

FINAL

Environmental Assessment
for
Construction/Replacement Military
Family Housing – Phase V
MacDill AFB, Florida



Headquarters Air Mobility Command
Scott AFB, IL

December 2003

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE DEC 2003		2. REPORT TYPE		3. DATES COVERED 00-00-2003 to 00-00-2003	
4. TITLE AND SUBTITLE Final Environmental Assessment for Construction/Replacement Military Family Housing- Phase V MacDill AFB, Florida				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 6 Civil Engineer Squadron (6 CES/CEVN),7621 Hillsborough Loop Drive,MacDill AFB,FL,33621-5207				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 116	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

**FINDING OF NO SIGNIFICANT IMPACT
AND
FINDING OF NO PRACTICABLE ALTERNATIVE
CONSTRUCTION/REPLACEMENT MILITARY FAMILY HOUSING – PHASE V
MACDILL AIR FORCE BASE, FLORIDA**

Agency: United States Air Force (USAF), Headquarters, Air Mobility Command

Background: Pursuant to the President's Council on Environmental Quality (CEQ) regulations, Title 40 Code of Federal Regulations (CFR) Parts 1500-1508, as they implement the requirements of the National Environment Policy Act (NEPA) of 1969, 42 U.S.C. § 4321, et seq., and the Air Force Environmental Impact Analysis Process, as promulgated at 32 CFR Part 989, the U.S. Air Force conducted an assessment of the potential environmental consequences associated with implementation of the following Proposed Action: to construct 76 new military family housing units and demolish 96 substandard housing units. The environmental assessment considered all potential impacts of the Proposed Action and alternatives, both as solitary actions and in conjunction with other proposed activities. The finding of no significant impact (FONSI) summarizes the results of the evaluation of the Proposed Action and alternatives. The discussion focuses on activities that have the potential to change both the natural and human environments. The finding of no practicable alternative (FONPA) summarizes the options considered and why the proposed project was designed and sited as proposed.

Proposed Action: Construct 76 new military family housing units to replace 96 substandard housing units proposed for demolition. The new housing units will be single-family style houses constructed on a vacant parcel within an area designed for residential development. The houses proposed for demolition are multi-family apartment-style housing units in the southern portion of the existing military family housing area.

Alternatives: Renovation of existing housing units was considered as an alternative to the Proposed Action. This alternative would completely renovate approximately 96 of the existing multi-family apartment-style housing units (approximately 14 buildings) on base. The renovate existing housing alternative would provide modern, efficient housing for base personnel but would not improve the current situation of crowded living conditions or alleviate the potential for property loss or risk to human safety, health and welfare caused by flooding. The no action alternative was also considered as an alternative to the Proposed Action. The no action alternative would involve no construction or demolition activities and no changes to the current living conditions in the MacDill military family housing area. The environmental consequences associated with implementation of the Proposed Action are summarized in the following sections.

Air Quality: Fugitive dust and construction vehicle exhaust will be generated during construction of the new housing units and demolition of the existing houses but will not constitute a major source of air pollutants based on analysis. The estimated values for carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur oxides (SO_x), and particulate matter (PM₁₀) were determined to be substantially less than USEPA de minimis values and less than 10% of the Hillsborough County emissions inventory, and therefore, an air conformity analysis is not necessary.

Noise: Noise levels will increase temporally during construction and demolition activities, particularly for occupants of nearby houses. On average, buildings in the MacDill military family housing area are about 40 feet apart. Based on an average construction noise level of 85 decibels (dB) at 50 feet from

the point of generation, noise levels at the housing units adjacent to the buildings being demolished could rise above the 65 dB level during the demolition. Demolition of the buildings is anticipated to take approximately two weeks per building, consequently the increased noise levels would be temporary and short in duration and it is believed that the housing residents will accept the temporary increase in noise since they understand the net benefit provided by the project.

Wastes, Hazardous Materials and Stored Fuels: A temporary increase in the generation of solid waste will occur during construction of the new family housing units and demolition of existing units. Limited surveys have detected ACBM and LBP in the existing multi-family housing units. Prior to demolition of the buildings the construction contractor shall hire an environmental consulting company to assess the extent of the asbestos and lead-based paint in one of the existing housing units. Since all of the units proposed for demolition are very similar (constructed at the same time and under the same contract using identical building materials), the results for the “sample” facility will be used to determine the management/abatement process for all of the buildings being demolished. The environmental consulting company shall also be responsible for abatement of the hazardous materials and monitoring of the environment during abatement. Assuming these precautions are followed, the Proposed Action will not result in significant impacts from hazardous materials or wastes.

Water Resources: There will be no significant impacts to surface or ground water quality during construction or demolition of the military family housing units.

Floodplains: Construction of the new military family housing units and demolition of existing units will take place within the 100-year coastal floodplain on the eastern portion of the base. Currently, 80% of MacDill AFB is located within the coastal floodplain. The 20% of the installation that is not located within the floodplain is primarily being used for airfield operations and support. Consequently, there are very few construction sites available on the installation that are situated above the coastal floodplain. The construction sites that are available are not suitable for residential housing due to the proximity to airfield operations and noise constraints. In addition, construction at available sites above the floodplain will not meet the selection criteria of building houses within MacDill existing residential community. Based on this analysis, it is determined that there is no practicable alternative (as defined in Executive Order 11988, Floodplain Management) to constructing the new family housing units in the coastal floodplain on the Base.

All practicable measures to minimize the impact of floods on human health, safety, and welfare will be implemented for the project. In addition, the new housing units will be constructed 11 feet above mean sea level in accordance with Federal Emergency Management Agency (FEMA) guidelines. The project will not involve discharges of hazardous or sanitary wastewater to the floodplain or Tampa Bay. There will be no negative impacts on floodplain functions or threats to human life, health, and safety.

Biological Resources: Adverse impacts on wetlands (including wetland communities of Tampa Bay), wildlife, aquatic life, or protected species will not occur during construction or demolition of the family housing units. No state- or Federally-listed (or candidate species or species habitat) were observed or anticipated due to lack of habitat at the proposed action sites or adjacent areas. The USFWS has concurred that the project should not adversely impact threatened or endangered species. Jurisdictional wetlands are not located on the proposed construction or demolition sites. Jurisdictional wetlands will not be filled, altered or impacted by construction or demolition of the family housing units.

Socioeconomic Resources: Construction and demolition of the housing units will have a minor short-term economic benefit for the Tampa community.

Cultural Resources: The Wherry era housing units proposed for demolition were evaluated for eligibility for the National Register due to their age. A professional survey of all of the Wherry housing at MacDill AFB was completed in July 2002 and concluded that MacDill's Wherry housing lacked sufficient historical associations and physical integrity to be considered eligible for the National Register. There would be no impact to cultural resources as a result of construction of the new family housing units. In accordance with Section 106, consultation with the SHPO has been completed to confirm that they concur with MacDill's assessment of no adverse impact to historic properties.

Land Use: The Proposed Action is consistent with current land use planning on the installation and will not result in a major change in land use.

Transportation Systems: Construction and demolition of the military family housing units will have a short term, minor adverse impact on the transportation systems at MacDill AFB, but the impact would be temporary and is not considered significant.

Airspace/Airfield Operations: Construction and demolition of the military family housing units will not impact airspace/airfield operations.

Safety and Occupational Health: Construction of the new military family housing units will not pose safety hazards beyond those typically experienced with a construction project. ACBM and LBP are present in the housing units that will be demolished. The work scope for this project includes a comprehensive survey for ACBM and LBP. The work scope also includes provisions for the abatement of any identified asbestos or LBP. Abatement will be completed by a qualified abatement subcontractor who will remove and dispose of any identified ACBM and LBP in accordance with Federal requirements. This approach will greatly reduce the potential for health and safety impacts to construction workers. None of the identified construction and demolition sites fall within the boundaries of base Installation Restoration Program (IRP) or other contaminated (compliance) sites and excavation activities are not expected to encounter contaminated media.

Environmental Management: The residents in the new military family housing units will participate in Base recycling programs to reduce solid waste disposal volumes. The project will not result in a significant impact to the base potable water or sanitary sewer system.

Environmental Justice: No disproportionately high or adverse effects on minority or low-income populations would occur as a result of construction and demolition of the military family housing units.

Indirect and Cumulative Impacts: There are no site-specific direct, indirect, or cumulative impacts associated with the construction or demolition of the military family housing units.

Unavoidable Adverse Impacts: There are no unavoidable significant impacts associated with construction and demolition of the military family housing units.

Relationship Between Short-term Uses and Enhancement of Long-term Productivity: Implementation of the Proposed Action will have a positive effect on long-term productivity by

*Finding of No Significant Impact and Finding of No Practical Alternative
Construction/Replacement Military Family Housing – Phase V*


providing the base with modern, efficient military family housing that supports the mission at MacDill AFB.

Irreversible and Irretrievable Commitment of Resources: The construction and demolition activities of the Proposed Action will irreversibly commit fuels, manpower and costs related to the construction and demolition of the military family housing units.

Florida Coastal Zone Management: In accordance with the Federal Coastal Zone Management Act (CZMA) and the Florida CZMA, this Federal action must be consistent "to the maximum extent practicable" with the Florida Coastal Management Program (CMP). The Air Force finds that the Proposed Action is consistent with Florida's CMP and the State of Florida concurs with the Air Forces finding of consistency.

FINDING OF NO SIGNIFICANT IMPACT: Based upon my review of the facts and analyses contained in the attached Environmental Assessment, which is hereby incorporated by reference, I conclude that implementation of the Proposed Action will not have a significant environmental impact, either by itself or cumulatively with other projects at MacDill AFB. Accordingly, the requirements of NEPA, the regulations promulgated by the Council on Environmental Quality and the Air Force are fulfilled and an Environmental Impact Statement is not required. The *Tampa Tribune* published a Notice of Availability on July 7, 2003. No comments were received during the public comment period ending August 8, 2003. The signing of this combined finding of no significant impact and finding of no practicable alternative (FONSI/FONPA) completes the EIAP under Air Force regulations.

FINDING OF NO PRACTICABLE ALTERNATIVE: Pursuant to Executive Order 11988, the authority delegated in Secretary of the Air Force Order (SAFO) 791.1, and taking the above information into account, I find that there is no practicable alternative to locating the proposed new military family housing units at the identified sites. The alternatives to construction of new military family housing units were determined to be impracticable due to land-use constraints. Since construction of new military family housing on MacDill AFB is required, and since the only available sites for construction above the coastal floodplain are not suitable for construction of residential housing due to the proximity to daily airfield operations and noise constraints, there is no practicable alternative to building the housing units within a floodplain. The Proposed Action, as designed, includes all practicable measures to minimize floods on human health, safety, and welfare. The Air Force has sent all required notices to Federal agencies, single points of contact, the State of Florida, local government representatives, and the local news media.


JOHN R. BAKER
Lieutenant General, USAF
Vice Commander


DATE

Attachment: Environmental Assessment

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

SECTION 1.0 PURPOSE OF AND NEED FOR PROPOSED ACTION.....	1-1
1.1 Purpose Of Proposed Action	1-1
1.2 Need For Proposed Action	1-1
1.3 Objectives Of The Proposed Action	1-2
1.4 Location Of Proposed Action	1-3
1.5 The Scope Of The Environmental Review	1-3
1.6 Environmental Permit Requirements	1-4
SECTION 2.0 DETAILED DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES	2-5
2.1 Selection Criteria	2-5
2.2 Detailed Description Of The Proposed Action	2-5
2.3 Description Of The Remodel Existing Units Alternative.....	2-7
2.4 Description Of The No Action Alternative	2-7
2.5 Alternatives Considered But Eliminated From Further Study.....	2-8
SECTION 3.0 AFFECTED ENVIRONMENT	3-1
3.1 Air Quality	3-1
3.2 Noise.....	3-2
3.3 Wastes, Hazardous Materials, And Stored Fuel	3-2
3.4 Water Resources	3-3
3.5 Floodplains	3-4
3.6 Biological Resources	3-4
3.7 Socioeconomics	3-7
3.8 Cultural Resources.....	3-8
3.9 Land Use.....	3-9
3.10 Transportation.....	3-9
3.11 Airspace And Airfield Operations And Bird Aircraft Strike Hazard	3-9
3.12 Safety And Occupational Health	3-10
SECTION 4.0 ENVIRONMENTAL CONSEQUENCES	4-1
4.1 Air Quality	4-2
4.1.1 Proposed Action	4-2
4.1.2 Remodel Existing Housing Alternative.....	4-3
4.1.3 No-Action Alternative.....	4-4
4.1.4 Cumulative Air Quality Impacts	4-4
4.2 Noise.....	4-4
4.2.1 Proposed Action	4-5
4.2.2 Remodel Existing Housing Alternative.....	4-6
4.2.3 No-Action Alternative.....	4-7

4.3 Wastes, Hazardous Material, And Stored Fuel.....	4-7
4.3.1 Proposed Action.....	4-7
4.3.2 Remodel Existing Housing Alternative.....	4-9
4.3.3 No-Action Alternative.....	4-9
4.4 Water Resources	4-9
4.4.1 Proposed Action	4-9
4.4.2 Remodel Existing Housing Alternative.....	4-10
4.4.3 No Action Alternative	4-10
4.5 Floodplains	4-10
4.5.1 Proposed Action	4-11
4.5.2 Remodel Existing Housing Alternative.....	4-11
4.5.3 No Action Alternative	4-11
4.6 Biological Resources	4-12
4.6.1 Proposed Action	4-12
4.6.2 Remodel Existing Housing Alternative.....	4-12
4.6.3 No Action Alternative	4-12
4.7 Socioeconomics	4-13
4.7.1 Proposed Action	4-13
4.7.2 Remodel Existing Housing Alternative.....	4-13
4.7.3 No-Action Alternative.....	4-13
4.8 Cultural Resources.....	4-13
4.8.1 Proposed Action	4-13
4.8.2 Remodel Existing Housing Alternative.....	4-14
4.8.3 No Action Alternative	4-14
4.9 Land Use.....	4-14
4.9.1 Proposed Action	4-14
4.9.2 Remodel Existing Housing Alternative.....	4-14
4.9.3 No Action Alternative	4-15
4.10 Transportation.....	4-15
4.10.1 Proposed Action	4-15
4.10.2 Remodel Existing Housing Alternative.....	4-15
4.10.3 No-Action Alternative.....	4-15
4.11 Airspace/Airfield Operations And Bird-Aircraft Strike Hazard.....	4-15
4.12 Safety And Occupational Health	4-16
4.12.1 Proposed Action	4-16
4.12.2 Remodel Existing Housing Alternative.....	4-17
4.12.3 No-Action Alternative.....	4-17
4.13 Environmental Justice.....	4-17
4.14 Indirect And Cumulative Impacts.....	4-18
4.15 Unavoidable Adverse Impacts.....	4-18

4.16 Relationship Between Short-Term Uses And Enhancement Of Long Term Productivity	4-18
4.17 Irreversible And Irretrievable Commitment Of Resources.....	4-18
SECTION 5.0 PERSONS CONTACTED	5-1
SECTION 6.0 LIST OF PREPARERS	6-1
SECTION 7.0 REFERENCES.....	7-1
FIGURES	
Figure 1-1 Project Location and Vicinity Map, Construction/Replacement Military Family Housing Phase V, MacDill Air Force Base	
Figure 2-1 Proposed Construction Site for New Family Housing at MacDill, Construction/Replacement Military Family Housing Phase V, MacDill Air Force Base	
Figure 2-2 Existing Family Housing Units Proposed for Demolition, Construction/Replacement Military Family Housing Phase V, MacDill Air Force Base	
Figure 3-1 100-Year Floodplain, MacDill Air Force Base	
Figure 3-2 Environmental Constraints Around Phase V Construction and Demolition Sites, MacDill Air Force Base	
Figure 4-1 Location of IRP Site 78, Construction/Replacement of Military Family Housing Phase V, MacDill Air Force Base.	
Figure 4-2 Location of Soil Samples Collected During July 2002 SWMU 48 Investigation, MacDill Air Force Base	
TABLES	
Table 3.6	Summary of Protected Species Identified at MacDill Air Force Base
Table 4.0	Comparison of Environmental Consequences, Construction/Replacement of Military Family Housing Phase V, MacDill Air Force Base
Table 4.1.1	Proposed Action Air Emissions at MacDill AFB

APPENDICIES

APPENDIX A	CONSISTENCY STATEMENT	A-1
APPENDIX B	AF FORM 813	B-1
APPENDIX C	AIR EMISSION CALCULATIONS FOR PROPOSED ACTION AND CUMMULATIVE AIR EMISSIONS	C-1
APPENDIX D	PUBLIC NOTICE AND AGENCY CORRESPONDENCE	D-1

SECTION 1.0

PURPOSE OF AND NEED FOR PROPOSED ACTION

This Environmental Assessment (EA) examines the potential for impacts to the environment resulting from construction/replacement of Military Family Housing – Phase V at MacDill Air Force Base (AFB). The location of the proposed project, the scope of the environmental review, applicable regulatory requirements and coordination, and the type of decision being made are presented in this section. The logic, scope, and organization of the Environmental Assessment (EA) are also described.

1.1 PURPOSE OF PROPOSED ACTION

The Proposed Action is intended to provide MacDill AFB families with modern, safe, and comfortable living quarters. The new housing units would be constructed with more space between the units to decrease housing density on the base. The new housing area would provide more parking areas which would improve the living conditions for the MacDill housing community. In addition, the new family housing units would be energy efficient to meet base energy conservation goals.

1.2 NEED FOR PROPOSED ACTION

Much of MacDill's existing family housing was constructed in the early to late 1950's under the Wherry Military Housing Act of 1949. The 1950's vintage housing no longer meets modern living or energy efficiency standards due to age and deterioration, and economic analysis (AFM 32-1089) recommends replacement. Replacing substandard housing with modern and efficient housing would meet current Air Force standards for military housing, including authorized net square footage requirements. The Proposed Action is programmed in accordance with the

Housing Community Plan and meets the criteria/scope specified in Part II of Military Handbook 1190, “Facility Planning and Design Guide.”

The current housing units are undersized, outdated, and may adversely affect the morale of personnel and their family members assigned to the base. Deficiencies associated with the existing housing proposed for replacement include:

- Roof, walls, foundation, and exterior pavements require major repair or replacement;
- Plumbing and electrical systems are antiquated and do not meet current standards for efficiency or safety;
- Lack of adequate parking spaces for occupants creates congestion and safety hazards.
- Housing density is high, creating a noisy living environment;
- Housing interiors are inadequate by modern criteria; the rooms are small and lack sufficient storage space.
- Flooring throughout the housing is worn and contains asbestos.
- Lead-based paint has been identified in the baseboards, walls, doors, and plaster of multiple housing units.

1.3 OBJECTIVES OF THE PROPOSED ACTION

The objective of the Proposed Action is to provide modern, safe, energy efficient housing for military personnel at MacDill AFB. The new housing would be dispersed to reduce housing density and would provide additional parking closer to the housing units. The new housing would be constructed in the vicinity of the other base housing areas and facilities to create a well planned, spacious housing community on MacDill AFB.

1.4 LOCATION OF PROPOSED ACTION

The Proposed Action would take place at MacDill AFB. The Base occupies approximately 5,630 acres in Hillsborough County adjacent to the City of Tampa, at the southern tip of the Interbay Peninsula (Figure 1-1). The Base is surrounded on three sides by Tampa Bay and Hillsborough Bay, and is bordered on the north by development within the City of Tampa. One site is proposed for construction of the Phase V family housing units. The roughly 15 acre site is located south of the base hospital on the south side of McClelland Drive in the open grassy area that was previously developed for construction of the Phase II housing project. Phase II was never constructed and the site has been maintained as an open field for several years. The site is located adjacent to and south of the Phase III/IV Family Housing site and north of the Palm Golf Course.

1.5 THE SCOPE OF THE ENVIRONMENTAL REVIEW

This EA identifies, describes, and evaluates potential environmental impacts associated with construction of new military family housing units at MacDill AFB and the demolition of some of the existing substandard housing units. This environmental analysis has been conducted in accordance with the President's Council on Environmental Quality (CEQ) regulations, Title 40 of the Code of Federal Regulations (CFR) §§1500-1508, as they implement the requirements of the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §4321, et seq., and the Air Force Environmental Impact Analysis Process, as promulgated in 32 CFR Part 989.

The Federal Coastal Zone Management Act (CZMA) requires Federal agencies carrying out activities subject to the Act to provide a "consistency determination" to the relevant state agency. The Air Force's Consistency Determination for the Phase V Family Housing project is contained in Appendix A. The State of Florida agrees with the Air Force's Consistency Determination for the Proposed Action.

1.6 ENVIRONMENTAL PERMIT REQUIREMENTS

It is anticipated that completion of this project would require application for a stormwater management permit from the Southwest Florida Water Management District (SWFWMD), for the construction of the proposed family housing units and impervious parking areas. In addition, since the site is larger than one acre in area, a National Pollutant Discharge Elimination System (NPDES) Phase II Storm water construction permit would be required.

SECTION 2.0

DETAILED DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This section provides a description of the Proposed Action and alternatives to the Proposed Action. The Proposed Action is to provide modern efficient housing for military members and their families. Under the Proposed Action 76 new military housing units (approximately 40 buildings) would be constructed and 92 existing substandard housing units would be demolished (13 buildings). Under the Remodel Existing Units alternative, the 92 existing units would be extensively remodeled. Under the No Action alternative, the new housing units would not be constructed at MacDill AFB, and routine maintenance and repairs to the existing housing units would continue.

2.1 SELECTION CRITERIA

The new family housing units are required to be located within the existing military community, specifically, the area of MacDill that has been outlined in the base comprehensive plan as residential (USAF, 2002). The residential area on MacDill AFB is located along the northeastern portion of the base, near the shoreline. The site proposed for construction of the Phase V housing area is located directly south of the recently constructed Phase III/IV housing area on the south side of McClelland Avenue and north of the Palm Golf Course.

2.2 DETAILED DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action is construction of new housing units at MacDill AFB (Figure 2.1) and demolition of existing substandard units (Figure 2.2). This project is the fifth phase of a ten-phase plan that aims to replace the majority of the housing units on base. The last five phases

are scheduled for completion between 2005 and 2010. Basically, the Proposed Action can be divided into demolition activities and construction activities.

Demolition activities would include the complete removal of 13 multi-family buildings (92 units total) and two large multi-bay garages at the locations presented in Figure 2.2. The building numbers proposed for demolition include Buildings 644, 646, 667, 668, 669, 670, 671, 673, 674, 675, 676, 677, 678, 685, and 687. All of the buildings are located on Kenwere Drive.

