

Draft Environmental Assessment

# Airport Operations Facility

City of Vero Beach, Indian River County, Florida

FEMA-145-DR-FL, Project Worksheets (PW) Numbers 631, 1443 and 3199

*November 3, 2006*



**FEMA**

**U.S. Department of Homeland Security**  
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## ATTACHMENTS

**A – Letter to the City of Vero Beach Regarding Scrub Jay Surveys**

**B – Soils**

**Environmental Assessment  
City of Vero Beach Airport Operations Facility  
FEMA-1545-DR-FL**

**A. Project Name**

Hurricane Frances (DR-1545-FL), Project Worksheets (PW) Numbers 631, 1443 and 3199, City of Vero Beach, Airport Operations Facility

**B. Environmental Assessment**

This Environmental Assessment (EA) documents the results of analysis of the proposed project's potential environmental impacts, and has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969; the President's Council on Environmental Quality regulations implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); and Federal Emergency Management Agency (FEMA) regulations implementing NEPA (44 CFR Part 10.9). In compliance with NEPA and its implementing regulations, FEMA has prepared this EA to analyze potential environmental impacts associated with several alternatives to meet the stated purpose and need.

**C. Purpose and Need**

On September 5, 2004, Hurricane Frances came ashore near the City of Vero Beach (City) on the central east coast of Florida as a Category 2 hurricane. The storm brought heavy rains, and strong winds. The storm severely damaged infrastructure in the City of Vero Beach, in Indian River County, Florida, including three hangar buildings, located at the Vero Beach Municipal Airport Facility (Airport). Vero Beach Municipal Airport (VRB) is a publicly licensed, city owned airport located on the east coast of Florida, about 1½ hours south-east of Orlando. It is a fully certified Federal Aviation Administration (FAA) Part 139 airport, tower-controlled, with sufficient facilities to handle general aviation aircraft, charter services, and corporate jets. Airport services can meet any current aviation need, from fuel and maintenance to flight instruction and pilot supplies. In addition, there are restaurants, car rental, and taxi services at the field. The Airport current handles approximately 250,000 aircraft movements per year.

Hangar 6 (located at 2570 Airport North Drive), Hangar 7 (located 2560 Airport North Drive) and Hangar 8 (located at 2550 Airport Drive) were all damaged beyond repair by high winds and wind-driven rain. Due to the severity of the damage to the hangars, the City has decided not to rebuild the three hangars, but instead has demolished them and is proposing to build a new Airport Operations Facility on a different location within the Airport property.

The City of Vero Beach (Applicant) has identified the need for a new Airport Operations Facility. FEMA's Public Assistance Program is considering providing the Applicant with grant

funding to build a new Airport Operations Facility building. Airport operations are currently handled from several different locations at and around the Airport. The purpose and need of the Proposed Action is to consolidate operational activities to allow more efficient delivery of services at the Airport and better serve the public by providing several enhancements to the Airport, including:

- A hurricane-resistant building designed for the storage and protection of first-responder personnel, vehicles, and equipment that will be required by the community immediately after a disaster event; and
- A single building location within the airport for the deployment of all service, repair and maintenance equipment (trucks, mowers, etc) to the airfield where they are primarily utilized.

This EA considers three alternative means of addressing these needs.

#### **D. Public Participation**

The public will be notified that a Draft EA has been prepared, and will be advised on how to review the Draft EA, and submit comments to FEMA. The Draft EA will be made available to interested parties through publication on FEMA's website ([www.fema.gov/plan/ehp/envdocuments/index.shtm](http://www.fema.gov/plan/ehp/envdocuments/index.shtm)) and by distribution located at the Vero Beach Main Library, 1600 21st Street, Vero Beach, FL 32960. Notification in the local *Vero Beach Press Journal* newspaper will notify the public of such availability. The combined advertisement and public notice will also serve as notification of FEMA's compliance with the National Environmental Policy Act (NEPA) EO 11988 (Floodplain Management), and other applicable Federal laws.

The Draft EA will be available for review from Tuesday, November 14 to Tuesday, November 28<sup>th</sup>, 2006 FEMA is requesting public comments in writing to:

Richard Myers, Environmental Liaison Officer  
FEMA Long-Term Recovery Office  
36 Skyline Drive  
Lake Mary, Florida 32746  
Email: [Richard.Myers@dhs.gov](mailto:Richard.Myers@dhs.gov)

#### **E. Alternatives Considered**

NEPA requires the investigation and evaluation of reasonable project alternatives as part of the project's environmental review process. Three alternatives are addressed in this EA. The potential environmental impacts for each of the alternatives are analyzed by resource category and discussed in **Section F** (Affected Environment and Environmental Consequences).

- Alternative 1: The **No Action Alternative** proposes that the Applicant does nothing.
- Alternative 2: The **43rd Avenue Alternative** proposes to construct the Airport Operations Facility building on a previously undisturbed parcel of land adjacent to the southwest corner of the Airport property, adjacent to the existing Airport fire station, along 43<sup>rd</sup> Avenue.
- Alternative 3: The **Proposed Action** proposes to construct the Airport Operations Facility building adjacent to existing Airport buildings on a previously disturbed parcel located on the southern portion of the Airport property.

### **Alternative 1 - No Action Alternative**

Under the **No Action Alternative**, the Applicant would do nothing; no construction would occur. The Airport would not benefit from a new Airport Operations Facility building, and first responders would continue to operate out of a decentralized location, located offsite from the Airport property.

### **Alternative 2 – Construct new Airport Operations Facility adjacent to existing fire station outside of Airport property (43rd Avenue Alternative)**

The **43rd Avenue Alternative** proposes to construct an Airport Operations Facility outside of the Airport property. The proposed site is located off of 43<sup>rd</sup> Avenue, in Vero Beach and is adjacent to the existing Airport Fire Station (Figure 2). This previously undisturbed 200-foot by 200-foot lot is heavily vegetated with native species. The proposed building would be approximately 150 feet long by 80 feet wide. The proposed building would be built to comply with all applicable Federal, state, and local codes, standards, ordinances and regulations. The Applicant would be required to purchase this parcel at an undetermined cost.

### **Alternative 3 – Construct new Airport Operations Facility adjacent to existing structures within the Airport property (Proposed Action)**

This alternative proposes to construct a new Airport Operations Facility within the Airport property. The proposed project site is located adjacent to exiting buildings on a previously disturbed and regularly maintained parcel in the southern portion of the Airport property. The proposed site is bordered by an aircraft executive hangar to the north aircraft taxiways to the west, and a storm-water retention area to the southwest (Figure 2). The proposed building would be approximately 150 feet long by 80 feet wide. The proposed building would be built to comply with all applicable Federal, state, and local codes, standards, ordinances and regulations.

## **F. Affected Environment and Environmental Consequences**

This section is organized by individual resources; it includes a description of the existing conditions at each of the alternative sites, and provides an analysis of potential environmental consequences for each alternative. Information for this section was derived from a review of relevant literature and websites, as well as a site visit conducted on March 29, 2006. Table 1 (on following page) summarizes the results of the environmental review process.

