project description provided in the Concurrency Letter to the Florida State Clearinghouse and the electronic copy of the Draft EA that was attached, the following comment is offered for consideration.

1. Figure 3-3, Major Surface Water Bodies in the Project Vicinity – The water bodies referenced in the text are not identified on the figure. It appears that the incorrect figure may have been included in this section.

Thank you for providing the District VI Planning and Environmental Management Office, Environment Section with the opportunity to comment. Should you have any questions please contact Erica Collins or me at (305) 470-5220.

COUNTY: MIAMI-DADE
106-SCH-USAF-HS

DATE: 1/11/2010
COMMENTS DUE DATE: 2/25/2010
CLEARANCE DUE DATE: 3/12/2010
SAI#: FL201001115084C

RECEIVED
FEB 12 2010
DEP Office of Intergovt'l Programs

MESSAGE: 2010-12

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
COMMUNITY AFFAIRS	SOUTH FLORIDA WMD		
ENVIRONMENTAL PROTECTION			
FISH and WILDLIFE COMMISSION			
X STATE			
TRANSPORTATION			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

_ **Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.**

X **Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.**

_ **Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.**

_ **Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.**

Project Description:

DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT, CONSTRUCTION OF A NEW ENTRY GATE COMPLEX AT HOMESTEAD AIR RESERVE BASE - HOMESTEAD, MIAMI-DADE COUNTY, FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA Federal Consistency

- [X] No Comment
- [ ] Comment Attached
- [ ] Not Applicable
- [X] No Comment/Consistent
- [ ] Consistent/Comments Attached
- [ ] Inconsistent/Comments Attached
- [ ] Not Applicable

From:
Division/Bureau: Historical Resources/ Historic Preservation
Reviewer: Samantha Earnest
Date: 2/10/10

Laura A. Kammerer
Deputy SHPO
2.10.2010

RECEIVED
BUREAU OF
HISTORIC PRESERVATION
2010 JAN 14 P 3:20

United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960

March 11, 2010

Erika Schreiber
AECOM Technical Services, Incorporated
Building VI, Suite 500
10 Patewood Drive
Greenville, South Carolina 29615

Service Federal Activity Code: 41420-2010-CPA-0096
Service Consultation Code: 41420-2010-TA-0134
Date Received: January 19, 2010
Project Name: New Entry Gate Complex
Applicant: Homestead Air Reserve Base
County: Miami-Dade

Dear Ms. Schreiber:

Per your request in the letter dated January 7, 2010, the South Florida Ecological Services Office of the U.S. Fish and Wildlife Service (Service) has completed a review of the Draft Environmental Assessment for Construction of a New Entry Gate Complex at Homestead Air Reserve Base (ARB). This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.) and the provisions of the Fish and Wildlife Coordination Act of 1958, as amended (48 Stat. 401; 16 U.S.C. 661 *et seq.*).

PROJECT DESCRIPTION

The U.S. Air Force proposes to construct a new entry gate complex and road realignment on vacant county-owned land. The improvements will consist of three small building structures (a covered gatehouse, pass and identification [ID] inspection office [visitor center], and commercial vehicle inspection area [CVIA]), adjacent parking areas, a static aircraft display, and the associated road realignment of SW 288th Street. The purpose of the project is to accommodate the current mission/tenants and anticipated future increases in gate traffic. The project will permanently impact 6.3 acres of "vacant land with closed roads." The project site is located at the northwest corner of SW 288th Street and SW 127th Avenue in Homestead, Miami-Dade County, Florida.

THREATENED AND ENDANGERED SPECIES

Eastern indigo snake

The project occurs within the geographic range of the threatened eastern indigo snake (*Drymarchon corais couperi*). Given this species' large home range requirement and the small project area with limited habitat, the probability of an individual indigo snake occurring in the project area is discountable. On behalf of the Air Force, AECOM has determined the project "may affect, but is not likely to adversely affect" the eastern indigo snake. Based on the current conditions of the project site and its proximity to development, the Service concurs with the Air Force determination.

Small's milkpea and Sand flax

The endangered Small's milkpea (*Galactia smalli*) is a small, perennial vine with pink flowers which most often grows prostrate or very close to the ground in pine rocklands or rockland hammocks (Nature Serve 2009). It has not been found within the current boundaries of Homestead ARB, but has been found adjacent (USAF 2009 and Bradley 2009). The candidate sand flax (*Linum arencola*) is a wiry perennial plant approximately 1-ft tall with yellow flowers, often found adjacent to pine rocklands (USFWS 2009). Sand flax in known to occur within the current boundaries of Homestead ARB, but is unlikely to occur on the project site due to habitat preferences (USAF 2009). Several plant surveys have been conducted on former Homestead Air Force Base (AFB) property since 1993, but only one federally endangered species was encountered, the Small's milkpea (USAF 2009). A federal candidate species, the sand flax, which is state-listed as endangered, was also found (USFWS 2009). Both these species were found in a remnant pine rockland tract within former Homestead AFB property on the east side of Homestead ARB (USAF 2009). A recent survey for the SOCSOUTH HQ site, which is located southeast of the alternative site, found large populations of the Small's milkpea and the sand flax (Bradley 2009).

Given the land use history of the North Gate Site (previously developed residential neighborhood), and the lack of the rockland habitats required by these plants on the site, the potential for occurrence of either of these plants within the project area is discountable. Therefore, the Service concurs with the Air Force's determination that the proposed project may affect but is unlikely to adversely affect the Small's milkpea or sand flax.

This letter fulfills the requirements of section 7 of the Act and no further action is required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

Thank you for your cooperation and effort in protecting federally listed species. If you have any questions, please contact Brian Powell at 772-562-3909, extension 315.

Sincerely yours,

for Paul Souza
Field Supervisor
South Florida Ecological Services Office

cc: electronic copy only
FWC, Tallahassee, Florida (Kellie Youmans)

LITERATURE CITED

Bradley, Keith. 2009. Personal (e-mail) communication between Keith Bradley (Institute for Regional Conservation) and Erika Schreiber (ATS) regarding a species survey on proposed SOCSOUTH property. Received 14 December 2009.

U.S. Air Force. 2009. Draft Integrated Natural Resources Management Plan for Homestead Air Reserve Base, Homestead, Florida. Volumes I and II. July. Prepared for: United States Department of the Air Force Headquarters, Air Force Reserve Environmental Division Robins Air Force Base, Georgia 31098-1635.

U.S. Fish and Wildlife Service. 2009. U.S. Fish and Wildlife Service Species Assessment and Listing Priority Assignment Form. Sand Flax. Accessed on 15 November 2009 at http://ecos.fws.gov/docs/candforms_pdf/r4/Q14H_P01.pdf.

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FLORIDA DEPARTMENT OF STATE
Kurt S. Browning
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Ms. Erika Schreiber
AECOM Technical Services, Inc.
10 Patewood Drive
Building VI, Suite 500
Greenville, South Carolina 29615

February 10, 2010

RE: DHR Project File Number: 2010-398 (2009-6539)
United States Department of the Air Force – Air Force Reserve Command
Draft Environmental Assessment for the Construction of a New Entry Control Complex at Homestead Air Reserve Base
Homestead ARB, Dade County

Dear Ms. Schreiber:

This office reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places.* The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, *36 CFR Part 800: Protection of Historic Properties* and the *National Environmental Policy Act of 1969,* as amended.

Based on the information provided, it is the opinion of this office that the above-referenced undertaking will have no effect on historic properties.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservationist, by electronic mail *sedwards@dos.state.fl.us*, or at 850.245.6333 or 800.847.7278.

Sincerely,

Laura A. Kammerer

Laura A. Kammerer
Deputy State Historic Preservation Officer
For Review and Compliance

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Florida Department of Transportation

1000 NW 111 Avenue
Miami, Florida 33172-5800

CHARLIE CRIST
GOVERNOR

STEPHANIE C. KOPELOUSOS
SECRETARY

December 10, 2009

Ms. Erica Schreiber
AECOM Technical Services, Inc.
10 Patewood Drive
Building VI, Suite 500
Greenville, SC 29615

SUBJECT: Environmental Assessment (EA) for the Construction of a New Entry Gate Complex at Homestead Air Reserve Base (ARB), Florida

Dear Ms. Schreiber:

The Florida Department of Transportation has coordinated a review of the referenced Proposed Action. Based on the project description provided in the Memorandum to the Department and attached figures, the following comments are offered for consideration.

1. Please coordinate with the Florida Turnpike Enterprise on any potential impact to S.R. 821/Homestead Extension of Florida's Turnpike and the SW 288th Street interchange.

2. There are no State Routes within the vicinity of the proposed project.

Thank you for providing the District VI Planning and Environmental Management Office, Environment Section with the opportunity to comment. Should you have any questions please contact me at 305-470-5217.

Sincerely,

Dat Huynh, P.E.
District Project Development Engineer

cc: Aileen Bouclé, AICP, FDOT
Steven Craig James, RLA, FDOT

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Schreiber, Erika

From: Steve_Schubert@fws.gov
Sent: Wednesday, December 09, 2009 4:22 PM
To: Schreiber, Erika
Cc: Winston_Hobgood@fws.gov; Marilyn_Knight@fws.gov
Subject: EA for Construction of Homestead ARB gate

Erika,

This email is a response to your Memo to Paul Souza (received November 12, 2009) regarding the upcoming Draft Environmental Assessment for the construction of a new entry gate complex at Homestead Air Reserve Base, Florida. The Fish and Wildlife Service has assigned the following Federal Activity code to the project: 41420-2010-CPA-0096.

Here are our comments:

1) The EA should address the potential effects of the project on the following federally listed species:

- Eastern indigo snake (*Drymarchon corais couperi*)
- Small's milkpea (*Galactia smallii*)
- Sand flax (*Linum arenicola*), candidate species

Keith Bradley (at The Institute for Regional Conservation) did a survey recently on the site for all federally listed / imperiled plants, so you may want to contact him for the latest info. (There are other State-listed plants on site, that Keith may have data on too.)

2) The EA should address the relatedness of this project/action to other construction activities at the ARB.

If you have any questions, please let me know.
Thanks
Steve

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Florida Fish and Wildlife Conservation Commission

Commissioners
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Miami

Kathy Barco
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Information Science And Management
(850) 488-0558
(850) 410-5269 FAX

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620 South Meridian Street
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(800) 955-8770 (V)

MyFWC.com

November 19, 2009

Ms. Erika A. Schreiber
AECOM
10 Patewood Drive
Building VI, Suite 500
Greenville, SC 29615

Dear Ms. Schreiber:

This letter is in response to your request for listed species occurrence records for your project (Homestead Entry Gate Project), located in Miami-Dade County, Florida. No records of listed species occurrence or critical habitats from the Florida Fish and Wildlife Conservation Commission database were located within the project area. Enclosed are 8.5 x 11 maps showing listed species, species richness, and land cover for the project area.

This letter and/or attachments should not be considered as a review or an assessment of the impact upon threatened or endangered species of the project site. It provides FWC's most current data regarding the location of listed species and their associated habitats.

Our SHCA recommendations are intended to be used as a guide. Land development and ownership in Florida is ever-changing and priority areas identified as SHCA might already have been significantly altered due to development or acquired into public ownership. Onsite surveys, literature reviews, and coordination with FWC biologists remain essential steps in documenting the presence or absence of rare and imperiled species and habitats within the project area.

Our fish and wildlife location data represents only those occurrences recorded by FWC staff and other affiliated researchers. Please note that our database does not necessarily contain records of all listed species that may occur in a given area. Also, data on certain species, such as gopher tortoises, are not entered into our database on a site-specific basis. **Therefore, one should not assume that an absence of occurrences in our database indicates that species of significance do not occur in the area.**

The Florida Natural Areas Inventory (FNAI) maintains a separate database of listed plant and wildlife species, please contact FNAI directly for specific information on the location of element occurrences within the project area. Because FNAI is funded to provide information

to public agencies only, you may be required to pay a fee for this information. County-wide listed species information can be located at their website (http://www.fnai.org).

Please credit the Florida Fish and Wildlife Conservation Commission in any publication or presentation of these data. If you have any questions or further requests, please contact me at (850) 488-0588 or gisrequests@myfwc.com.

Sincerely,

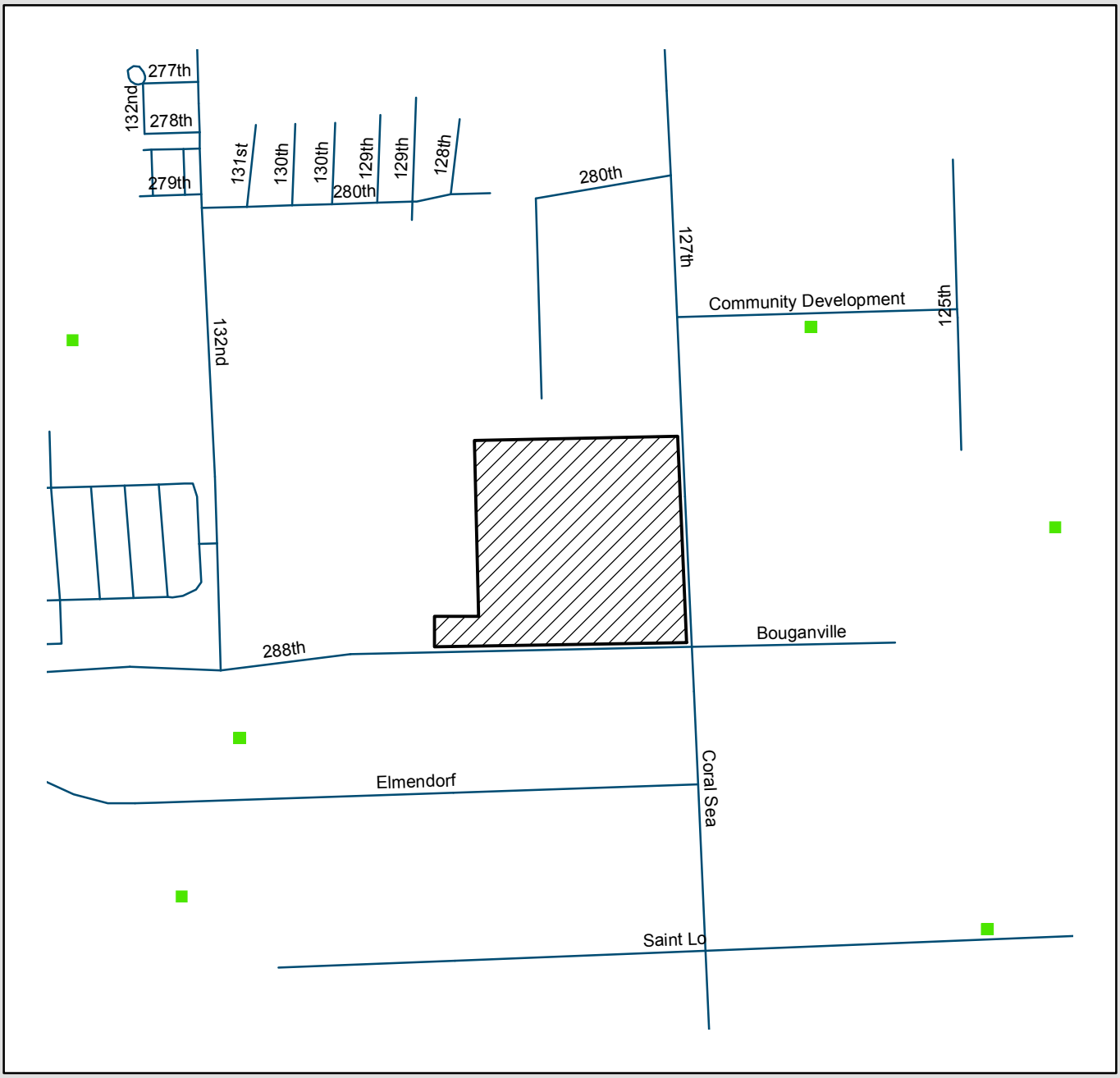
Jan Stearns

Jan Stearns
Staff Assistant

js
2009_5427
Enclosures

Species Occurrence

Homestead Entry Gate Project



- Florida Natural Inventory Areas
- County Boundary
- Project Site
- County/City Roads

