

CHAPTER 21.

SECTION 4(F) EVALUATION

21.1 PURPOSE OF SECTION 4(F) EVALUATION

The environmental law known as Section 4(f), which is part of the United States (U.S.) Department of Transportation Act of 1966 (49 U.S. Code § 303), declares that “it is the policy of the U.S. government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.” Further, it is specified that, “the Secretary [of Transportation] may approve a transportation program or project... requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, site), only if:

- There is no prudent and feasible alternative to using that land.
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use;” or, based on the regulations implementing Section 4(f).
- “The Administration (Federal Highway Administration [FHWA]) determines that the use of the property, including any measure(s) to minimize harm (such as avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, would have a ‘de minimis’ impact on the property.” (23 Code of Federal Regulations [CFR] 774.3[b]).

The regulations interpreting Section 4(f) state that “The potential use of land from a Section 4(f) property shall be evaluated as early as practicable in the development of the action when alternatives to the proposed action are under study (23 CFR 774.9[a]).” The use of Section 4(f) resources occurs when: (1) land from a Section 4(f) site is permanently incorporated into a transportation facility; (2) there is a temporary occupancy of Section 4(f) land that is adverse in terms of the statute’s preservation purpose, or (3) when a “constructive use” of a Section 4(f) property is determined. A constructive use occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired” (23 CFR 774.15[a]).

The term “historic site” includes any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (NRHP) (23 CFR 774.17). Section 4(f) does not apply to archaeological sites on or eligible for the NRHP when the FHWA concludes that the archaeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place (23 CFR 774.13[a][1]). Constructive use does not occur when compliance with the requirements of Section 106 of the National Historic Preservation Act (NHPA) (16 U.S. Code § 470) and related regulations defining proximity impacts of a proposed project on an NRHP site results in “an agreement of no historic properties affected” or “no adverse effect” (23 CFR 774.15[f][1]).

Section 4(f) further requires consultation with the U.S. Department of the Interior and, as appropriate, the involved offices of the U.S. Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use properties protected by Section 4(f).

Because the Guam roadway projects would involve the use of Section 4(f) properties, this evaluation identifies the significant Section 4(f) resources in the project area, describes the nature and extent of the use of these significant properties, evaluates alternatives that would avoid the use of Section 4(f) resources, and describes measures to minimize harm to the affected resources.

21.2 PROPOSED PROJECT

The roadway projects are encompassed within the Guam Road Network (GRN), which is comprised of the non-military roadway system on the island of Guam. Construction of the GRN projects is required to accommodate three proposed military actions (Figure 21.2-1). First, increased traffic from the military buildup on the island connected to the relocation of approximately 8,600 Marines of the III Marine Expeditionary Force and their dependents from Okinawa by 2014 needs to be accommodated. Aviation and waterfront operations, training, main cantonment, family housing and associated utilities, and infrastructure improvements comprise the scope of activities to be conducted in support of Marine Corps projects on the island. Roadway improvements are needed to support construction of the facilities and the ensuing traffic related to the proposed military buildup on Guam. Roadway improvements are also connected to construction of operational facilities, training, main cantonment, and family housing on Guam to support the defensive mission of the Marine Corps.