Additional material to be removed as part of the demolition includes fencing, asphalt from parking lots, curbs and sidewalks, recreational equipment, storm drains, electric lines and light poles. Kenwere Drive itself would not be demolished. Upon completion of the demolition activities, the land would be graded, leveled and covered with sod.

The major construction activities would be to build approximately 40 new buildings, both multi-family and single-family style, creating a total of 76 new housing units. Each unit would vary from 950 to 2,000 square feet and contain two to four bedrooms. The houses would be single-family, slab-on-grade units. The replacement housing would provide a modern kitchen, living room, dining room and bath configuration with ample storage. Exterior storage would be included in all the units. Carport or garages would be included for most of the new units and off-street parking would be provided for all the new units.

Construction design includes landscaping, upgraded utilities, roads, and recreational areas. All of the units are designed to withstand hurricane force winds and storm surges. In addition, the new housing units would be constructed above 11 feet mean sea level to raise them above the 100-year floodplain. Raising the building foundations above the floodplain is required by Section 1315 of the 1968 Flood Insurance Act and prohibits FEMA from providing flood insurance unless communities adopt and enforce floodplain management regulations that meet or exceed the floodplain management criteria established in accordance with Section 1361(c) of the Act.

2.3 DESCRIPTION OF THE REMODEL EXISTING UNITS ALTERNATIVE

Under this alternative, there would be no new construction, and the existing units would be extensively remodeled. The housing is over 50 years old, and has not been upgraded since construction. Roofs, walls, foundations, and exterior pavements require major repair or replacement. The existing housing requires asbestos removal and lead-based paint abatement. The existing units require structural upgrades to withstand hurricane force winds and storm surges. High-density living conditions would remain, as the existing housing is multi-family apartment style complexes with buildings in close proximity. In accordance with Air Force Instruction (AFI) 32-6002 1.11.3, if the estimated cost of improvement is greater than 70 percent of the replacement cost, the Air Force may elect to replace the units. Preliminary cost estimates by the 6th Civil Engineering Squadron (6 CES) indicated that the cost for extensive renovation of the units would exceed the 70 percent threshold.

2.4 DESCRIPTION OF THE NO ACTION ALTERNATIVE

Under the No Action Alternative, no construction or demolition of family housing units would occur. The existing housing assets would remain in place to meet the mission of providing adequate housing for authorized personnel. The Civil Engineer would continue routine maintenance on an “as needed” basis. The current homeowner market is adequate for all personnel wanting to purchase housing. The rental market is competitive making it difficult for transitory military personnel to acquire adequate housing. Living in some of the rental units would require approximately a 45-minute commute one way to reach the base. The on-base assets would continue to deteriorate and increase maintenance costs over time. Continuing to use the existing assets would require personnel and families to live in outdated and unsatisfactory housing. The results would be high costs for maintenance, repair, and utilities, as well as considerable inconvenience to the occupants.

2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER STUDY

Using the Direct Compensation Alternative for off-base housing for Junior and Senior Non-Commissioned Officers was identified, and determined to be impracticable for economic and logistical reasons. The existing off-base housing within 30 minutes of MacDill AFB has a limited availability and is typically highly priced due to the affluent nature of the surrounding community. Off-base housing in the surrounding area that is affordable is generally of poor quality, in less than desirable locations. A previous housing market analysis confirmed this, indicating that if on-base housing was not provided non-commissioned officers would be required to live in substandard, low rent off-base housing. Areas around Tampa with affordable, readily available housing are generally located more than 30 minutes from the base.

SECTION 3.0 AFFECTED ENVIRONMENT

This section describes the characteristics of the existing natural and man-made environment that could be affected by implementation of the Proposed Action including all considered alternatives. This section establishes the basis for assessing impacts of the alternatives on the affected environment provided in Section 4.0.

3.1 AIR QUALITY

The Clean Air Act (CAA), as amended in 1977 and 1990, provides the basis for regulating air pollution to the atmosphere. The United States Environmental Protection Agency (USEPA) set air quality standards for six “criteria” pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), sulfur oxides (SO_x), measured as sulfur dioxide [SO₂], lead (Pb), and particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM₁₀). These standards are the cornerstone of the CAA. Although not directly enforceable, they are the benchmark for the establishment of emission limitations by the states for the pollutants USEPA determines may endanger public health or welfare.

The Environmental Protection Commission of Hillsborough County (EPC) is responsible for issuing and enforcing the CAA Title V Air Operation Permit (Permit No. 0570141-001-AV issued 21 Oct 99) for MacDill AFB. The 1998 air emission inventory at MacDill AFB found the installation is a major source of nitrogen oxides with potential emissions of 184 tons per year.

The USEPA tracks compliance with the air quality standards through designation of a particular region as “attainment” or “non-attainment.” MacDill AFB is located in Hillsborough County within the West Central Florida Intrastate Air Quality Control Region (AQCR). Hillsborough County currently meets the EPA air quality standards for all criteria pollutants (60 FR 62748,

December 7, 1995). The county was formerly non-attainment for ozone, but is currently in maintenance of attainment.

3.2 NOISE

The day-night average sound level (DNL) developed to evaluate the total daily community noise environment applies here. In June 1980, the Federal Interagency Committee on Urban Noise published guidelines relating DNL values to compatible land uses. This committee was composed of representatives from the U.S. Departments of Defense, Transportation, and Housing and Urban Development; the USEPA; and the Veterans Administration. Since their issuance, Federal agencies have generally adopted their guidelines for noise analysis. Most agencies have identified 65 dB DNL as a criterion that protects those most affected by noise and that can often be achieved on a practical basis.

Base activities that have the highest potential source of noise impacts are the aircraft/airspace operations. The Air Installation Compatible Use Zone (AICUZ) Study (1996) plotted the day-night average sound level (DNL) from 65 to 80 dB for a typical busy day at MacDill. The DNL contours reflect the aircraft operations at MacDill AFB. The DNL 65 dB contour covers the main runway, and extends about one mile southwest over Tampa Bay, and about 1.5 miles northeast over Hillsborough Bay. The proposed locations for the new military family housing units are located outside the 65 dB contour as are the existing base housing units proposed for demolition.

3.3 WASTES, HAZARDOUS MATERIALS, AND STORED FUEL

Hazardous wastes generated at MacDill AFB include solvents, fuels, lubricants, stripping materials, used oils, waste paint-related materials, and other miscellaneous wastes. The responsibility for managing hazardous waste lies with the generating organization and 6

CES/CEV. Wastes come from approximately 50 locations throughout the Base and are managed at satellite accumulation points base-wide.

Approximately 105 operations base-wide use hazardous materials. Hazardous materials on-base include various organic solvents, chlorine, freon, paints, thinners, oils, lubricants, compressed gases, pesticides, herbicides, nitrates, and chromates. A detailed tracking and accounting system is in place to identify potentially hazardous materials and to ensure that Base organizations are approved to use specific hazardous materials.

The Base receives jet fuel (JP-8) at the Defense Fuel Supply Point (DFSP) by pipeline from Port Tampa. JP-8 storage capacity at DFSP and MacDill AFB is over 7.5 million gallons. Diesel, gasoline and heating oil are stored throughout MacDill in small to medium-sized Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs) ranging in size from 50 to 12,000 gallons, including a 12,000-gallon heating oil AST and two 5,000-gallon diesel UST at the base hospital due north of the Phase V housing site.

3.4 WATER RESOURCES

Surface water flows at the Base are primarily from stormwater runoff. Most of the Base drains toward the southern tip of the Interbay Peninsula; however, the easternmost section of the Base drains toward Hillsborough Bay.

The USEPA issued a National Pollutant Discharge Elimination System (NPDES) multi-sector storm water general permit (No. FLR05B679) to MacDill AFB in October 1998. This permit authorizes the discharge of storm water associated with industrial activity. In accordance with 40 CFR 112, the base has developed a Spill Prevention Control and Countermeasures (SPCC) Plan and a Facility Response Plan given the location of the Base adjacent to navigable waters and shorelines, as well as the amount of fuel storage capacity existing on site.

3.5 FLOODPLAINS

According to information provided by the Federal Emergency Management Agency (FEMA Maps dated 1982-1991), 80 percent of the Base is within a 100-year coastal floodplain (see Figure 3-1). The maps indicate that all the residential, industrial, and institutional (medical and education) land uses on the Base are within the 100-year floodplain, along with most of the commercial and aviation support areas. The remaining 20% of land that is above the floodplain is designated primarily for airfield operations.

The extent of the floodplain is an important consideration for MacDill AFB because EO 11988, and the floodplain management criteria contained in 44 CFR Part 60, Criteria for Land Management and Use, regulate the uses of these areas. The objective of this presidential order is to avoid to the extent possible the long- and short-term adverse impacts associated with occupancy and modification of floodplains. The order applies to all Federal agencies conducting activities and programs that may potentially affect floodplains. To comply with EO 11988, before taking any action, the Air Force must evaluate the impacts of specific proposals in the floodplain. The site proposed for construction of the new military family housing units is located in the 100-year coastal floodplain. Approximately 80% of the land mass of MacDill AFB is located within the 100-year coastal floodplain. The 20% that is located above the floodplain is almost entirely used for airfield operations and is not suitable for family housing. Likewise, locating the new housing units outside the 100-year floodplain would separate them from the existing residential area of MacDill AFB which does not meet the objectives of the Proposed Action. The existing military family housing units proposed for demolition are also located in the 100-year coastal floodplain.

3.6 BIOLOGICAL RESOURCES

A detailed description of the biological resources found at MacDill AFB is provided in the *Integrated Natural Resources Management Plan (INRMP)* (USAF, 2000). MacDill's INRMP

has been approved by the state and Federal fish and wildlife agencies. Land use on MacDill AFB includes urban, light industrial, residential, or improved vacant land. The few undeveloped areas within the Base boundaries have all experienced some degree of disturbance, such as ditching, clearing, or the encroachment of exotic vegetation.

The 1998 Wetland Delineation Study identified, delineated, and classified approximately 1,195 acres of wetlands on MacDill AFB. Mangrove wetlands are the principal scrub/shrub wetland community on the Base. The mangrove community at MacDill AFB has been categorized as excellent wildlife habitat and is protected by state and local regulations. A shallow drainage ditch, classified as a palustrine emergent wetland, is located along the southern boundary of the Phase V housing site.

Wildlife species listed by federal or state agencies as endangered, threatened, or of special concern and known to occur permanently or periodically, or have the potential to occur on the Base are shown in Table 3.6 below. In 1996, the *Endangered Species Management Plan MacDill AFB* and the *Biological Survey of MacDill AFB* identified the general locations of protected species at MacDill AFB. The report does not identify any protected species within the proposed Phase V Family Housing area (USAF, 1996).

TABLE 3.6 - Summary Of Protected Species Identified At MacDill AFB

Common name	Scientific Name	Status	
		Federal	State
Reptile/Amphibians			
American alligator	Alligator mississippiensis	T (SA)	SSC
Atlantic loggerhead turtle	Caretta caretta caretta	T	T
Atlantic green turtle	Chelonia mydas mydas	E	E
Gopher tortoise	Gopherus polyphemus	-	SSC
Gopher frog	Rana capito	C2	SSC
Florida pine snake	Pituophis melanoleucus mugitus	C2	SSC
Short-tailed snake	Stilosoma extenuatum	C2	T
Birds			
Roseate spoonbill	Ajaia ajaja	-	SSC
Limpkin	Aramus guarauna	-	SSC
Burrowing owl	Athene cunicularia	-	SSC
Piping plover	Charadrius melodus	T	T
Southeastern snowy plover	Charadrius alexandrinus tenuirostris	C2	T
Little blue heron	Egretta caerulea	C2	SSC
Reddish egret	Egretta rufescens	C2	SSC
Snowy egret	Egretts thula	-	SSC
Tricolored heron	Egretta tricolor	-	SSC
Peregrine falcon	Falco peregrinus tundris	T	E

Common name	Scientific Name	Status	
		Federal	State
Birds (continued)			
Southeast American kestrel	Falco sparverius paulus	C2	E
Florida sandhill crane	Grus canadensis pratensis	-	T
American oystercatcher	Haematopus palliatus	-	SSC
Bald eagle	Haliaeetus leucocephalus	T	T
Wood stork	Mycteria americana	E	E
Brown pelican	Pelecanus occidentalis	-	SSC
Least tern	Sterna antillarum	-	T
Roseate tern	Sterna dougalii	T	T
Bachman’s warbler	Vermivora bachmanii	E	E
Black skimmer	Rynchops niger	-	SSC
White ibis	Eudocimus albus	-	SSC
Mammals			
Florida mouse	Podomys floridanus	C2	SSC
West Indian (FL) manatee	Trichechus manatus	E	E
Fish			
Common snook	Centropomus undecimalis	-	SSC
Plants			
No State or Federally listed plant species are known to exist on MacDill AFB		-	-

T=Threatened, T(SA)=Threatened/Similarity of Appearance, E= Endangered, SSC= Species of Special Concern, C2=Candidate for listing

Source: Endangered Species Management Plan, MacDill AFB, Florida, 1996

3.7 SOCIOECONOMICS

The Economic Impact Region (EIR) for MacDill AFB is the geographic area within a 50-mile radius of the Base subject to significant Base-related economic impacts. According to the 1998

Economic Resource Impact Statement for MacDill AFB the total economic impact of MacDill AFB on the EIR was \$3.5 billion with over 105,000 jobs supported. Purchase of local labor, goods, and services to support base operations provides a total annual economic impact of \$1.34 billion. Retiree income provides a total economic impact of \$2.19 billion. The direct impact on local income produced by Base expenditures is \$494 million.

3.8 CULTURAL RESOURCES

Cultural resources are prehistoric and historic sites. These resources consist of districts, buildings, structures and objects that are significant in American history, architecture, archaeology, engineering, and culture. Historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP) are subject to protection or consideration by a federal agency in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Five archaeological sites are found on MacDill AFB. The closest archaeological prehistoric site is the Gadsden Point site (8Hi49) located approximately 1,400 feet due south of the proposed action site, located in the southeastern area of the base near Gadsden Point.

Construction of MacDill AFB began in November 1939, and the Base was dedicated in April 1941. Sites and structures related to early missions remain on Base today. The housing units proposed for demolition were not constructed during the initial build-up of the base in the 1940's but were constructed in the early 1950's under the Wherry Military Housing Act program, a DOD-wide housing construction program. Because they are greater than 50 years old, the Wherry Housing on MacDill AFB were tentatively identified as potentially eligible for the National Register of Historic Places. However, a Wherry Housing Historic Building Inventory Evaluation completed in July 2003 for all of MacDill's Wherry Housing found that all of the housing units lacked sufficient historical associations or physical integrity to be considered eligible for inclusion in the National Register (USAF, 2003).

3.9 LAND USE

Land use at MacDill AFB includes airfield, industrial, commercial, institutional (educational & medical), residential, recreational, and vacant land. These areas are delineated in MacDill AFB 2010 Plan (USAF, 2002). The 2010 Plan classifies the site proposed for construction of the new housing units as open space. The site proposed for demolition is classified as residential land.

3.10 TRANSPORTATION

MacDill AFB is currently served by four operating gates. The main gate is located at Dale Mabry Highway, and secondary gates are at Bayshore Boulevard and MacDill Avenue. Due to an increase in force protection measures since September 11, 2001, the Dale Mabry, MacDill and Bayshore gates are only used for commuter traffic. The fourth gate, located on the west side of the Base near Manhattan Avenue, has been reopened and is used as the sole entry point for commercial, contractor, delivery, and recreational vehicles.

The transportation system on Base consists of arterials, collectors, and local streets that connect with the off-base network through the three gates. On-base arterial facilities include North and South Boundary Roads, Bayshore Boulevard, Marina Bay Drive, and Tampa Point Boulevard. The 1998 traffic study determined that service levels for traffic on Base are generally acceptable.

3.11 AIRSPACE AND AIRFIELD OPERATIONS AND BIRD AIRCRAFT STRIKE HAZARD

The airspace region of influence includes the airspace within a 20-nautical-mile radius of MacDill AFB from the ground surface up to 10,000 feet above MSL. Radar monitoring and advisories within the region are provided by the Tampa Terminal Radar Approach Control (TRACON). There are 13 military and public airports, as well as five private use airports

located within or adjacent to the controlled airspace associated with the MacDill AFB region of influence. No special use airspace exists within the region.

MacDill AFB has a bird-aircraft strike hazard plan. It provides guidance for reducing the incidents of bird strikes in and around areas where flying operations occur. The plan establishes provisions to disperse information on specific bird hazards and procedures for reporting hazardous bird activity.

3.12 SAFETY AND OCCUPATIONAL HEALTH

The MacDill AFB Asbestos Management Plan identifies procedures for management and abatement of asbestos. Prior to renovation or demolition activities, asbestos sampling is performed; and, if present, the asbestos is removed in accordance with applicable Federal and state regulations.

Some limited-scope asbestos surveys have been completed at the housing units proposed for demolition. These files are maintained on-base at 6 CEV/CES, Building 147, Room 304. Typically, these surveys were completed prior to small-scale renovation projects. Asbestos fibers were identified as being present in numerous screening reports on file, with asbestos containing materials (ACMs) typically including floor tile and mastic in water heater rooms, tile and mastic in AC room, and kitchen and bathroom linoleum.

The Base engineer assumes that all structures constructed prior to 1978 possibly contain lead-based paint (LBP). When required, LBP abatement is accomplished in accordance with applicable Federal and State regulations, and Base procedures, prior to demolition activities to prevent any health hazards.

Lead-based paint has been identified in the baseboards, walls, doors, and plaster of multiple housing units. Sampling results for LBP can be found in MacDill's environmental office, please see Section 7.0 References for location of the sampling results.

SECTION 4.0 ENVIRONMENTAL CONSEQUENCES

Section 4.0 discusses the potential effects associated with implementation of the Proposed Action and the alternatives to the Proposed Action. The Proposed Action is to construct approximately 76 new family housing units and demolish approximately 92 existing, substandard housing units at the locations proposed in Section 2.2. One alternative to implementing the Proposed Action is extensive remodeling of some of the existing housing units to create suitable living quarters for base personnel. The No-Action alternative was also considered as an alternative to the Proposed Action. A brief summary of the anticipated environmental consequences of each action is provided in Table 4.0 below.

Table 4.0 Comparison of Environmental Consequences

Environmental Resources	Alternative A – Proposed Action	Alternative B –Remodel Existing Housing	Alternative C – No Action
Air Quality	Short-term – <i>Minor Adverse</i> Long-term – No Impact	Short-term – Minor Adverse Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Noise	Short-term – Minor Adverse Long-term – No Impact	Short-term – Minor Adverse Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Hazardous Materials/ Wastes/Stored Fuels	Short-term – Minor Adverse Long-term – No Impact	Short-term – Minor Adverse Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Water Resources	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Floodplains	Short-term – Minor Adverse Long-term – Minor Positive	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Biological Resources	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Geology and Soils	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Socioeconomics	Short-term – Minor Positive Long-term – Minor Positive	Short-term – Minor Positive Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Cultural Resources	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Transportation	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Safety and Occupational Health	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Environmental Justice	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Indirect and Cumulative Impacts	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact

4.1 AIR QUALITY

4.1.1 Proposed Action

Air quality impacts would occur during construction of the new housing units and demolition of the existing units; however, these air quality impacts would be temporary.

Fugitive dust (particulate matter: suspended and PM₁₀) and construction vehicle exhaust emissions would be generated by (1) equipment traffic; and (2) entrainment of dust particles by

the action of the wind on exposed soil surfaces and debris. These emissions would be greater during grading of the new sites and demolition of the substandard housing units. Emissions would vary daily. Dust would be generated by equipment travel over temporary roads and would fall rapidly within a short distance from the source.

Pollutants from construction equipment and vehicle engine exhausts include nitrogen oxides (NO_x), carbon monoxide (CO), PM₁₀, and VOCs. Internal combustion engine exhausts would be temporary and, like fugitive dust emissions, would not result in long-term impacts. Pollutant emission estimates are presented in Appendix C and summarized in Table 4.1.1.

Table 4.1.1 Proposed Action Air Emissions at MacDill AFB

Pollutant	Proposed Action Annual Emissions (tpy)	Hillsborough County Emissions Inventory ^a (tpy)	Net Change (%)	De minimis Values ^c (tpy)	Above/ Below De minimis
CO	34.85	19,272	0.01	100	Below
VOC	11.31	27,703	0.003	100	Below
NO _x	37.85	82,563	0.001	100	Below
SO _x	1.85	NA	--	100	Below
PM ₁₀ ^b	2.93	NA	--	100	Below
Pb	--	53	--	25	--

^a Based on stationary permitted emissions presented in 1997 Ozone Emissions Inventory, EPC.

^b PM₁₀ estimated as 50 percent of the 1990 tpy reported for TSP

^c Source: 40 CFR 93.153, November 30, 1993.

tpy Tons per year

% Percent

4.1.2 Remodel Existing Housing Alternative

The Remodeling alternative would not construct any new or demolish any existing buildings. The remodeling alternative would result in some air impacts, primarily associated with demolition of the interior walls, floors, and ceilings of the buildings selected for remodeling; however, the air impacts associated with remodeling would be significantly less than those associated with the Proposed Action. Impacts to air quality would include increased dust emissions in the air resulting from remodeling construction activities. Dust generated during remodeling would mostly be contained within the building being remodeled and dust that

escaped the confines of the building would settle to the ground quickly. An increase in vehicle exhaust emissions from the construction vehicles associated with the project is also expected. Although an increase in air emission above baseline conditions would result from the Remodeling alternative, these air impacts would be temporary and minor. Under this alternative, there would be no long-term impacts to air quality.

4.1.3 No-Action Alternative

Because the status quo would be maintained, there would be no impacts to air quality under the No-Action alternative.

4.1.4 Cumulative Air Quality Impacts

The cumulative air impacts would include air sources from other proposed construction projects on MacDill AFB. Table 1 in Appendix C presents the estimated air emissions calculated for projects proposed for the near future, during the timeframe that construction and demolition activities would be completed. Based on the calculations provided in Appendix C, implementation of the Proposed Action would not result in cumulative air impacts that exceed Hillsborough County's guidance standards.

4.2 NOISE

The primary human response to environmental noise is annoyance (AIHA, 1986). The degree of annoyance has been found to correlate well with the DNL. Annoyance for short-term activities, such as construction noise and fire fighting, could be influenced by other factors such as awareness and attitude toward the activity creating the noise.

Several social surveys have been conducted in which people's reaction to their noise environment has been determined as a function of DNL occurring outside their homes. Guidelines have been developed for individual land uses based upon the information collected in

these surveys and upon information concerning activity interference. For various land uses, the level of acceptability of the noise environment is dependent upon the activity that is conducted and the level of annoyance, hearing loss, speech interference, and sleep interference that results there from.