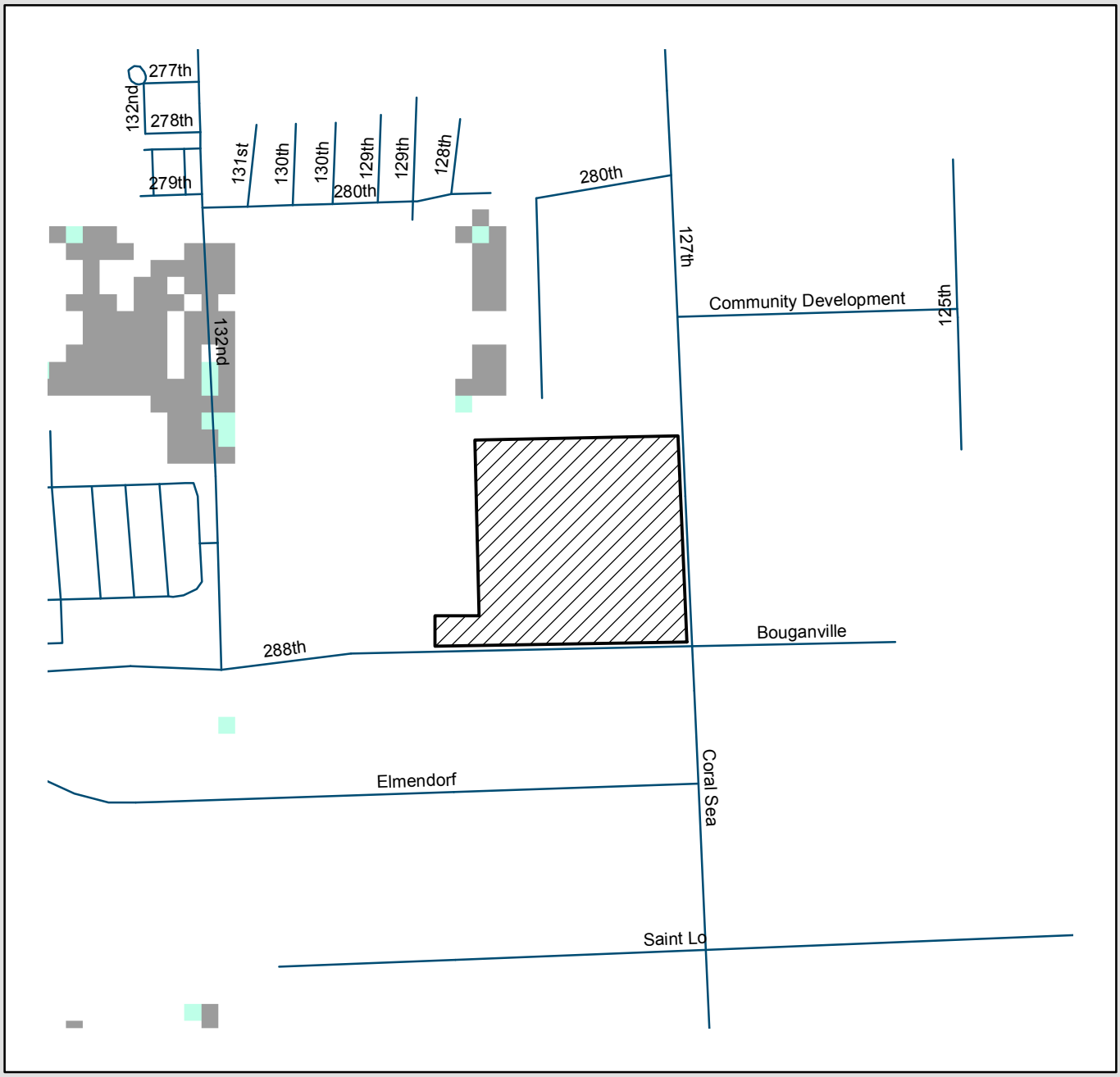
Miles
0 0.1 0.2 0.3 0.4

N

2009_5427

Species Richness

Homestead Entry Gate Project



Species Richness
1 - 3
4 - 6
7 - 9
10 - 13

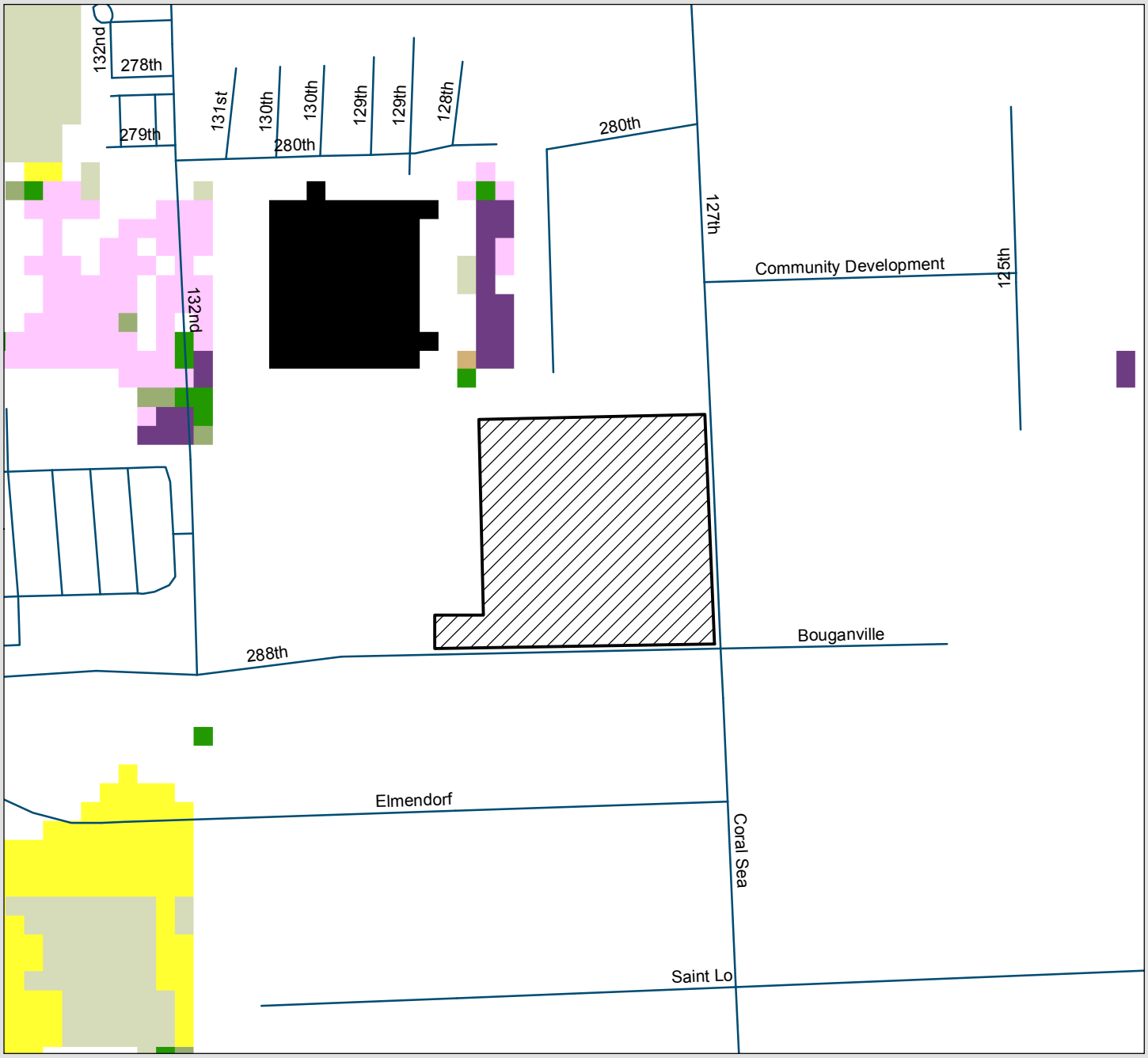
County Boundary
Project Site
County/Cty Roads

Miles
0 0.1 0.2 0.3 0.4

N

2009_5427

Florida Land Cover - 2003
Homestead Entry Gate Project



Project Site
Major Roads
County Boundary

Coastal Strand
Sand/Beach
Xeric Oak Scrub
Sand Pine Scrub
Sandhill
Dry Prairie
Mixed Pine-Hardwood Forest
Hardwood Hammocks and Forest
Pinelands
Cabbage Palm-Live Oak Hammock
Tropical Hardwood Hammock
Freshwater Marsh and Wet Prairie
Sawgrass Marsh

Cattail Marsh
Shrub Swamp
Bay Swamp
Cypress Swamp
Cypress/Pine/Cabbage Palm
Mixed Wetland Forest
Hardwood Swamp
Hydric Hammock
Bottomland Hardwood Forest
Salt Marsh
Mangrove Swamp
Scrub Mangrove

Tidal Flat
Open Water
Shrub and Brushland
Grassland
Bare Soil/Clearcut
Improved Pasture
Unimproved Pasture
Other Agriculture
Citrus
Exotic Plants
High and Low Impact Urban
Extractive

Miles
0 0.1 0.2

N

2009_5427

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STOP This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333 for project review information.

November 6, 2009

Florida Master Site File

Ms. Carol Butler Freeman
Environmental Scientist
AECOM Environment
10 Patewood Drive
Building VI, Suite 500
Greenville, South Carolina 29615

Dear Ms. Freeman,
In response to your inquiry of November 5, 2009 the Florida Master Site File lists no previously recorded historical resources in the following parcel of Dade County:

Township 57 South, Range 39 East, Section 2

When interpreting the results of this search, please consider the following information:

- **This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.**
- **Federal, State and local laws require formal environmental review for most projects. This search DOES NOT constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333.**

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Kind Regards,

Lindsay Hafford

Lindsay Hafford
Historical Data Analyst
Florida Master Site File
lbhafford@dos.state.fl.us

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FLORIDA DEPARTMENT OF STATE
Kurt S. Browning
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Ms. Erika Schreiber
AECOM Technical Services, Inc.
10 Patewood Drive
Building VI, Suite 500
Greenville, South Carolina 29615

November 13, 2009

RE: DHR Project File Number: 2009-6539
United States Department of the Air Force – Air Force Reserve Command
Proposed Environmental Assessment for the Construction of a New Entry Control Complex at Homestead Air Reserve Base
Homestead ARB, Dade County

Dear Ms. Schreiber:

This office reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places.* The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, *36 CFR Part 800: Protection of Historic Properties* and the *National Environmental Policy Act of 1969,* as amended.

Based on the information provided, it is the opinion of this office that the above-referenced undertaking will have no effect on historic properties.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservationist, by electronic mail sedwards@dos.state.fl.us, or at 850-245-6333 or 800-847-7278.

Sincerely,

Laura A. Kammerer

Laura A. Kammerer
Deputy State Historic Preservation Officer
For Review and Compliance

APPENDIX B

Traffic Study

AECOM

SHEET 1 OF 8

JOB TITLE Homestead RAFB ORIGINATOR K Rothermel DATE 11/24/09

JOB NO. CALC. NO. REVIEWER DATE

VEHICLE COUNT SUMMARY

Site 1: Bougainville Blvd west of Nevada Ave

		Mon 10/26	Tues 10/27	Wed 10/28	Thurs 10/29	Fri 10/30	Average
ADT	EB	388	4760	4814	5050	1557	**4875**
	WB	392	4326	4401	4851	678	**4526**
PHV - AM	EB		674	685	661	419	**673**
	WB		360	385	382	220	**376**
PHV - PM	EB	125	409	438	396		**414**
	WB	173	496	457	441		**465**
AM Peak	EB		07:30 AM	07:30 AM	07:30 AM	06:45 AM	
	WB		11:00 AM	11:00 AM	11:00 AM	07:45 AM	
PM Peak	EB	07:30 PM	12:30 PM	12:45 PM	12:30 PM		
	WB	07:30 PM	04:30 PM	04:15 PM	03:00 PM		
15 minute	EB		183	183	193	137	**186**
AM Peak	WB		109	113	111	63	**111**
15 minute	EB	35	111	120	120		**117**
PM Peak	WB	58	157	145	145		**149**
AM PHF	EB		0.921	0.936	0.856	0.765	**0.904**
	WB		0.826	0.852	0.860	0.873	**0.846**
PM PHF	EB	0.893	0.921	0.913	0.825		**0.886**
	WB	0.746	0.790	0.788	0.760		**0.779**

Site 2: Westover Ave

		Sun 11/1	Mon 11/2	Tues 11/3	Wed 11/4	Thurs 11/5	Average
ADT	SB	142	2117	2365	2242	2176	**2241**
	NB	175	2300	2427	2744	2565	**2490**
PHV - AM	SB		320	368	277	393	**322**
	NB		260	310	318	347	**296**
PHV - PM	SB	40	270	291	259	226	**273**
	NB	97	313	344	387	383	**348**
AM Peak	SB		07:15 AM	06:45 AM	06:15 AM	06:15 AM	
	NB		11:00 AM	11:00 AM	11:00 AM	11:00 AM	
PM Peak	SB	07:45 PM	12:15 PM	12:30 PM	12:30 PM	12:00 PM	
	NB	09:45 PM	04:00 PM	03:45 PM	04:00 PM	11:15 AM	
15 minute	SB		100	107	77	116	**95**
AM Peak	NB		83	97	96	117	**92**
15 minute	SB	15	77	75	71	71	**74**
PM Peak	NB	42	107	126	129	107	**121**
AM PHF	SB		0.800	0.860	0.899	0.847	**0.853**
	NB		0.783	0.799	0.828	0.741	**0.803**
PM PHF	SB	0.667	0.877	0.970	0.912	0.796	**0.920**
	NB	0.577	0.731	0.683	0.750	0.895	**0.721**

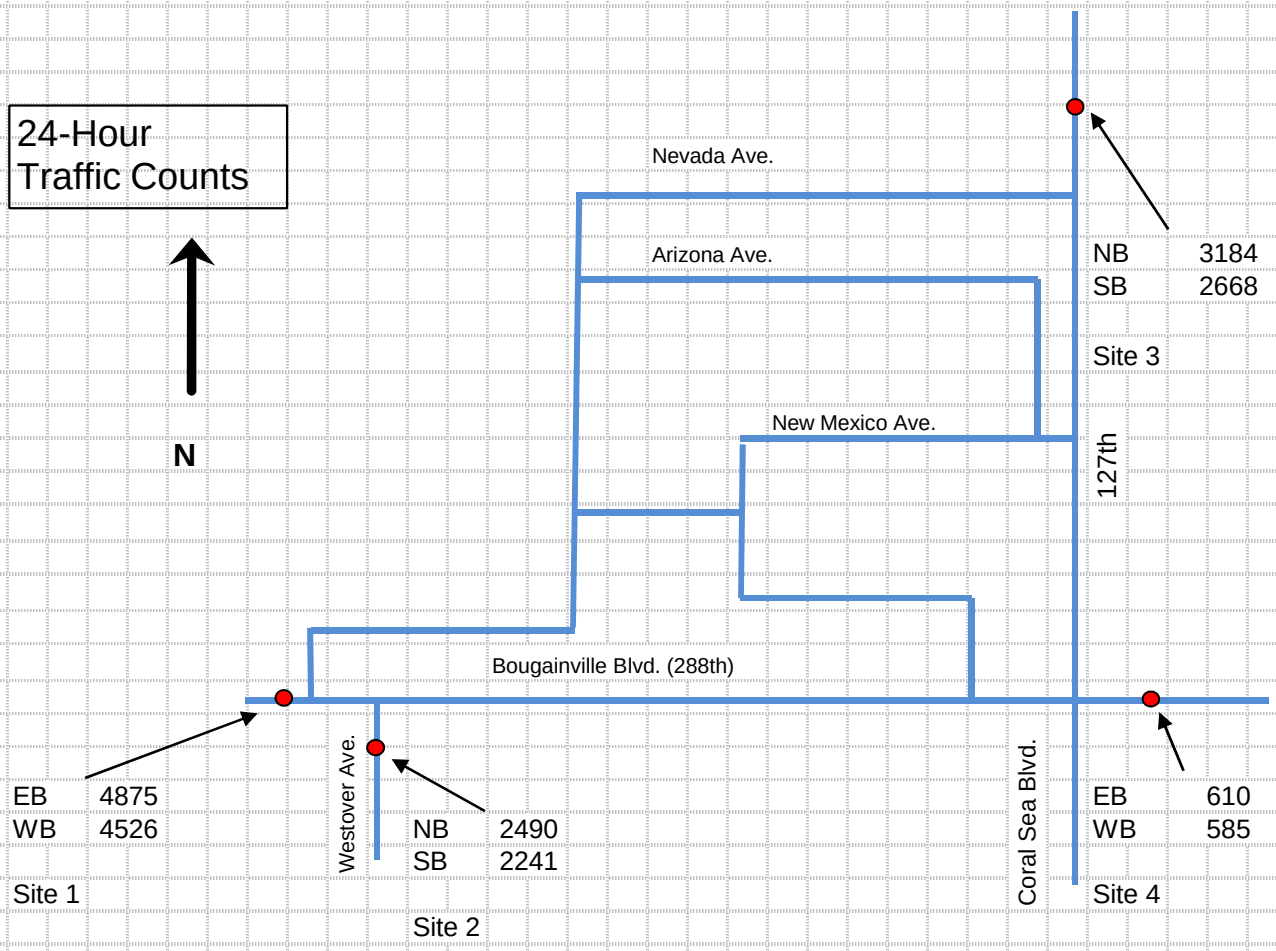
VEHICLE COUNT SUMMARY (cont.)