**Table 1: Potential Impacts Summary**

Potentially Affected Resource Areas	Potential Impacts		
	Alternative 1: No Action	Alternative 2: 43rd Avenue Alternative	Alternative 3: Proposed Action Alternative
Geology and Soils	No impacts	Temporary construction-related impacts. BMPs and erosion control measures are anticipated to mitigate any potential impacts.	Temporary construction-related impacts. BMPs and erosion control measures are anticipated to mitigate any potential impacts.
Hydrology & Floodplains (E.O. 11988)	No impacts	Project site is not located in a floodplain. Changes to existing runoff levels would be insignificant.	Project site is not located in a floodplain. Changes to existing runoff levels would be insignificant.
Wetlands (E.O. 11990)	No impacts	There are no jurisdictional wetlands located in the project area.	There are no jurisdictional wetlands located in the project area.
Water Quality	No impacts	No impacts	No impacts
Air Quality	No impacts	Construction-related emissions would be temporary and not significant.	Construction-related emissions would be temporary and not significant.
Threatened and Endangered Species (Endangered Species Act)	No impacts	Project area is in USFWS consultation zones for two threatened species: the Florida Scrub Jay and the Crested Caracara bird. Potential impacts anticipated to the Florida Scrub Jay; however, further surveys would be required.	Project area is located in USFWS consultation zones for threatened species: the Florida Scrub Jay and the Crested Caracara bird. No impacts are anticipated to either species due to lack of appropriate habitat.
Cultural Resources (National Historic Preservation Act)	No impacts	No known historic resources exist at or near the proposed site.	No known historic resources exist at or near the proposed site.
Socioeconomics (Land Use/Zoning, Visual Resources, Public Services and Utilities)	Adverse effect; Airport operations would continue to function in the existing inefficient, unconsolidated manner.	Visual resources would be adversely affected due to loss of native vegetation and wildlife habitat. Provide hurricane-resistant storage and protection of first-responder personnel, vehicles, and equipment that will be required by the community immediately after a disaster event.].	Provide hurricane-resistant storage and protection of first-responder personnel, vehicles, and equipment that will be required by the community immediately after a disaster event
Environmental Justice (E.O. 12898)	No impacts	No impacts	No impacts
Safety	No Impacts	Building would be in close proximity to an already existing fire station. Partially located within an approach/take-off path of aircraft and could present moderate safety concerns for the structure, personnel and equipment.	Building would be on the Airport property. This building would be constructed next to an already existing structure. In addition, the proposed building is not located within an approach/take-off path of aircraft and could present no safety concerns the structure, personnel and equipment.
Noise	No impacts	Noise levels would increase temporarily during construction. Impacts would be minor as compared to existing noise levels, short-term, and limited to the duration of construction activities. Additional noise generated from the operation would be negligible.	Noise levels would increase temporarily during construction. Impacts would be minor as compared to existing noise levels, short-term, and limited to the duration of construction activities. Additional noise generated from the operation would be negligible.
Traffic and Transportation	No impacts	A slight increase in traffic could result from construction and operational activities; however impacts would be negligible due to existing levels.	A slight increase in traffic could result from construction and operational activities; however impacts would be negligible due to existing levels.
Hazardous Materials and Toxic Wastes	No impacts	The proposed facility may store insignificant quantities of hazardous materials for vehicle maintenance. Storage would follow all applicable regulations.	The proposed facility may store insignificant quantities of hazardous materials for vehicle maintenance. Storage would follow all applicable regulations.

## Geology and Soils

The major types of existing soils are as follows in the entire project area (approximately): 37 percent Oldsmar fine sand which consists of sandy or loamy marine deposits, 36 percent EauGallie fine sand which consists of sandy or loamy marine deposits and 20 percent Arents that consists of altered marine deposits (Natural Resources Conservation Service, 2006). None of the sites contain hydric soils or Prime Farmland (Attachment B).

Under the **No Action Alternative**, no construction would occur. Therefore, geology and soils would not be affected.

Under **43rd Avenue Alternative**, existing soils at the proposed site would be temporarily disturbed by construction-related and ground-moving activities. Erosion control measures would be required as a condition of FEMA funding and would minimize any potential localized effects.

Potential impacts resulting from the **Proposed Action** would be similar to those previously described under the **43rd Avenue Alternative**.

## Water Quality: Floodplain, Hydrology, and Wetlands

### Floodplain and Hydrology

Executive Order (E.O.) 11988 requires Federal agencies to minimize the occupancy and modifications of floodplains. Specifically, E.O. 11988 prohibits Federal agencies from funding activities in or affecting the 100-year floodplain unless there are no practical alternatives. Potential impacts related to floodplain management include damages to structures located in the floodplain and changes to the extent, elevation, or other features of the floodplain as a result of flood protection measures or other structures being sited in or removed from the floodplain.

Under the **No Action Alternative**, no construction would occur. Therefore, the **No Action Alternative** would not affect the floodplain.

A review of the Flood Insurance Rate Maps (FIRM) for the **43rd Avenue Alternative** site indicates that it is located outside the 100 and 500-year floodplains (FIRM panel number 12061C0155E). The proposed site is located approximately 1 mile from the nearest 100-year floodplain (Figure 3). Under this alternative, no impacts to the floodplain are anticipated.

Stormwater flows enter the **43rd Avenue Alternative** site via rainfall runoff from an adjacent developed site and exit the proposed project site via sheet flow to the adjacent, existing swale areas along 43<sup>rd</sup> Avenue. The **43rd Avenue Alternative** would increase the amount of impervious surface at the new site; however, the resulting increase in runoff from the proposed building is not anticipated to be significant because of the existing developed and impervious surfaces surrounding the vacant parcel. The added impervious surface area would be minimal in

comparison to existing developed areas. In order to minimize erosion during construction, the Applicant would be required to implement erosion and sedimentation control measures and Best Management Practices (BMPs), which would be included as a condition of FEMA funding.

The **Proposed Action** project site is located outside the 100 and 500-year floodplains (FIRM panel number 12061C0155E). The **Proposed Action** is located approximately 1 mile from the nearest 100-year floodplain (Figure 3); therefore, under this alternative, no impacts to the floodplain are anticipated.

Stormwater flows enter the **Proposed Action** site via rainfall runoff from the adjacent developed Airport complex and exit the proposed project site via sheet flow to the adjacent, existing stormwater retention area to the west. The **Proposed Action** would increase the amount of impervious surface at the proposed site; however, the resulting increase in runoff from the proposed building is not anticipated to be significant because of the existing developed and impervious surfaces. The added impervious surface area would be minimal in comparison to existing developed areas. In order to minimize erosion during construction, the Applicant would be required to implement erosion and sedimentation control and BMPs, which would be included as a condition of FEMA funding.

### Wetlands

E.O. 11990 requires Federal agencies to consider the effects of their actions on wetlands and take actions to avoid, or minimize potential impacts. “Wetlands” are defined as those areas that are inundated or saturated by surface or groundwater for a majority of the growing season during most years. This wetland hydrology must occur with a frequency and duration sufficient to support a dominance of vegetation species adapted to living in wet (saturated or seasonally saturated) soil conditions. The three primary indicators that must be present for an area to be considered as a Federal jurisdictional wetland are wetland hydrology, wetland vegetation, and hydric soil conditions.

Under the **No Action Alternative**, no construction would occur and there would be no impacts to wetlands.

Per the National Wetlands Inventory (NWI) map (Figure 4) as managed by the United States Fish and Wildlife Service (USFWS), the closest wetland (including drainage-ways, streams, rivers, ponds, marshes, bogs, and swamps) is located approximately 1 mile from the **43rd Avenue Alternative** site (USFWS, 2004). The site visit also confirmed the absence of any characteristics common to wetlands (Figure 5). In addition, the proposed site is not located within a Coastal Barrier Resource Act (CBRA) Zone or seaward of the Coastal Construction Control Line (CCCL) permit area, as defined by the Florida Department of Environmental Protection (FDEP). Therefore, due to the distance from the proposed site, this alternative would not affect any wetlands or waters of the U.S.

Per the National Wetlands Inventory (NWI) map (Figure 4) as managed by the United States Fish and Wildlife Service (USFWS), the closest wetland (including drainage-ways, streams,

ivers, ponds, marshes, bogs, and swamps) is located approximately 1 mile from **Proposed Action** site, (USFWS, 2004.). The site evaluation also confirmed the absence of any characteristics common to wetlands. In addition, the proposed site is not located within a Coastal Barrier Resource Act (CBRA) Zone or seaward of the Coastal Construction Control Line (CCCL) permit area, as defined by the Florida Department of Environmental Protection (FDEP). Therefore, due to the distance from the proposed site, this alternative would not affect any wetlands or waters of the U.S.

## **Air Quality**

Heavy construction is a source of air emissions that can have a temporary impact on local air quality. Emissions associated with construction are from two sources: fumes from construction vehicles and fugitive dust from ground-disturbing activities. The quantity of dust emissions from construction operations is related to the construction area, level of activity, the type of soil, and the type of construction vehicles.

Under the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for air quality contaminants considered harmful to public health and the environment. Each of the proposed project sites are located in attainment zones, or areas where the NAAQS are being met (Florida Department of Environmental Protection, 2006).

Under the **No Action Alternative**, no construction or operations would occur. Therefore, the **No Action Alternative** would have no effects to air quality, and would be in compliance with the CAA.

The **43rd Avenue Alternative** would result in short-term air emissions during construction activities, principally from construction activities related to site preparation and the associated use of construction equipment. Use of such equipment would temporarily increase emissions.

If necessary, the Applicant would be required to periodically wet down the site during construction to reduce fugitive dust. Emissions from fuel-burning combustion engines (e.g., heavy equipment, earthmoving machinery, and motor vehicles) could temporarily increase air pollutants; to minimize the potential for these impacts, the Applicant would be required to properly maintain the engines, and fuel-burning equipment run times would be kept to a minimum. These mitigation measures would help reduce air quality impacts. Any impacts that could potentially occur as a result of construction activities would be limited to the immediate project vicinity, would last only as long as the duration of construction, and would not result in any long-term impacts.