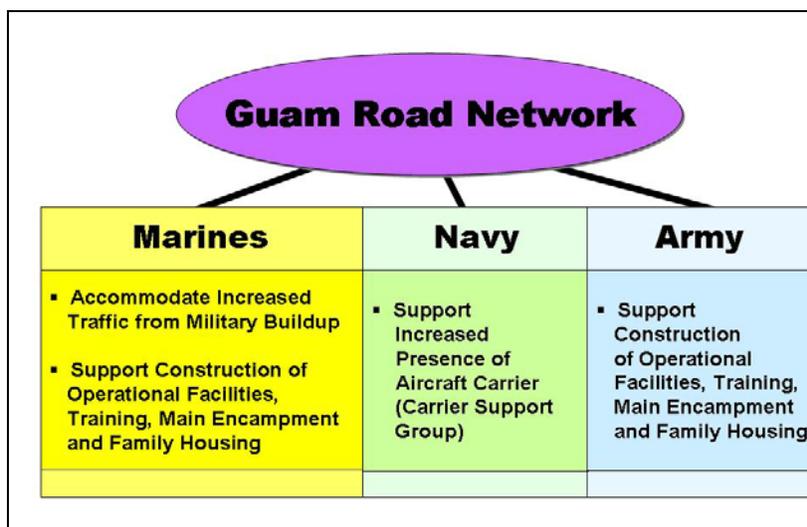


Figure 21.2-1. Connectivity of the Guam Road Network

Second, the roadway improvements are connected to Navy initiatives associated with an increase in aircraft carrier presence to support engagement and deterrence consistent with the global shift of trade and transport. A new deep-water wharf at Apra Harbor is needed to support the increased Navy presence and port visits associated with a Carrier Strike Group.

Third, the roadway improvements are also connected to construction of operational facilities, training, main cantonment, and family housing on Guam to support the Army Ballistic Missile Defense Task Force (BMDTF) and its defensive mission.

Improvements to the roadway network on Guam are needed to allow efficient and safe access to military lands for construction of facilities and to accommodate military-related and projected organic (ongoing)

traffic growth on Guam. The existing roadways connecting the population centers and DoD lands on Guam are shown in Figure 21.2-2.

The proposed construction of roadway improvements would be located on the island of Guam, which is geographically part of the Mariana Islands archipelago. Guam is a territory of the U.S. The setting for the project encompasses the primary roadway network for the entire island of Guam, comprised of 20 federal-aid roadways and one local road totaling approximately 66 miles (106 kilometers [km]) in length.

21.2.1 Purpose and Need

A complete discussion of the purpose and need for the project is provided in Chapter 1 of this volume.

An improved network of roads on Guam is needed as part of the mission-critical infrastructure to support planned relocation of Marines and their dependents, as well as to accommodate ongoing growth on the island in accordance with the 2030 Guam Transportation Plan. The island of Guam is experiencing roadway problems that include inadequate bridges; flooding roads; poor lane visibility, as a result of tight corners, poor lane striping, lighting, and lane geometry; high accident locations; landslides; eroding embankments; and inadequate intersections due to the absence of traffic signals. To meet these needs, the proposed GRN projects would include roadway widening, existing intersection improvements and new intersections that would serve as military access points, bridge replacements, pavement strengthening at specific locations island-wide, and the realignment of Route 15, as well as a new Core Bus System. These improvements are needed to resolve traffic congestion during the construction period from 2010 through 2016, with peak construction and peak population in 2014, and the ensuing traffic increase from full military buildup combined with projected organic growth. The transportation network would become an integral component for fulfilling the U.S. defense strategy and alliance requirements, as well as providing an enhanced capability to defend critical military assets on Guam through the Army BMDTF.

21.2.2 Project Alternatives Using Section 4(f) Properties

A complete discussion of the project alternatives is provided in Chapter 2 of this volume.

21.2.2.1 Alternative 1

Alternative 1 includes: utilizing Naval Computer and Telecommunications Station (NCTS) Finegayan (809 acres (ac) [327 hectares {ha}]), South Finegayan (290 ac [117 ha]), acquisition or long-term leasing of Federal Aviation Administration (FAA) land (680 ac [275 ha]), and acquisition or long-term leasing of land in the Harmon Annex (326 ac [132 ha]) for a total of 2,105 ac (852 ha). A detailed view of the Main Cantonment configuration associated with this alternative is presented in Volume 6 Chapter 2 Figure 2.5-9 (Alternative 1 Housing and Cantonment).

The Main Cantonment would include housing facilities, base operations and support facilities, various headquarters and administrative support facilities, Quality of Life (QOL) facilities (e.g., shops, schools and recreation), training areas, and open space. Military personnel, including Army BMDTF, and their dependents would generally live, work, recreate, and shop in the north to northwest part of Guam.

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Figure 21.2-2
Roadways Connecting Military Lands on Guam

Most ground training activities (non-firing and firing) would occur on the east coast of Guam, the principal battalion-level training area would be on Tinian. Waterfront activities would be at Apra Harbor, but most Marine Corps vehicle traffic would be in the northern half of the island, except during embarkation. Amphibious Readiness Group embarkation and berthing would be at contiguous wharves, but the U.S. Coast Guard would need to be relocated to Oscar/Papa Wharves. Under this alternative, the new deep-draft aircraft carrier berth would be at the former Ship Repair Facility (SRF). The water and wastewater proposals under this alternative provide the greatest capacity and benefit to populations outside of the military relocation. The existing Northern District Wastewater Treatment Plant (NDWWTP) would be upgraded with secondary treatment capacity. Upgrades and improvements to the existing Guam Power Authority (GPA) system would be funded, but no new power generation capacity would be provided. Solid waste would be managed on DoD property.