Site 3: SW 127th Ave

		Mon 10/26	Tues 10/27	Wed 10/28	Thurs 10/29	Fri 10/30	Average
ADT	SB	605	2625	2657	2723	667	**2668**
	NB	644	3152	3117	3284	657	**3184**
PHV - AM	SB		329	329	330	167	**329**
	NB		372	370	354	152	**365**
PHV - PM	SB	187	246	258	251		**252**
	NB	187	273	258	318		**283**
AM Peak	SB		07:45 AM	07:30 AM	07:45 AM	07:30 AM	
	NB		07:30 AM	07:45 AM	07:30 AM	08:30 AM	
PM Peak	SB	05:30 PM	02:45 PM	02:00 PM	03:00 PM		
	NB	05:30 PM	02:15 PM	03:45 PM	02:45 PM		
15 minute	SB		98	96	93	52	**96**
AM Peak	NB		109	110	102	48	**107**
15 minute	SB	58	89	93	87		**90**
PM Peak	NB	51	80	77	93		**83**
AM PHF	SB		0.839	0.857	0.887	0.803	**0.861**
	NB		0.853	0.841	0.868	0.792	**0.854**
PM PHF	SB	0.806	0.691	0.694	0.721		**0.702**
	NB	0.917	0.853	0.838	0.855		**0.849**

Site 4: Bougainville Blvd east of SW 127th

		Mon 10/26	Tues 10/27	Wed 10/28	Thurs 10/29	Fri 10/30	Average
ADT	EB	88	574	594	661	214	**610**
	WB	79	546	560	649	141	**585**
PHV - AM	EB		89	100	98	85	**96**
	WB		35	51	56	39	**47**
PHV - PM	EB	22	56	49	52		**52**
	WB	25	92	76	71		**80**
AM Peak	EB		07:30 AM	07:30 AM	07:45 AM	07:15 AM	
	WB		07:45 AM	07:45 AM	11:00 AM	09:30 AM	
PM Peak	EB	06:30 PM	12:30 PM	12:15 PM	12:30 PM		
	WB	06:30 PM	04:30 PM	04:15 PM	03:15 PM		
15 minute	EB		29	32	36	27	**32**
AM Peak	WB		14	15	23	12	**17**
15 minute	EB	7	25	15	17		**19**
PM Peak	WB	10	28	29	22		**26**
AM PHF	EB		0.767	0.781	0.681	0.787	**0.743**
	WB		0.625	0.850	0.609	0.813	**0.695**
PM PHF	EB	0.786	0.560	0.817	0.765		**0.714**
	WB	0.625	0.821	0.655	0.807		**0.761**



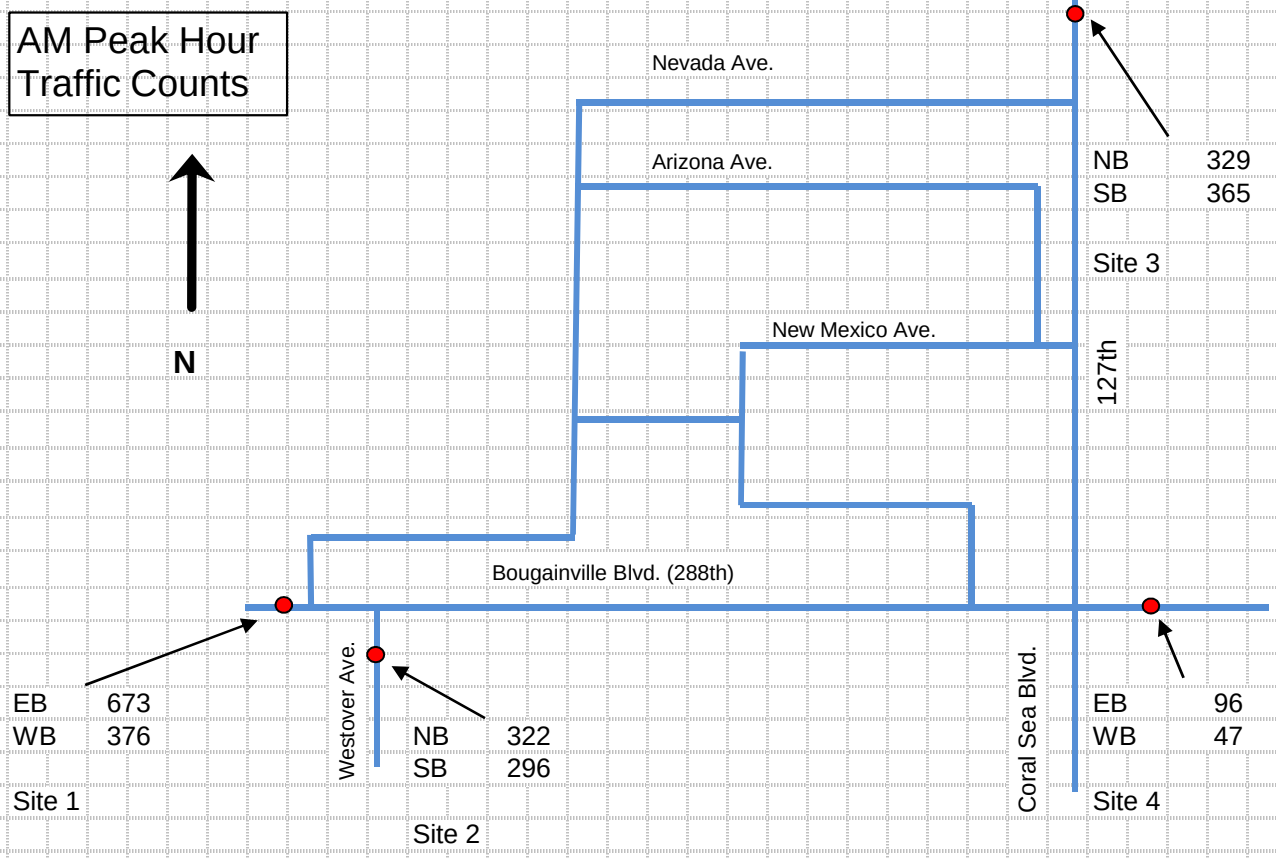
Site 1: Bougainville Blvd west of Nevada Ave

Site 2: Westover Ave

Site 3: SW 127th Ave

Site 4: Bougainville Blvd east of SW 127th

ADT	EB	**4875**	SB	**2241**	SB	**2668**	EB	**610**
	WB	**4526**	NB	**2490**	NB	**3184**	WB	**585**
PHV - AM	EB	673	SB	322	SB	329	EB	96
	WB	376	NB	296	NB	365	WB	47
PHV - PM	EB	414	SB	273	SB	252	EB	52
	WB	465	NB	348	NB	283	WB	80
15 minute	EB	186	SB	95	SB	96	EB	32
AM Peak	WB	111	NB	92	NB	107	WB	17
15 minute	EB	117	SB	74	SB	90	EB	19
PM Peak	WB	149	NB	121	NB	83	WB	26
AM PHF	EB	0.9043	SB	0.853	SB	0.861	EB	0.743
	WB	0.8459	NB	0.803	NB	0.854	WB	0.695
PM PHF	EB	0.8862	SB	0.920	SB	0.702	EB	0.714
	WB	0.7794	NB	0.721	NB	0.849	WB	0.761



Site 1: Bougainville Blvd west of Nevada Ave

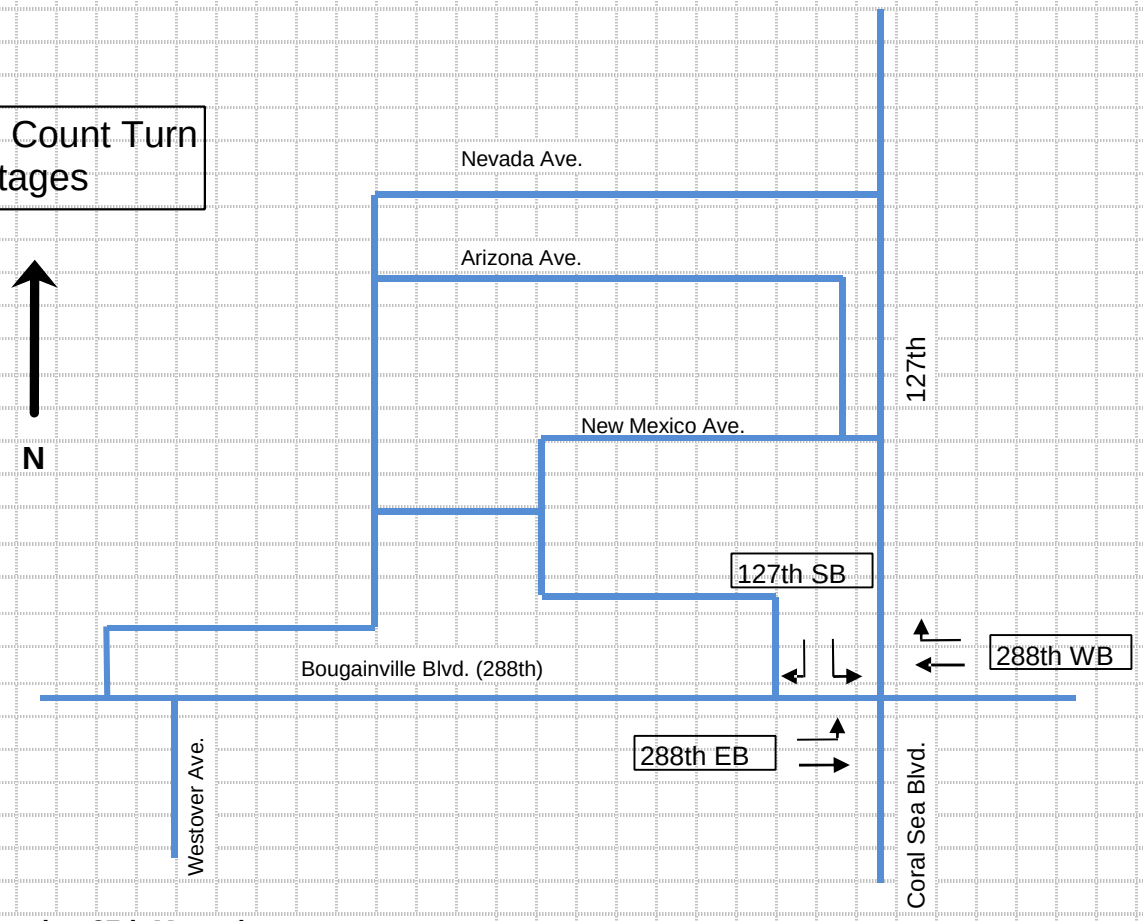
Site 2: Westover Ave

Site 3: SW 127th Ave

Site 4: Bougainville Blvd east of SW 127th

ADT	EB	4875	SB	2241	SB	2668	EB	610
	WB	4526	NB	2490	NB	3184	WB	585
PHV - AM	EB	**673**	SB	**322**	SB	**329**	EB	**96**
	WB	**376**	NB	**296**	NB	**365**	WB	**47**
PHV - PM	EB	414	SB	273	SB	252	EB	52
	WB	465	NB	348	NB	283	WB	80
15 minute	EB	186	SB	95	SB	96	EB	32
AM Peak	WB	111	NB	92	NB	107	WB	17
15 minute	EB	117	SB	74	SB	90	EB	19
PM Peak	WB	149	NB	121	NB	83	WB	26
AM PHF	EB	0.9043	SB	0.853	SB	0.861	EB	0.743
	WB	0.8459	NB	0.803	NB	0.854	WB	0.695
PM PHF	EB	0.8862	SB	0.920	SB	0.702	EB	0.714
	WB	0.7794	NB	0.721	NB	0.849	WB	0.761

Manual Count Turn Percentages



October 27th Manual turn percentages

	AM Peak	Noon Peak	PM Peak	OVERALL
288th EB				
Throughs	84%	82%	91%	**86%**
Left Turns	16%	18%	9%	**14%**
288th WB				
Throughs	82%	77%	71%	**77%**
Right Turns	18%	23%	29%	**23%**
127th SB				
Right Turns	92%	93%	91%	**92%**
Left Turns	8%	7%	9%	**8%**

JOB TITLE Homestead RAFB ORIGINATOR K Rothermel DATE 11/24/09

JOB NO. CALC. NO. REVIEWER DATE

CORRESPONDING MOVEMENTS

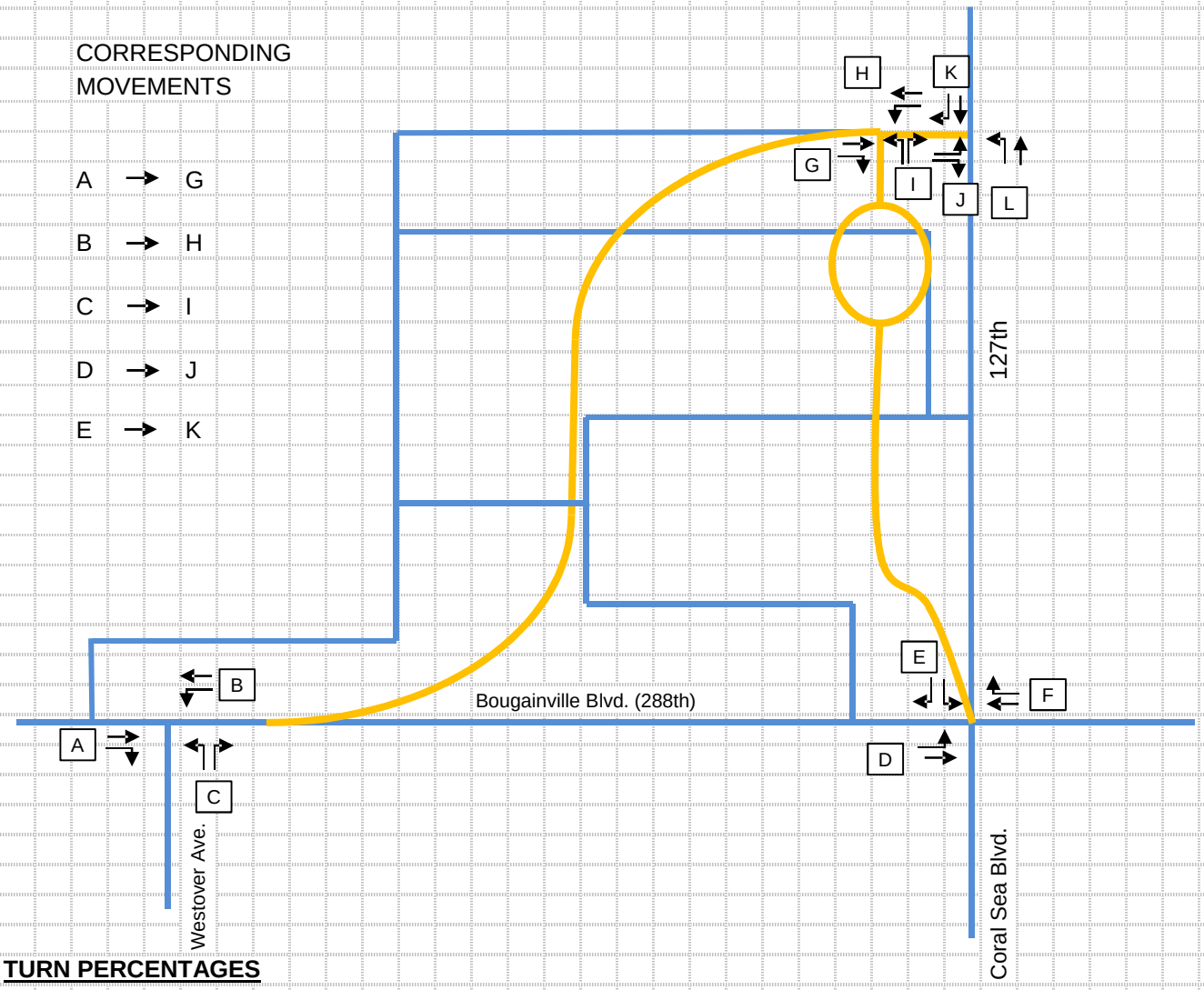
A → G

B → H

C → I

D → J

E → K



TURN PERCENTAGES

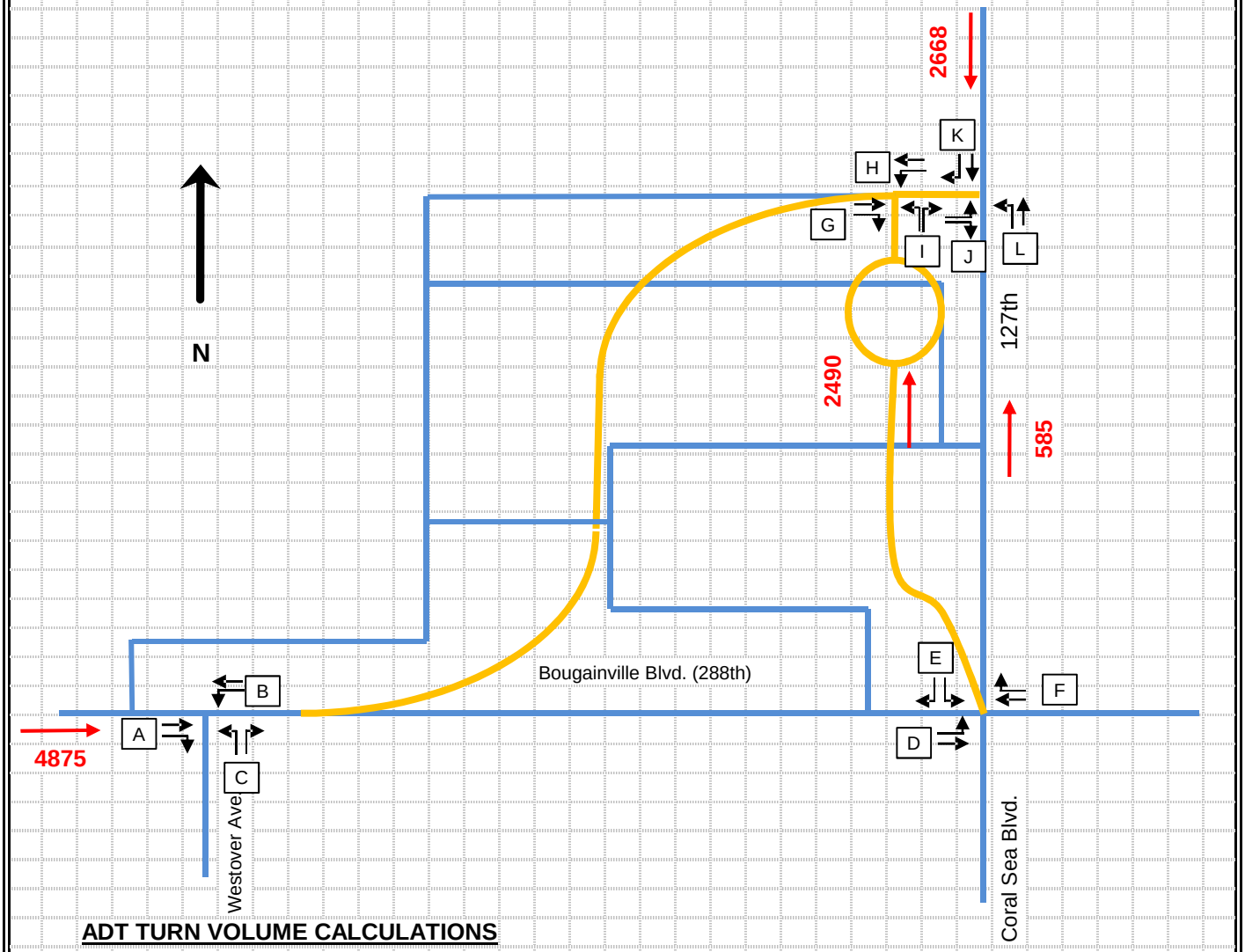
EXISTING			NEW		
A	THRU	72%	G	THRU	72%
	RT	28%		RT	28%
B	LT	28%	H	LT	28%
	THRU	72%		THRU	72%
C	LT	65%	I	LT	65%
	RT	35%		RT	35%
D	LT	86%	J	LT	86%
	THRU	14%		RT	14%
E	LT	8%	K	THRU	8%
	RT	92%		RT	92%
F	THRU	77%	L	LT	75%
	RT	23%		THRU	25%