4.2.1 Proposed Action

Noise impacts associated with the Proposed Action would result from construction of new housing units and demolition of the existing housing units. The degree of noise impacts would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Normally, construction activities are carried out in stages and each stage has its own noise characteristics based on the mixture of construction equipment in use.

The closest sensitive receptors are occupants of adjacent housing units, especially in the areas proposed for demolition. Each multi-unit housing building proposed for demolition has at least one and as many as three other multi-unit residential buildings immediately adjacent to it. It is expected that these adjacent residential units would be occupied during the demolition work. On average the adjacent occupied housing units are about 40 feet away from the buildings proposed for demolition; however, some of the buildings proposed for demolition are as close as 20 feet from an adjacent occupied building. Since demolition activities would be completed during normal business hours (typically 0800 to 1700), occupants that stay home during the day may experience some noise impacts associated with the demolition portion of the project.

All of the adjacent receptors would probably experience noise impacts from construction. The magnitude of these impacts would be directly tied to the proximity of the occupied facility to the construction or demolition site. In addition, the impacts vary according to the activity occurring on any particular day, and impacts would cease when construction is completed. Based on a cumulative average construction noise level of approximately 85 dB at 50 feet from the center of

the project site, several residential buildings in close proximity to buildings proposed for demolition, particularly Buildings 642, 641, 647, 648, 671, 673, 688, 689, and 684, would be negatively impacted by the Proposed Action. These impacts would be temporary since demolition of each individual building should take less than two weeks. Consequently, demolition of all 13 of the multi-unit residential buildings should take less than seven months.

Noise impacts associated with construction of the new housing units would be dramatically less than those associated with demolition since there are no facilities in close proximity to the proposed construction sites. The closest buildings to any of the sites proposed for construction are the cluster of five single-family houses located in the southeastern portion of the 20-homes area on McClelland Avenue and also the Phase III/IV housing on the north side of McClelland. In the southeastern portion of the 20-homes area, the two homes closest to the proposed construction site, buildings 871 and 872, are located approximately 300 feet from the area proposed for construction of the new housing units. The closest Phase III/IV housing units are approximately 300 feet north of the site proposed for construction of the new housing units. In general, the noise impacts associated with construction would be temporary and considered minor.

4.2.2 Remodel Existing Housing Alternative

Noise impacts would occur under this alternative; however, the noise levels would be significantly less than those resulting from the Proposed Action. Construction and demolition activities would primarily occur on the interior of the houses; therefore the noise would be muffled by the exterior walls of the building. This alternative would require much less site preparation and outside work, resulting in diminished noise levels by comparison with the Proposed Action. In addition, the noise associated with remodeling would be temporary and considered minor when compared to the noise of an active military training base.

4.2.3 No-Action Alternative

Under the No-Action Alternative no new noise impacts would occur since no demolition or construction would occur.

4.3 WASTES, HAZARDOUS MATERIAL, AND STORED FUEL

The following section describes sanitary wastewater treatment, solid waste collection and disposal, hazardous material and waste management, and stored fuels management.

4.3.1 Proposed Action

A temporary increase in the generation of solid waste would occur during construction and demolition of the identified housing units. Local off-base waste handling services/facilities have sufficient capacity to handle this increased output. Since the number of personnel on base would not change significantly with the Proposed Action, there would be no appreciable increase in solid waste generation upon completion of the project.

The Proposed Action would result in a minor increase in the number of housing units on base (six total) and each of the new units would include full bathroom and kitchen facilities.

However, the net increase in wastewater discharge to the base wastewater treatment plant is not substantial and would not impact operation of the plant.

Hazardous wastes/materials, such as paint, adhesives, and solvents, would be on site during construction of the new housing units. All hazardous wastes/materials would be temporarily stored and disposed of per Base procedures. All construction related hazardous wastes/materials, including petroleum products, would be removed and disposed of according to Base procedures following the completion of tasks. The disposal of such waste would be in compliance with established Base procedures. No impacts from hazardous materials or waste would occur during construction of the new family housing units.

Previous, limited scope surveys of housing units at MacDill AFB have detected lead-based paint and asbestos containing building materials. Prior to beginning demolition of the selected residential housing units, a lead-based paint survey and asbestos survey would be completed at one of the housing units proposed for demolition. Since each of the housing units are very similar, for example they were constructed by the same contractor, around the same time frame using identical building materials, the results from the survey for the “sample” housing unit shall be used to manage any hazardous building materials for all of the housing units. If asbestos and lead-based paint-containing materials are identified during the survey, these materials must be abated prior to demolition of the buildings. Any materials containing asbestos must be removed from the facility by a licensed asbestos contractor in accordance with all Federal, state and local guidelines. An independent environmental consulting firm shall perform environmental monitoring of the work area during the asbestos abatement work.

There are no Installation Restoration Program (IRP) sites within the area identified for demolition activities; however, one IRP site is located adjacent to the site proposed for construction of the new housing units (Figure 4-1). The eastern boundary of Site 48 is located approximately 50 feet west of the western half of the proposed construction site. Initial sampling information from Site 48 indicates both soil and groundwater contamination is present. The principal constituents of concern at both sites are arsenic and pesticides. Black and Vetch, under contract by the MacDill AFB Installation Restoration Program completed a limited soil investigation within the Phase V housing site to determine if constituents of concern from the IRP sites are present within the proposed project. Approximately 12 shallow soil samples were collected on the proposed Phase V housing site in the vicinity of SWMU 48 (Figure 4-2). The soil samples were analyzed for pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and Target Analyte List metals. The investigation, completed around July 2002, did not detect any constituents of concern at the proposed Phase V housing site.

If contaminated media is encountered during construction of the new units or demolition of the old, the material would be managed in accordance with IRP guidelines. These guidelines

include the development of a site-specific Health & Safety Plan by the construction/demolition contractor and the use approved personal protective equipment (PPE) and clothing by all personnel working within the contaminated portions of the site. Following IRP guidelines would insure the protection of worker health and safety and the proper management of contaminated material; consequently, if contaminated media is encountered, the proposed construction activities should not represent a significant impact.

The Proposed Action would have no impact on stored fuels management and environmental compliance at the Base.

4.3.2 Remodel Existing Housing Alternative

This alternative would have no impact on hazardous materials or hazardous waste since the demolition sites are not located near IRP sites. Reasonable amounts of typical hazardous materials, such as paint and cleaning solvents, would be used under this alternative; however, if proper storage and disposal methods are followed these materials should not result in impacts to the environment. The Remodel Existing Housing alternative would have no impact on stored fuels at MacDill AFB.

4.3.3 No-Action Alternative

Under the No-Action Alternative, no impacts to wastes or hazardous material or stored fuels would occur since there would be no change in the existing conditions.

4.4 WATER RESOURCES

4.4.1 Proposed Action

A small amount of soil erosion would occur during construction and demolition activities since the soil surface would be exposed and disturbed at work locations during the project. Soil

erosion in areas that are disturbed would be controlled by implementation of a sediment and erosion control plan, including implementation of Best Management Practices (BMPs). This EA has been prepared under the assumption that the construction and demolition sites would, at a minimum, be covered with a clean layer of graded and grassed fill. Silt fencing would be installed around the perimeter of the proposed construction and demolition sites to control erosion caused by stormwater runoff. There would be no long-term impacts to water resources once the project is complete.

Under the Proposed Action, there would be no direct or indirect discharges to groundwater. No negative impacts to groundwater would occur with implementation of the Proposed Action. Potable water would be required for all of the new housing units; however, demolition of the old units would remove potable water users from the base system. Overall the project would result in a negligible change in potable water used on base since housing is basically being replaced on a one-for-one basis.

4.4.2 Remodel Existing Housing Alternative

The impact under this alternative would be similar to the Proposed Action and no impact to water resources would occur.

4.4.3 No Action Alternative

Under the No Action alternative, there would be no change to the current conditions and no impact to water resources would occur with implementation of this alternative.

4.5 FLOODPLAINS

In accordance with the requirements of EO 11988, the Air Force must demonstrate that there is no practicable alternative to carrying out the proposed action within the coastal floodplain. No

other practicable sites were identified during the initial siting phase, and potential siting locations were limited due to the nature of the project.

4.5.1 Proposed Action

The proposed new housing units would be located entirely in the 100-year floodplain. All of the new housing units would be constructed on a sufficient volume of fill material to raise the building foundations above the 100-year coastal floodplain elevation (11 ft msl). Elevating the new buildings above the floodplain would reduce the risk of flood loss and dramatically reduce the impacts from floods on human safety, health and welfare. Construction of the new housing units would increase the amount of impervious surface within the floodplain; however the increase in impervious surface would be compensated for through construction of stormwater retention areas which collect stormwater runoff and direct it back into the ground. In addition, demolition of the existing housing units, roadways, and sidewalks, would reduce the impervious surface on the base.

4.5.2 Remodel Existing Housing Alternative

No impacts to the floodplain would occur under this alternative since no new houses would be constructed. Remodeling of the existing units would not involve elevating the housing units, consequently, upon completion of remodeling activities, the housing units would still be within the 100-year floodplain and subject to flooding.

4.5.3 No Action Alternative

There would be no changes to existing conditions with implementation of the No Action alternative and there would be no impacts to the floodplain.

4.6 BIOLOGICAL RESOURCES

4.6.1 Proposed Action

No major wetland areas are located in or adjacent to areas proposed for construction of new housing or demolition of existing housing. A small drainage canal, classified as a palustrine emergent wetland, is located along the southern boundary of the proposed construction site. MacDill's construction program practices would ensure that silt fencing is installed around the perimeter of the construction area; consequently, implementation of the Proposed Action should have no impact on the wetlands.

Section 3.6.4 identifies the Federal- and State-listed species that potentially occur at MacDill AFB. The Phase V Family Housing site has been inspected by the MacDill AFB natural resources manager who determined that no threatened or endangered species or critical habitat would be impacted by construction activities at the site. Coordination with the USFWS has been completed to insure compliance with the Endangered Species Act and confirm that the project would have no impact on listed species (Appendix D).

4.6.2 Remodel Existing Housing Alternative

No impacts to Threatened and Endangered species, wildlife or wetlands would occur under this alternative since no new houses would be constructed.

4.6.3 No Action Alternative

No new construction or demolition would occur with implementation of the No Action alternative and no impacts to biological resources would occur.

4.7 SOCIOECONOMICS

4.7.1 Proposed Action

The Proposed Action would cost approximately \$16.2 million to complete, based on 2002 cost estimates. This would equal approximately 3.2% of the nearly \$494 million annual expenditures that MacDill AFB provides to the local economy, and would constitute a moderate beneficial impact. The Proposed Action would also have a minor beneficial impact on the work force in the region during the construction period.

4.7.2 Remodel Existing Housing Alternative

Remodeling the existing housing units is estimated to cost approximately \$15 million. The remodel existing housing alternative represents approximately 3% of the nearly \$494 million annual expenditures that MacDill AFB provides to the local economy, and would therefore constitute a minor beneficial impact.

4.7.3 No-Action Alternative

Under the No-Action Alternative, no impacts to socioeconomic resources would occur.

4.8 CULTURAL RESOURCES

4.8.1 Proposed Action

All of the housing units and the two garages proposed for demolition were constructed in 1951 under the Wherry building program. These buildings are greater than 50 years old and are therefore potentially eligible for nomination to the National Register of Historic Places. To determine the historical significance of MacDill's Wherry housing, the base conducted a Wherry Housing Historic Building Inventory Evaluation. The investigation, completed in July 2003,

concluded that all of the Wherry housing on MacDill AFB lacked sufficient historical associations and physical integrity to be recommended as eligible for inclusion in the National Register (USAF, 2003). The results of the Wherry housing evaluation were presented to the SHPO for concurrence. The SHPO confirmed the findings of the Wherry Housing Historic Building Inventory Evaluation and agreed that the housing did not meet the criteria necessary for listing in the National Register. The SHPO concurrence letter is provided in Appendix D.

4.8.2 Remodel Existing Housing Alternative

The remodel existing housing alternative would not adversely impact the existing housing units from a cultural resources standpoint since the buildings lack the historical associations and physical integrity required for National Register consideration.

4.8.3 No Action Alternative

Under the No-Action Alternative, no impacts to cultural resources would occur.

4.9 LAND USE

4.9.1 Proposed Action

Land use would change from open space to residential community with implementation of the Proposed Action. At sites where construction is proposed the land would be changed from an open grass field to residential community (houses, streets, sidewalks, playgrounds, etc). In areas where demolition is proposed the land would change from existing housing units to open grassy area.

4.9.2 Remodel Existing Housing Alternative

No changes to land use would be incurred with implementation of this alternative.

4.9.3 No Action Alternative

Under the No-Action Alternative, no impacts to land use would be incurred.

4.10 TRANSPORTATION

4.10.1 Proposed Action

There would be a temporary negative impact from construction vehicles during construction of the new housing units and demolition of the existing housing. The construction impacts would be temporary, and the level of service of Base roads would not decline. No long-term impacts to transportation would result from the Proposed Action.

4.10.2 Remodel Existing Housing Alternative

The impacts on transportation for this alternative would be similar to those identified for the Proposed Action. Consequently, no long-term impacts on transportation would be incurred with implementation of this alternative.

4.10.3 No-Action Alternative

No impacts on transportation would be incurred under the No-Action alternative.

4.11 AIRSPACE/AIRFIELD OPERATIONS AND BIRD-AIRCRAFT STRIKE HAZARD

None of the alternatives considered would have an impact on Airspace/Airfield Operations or Bird-Aircraft Strike Hazard.

4.12 SAFETY AND OCCUPATIONAL HEALTH

4.12.1 Proposed Action

The proposed construction activities for the project would pose safety hazards to the workers similar to those associated with typical industrial construction projects, such as falls, slips, heat stress, and machinery injuries. Construction would not involve any unique hazards and all construction methods would comply with OSHA requirements to ensure the protection of workers and the general public during construction. Vigilant but not controlling governmental oversight of contractor activities would help assure OSHA compliance.

Limited surveys for lead-based paint and asbestos containing building materials have been previously performed in many of the housing units proposed for demolition; however, these surveys were by no means comprehensive. Prior to initiating demolition activities the demolition contractor shall hire a qualified independent environmental consulting firm to perform a comprehensive asbestos and lead-based paint survey for one of the buildings proposed for demolition. Since all of the 13 buildings (92 units) proposed for demolition are the same, the results from the “sample” building shall be used for the other buildings. Once the survey has been completed and the hazardous materials identified, the demolition contractor shall hire a qualified environmental abatement subcontractor to remove and dispose of the asbestos containing building material and lead-based paint. The same environmental firm shall perform environmental monitoring during the abatement work in accordance with Air Force, Environmental Protection Agency, and other applicable environmental regulations. All waste disposal manifests shall be turned over to the government upon completion of the demolition work.

4.12.2 Remodel Existing Housing Alternative

The proposed construction activities for the project would pose safety hazards to the workers similar to those associated with typical industrial construction projects, such as falls, slips, heat stress, and machinery injuries. Construction would not involve any unique hazards and all construction methods would comply with OSHA requirements to ensure the protection of workers and the general public during construction. Vigilant but not controlling governmental oversight of contractor activities would help assure OSHA compliance.

Remodeling activities in the existing houses would have impacts similar to demolition of the buildings. These materials would be surveyed and managed as described in the Proposed Action. This alternative would have a long-term positive impact on health and safety by removing toxic materials from the housing units.

4.12.3 No-Action Alternative

No impacts on safety and occupational health would be incurred under the No-Action Alternative.

4.13 ENVIRONMENTAL JUSTICE

Replacing a portion of the family housing at MacDill AFB would not affect minority or low-income populations. There are no minorities or low-income populations in the area around the proposed construction and demolition sites, and thus, there would be no disproportionately high or adverse impacts on such populations. No adverse environmental impacts would occur outside MacDill AFB. Therefore, no adverse effects on minority and low-income populations would occur as a result of replacing military family housing at MacDill AFB.

4.14 INDIRECT AND CUMULATIVE IMPACTS

There are no site-specific direct, indirect, or cumulative impacts associated with replacing a portion of the military family housing at MacDill AFB.

4.15 UNAVOIDABLE ADVERSE IMPACTS

There are no significant unavoidable adverse impacts associated with replacing a portion of the military family housing at MacDill AFB.

4.16 RELATIONSHIP BETWEEN SHORT-TERM USES AND ENHANCEMENT OF LONG TERM PRODUCTIVITY

Replacing some of the existing military family housing on MacDill would have a negligible effect on long-term productivity. The minor negative environmental effects would certainly outweigh the long-term benefit of new housing on base, and the project would have a positive effect on morale at MacDill, which, in turn, can improve productivity.

4.17 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Both the Proposed Action and the Remodel Existing Housing alternative would irreversibly commit fuels, manpower, construction materials, and costs related to construction and demolition.

SECTION 5.0 PERSONS CONTACTED

Kevin Gokeman 6 CES/CEC 2610 Pink Flamingo Avenue MacDill AFB, FL 33621 1-813-828-8681	Steve Boyd 6 CES/CEPP 2610 Pink Flamingo Avenue MacDill AFB, FL 33621 1-813-828-2543
Tony Rodriguez 6 CES/CEPP 7621 Hillsborough Loop Drive MacDill AFB, FL 33621 1-813-828-2543	Mike Cooley 6 CES/CEP 7621 Hillsborough Loop Drive MacDill AFB, FL 33621 1-813-828-5420
Ken Domako 6 CES/CER Installation Restoration Program 7621 Hillsborough Loop Drive MacDill AFB, FL 33621 1-813-828-0776	Anthony Gennaro MacDill Air Force Base Installation Restoration Program 7621 Hillsborough Loop Dr. MacDill AFB, FL 33621-5207 1-813-828-4554
Laura Kammerer Division of Historical Resources Compliance Review Section 500 S Bronough St. Tallahassee, FL 32399-0250 1-800-847-7278	Jack Moore Southwest Florida Water Management District 7601 U.S. Highway 301 North Tampa, FL 33637 1-813-985-7481
Bryan Pridgen US Fish and Wildlife Service 9549 Koger Blvd Suite 111 St. Petersburg, FL 33702 1-727-570-5398	Isaac Chandler Florida Fish and Wildlife Conservation Commission 3900 Dranefield Road Lakeland, FL 33811 1-863-648-3203
Jasmine Raffington FL Coastal Management Program Florida State Clearing House 2555 Shumard Oak Blvd. Tallahassee, FL 32399-2100 1-850-414-6568	Bob Fisher 6 CES/CEC 2610 Pink Flamingo Avenue MacDill AFB, FL 33621 1-813-828-8685

SECTION 6.0 LIST OF PREPARERS

Mr. Jason Kirkpatrick
6 CES/CEVN
7621 Hillsborough Loop Dr.
MacDill AFB, FL 33621-5207
Voice: (813) 828-0459
FAX: (813) 828-2212
e-mail: jason.kirkpatrick@macdill.af.mil

Mr. Jason Lichtenstein
6 CES/CEV
7621 Hillsborough Loop Dr.
MacDill AFB, FL 33621-5207
Voice: (813) 828-2718
FAX: (813) 828-2212
e-mail: jason.lichtenstein@macdill.af.mil

SECTION 7.0 REFERENCES

Advisory Council on Historic Preservation, 1986.	<i>36 CFR Part 800: Protection of Historic Properties</i> . U.S. Government Printing Office, Washington, D.C.
American Weather Service (AWS), 1993.	AWS Climatic Brief, Air Force Combat Climatology Center, Air Weather Service, Scott AFB, October 1993.
Florida Natural Areas Inventory (FNAI), 1996.	Florida Natural Areas Inventory, 1996. Biological Survey of MacDill Air Force Base.
United States Environmental Protection Agency (USEPA), 1988	Gap Filling PM ₁₀ Emission Factors for Selected open Area Dust Sources (EPA-450/4-88-003), United States Environmental Protection Agency, Research Triangle Park, February 1988.
USAF, 1992.	U.S. Air Force, 1986. From the 1940s to Now A Historical Synopsis of the 56th Tactical Training Wing And MacDill Air Force Base, Florida. 56 FW Historian's Office, MacDill AFB.
USAF, 1994.	U.S. Air Force, 1994. Environmental Assessment, Transfer and Reuse of Part of MacDill Air Force Base, Florida.
USAF, 1995	U.S. Air Force, 1995. Environmental Assessment for Implementation of the Integrated Natural Resources Management Plan MacDill Air Force Base, Florida.
USAF, 1995.	Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, 5th Edition (AP-42), United States Environmental Protection Agency, Research Triangle Park, January 1995 (Supplement A, February 1996).
USAF, 1996	U.S. Air Force, 1996. Biological Survey of MacDill Air Force Base – Final Report
USAF, 1996	U.S. Air Force, 1996. Endangered Species Management Plan MacDill Air Force Base, Florida
USAF, 1996	U.S. Air Force, 1996. Environmental Assessment for the Replacement of Military Family Housing MacDill Air Force Base, Florida.
USAF, 1996.	U.S. Air Force, 1996. Air Installation Compatible Use Zone (AICUZ) Study, MacDill AFB, Tampa.
USAF, 1997	<u>Economic Resource Impact Statement</u> MacDill Air Force Base, Florida.