The roadway projects that would be required for Alternative 1 are all projects listed in Chapter 2, Table 2.5-1 of this volume, with the exception of GRN #38, 39, 41, 47 through 49A, 63, and 74.

21.2.2.2 Alternative 2

Alternative 2 includes: utilizing NCTS Finegayan (1,230 ac [498 ha]), South Finegayan (290 ac [117 ha]), and acquisition or long-term leasing of FAA land (680 ac [275 ha]) for a total of 2,200 ac (890 ha). A detailed view of the Main Cantonment configuration associated with this alternative is presented in Chapter 2, Figure 2.5-10 (Alternative 2 Housing and Cantonment) of this volume.

The roadway projects that would be required for Alternative 2 are all projects listed in Chapter 2, Table 2.5-1 of this volume, with the exception of GRN #38A, 39A, 41A, 47 through 49A, 63, and 74.

21.2.2.3 Alternative 3

Alternative 3 includes: utilizing NCTS Finegayan (1,230 ac [498 ha]), South Finegayan (290 ac [117 ha]), with portions of military housing and QOL services at Air Force Barrigada and Navy Barrigada (420 and 377 ac, respectively [174 and 153 ha, respectively]) for a total of 2,327 ac (942 ha) for a total of 2,327 ac [942 ha]. A detailed view of the Main Cantonment configuration associated with this alternative is presented in Chapter 2, Figure 2.5-11 (Alternative 3 Housing and Cantonment) of this volume.

The roadway projects that would be required for Alternative 3 are all projects listed in Chapter 2, Table 2.5-1 of this volume, with the exception of GRN #19, 20, 31, 38A, 39A, 41, 124, and 49A.

21.2.2.4 Alternative 8

Alternative 8 includes NCTS Finegayan (809 ac [327 ha]), acquisition or long-term leasing of FAA land (680 ac [275 ha]), South Finegayan (290 ac [117 ha]), with portions of military housing and QOL services at Air Force Barrigada (430 ac [174 ha]), for a total of 2,209 ac (894 ha). A detailed view of the Main Cantonment configuration associated with this alternative is presented in Volume 2, Figure 2.5-7 (Alternative 8 Housing and Cantonment) of this volume.

The roadway projects that would be required for Alternative 8 are all projects listed in Chapter 2, Table 2.5-1 of this volume, with the exception of GRN #38, 39, 41, 47, 48, 49, 63, and 74.

21.2.3 Other Alternatives Considered, but Eliminated

For discussion of other alternatives considered but eliminated, refer to the Overview of Proposed Action and Alternatives Chapter of Volume 2.

21.3 SECTION 4(F) PROPERTIES

21.3.1 Public Parks

Please refer to Chapter 11 Recreation Resources of this volume for full discussion of public parks and recreation areas potentially affected by the GRN projects.

Route 1 provides the principal access to recreational opportunities in the western segment of the Central Region (i.e., Piti, Asan, Hagatna, Monmong, and Tamuning). Proposed improvements along Route 1 include pavement strengthening, intersection improvements, bridge replacement, and military access points. Recreational opportunities along the western segment of the Central Region are largely comprised of beaches, trails, public parks, and scenic vistas. Portions of Route 1 are located immediately adjacent to or within close proximity to these areas.

21.3.2 Wildlife Refuges

On the northernmost part of the island, the Guam National Wildlife Refuge was established in 1993 with the Ritidian Unit, which was relinquished by the Navy. Most of the refuge, approximately 22,500 ac (9,105 ha), is an “overlay refuge” on lands administered by the Air Force and the Navy. The military mission has priority on these lands; however, the USFWS assists in protecting native species and habitats.

Given the military mission precedence on these lands, and the fact that they are fenced off from public entry, the Guam National Wildlife Refuge is not considered an accessible “publicly owned” wildlife refuge; therefore, it is not determined to be subject to the protective provisions of Section 4(f).