The **43rd Avenue Alternative** would result in a negligible change to the amount of long-term emissions from Airport facility operation. There would be no anticipated change to the existing equipment currently being operated by the Airport. Since this equipment would be used in other locations within the Airport property, there would be no net increase in emissions. Federal or

State air quality attainment levels would not likely be exceeded. Therefore, no long-term impacts are expected under this Alternative.

Potential impacts to air quality resulting from the **Proposed Action** would be similar to those previously-described under the **43rd Avenue Alternative**.

## Biological Resources

The Endangered Species Act of 1973 (ESA) requires that Federal agencies determine the effect of their actions on threatened and endangered species of fish, wildlife, and their habitats, and take steps to conserve and protect these species. The USFWS database does not contain any records of listed species in the southwest corner of the airport property. However, at least two federally listed protected species have been identified by FEMA as having the potential to occur within the proposed project areas; the Florida Scrub Jay, *Aphelocoma coerulescens* (Figure 6), and the Crested Caracara, *Caracara plancus* (Figure 7). No impacts to marine species are anticipated.

The Florida Scrub Jay is a federally threatened bird found in scrub habitats mostly in peninsular Florida. Measuring about 11 inches long, the character-defining feature of this bird is its vivid blue coloring. This bird has a black eye mask; the belly is white to grayish with a gray patch on its back, and a black bill and legs. Scrub jays forage on the ground and bury caches of food for later in the white sandy soils of the Florida scrub habitat. The preferred habitat of the scrub jay includes fire-dominated, low-growing, oak scrub habitat found on well-drained, sandy soils. Secondly, they may also inhabit areas with sparser oaks or scrub areas that are overgrown (Brandt, Hipes, Jackson, Nesmith, & Prentiss, 2001). Threats to this bird are numerous and range from habitat loss due to burn bans, to increased development, to domestic and indigenous animals predating nests (Charlotte County Environmental Services, 2006; Brandt, et. al., 2001).

Under the **No Action Alternative**, no construction would occur, and there would be no impact to any scrub jay habitat; therefore no impacts are anticipated to the Florida Scrub Jay.

There is scrub jay habitat located in the proposed **43rd Avenue Alternative** project site. On March 29, 2006 two FEMA biologists surveyed the site in accordance with USFWS scrub jay survey protocol. The proposed project area was examined for the presence of any one of six oak species that constitute scrub oak habitat. Per USFWS, the presence of any one of these six species indicates the suitability of the habitat for scrub jays. Although scrub jay habitat requirements are more stringent for breeding habitat, the lower-quality sites that possess only marginal habitat can serve as foraging sites. Disturbance of these lower-quality foraging sites could result in incidental take and must therefore be surveyed.

The site visit revealed that three of the six scrub oak species were present on the proposed project site. Mature specimens of sand live oak (*Quercus geminate*) and Myrtle oak (*Q. myrtifolia*) were present in abundance on the proposed project area. The presence of these species results in a determination that the property contains appropriate scrub jay habitat. In

addition to these oak species, seedling scrub oaks (*Q. ilicifolia*) were noted within openings. Since there were no mature scrub oaks in the vicinity, this provides evidence that acorns are being buried after being brought in from another area. Both blue jays and scrub jays are known to have this behavior; which species is present at the property is unknown since neither was noted during the site visit.

Since scrub jay habitat was found on the proposed project site, a species-survey would need to be conducted to determine if the scrub jay species is present. USFWS has developed a protocol, which consists of broadcasting high quality scrub jay tape recordings on adequately spaced transects an hour after sunrise until mid-day. These surveys would be conducted for a minimum of five days, and would be conducted anytime between March 1 and October 31. In a letter dated April 21, 2006 FEMA advised the Applicant that these surveys must be conducted on the proposed site before environmental review can be completed.

In addition to the proposed property having appropriate scrub jay habitat, an abandoned gopher tortoise burrow was observed during the site visit. Gopher tortoises (*Gopherus Polyphemus*) are a Florida Species of Special Concern. In a letter dated April 21, 2006 (Attachment A) the Applicant was notified by FEMA that a survey for this species would also be required before FEMA's environmental review can be completed.

Under the **43rd Avenue Alternative**, potential adverse impacts to the scrub jay and its habitat could occur. However, further species-specific surveys and consultation with USFWS would be required to make a final determination.

The **Proposed Action** project site is located within a cleared and regularly maintained portion of the Airport property. There is no scrub habitat located in the **Proposed Action** project site; therefore there is "no effect" of the proposed action on the Florida scrub jay.

The Crested Caracara is a federally threatened bird and the only species of Caracara found in North America. The Caracara's preferred habitat is open country (dry prairie and pasture lands) with cabbage palm and live oak hammocks, and shallow ponds and sloughs. Their preferred nest trees are cabbage palms, and secondarily live oaks (Hipes et al., 2000). The Caracara's diet consists of both carrion and live prey, and includes insects, other invertebrates, fish, amphibians, reptiles, birds, and mammals. Caracaras were common in the prairies of central Florida, but their numbers have declined as habitat is converted to housing developments, citrus groves and improved pastures (Brandt, et. al., 2001).

Under the **No Action Alternative**, no construction would occur, and there would be no impact to any Caracara habitat; therefore no impacts are anticipated to the Crested Caracara.

The proposed site for the **43rd Avenue Alternative** contains scrub oak habitat. Since the proposed site does not consist of open land with cabbage palm/live oak hammocks, and no shallow ponds or sloughs are located nearby, it is not likely that there would be any impact to the Crested Caracara under this alternative.

The **Proposed Action** project site is located within a cleared and regularly maintained portion of the Airport property. There is no open land/hammock habitat in the **Proposed Action** project site; therefore “no effects” from the proposed action are anticipated to the Crested Caracara.

## **Cultural Resources**

Section 106 of the National Historic Preservation Act (NHPA), as amended (36 CFR Part 800), requires Federal agencies to take into account the effect of any action (undertaking) on any district, site, building, structure, or object that is included in, or eligible for, inclusion in the National Register of Historic Places. The original hangars were destroyed by the event and were demolished and removed from the Airport property. All three hangars are less than 50 years old (per the Applicant); therefore there is no affect on historic structures.

Under the **No Action Alternative**, no construction would occur. Therefore, the **No Action Alternative** would not have any effects to cultural resources, and would be in compliance with the NHPA.

No archaeological resources are known to exist at or within the vicinity of the proposed project site (Figure 8); therefore the **43rd Avenue Alternative** is not expected to affect cultural resources. However, if ground-disturbing activities resulting from the implementation of the **43rd Avenue Alternative** uncover historically and/or archaeologically significant materials (or evidence thereof), the Applicant would be required to stop work immediately, notify FEMA, and take all reasonable measures to avoid or minimize harm to the property. The Applicant would not proceed with work until FEMA, in consultation with the State Historic Preservation Officer (SHPO), determines that appropriate measures have been taken to ensure that the project is in compliance with the NHPA.

Potential impacts to cultural resources resulting from the **Proposed Action** would be similar to those previously-described under the **43rd Avenue Alternative**. Additionally, the adjacent hangar to the Proposed Action is less than 50 years old (per Applicant), therefore there is no effect to historic structures and the Proposed Action is in compliance with Section 106 of the NHPA.

## **Socioeconomics and Environmental Justice**

**Zoning and Land Use:** The **No Action Alternative**, no construction would occur; therefore, no impacts to zoning and land use are anticipated.

The zoning designation for the proposed **43rd Avenue Alternative** and the **Proposed Action sites** are industrial (Indian River County, 2002). The proposed building construction would be consistent with zoning and land use designations at either site. Therefore, no impacts are anticipated under either alternative.

**Visual Resources:** Under the **No Action Alternative**, no construction would occur; therefore, no impacts to visual resources are anticipated.

The proposed **43rd Avenue Alternative** project site is located on a previously undisturbed and undeveloped parcel of land outside the boundaries of the Vero Beach Airport. The parcel is located in the southwest portion of the Airport, and is bordered by 43rd Avenue to the west and unnamed roads, driveways and service ways to the north and east. The parcel is heavily vegetated with oak trees and other native species. The construction of the proposed building would remove the vegetation and potential wildlife habitat, and would adversely impact aesthetics and visual resources.