USAF, 1998	U.S. Air Force, 1998. Interim Remedial Action/Closure Report for Underground Storage Tank Removal and Facility Demolition: Site 56 and Site 32. MacDill AFB, Florida, April 1998.
USAF, 1998	U.S. Air Force, 1998. Delineation Study of the Waters of the United States Including the Landward Extent of Wetlands and Surface Waters MacDill Air Force Base Tampa, Hillsborough County, Florida.
USAF, 1998	U.S. Air Force, 1998. <u>Entry Gate Development Study</u> MacDill Air Force Base, Florida.
USAF, 1999	U.S. Air Force, 1999. <u>DRAFT Title V Permit No. 0570141-001-AV</u> MacDill Air Force Base, Florida.
USAF, 2000	U.S. Air Force, 2000. <u>Integrated Natural Resource Management Plan (INRMP)</u> MacDill Air Force, Florida
USAF, 2001	U.S. Air Force, 2001. <u>Cultural Resources Management Plan (CRMP)</u> MacDill Air Force Base, Florida.
USAF, 2002.	U.S. Air Force, 2002. <u>Environmental Compliance Assessment and Management Program (ECAMP)</u> , MacDill Air Force Base, Florida.
USAF, 2002	U.S. Air Force 2002. Base Comprehensive Plan (2010 Plan), MacDill AFB, Florida.
USAF, 2003	U.S. Air Force, 2003. Wherry Housing Historic Building Inventory Evaluation, MacDill AFB, Florida. July 2003.
USEPA, 1995	Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, 5 th Edition (AP-42), USEPA, Research Triangle Park, January 1995 (Supplement A, February 1996).
USEPA, 1985	Compilation of Air Pollutant Emission Factors, Volume II: Mobile Sources, 4 th Edition (AP-42), USEPA, Ann Arbor, September 1985, (Supplement A, January 1991).
USEPA, 1971	Noise from Construction Equipment and Operation, Building Equipment and Home Appliances
State of Florida, 1981	Florida Coastal Management Program
Lead & Asbestos Surveys	Building # 147, Room # 304

Page Intentionally Left Blank

FIGURES

Page Intentionally Left Blank

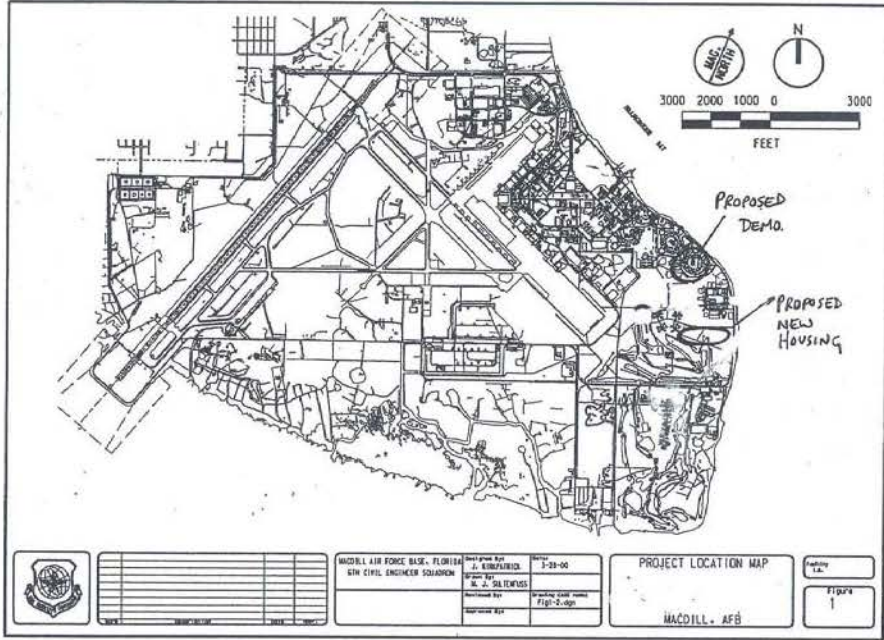
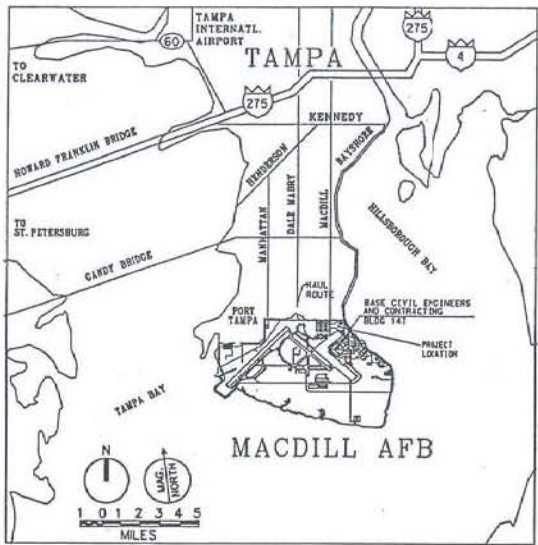
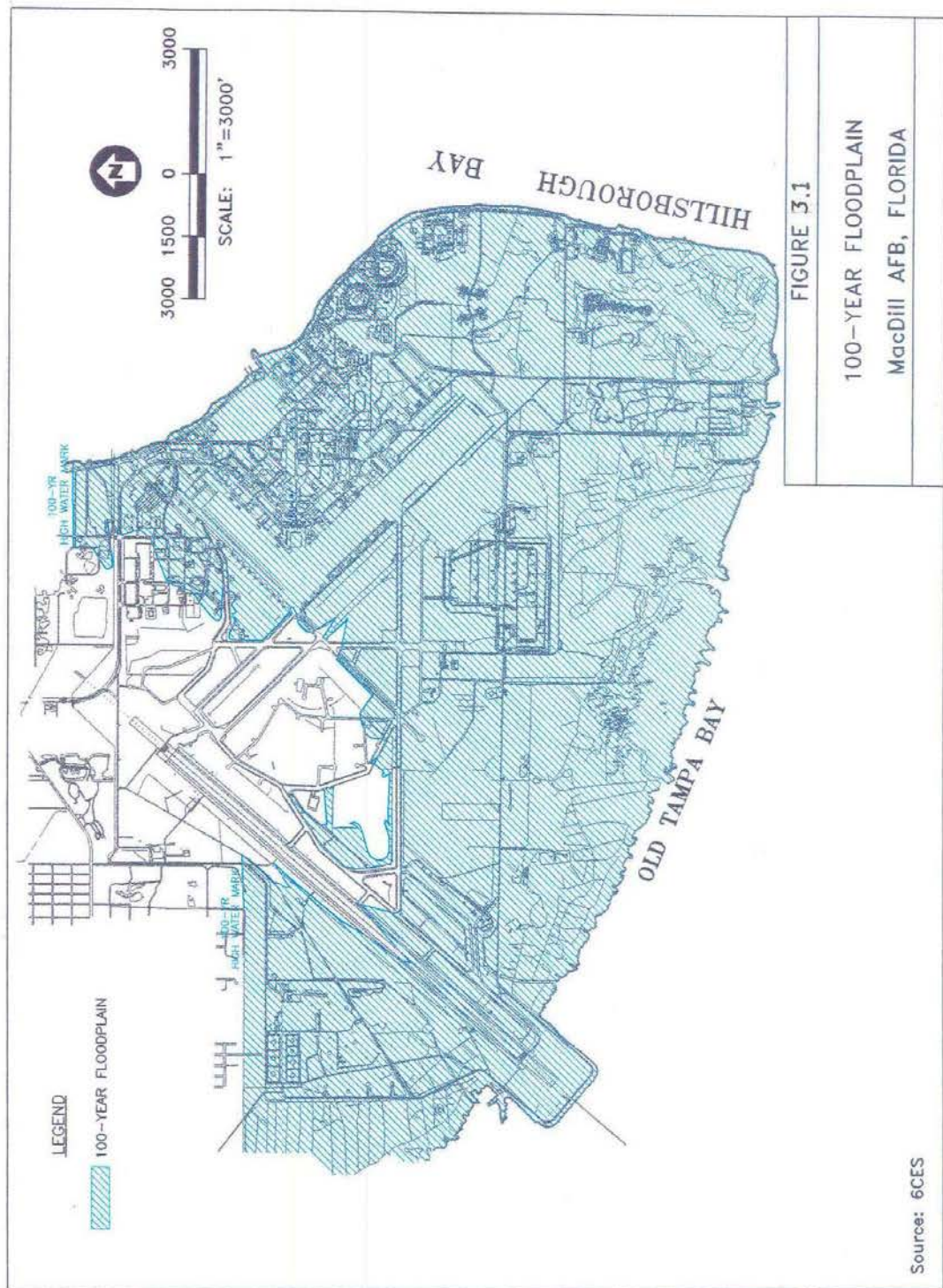


FIGURE 1-1 – Project Location and Vicinity Map,
Construct/Replace Military Family Housing – Phase 5
MacDill AFB, Florida









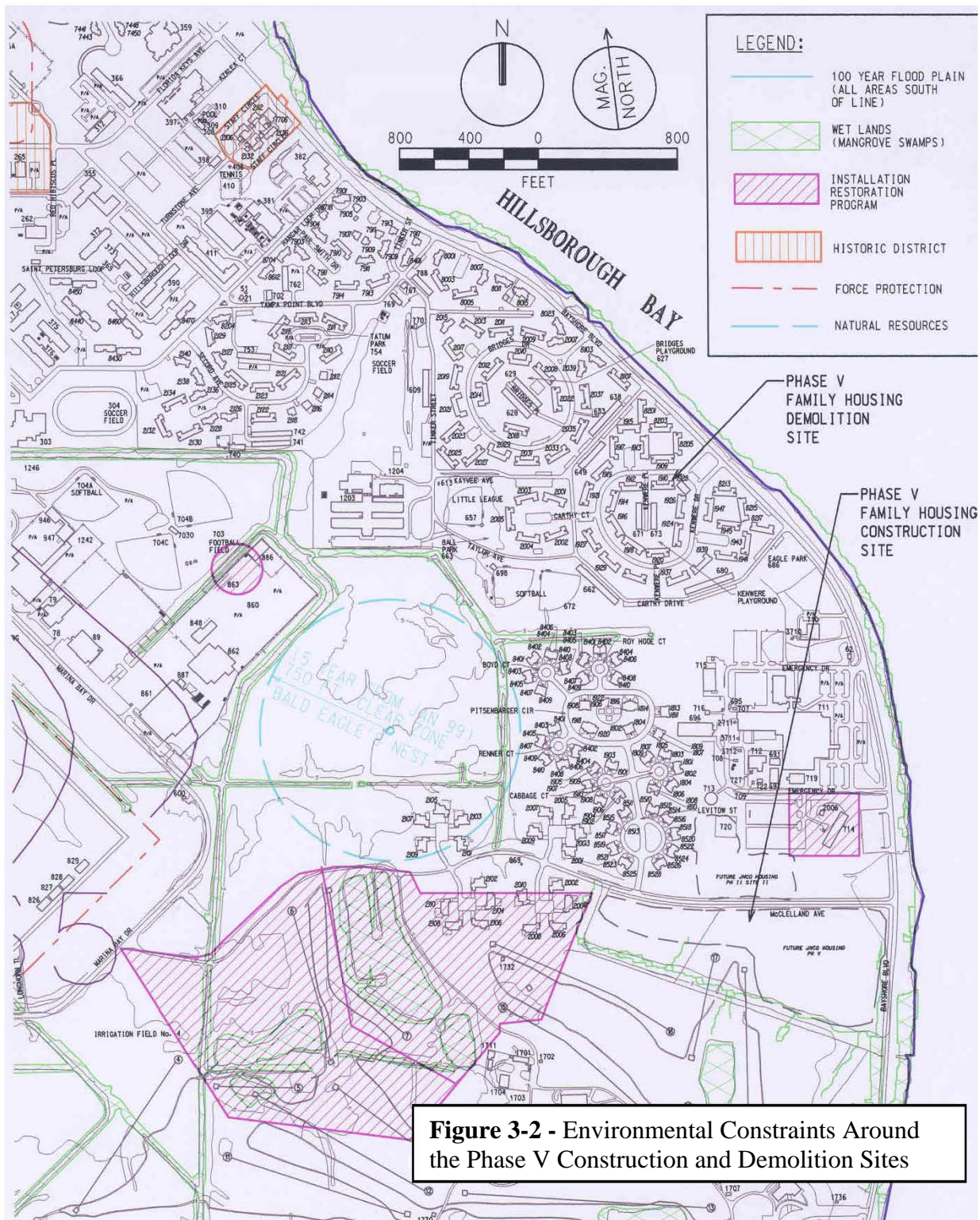
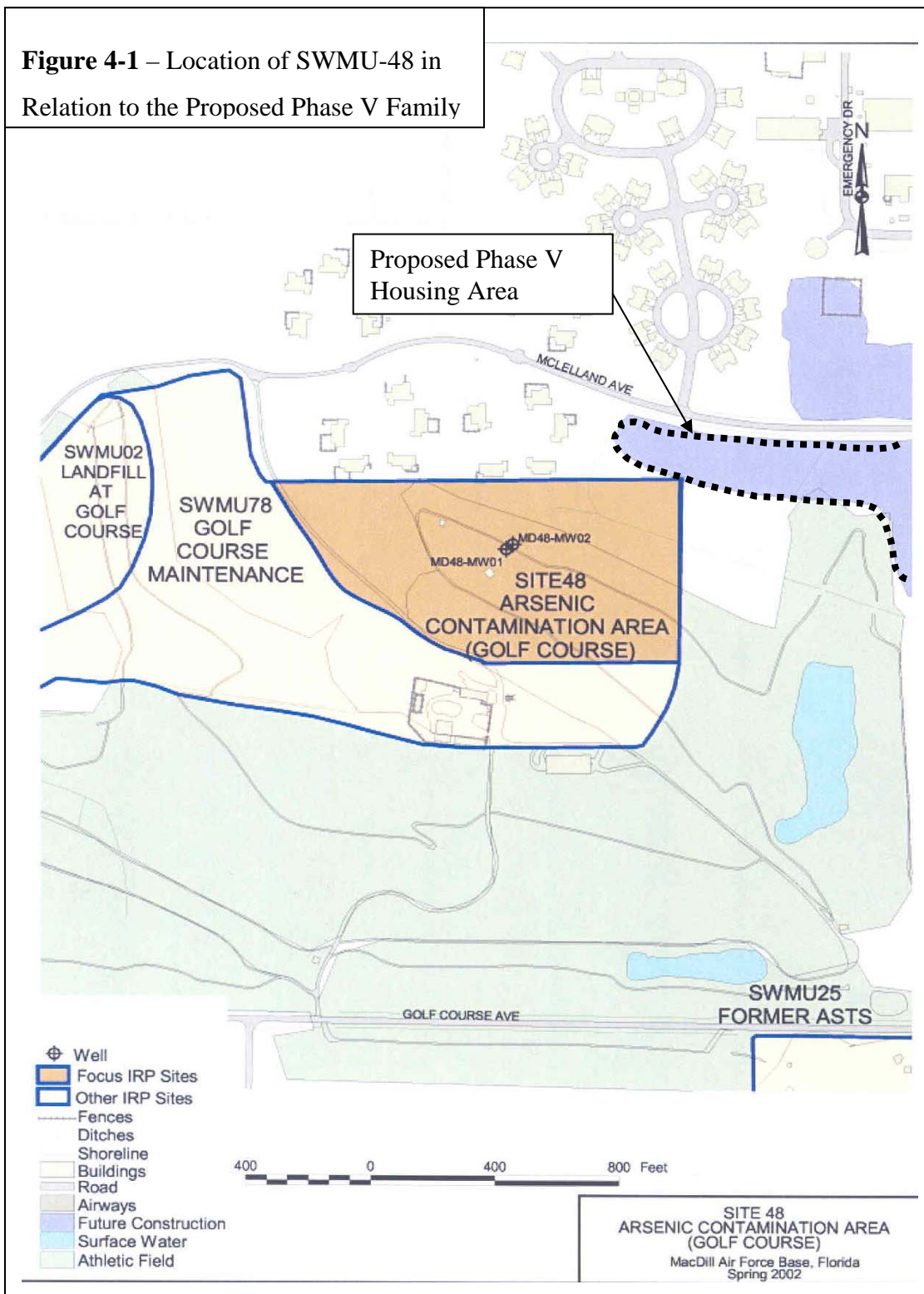
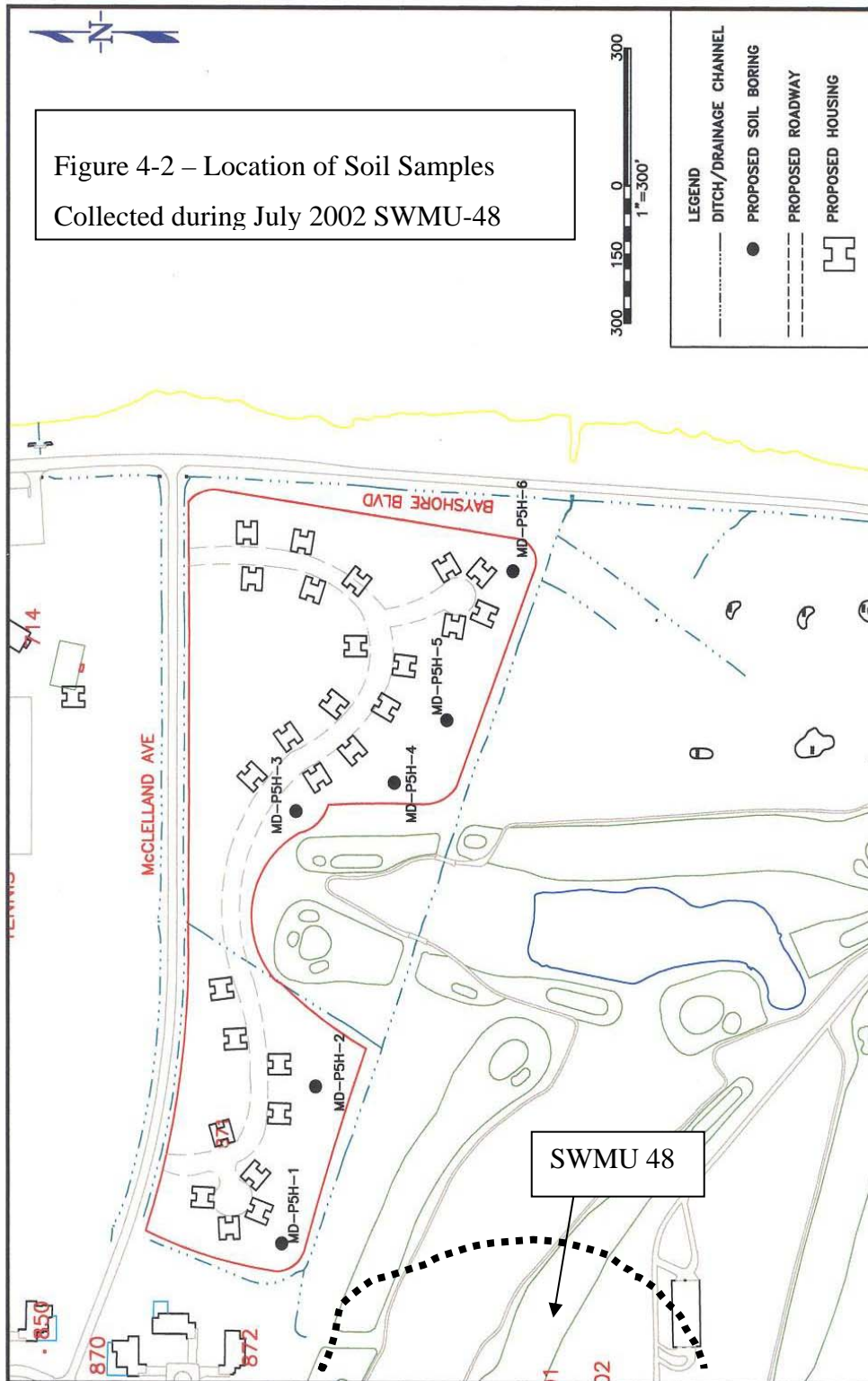


Figure 4-1 – Location of SWMU-48 in
Relation to the Proposed Phase V Family





APPENDIX A

CONSISTENCY STATEMENT

Page Intentionally Left Blank

APPENDIX A

CONSISTENCY STATEMENT

This consistency statement will examine the potential environmental consequences of the Proposed Action and ascertain the extent to which the consequences of the Proposed Action are consistent with the objectives of Florida Coastal Management Program (CMP).

Of the Florida Statutory Authorities included in the CMP, impacts in the following areas are addressed in the EA: beach and shore preservation (Chapter 161), historic preservation (Chapter 267), economic development and tourism (Chapter 288), public transportation (Chapters 334 and 339), saltwater living resources (Chapter 370), living land and freshwater resource (Chapter 372), water resources (Chapter 373), environmental control (Chapter 403), and soil and water conservation (Chapter 582). This consistency statement discusses how the proposed options may meet the CMP objectives.

CONSISTENCY DETERMINATION

Chapter 161: Beach and Shore Preservation

No disturbances to the base's canals are foreseen under the Proposed Action or Alternative Actions.

Chapter 267: Historic Preservation

The Air Force and the Florida State Historic Preservation Officer have determined that there are two areas on MacDill AFB with buildings that are potentially eligible for the National Register of Historic Places. The housing units proposed for demolition are greater than 50 years old and therefore potentially eligible for the National Register of Historic Places. Consultation between the Air Force and State Historical Preservation Officer have been completed to insure that historic resources would not be impacted by the Proposed Action or alternatives.

Chapter 288: Economic Development and Tourism

The EA presents the new employment impact and net income impact of the Proposed Action and alternatives. The options would not have significant adverse effects on any key Florida industries or economic diversification efforts.

The EA quantitatively addresses potential impacts to transportation systems and planning and implementation of transportation improvements.

Chapter 372: Saltwater Living Resources

The EA addresses potential impacts to local water bodies. Water quality impacts were surveyed for existing conditions at the Proposed Action and alternatives. Results indicate that no impacts would result from the Proposed Action or alternatives.

Chapter 372: Living Land and Freshwater Resources

Threatened and endangered species, major plant communities, conservation of native habitat, and mitigation of potential impacts to the resources are addressed in the EA. The Proposed Action and alternatives would not result in permanent disturbance to native habitat and should not impact threatened or endangered species.

Chapter 373: Water Resources

There would be no impacts to surface water or groundwater quality under the Proposed Action or alternatives as discussed in the EA.

Chapter 403: Environmental Control

The EA addresses the issues of conservation and protection of environmentally sensitive living resources; protection of groundwater and surface water quality and quantity; potable water supply; protection of air quality; minimization of adverse hydrogeologic impacts; protection of endangered or threatened species; solid, sanitary, and hazardous waste disposal; and protection of floodplains and wetlands. Where impacts to these resources can be identified, possible mitigation measures are suggested. Implementation of mitigation will, for the most part, be the responsibility of MacDill AFB.

Chapter 582: Soil and Water Conservation

The EA addresses the potential of the Proposed Action and alternatives to disturb soil and presents possible measures to prevent or minimize soil erosion. Impacts to groundwater and surface water resources also are discussed in the EA.



CONCLUSION

The Air Force finds that the conceptual Proposed Action and alternatives plans presented in the EA are consistent with Florida's CMP.