21.3.3 Historic Sites

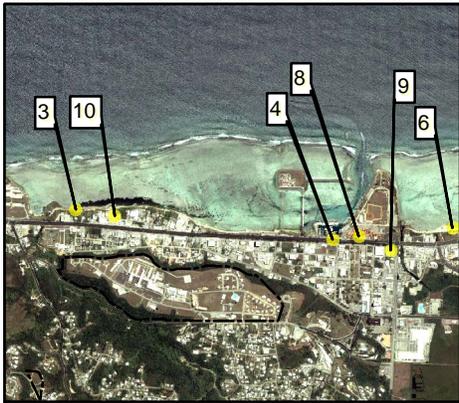
Figure 21.3-1 plots known historic sites in relation to Haul Road projects. These are sites previously determined eligible for or listed on the NRHP.

21.4 IMPACTS ON SECTION 4(F) PROPERTIES

21.4.1 Public Parks

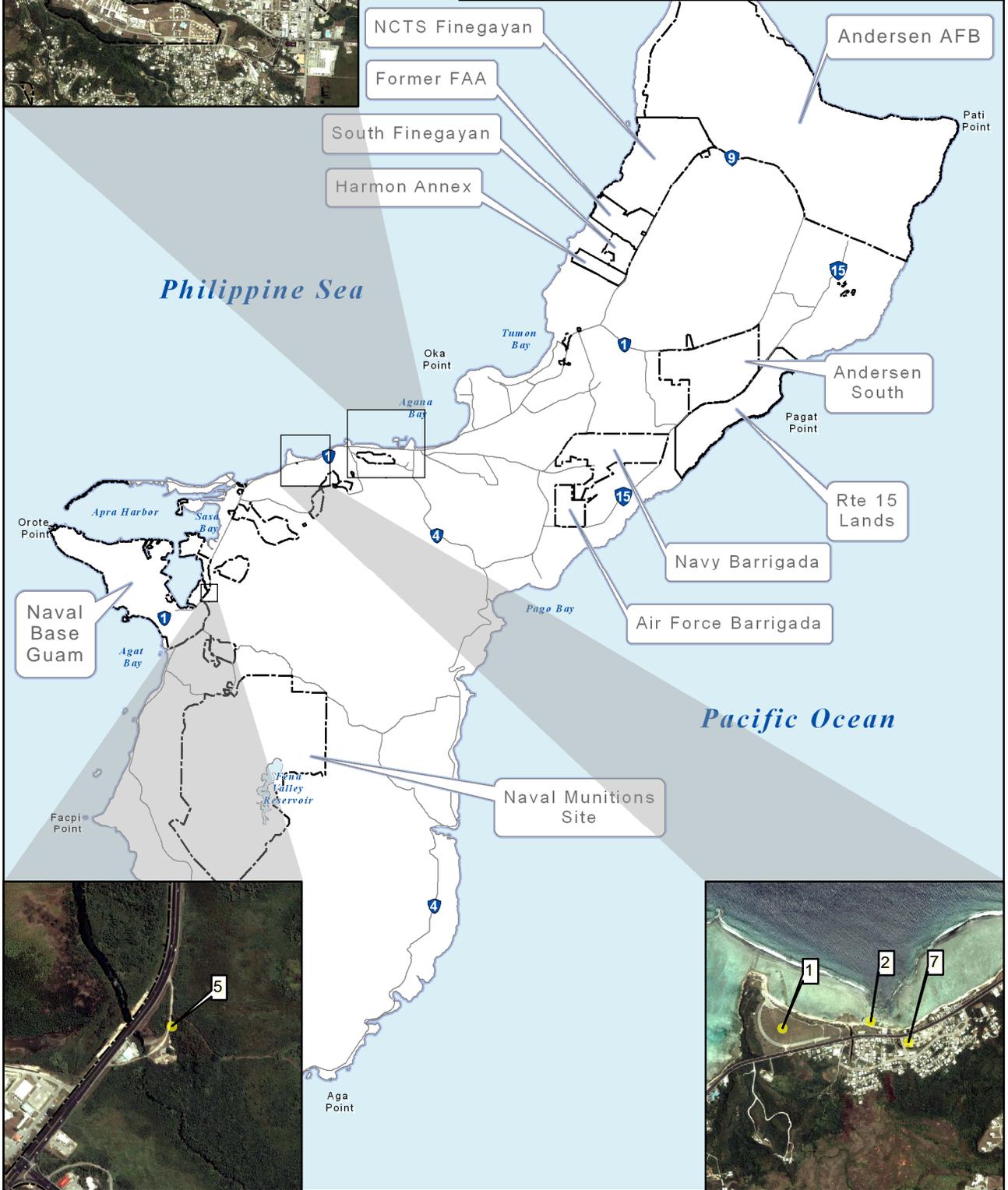
Based on preliminary engineering design information, minor right-of-way (ROW) acquisition or temporary use would be required at three parks located along Route 1, as described below.