The **Proposed Action** proposes to construct a building on a currently maintained parcel located on the Airport property. The building would be visually compatible with surrounding buildings; therefore, potential impacts to aesthetics resulting from the **Proposed Action** would be minimal.

**Public Services and Utilities:** Under the **No Action Alternative**, no construction would occur. Airport operations would continue to function in the existing inefficient, unconsolidated manner. Therefore the **No Action Alternative** would have an adverse effect on public services and utilities.

Under the **43rd Avenue Alternative**, the construction of the Airport Operations Facility would be beneficial to public services due to the proximity of the location to the existing fire station. Emergency response time to the Airport and vicinity would decrease due to the housing of emergency personnel in the immediate vicinity. Public services would benefit from the construction of the building at this site. New utilities would need to be installed at this site.

Under the **Proposed Action** a new building would be built on Airport property and located next to existing structures; installation of new utilities would be minimal. Since the Airport operations are currently handled from several different locations at and around the Airport, the Proposed Action would consolidate operational activities and allow more efficient delivery of services at the Airport. The proposed building would also provide hurricane-resistant storage and protection of first-responder personnel, vehicles, and equipment that will be required by the community immediately after a disaster event.

**Environmental Justice:** E.O. 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations) requires Federal agencies to focus attention on potential impacts of their proposed actions to human health and environmental conditions in minority and/or low-income communities. The goal of the E.O. is to avoid disproportionate adverse effects to minority or low income populations.

According to the 2005 American Community Survey (US Census Bureau, 2006), approximately 6 percent of families and 9 percent of individuals in the City of Vero Beach are below the poverty level; these levels are slightly below the national average of approximately 9 percent for families and 12 percent for individuals. The population of the City of Vero Beach is composed of

approximately 93 percent Caucasian, 3 percent African American with 6 percent Hispanic (of any race). The percentage of Caucasians in the City is well above the national average; the percentages of African American and Hispanic populations are much lower (US Census Bureau, 2006).

Under the **No Action Alternative**, no construction would occur. Therefore, the **No Action Alternative** would not change social and economic resources when compared with existing conditions within the project area.

Both the **43rd Avenue** and **Proposed Action Alternatives** are not expected to have disproportionably high or adverse impacts on minority or low-income populations when compared with existing conditions within the project area. The largest benefit to social and economic resources would be an increased efficiency of emergency operations that would result in increased public safety and possible reduced loss of human life, and property.

### **Safety:**

Under the **No Action Alternative** no construction would occur, therefore there are no safety concerns.

With the **43rd Avenue Proposed Action** alternative the new building would be in close proximity to an already existing fire station. In addition, the proposed building is partially located within an approach/take-off path of aircraft and could present moderate safety concerns for the structure, personnel and equipment. All construction must comply with applicable FAA regulations.

Under the **Proposed Action** alternative the new building would be on the Airport property. This building would be constructed next to an already existing structure. In addition, the proposed building is not located within an approach/take-off path of aircraft and could present no safety concerns the structure, personnel and equipment. All construction must comply with applicable FAA regulations.

### **Noise**

“Noise” can be defined as unwanted or unwelcome sound, and is regulated by the Noise Control Act of 1972 (NCA). The NCA requires Federal agencies that operate noise-producing facilities or equipment to implement noise standards; by its nature, FEMA does not have statutes defining noise.

Under the **No Action Alternative**, no construction would occur. Therefore, no additional noise would be generated, and the Alternative would be in compliance with the NCA.

Each of the proposed sites for both the **43rd Avenue** and **Proposed Action Alternative** do not contain sensitive receptors (nursing homes, hospitals, etc.). Each of the proposed project areas currently experiences significant noise from Airport aircraft and vehicle traffic.

Under the **43rd Avenue** and **Proposed Action Alternatives** additional noise would be generated during construction and operation activities. Both proposed project sites are located near the existing Airport that currently generates significant noise from regular, ongoing Airport operations. In order to minimize impacts, the Applicant would be required to restrict construction activities to normal work hours. Noise levels within the project area would increase temporarily during construction due to construction equipment. Construction noise impacts would be minor as compared to existing noise levels, short-term, and limited to the duration of construction activities. Additional noise generated from the operation of the Airport Operation Facility would be negligible as compared to existing noise levels in the area.

### **Traffic and Transportation**

Under the **No Action Alternative**, no construction would occur. Therefore, the **No Action Alternative** would not have any effects to traffic and transportation.

Under the **43rd Avenue** and **the Proposed Action Alternatives** traffic would temporarily increase during construction due to the ingress and egress of construction equipment. This traffic impact would be short-term and limited to the duration of construction. A slight increase in traffic would result from Airport Operation Facility activities; however it would be negligible as compared with existing levels. Due to the close proximity of the proposed project areas to the Airport, no significant traffic impacts are anticipated to impact the surrounding community.

### **Hazardous and Toxic Materials**

Under the **No Action Alternative**, no construction would occur. Therefore, the **No Action Alternative** would not have any effects to hazardous materials within the project area as compared to existing levels.

There are no known site contaminants or underground storage tanks at the **43rd Avenue Alternative** or at **the Proposed Action** site. However, if any contaminated materials are found during construction, the Applicant would be required to remediate all hazardous materials, and would be required to abate, or dispose of as appropriate, and handled in accordance with all applicable local, state, and federal laws and regulations. The contractor would implement measures to prevent spillage or runoff of chemicals, fuels, oils, or sewer-related wastes during project work. In addition, it is anticipated that the proposed Airport Operations Center would not store or use significant quantities of hazardous materials within the facility or on the property. Therefore, the **43rd Avenue** and the **Proposed Action Alternatives** are not expected to result in any impacts from hazardous materials.

## **G. Cumulative Effects**

Cumulative adverse effects are the adverse effects on the environment, which may result from a number of actions taking place within the same geographical region. A significant adverse effect of this kind occurs when the accumulated adverse effects of all of the proposed action are added to other past, present, and reasonably foreseeable future actions.

FEMA's Public Assistance program is designed to assist public facilities after a disaster event. To address cumulative impacts, FEMA has determined that the implementation of the Proposed Action would have an overall positive impact on human health and the environment as compared to the No Action, and 43<sup>rd</sup> Avenue Alternatives. No other projects are ongoing or anticipated in the vicinity of the Proposed Action project area within the foreseeable future. There would be no significant cumulative adverse effects expected as a result of the implementation of the **Proposed Action** as evaluated in this EA.

## **H. Project Conditions**

### **No Action Alternative:**

1. Proposes that the Applicant does nothing; therefore there are no project conditions.

### **43rd Avenue Alternative:**

1. Applicant would be required to implement Best Management Practices (BMP's) for construction which includes erosion control, vehicle maintenance, site maintenance, etc.
2. A species-survey would need to be conducted to determine if the scrub jay species is present. These surveys would be conducted for a minimum of five days, and would be conducted anytime between March 1 and October 31. In a letter dated April 21, 2006 FEMA advised the Applicant that these surveys must be conducted on the proposed site before environmental review can be completed.
3. A survey for Gopher tortoises would also be required before FEMA's environmental review can be completed.
4. No archaeological resources are known to exist at or within the vicinity of the proposed project site. However, if ground-disturbing activities resulting from the implementation of this action uncover historically and/or archaeologically significant materials (or evidence thereof), the Applicant would be required to stop work immediately, notify FEMA, and take all reasonable measures to avoid or minimize harm to the property. The Applicant would not proceed with work until FEMA, in consultation with the State Historic Preservation Officer (SHPO), determines that appropriate measures have been taken to ensure that the project is in compliance with the NHPA.
5. The Applicant would be required to restrict construction activities to normal work hours.
6. All construction must comply with applicable FAA regulations.
7. If any contaminated materials are found during construction, the Applicant would be required to remediate all hazardous materials, and would be required to abate, or dispose of as appropriate, and handled in accordance with all applicable local, state, and federal

laws and regulations. The contractor would implement measures to prevent spillage or runoff of chemicals, fuels, oils, or sewer-related wastes during project work.