APPENDIX B

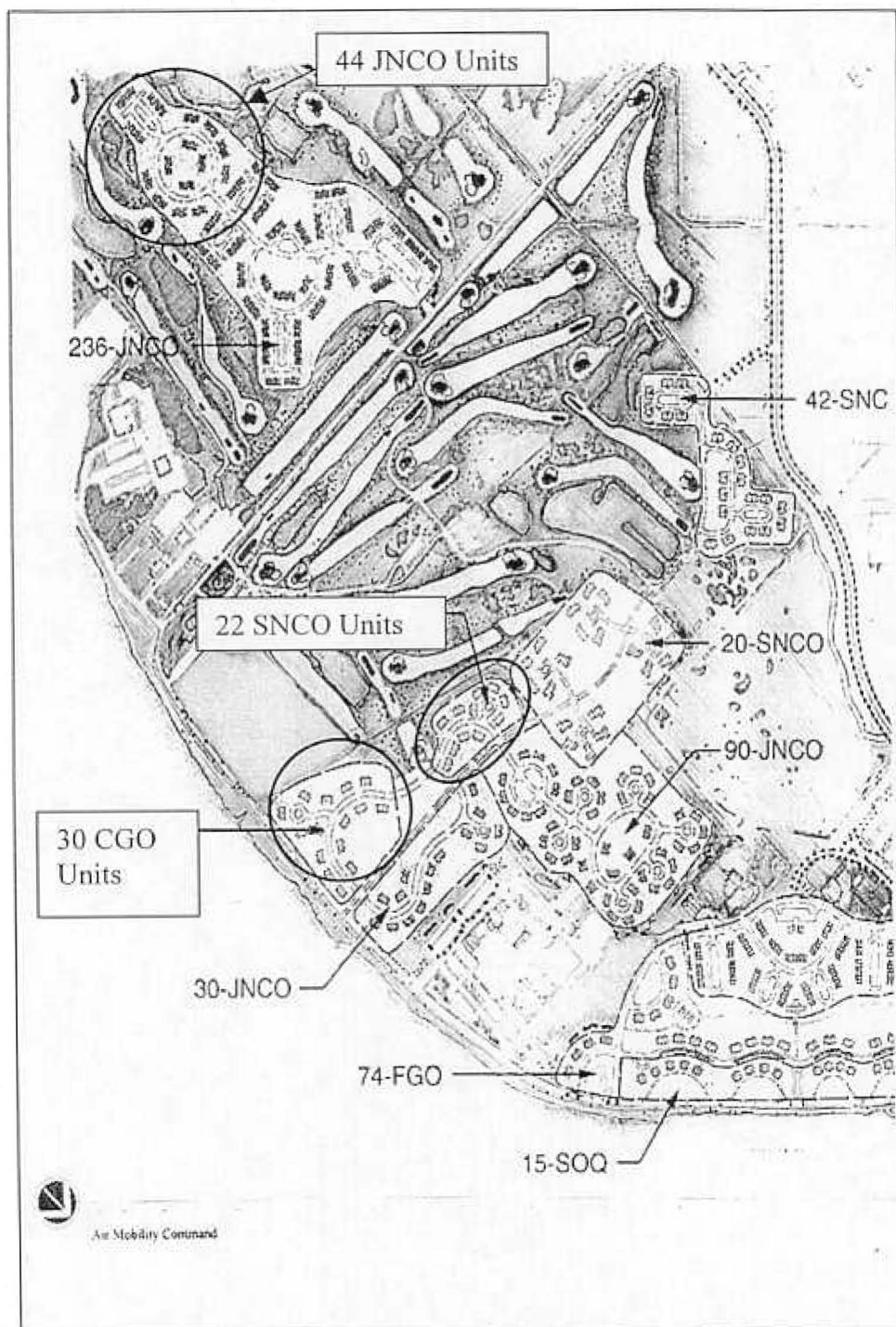
AIR FORCE FORM 813

Page Intentionally Left Blank

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS		Report Control Symbol RCS: 28401-17																																																
INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).																																																		
SECTION I - PROPONENT INFORMATION																																																		
1. TO (Environmental Planning Function) 6 CES/CEV	2. FROM (Proponent organization and functional address symbol) 6 CES/CEPP	2a. TELEPHONE NO. 828-2543																																																
3. TITLE OF PROPOSED ACTION NVZR 01-3705R1, REPLACE FAMILY HOUSING PHASE 5																																																		
4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date) Existing housing are over 45 years old and show the effects of age and continuous heavy use. They have had no major upgrades since construction and do not meet the needs of today's families.																																																		
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.) Project constructs 96 units of Military Family Housing. Includes sitework, replacement/upgrade of utilities, roads, landscaping and recreational areas. Demolishes 92 existing units and remediates associated asbestos.																																																		
6. PROPONENT APPROVAL (Name and Grade) STEPHAN C. BOYD	6a. SIGNATURE 	6b. DATE 10 Oct 01																																																
SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)		<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 25%;">+</td> <td style="width: 25%;">0</td> <td style="width: 25%;">-</td> <td style="width: 25%;">U</td> </tr> <tr> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>	+	0	-	U		X						X				X		X						X		X						X								X	X							
+	0	-	U																																															
	X																																																	
			X																																															
			X																																															
	X																																																	
			X																																															
	X																																																	
			X																																															
			X																																															
X																																																		
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)																																																		
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)																																																		
9. WATER RESOURCES (Quality, quantity, source, etc.)																																																		
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, etc.)																																																		
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)																																																		
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, flora, fauna, etc.)																																																		
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)																																																		
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)																																																		
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)																																																		
16. OTHER (Potential impacts not addressed above.)																																																		
SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION																																																		
17. <table border="0" style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;"><input type="checkbox"/></td> <td>PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.</td> </tr> </table>			<input type="checkbox"/>	PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR	<input checked="" type="checkbox"/>	PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.																																												
<input type="checkbox"/>	PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR																																																	
<input checked="" type="checkbox"/>	PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.																																																	
18. REMARKS MacDill AFB is located in a maintenance area for the following criteria pollutant: Ozone. Direct emissions from construction and indirect emissions from visiting traffic and/or follow-on operations, when totaled are less than the de minimus amounts in 40 CFR 93.153, therefore, a conformity analysis is not required.																																																		
19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade) MICHAEL S. COMAN, Col, USAF Vice Commander, 6 AMW	19a. SIGNATURE 	19b. DATE 1/23/02																																																

1. COMPONENT AIR FORCE	FY 2003 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION MACDILL AIR FORCE BASE, FLORIDA		
4. PROJECT TITLE REPLACE FAMILY HOUSING - PHASE 5		7. PROJECT NUMBER NVZR013705R1

SITE PLAN
- not to scale -



1. COMPONENT AIR FORCE		FY 2003 MILITARY CONSTRUCTION PROJECT DATA (computer generated)				2. DATE 9/28/01	
3. INSTALLATION AND LOCATION MACDILL AIR FORCE BASE, FLORIDA				4. PROJECT TITLE REPLACE FAMILY HOUSING PHASE 5			
5. PROGRAM ELEMENT 88741		6. CATEGORY CODE 711-142		7. PROJECT NUMBER NVZR013705R1		8. PROJECT COST (\$000) 18,191	
9. COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
MILITARY FAMILY HOUSING				UN	96	102,123	9,804
SUPPORTING FACILITIES							6,618
UTILITIES				LS			(346)
PAVEMENTS				LS			(1,649)
LANDSCAPING				LS			(346)
SITE PREPARATION				LS			(2,078)
RECREATION				LS			(322)
SPECIAL CONSTRUCTION FEATURES				LS			(1,531)
DEMOLITION/ENVIRONMENTAL HAZARD REMEDIATION				LS			(346)
SUBTOTAL							16,422
CONTINGENCY (5%)							821
TOTAL CONTRACT COST							17,243
SUPERVISION, INSPECTION AND OVERHEAD (5.5%)							948
TOTAL REQUEST							18,191
AREA COST FACTOR .88							
10. Description of Proposed Construction: Replaces 96 housing units. Includes sitework, replacement/upgrade of utilities, roads, landscaping, and recreation areas. Amenities in new units include: kitchen appliances, carports, HVAC, carpet, patios and privacy fencing. Special construction features denote design and construction of units to withstand hurricanes and storm surges. Demolishes 92 existing units and remediates associated asbestos.							
Unit Type		Net Area	Project Factor	\$/NSM	No. Units	Total Cost	
CGO	4BR	160	0.86	852	8	937,882	
CGO	3BR	139	0.86	852	22	2,240,658	
SNCO	4BR	160	0.86	852	10	1,172,352	
SNCO	3BR	139	0.86	852	12	1,222,177	
NCO	4BR	146	0.86	852	18	1,925,588	
NCO	3BR	121	0.86	852	26	2,305,137	
					96	9,803,794	
11. REQUIREMENT: 804 UN ADEQUATE: 172 UN SUBSTANDARD: 632 UN							
PROJECT: Replace Military Family Housing, Phase 5. (Current Mission)							
REQUIREMENT: Replaces 96 housing units. Includes sitework, replacement/upgrade of utilities, roads, landscaping, and recreation areas. Amenities in new units include: kitchen appliances, carports, HVAC, carpet, patios, and privacy fencing. Special construction features denote design and construction of units to withstand hurricanes & storm surges. Demolishes 92 existing units and remediate associated asbestos.							
CURRENT SITUATION: This project replaces houses that are over 45 years old and are showing the effects of age and continuous heavy use. They have had no major upgrades since construction and do not meet the needs of today's families. Roofs, walls, foundations, and exterior pavements require major repair or replacement. Plumbing							

1. COMPONENT AIR FORCE	FY 2003 MILITARY CONSTRUCTION PROJECT DATA (computer generated)		2. DATE
3. INSTALLATION AND LOCATION MACDILL AIR FORCE BASE, FLORIDA		4. PROJECT TITLE REPLACE FAMILY HOUSING PHASE 5	
5. PROGRAM ELEMENT 88741	6. CATEGORY CODE 711-142	7. PROJECT NUMBER NVZR013705R1	8. PROJECT COST (\$000) 18,191

and electrical systems are antiquated and do not meet current standards for efficiency or safety. Lack of adequate parking spaces for occupants has created excessive congestion and safety hazards. Housing interiors are inadequate by any modern criteria. Bedrooms are small and lack sufficient closet space. Bathrooms are small; fixtures are outdated and in poor condition. Kitchens have inadequate storage and counter space; cabinets are old and unsightly; counter tops and sinks are badly worn. Utility systems require excessive maintenance and repair. Housing density is excessive, creating a noisy, chaotic living environment.

IMPACT IF NOT PROVIDED: Air Force members and their families will continue to live in small, outdated and unsatisfactory housing. The units will deteriorate further, resulting in escalating and unacceptable maintenance and repair costs as well as inconveniencing the occupants. Without this and subsequent phases of this initiative, repairs will continue in a costly, piecemeal fashion with little or no improvement in occupant quality of life. These deficiencies will continue to adversely affect the morale of all personnel and their family members assigned to the base.

ADDITIONAL: This project meets the criteria/scope specified in Part II of Military Handbook 1190, "Facility Planning and Design Guide". Since this is replacement housing, student population will not increase nor will the ability of the local school district to support base dependents be impacted. The cost to improve these units is 82% of the replacement cost. The construction agent for this project is Chugach Management Services. Base Civil Engineer: Lt Col Thomas A. Kaldenberg, (813) 828-3577.

Project	No. Units Built	No. Units Demolished
Phase 1	56	124
Phase 2	36	44
Phase 3	36	0
Phase 4	44	8
Phase 5 (this Project)	96	92

Tri-Service Family Housing Cost Model

SERVICE: AIR FORCE

LOCATION: MACDILL AIR FORCE BASE, FLORIDA

BASELINE:

(96)*(139)*(852) = \$11,399,760
 (No. Units)*(ANSM)*(\$/NSM) = 1.5 M Line Cost

PROJECT FACTORS:

(0.88)*(1.02)*(0.96) = 0.86
 (ACF)*(Project Size)*(Unit Size) = Project Factor

HOUSING COST:

(11,399,760)*(0.86) = \$9,803,794
 (1.5 Meter Line Cost)*(Project Factor) = Housing Cost

 (9,803,794)/(96) = \$102,123
 (Housing Cost)/(No. Units) = Average Unit Cost

SUPPORTING COST:

UTILITIES	\$346,000
PAVEMENTS	\$1,649,000
LANDSCAPING	\$346,000
SITE PREPARATION	\$2,078,000
RECREATION	\$322,000
SPECIAL CONSTRUCTION FEATURES	\$1,531,000
DEMOLITION/ENVIRONMENTAL HAZARD REMEDIATION	\$346,000
Support Cost	\$6,618,000

SUMMARY

9,803,794)+(6,618,000) = \$16,421,794
 Housing Cost)+(Support Cost) = Subtotal

 16,421,794)*(1.05)*(1.055) = \$18,191,242 Say: \$18,191,000
 Subtotal)*(Contingency)*(SIOH) = Project Cost (Round)

 (18,191,000)/(96)*(139)*(0.88) = \$1,545
 (Project Cost)/(No. Units)*(ANSM)*(ACF) = Total Project Cost/SM

PROJECT SIZE FACTOR - (# OF UNITS)

1-9 = 1.15	100-199 = 1.00
10-19 = 1.10	200-299 = 0.98
20-49 = 1.05	300-499 = 0.96
50-99 = 1.02	500+ = 0.95

UNIT SIZE - (AVG NET SM)

55-68 = 1.05	97-105 = 0.99
69-77 = 1.03	106-115 = 0.98
78-87 = 1.01	116-124 = 0.97
88-96 = 1.00	125+ = 0.96

Site Summary for Site48
Environmental Restoration Program, MacDill AFB, FL

Site ID: Site48

Site Name: 6th GREEN & 7th TEE-
Golf Course

Air Force ID: LF048

Regulatory Program:

Air Force Program: IRP

Current Status:

Relative Risk: Not Evaluated

ARSENIC CONTAMINATION AREA (GOLF COURSE)

Site48

Primary Contaminants of Potential Concern

Groundwater:	Arsenic
Soils:	None Identified
Surface water:	None Identified
Sediments:	None Identified
Buildings/structures:	None Identified

Physical Setting

Elevated concentrations of nitrate-nitrogen were detected in shallow grnd. GW @ a.13 sq. mile area: course. The golf course has since been "fertigated" since late 1960's by spraying w/treated sewage efflu supplemented w/liquid fertilize

Narrative

Site 48 is situated on the eastern portion of the north golf course located in the southeastern portion MacDill AFB east of Lake McClelland. Elevations within Site 48 range from three to seven feet above mean sea level (amsl). The topography of this area is generally flat, except where the land has been altered to create the fairways for holes six and seven. Site 48 is bordered to the north by housing unit m 977 of Officer Housing Area, Lake McClelland and an unpaved maintenance road to the west, the seventh boxes and fairway to the south and southeast, and an open, flat grassy area to the east. All surface drain from this area flows into Lake McClelland.

Summary of Activities to Date

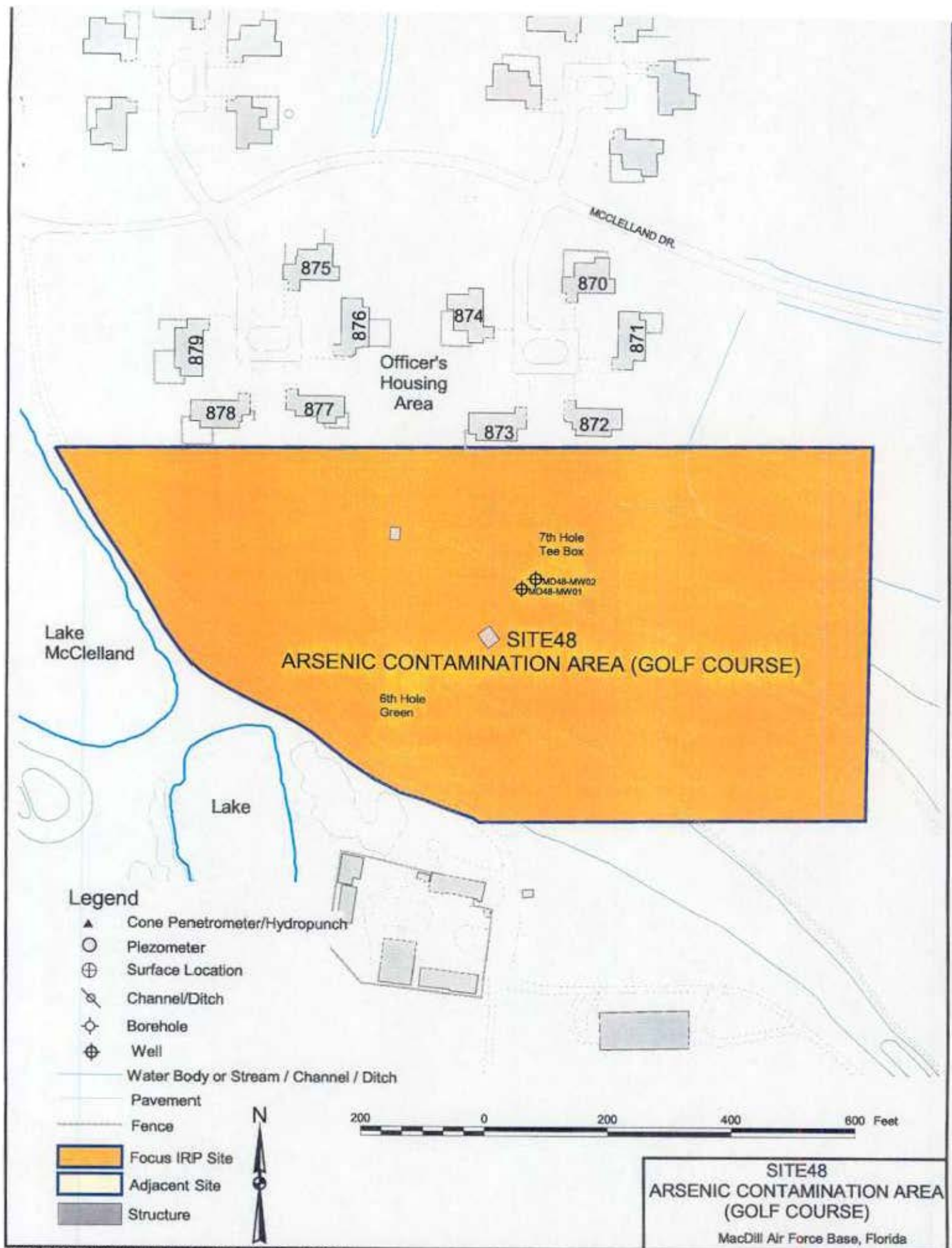
Started	Completed	Activity or Milestone
3/1/1995	3/1/1995	Sampling
5/1/1995	5/1/1995	Technical Memorandum
8/1/1997	8/1/1997	Submitted Limited Groundwater Investigation Report

Government Contact

MacDill AFB
Remedial Program Manager
Installation Restoration Program
MacDill AFB, FL 33621
POC: Anthony Gennaro
Phone: (813)828-0764
Fax: (813)828-0731
Email: anthony.gennaro@macdill.af.mil

Contractor on Site

Black and Veatch
1145 Sanctuary Parkway
Suite 475
Alpharetta, GA 30004
POC: Bob Marbury
Phone: (770)521-8111
Fax: (770)751-8322
Email: marburyre@bv.com



SITE48
ARSENIC CONTAMINATION AREA (GOLF COURSE)

AOC78
GOLF COURSE
MAINTENANCE

Legend

- ▲ Cone Penetrometer/Hydropunch
- Piezometer
- ⊕ Surface Location
- ↘ Channel/Ditch
- ◇ Borehole
- ⊗ Well
- Water Body or Stream / Channel / Ditch
- Pavement
- Fence

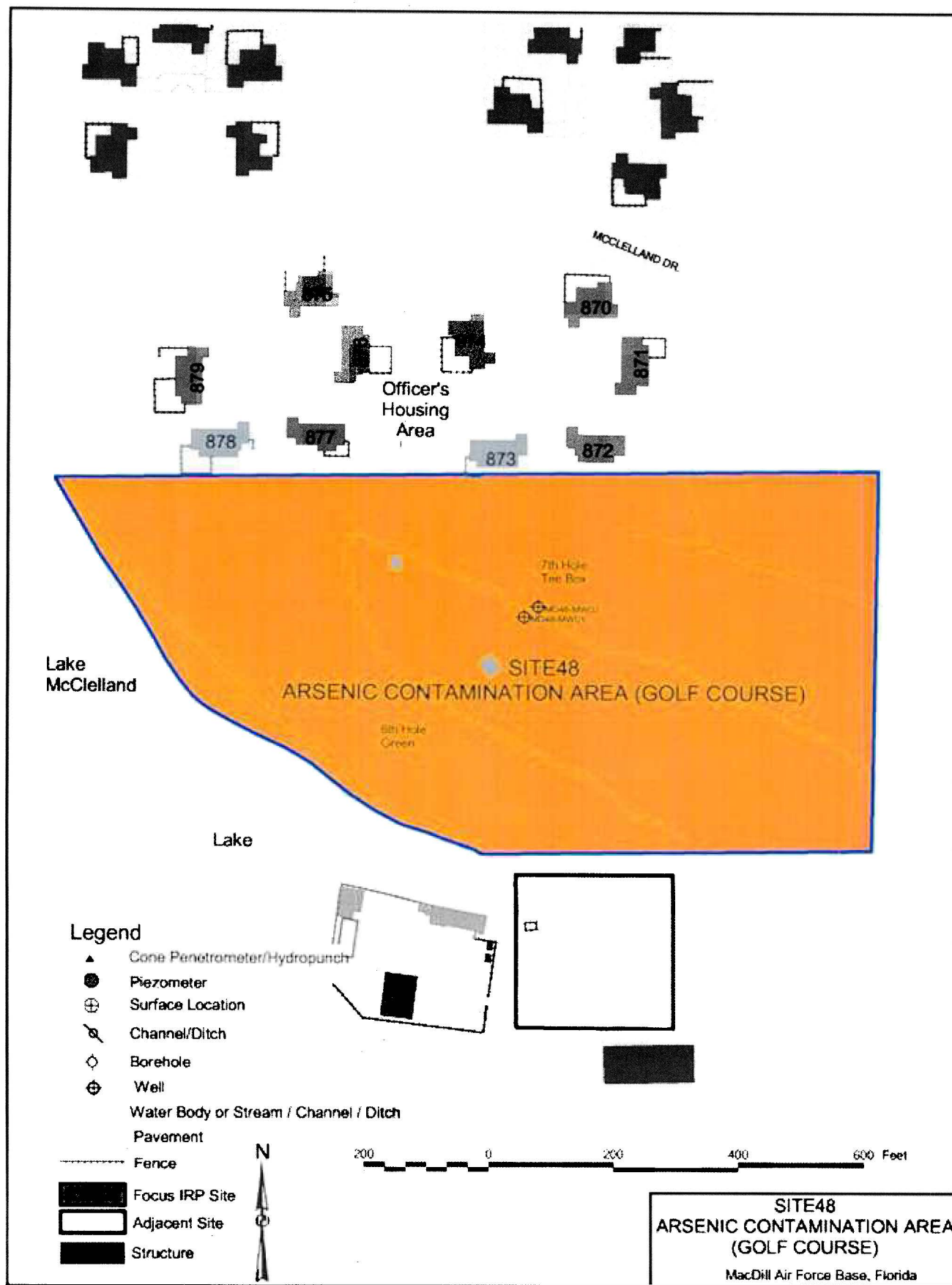
- Focus IRP Site
- Adjacent Site
- Structure



100 0 100 200 300 Feet

AOC78
GOLF COURSE MAINTENANCE

MacDill Air Force Base, Florida



APPENDIX C

AIR EMISSIONS CALCULATIONS FOR PROPOSED ACTION AND CUMMULATIVE AIR EMISSIONS CALCULATIONS

Page Intentionally Left Blank

TABLE - CONSTRUCTION SITE AIR EMISSIONS
Combustive Emissions of ROG, NOx, SO2, CO and PM10 Due to Construction

6-Jul-01

Input:

Total Building Area: 263,200 ft² (calculation: [96 + 92 units] x ~1,400 SF/unit = 263,200 SF)
 Total Paved Area: 26,320 ft²
 Total Disturbed Area: 15.0 acres
 Construction Duration: 2.0 years
 Annual Construction Activity: 260 days/yr

Results:[Average per Year Over the Construction Period]

	ROG	NOx	SO2	CO	PM10
Emissions, lbs/day	74.68	241.91	11.84	217.19	18.94
Emissions, tons/yr	9.71	31.45	1.54	28.23	2.46

Calculation of Unmitigated Emissions

Summary of Input Parameters

	ROG	NOx	SO2	CO	PM10
Total new acres disturbed:	15.00	15.00	15.00	15.00	15.00
Total new acres paved:	0.60	0.60	0.60	0.60	0.60
Total new building space, ft ² :	263,200	263,200	263,200	263,200	263,200
Total years:	2.00	2.00	2.00	2.00	2.00
Area graded, acres in 1 yr:	7.50	7.50	7.50	7.50	7.50
Area paved, acres in 1 yr:	0.30	0.30	0.30	0.30	0.30
Building space, ft ² in 1 yr:	131,600	131,600	131,600	131,600	131,600

Annual Emissions by Source (lbs/day)

	ROG	NOx	SO2	CO	PM10
Grading Equipment	1.9	12.0	0.8	2.6	2.1
Asphalt Paving	0.1	0.0	0.0	0.0	0.0
Stationary Equipment	22.1	18.0	1.2	3.9	1.1
Mobile Equipment	21.1	211.9	9.8	210.7	15.8
Architectural Coatings (Non-Res)	29.6	0.0	0.0	0.0	0.0
Total Emissions (lbs/day):	74.7	241.9	11.8	217.2	18.9

Emission Factors

Reference: Air Quality Thresholds of Significance, SMAQMD, 1994.