- **Paseo de Susana Park** would be affected by GRN #3 (Agana Bridge Replacement). The bridge replacement limits are very conceptual at this stage, and the affected land cannot be accurately estimated; however, based on the preliminary design, approximately 4,800 square feet (446 square meters) of land may be required. There likely would be work in the Agana River and possibly slope protection at the abutment. At the very least it would be a temporary impact during construction, limiting access to this area of the park. See Figure 21.4-1.
- **Buffer Strip Park** would be affected by GRN #7 and GRN #6 intersection widening at Route 1 and 27, and Route 1 and 26. While the widening currently depicted can likely be adjusted to avoid most of the linear impact, at the intersection with Route 27 the existing roadway appears to encroach on the park ROW by approximately 500 square feet (46 m²). See Figure 21.4.3.



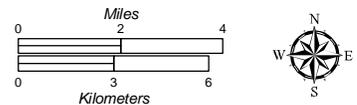
Legend

- Military Installation
- Route Number
- 1 Asan Invasion Beach/War in the Pacific NHP
- 2 Memorial Beach Park/War in the Pacific NHP
- 3 Toves House
- 4 Agana Spanish Bridge
- 5 Atantano Shrine
- 6 Cormoran Monument/US Naval Cemetery
- 7 Asan Patriots of World War II Memorial
- 8 Guam Heroes Memorial/Skinner Plaza
- 9 Taitano House
- 10 Garrido House



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**Figure 21.3-1
Known Historic Sites Within the APE**



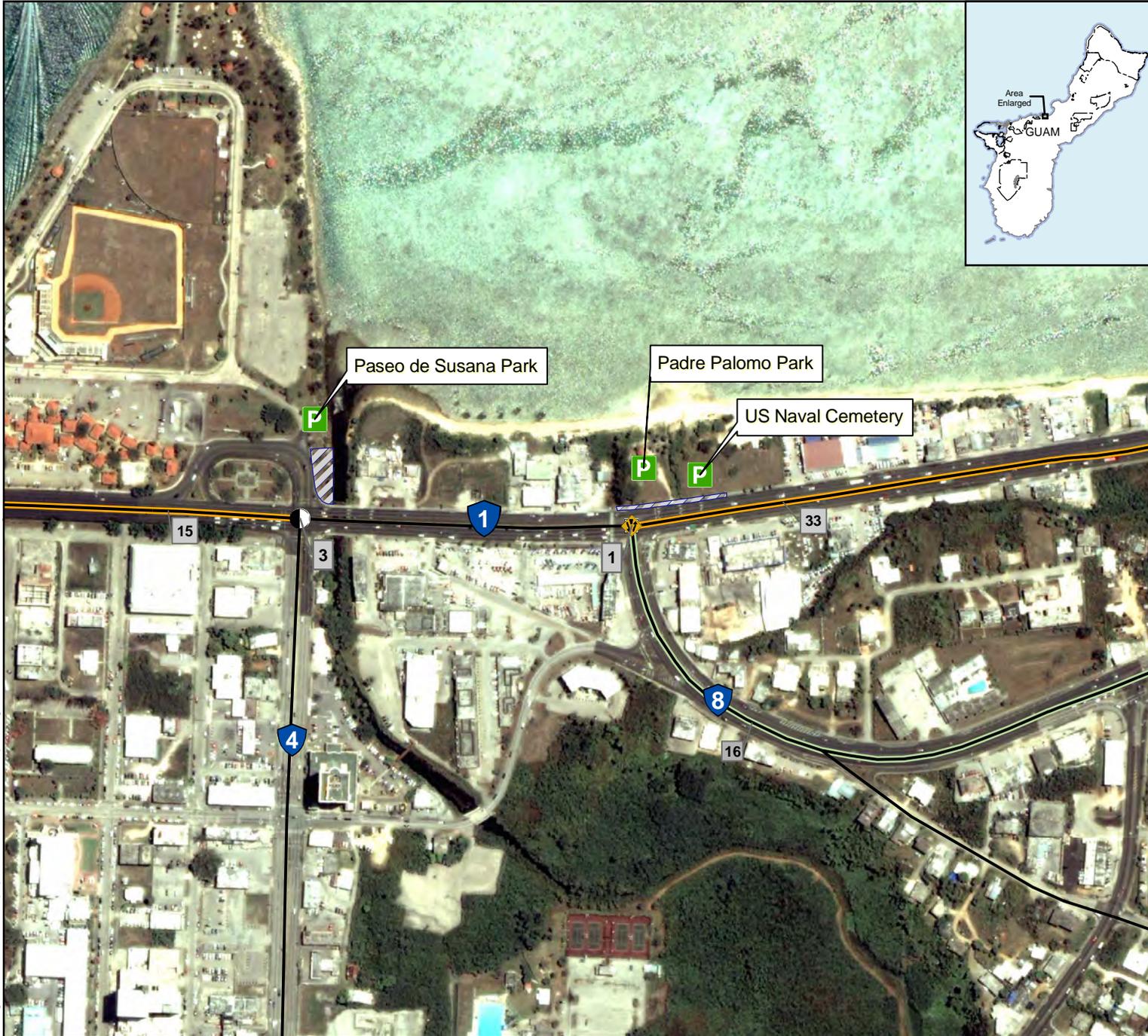
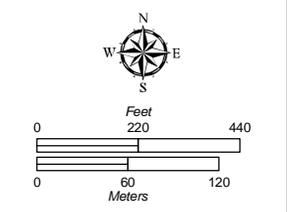