### **Proposed Action**

1. Applicant would be required to implement Best Management Practices (BMP's) for construction which includes erosion control, vehicle maintenance, site maintenance, etc.
2. No archaeological resources are known to exist at or within the vicinity of the proposed project site. However, if ground-disturbing activities resulting from the implementation of this action uncover historically and/or archaeologically significant materials (or evidence thereof), the Applicant would be required to stop work immediately, notify FEMA, and take all reasonable measures to avoid or minimize harm to the property. The Applicant would not proceed with work until FEMA, in consultation with the State Historic Preservation Officer (SHPO), determines that appropriate measures have been taken to ensure that the project is in compliance with the NHPA.
3. The Applicant would be required to restrict construction activities to normal work hours.
4. All construction must comply with applicable FAA regulations.
5. If any contaminated materials are found during construction, the Applicant would be required to remediate all hazardous materials, and would be required to abate, or dispose of as appropriate, and handled in accordance with all applicable local, state, and federal laws and regulations. The contractor would implement measures to prevent spillage or runoff of chemicals, fuels, oils, or sewer-related wastes during project work.

### **H. References, and Agencies Consulted**

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United States Fish and Wildlife Service staff consulted. Vero Beach Office, 1339 20<sup>th</sup> Street, Vero Beach FL 32960-3559, 772-562-3909.

## **I. Acronyms and Abbreviations**

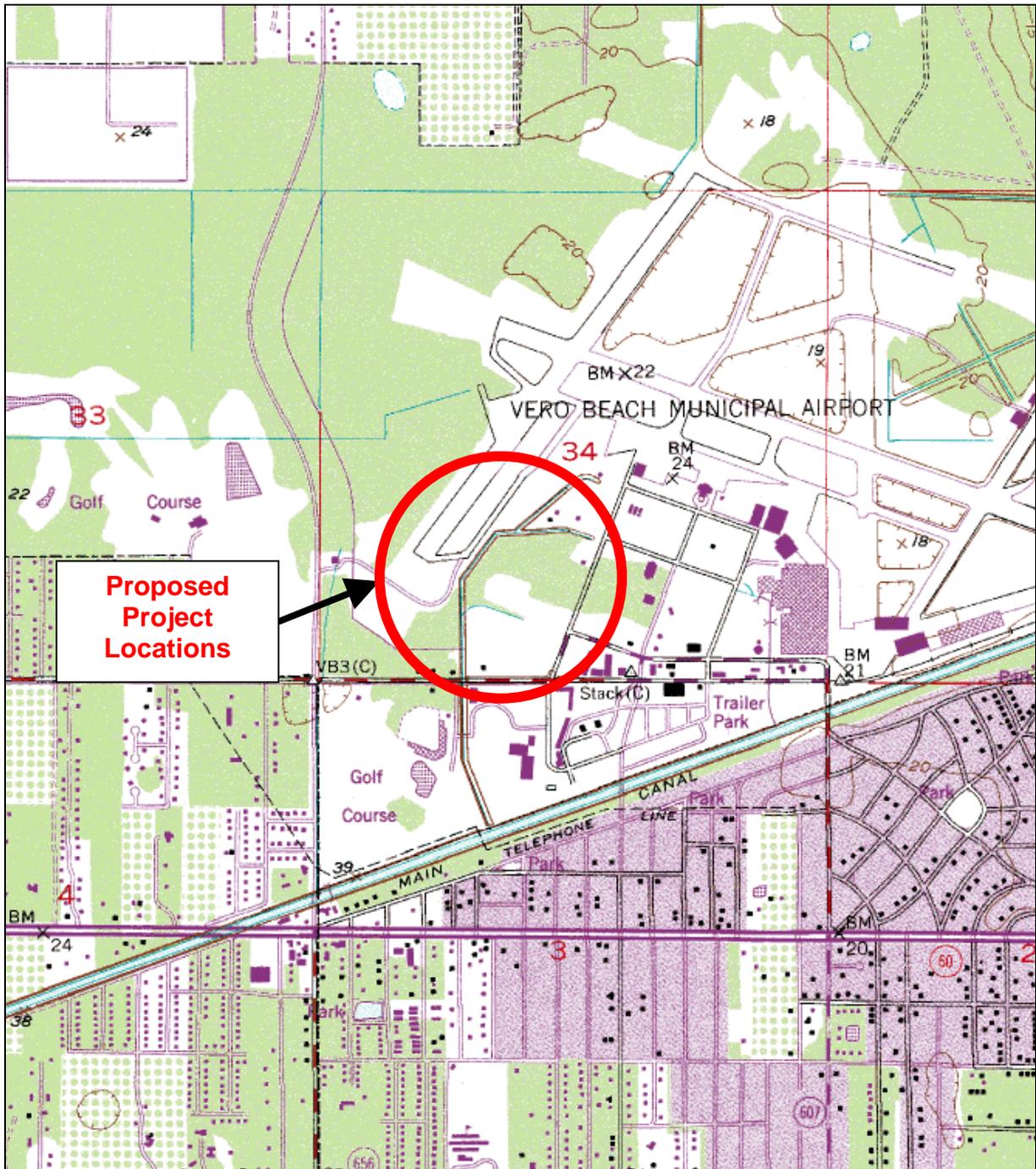
BMP	Best Management Practices
CAA	Clean Air Act
CBRA	Coastal Barrier Resource Act
CCCL	Coastal Construction Control Line
CFR	Code of Federal Regulations
CEQ	Council on Environmental Quality

ESA	Endangered Species Act
EA	Environmental Assessment
EPA	Environmental Protection Agency
EO	Executive Order
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FIRM	Flood Insurance Rate Map
FDEP	Florida Department of Environmental Protection
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NWI	National Wetland Inventory
NCA	Noise Control Act
PW	Project Worksheet
SHPO	State Historic Preservation Officer
USFWS	United States Fish and Wildlife Service

### **J. EA Document Preparers**

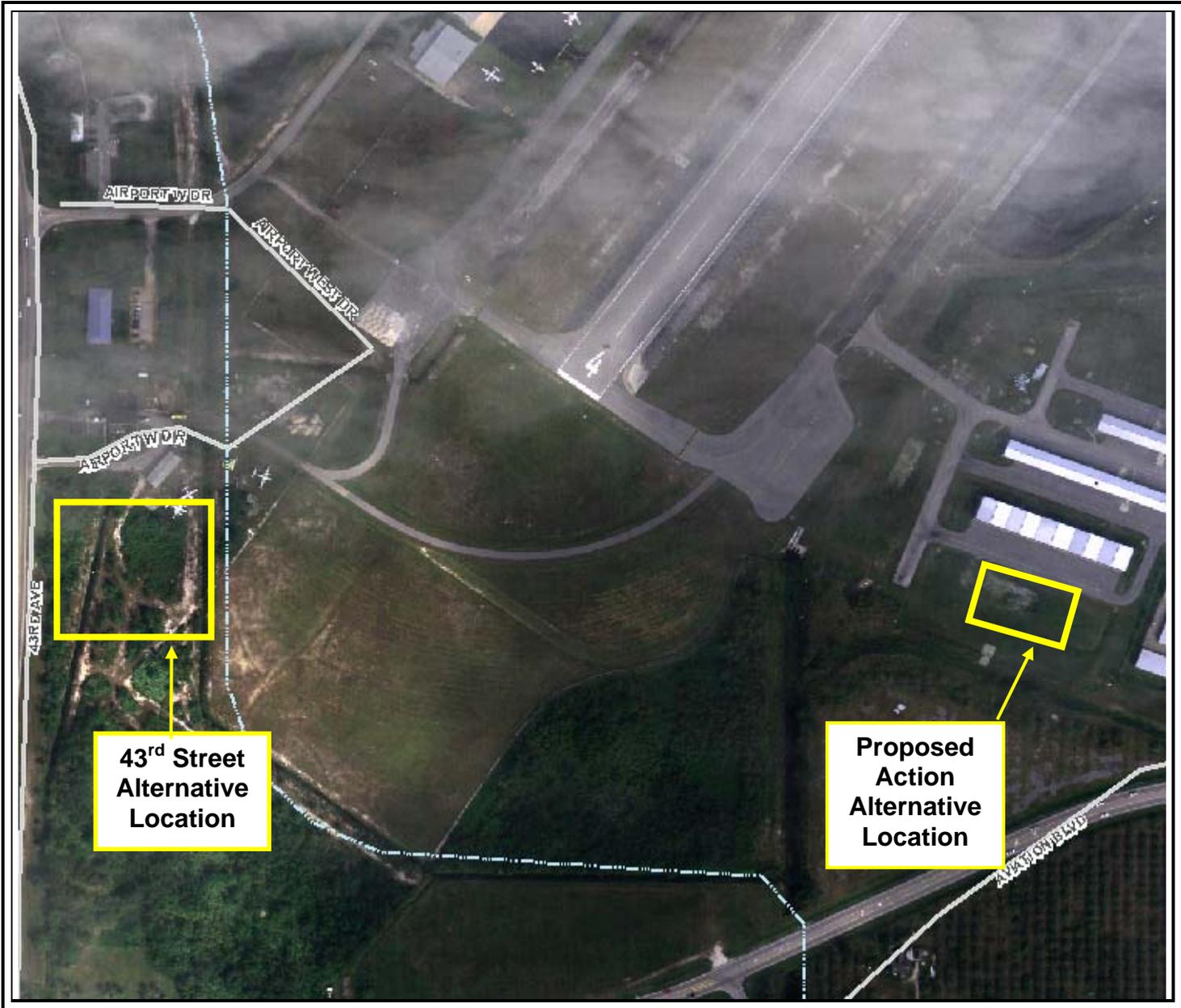
1. Batson, Heather, FEMA Environmental Specialist, Document Author
2. Cherney, Laura FEMA Deputy Environmental Liaison Officer, Technical Reviewer
3. Myers, Richard, FEMA Environmental Liaison Officer, Technical Reviewer
4. Nash, Cheryl, CTE, Lead Wetlands Biologist, Site Survey