Source	SMAQMD Emission Factor				
	ROG	NOx	SO2 *	CO *	PM10
Grading Equipment	2.50E-01 lbs/acre/day	1.60E+00 lbs/acre/day	0.11 lbs/acre/day	0.35 lbs/acre/day	2.80E-01 lbs/acre/day
Asphalt Paving	2.62E-01 lbs/acre/day	NA	NA	NA	NA
Stationary Equipment	1.68E-04 lbs/day/ft ²	1.37E-04 lbs/day/ft ²	9.11E-06 lbs/day/ft ²	2.97E-05 lbs/day/ft ²	8.00E-06 lbs/day/ft ²
Mobile Equipment	1.60E-04 lbs/day/ft ²	1.61E-03 lbs/day/ft ²	7.48E-05 lbs/day/ft ²	0.0016 lbs/day/ft ²	1.20E-04 lbs/day/ft ²
Architectural Coatings (Non-Res)	8.15E-02 lbs/day/ft	NA	NA	NA	NA

- * Factors for grading equipment and stationary equipment are calculated from AP-42 for diesel engines using ratios with the NOx factors.
 Factors for mobile equipment are calculated from ratios with Mobile5a 2001 NOx emission factors for heavy duty trucks for each site.

TABLE - CONSTRUCTION (GRADING) EMISSIONS

Estimate of time required to grade a specified area.

Updated 17 June 1997.

Input Parameters

Construction area: 8 acres/yr
Qty Equipment: 1

Assumptions.

Terrain is mostly flat.

Terrain is populated with medium brush; trees are negligible.

An average of 6" soil is removed during stripping.

An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.

200 hp bulldozers are used for site clearing.

300 hp bulldozers are used for stripping, excavation, and backfill.

Vibratory drum rollers are used for compacting.

Stripping, Excavation, Backfill and Compaction require an average of two passes each.

Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 6th Ed., R. S. Means, 1992.

Means Line No.	Operation	Description	Output	Units	Acre/(equip)(day)	(Equip)(day)/acre	Acres/yr	(Equip)(days)/yr
021 108 0550	Site Clearing	Dozer & rake, medium brush	0.6	acre/day	0.6	1.67	7.50	12.50
021 144 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	7.50	3.67
022 242 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	3.75	3.78
022 208 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	3.75	1.55
022 226 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	1,950	cu. yd/day				
TOTAL								

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 24.60

Qty Equipment: 1

Grading days/yr: 24.60

Round to 25 grading days/yr

TABLE - CONSTRUCTION (GRADING) EMISSIONS

Estimate of time required to grade a specified area.

Updated 17 June 1997.

Input Parameters

Construction area: 8 acres/yr
Qty Equipment: 1

Assumptions.

Terrain is mostly flat.

Terrain is populated with medium brush; trees are negligible.

An average of 6" soil is removed during stripping.

An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.

200 hp bulldozers are used for site clearing.

300 hp bulldozers are used for stripping, excavation, and backfill.

Vibratory drum rollers are used for compacting.

Stripping, Excavation, Backfill and Compaction require an average of two passes each.

Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 6th Ed., R. S. Means, 1992.

Means Line No.	Operation	Description	Output	Units	Acre/(equip)(day)	(Equip)(day)/acre	Acres/yr	(Equip)(days)/yr
021 108 0550	Site Clearing	Dozer & rake, medium brush	0.6	acre/day	0.6	1.67	7.50	12.50
021 144 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	7.50	3.67
022 242 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	3.75	3.78
022 208 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	3.75	1.55
022 226 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	1,950	cu. yd/day	2.42	0.41	7.50	3.10
TOTAL								24.60

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 24.60

Qty Equipment: 1

Grading days/yr: 24.60

Round to	25 grading days/yr
----------	--------------------

TABLE - CONSTRUCTION EMISSION FACTOR

Calculation of PM10 Emissions Due to Site Preparation (Uncontrolled).
Revised 16 June 1997.

User Input Parameters / Assumptions

Acres graded per year:	7.5	acres/yr	
Grading days/yr:	25	days/yr	(From "grading")
Exposed days/yr:	120	days/yr	graded area is exposed
Grading Hours/day:	8	hr/day	
Soil piles area fraction:	0.01	(Fraction of site area covered by soil piles)	
Soil percent silt, s:	15	%	
Soil percent moisture, M:	8	%	
Annual rainfall days, H:	107	days/yr	that rainfall exceeds 0.01 inch (Tampa, FL)
Wind speed > 12 mph %, I:	12	%	
Fraction of TSP, J:	0.45	(SCAQMD recommendation)	
Mean vehicle speed, S:	5	mi/hr	(On-site)
Dozer path width:	5	ft	
Qty construction vehicles:	1	vehicles	
On-site VMT/vehicle/day:	5	mi/veh/day	(Excluding bulldozer VMT during grading)

Emissions Due to Soil Disturbance Activities

Operation Parameters (Calculated from User Inputs)

Grading duration per acre	26.7	hr/acre	
Bulldozer mileage per acre	1.7	VMT/acre	(Miles traveled by bulldozer during grading)
Construction VMT per day	5	VMT/day	
Construction VMT per acre	15	VMT/acre	(Travel on unpaved surfaces within site)

Equations Used (Corrected for PM10)

Operation	Empirical Equation	Units	AP-42 Section (4th Edition)
Bulldozing	$0.75(s^{1.5})/(M^{1.4})$	lbs/hr	8.24, Overburden
Grading	$(0.60)(0.051)S^{2.0}$	lbs/VMT	8.24, Overburden
Vehicle Traffic	$(3.72/(M^{4.3}))^{*6}$	lbs/VMT	8.24, Overburden

Source: Compilation of Air Pollutant Emission Factors, Vol. I, USEPA AP-42.
Section 8.24, Western Surface Coal Mining (4th Edition)

Calculation of PM10 Emission Factors for Each Operation

Operation	Emission Factor (mass/ unit)	Operation Parameter	Emission Factor (lbs/ acre)
Bulldozing	2.37 lbs/hr	26.7 hr/acre	63.3 lbs/acre
Grading	0.77 lbs/VMT	1.7 VMT/acre	1.3 lbs/acre
Vehicle Traffic	0.00 lbs/VMT	15 VMT/acre	0 lbs/acre

Emissions Due to Wind Erosion of Soil Piles and Exposed Graded Surface

Reference: CEQA Air Quality Handbook, SCAQMD, April 1993.

Soil Piles EF = $1.7(s/1.5)[(365 - H)/235](I/15)(J) = (s)(365 - H)(I)(J)/(3110.2941)$, p. A9-99.

Soil Piles EF = 6.7 lbs/day/acres covered by soil piles

Consider soil piles area fraction so that EF applies to graded area

Soil piles area fraction: 0.01 (Fraction of site area covered by soil piles)

Soil Piles EF = 0.067 lbs/day/acres graded

Graded Surface EF = 26.4 lbs/day/acre (recommended in CEQA Manual, p. A9-93).

Calculation of Annual PM10 Emissions

Source	Emission Factor	Graded Acres/yr	Exposed days/yr	Emissions lbs/yr	Emissions tons/yr
Bulldozing	63.3 lbs/acre	7.50	NA	475	0
Grading	1.3 lbs/acre	7.50	NA	10	0
Vehicle Traffic	0.0 lbs/acre	7.50	NA	0	0
Erosion of Soil Piles	0.1 lbs/acre/day	7.50	120	60	0
Erosion of Graded Surface	26.4 lbs/acre/day	7.50	120	23,760	12
TOTAL				24,305	12

TABLE 4A
Total Air Emissions for Projects at MacDill

Pollutants	MFH-Phase 5	Fitness Center	Mission Planning Center	Control Tower/ Crash Rescue	TLFs	CE Storage Facility/Demo	SVS Storage Facility/Demo	CENT. Wall & Parking Lots	War Res. Facility	Hydrant Fueling System	Military Service Station	Runway Pavement Repairs	Project Totals	Hills Cty Emissions 1997	Net Change	De minimis	Above/Below De minimis
CO	28.23	12.64	7.2	5.39	16.88	7.37	5.40	0.21	0.81	30.97	0.11	2.60	117.81	19,272	0.61%	100	Above
VOC	9.71	5.31	3.59	2.81	6.6	3.50	2.81	0.3	0.61	10.38	0.21	1.88	47.71	27,703	0.17%	100	Below
NO _x	31.45	14.16	8.74	6.09	19	8.22	6.11	0.96	0.94	33.84	0.24	12.02	141.77	82,563	0.17%	100	Above
SO _x	1.54	0.7	0.44	0.3	0.93	0.40	0.3	0.06	0.05	1.64	0.01	0.80	7.17	NA		100	Below
PM ₁₀	2.46	1.12	0.78	0.49	1.51	0.64	0.49	0.17	0.08	2.57	0.04	2.10	12.45	NA		100	Below
Pb													0	53		25	Below
Estimated Start/End Date	1/2003 to 12/2004	4/2001 to 6/2002	1/2002 to 6/2003	3/2003 to 9/2004	4/2001 to 7/2002	11/2001 to 11/2002	5/2002 to 5/2003	8/2002 to 4/2003	8/2001 to 6/2002	8/2001 to 1/2004	6/2002 to 6/2003	10/2001 to 3/2004					

**Note: All values in tons per year unless otherwise noted.

Net change = Project totals / Hills Cty emissions

Above/Below De minimis = Project totals above or below de minimis

NA = not available.

*YEAR 2002, 2003 & 2004 EMISSIONS WERE CALCULATED BY TAKING AN APPROPRIATE PERCENTAGE OF THE TOTAL EMISSIONS DETERMINED ABOVE.
 SEE TABLES 4B and 4D BELOW*

TABLE 4B
Emissions for Year 2002

		MFH-Phase 5	Fitness Center	Mission Planning Center	Control Tower/ Crash Rescue	TLFs	CENT. Wall & Parking Lots	CE Storage Facility	SVS Storage Facility	War Res. Facility	Hydrant Fueling System	Military Service Station	Runway Pavement Repairs	2002 Project Totals	De minimis	Above/Below De minimis
Estimated % of Time During 2002 That Project Would Be Active		0%	50%	100%	0%	58%	25%	91%	58%	50%	100%	50%	100%			
	Pollutants															
	CO	0.00	6.32	7.20	0.00	9.79	0.05	6.71	3.13	0.41	30.97	0.06	2.60	67.23	100	Below
	VOC	0.00	2.66	3.59	0.00	3.83	0.08	3.19	1.63	0.31	10.38	0.11	1.88	27.63	100	Below
	NO _x	0.00	7.08	8.74	0.00	11.02	0.24	7.48	3.54	0.47	33.84	0.12	12.02	84.55	100	Below
	SO _x	0.00	0.35	0.44	0.00	0.54	0.02	0.36	0.17	0.03	1.64	0.01	0.80	4.35	100	Below
	PM ₁₀	0.00	0.56	0.78	0.00	0.88	0.04	0.58	0.28	0.04	2.57	0.02	2.10	7.85	100	Below
	Pb													0	25	Below

TABLE 4C
Emissions for Year 2003

[illegible]

TABLE 4D
Emissions for Year 2004

[illegible]

APPENDIX D
PUBLIC NOTICE
AND AGENCY CORRESPONDENCE

Page Intentionally Left Blank

PHASE V
HOUSING

THE TAMPA TRIBUNE
Published Daily
Tampa, Hillsborough County, Florida

State of Florida }
County of Hillsborough } ss.

Before the undersigned authority personally appeared C. Pugh, who on oath says that she is Advertising Billing Supervisor of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of **PUBLIC NOTICE**

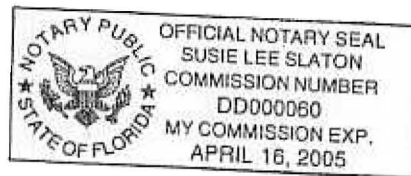
was published in said newspaper in the issues of **JULY 3, 2003**

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

Sworn to and subscribed by me, this 03 day
of JULY, A.D. 2003

Personally Known ☒ or Produced Identification
Type of Identification Produced _____

Susie Lee Slaton



PUBLIC NOTICE
UNITED STATES
AIR FORCE

MacDill Air Force Base is inviting public review and comment on the Draft Finding of No Significant Impact (FONSI)/Finding of No Practical Alternative (FONPA) and supporting Environmental Assessment (EA). The project is entitled Construct/Replace Military Family Housing - Phase V. The project will demolish 104 substandard housing units and construct 72 new housing units. The housing would serve junior and senior non-commissioned officers.

Notice of Availability

The document is part of the Air Force environmental impact analysis process to satisfy requirements under the National Environmental Policy Act (NEPA). The FONSI/FONPA and supporting EA draft is available for public review and comment beginning July 7th, 2003 at the Tampa/Hillsborough County Public Library, located at 900 N. Ashley Drive, Tampa, FL 33606. The documents may be found in the Humanities Section of the Main Library. The comment period will close on August 8, 2003. Address written comments to the 6 AMW Public Affairs, 8209 Hangar Loop Drive, Suite 14, MacDill AFB, FL 33621-5502. The telephone number is (813) 828-2215.

July 3, 2003

2242

jes Fight lpractice



LAW & ORDER

HILLSBOROUGH

Tampa Officer Shoots Self Accidentally

TAMPA — An off-duty Tampa police officer accidentally shot herself in the abdomen Monday afternoon while installing a trigger guard on her service weapon.

Officer Sonja Wise was in stable condition as of late Wednesday after surgery at Tampa General Hospital. Her Glock 9 mm accidentally discharged one round about 12:45 p.m., when she was packing to leave on vacation, said Capt. Bob Guidara of Tampa Police Department.

Wise, a patrol officer in District 1, called 911 and requested an ambulance. Tampa Fire Rescue responded minutes later and stabilized her.

Wise is a four-year veteran of the department.

Al-Arian Can't Testify About Prison Conditions

TAMPA — A federal judge has refused to allow Sami Al-Arian to testify about his prison conditions.

U.S. Magistrate Thomas B. McCoun III, denied a motion from Al-Arian's attorneys asking for a hearing at which their client could describe what they maintain are unreasonable conditions in solitary confinement at Coleman Federal Correctional Complex in Sumter County.

Al-Arian and co-defendant Sameeh Hammoudeh have been imprisoned without bail since they were indicted in February on charges they supported the Palestinian Islamic Jihad. Their trial is slated to start Jan. 10, 2005.

McCoun has found that although the conditions in a special high-security unit at

Coleman are unusual, they do not violate the Constitution.

ELSEWHERE

Woman, 80, Drowns In Canal Behind Home

HIALEAH — An 80-year-old woman drowned when she slipped and fell into a canal, apparently while chasing her dog, police said.

Norma Martinez-Malo was found by her husband Tuesday morning in the canal behind their home, Hialeah police Detective Lionel Gracia said.

The husband, Orlando Martinez-Malo, usually waited for his wife in the car in the mornings, relatives said. But when she took longer than usual, he went inside the house to look for her.

Relatives quickly arrived on the scene to care for the bereaved husband. The couple, who emigrated from Cuba in 1960, had no children. They were married 30 years.

Man Released From Jail Accused In Slaying

FORT PIERCE — A man recently released from prison was arrested on charges that he raped and killed a woman and left her body in the woods.

Eddie Bigham, 45, was arrested Tuesday after police said his DNA matched that found at the scene of the crime.

Police said the murder of Lourdes Lu Lu Cavoza, 40, occurred about a month after Bigham was released from the Jackson Correctional Institution on April 25.

Cavoza was last seen by her family May 23. Her half-nude body was found by a passer-by the next morning, a police report said.

A staff and wire report

LEGAL ADVERTISEMENT

PUBLIC NOTICE UNITED STATES AIR FORCE

MacDill Air Force Base is inviting public review and comment on the Draft Finding of No Significant Impact (FONSI)/Finding of No Practical Alternative (FONPA) and supporting Environmental Assessment (EA). The project is entitled Construct/ Replace Military Family Housing - Phase V. The project will demolish 104 substandard housing units and construct 72 new housing units. The housing would serve junior and senior non-commissioned officers.

Notice of Availability

The document is part of the Air Force environmental impact analysis process to satisfy requirements under the National Environmental Act (NEPA). The FONSI/FONPA and supporting EA draft is available for public review and comment beginning July 7th, 2003 at the Tampa/Hillsborough County Public Library, located at 900 N. Ashley Drive, Tampa, FL 33606. The documents may be found in the Humanities Section of the Main Library. The comment period will close on August 8, 2003. Address written comments to the 6 AMW Public Affairs, 8209 Hangar Loop Drive, Suite 14, MacDill AFB, FL 33621-5502. The telephone number is (813) 828-2215.

2242

July 3, 2003

Legal Advertisement

Public Notice United States Air Force

The Air Force is inviting public review and comment on the Finding of No Significant Impact (FONSI)/Finding of No Practical Alternative (FONPA) and supporting Environmental Assessment (EA) draft for a proposed construction project at MacDill Air Force Base. The project, entitled Construct Antiterrorism/Force Protection Gates, would improve force protection measures at all four entry points for MacDill AFB. Improvements include construction of security overwatch positions, vehicle inspection areas and turnarounds, two new visitor centers, and numerous entry control structures.

Notice of Availability

The document is part of the Air Force environmental impact analysis process to

Reporter Joe Follick can be reached at (850) 222-8382.



DEPARTMENT OF THE AIR FORCE
6TH AIR MOBILITY WING (AMC)
MACDILL AIR FORCE BASE, FLORIDA

2.6
G
CEW

MEMORANDUM FOR U.S. FISH AND WILDLIFE SERVICE (USFWS)


FROM: 6 CES/CC

7621 Hillsborough Loop Drive
MacDill AFB Florida 33621-5207

SUBJECT: Construction of General Officer Quarters (GOQs) Approximately 550 feet from
Abandoned Eagles Nest at MacDill Air Force Base (AFB)

1. The U.S. Air Force (AF) intends to construct four new GOQs to provide modern, secure housing for select Commanders in Chief (CINCs) stationed at MacDill AFB. The site selected for construction falls within the 750-foot exclusion zone around an abandoned eagle nest at MacDill AFB (Figure 1). This is the only abandoned eagle nest on the base and is hereafter referred to as Nest 1. The pair of eagles that winter at MacDill AFB last used this nest during the 1998 nesting season. Since that time the AF has maintained a 750-foot exclusion zone around the nest to protect the site. USFWS guidelines recommend maintaining an exclusion zone for five years.
2. Since abandoning Nest 1 in 1998, the eagles have constructed two other nests on the base. The first nest (Nest 2) was constructed approximately 1,000 feet southwest of the abandoned nest and closer to Marina Bay Drive (Figure 2). The eagles utilized Nest 2 during the 1999 and 2000 nesting seasons. Unfortunately, this nest tree was blown over during Tropical Storm Gabriel in September 2001 and the nest was destroyed. The eagles did not nest during the 2001 nesting season but recently established a new nest (Nest 3) in a long-leaf pine in the Munitions Storage Area approximately one mile due west of the previous nest sites (Figure 2).
3. MacDill AFB would like to begin construction of the four GOQs as early as January 2003. The closest of the four GOQs would be constructed approximately 550 feet from the abandoned eagles nest. The eagles have not returned to the abandoned nest for more than three years and there is no reason to suspect that they might return. The AF believes that construction of the GOQs within 550 feet of the abandoned eagle nest would not likely adversely affect the bald eagles on MacDill AFB. To insure protection of the bald eagles, it is proposed that a representative from the MacDill AFB Natural Resources Staff monitor the eagles during construction of the GOQs. If the eagles return to their abandoned nest at any time during construction of the GOQs, MacDill AFB will immediately stop construction of the GOQs and contact the USFWS to initiate formal consultation. If the USFWS agrees with this approach for implementation of the proposed project, please indicate your concurrence by signing below.

5. If you have any questions or require additional information on the proposed project, please contact Mr. Jason Kirkpatrick at (813) 828-0459.


ANTHONY A. FOTI, Lt Col, USAF
Commander, 6 CES

Attachment:

Figure 1 – Existing 750-foot Exclusion Zone Around Abandoned Nest Tree

Figure 2 – Locations of Abandoned Eagles Nest Tree (Nest 1), 1999-2000 Nesting Season Tree (Nest 2), and 2002 Nesting Tree (Nest 3).