AECOM

SHEET 7 OF 8

JOB TITLE Homestead RAFB ORIGINATOR K Rothermel DATE 11/24/09

JOB NO. CALC. NO. REVIEWER DATE



ADT TURN VOLUME CALCULATIONS

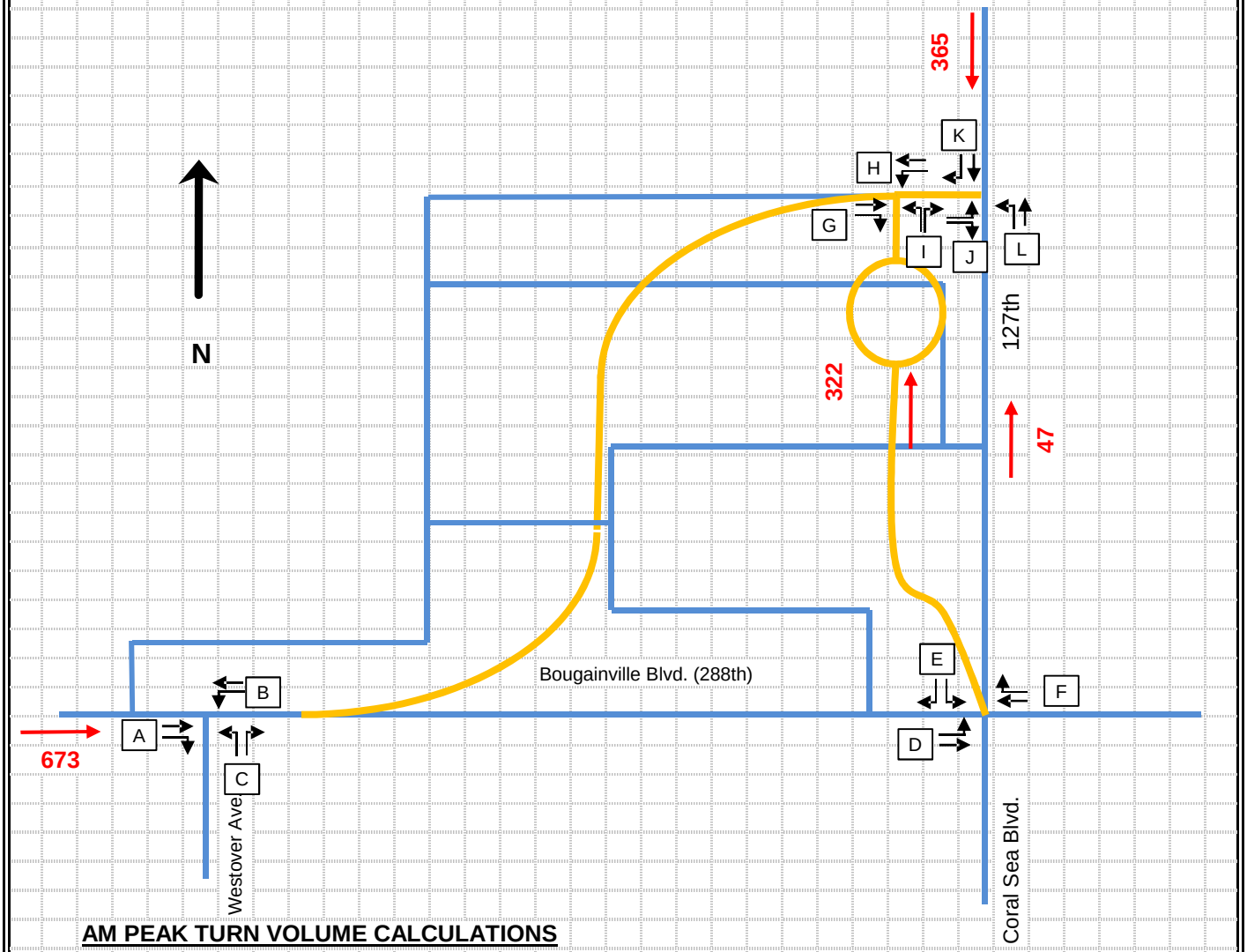
G	**THRU**		4875	72%	=	3510						
	RT			28%	=	1365						
H	**LT**		2668	28%	92%	+	585	75%	=	1186		
	THRU			72%					=	2360		
I	**LT**		2490	65%	=	1619						
	RT			35%	=	872						
J	**LT**	[	2490	35%	+	4875	72%	]	69%	=	3023	
	RT								31%	=	1358	
K	**THRU**		2668	8%	=	213						
	RT			92%	=	2455						
L	**LT**		585	75%	=	439						
	THRU			25%	=	146						

AECOM

SHEET 8 OF 8

JOB TITLE Homestead RAFB ORIGINATOR K Rothermel DATE 11/24/09

JOB NO. CALC. NO. REVIEWER DATE



AM PEAK TURN VOLUME CALCULATIONS

G	**THRU**		673	72%	=	485						
	RT			28%	=	188						
H	**LT**		365	28%	92%	+	47	75%	]	=	137	
	THRU			72%						=	298	
I	**LT**		322	65%	=	209						
	RT			35%	=	113						
J	**LT**	[	322	35%	+	673	72%	]	69%	=	412	
	RT								31%	=	185	
K	**THRU**		365	8%	=	29						
	RT			92%	=	336						
L	**LT**		47	75%	=	35						
	THRU			25%	=	12						

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Karl Rothermel*
Agency/Co.	*AECOM Technical Services*
Date Performed	*11/19/2009*
Analysis Time Period	*AM Peak*

Site Information

Intersection	
Jurisdiction	
Analysis Year	*2009*

Project ID

East/West Street: *Bougainville Avenue* | North/South Street: *Westover Avenue*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*485*	*188*	*137*	*345*	*0*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*209*	*0*	*113*	*0*	*0*	*0*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*T*	*R*	*L*	*T*	*L*	*R*		
PHF	*0.90*	*0.90*	*0.84*	*0.84*	*0.80*	*0.80*		
Flow Rate (veh/h)	*538*	*208*	*163*	*410*	*261*	*141*		
% Heavy Vehicles	*6*	*12*	*12*	*6*	*12*	*12*		
No. Lanes	*2*		*2*		*2*		*0*	
Geometry Group	*5*		*5*		*1*			
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*0.0*	*0.0*	*1.0*	*0.0*	*1.0*	*0.0*		
Prop. Right-Turns	*0.0*	*1.0*	*0.0*	*0.0*	*0.0*	*1.0*		
Prop. Heavy Vehicle	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*	*0.2*	*0.2*		
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*	*-0.6*	*-0.6*		
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*		
hadj, computed	*0.1*	*-0.5*	*0.7*	*0.1*	*0.4*	*-0.4*		

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*	*3.20*	*3.20*		
x, initial	*0.48*	*0.18*	*0.14*	*0.36*	*0.23*	*0.13*		
hd, final value (s)	*6.97*	*6.36*	*7.76*	*7.14*	*7.28*	*6.47*		
x, final value	*1.04*	*0.37*	*0.35*	*0.81*	*0.53*	*0.25*		
Move-up time, m (s)	*2.3*		*2.3*		*2.0*			
Service Time, t_s (s)	*4.7*	*4.1*	*5.5*	*4.8*	*5.3*	*4.5*		

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*538*	*458*	*413*	*502*	*488*	*391*		
Delay (s/veh)	*77.11*	*12.71*	*14.60*	*34.00*	*18.14*	*11.65*		
LOS	*F*	*B*	*B*	*D*	*C*	*B*		
Approach: Delay (s/veh)	*59.15*		*28.48*		*15.87*			
LOS	*F*		*D*		*C*			
Intersection Delay (s/veh)	*38.83*							
Intersection LOS	*E*							

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Karl Rothermel*
Agency/Co.	*AECOM Technical Services*
Date Performed	*11/19/2009*
Analysis Time Period	*AM Peak*

Site Information

Intersection	
Jurisdiction	
Analysis Year	*2009*

Project ID

East/West Street: *288th* | North/South Street: *127th*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*412*	*0*	*185*	*0*	*0*	*0*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*35*	*12*	*0*	*0*	*29*	*336*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*R*			*LT*		*T*	*R*
PHF	*0.85*	*0.85*			*0.85*		*0.86*	*0.86*
Flow Rate (veh/h)	*484*	*217*			*55*		*33*	390
% Heavy Vehicles	*6*	*6*			*0*		*6*	*6*
No. Lanes	*2*		*0*		*1*		*2*	
Geometry Group	*1*				*3b*		*5*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*			*0.7*		*0.0*	*0.0*
Prop. Right-Turns	*0.0*	*1.0*			*0.0*		*0.0*	*1.0*
Prop. Heavy Vehicle	*0.1*	*0.1*			*0.0*		*0.1*	*0.1*
hLT-adj	*0.2*	*0.2*			*0.2*	*0.2*	*0.5*	*0.5*
hRT-adj	*-0.6*	*-0.6*			*-0.6*	*-0.6*	*-0.7*	*-0.7*
hHV-adj	*1.7*	*1.7*			*1.7*	*1.7*	*1.7*	*1.7*
hadj, computed	*0.3*	*-0.5*			*0.1*		*0.1*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*			*3.20*		*3.20*	*3.20*
x, initial	*0.43*	*0.19*			*0.05*		*0.03*	*0.35*
hd, final value (s)	*5.56*	*4.76*			*6.81*		*6.45*	*5.74*
x, final value	*0.75*	*0.29*			*0.10*		*0.06*	*0.62*
Move-up time, m (s)	*2.0*				*2.0*		*2.3*	
Service Time, t_s (s)	*3.6*	*2.8*			*4.8*		*4.1*	*3.4*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*637*	*467*			*305*		*283*	*607*
Delay (s/veh)	*23.16*	*9.66*			*10.60*		*9.55*	*17.42*
LOS	*C*	*A*			*B*		*A*	*C*
Approach: Delay (s/veh)	*18.98*				*10.60*		*16.81*	
LOS	*C*				*B*		*C*	
Intersection Delay (s/veh)	*17.81*							
Intersection LOS	*C*							

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*Karl Rothermel*
Agency/Co.	*AECOM Technical Services*
Date Performed	*11/19/2009*
Analysis Time Period	*AM*

Site Information

Intersection	
Jurisdiction	
Analysis Year	*2009*

Project Description

East/West Street: *288th*	North/South Street: *Coral Sea Blvd*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*485*	*188*	*137*	*298*	
Peak-Hour Factor, PHF	*1.00*	*0.90*	*0.90*	*0.86*	*0.86*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*0*	*538*	*208*	*159*	*346*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*1*	*1*	*0*
Configuration		*T*	*R*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*209*		*113*			
Peak-Hour Factor, PHF	*0.80*	*1.00*	*0.80*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*261*	*0*	*141*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*159*	*261*		*141*			
C (m) (veh/h)		*871*	*168*		*547*			
v/c		*0.18*	*1.55*		*0.26*			
95% queue length		*0.66*	*17.29*		*1.02*			
Control Delay (s/veh)		*10.1*	*325.6*		*13.9*			
LOS		*B*	*F*		*B*			
Approach Delay (s/veh)	--	--	*216.3*					
Approach LOS	--	--	*F*					

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*Karl Rothermel*
Agency/Co.	*AECOM Technical Services*
Date Performed	*11/19/2009*
Analysis Time Period	*AM Peak*

Site Information

Intersection	
Jurisdiction	
Analysis Year	*2009*

Project ID

East/West Street: *288th*

North/South Street: *Coral Sea Blvd*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*485*	*188*	*137*	*298*	*0*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*209*	*0*	*113*	*0*	*0*	*0*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*T*	*R*	*L*	*T*	*L*	*R*		
PHF	*0.90*	*0.90*	*0.86*	*0.86*	*0.80*	*0.80*		
Flow Rate (veh/h)	*538*	*208*	*159*	*346*	*261*	*141*		
% Heavy Vehicles	*6*	*6*	*6*	*6*	*12*	*12*		
No. Lanes	*2*		*2*		*2*		*0*	
Geometry Group	*5*		*5*		*1*			
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*0.0*	*0.0*	*1.0*	*0.0*	*1.0*	*0.0*		
Prop. Right-Turns	*0.0*	*1.0*	*0.0*	*0.0*	*0.0*	*1.0*		
Prop. Heavy Vehicle	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*	*0.2*	*0.2*		
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*	*-0.6*	*-0.6*		
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*		
hadj, computed	*0.1*	*-0.6*	*0.6*	*0.1*	*0.4*	*-0.4*		

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*	*3.20*	*3.20*		
x, initial	*0.48*	*0.18*	*0.14*	*0.31*	*0.23*	*0.13*		
hd, final value (s)	*6.83*	*6.12*	*7.62*	*7.11*	*7.16*	*6.35*		
x, final value	*1.02*	*0.35*	*0.34*	*0.68*	*0.52*	*0.25*		
Move-up time, m (s)	*2.3*		*2.3*		*2.0*			
Service Time, t_s (s)	*4.5*	*3.8*	*5.3*	*4.8*	*5.2*	*4.4*		

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*538*	*458*	*409*	*502*	*496*	*391*		
Delay (s/veh)	*70.40*	*12.12*	*14.13*	*23.77*	*17.65*	*11.45*		
LOS	*F*	*B*	*B*	*C*	*C*	*B*		
Approach: Delay (s/veh)	*54.15*		*20.73*		*15.47*			
LOS	*F*		*C*		*C*			
Intersection Delay (s/veh)	*34.53*							
Intersection LOS	*D*							

AECOM

SHEET 1 OF 1

JOB TITLE Homestead RAFB ORIGINATOR K Rothermel DATE 11/24/09

JOB NO. CALC. NO. REVIEWER DATE

Turning percentage assumptions

	EB RT	EB Thru	WB LT	WB Thru	NB LT	NB RT	% ADT		% w/in 4-hr period		% of ADT for period
7:00	**35%**	65%	30%	70%	65%	35%	30%	*	30%	=	**9.00%**
8:00	30%	70%	30%	70%	65%	35%			30%	=	9.00%
9:00	28%	72%	28%	72%	65%	35%			20%	=	6.00%
10:00	28%	72%	28%	72%	65%	35%			20%	=	6.00%
11:00	40%	60%	30%	70%	60%	40%	25%	*	40%	=	12.00%
12:00	40%	60%	35%	65%	60%	40%			40%	=	12.00%
13:00	35%	65%	35%	65%	65%	35%			10%	=	3.00%
14:00	35%	65%	30%	70%	65%	35%			10%	=	3.00%
15:00	25%	75%	25%	75%	35%	65%	30%	*	20%	=	6.00%
16:00	25%	75%	25%	75%	35%	65%			30%	=	9.00%
17:00	30%	70%	25%	75%	35%	65%			30%	=	9.00%
18:00	30%	70%	20%	80%	35%	65%			20%	=	6.00%

EB RT : realigned Bougainville Ave. turning into Coral Sea Blvd.
EB Thru : realigned Bougainville Ave. heading toward SW 127th
WB LT : realigned Bougainville Ave. turning left onto Coral Sea Blvd.
WB Thru : realigned Bougainville Ave. heading away from SW 127th
NB LT: Coral Sea Blvd. turning west
NB RT: Coral Sea Blvd. turning east towards SW 127th

ADT Volumes

SW288th EB **4875** Coral Sea NB **2490** SW288th WB **3546**

(east of Coral Sea Blvd.) (west of Coral Sea Blvd.)

(turning % by movement) * (% of ADT for period) * ADT = time of day volumes by movement

Ex. : 35% * 9.0% * 4875 = 154

Time of Day Volumes

	EB RT	EB Thru	WB LT	WB Thru	NB LT	NB RT
7:00	**154**	285	96	223	146	78
8:00	132	307	96	223	146	78
9:00	82	211	60	153	97	52
10:00	82	211	60	153	97	52
11:00	234	351	128	298	179	120
12:00	234	351	149	277	179	120
13:00	51	95	37	69	49	26
14:00	51	95	32	74	49	26
15:00	73	219	53	160	52	97
16:00	110	329	80	239	78	146
17:00	132	307	80	239	78	146
18:00	88	205	43	170	52	97

Warrants Summary

Information			
Analyst	Karl Rothermel	Intersection	
Agency/Co	AECOM Technical Services	Jurisdiction	
Date Performed	11/24/2009	Units	U.S. Customary
Project ID		Time Period Analyzed	
East/West Street	Bougainville Ave.	North/South Street	Coral Sea Blvd
File Name	main entrance.xhy	Major Street	East-West

Project Description

General				Roadway Network	
Major Street Speed (mph)	35	ḅ	Population < 10,000	Two Major Routes	ė
Nearest Signal (ft)	0	ė	Coordinated Signal System	Weekend Count	ė
Crashes (per year)	0	ė	Adequate Trials of Alternatives	5-yr Growth Factor	0

Geometry and Traffic	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N	0	1	1	1	1	0	1	0	1	0	0	0
Lane usage		T	R	L	T		L		R			
Vehicle Volume Averages (vph)	0	118	247	74	191	0	100	0	86	0	0	0
Peds (ped/h) / Gaps (gaps/h)	--	/	--	--	/	--	--	/	--	--	/	--
Delay (s/veh) / (veh-hr)	--	/	--	--	/	--	--	/	--	--	/	--

Warrant 1: Eight-Hour Vehicular Volume	ḅ
1 A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--	ḅ
1 B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--	ė
1 80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)	ḅ
Warrant 2: Four-Hour Vehicular Volume	ḅ
2 A. Four-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	ḅ
Warrant 3: Peak Hour	ḅ
3 A. Peak-Hour Conditions (Minor delay --and-- minor volume --and-- total volume) --or--	ė
3 B. Peak- Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	ḅ
Warrant 4: Pedestrian Volume	ė
4 A. Pedestrian Volumes (Four hours --or-- one hour) --and--	ė
4 B. Gaps Same Period (Four hours --or-- one hour)	ė
Warrant 5: School Crossing	ė
5. Student Volumes --and--	ė
5. Gaps Same Period	ė
Warrant 6: Coordinated Signal System	ė
6. Degree of Platooning (Predominant direction or both directions)	ė
Warrant 7: Crash Experience	ė
7 A. Adequate trials of alternatives, observance and enforcement failed --and--	ė
7 B. Reported crashes susceptible to correction by signal (12-month period) --and--	ė
7 C. 80% Volumes for Warrants 1A, 1B --or-- 4 are satisfied	ė

Warrant 8: Roadway Network	
8 A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2 or 3) --or--	
8 B. Weekend Volume (Five hours total)	