**Figure 1: Project Location**  
Source base map: USGS Vero Beach (FL) Quadrangle Map Indian River  
Hospital, 1949.



### Figure 2: Aerial Photo of Project Area

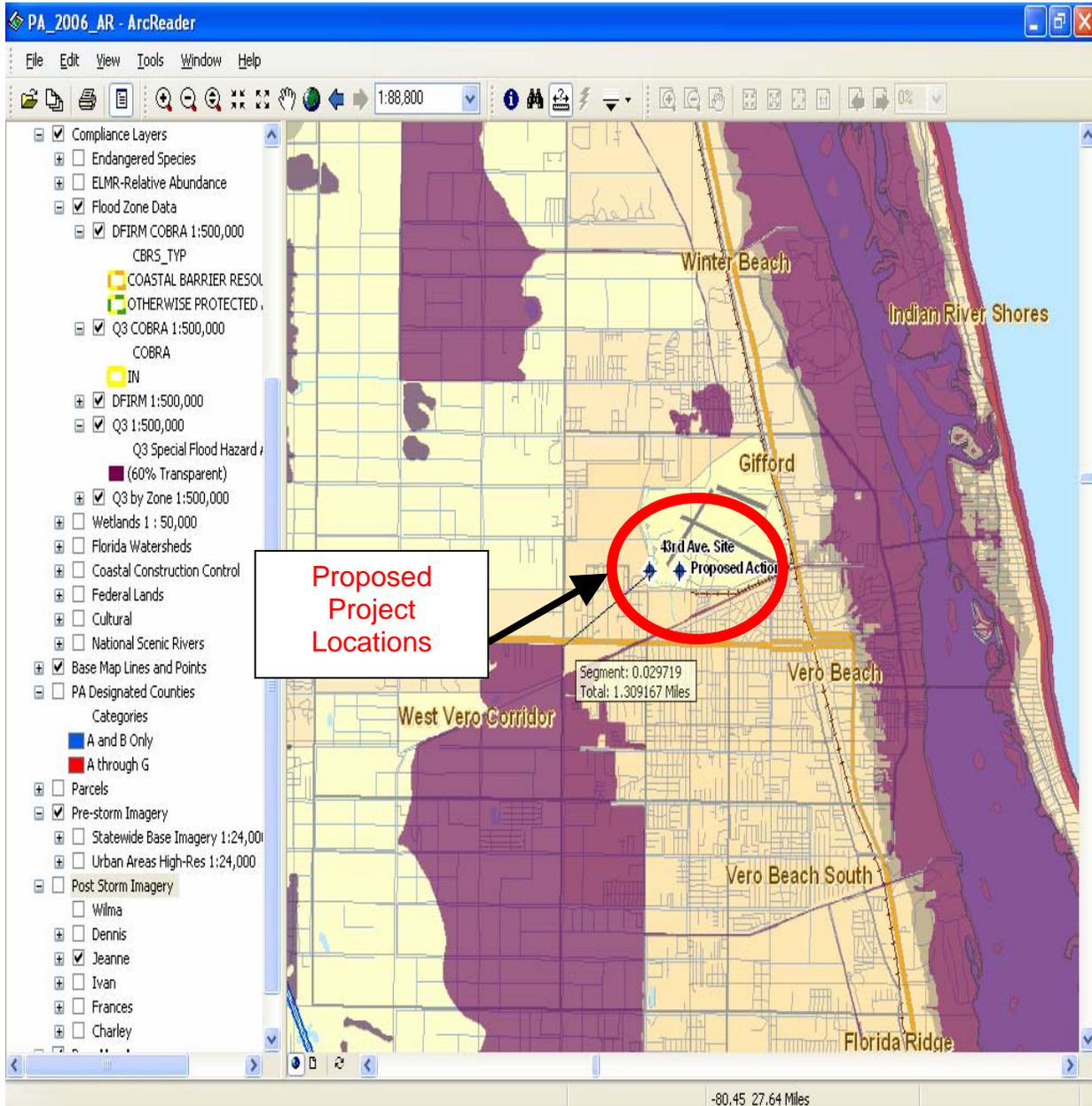
Note: Map not to scale.



### Figure 3: Floodplain Map

Source: Flood Insurance Rate Map (FIRM) Panel Number 12061C0155E

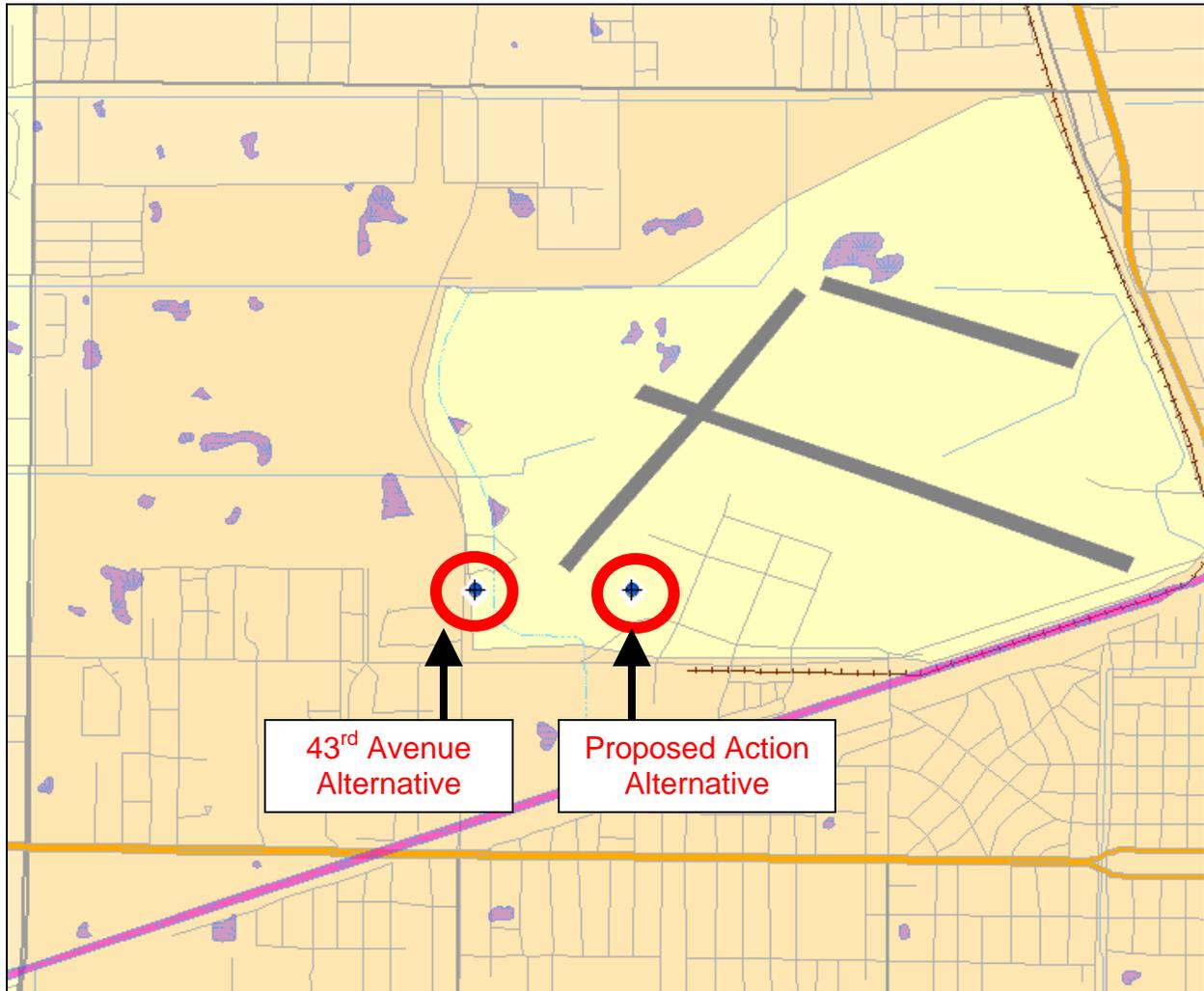
Note: Purple shading indicates inclusion in the Special Flood Hazard Area (100-year floodplain)



## Figure 4: National Wetlands Inventory Map

Source: USFWS, 2004

Note: Purple shading indicates wetland areas. Nearest wetland is approximately less than one mile away. Map not to scale.