The U.S. Fish and Wildlife Service agrees that construction of the GOQs as proposed would not likely adversely affect the bald eagle provided that MacDill AFB immediately stops construction and initiates formal consultation with the USFWS if the eagles return to the abandoned nest site during the construction period.


U.S. Fish and Wildlife Service Representative

10/4/02
Date

FW 5 Log No 03-0026



ARCHITECTURE, ENGINEERING, SCIENCE,
INTERIORS, GRAPHICS, CONSULTING
2000 First Oak Blvd., Suite 3700, Houston, Texas, 77057
Voice: 713 407-1300
Fax: 713 407-1808
Internet: <http://www.eia.com>

MacDill AFB
REPLACE FAMILY HOUSING PHASE 5

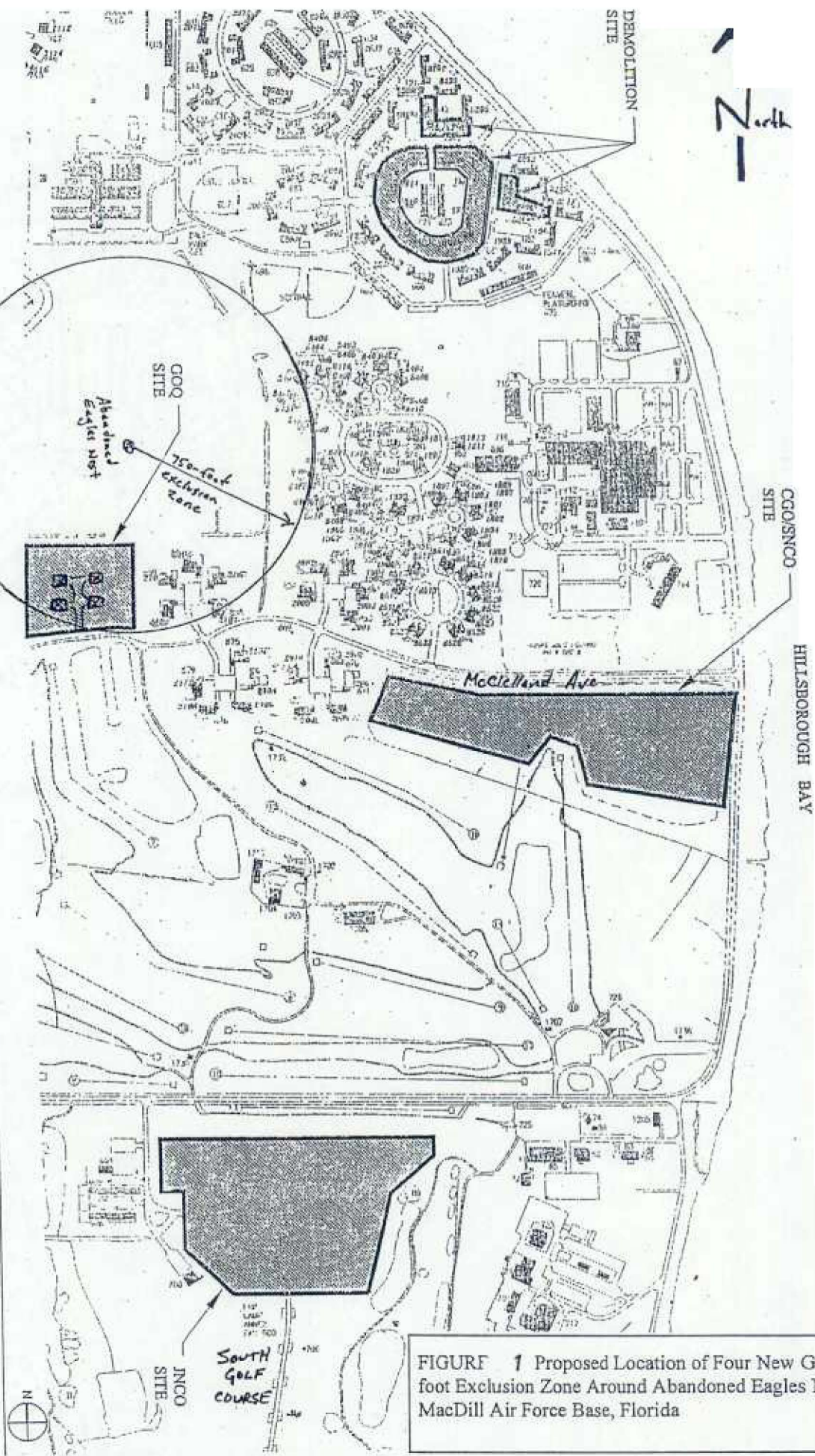
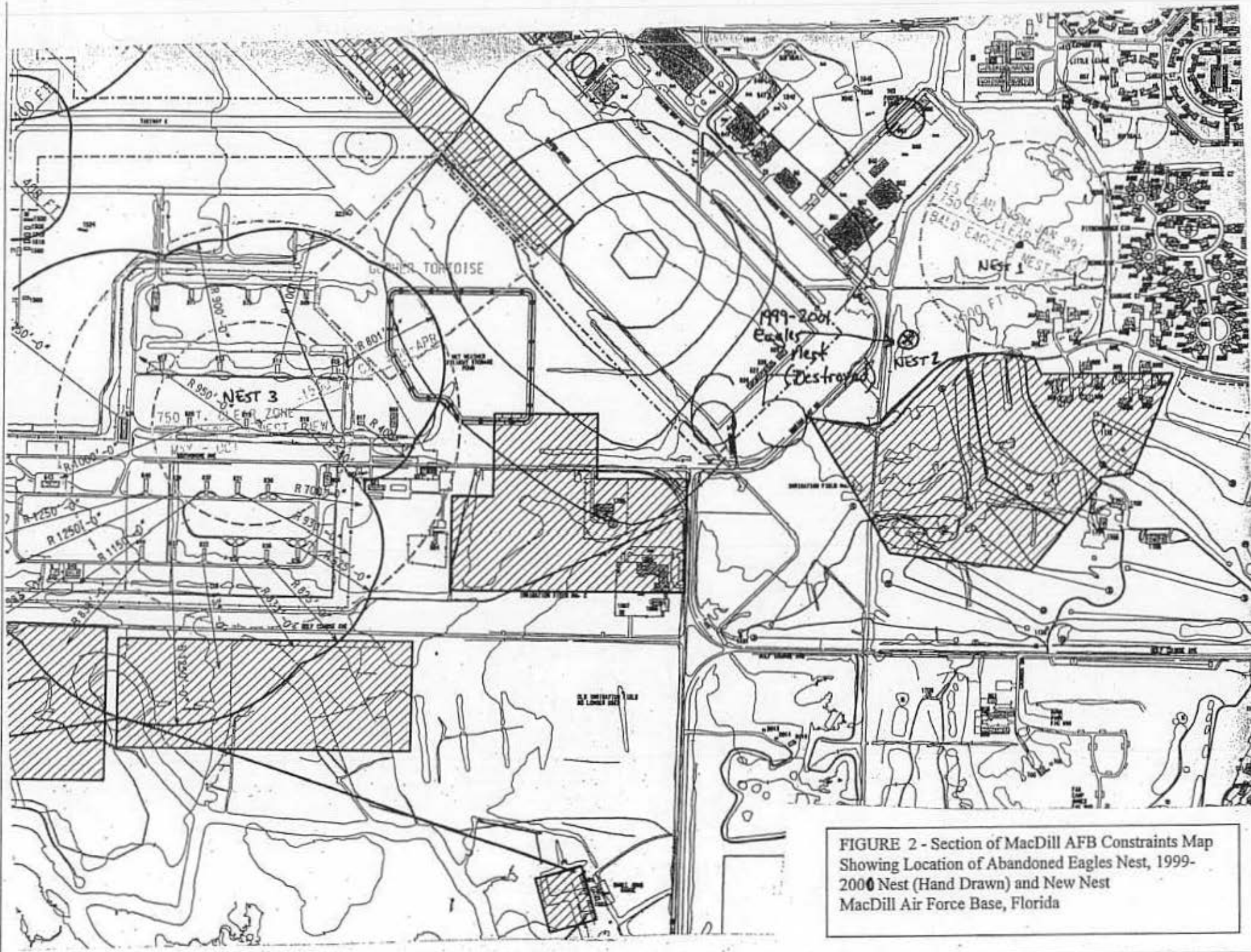


FIGURE 1 Proposed Location of Four New GOQs within 750-foot Exclusion Zone Around Abandoned Eagles Nest
MacDill Air Force Base, Florida





Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

September 18, 2002

Mr. Jason Kirkpatrick
6 CES/CEVN
7621 Hillsborough Loop Drive
MacDill AFB, Florida 33621-5207

Re: U.S. Department of the Air Force – Environmental Assessment for the Proposed
Construction/Replacement of Military Family Housing – Phase V – MacDill Air Force
Base, Hillsborough County, Florida
SAI: FL200208022514C

Dear Mr. Kirkpatrick:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16, U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4231, 4331-4335, 4341-4347, as amended, has coordinated a review of the above-referenced Environmental Assessment (EA).

The Florida Department of State (DOS) notes that the buildings associated with the *Capehart and Wherry Era Family Housing*, mentioned in sections 3.8 and 4.8 of the EA, may be historically significant. The DOS requests that the applicant provide a professional historical and architectural identification and evaluation report to determine whether significant properties will be affected and what measures must be taken to avoid, minimize, or mitigate impacts to these properties. Please refer to the enclosed DOS comments.

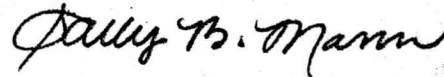
The Southwest Florida Water Management District (SWFWMD) indicates that an Environmental Resource Permit may be required for the proposed activity. Coordination with SWFWMD regulatory staff in Tampa is recommended to address permitting issues. Please refer to the enclosed comments

Based on the information contained in the Environmental Assessment and the comments provided by our reviewing agencies, as summarized above and enclosed, the state has determined that the above-referenced project is consistent with the Florida Coastal Management Program. However, the applicant is required to address the concerns identified by DOS and SWFWMD staff. The state's continued concurrence with the project will be based, in part, on the adequate resolution of issues identified during this and subsequent (permitting) reviews.

Mr. Jason Kirkpatrick
September 18, 2002
Page 2

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Ms. Lauren P. Milligan at (850) 922-5438.

Sincerely,

A handwritten signature in cursive script that reads "Sally B. Mann". The ink is dark and the signature is fluid.

Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/lm

Enclosures

cc: Janet Snyder Matthews, DOS
Trisha Neasman, SWFWMD

DIVISIONS OF FLORIDA DEPARTMENT OF STATE
Office of the Secretary
Office of International Relations
Division of Elections
Division of Corporations
Division of Cultural Affairs
Division of Historical Resources
Division of Library and Information Services
Division of Licensing
Division of Administrative Services



MEMBER OF THE FLORIDA CABINET
State Board of Education
Trustees of the Internal Improvement Trust Fund
Administration Commission
Florida Land and Water Adjudicatory Commission
Siting Board
Division of Bond Finance
Department of Revenue
Department of Law Enforcement
Department of Highway Safety and Motor Vehicles
Department of Veterans' Affairs

FLORIDA DEPARTMENT OF STATE

Jim Smith

Secretary of State

DIVISION OF HISTORICAL RESOURCES

CMSgt. Steven T. Olson
Department of the Air Force
6 CES/CD
7621 Hillsborough Loop Drive
MacDill AFB, Florida 33621

August 6, 2002

RE: DHR Project File No. 2002-7099
Received by DHR July 19, 2002
Construction/Replace Military Family Housing – Phase 5
MacDill AFB, Hillsborough County, Florida

Dear CMSgt. Olson:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties*. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing, in the *National Register of Historic Places*), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

We have determined that we have not been provided sufficient information to evaluate the effect the project may have on historic properties. The buildings in question are associated with the *Capehart and Wherry Era Family Housing*, some may be historically significant. ~~However, we cannot evaluate their significance until there has been an evaluation of all Capehart and Wherry buildings at MacDill. Please provide this office with a professional historical and architectural identification and evaluation report.~~ The results of the study should determine if significant *Capehart and Wherry* properties will be affected by this project. In addition, if significant properties are located, the data described in the report and the consultant's conclusions will assist this office in determining measures that must be taken to avoid, minimize, or mitigate adverse impacts to significant properties. When this information is received, we can quickly complete the review process.

SEE ICR
Pg 37
DOES DO
THINKS

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

Sincerely,

Janet Snyder Matthews, Ph.D., Director, and
State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

☐ Director's Office
(850) 245-6300 • FAX: 245-6435

☐ Archaeological Research
(850) 245-6444 • FAX: 245-6436

☒ Historic Preservation
(850) 245-6333 • FAX: 245-6437

☐ Historical Museums
(850) 245-6400 • FAX: 245-6433

☐ Palm Beach Regional Office
(561) 279-1475 • FAX: 279-1476

☐ St. Augustine Regional Office
(904) 825-5045 • FAX: 825-5044

☐ Tampa Regional Office
(813) 272-3843 • FAX: 272-2340

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
9721 Executive Center Drive North
St. Petersburg, Florida 33702

August 29, 2002

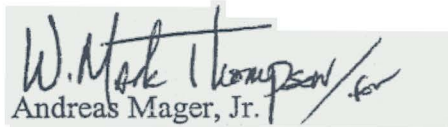
Steven T. Olson, CMSgt, USAF
Acting Deputy Base Civil Engineer
Department of the Air Force
6th Air Mobility Wing
MacDill Air Force Base, Florida 33621

Dear Sargent Olson:

The National Marine Fisheries Service has reviewed the Draft Environmental Assessment dated July 2002 for the proposed construction/replacement of military family housing at MacDill Air Force Base in Hillsborough County, Florida. We find that the description of fishery resources and habitats in the project area and the assessment of potential adverse impacts associated with the proposed activities are adequate. Furthermore, based on our assessment of the proposed project, we anticipate that any adverse effect that might occur on marine and anadromous fishery resources would be minimal and, therefore, we do not have any comments to provide at this time.

We appreciate the opportunity to provide you with our comments. Please direct related comments, questions, or correspondence to Mr. Mark Thompson in Panama City, Florida. He may be contacted at 850/234-5061.

Sincerely,


Andreas Mager, Jr.
Assistant Regional Administrator
Habitat Conservation Division

cc:
F/SER4

cc: email
F/SER3



DIVISIONS OF FLORIDA DEPARTMENT OF STATE
Office of the Secretary
Office of International Relations
Division of Elections
Division of Corporations
Division of Cultural Affairs
Division of Historical Resources
Division of Library and Information Services
Division of Licensing
Division of Administrative Services



FLORIDA DEPARTMENT OF STATE

Jim Smith

Secretary of State

DIVISION OF HISTORICAL RESOURCES

MEMBER OF THE FLORIDA CABINET
State Board of Education
Trustees of the Internal Improvement Trust Fund
Administration Commission
Florida Land and Water Adjudicatory Commission
Siting Board
Division of Bond Finance
Department of Revenue
Department of Law Enforcement
Department of Highway Safety and Motor Vehicles
Department of Veterans' Affairs

Ms. Cindy Cranick
Florida State Clearinghouse Coordinator
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, Mail Station 47
Tallahassee, Florida 32399-3000

August 28, 2002

RECEIVED

SEP 06 2002

OIP/OLGA

RE: DHR Project File No. 2002-7834
Received by DHR August 9, 2002
SAI# FL200208022514C
U.S. Department of the Air Force – Environmental Assessment for the Proposed
Construction/Replacement of Military Family Housing – Phase V
MacDill Air Force Base, Hillsborough County, Florida

Dear Ms. Cranick:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 89-665), as amended in 1992, and *36 C.F.R., Part 800: Protection of Historic Properties*, Chapter 267, *Florida Statutes*, Florida's Coastal Management Program, and implementing state regulations, for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places*, or otherwise of historical, architectural or archaeological value. The State Historic Preservation Officer is to advise and assist state and federal agencies when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or minimize adverse effects.

We specifically reviewed sections 3.8 and 4.8, both dealing with Cultural Resources. The buildings in question are associated with the *Capehart and Wherry Era Family Housing*, some may be historically significant. However, we cannot evaluate their significance until there has been an evaluation of all *Capehart and Wherry* buildings at MacDill. Please provide this office with a professional historical and architectural identification and evaluation report. The results of the study should determine if significant *Capehart and Wherry* properties will be affected by this project. In addition, if significant properties are located, the data described in the report and the consultant's conclusions will assist this office in determining measures that must be taken to avoid, minimize, or mitigate adverse impacts to significant properties. When this information is received, we can quickly complete the review process.

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

☐ Director's Office
(850) 245-6300 • FAX: 245-6435

☐ Archaeological Research
(850) 245-6444 • FAX: 245-6436

☒ Historic Preservation
(850) 245-6333 • FAX: 245-6437

☐ Historical Museums
(850) 245-6400 • FAX: 245-6433

☐ Palm Beach Regional Office
(561) 279-1475 • FAX: 279-1476

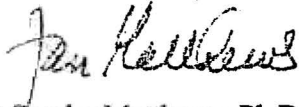
☐ St. Augustine Regional Office
(904) 825-5045 • FAX: 825-5044

☐ Tampa Regional Office
(813) 272-3843 • FAX: 272-2340

Ms. Cranick
August 28, 2002
Page 2

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

Sincerely,

A handwritten signature in dark ink, appearing to read "Janet Snyder Matthews". The signature is fluid and cursive, with the first name "Janet" being more prominent.

Janet Snyder Matthews, Ph.D., Director, and
State Historic Preservation Officer

XC: Jasmin Raffington, FCMP-DCA



An Equal
Opportunity
Employer

Southwest Florida Water Management District

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)
SUNCOM 578-2070

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)
SUNCOM 572-6200

2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
On the Internet at: WaterMatters.org

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)
SUNCOM 531-6900

Lecanto Service Office
3600 West Sovereign Path
Suite 226
Lecanto, Florida 34461-8070
(352) 527-8131
SUNCOM 667-3271

August 19, 2002

Ms. Cindy Cranick
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, Mail Station 47
Tallahassee, Florida 32399-3000

**Subject: Department of the Air Force-Environmental Assessment
for the Proposed Construction/Replacement of Military
Family Housing-Phase V-MacDill Air Force Base-
Hillsborough County, Florida
SAI#: FL200208022514C**

Dear Ms. Cranick:

The Southwest Florida Water Management District evaluated the referenced project and found it consistent with District activities. We believe, however, that a District Environmental Resource Permit may be required for the proposed construction activity. Consequently, we recommend that the applicant coordinate, as early as possible, with our Tampa Regulation staff to address permitting issues. Alberto Martinez, Tampa Regulation, can assist with this matter. Mr. Martinez can be reached at (813) 985-7481.

The District appreciates the opportunity to participate in the review of this application. If you should have any questions or if I can be of further assistance, please contact me in the District's Planning Department.

Sincerely,

Trisha Neasman

Trisha Neasman, AICP
Government Planning Coordinator

TN

cc: Alberto Martinez, SWFWMD

RECEIVED

AUG 22 2002

OIP/OLGA

Rand Baldwin, SWFWMD

Ronnie E. Duncan
Chair, Pinellas
Thomas G. Dabney, II
Vice Chair, Sarasota
Heidi B. McCree
Secretary, Hillsborough
Watson L. Haynes, II
Treasurer, Pinellas
Edward W. Chance
Manatee
Monroe "Al" Coogler
Citrus
Maggie N. Dominguez
Hillsborough
Pamela L. Fentress
Highlands
Ronald C. Johnson
Polk
Janet D. Kovach
Hillsborough
John K. Renke, III
Pasco
E. D. "Sonny" Vergara
Executive Director
Gene A. Heath
Assistant Executive Director
William S. Bilenky
General Counsel



- ☒ email Governor Jeb Bush
- ☐ Gov. Bush's E-Newsletter

Agency

[Home](#)

[My In-Box](#)

[Search Project](#)

[Help](#)

Public Area

[Brochure](#)

[Manual](#)

STATE CLEARINGHOUSE

[Home](#) > [My In-Box](#) > [Search Project](#) > **Update Agency Comments**
User: Lauren Milligan, , ENVIRONMENTAL PROTECTION

Project Information

Project: FL200208022514C
Description: Department of the Air Force - Environmental Assessment for the Proposed Construction/Replacement of Military Family Housing - Phase V - MacDill Air Force Base - Hillsborough County, Florida.
Keywords: USAF - EA - Military Housing, Phase V - MacDill, H
Program:

Review Comments

Page: **GO!** **Page 1/10**  

Reviewer: COMMUNITY AFFAIRS
Date: 08/15/2002
Description: NC
Comment Type: ☐ Draft ☒ Final

☒ email Governor Job Bush

☐ Gov. Bush's E-Newsletter

Agency

[Home](#)

[My In-Box](#)

[Search Project](#)

[Help](#)

Public Area

[Brochure](#)

[Manual](#)

STATE CLEARINGHOUSE

[Home](#) > [My In-Box](#) > [Search Project](#) > **Add Agency Comments**

User: Lauren Milligan, , ENVIRONMENTAL PROTECTION

Project Information

Project: FL200208022514C

Description: Department of the Air Force - Environmental Assessment for the Proposed Construction/Replacement of Military Family Housing - Phase V - MacDill Air Force Base - Hillsborough County, Florida.

Keywords: USAF - EA - Military Housing, Phase V - MacDill, H

Program:

Review Comments

Page:



Page 3/10



Reviewer: FISH and WILDLIFE COMMISSION

Date: 08/06/2002

Description: NC by Brain Barnett

Comment Type: ☒ Draft ☐ Final

Message:

STATE AGENCIES

WATER MNGMNT. DISTRICTS

OPB POLICY UNITS

COMMUNITY AFFAIRS
FISH and WILDLIFE COMMISSION
X HEALTH
STATE
TRANSPORTATION
ENVIRONMENTAL PROTECTION

SOUTHWEST FLORIDA WMD

ENVIRONMENTAL POLICY UNIT

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 - Environmental Assessment for the Proposed Construction/Replacement of Military Family Housing - Phase V - MacDill Air Force Base - Hillsborough County, Florida.