SHORT REPORT

General Information		Site Information	
Analyst	*Karl Rothermel*	Intersection	*Main Entrance*
Agency or Co.	*AECOM Technical Services*	Area Type	*All other areas*
Date Performed	*12/16/2009*	Jurisdiction	
Time Period	*AM Peak*	Analysis Year	*2009*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes		*1*	*1*	*1*	*1*		*1*		*1*			
Lane Group		*T*	*R*	*L*	*T*		*L*		*R*			
Volume (vph)		*485*	*188*	*137*	*298*		*209*		*113*			
% Heavy Vehicles		*0*	*0*	*0*	*0*		*0*		*0*			
PHF		*0.86*	*0.86*	*0.86*	*0.86*		*0.86*		*0.86*			
Pretimed/Actuated (P/A)		*P*	*P*	*P*	*P*		*A*		*A*			
Startup Lost Time		*2.0*	*2.0*	*2.0*	*2.0*		*2.0*		*2.0*			
Extension of Effective Green		*2.0*	*2.0*	*2.0*	*2.0*		*2.0*		*2.0*			
Arrival Type		*3*	*3*	*3*	*3*		*3*		*3*			
Unit Extension		*3.0*	*3.0*	*3.0*	*3.0*		*3.0*		*3.0*			
Ped/Bike/RTOR Volume	*0*	*0*	*10*	*0*	*0*		*0*	*0*	*11*			
Lane Width		*12.0*	*12.0*	*12.0*	*12.0*		*12.0*		*12.0*			
Parking/Grade/Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*			
Parking/Hour												
Bus Stops/Hour		*0*	*0*	*0*	*0*		*0*		*0*			
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*				

Phasing	Thru & RT	WB Only	03	04	NB Only	06	07	08
Timing	G = *26.4*	G = *7.7*	G = *0.0*	G = *0.0*	G = *10.9*	G =	G =	G =
	Y = *5*	Y = *5*	Y = *0*	Y = *0*	Y = *5*	Y =	Y =	Y =
Duration of Analysis (hrs) = *0.25*						Cycle Length C = *60.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate		*564*	*207*	*159*	*347*		*243*		*119*			
Lane Group Capacity		*836*	*1139*	*232*	*1238*		*328*		*293*			
v/c Ratio		*0.67*	*0.18*	*0.69*	*0.28*		*0.74*		*0.41*			
Green Ratio		*0.44*	*0.70*	*0.13*	*0.65*		*0.18*		*0.18*			
Uniform Delay d_1		*13.4*	*3.0*	*25.0*	*4.5*		*23.2*		*21.7*			
Delay Factor k		*0.50*	*0.50*	*0.50*	*0.50*		*0.30*		*0.11*			
Incremental Delay d_2		*4.3*	*0.4*	*15.3*	*0.6*		*8.7*		*0.9*			
PF Factor		*1.000*	*1.000*	*1.000*	*1.000*		*1.000*		*1.000*			
Control Delay		*17.7*	*3.3*	*40.2*	*5.0*		*31.9*		*22.6*			
Lane Group LOS		*B*	*A*	*D*	*A*		*C*		*C*			
Approach Delay		*13.9*			*16.1*			*28.9*				
Approach LOS		*B*			*B*			*C*				
Intersection Delay		*17.9*			Intersection LOS					*B*		

288th Street Re-route (EB)
288th Street Re-route (WB)
Entrance Driveway

INPUT REPORT

Site: New Site - 1

Proposed Entry Control
Complex - Coral Sea Blvd
Conceptual

Intersection and Model Parameters	
Title	Proposed Entry Control Complex - Coral Sea Blvd Conceptual
Intersection ID	1
Unit Time (for volumes)	60 minutes
Peak Flow Period (for performance)	15 minutes
Intersection Type	Roundabout
Model Name	US HCM (US)
Drive Rule	Right-hand side of the road
Units	US
New Zealand Rule	No
HCM Version	Yes

Approach Data

Location	Name	Type	No. of App. Lanes	No. of Exit Lanes	Extra Bunching %
South	Entrance Driveway	Two-way	2	1	-10.0
East	288th Street Re-route (WB)	Two-way	2	1	-10.0
West	288th Street Re-route (EB)	Two-way	2	2	-10.0

Approach Lane Data

Lane Number	Lane Type	Lane Discip.	Basic Satn Flow tcu/h	Utilisation Ratio %	Saturation Speed mph	Capacity Adjustment %
South	Entrance Driveway					
App. Lane 1	Normal	L	1900	–	–	0.0
App. Lane 2	Normal	R	1900	–	–	0.0
East	288th Street Re-route (WB)					
App. Lane 1	Normal	L	1900	–	–	0.0
App. Lane 2	Normal	T	1900	–	–	0.0
West	288th Street Re-route (EB)					
App. Lane 1	Normal	T	1900	–	–	0.0
App. Lane 2	Slip	R	1900	–	–	0.0

Approach & Exit Lane Data

Lane Number	Lane Width ft	Lane Length ft	Grade %	SL Type
South	Entrance Driveway			
App. Lane 1	12.00	1000.0	0.00	–
App. Lane 2	12.00	1000.0	0.00	–
Exit Lane 1	12.00	1000.0	0.00	–
East	288th Street Re-route (WB)			
App. Lane 1	12.00	200.0	0.00	–
App. Lane 2	12.00	200.0	0.00	–
Exit Lane 1	12.00	200.0	0.00	–
West	288th Street Re-route (EB)			
App. Lane 1	12.00	1200.0	0.00	–
App. Lane 2	12.00	1150.0	0.00	–
Exit Lane 1	12.00	1200.0	0.00	–
Exit Lane 2	12.00	1200.0	0.00	–

Lanes are numbered from left to right in the direction of travel.

Roundabout Data

Location	Name	Island Diameter ft	Circ. Width ft	Circ. Lanes	Entry/Circ. Flow Adjust.	NCHRP Single Lane		NCHRP Multi-Lane Dominant Lane		NCHRP Multi-Lane Subdominant Lane	
						Para. A	Para. B	Para. A	Para. B	Para. A	Para. B
South	Entrance Driveway	150.00	32.00	2	Medium	1130.0	0.001000	1130.0	0.000700	1130.0	0.000750
East	288th Street Re-route (WB)	150.00	32.00	2	Medium	1130.0	0.001000	1130.0	0.000700	1130.0	0.000750
West	288th Street Re-route (EB)	150.00	32.00	2	Medium	1130.0	0.001000	1130.0	0.000700	1130.0	0.000750

Definitions & Path Data

To Approach	Movement Banned	Turn Desig.	App. Cruise Speed mph	Exit Cruise Speed mph	App. Trav. Distance ft	Negn Speed mph	Negn Distance ft	Downst. Distance ft	Negn Radius ft
From: South	Entrance Driveway								
South	Yes	–	–	–	–	–	–	–	–
West	No	L	35.0	25.0	1000.0	–	–	–	–
East	No	R	35.0	25.0	1000.0	–	–	–	–
From: East	288th Street Re-route (WB)								
South	No	L	25.0	20.0	200.0	–	–	–	–
West	No	T	25.0	20.0	200.0	–	–	–	–
From: West	288th Street Re-route (EB)								
West	Yes	–	–	–	–	–	–	–	–
East	No	T	35.0	25.0	1200.0	–	–	–	–
South	No	R	35.0	25.0	1200.0	–	–	–	–

Volumes

To Approach	Total veh	HV %	Peak Flow Factor %	Vehicle Occupancy pers/veh	Flow Scale %	Growth Rate %/year
From: South	Entrance Driveway					
West	209.0	2.00	92.0	1.20	100.00	2.00
East	113.0	2.00	92.0	1.20	100.00	2.00
From: East	288th Street Re-route (WB)					
South	137.0	2.00	92.0	1.20	100.00	2.00
West	298.0	2.00	92.0	1.20	100.00	2.00
From: West	288th Street Re-route (EB)					
East	485.0	2.00	92.0	1.20	100.00	2.00
South	188.0	2.00	92.0	1.20	100.00	2.00

Movement Data - General

Turn	Mov. ID	Queue Space LV ft	Queue Space HV ft	Vehicle Length LV ft	Vehicle Length HV ft	HVE	P.Deg. Satn	Movement Type	Movement Control
South	Entrance Driveway								
L	3L	25.00	90.00	17.00	73.50	2.00	–	Normal	–
R	8R	25.00	90.00	17.00	73.50	2.00	–	Normal	–
East	288th Street Re-route (WB)								
L	1L	25.00	90.00	17.00	73.50	2.00	–	Normal	–
T	6T	25.00	90.00	17.00	73.50	2.00	–	Normal	–
West	288th Street Re-route (EB)								
T	2T	25.00	90.00	17.00	73.50	2.00	–	Normal	–
R	2R	25.00	90.00	17.00	73.50	2.00	–	Slip	Yield

Gap Acceptance Data

Movement		Critical Gap sec	Follow-up Headway sec	Min. Departures veh/min	Exiting Flow Effect %
South	Entrance Driveway				
	L	–	–	2.50	0
	R	–	–	2.50	0
East	288th Street Re-route (WB)				
	L	–	–	2.50	0
	T	–	–	2.50	0
West	288th Street Re-route (EB)				
	T	–	–	2.50	0
	R	–	–	2.50	0

Cost Parameters	
Vehicle Operating Cost	
Cost Unit	$
Pump Price of Fuel	3.000 $/gal
Fuel Resource Cost Factor	0.700
Ratio of Running Cost to Fuel Cost	3.00
Vehicle Mass	
Light Vehicle Mass	3100.0 lb
Heavy Vehicle Mass	24000.0 lb
Time Cost	
Average Income	19.00 $/h
Time Value Factor	0.400

Advanced Model Settings	
General Options	
Level of Service Method	Delay (HCM)
Level of Service Target	LOS D
Performance Measure	Delay
Percentile Queue	95 %
Hours per Year	480 h
HV Method for Gap-Acceptance	Include HV Effect for all percentages
Gap-Acceptance Capacity	SIDRA Standard (Akçelik M3D)
Roundabout Models	
Capacity Model	US NCHRP 572
LOS Method	Same as Signalised Intersections
US NCHRP 572 Roundabout Model	
Include Origin-Destination Pattern Effects	No
Factor for Parameter A	1.000
Factor for Parameter B	1.000
Other Roundabout Models	
FHWA 2000	No
Use Urban Compact Roundabout	–
HCM 2000	No
German	No
NAASRA 1986	No

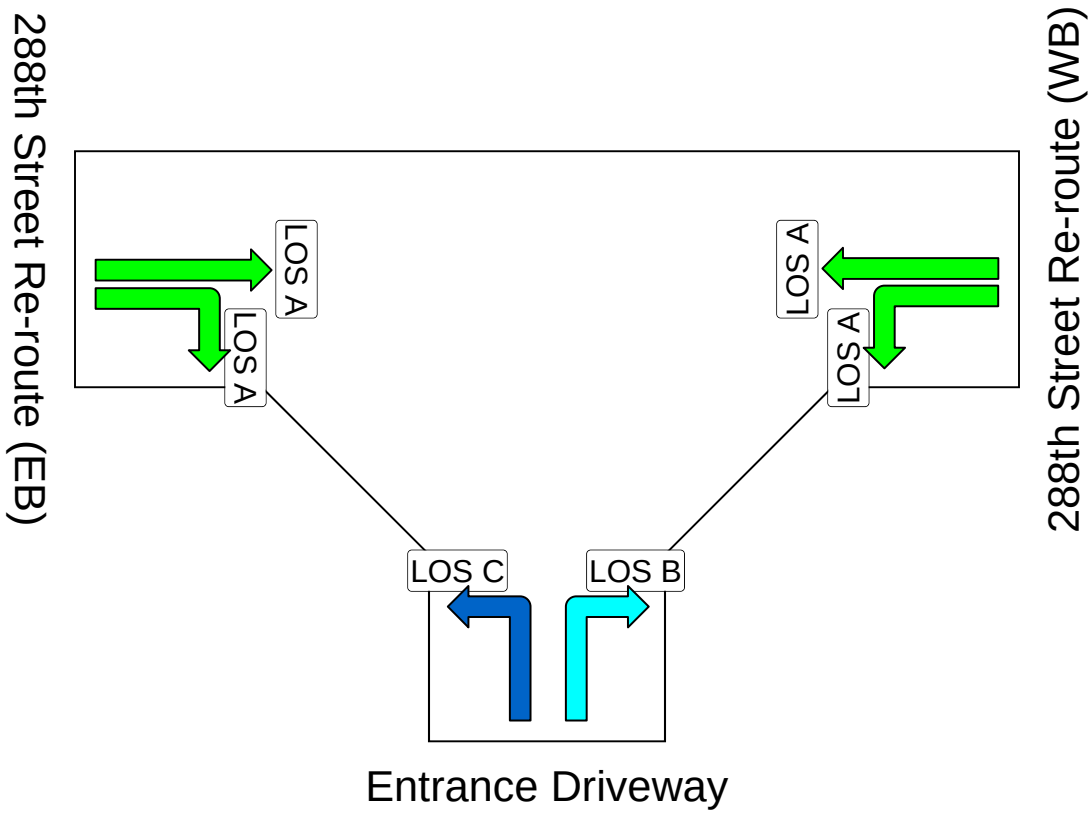
Demand & Sensitivity Analysis	
Analysis Method: Design Life	
Design Life Analysis Objective	Practical Capacity (v/c ratio = xp)
Growth Model	Compound
Number of Years	30

LEVEL OF SERVICE

Level of Service Method: Delay (HCM)

Site: New Site - 1

Proposed Entry Control
Complex - Coral Sea Blvd
Conceptual
Roundabout



Colour code based on Level of Service

LOS A | LOS B | LOS C | LOS D | LOS E | LOS F | Continuous

Roundabout Level of Service Method used in this display: Same as Signalised Intersections

MOVEMENT SUMMARY

Site: New Site - 1

Proposed Entry Control
Complex - Coral Sea Blvd
Conceptual
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South	Entrance Driveway										
3L	L	373	2.0	0.624	21.0	LOS C	5.5	144.8	0.76	1.09	18.9
8R	R	202	2.0	0.352	11.3	LOS B	1.9	51.0	0.65	0.78	23.0
Approach		574	2.0	0.624	17.6	LOS C	5.5	144.8	0.72	0.98	20.0
East	288th Street Re-route (WB)										
1L	L	244	2.0	0.293	4.7	LOS A	1.4	36.2	0.43	0.56	17.1
6T	T	531	2.0	0.614	5.0	LOS A	4.8	126.6	0.59	0.69	16.1
Approach		776	2.0	0.614	4.9	LOS A	4.8	126.6	0.54	0.64	16.5
West	288th Street Re-route (EB)										
2T	T	865	2.0	0.842	7.6	LOS A	12.0	315.7	0.76	0.81	26.7
2R	R	335	2.0	0.360	3.5	LOS A	1.6	42.4	0.35	0.39	29.3
Approach		1200	2.0	0.842	6.5	LOS A	12.0	315.7	0.65	0.69	27.4
All Vehicles		2550	2.0	0.842	8.5	LOS A	12.0	315.7	0.63	0.74	23.1

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS C. LOS Method for individual vehicle movements: Delay (HCM).
Approach LOS values are based on the worst delay for any vehicle movement.
Roundabout LOS Method: Same as Signalised Intersections.
Roundabout Capacity Model: US NCHRP 572.
Design Life Analysis Objective: Practical Capacity (v/c ratio = xp). (Results for 25 years)

INTERSECTION SUMMARY

Site: New Site - 1

Proposed Entry Control
Complex - Coral Sea Blvd
Conceptual
Roundabout

Intersection Performance - Hourly Values

Performance Measure	Vehicles		Persons	
Demand Flows (Total)	2550	veh/h	3060	pers/h
Percent Heavy Vehicles	2.0	%		
Degree of Saturation	0.842			
Practical Spare Capacity	0.9	%		
Effective Intersection Capacity	3028	veh/h		
Control Delay (Total)	6.02	veh-h/h	7.22	pers-h/h
Control Delay (Average)	8.5	sec	8.5	sec
Control Delay (Worst Lane)	21.0	sec		
Control Delay (Worst Movement)	21.0	sec	21.0	sec
Level of Service (Aver. Int. Delay)	LOS A			
Level of Service (Worst Movement)	LOS C			
Level of Service (Worst Lane)	LOS C			
95% Back of Queue - Vehicles (Worst Lane)	12.0	veh		
95% Back of Queue - Distance (Worst Lane)	315.7	ft		
Total Effective Stops	1896	veh/h	2276	pers/h
Effective Stop Rate	0.74	per veh	0.74	per pers
Proportion Queued	0.63		0.63	
Performance Index	41.6		41.6	
Travel Distance (Total)	528.1	veh-mi/h	633.7	pers-mi/h
Travel Distance (Average)	1093	ft	1093	ft
Travel Time (Total)	22.9	veh-h/h	27.4	pers-h/h
Travel Time (Average)	32.3	sec	32.3	sec
Travel Speed	23.1	mph	23.1	mph
Cost (Total)	352.14	$/h	352.14	$/h
Fuel Consumption (Total)	22.6	gal/h		
Carbon Dioxide (Total)	214.4	kg/h		
Hydrocarbons (Total)	0.361	kg/h		
Carbon Monoxide (Total)	13.63	kg/h		
NOx (Total)	0.419	kg/h		

LOS (Aver. Int. Delay) for Vehicles is based on average delay for all vehicle movements. LOS Method: Delay (HCM).
LOS Method for individual vehicle movements and lanes: Delay (HCM).
Roundabout LOS Method: Same as Signalised Intersections.
Roundabout Capacity Model: US NCHRP 572.
Design Life Analysis Objective: Practical Capacity (v/c ratio = xp). (Results for 25 years)

Intersection Performance - Annual Values

Performance Measure	Vehicles		Persons	
Demand Flows (Total)	1,224,034	veh/y	1,468,841	pers/y
Delay	2,888	veh-h/y	3,466	pers-h/y
Effective Stops	910,308	veh/y	1,092,370	pers/y
Travel Distance	253,484	veh-mi/y	304,180	pers-mi/y
Travel Time	10,975	veh-h/y	13,170	pers-h/y
Cost	169,029	$/y	169,029	$/y
Fuel Consumption	10,866	gal/y		
Carbon Dioxide	102,915	kg/y		
Hydrocarbons	173	kg/y		
Carbon Monoxide	6,544	kg/y		
NOx	201	kg/y		