**Figure 5: Site Visit Photos**

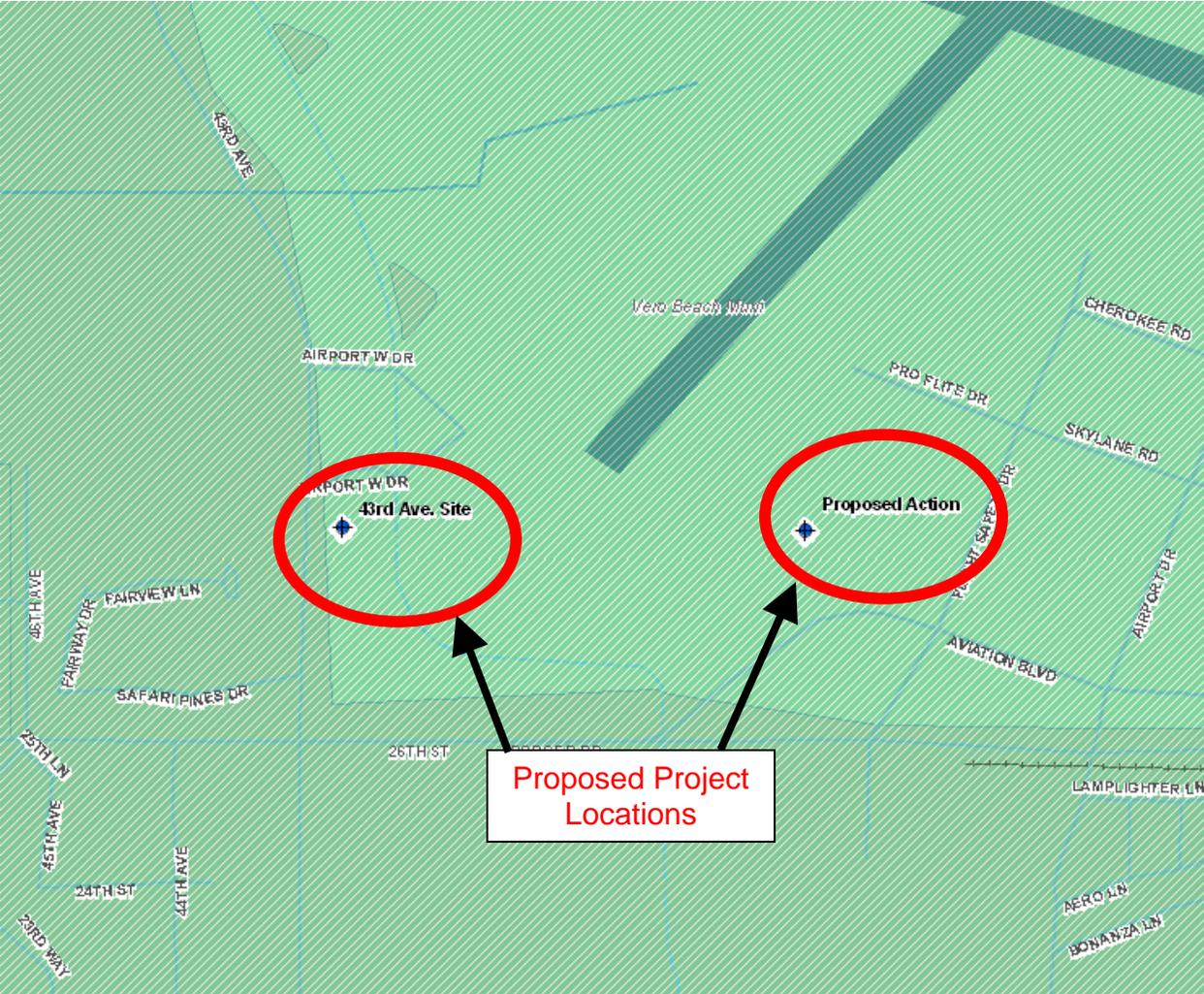
Vero Beach, Florida, March 29, 2006



**Figure 6: Scrub Jay Consultation Area Map**

**Source: USFWS, 2004**

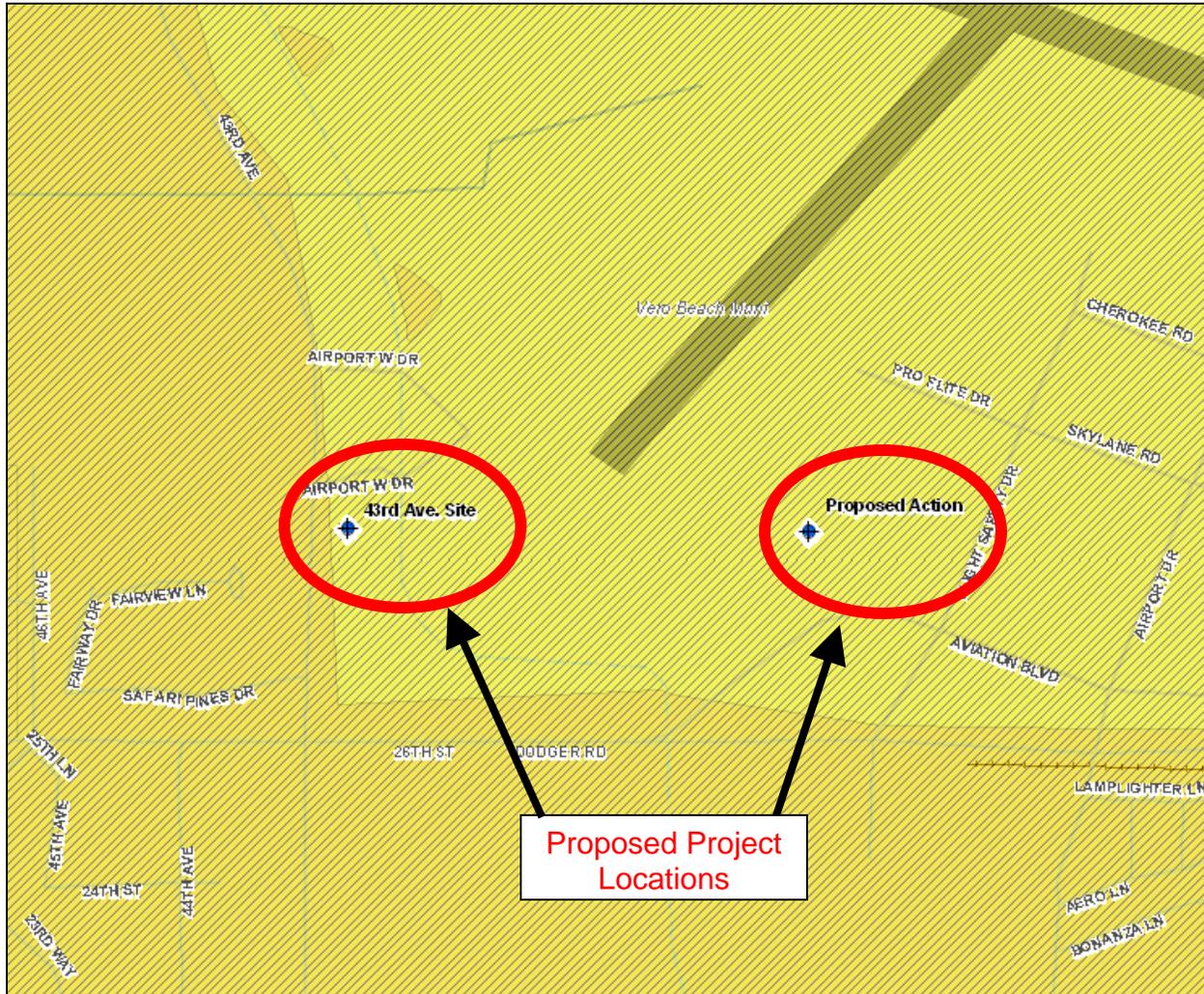
Note: Green hatching indicates Scrub Jay Consultation Area.