Figure 21.4-1
 Potential Use of
 Paseo de Susana Park

- Legend**
- Military Installation
 - Route Number
 - Project Locations and GRN#
 - Bridge Replacement
 - Intersection Improvement
 - Pavement Strengthening
 - Widening/Pavement Strengthening
 - Park Locations
 - Park Takes



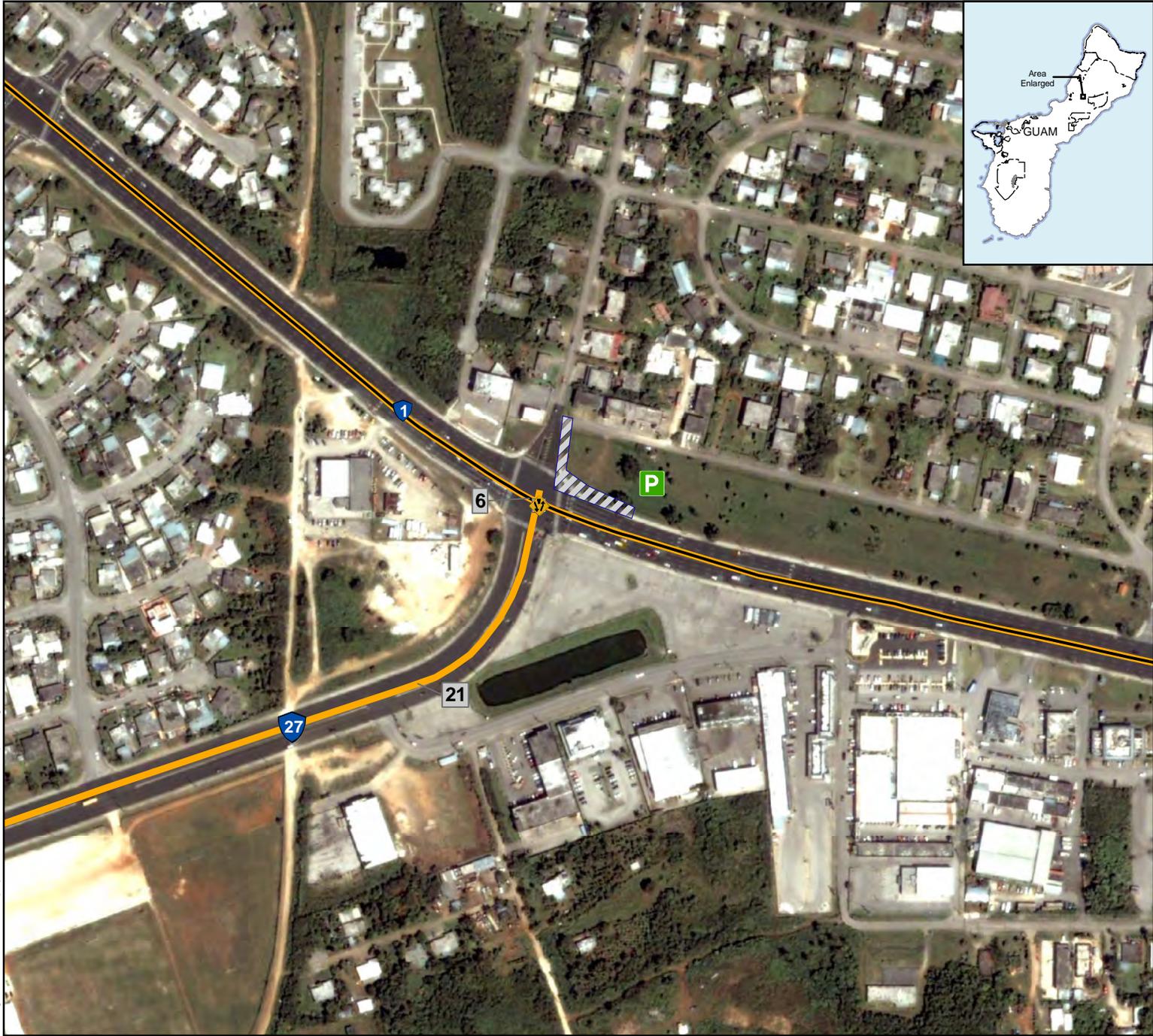
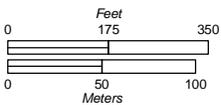


Figure 21.4-2

Potential Use of Buffer Strip Park

Legend

-  Military Installation
-  Route Number
-  Project Locations and GRN#
-  Intersection Improvement
-  Pavement Strengthening
-  Park Locations
-  Park Takes



- **Chinese Park** would be affected by GRN #33 intersection widening at Route 1 and 14. The existing ROW parcel line appears to indicate that the existing roadway is built partially inside the park ROW. Approximately 15,900 square feet (1,477 m²) of land would need to be acquired to correct this situation and to allow the intersection improvements. Based on field observations, the potentially affected area is rocky land that slopes approximately 45 degrees. It appears to be unusable for park purposes. See Figure 21.4-3.

Note that the above information is subject to change during the detailed engineering design phase. Some design adjustment could also minimize impacts to the existing parklands to ensure the project does not adversely affect important park features, attributes or activities. After public review and comment on this Draft EIS/OEIS and Section 4(f) Evaluation, FHWA will coordinate with respective park officials to determine if the project will adversely affect the protected activities, features or attributes of the park. If the project does not adversely affect the protected activities, features or attributes of the park, FHWA may request written concurrence from respective park officials to concur in the determination that the project will have a “de minimis” (of minimum importance) impact to the park. Because construction of the proposed improvement projects would be centered on the existing roadway corridor and intersections, no park closure is anticipated during the peak construction year.

21.4.2 Historic Sites

Refer to Chapter 14 Cultural Resources of this volume for a full discussion of the historic sites potentially affected by the GRN projects. Effects on known historic sites are summarized in Table 21.4-1. Effects of Alternatives 1, 2, 3, and 8 on Known Historic Sites. These effects are essentially the same for all four build alternatives. Table 21.4-1 lists known historic sites in relation to GRN projects. The table excludes potential impacts to archaeological sites that are not considered Section 4(f) resources. The War in the Pacific National Historic Park straddles Route 1 within Project 13. It includes both Asan Invasion Beach and Memorial Beach. All three are historic properties.