RECEIVED

SEP 06 2002

OIP/OLGA

To: Florida State Clearinghouse

EO. 12372/NEPA

Federal Consistency

AGENCY CONTACT AND COORDINATOR (SCH)

2555 SHUMARD OAK BLVD

TALLAHASSEE, FLORIDA 32399-2100

(850) 414-6580 (SC 994-6580)

(850) 414-0479

☐ No Comment☐ Comment Attached☐ Not Applicable☒ No Comment/Consistent☐ Consistent/Comments Attached☐ Inconsistent/Comments Attached☐ Not Applicable

Existing Wastewater Treatment Plant

From:

Division/Bureau:

HSES Onsite Sewage

Reviewer:

E. Borranio

Date:

8/26/2002

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
INTERGOVERNMENTAL COORDINATION AND REVIEW
ROUTING SHEET

FORM 525-010-20
STATE TRANSPORTATION PLANNER
06/02

7/23/02

9/1/02

9/21/02

2514C

INIT

1/4/02

k Langley, D1; Dave Byrd, D2; Denny Wood, D3; Gerry O'Reilly, D4; Carolyn Ismart, D5;
y Donn, D6; Don Skelton, D7; Irwin, EMO; Alexander, Seaport; Ashbaker, Aviation; Lee, Rail

200208022514C

Description:

MacDiell Hsg.

Use Due to the Clearinghouse:

9/1/02

RECEIVED
PLANNING UNIT
2002 09 12 AM 11:01



and comment regarding the attached application in accordance with Department Procedure
A response to the Director of the Clearinghouse and this routing sheet should be completed and returned
the procedure.

g criteria, as appropriate to the project, should be used to evaluate the application and develop your

Florida Transportation Plan
Adopted Work Program
Transportation Improvement Program (TIP)
Right of Way Preservation and Advanced Acquisition
Transit Development Program
MPO Comprehensive Transportation Plan and 20 Year Transportation Plan
Florida Rail System Plan
Florida Aviation System Plan
Local Airport Master Plan
Florida Seaport Mission Plan
Environment Commitments
Unified Planning Work Program
Level of Service
Access Management

RECEIVED

SEP 04 2002

OIP/OLGA

ental

amily
base -

nts are warranted based on other criteria, they should be included.

ation Type: ☒ General ☐ Aviation ☐ Rail ☐ Transit ☐ Environmental ☐ Seaport

hed
ched

ial Project Identifier: _____ (if applicable).

Sandra Whitmire

Off: IR Coordinator - MS #28
: (850) 414-4812 / SC 994-4812
(850) 413-7640 / SC 293-7640

RECYCLED PAPER



Message:

DATE: 7/23/02
 COMMENTS DUE DATE: 9/1/02
 CLEARANCE DUE DATE: 9/21/02
 SAI# FF 200208022514C

FILE COPY

STATE AGENCIES

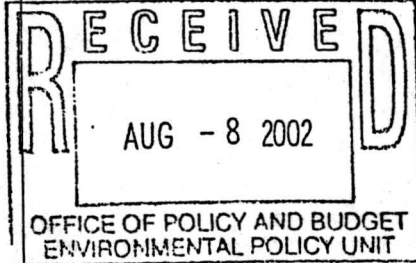
COMMUNITY AFFAIRS
 FISH and WILDLIFE COMMISSION
 HEALTH
 STATE
 TRANSPORTATION
 ENVIRONMENTAL PROTECTION

WATER MNGMNT. DISTRICTS

SOUTHWEST FLORIDA WMD

OPB POLICY UNITS

X ENVIRONMENTAL POLICY UNIT



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 - Environmental Assessment for the Proposed Construction/Replacement of Military Family Housing - Phase V - MacDill Air Force Base - Hillsborough County, Florida.

To: Florida State Clearinghouse
 AGENCY CONTACT AND COORDINATOR (SCH)
 2555 SHUMARD OAK BLVD
 TALLAHASSEE, FLORIDA 32399-2100
 (850) 414-6580 (SC 994-6580)
 (850) 414-0479

EO. 12372/NEPA

Federal Consistency

- ☒ No Comment
- ☐ Comment Attached
- ☐ Not Applicable

- ☐ No Comment/Consistent
- ☐ Consistent/Comments Attached
- ☐ Inconsistent/Comments Attached
- ☐ Not Applicable

From:

Division/Bureau:

Reviewer:

Date:

OPB. DR 66-1
 m. Sanner
 8/22/02

RECEIVED

AUG 30 2002

OIP/OLGA

**FLORIDA STATE CLEARINGHOUSE
LOCAL GOVERNMENT COORDINATION
ROUTING SHEET**

SAI#: FL200208022514C

DATE: 7/23/02

COMMENTS DUE TO RPC: 8/23/02

AREA OF PROPOSED ACTIVITY: COUNTY: HILLSBOROUGH CITY:

☐ FEDERAL ASSISTANCE ☒ DIRECT FEDERAL ACTIVITY ☐ FEDERAL LICENSE OR PERMIT ☐ OCS

PROJECT DESCRIPTION

Department of the Air Force - Environmental Assessment for the Proposed Construction/Replacement of Military Family Housing - Phase V - MacDill Air Force Base - Hillsborough County, Florida.

ROUTING:

RPC

Local Governments

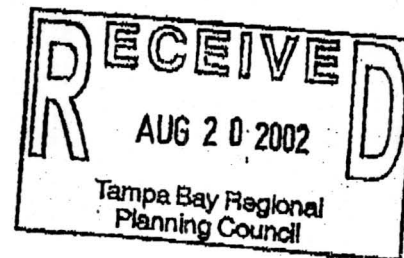
TAMPA BAY RPC

X HILLSBOROUGH

RECEIVED

AUG 1 2 2002

HILLSBOROUGH COUNTY
PLANNING COMMISSION



IF YOU HAVE NO COMMENTS, PLEASE CHECK HERE AND RETURN FORM TO RPC :

ALL CONCERNS OR COMMENTS REGARDING THE ATTACHED PROJECT SHOULD BE SENT IN WRITING BY THE DUE DATE TO THE REGIONAL PLANNING COUNCIL SHOWN BELOW. PLEASE REFER TO THE SAI # IN ALL CORRESPONDENCE:

Ms. ANGELA HURLEY
9455 KOGER BOULEVARD
SUITE 219
ST. PETERSBURG, FLORIDA 337022491

IMPORTANT: PLEASE DO NOT SEND COMMENTS DIRECTLY TO THE CLEARINGHOUSE!

IF YOU HAVE QUESTIONS REGARDING THE ATTACHED PROJECT OR THE INTERGOVERNMENTAL COORDINATION PROCESS, PLEASE CONTACT THE STATE CLEARINGHOUSE. IF YOU HAVE QUESTIONS REGARDING THE FEDERAL CONSISTENCY REVIEW PROCESS, PLEASE CONTACT THE FLORIDA COASTAL MANAGEMENT PROGRAM. THE TELEPHONE NUMBER FOR BOTH PROGRAMS IS (850) 414-6580 OR SUNCOM 994-6580.

Department of the Air Force - Environmental Assessment for
the Proposed Construction/Replacement of Military Family
Housing - Phase V - MacDill Air Force Base - Hillsborough
County, Florida.

SAI# FL200208022514C

The above-described project was received by the Florida State Clearinghouse on 7/13/02, and has been forwarded to the appropriate reviewing agencies. The clearance letter and agency comments will be forwarded to you no later than 9/21/02, unless you are otherwise notified. Please refer to the above State Application Identifier (SAI) number in all written correspondence with the Florida State Clearinghouse regarding this project. If you have any questions, please contact Ms. Cindy Cranick, Clearinghouse Coordinator, at (850) 922-5438.



FLORIDA DEPARTMENT OF STATE

Glenda E. Hood

Secretary of State

DIVISION OF HISTORICAL RESOURCES

Mr. Gene A. Rogers
Department of the Air Force
6 CES/CD
7621 Hillsborough Loop Drive
MacDill AFB, Florida 33621-5207

June 6, 2003

RE: DHR Project File Number: 2003-4176
Received by DHR May 12, 2003 *RAK 6/6/03*
Draft Historic Building Inventory Evaluation for MacDill Air Force Base
Capehart & Wherry Housing
MacDill AFB, Hillsborough County

Dear Mr. Rogers:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties*. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing, in the *National Register of Historic Places*), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

Based on the information provided, this office concurs with your finding that the Capehart & Wherry Housing buildings do not appear to meet the criteria for listing in the *National Register*.

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

Sincerely,

Janet Snyder Matthews
Janet Snyder Matthews, Ph.D., Director, and
State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

☐ Director's Office
(850) 245-6300 • FAX: 245-6435

☐ Archaeological Research
(850) 245-6444 • FAX: 245-6436

☒ Historic Preservation
(850) 245-6333 • FAX: 245-6437

☐ Historical Museums
(850) 245-6400 • FAX: 245-6433

☐ Palm Beach Regional Office
(561) 279-1475 • FAX: 279-1476

☐ St. Augustine Regional Office
(904) 825-5045 • FAX: 825-5044

☐ Tampa Regional Office
(813) 272-3843 • FAX: 272-2340



DEPARTMENT OF THE AIR FORCE
6TH AIR MOBILITY WING (AMC)
MACDILL AIR FORCE BASE, FLORIDA

JUL 11 2002

MEMORANDUM FOR DIVISION OF HISTORIC RESOURCES
ATTN: MS. JANET SNYDER MATTHEWS

FROM: 6 CES/CD
7621 Hillsborough Loop Drive
MacDill AFB FL 33621-5207

SUBJECT: Construction/Replace Military Family Housing – Phase 5 at MacDill Air Force Base (AFB)

1. The United States Air Force (USAF) intends to construct new military family housing at MacDill AFB and demolish a small portion of the existing, substandard housing units. Specifically the project would construct approximately 45 new buildings (96 housing units total) at three locations on base (Figure 2-1). Both areas are currently vacant, grass-covered land. The southern site, located in the south golf course area, was previously used for semi-permanent trailers that served as temporary lodging for incoming personnel. The northern site, just south of the hospital, has never been developed. The project would also demolish approximately 13 existing buildings (92 housing units total) in an area of existing housing north of the base hospital (Figure 2-2). All of the houses proposed for demolition are located on Kenwere Drive.
2. A representative from the MacDill AFB Natural/Cultural Resources staff surveyed the proposed project sites to determine if any cultural resources would be affected by the project. The proposed construction sites are not located in either of MacDill AFB's historic districts or on or adjacent to any archeological sites, therefore construction of the new housing units is not expected to impact cultural resources on MacDill AFB.
3. The 13 buildings proposed for demolition include Facilities 644, 646, 667, 668, 669, 670, 674, 675, 676, 677, 678, 685, and 687. According to MacDill AFB real property records these buildings were all constructed in 1951 along with more than 100 other buildings on base under the Capehart and Wherry housing program. Each building contains multiple housing units ranging from 4 to 8 units per building. The Capehart and Wherry housing program was a Department of Defense (DOD) construction program created to rapidly expand the housing on DOD installations. The Capehart and Wherry program constructed thousands of houses on DOD installation throughout the country between approximately 1950 and 1960.
4. Although the buildings are all greater than 50 years old, these buildings are only a small portion of the multi-unit Capehart and Wherry houses on base. Demolition of the 13 multi-unit buildings will not remove any unique or individual potentially eligible buildings from MacDill AFB. Numerous representative examples of these Capehart and Wherry multi-unit houses will still be present on base upon completion of the Phase 5 Family Housing project.

5. If you agree with MacDill's assessment that construction of the new family housing and demolition of a portion of the existing housing on MacDill AFB would have no adverse affect on cultural resources, please document your concurrence by signing where indicated below.
6. If you have any questions about the proposed project, please contact Mr. Jason Kirkpatrick at (813) 828-0459.



STEVEN T. OLSON, CMSgt, USAF
Acting Deputy Base Civil Engineer

Attachments:

Figure 2-1 – Proposed Construction Sites for New Housing Units on MacDill AFB
Figure 2-2 – Existing Military Family Housing Unit Proposed for Demolition
Photographs of Example Capehart and Wherry Building Proposed for Demolition

MEMORANDUM FOR 6 CES/CD

The State Historic Preservation Office concurs with MacDill AFB that construction of the new family housing units and demolition of a portion of the existing housing units on base will have no adverse effect on cultural resources at MacDill AFB.

JANET SNYDER MATTHEWS
State Historic Preservation Officer

Date: _____

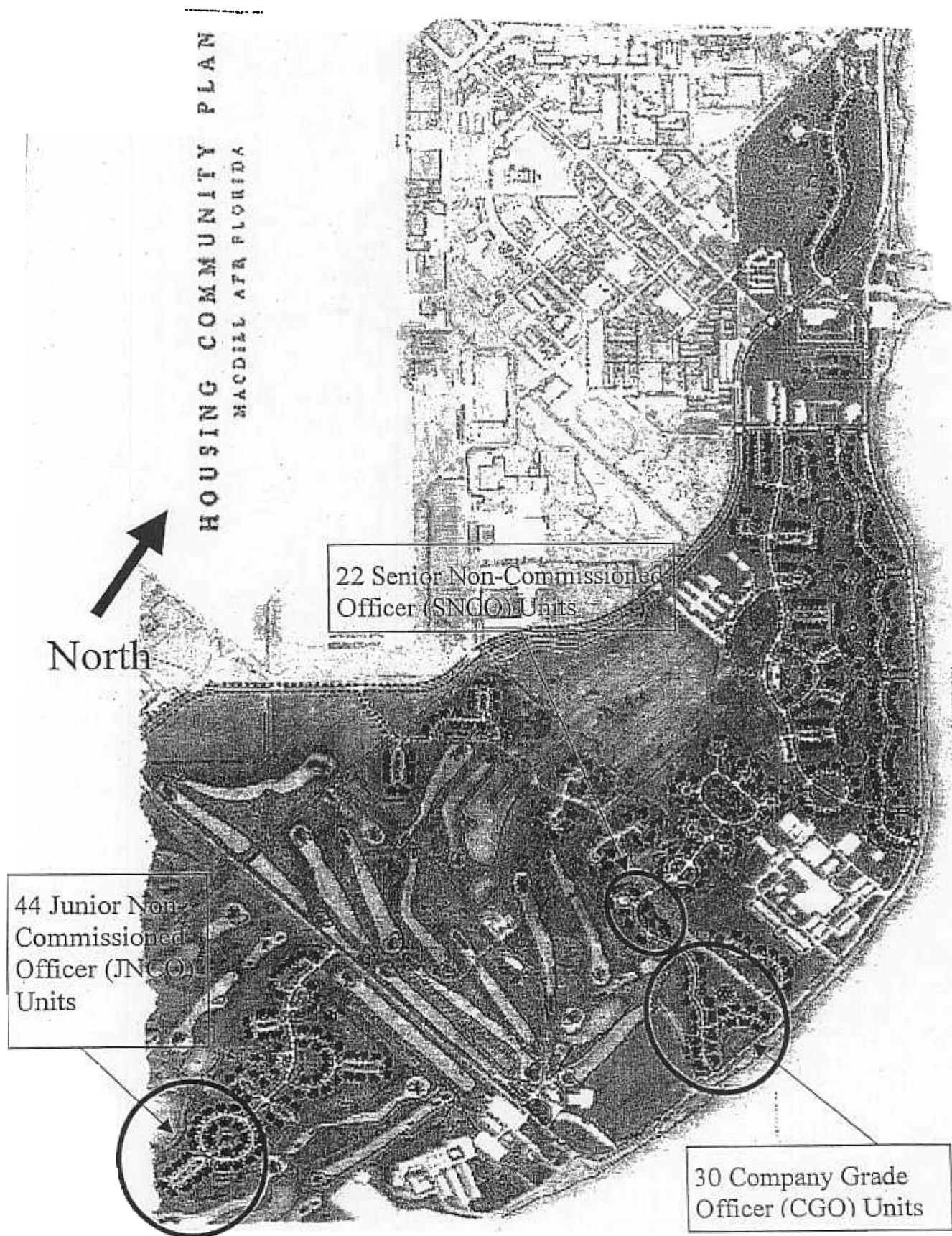
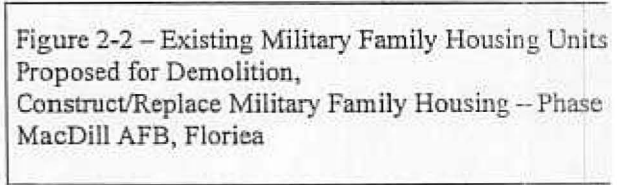
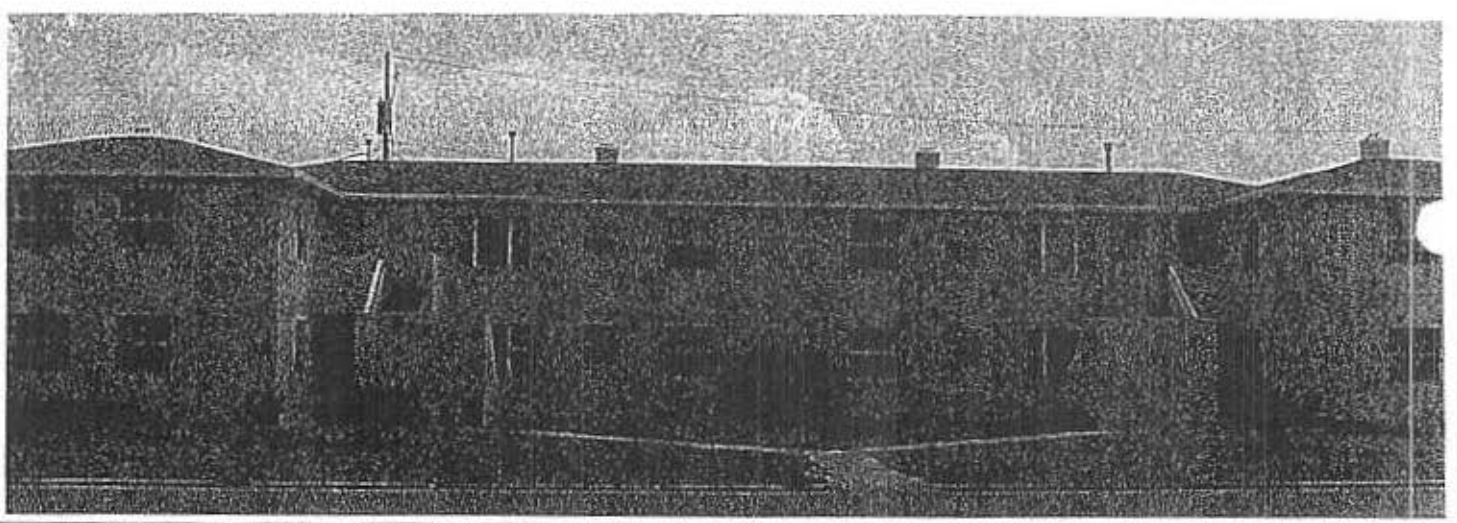


Figure 2-1 – Proposed Construction Sites for New Housing Units to be Constructed/Replace Military Family Housing – Phase 5
MacDill AFB, Florida

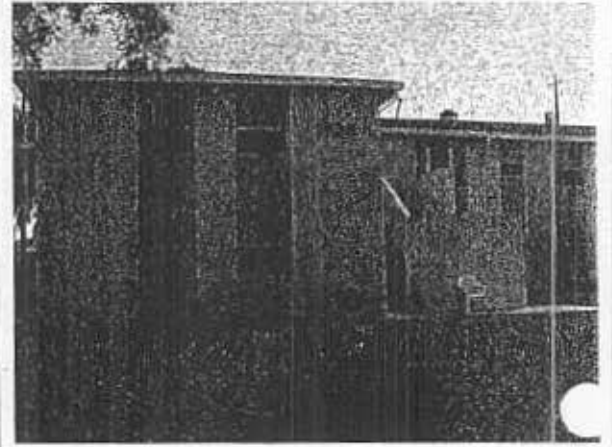




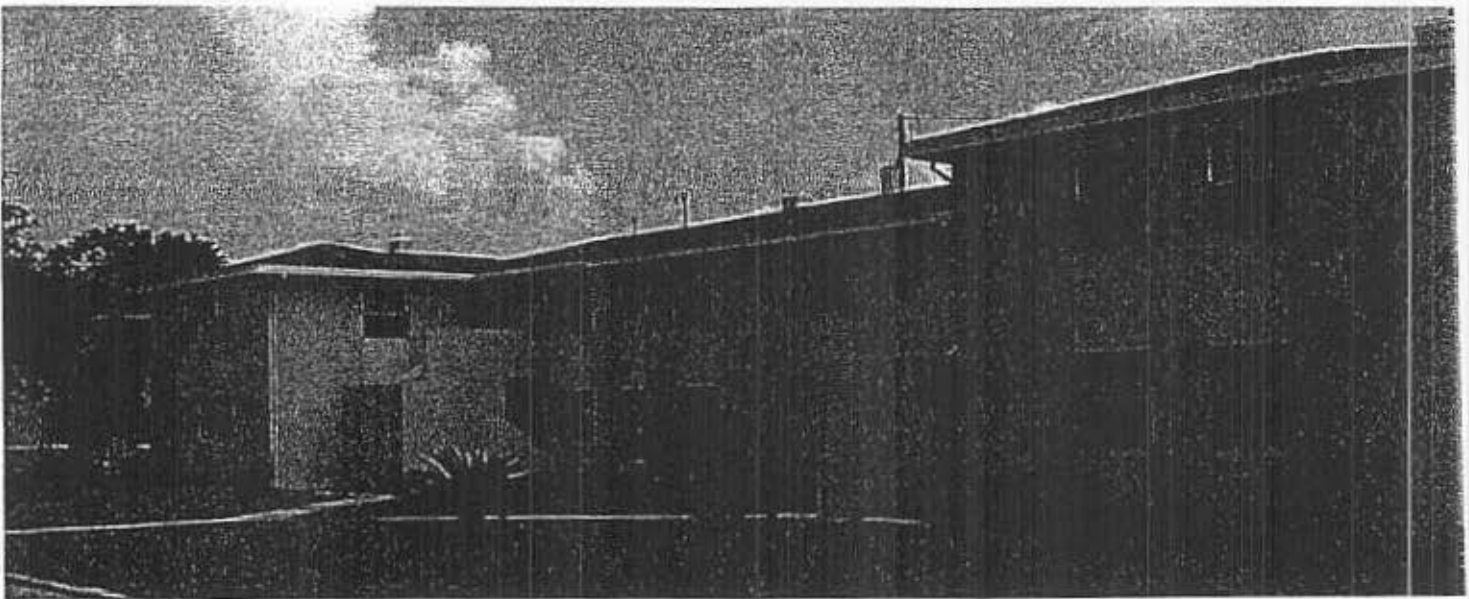
Photograph of Example Seven (7) Housing Unit Capehart and Wherry Building Proposed for Demolition – Front View



Back View of Seven Unit Capehart and Wherry Building



Close-up of Seven Unit Building



Oblique View of Seven Unit Capehart and Wherry Building Proposed for Demolition