LANE SUMMARY

Site: New Site - 1

Proposed Entry Control
Complex - Coral Sea Blvd
Conceptual
Roundabout

Lane Use and Performance

	Demand Flows L veh/h	T veh/h	R veh/h	Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Lane Length ft	SL Type	Cap. Adj. %	Prob. Block. %
South	Entrance Driveway															
Lane 1	373	0	0	373	2.0	597	0.624	100	21.0	LOS C	5.5	144.8	1000	–	0.0	0.0
Lane 2	0	0	202	202	2.0	572	0.353	100	11.3	LOS B	1.9	51.0	1000	–	0.0	0.0
Approach	373	0	202	574	2.0		0.624		17.6	LOS C	5.5	144.8				
East	288th Street Re-route (WB)															
Lane 1	244	0	0	244	2.0	833	0.293	100	4.7	LOS A	1.4	36.2	200	–	0.0	0.0
Lane 2	0	531	0	531	2.0	866	0.614	100	5.0	LOS A	4.8	126.6	200	–	0.0	0.0
Approach	244	531	0	776	2.0		0.614		4.9	LOS A	4.8	126.6				
West	288th Street Re-route (EB)															
Lane 1	0	865	0	865	2.0	1027	0.842	100	7.6	LOS A	12.0	315.7	1200	–	0.0	0.0
Lane 2	0	0	335	335	2.0	931	0.360	100	3.5	LOS A	1.6	42.4	1150	–	0.0	0.0
Approach	0	865	335	1200	2.0		0.842		6.5	LOS A	12.0	315.7				
Intersection				2550	2.0		0.842		8.5	LOS A	12.0	315.7				

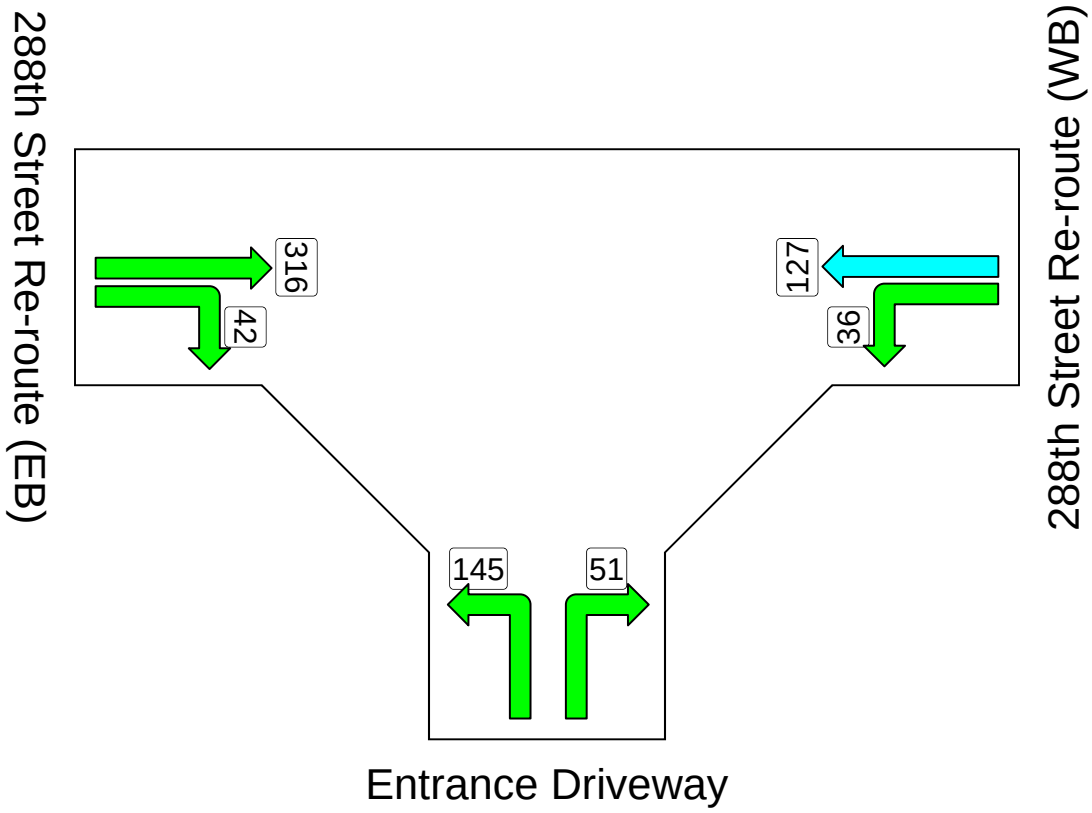
Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all lanes. LOS Method: Delay (HCM).
Level of Service (Worst Lane): LOS C. LOS Method for individual lanes: Delay (HCM).
Approach LOS values are based on the worst delay for any lane.
Roundabout LOS Method: Same as Signalised Intersections.
Roundabout Capacity Model: US NCHRP 572.
Design Life Analysis Objective: Practical Capacity (v/c ratio = xp). (Results for 25 years)

QUEUE DISTANCE

Largest 95% Back of Queue for any lane used by movement (feet)

Site: New Site - 1

Proposed Entry Control
Complex - Coral Sea Blvd
Conceptual
Roundabout



Colour code based on Queue Storage Ratio

[< 0.6] [0.6 – 0.7] [0.7 – 0.8] [0.8 – 0.9] [0.9 – 1.0] [> 1.0] Continuous

Site 1: Bougainville Blvd west of Nevada Ave
Start Date: 10/26/2009
Start Time: 7:30:00 PM
Site Code: 130013150000
Station ID: 870001322100

Mon	26-Oct				Tue	27-Oct				Wed	28-Oct				Thu	29-Oct				Fri	30-Oct			
	EB		WB			EB		WB			EB		WB			EB		WB			EB		WB	
time	count	hr tot	count	hr tot	time	count	hr tot		hr tot	time		hr tot	count	hr tot	time	count	hr tot	count	hr tot	time	count	hr tot	count	hr tot
12:00 AM					12:00 AM	9	42	10	45	12:00 AM	5	34	7	35	12:00 AM	9	44	14	53	12:00 AM	14	48	17	79
12:15 AM					12:15 AM	3	32	7	41	12:15 AM	3	29	8	32	12:15 AM	3	35	13	54	12:15 AM	9	43	7	70
12:30 AM					12:30 AM	4	24	8	34	12:30 AM	2	16	5	27	12:30 AM	2	25	4	43	12:30 AM	5	36	6	47
12:45 AM					12:45 AM	1	17	5	30	12:45 AM	5	15	5	25	12:45 AM	3	17	5	36	12:45 AM	5	33	12	42
01:00 AM					01:00 AM	2	10	2	22	01:00 AM	0	10	5	23	01:00 AM	3	11	6	28	01:00 AM	6	25	8	33
01:15 AM					01:15 AM	2	9	4	19	01:15 AM	5	12	1	16	01:15 AM	0	8	1	16	01:15 AM	1	17	6	32
01:30 AM					01:30 AM	2	7	2	13	01:30 AM	1	11	1	12	01:30 AM	1	7	5	17	01:30 AM	2	14	2	28
01:45 AM					01:45 AM	2	8	0	8	01:45 AM	1	7	2	9	01:45 AM	2	6	2	14	01:45 AM	2	11	2	18
02:00 AM					02:00 AM	0	6	2	8	02:00 AM	2	9	3	7	02:00 AM	1	4	0	8	02:00 AM	5	10	3	13
02:15 AM					02:15 AM	1	5	0	4	02:15 AM	0	4	2	8	02:15 AM	0	4	1	8	02:15 AM	0	9	4	11
02:30 AM					02:30 AM	1	4	1	3	02:30 AM	1	4	0	7	02:30 AM	0	3	0	3	02:30 AM	1	8	0	9
02:45 AM					02:45 AM	1	3	2	5	02:45 AM	1	4	1	6	02:45 AM	3	4	1	2	02:45 AM	2	8	1	8
03:00 AM					03:00 AM	3	6	2	5	03:00 AM	3	5	2	5	03:00 AM	3	6	7	9	03:00 AM	0	3	0	5
03:15 AM					03:15 AM	0	5	2	7	03:15 AM	3	8	1	4	03:15 AM	1	7	2	10	03:15 AM	2	5	5	6
03:30 AM					03:30 AM	1	5	1	7	03:30 AM	0	7	1	5	03:30 AM	1	8	1	11	03:30 AM	4	8	2	8
03:45 AM					03:45 AM	3	7	1	6	03:45 AM	2	8	2	6	03:45 AM	5	10	1	11	03:45 AM	2	8	1	8
04:00 AM					04:00 AM	1	5	0	4	04:00 AM	4	9	2	6	04:00 AM	2	9	0	4	04:00 AM	2	10	5	13
04:15 AM					04:15 AM	4	9	0	2	04:15 AM	1	7	2	7	04:15 AM	0	8	0	2	04:15 AM	1	9	0	8
04:30 AM					04:30 AM	4	12	2	3	04:30 AM	6	13	6	12	04:30 AM	4	11	3	4	04:30 AM	7	12	7	13
04:45 AM					04:45 AM	7	16	2	4	04:45 AM	7	18	3	13	04:45 AM	2	8	7	10	04:45 AM	5	15	6	18
05:00 AM					05:00 AM	6	21	3	7	05:00 AM	5	19	1	12	05:00 AM	9	15	2	12	05:00 AM	6	19	3	16
05:15 AM					05:15 AM	8	25	6	13	05:15 AM	10	28	10	20	05:15 AM	21	36	7	19	05:15 AM	14	32	7	23
05:30 AM					05:30 AM	24	45	7	18	05:30 AM	19	41	10	24	05:30 AM	25	57	13	29	05:30 AM	20	45	2	18
05:45 AM					05:45 AM	35	73	7	23	05:45 AM	38	72	5	26	05:45 AM	31	86	9	31	05:45 AM	27	67	14	26
06:00 AM					06:00 AM	37	104	18	38	06:00 AM	38	105	13	38	06:00 AM	40	117	12	41	06:00 AM	34	95	12	35
06:15 AM					06:15 AM	85	181	18	50	06:15 AM	83	178	15	43	06:15 AM	66	162	19	53	06:15 AM	79	160	16	44
06:30 AM					06:30 AM	95	252	12	55	06:30 AM	101	260	12	45	06:30 AM	98	235	19	59	06:30 AM	78	218	13	55
06:45 AM					06:45 AM	136	353	26	74	06:45 AM	135	357	20	60	06:45 AM	137	341	36	86	06:45 AM	137	328	37	78
07:00 AM					07:00 AM	97	413	35	91	07:00 AM	93	412	32	79	07:00 AM	93	394	38	112	07:00 AM	97	391	22	88
07:15 AM					07:15 AM	122	450	30	103	07:15 AM	113	442	31	95	07:15 AM	132	460	54	147	07:15 AM	80	392	34	106
07:30 AM					07:30 AM	148	503	59	150	07:30 AM	155	496	61	144	07:30 AM	131	493	53	181	07:30 AM	105	419	48	141
07:45 AM					07:45 AM	183	550	67	191	07:45 AM	179	540	67	191	07:45 AM	184	540	96	241	07:45 AM	114	396	55	159
08:00 AM					08:00 AM	182	635	90	246	08:00 AM	183	630	96	255	08:00 AM	193	640	78	281	08:00 AM	117	416	59	196
08:15 AM					08:15 AM	161	674	85	301	08:15 AM	168	685	100	324	08:15 AM	153	661	107	334	08:15 AM	80	416	43	205
08:30 AM					08:30 AM	111	637	83	325	08:30 AM	144	674	76	339	08:30 AM	120	650	91	372	08:30 AM	102	413	63	220
08:45 AM					08:45 AM	76	530	51	309	08:45 AM	105	600	63	335	08:45 AM	105	571	68	344	08:45 AM	92	391	55	220
09:00 AM					09:00 AM	72	420	38	257	09:00 AM	76	493	37	276	09:00 AM	76	454	49	315	09:00 AM	57	331	52	213
09:15 AM					09:15 AM	51	310	34	206	09:15 AM	71	396	36	212	09:15 AM	63	364	57	265	09:15 AM	78	329	49	219
09:30 AM					09:30 AM	49	248	30	153	09:30 AM	56	308	44	180	09:30 AM	46	290	47	221	09:30 AM	53	280		
09:45 AM					09:45 AM	48	220	40	142	09:45 AM	52	255	38	155	09:45 AM	58	243	50	203	09:45 AM	49	237		
10:00 AM					10:00 AM	41	189	43	147	10:00 AM	58	237	51	169	10:00 AM	37	204	55	209	10:00 AM	63	243		
10:15 AM					10:15 AM	51	189	31	144	10:15 AM	47	213	52	185	10:15 AM	39	180	50	202	10:15 AM				
10:30 AM					10:30 AM	51	191	34	148	10:30 AM	50	207	46	187	10:30 AM	48	182	64	219	10:30 AM				
10:45 AM					10:45 AM	63	206	59	167	10:45 AM	54	209	52	201	10:45 AM	51	175	62	231	10:45 AM				
11:00 AM					11:00 AM	50	215	73	197	11:00 AM	76	227	87	237	11:00 AM	56	194	74	250	11:00 AM				
11:15 AM					11:15 AM	77	241	71	237	11:15 AM	72	252	82	267	11:15 AM	65	220	102	302	11:15 AM				
11:30 AM					11:30 AM	66	256	109	312	11:30 AM	67	269	113	334	11:30 AM	58	230	95	333	11:30 AM				
11:45 AM					11:45 AM	93	286	107	360	11:45 AM	81	296	103	385	11:45 AM	75	254	111	382	11:45 AM				
12:00 PM					12:00 PM	79	315	106	393	12:00 PM	81	301	122	420	12:00 PM	77	275	111	419	12:00 PM				
12:15 PM					12:15 PM	65	303	86	408	12:15 PM	82	311	80	418	12:15 PM	82	292	85	402	12:15 PM				
12:30 PM					12:30 PM	99	336	72	371	12:30 PM	77	321	60	365	12:30 PM	83	317	71	378	12:30 PM				
12:45 PM					12:45 PM	111	354	59	323	12:45 PM	120	360	51	313	12:45 PM	120	362	64	331	12:45 PM				
01:00 PM					01:00 PM	105	380	63	280	01:00 PM	113	392	55	246	01:00 PM	103	388	64	284	01:00 PM				
01:15 PM					01:15 PM	94	409	61	255	01:15 PM	112	422	43	209	01:15 PM	90	396	82	281	01:15 PM				
01:30 PM					01:30 PM	88	398	41	224	01:30 PM	93	438	56	205	01:30 PM	82	395	67	277	01:30 PM				
01:45 PM					01:45 PM	72	359	56	221	01:45 PM	100	418	64	218	01:45 PM	91	366	62	275	01:45 PM				
02:00 PM					02:00 PM	78	332	95	253	02:00 PM	64	369	128	291	02:00 PM	70	333	89	300	02:00 PM				
02:15 PM					02:15 PM	69	307	71	263	02:15 PM	65	322	104	352	02:15 PM	65	308	59	277	02:15 PM				
02:30 PM					02:30 PM	53	272	61	283	02:30 PM	55	284	70	366	02:30 PM	78	304	80	290	02:30 PM				
02:45 PM					02:45 PM	97	297	42	269	02:45 PM	64	248	67	369	02:45 PM	90	303	68	296	02:45 PM				
03:00 PM					03:00 PM	85	304	157	331	03:00 PM	71	255	99	340	03:00 PM	91	324	145	352	03:00 PM				
03:15 PM					03:15 PM	61	296	104	364	03:15 PM	59	249	90	326	03:15 PM	79	338	98	391	03:15 PM				
03:30 PM					03:30 PM	59	302	117	420	03:30 PM	45	239	105	361	03:30 PM	71	331	108	419	03:30 PM				
03:45 PM					03:45 PM	65	270	78	456	03:45 PM	70	245	94	388	03:45 PM	69	310	90	441	03:45 PM				
04:00 PM					04:00 PM	68	253	116	415	04:00 PM	69	243	115	404	04:00 PM	73	292	97	393	04:00 PM				
04:15 PM					04:15 PM	65	257	96	407	04:15 PM	54	238	95	409	04:15 PM	76	289	90	385	04:15 PM				
04:30 PM					04:30 PM	57	255	130	420	04:30 PM	55	248	132	436	04:30 PM	66	284	128	405	04:30 PM				
04:45 PM					04:45 PM	55	245	123	465	04:45 PM	56	234	85	427	04:45 PM	72	287	103	418	04:45 PM				
05:00 PM					05:00 PM	59	236	121	470	05:00 PM	73	238	145	457	05:00 PM	65	279	96	417	05:00 PM				
05:15 PM					05:15 PM	54	225	122	496	05:15 PM	48	232	83	445	05:15 PM	60	263	87	414	05:15 PM				
05:30 PM					05:30 PM	53	221	105	471	05:30 PM	62	239	77	390	05:30 PM	69	266	84	370	05:30 PM				
05:45 PM					05:45 PM	56	222	81	429	05:45 PM	58	241	103	408	05:45 PM	69	263	89	356	05:45 PM				
06:00 PM					06:00 PM	50	213	97	405	06:00 PM	53	221	70	333	06:00 PM	64	262	81	341	06:00 PM				
06:15 PM					06:15 PM	55	214	81	364	06:15 PM	45	218	63	313	06:15 PM	81	283	80	334	06:15 PM				
06:30 PM					06:30 PM	59	220	60	319	06:30 PM	49	205	62	298	06:30 PM	58	272	80	330	06:30 PM				
06:45 PM					06:45 PM	44	208	57	295	06:45 PM	37	184	78	273	06:45 PM	52	255	79	320	06:45 PM				
07:00 PM					07:00 PM	49	207	61	259	07:00 PM	46	177	60	263	07:00 PM	52	243	68	307	07:00 PM				
07:15 PM					07:15 PM	41	193	48	226	07:15 PM	44	176	47	247	07:15 PM	45	207	62	289	07:15 PM				
07:30 PM	35		39		07:30 PM	47	181	46	212	07:30 PM	41	168	47	232	07:30 PM	53	202	57	266	07:30 PM				
07:45 PM	29		39		07:45 PM	42	179	51	206	07:45 PM	35	166	51	205	07:45 PM	56	206	63	250	07:45 PM				
08:00 PM	31		58		08:00 PM	22	152	58	203	08:00 PM	29	149	59	204	08:00 PM	48	202	55	237	08:00 PM				
08:15 PM	30	125	37	173	08:15 PM	32	143	37	192	08:15 PM	25	130	37	194	08:15 PM	47	204	46	221	08:15 PM				
08:30 PM	23	113	20	154	08:30 PM	30	126	21	167	08:30 PM	34	123	25	172	08:30 PM	27	178	55	219	08:30 PM				
08:45 PM	25	109	23	138	08:45 PM	34	118	22	138	08:45 PM	24	112	17	138	08:45 PM	31	153	28	184	08:45 PM				
09:00 PM	28	106	15	95	09:00 PM	33	129	26	106	09:00 PM	30	113	27	106	09:00 PM	48	153	38	167	09:00 PM				
09:15 PM	28	104	23	81	09:15 PM	43	140	29	98	09:15 PM	24	112	28	97	09:15 PM	46	152	39	160	09:15 PM				
09:30 PM	28	109	15	76	09:30 PM	29	139	22	99	09:30 PM	28	106	30	102	09:30 PM	31	156	67	172	09:30 PM				
09:45 PM	14	98	10	63	09:45 PM	18	123	19	96	09:45 PM	19	101	23	108	09:45 PM	26	151	46	190	09:45 PM				
10:00 PM	21	91	27	75	10:00 PM	18	108	19	89	10:00 PM	26	97	28	109	10:00 PM	31	134	41	193	10:00 PM				
10:15 PM	17	80	15	67	10:15 PM	20	85	16	76	10:15 PM	7	80	27	108	10:15 PM	15	103	26	180	10:15 PM				
10:30 PM	20	72	10	62	10:30 PM	19	75	10	64	10:30 PM	20	72	15	93	10:30 PM	17	89	14	127	10:30 PM				
10:45 PM	15	73	17	69	10:45 PM	17	74	15	60	10:45 PM	21	74	18	88	10:45 PM	22	85	26	107	10:45 PM				
11:00 PM	11	63	9	51	11:00 PM	13	69	21	62	11:00 PM	15	63	15	75	11:00 PM	20	74	30	96	11:00 PM				
11:15 PM	13	59	11	47	11:15 PM	8	57	11	57	11:15 PM	12	68	12	60	11:15 PM	14	73	16	86	11:15 PM				
11:30 PM	12	51	15	52	11:30 PM	15	53	10	57	11:30 PM	12	60	15	60	11:30 PM	12	68	29	101	11:30 PM				
11:45 PM	8	44	9	44	11:45 PM	6	42	7	49	11:45 PM	11	50	12	54	11:45 PM	8	54	17	92	11:45 PM				