Table 21.4-1. Effects of Alternatives 1, 2, 3, and 8 on Known Historic Sites

<i>Haul Road Project</i>	<i>Historic Sites</i>	<i>Section 106 Effect</i>
1	Cormoran Monument, U.S. Naval Cemetery Fortification	The Cormoran Monument would not be affected. This is a pavement strengthening project; therefore, the improvements do not extend beyond the existing roadway.
13	Asan Invasion Beach, Memorial Beach Park, War in the Pacific National Historical Park	No historic properties affected.
14	Asan World War II Memorial	No historic properties affected.
15	San Nicholas Bridge, Agana Spanish Bridge, Guam Heroes Memorial and Skinner Plaza, Taitano House, Garrido House, Toves House	No historic properties affected.
24	Atantano Shrine	No historic properties affected.

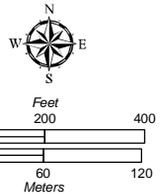


Figure 21.4-3

Potential Use of Chinese Park

Legend

-  Military Installation
-  Route Number
-  Project Locations and GRN#
-  Intersection Improvement
-  Pavement Strengthening
-  Park Locations
-  Park Takes



21.4.3 No-Action Alternative

Under the no-action alternative, Marine Corps units would remain in Japan and not relocate to Guam, the visiting aircraft carrier would berth at Kilo Wharf, and an Army BMDTF would not be positioned on Guam. No additional training capabilities (beyond what is proposed in the Mariana Islands Range Complex EIS/OEIS) would be implemented for the Commonwealth of the Northern Mariana Islands or Guam. The project objectives and the U.S. Government – Government of Japan treaty and associated agreements would not be met. There would be no land acquisition, dredging, new construction or infrastructure upgrades associated with Marine Corps or Army forces stationed on Guam. There would be no construction costs associated with this alternative. The Air Force military population would grow as projected for Intelligence Surveillance and Reconnaissance Strike (see Cumulative Projects, Volume 7). The Navy and Army do not project population increases. The no-action alternative does not meet the purpose and need of the proposed action. Although this alternative serves as a baseline, there would be roadway capacity projects conducted by the GovGuam to accommodate organic growth on Guam (see Table 2.5-6 and Figure 2.5-8).

21.5 MEASURES TO MINIMIZE HARM

21.5.1 Public Parks

To minimize the park taking at Chinese Park, the GovGuam Department of Public Works would evaluate the feasibility of constructing a retaining wall, which would be approximately 20 ft (6.1 m) high; artwork could be used to minimize the visual effect of the wall. Measures to further minimize park use at Paseo de Susana Park and Buffer Strip Park would also be considered during the detailed engineering design phase.

To ensure maintenance of access to public parks, the GovGuam Department of Public Works would develop a Traffic Management Plan for implementation during construction activities. The Traffic Management Plan would identify and provide alternate traffic detour routes, construction materials hauling routes, bus stops, transit routes and operation hours, pedestrian routes, and residential and commercial access routes to be used during the construction period.

The GovGuam Department of Public Works would also develop an outreach program to keep residents, tourists, businesses, and any service providers within the area informed, and to inform surrounding communities about the project construction schedule, traffic-impacted areas and the Traffic Management Plan, and other relevant project information.

21.5.2 Historic Properties

The proposed GRN projects would not affect known historic properties. Pursuant to the Programmatic Agreement (see the Cultural Resources chapter of this Volume 6), FHWA would be responsible for further work, including any sub-surface testing to identify historic properties where necessary. Data recovery measures, if required, would be implemented where appropriate, as determined through Section 106 consultation with the Guam Historic Preservation Office (GHPO) and other cultural resources stakeholders. Monitoring may be required for some GRN projects.

21.6 COORDINATION

Section 106 coordination with the GHPO is ongoing. GHPO representatives are visiting each project site to assist with NHPA 106 compliance efforts (see the Cultural Resources chapter of this volume for full Section 106 coordination details). A full list of historic properties and potential effects would be presented to the GHPO for concurrence. Some historic properties may not be discovered through archival research and surface surveys. A Memorandum of Agreement between FHWA and GHPO would be developed to govern these situations. Through the public access, segments of roadway would be designated by their potential to hold historic properties. This assessment would be compiled using previous archaeological investigations, historic maps, interviews, ethno-historic accounts and an understanding of post-depositional site formation processes. These evaluations would be completed in consultation with the GHPO and the National Park Service.

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