## Figure 7: Crested Caracara Consultation Area Map

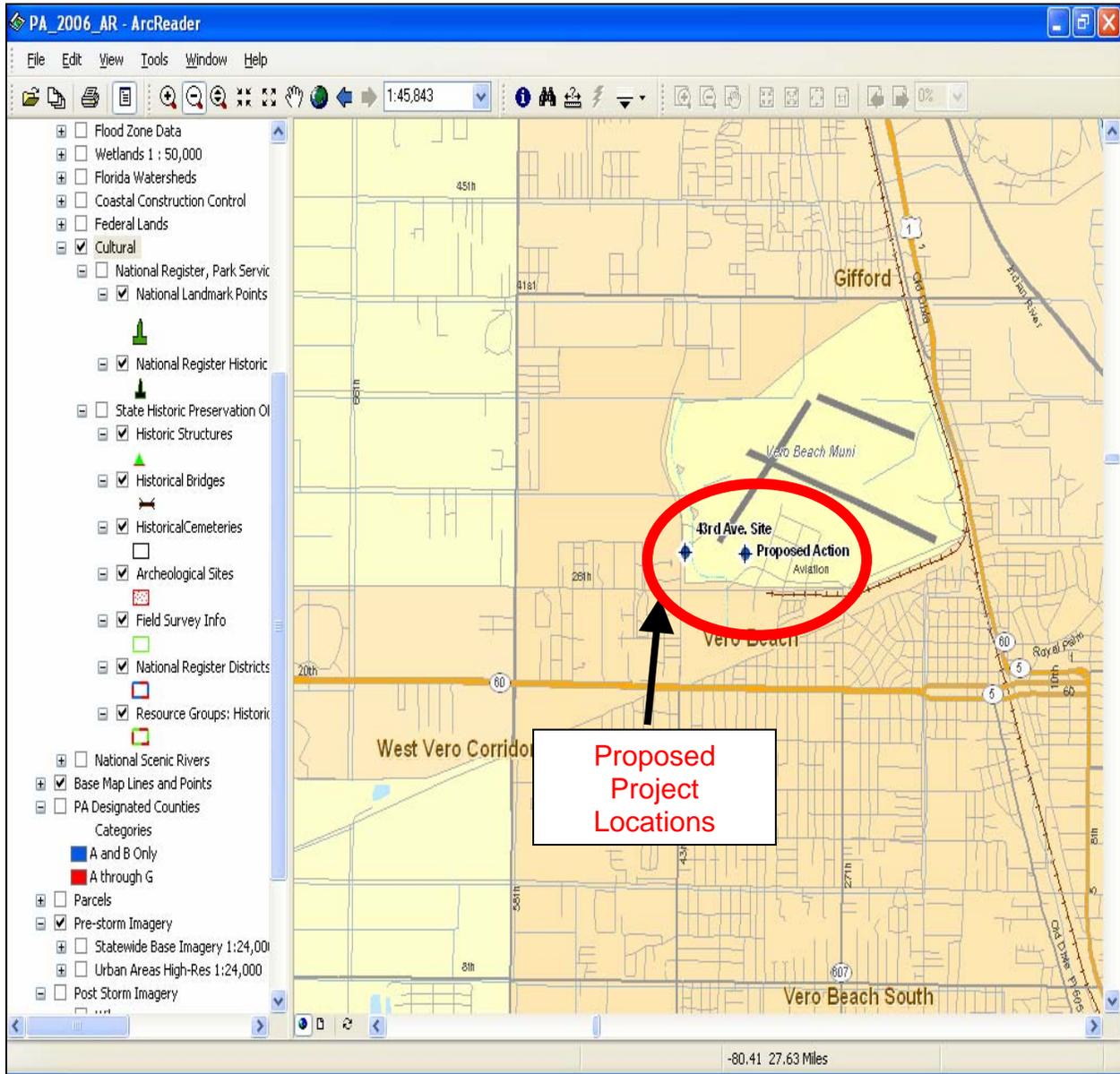
Source: USFWS, 2004

Note: Yellow hatching indicates Crested Caracara Consultation Area.



## Figure 8: Cultural Resources within Project Area Source: State Historic Preservation Office, 2005

Note: Map not to scale. No resources within approximately five miles of the project area.



## **Attachment A**

April 21, 2006

City of Vero Beach  
Attention: Ms. Jackie Mitts  
P. O. Box 1389  
Vero Beach, FL 32961-1389

Subject: Request for Alternate Project  
DR-1545-FL, PWs 631, 1443, and 3199

Dear Ms. Mitts,

The Federal Emergency Management Agency (FEMA) is in receipt of your request for an alternate project. The City of Vero Beach had three hangars that received significant damage from Hurricane Francis. The City is proposing to construct a new Airport Operations Facility as an Alternate Project, instead of repairing the hangars. FEMA's Environmental Department has initiated its review of the alternate project and has encountered some challenges for the project.

The proposed location is within an area that requires consultation with U.S. Fish & Wildlife Service (USF&WS) regarding the Florida scrub jay. USF&WS advised that the Florida scrub jay is known to inhabit the airport and therefore requested that FEMA make a determination as to whether or not habitat was present on the proposed site. FEMA Environmental conducted a site visit to the proposed location on March 20, 2006. The site visit revealed the presence of three scrub oak species (*Quercus geminate*, *Q. myrtifolia*, and *Q. ilicifolia*). The presence of these oak species on the property results in a determination that Florida scrub jay habitat is present, and a formal survey must now be conducted.

We have attached the USF&WS sanctioned Florida scrub jay survey protocol. The City of Vero Beach must determine if there are Florida scrub jay present on the proposed site, utilizing this protocol, before FEMA Environmental can continue their review. The City of Vero Beach will need to hire a consultant to conduct these surveys, which consist of broadcasting scrub jay recordings on transects between an hour after sunrise and mid-day. These surveys must be conducted for a period of five consecutive days, and should be conducted in the month of March. Because of the known presence of Florida scrub jay on the airport property, and the potential for birds to utilize the proposed property for foraging, there is a significant potential that the project as proposed could impact the Florida scrub jay.

In addition to Florida scrub jay habitat, FEMA Environmental noted the presence of an abandoned gopher tortoise (*Gopherus polyphemus*) hole on the proposed site. Because the gopher tortoise is a Florida Species of Special Concern, FEMA is also requesting that the City of

Vero Beach conduct a survey to determine if gopher tortoises are present on the proposed property.

April 21, 2006

City of Vero Beach

Subject: Request for Alternate Project; DR-1545-FL, PWs 631, 1443, and 3199

- page 2 -

If impacts to the Florida scrub jay are determined to be probable, it is likely that FEMA Environmental will not be able to approve the project. If impacts to the gopher tortoise are determined to be probable, gopher tortoise mitigation will be required for the project. In order to avoid possible impacts to any protected species, it is strongly recommended that the City of Vero Beach look for alternate locations that have been previously cleared or developed.

The proposed location has not undergone National Historic Preservation Act review. Because the property has not been previously developed, the potential exists for there to be unknown archaeological resources present that could be impacted. The FEMA Historic Preservation Department will contact you pending the outcome of their initial review; further studies may be required. If the City of Vero Beach were to identify an alternate location that has been previously disturbed due to either development or the installation of underground utilities, the Historic Preservation review could be streamlined.

Funding for your alternate project has been placed on hold pending resolution of the environmental and historic issues. If the City of Vero Beach is able to identify another location that has been previously disturbed and that does not contain Florida scrub jay habitat, the environmental review can be reinstated. If the City cannot identify another location, the environmental review will be reinstated after completion of the City's Florida scrub jay survey on the proposed site and completion of the Historic Preservation Department's review.

If you have any questions or wish to discuss this matter, please don't hesitate to contact me at 407-858-2705.

Sincerely,

Richard Myers  
Environmental Liaison Officer  
FEMA Florida Long Term Recovery Office

c: Mr. Craig Fugate, Director, Florida Division of Emergency Management  
James M. Gabbard, City Manager  
Ericson W. Menger, Airport Director  
Marty Altman, FEMA Florida Long Term Recovery Office