Site 2: Westover Ave
Start Date: 11/1/2009
Start Time: 6:30:00 PM
Site Code: 110011250000
Station ID: 870001522100

Sun	1-Nov				Mon	2-Nov				Tue	3-Nov				Wed	4-Nov				Thu	5-Nov			
	SB		NB			SB		NB			SB		NB			SB		NB			SB		NB	
time	count	hr tot	count	hr tot	time	count	hr tot	count	hr tot	time	count	hr tot	count	hr tot	time	count	hr tot	count	hr tot	time	count	hr tot	count	hr tot
12:00 AM					12:00 AM	2	14	0	13	12:00 AM	3	8	6	17	12:00 AM	2	13	6	20	12:00 AM	0	14	2	24
12:15 AM					12:15 AM	1	12	1	11	12:15 AM	0	6	2	13	12:15 AM	0	9	3	23	12:15 AM	2	10	0	18
12:30 AM					12:30 AM	4	10	0	7	12:30 AM	3	9	0	8	12:30 AM	5	11	7	21	12:30 AM	6	11	2	7
12:45 AM					12:45 AM	1	8	2	3	12:45 AM	2	8	0	8	12:45 AM	0	7	4	20	12:45 AM	1	9	0	4
01:00 AM					01:00 AM	1	7	0	3	01:00 AM	1	6	1	3	01:00 AM	1	6	6	20	01:00 AM	0	9	1	3
01:15 AM					01:15 AM	0	6	0	2	01:15 AM	1	7	2	3	01:15 AM	2	8	2	19	01:15 AM	3	10	0	3
01:30 AM					01:30 AM	0	2	1	3	01:30 AM	0	4	1	4	01:30 AM	1	4	0	12	01:30 AM	2	6	3	4
01:45 AM					01:45 AM	0	1	0	1	01:45 AM	0	2	1	5	01:45 AM	0	4	1	9	01:45 AM	0	5	0	4
02:00 AM					02:00 AM	0	0	0	1	02:00 AM	0	1	0	4	02:00 AM	1	4	0	3	02:00 AM	0	5	2	5
02:15 AM					02:15 AM	0	0	0	1	02:15 AM	0	0	0	2	02:15 AM	1	3	0	1	02:15 AM	0	2	0	5
02:30 AM					02:30 AM	1	1	0	0	02:30 AM	0	0	1	2	02:30 AM	0	2	0	1	02:30 AM	0	0	0	2
02:45 AM					02:45 AM	0	1	0	0	02:45 AM	1	1	1	2	02:45 AM	0	2	0	0	02:45 AM	0	0	0	2
03:00 AM					03:00 AM	0	1	1	1	03:00 AM	3	4	3	5	03:00 AM	0	1	0	0	03:00 AM	1	1	2	2
03:15 AM					03:15 AM	1	2	1	2	03:15 AM	2	6	1	6	03:15 AM	2	2	1	1	03:15 AM	0	1	0	2
03:30 AM					03:30 AM	1	2	0	2	03:30 AM	1	7	0	5	03:30 AM	1	3	0	1	03:30 AM	0	1	2	4
03:45 AM					03:45 AM	2	4	0	2	03:45 AM	2	8	0	4	03:45 AM	3	6	2	3	03:45 AM	4	5	0	4
04:00 AM					04:00 AM	5	9	1	2	04:00 AM	3	8	0	1	04:00 AM	4	10	2	5	04:00 AM	3	7	0	2
04:15 AM					04:15 AM	0	8	0	1	04:15 AM	1	7	1	1	04:15 AM	3	11	0	4	04:15 AM	1	8	0	2
04:30 AM					04:30 AM	2	9	0	1	04:30 AM	1	7	1	2	04:30 AM	3	13	3	7	04:30 AM	2	10	0	0
04:45 AM					04:45 AM	3	10	1	2	04:45 AM	7	12	1	3	04:45 AM	6	16	1	6	04:45 AM	7	13	1	1
05:00 AM					05:00 AM	3	8	1	2	05:00 AM	3	12	0	3	05:00 AM	5	17	2	6	05:00 AM	7	17	1	2
05:15 AM					05:15 AM	11	19	2	4	05:15 AM	14	25	3	5	05:15 AM	7	21	0	6	05:15 AM	9	25	0	2
05:30 AM					05:30 AM	22	39	2	6	05:30 AM	19	43	4	8	05:30 AM	20	38	4	7	05:30 AM	21	44	5	7
05:45 AM					05:45 AM	19	55	2	7	05:45 AM	29	65	3	10	05:45 AM	30	62	3	9	05:45 AM	32	69	4	10
06:00 AM					06:00 AM	26	78	16	22	06:00 AM	31	93	10	20	06:00 AM	34	91	9	16	06:00 AM	46	108	6	15
06:15 AM					06:15 AM	59	126	6	26	06:15 AM	86	165	16	33	06:15 AM	74	158	14	30	06:15 AM	86	185	16	31
06:30 AM					06:30 AM	64	168	13	37	06:30 AM	69	215	5	34	06:30 AM	55	193	11	37	06:30 AM	96	260	10	36
06:45 AM					06:45 AM	100	249	6	41	06:45 AM	107	293	8	39	06:45 AM	71	234	11	45	06:45 AM	116	344	10	42
07:00 AM					07:00 AM	65	288	18	43	07:00 AM	85	347	24	53	07:00 AM	77	277	16	52	07:00 AM	95	393	24	60
07:15 AM					07:15 AM	86	315	12	49	07:15 AM	86	347	16	53	07:15 AM	59	262	20	58	07:15 AM	63	370	14	58
07:30 AM					07:30 AM	60	311	34	70	07:30 AM	90	368	21	69	07:30 AM	50	257	30	77	07:30 AM	64	338	31	79
07:45 AM					07:45 AM	84	295	24	88	07:45 AM	97	358	14	75	07:45 AM	69	255	21	87	07:45 AM	90	312	17	86
08:00 AM					08:00 AM	90	320	24	94	08:00 AM	85	358	20	71	08:00 AM	53	231	32	103	08:00 AM	72	289	27	89
08:15 AM					08:15 AM	71	305	18	100	08:15 AM	69	341	16	71	08:15 AM	52	224	32	115	08:15 AM	55	281	17	92
08:30 AM					08:30 AM	53	298	14	80	08:30 AM	59	310	20	70	08:30 AM	52	226	32	117	08:30 AM	44	261	28	89
08:45 AM					08:45 AM	41	255	21	77	08:45 AM	50	263	29	85	08:45 AM	57	214	25	121	08:45 AM	56	227	26	98
09:00 AM					09:00 AM	34	199	22	75	09:00 AM	40	218	24	89	09:00 AM	40	201	31	120	09:00 AM	29	184	25	96
09:15 AM					09:15 AM	39	167	25	82	09:15 AM	21	170	22	95	09:15 AM	39	188	24	112	09:15 AM	42	171	30	109
09:30 AM					09:30 AM	25	139	19	87	09:30 AM	22	133	20	95	09:30 AM	32	168	29	109	09:30 AM	21	148	18	99
09:45 AM					09:45 AM	22	120	30	96	09:45 AM	29	112	19	85	09:45 AM	39	150	24	108	09:45 AM	32	124	19	92
10:00 AM					10:00 AM	26	112	23	97	10:00 AM	26	98	26	87	10:00 AM	27	137	23	100	10:00 AM	28	123	25	92
10:15 AM					10:15 AM	21	94	24	96	10:15 AM	26	103	22	87	10:15 AM	32	130	38	114	10:15 AM	24	105	20	82
10:30 AM					10:30 AM	24	93	22	99	10:30 AM	30	111	35	102	10:30 AM	22	120	26	111	10:30 AM	29	113	27	91
10:45 AM					10:45 AM	24	95	26	95	10:45 AM	36	118	29	112	10:45 AM	34	115	30	117	10:45 AM	26	107	33	105
11:00 AM					11:00 AM	25	94	54	126	11:00 AM	34	126	72	158	11:00 AM	21	109	67	161	11:00 AM	23	102	47	127
11:15 AM					11:15 AM	46	119	59	161	11:15 AM	42	142	65	201	11:15 AM	43	120	66	189	11:15 AM	37	115	85	192
11:30 AM					11:30 AM	31	126	83	222	11:30 AM	33	145	97	263	11:30 AM	42	140	89	252	11:30 AM	49	135	117	282
11:45 AM					11:45 AM	28	130	64	260	11:45 AM	43	152	76	310	11:45 AM	41	147	96	318	11:45 AM	37	146	98	347
12:00 PM					12:00 PM	55	160	65	271	12:00 PM	34	152	68	306	12:00 PM	54	180	65	316	12:00 PM	45	168	83	383
12:15 PM					12:15 PM	48	162	73	285	12:15 PM	61	171	48	289	12:15 PM	58	195	71	321	12:15 PM	52	183	56	354
12:30 PM					12:30 PM	77	208	43	245	12:30 PM	72	210	55	247	12:30 PM	68	221	58	290	12:30 PM	71	205	53	290
12:45 PM					12:45 PM	68	248	32	213	12:45 PM	75	242	38	209	12:45 PM	54	234	42	236	12:45 PM	58	226	31	223
01:00 PM					01:00 PM	77	270	26	174	01:00 PM	75	283	35	176	01:00 PM	71	251	27	198	01:00 PM	44	225	39	179
01:15 PM					01:15 PM	44	266	34	135	01:15 PM	69	291	30	158	01:15 PM	66	259	35	162	01:15 PM	43	216	32	155
01:30 PM					01:30 PM	32	221	29	121	01:30 PM	49	268	29	132	01:30 PM	48	239	33	137	01:30 PM	39	184	33	135
01:45 PM					01:45 PM	34	187	20	109	01:45 PM	41	234	33	127	01:45 PM	35	220	31	126	01:45 PM	41	167	86	190
02:00 PM					02:00 PM	17	127	38	121	02:00 PM	23	182	38	130	02:00 PM	27	176	45	144	02:00 PM	26	149	67	218
02:15 PM					02:15 PM	17	100	35	122	02:15 PM	30	143	31	131	02:15 PM	22	132	34	143	02:15 PM	32	138	50	236
02:30 PM					02:30 PM	24	92	29	122	02:30 PM	21	115	38	140	02:30 PM	19	103	32	142	02:30 PM	34	133	48	251
02:45 PM					02:45 PM	18	76	28	130	02:45 PM	34	108	31	138	02:45 PM	23	91	28	139	02:45 PM	19	111	31	196
03:00 PM					03:00 PM	26	85	71	163	03:00 PM	17	102	71	171	03:00 PM	23	87	66	160	03:00 PM	24	109	90	219
03:15 PM					03:15 PM	24	92	59	187	03:15 PM	19	91	59	199	03:15 PM	26	91	51	177	03:15 PM	23	100	61	230
03:30 PM					03:30 PM	15	83	73	231	03:30 PM	16	86	81	242	03:30 PM	18	90	94	239	03:30 PM	26	92	81	263
03:45 PM					03:45 PM	16	81	47	250	03:45 PM	37	89	52	263	03:45 PM	26	93	67	278	03:45 PM	25	98	107	339
04:00 PM					04:00 PM	17	72	92	271	04:00 PM	14	86	95	287	04:00 PM	20	90	96	308	04:00 PM	23	97	97	346
04:15 PM					04:15 PM	18	66	58	270	04:15 PM	8	75	71	299	04:15 PM	24	88	80	337	04:15 PM	14	88	58	343
04:30 PM					04:30 PM	16	67	107	304	04:30 PM	17	76	126	344	04:30 PM	24	94	129	372	04:30 PM	17	79	87	349
04:45 PM					04:45 PM	16	67	56	313	04:45 PM	23	62	48	340	04:45 PM	27	95	82	387	04:45 PM	21	75	90	332
05:00 PM					05:00 PM	6	56	86	307	05:00 PM	13	61	91	336	05:00 PM	18	93	76	367	05:00 PM	14	66	100	335
05:15 PM					05:15 PM	15	53	64	313	05:15 PM	21	74	72	337	05:15 PM	24	93	73	360	05:15 PM	24	76	90	367
05:30 PM					05:30 PM	17	54	64	270	05:30 PM	20	77	65	276	05:30 PM	18	87	62	293	05:30 PM	17	76	65	345
05:45 PM					05:45 PM	13	51	44	258	05:45 PM	17	71	35	263	05:45 PM	23	83	55	266	05:45 PM	26	81	59	314
06:00 PM					06:00 PM	13	58	29	201	06:00 PM	27	85	49	221	06:00 PM	25	90	60	250	06:00 PM	22	89	52	266
06:15 PM					06:15 PM	24	67	33	170	06:15 PM	17	81	32	181	06:15 PM	21	87	44	221	06:15 PM	18	83	57	233
06:30 PM	7				06:30 PM	9	59	31	137	06:30 PM	13	74	32	148	06:30 PM	16	85	32	191	06:30 PM	17	83	67	235
06:45 PM	5		2		06:45 PM	28	74	34	127	06:45 PM	10	67	24	137	06:45 PM	16	78	33	169	06:45 PM				
07:00 PM	1		4		07:00 PM	13	74	21	119	07:00 PM	8	48	25	113	07:00 PM	11	64	25	134	07:00 PM				
07:15 PM	8	21	3		07:15 PM	8	58	16	102	07:15 PM	4	35	17	98	07:15 PM	11	54	17	107	07:15 PM				
07:30 PM	6	20	4	13	07:30 PM	6	55	15	86	07:30 PM	8	30	9	75	07:30 PM	10	48	31	106	07:30 PM				
07:45 PM	12	27	3	14	07:45 PM	5	32	4	56	07:45 PM	9	29	10	61	07:45 PM	6	38	27	100	07:45 PM				
08:00 PM	12	38	8	18	08:00 PM	6	25	10	45	08:00 PM	2	23	4	40	08:00 PM	5	32	14	89	08:00 PM				
08:15 PM	5	35	5	20	08:15 PM	9	26	32	61	08:15 PM	7	26	8	31	08:15 PM	10	31	6	78	08:15 PM				
08:30 PM	11	40	6	22	08:30 PM	10	30	32	78	08:30 PM	4	22	4	26	08:30 PM	8	29	29	76	08:30 PM				
08:45 PM	6	34	4	23	08:45 PM	11	36	10	84	08:45 PM	6	19	15	31	08:45 PM	11	34	8	57	08:45 PM				
09:00 PM	7	29	2	17	09:00 PM	7	37	7	81	09:00 PM	5	22	14	41	09:00 PM	1	30	17	60	09:00 PM				
09:15 PM	15	39	9	21	09:15 PM	8	36	6	55	09:15 PM	11	26	9	42	09:15 PM	13	33	5	59	09:15 PM				
09:30 PM	10	38	2	17	09:30 PM	3	29	4	27	09:30 PM	3	25	10	48	09:30 PM	7	32	4	34	09:30 PM				
09:45 PM	3	35	20	33	09:45 PM	2	20	15	32	09:45 PM	2	21	16	49	09:45 PM	6	27	13	39	09:45 PM				
10:00 PM	4	32	42	73	10:00 PM	2	15	34	59	10:00 PM	3	19	31	66	10:00 PM	3	29	51	73	10:00 PM				
10:15 PM	9	26	22	86	10:15 PM	7	14	5	58	10:15 PM	5	13	12	69	10:15 PM	3	19	13	81	10:15 PM				
10:30 PM	4	20	13	97	10:30 PM	3	14	2	56	10:30 PM	2	12	7	66	10:30 PM	3	15	6	83	10:30 PM				
10:45 PM	5	22	4	81	10:45 PM	2	14	1	42	10:45 PM	7	17	3	53	10:45 PM	8	17	6	76	10:45 PM				
11:00 PM	0	18	9	48	11:00 PM	3	15	3	11	11:00 PM	3	17	4	26	11:00 PM	6	20	6	31	11:00 PM				
11:15 PM	3	12	3	29	11:15 PM	2	10	6	12	11:15 PM	4	16	0	14	11:15 PM	6	23	6	24	11:15 PM				
11:30 PM	6	14	4	20	11:30 PM	0	7	5	15	11:30 PM	3	17	9	16	11:30 PM	5	25	13	31	11:30 PM				
11:45 PM	3	12	6	22	11:45 PM	3	8	0	14	11:45 PM	4	14	5	18	11:45 PM	3	20	3	28	11:45 PM				

Site 3: SW 127th Ave
Start Date: 10/26/2009
Start Time: 5:30:00 PM
Site Code: 130013280000
Station ID: 870003122100

Mon	26-Oct				Tue	27-Oct				Wed	28-Oct				Thu	29-Oct				Fri	30-Oct			
	SB		NB			SB		NB			SB		NB			SB		NB			SB		NB	
time	count	hr tot	count	hr tot	time	count	hr tot		hr tot	time		hr tot	count	hr tot	time	count	hr tot	count	hr tot	time	count	hr tot	count	hr tot
12:00 AM					12:00 AM	5	37	12	34	12:00 AM	4	27	14	34	12:00 AM	8	32	14	38	12:00 AM	9	40	13	42
12:15 AM					12:15 AM	6	35	4	32	12:15 AM	7	24	4	34	12:15 AM	9	32	5	35	12:15 AM	6	35	12	41
12:30 AM					12:30 AM	4	24	4	25	12:30 AM	2	20	2	25	12:30 AM	3	27	5	31	12:30 AM	3	23	3	36
12:45 AM					12:45 AM	5	20	0	20	12:45 AM	4	17	4	24	12:45 AM	1	21	4	28	12:45 AM	5	23	4	32
01:00 AM					01:00 AM	1	16	1	9	01:00 AM	5	18	0	10	01:00 AM	6	19	2	16	01:00 AM	6	20	3	22
01:15 AM					01:15 AM	3	13	1	6	01:15 AM	3	14	4	10	01:15 AM	1	11	0	11	01:15 AM	4	18	0	10
01:30 AM					01:30 AM	1	10	1	3	01:30 AM	1	13	1	9	01:30 AM	2	10	2	8	01:30 AM	4	19	3	10
01:45 AM					01:45 AM	1	6	2	5	01:45 AM	2	11	1	6	01:45 AM	3	12	3	7	01:45 AM	3	17	2	8
02:00 AM					02:00 AM	1	6	0	4	02:00 AM	1	7	2	8	02:00 AM	0	6	1	6	02:00 AM	4	15	5	10
02:15 AM					02:15 AM	0	3	0	3	02:15 AM	2	6	0	4	02:15 AM	0	5	0	6	02:15 AM	1	12	0	10
02:30 AM					02:30 AM	2	4	1	3	02:30 AM	1	6	1	4	02:30 AM	0	3	0	4	02:30 AM	0	8	0	7
02:45 AM					02:45 AM	1	4	1	2	02:45 AM	0	4	1	4	02:45 AM	0	0	1	2	02:45 AM	0	5	2	7
03:00 AM					03:00 AM	1	4	2	4	03:00 AM	1	4	1	3	03:00 AM	4	4	2	3	03:00 AM	0	1	0	2
03:15 AM					03:15 AM	1	5	1	5	03:15 AM	1	3	2	5	03:15 AM	2	6	2	5	03:15 AM	2	2	2	4
03:30 AM					03:30 AM	2	5	2	6	03:30 AM	2	4	0	4	03:30 AM	2	8	1	6	03:30 AM	4	6	3	7
03:45 AM					03:45 AM	4	8	2	7	03:45 AM	5	9	2	5	03:45 AM	4	12	4	9	03:45 AM	3	9	2	7
04:00 AM					04:00 AM	1	8	2	7	04:00 AM	1	9	2	6	04:00 AM	1	9	1	8	04:00 AM	3	12	2	9
04:15 AM					04:15 AM	1	8	2	8	04:15 AM	1	9	0	4	04:15 AM	0	7	0	6	04:15 AM	0	10	1	8
04:30 AM					04:30 AM	2	8	0	6	04:30 AM	5	12	3	7	04:30 AM	0	5	1	6	04:30 AM	2	8	1	6
04:45 AM					04:45 AM	1	5	2	6	04:45 AM	2	9	1	6	04:45 AM	3	4	0	2	04:45 AM	5	10	4	8
05:00 AM					05:00 AM	6	10	4	8	05:00 AM	5	13	4	8	05:00 AM	5	8	4	5	05:00 AM	6	13	4	10
05:15 AM					05:15 AM	6	15	5	11	05:15 AM	7	19	4	12	05:15 AM	10	18	8	13	05:15 AM	6	19	6	15
05:30 AM					05:30 AM	3	16	10	21	05:30 AM	10	24	9	18	05:30 AM	5	23	6	18	05:30 AM	5	22	9	23
05:45 AM					05:45 AM	11	26	11	30	05:45 AM	9	31	12	29	05:45 AM	6	26	16	34	05:45 AM	12	29	10	29
06:00 AM					06:00 AM	19	39	18	44	06:00 AM	14	40	15	40	06:00 AM	13	34	22	52	06:00 AM	15	38	13	38
06:15 AM					06:15 AM	22	55	25	64	06:15 AM	23	56	21	57	06:15 AM	19	43	17	61	06:15 AM	17	49	18	50
06:30 AM					06:30 AM	19	71	40	94	06:30 AM	19	65	41	89	06:30 AM	24	62	35	90	06:30 AM	12	56	20	61
06:45 AM					06:45 AM	43	103	44	127	06:45 AM	41	97	33	110	06:45 AM	42	98	45	119	06:45 AM	36	80	22	73
07:00 AM					07:00 AM	38	122	29	138	07:00 AM	41	124	45	140	07:00 AM	36	121	37	134	07:00 AM	38	103	38	98
07:15 AM					07:15 AM	50	150	59	172	07:15 AM	51	152	48	167	07:15 AM	50	152	58	175	07:15 AM	32	118	18	98
07:30 AM					07:30 AM	68	199	71	203	07:30 AM	72	205	76	202	07:30 AM	56	184	68	208	07:30 AM	42	148	35	113
07:45 AM					07:45 AM	71	227	95	254	07:45 AM	76	240	74	243	07:45 AM	78	220	83	246	07:45 AM	52	164	33	124
08:00 AM					08:00 AM	98	287	109	334	08:00 AM	96	295	110	308	08:00 AM	82	266	102	311	08:00 AM	39	165	29	115
08:15 AM					08:15 AM	84	321	97	372	08:15 AM	85	329	104	364	08:15 AM	93	309	101	354	08:15 AM	34	167	29	126
08:30 AM					08:30 AM	76	329	56	357	08:30 AM	66	323	82	370	08:30 AM	77	330	56	342	08:30 AM	32	157	43	134
08:45 AM					08:45 AM	39	297	30	292	08:45 AM	46	293	51	347	08:45 AM	45	297	49	308	08:45 AM	25	130	34	135
09:00 AM					09:00 AM	27	226	40	223	09:00 AM	31	228	40	277	09:00 AM	28	243	42	248	09:00 AM	29	120	27	133
09:15 AM					09:15 AM	19	161	33	159	09:15 AM	28	171	42	215	09:15 AM	29	179	38	185	09:15 AM	21	107	48	152
09:30 AM					09:30 AM	21	106	26	129	09:30 AM	26	131	33	166	09:30 AM	24	126	26	155	09:30 AM	32	107	28	137
09:45 AM					09:45 AM	27	94	30	129	09:45 AM	24	109	33	148	09:45 AM	24	105	37	143	09:45 AM	29	111	23	126
10:00 AM					10:00 AM	26	93	35	124	10:00 AM	26	104	37	145	10:00 AM	24	101	26	127	10:00 AM	33	115	42	141
10:15 AM					10:15 AM	25	99	27	118	10:15 AM	37	113	35	138	10:15 AM	26	98	27	116	10:15 AM	24	118	35	128
10:30 AM					10:30 AM	23	101	35	127	10:30 AM	24	111	43	148	10:30 AM	38	112	39	129	10:30 AM	32	118	31	131
10:45 AM					10:45 AM	27	101	33	130	10:45 AM	18	105	36	151	10:45 AM	26	114	25	117	10:45 AM				
11:00 AM					11:00 AM	29	104	29	124	11:00 AM	33	112	39	153	11:00 AM	29	119	27	118	11:00 AM				
11:15 AM					11:15 AM	32	111	32	129	11:15 AM	39	114	37	155	11:15 AM	34	127	31	122	11:15 AM				
11:30 AM					11:30 AM	31	119	36	130	11:30 AM	29	119	32	144	11:30 AM	35	124	34	117	11:30 AM				
11:45 AM					11:45 AM	44	136	59	156	11:45 AM	34	135	35	143	11:45 AM	31	129	33	125	11:45 AM				
12:00 PM					12:00 PM	33	140	40	167	12:00 PM	41	143	41	145	12:00 PM	34	134	39	137	12:00 PM				
12:15 PM					12:15 PM	31	139	28	163	12:15 PM	26	130	44	152	12:15 PM	27	127	31	137	12:15 PM				
12:30 PM					12:30 PM	32	140	40	167	12:30 PM	31	132	34	154	12:30 PM	31	123	29	132	12:30 PM				
12:45 PM					12:45 PM	29	125	44	152	12:45 PM	31	129	44	163	12:45 PM	34	126	39	138	12:45 PM				
01:00 PM					01:00 PM	46	138	46	158	01:00 PM	35	123	42	164	01:00 PM	41	133	36	135	01:00 PM				
01:15 PM					01:15 PM	32	139	41	171	01:15 PM	25	122	53	173	01:15 PM	32	138	51	155	01:15 PM				
01:30 PM					01:30 PM	31	138	61	192	01:30 PM	26	117	66	205	01:30 PM	22	129	50	176	01:30 PM				
01:45 PM					01:45 PM	32	141	56	204	01:45 PM	35	121	77	238	01:45 PM	33	128	61	198	01:45 PM				
02:00 PM					02:00 PM	38	133	54	212	02:00 PM	93	179	59	255	02:00 PM	54	141	51	213	02:00 PM				
02:15 PM					02:15 PM	42	143	62	233	02:15 PM	67	221	46	248	02:15 PM	29	138	44	206	02:15 PM				
02:30 PM					02:30 PM	34	146	59	231	02:30 PM	46	241	40	222	02:30 PM	39	155	60	216	02:30 PM				
02:45 PM					02:45 PM	38	152	80	255	02:45 PM	52	258	50	195	02:45 PM	41	163	72	227	02:45 PM				
03:00 PM					03:00 PM	89	203	72	273	03:00 PM	41	206	58	194	03:00 PM	87	196	93	269	03:00 PM				
03:15 PM					03:15 PM	67	228	52	263	03:15 PM	48	187	46	194	03:15 PM	70	237	69	294	03:15 PM				
03:30 PM					03:30 PM	52	246	62	266	03:30 PM	49	190	55	209	03:30 PM	51	249	84	318	03:30 PM				
03:45 PM					03:45 PM	38	246	56	242	03:45 PM	42	180	57	216	03:45 PM	43	251	63	309	03:45 PM				
04:00 PM					04:00 PM	41	198	70	240	04:00 PM	38	177	77	235	04:00 PM	35	199	73	289	04:00 PM				
04:15 PM					04:15 PM	46	177	61	249	04:15 PM	50	179	56	245	04:15 PM	55	184	71	291	04:15 PM				
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Site 4: Bougainville Blvd east of SW 127th
Start Date: 10/26/2009
Start Time: 5:30:00 PM
Site Code: 130013280000
Station ID: 870003122100

Mon	26-Oct				Tue	27-Oct				Wed	28-Oct				Thu	29-Oct				Fri	30-Oct			
	EB		WB			EB		WB			EB		WB			EB		WB			EB		WB	
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12:00 AM					12:00 AM	1	11	12	14	12:00 AM	0	10	10	13	12:00 AM	3	17	10	12	12:00 AM	4	15	9	14
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APPENDIX C

Comment and Responses Summary

Appendix C

Comments Received During the 30-day Public Comment Period for the Environmental Assessment for Construction of a New Entry Gate Complex at Homestead Air Reserve Base, Miami-Dade County, Florida

The official 30-day public comment period began 7 January 2010 when the Draft Environmental Assessment (EA) was made available to the public through the Homestead ARB website (http://www.homestead.afrc.af.mil), in hard copy by request, and via a reference copy at the Homestead Branch of the Miami-Dade Public Library. The public had the opportunity to submit comments or questions via email, mail, or in person through 6 February 2010. Comments were received from various Miami-Dade County departments, the Florida Clearinghouse, and the US Fish and Wildlife Service. All comments were reviewed and incorporated into the EA as appropriate. Substantial comments are summarized below. Every attempt has been made to adequately respond to these comments and incorporate them into the EA.

Alternatives

COMMENT SUMMARY:

Several comments were received demonstrating a preference for Alternative # 3 because it would convert the existing "T" intersection at SW 127th Avenue /St. Nazaire Boulevard into a four-way intersection. Concern was expressed about Alternative #1 in which a new "T" intersection would be created in a close proximity (approximately 200 feet) of the existing SW 127th Avenue /St. Nazaire Boulevard intersection potentially creating traffic delays.

RESPONSE:

Homestead ARB met with the county departments on 9 April 2010 to discuss the county's comments on the proposed action and other alternatives. Homestead ARB agreed to modify Alternative #1 to move the intersection of the realigned SW 288th Street and SW 127th Avenue from the initially proposed "T" intersection at Nevada Avenue south to create a four-way intersection at the current St. Nazaire Boulevard and SW 127th Avenue "T" intersection. This modified alternative is discussed in Section 2.1 and in appropriate sections throughout the text.

COMMENT SUMMARY:

The county also proposed that regardless of the alternative selected, the intersection of SW 127th Avenue and Bougainville Boulevard should remain open to non-Homestead ARB traffic.

RESPONSE:

Due to federal security requirement, the base configuration, and the proximity of the current intersection of SW 127th Avenue and Bougainville Boulevard to visitor's quarters, this intersection must be closed.

Public Transportation

COMMENT SUMMARY:

Miami-Dade Transit (MDT) expressed concern regarding the potential impacts to Metrobus Route 70 from all project alternatives other than the no action alternative. Selection of any of the three project alternatives might require realignment of Route 70 such that service is canceled along Bougainville Boulevard, Ramey Avenue, and St. Nazaire Boulevard resulting in an inconvenience to transit users who regularly utilize the existing bus stops along those roads.

MDT indicated that it might be possible to maintain the route by re-routing buses through a portion of the BX Mart parking lot if funding is identified to construct a roadway and if the roadway design would be sufficient to accommodate the turning radius of the MDT 40-ft buses. If funding is available, it might also be possible to improve an existing road running north-south along the east side of the BX Mart connecting St. Nazaire Boulevard with Bougainville Boulevard. This improvement would allow a full circuit around the northern portion of the Job Corps, would maintain the existing bus stops, and would provide adequate turning radius at all corners. However, no roadway improvements with respect to either of these possible routing changes are included in the current county 2010 to 2035 transportation planning.

MDT indicated that other two possible bus routes presented in the EA would be infeasible. The suggested route through the Job Corps campus would be incompatible with MDT routing requirements and that the suggested route along Saint Lo Boulevard would require too much time and distance added to the route.

RESPONSE:

These comments are noted. Section 3.10.3.5 has been updated to include the additional suggestion for possible re-routing of Metrobus Route 70. Homestead ARB acknowledges the potential adverse impacts to the bus route and hopes that MDT and the county are able to determine a new route that will adequately meet the needs of the passengers currently utilizing the stops along Bougainville Boulevard and Ramey Avenue.

Traffic Study

COMMENT:

Two comments were made regarding specific details of the traffic study. It was noted that the two-way stop control capacity analysis in the Appendix B for Coral Sea Boulevard and the proposed SW 288 Street, westbound through volume should be 298 vehicles instead of zero. It was requested that raw traffic counts should be provided in the traffic study appendix.

RESPONSE:

These comments are noted. Table 3-7 in Section 3.10.3.2 and Appendix B have been updated to include this information.

Permitting/Agency Coordination

COMMENT SUMMARY:

Several comments were received regarding potential new county permits Homestead ARB would need to obtain or existing county permits for which Homestead ARB would need to obtain an amendment with regard to construction and operations of the new entry gate complex.

RESPONSE:

Homestead ARB has reviewed the permit comments and requirements and will comply with all regulations with regard to obtaining the proper permits at the appropriate stages of the project.

COMMENT SUMMARY:

The Miami-Dade Water and Sewer Department (M-D WSD) noted that the existing infrastructure could be adapted to support the facilities that would be part of the new gate complex, but that a private sewer pump station would likely be required. Additionally, potential impacts to water mains located along the closed roadway segments would need to be evaluated. All infrastructure changes and issues including the pump station would need to be coordinated with the M-D WSD engineering office.

RESPONSE:

Homestead ARB will coordinate closely with the WSD and all relevant County departments during the design, construction, and operation phases of the project to ensure all appropriate infrastructure needs are identified, installed, and properly operated. Homestead ARB will also coordinate with the WSD to evaluate potential impacts to water mains located along the closed roadway segments.

COMMENT SUMMARY:

During final project design and construction, consultation is necessary with various county departments. The final project design must comply with the M-D Fire Rescue Access Road Requirements. Final project design and construction must be coordinated with Miami-Dade Transit (MDT) to mitigate impacts to transit amenities and bus operations in the immediate area surrounding the project.

RESPONSE:

These comments are noted and will be taken into consideration during the final design process. Homestead ARB will consult with the M-D Fire Rescue Department to ensure the final design meets all requisite standards. Additionally, Homestead ARB will consult with MDT as appropriate.

Environmental Justice

COMMENT:

The Draft EA identifies the Homeless Assistance Center but not reference to the 200+ people in the homeless family and veterans at the Camillus Complex or the new housing project.

RESPONSE:

This comment is noted. Section 4.1.3 has been expanded to include a discussion of the planned new housing project and other associated construction.