DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND MARIANAS
PSC 455, BOX 195
FPO AP 96540-2937

IN REPLY REFER TO:
5090
SER EV/745
02 November 2017

Mr. Carl V. Dominguez
Director
Guam Bureau of Statistics and Plans
P.O. Box 2950
Hagåtña, Guam 96923

Dear Mr. Dominguez:

SUBJECT: FEDERAL AGENCY COASTAL DETERMINATIONS FOR FISCAL YEAR 2018 DEVELOPMENTS PROPOSED FOR THE MARINE CORPS RELOCATION ON GUAM

The Department of the Navy requests the Bureau of Statistics and Plan's (BSP) review of our phased coastal determination for Fiscal Year (FY) 2018 projects as part of the 2010 and 2015 Records of Decision (ROD) for the Guam Military Relocation. This phased determination includes the P-103 Water Phase 2, the H-280 Replace Andersen Housing Phase II, the J-006 Apra Medical/Dental Clinic, and the Construction of the Northern Haputo Ungulate Fence. BSP's conditional concurrence with the Navy's Programmatic Consistency Determination was formalized on 27 August 2014, which included BSP's renewed support of the phased determination process.

The Navy has assessed any reasonably foreseeable direct and indirect effects on Guam's defined coastal zone, and reviewed relevant management programs (enforceable policies) of the Guam Coastal Management Program (GCMP) in accordance with the Coastal Zone Management Act (CZMA). Based on the analyses, the subject projects would collectively have spillover (indirect and cumulative) impacts to the Guam coastal zone. There would be no direct impact to the coastal zone, as reasonably foreseeable effects are confined to land under federal jurisdiction.

Based on its assessment, the Navy finds that development under P-103, H-280, J-006 and the construction of the northern Haputo ungulate fence would comply with and would be conducted (or supported) in a manner consistent with the policies of the GCMP to the maximum extent practicable. The Navy will incorporate programmatic requirements as set forth by the BSP as part of the conditional concurrence granted for the Marine Corps Relocation program on Guam. Please see enclosures for project descriptions, vicinity maps, coastal effects determinations and other supporting information. Ground disturbance associated with construction for P-103, H-280, J-006 and the Haputo fence are not anticipated to begin until calendar year 2018.

I appreciate your ongoing support. If you have any questions relating to this submission, please contact Mr. Gino Tison, Compliance Specialist, by telephone at (671) 355-2957 or by email at gian.tison@fe.navy.mil.

Sincerely,

John F. Salas, P.E.
By Direction

Enclosures:

1. Effects Test and Consistency Determination for P-103, Water Phase 2
2. Effects Test and Consistency Determination for H-280 Replace Andersen Housing Phase II
3. Effects Test and Consistency Determination for J-006, Apra Medical/Dental Clinic
4. Effects Test and Consistency Determination to Construct Northern Haputo Ungulate Fence

Copy to: NAVFAC Pacific (Ms. Karen Sumida)

# EFFECTS TEST AND DETERMINATION UNDER COASTAL ZONE MANAGEMENT ACT

| | |
|---|---|
| **Project:** P-103 Water Phase 2 | **Date:** 27 October 2017 |
| **Project Location:** Andersen Air Force Base | **Prepared By:** MCAG PWD PRF5.1.2 |

**PROJECT DESCRIPTION:**

The P-103 project shall design and construct a water well system consisting of six water wells, raw water transmission lines, water treatment, water storage tank, water transfer pump facility, power and communications system, and treated water transmission line. This project will provide a minimum 0.81 million gallons per day (MGD) of potable water supply. Two of the well sites will be equipped with generator buildings and the remainder of the well sites will be equipped with electrical buildings. The water well system is located within the Andersen Air Force Base (AAFB) Munitions Storage Area (MSA) and will supply the majority of water to be used at the Marine Cantonment at Finegayan. Two water wells shall be constructed in advance of the others to serve as exploratory/test wells.

Built-in equipment includes standby generator systems at the transfer pump station and at two water well facilities. Site preparation includes site clearing and grubbing work for the project. Paving and site improvements include site demolition, construction of access roadways, construction of an emergency access roadway, and construction of 2.44-meter high chain-link fence with cable barriers, bollards, and deadmen for an emergency access roadway. Electrical utilities include primary electrical distribution, secondary electrical distribution, transformers, exterior lighting, and telecommunications infrastructure. Mechanical utilities include fire protection water distribution lines.

The P-103 project location and preliminary site plan are depicted in **Figure 1-1**.

**PROJECT EFFECTS TEST:**

Resources of Primary Coastal Concern (note that all could trigger reasonably foreseeable spillover impacts even if activities are confined to lands under federal jurisdiction):

*Water Quality*
Construction activities for P-103 are not in proximity and will not be of sufficient scale to influence any surface water conveyance or injection wells to affect coastal zone ground or surface water (marine) resources. It is very unlikely that coastal zone drinking water or marine habitat water quality would be affected by silt from erosion, hazardous material spills and other pollution sources that may be generated as a result of construction activities. Although the entire P-103 development occurs over the Northern Guam Lens Aquifer (NGLA), impacts related to construction of P-103 would be minimized through compliance with the Guam Soil Erosion and Sediment Control Regulations, as well as appropriate implementation of design and construction mitigations and/or best management practices (BMPs) committed to in the 2015 Record of Decision (ROD) for the Military Relocation. P-103 shall obtain a Clearing and Grading Permit from the Guam Environmental Protection Agency (EPA), which includes the preparation and implementation of an Environmental Protection Plan as a permit stipulation. P-103 shall also obtain coverage under the US EPA 2017 Construction General Permit (CGP), which includes the implementation of and compliance with a site-specific Storm Water Pollution Prevention Plan (SWPPP) as a condition of coverage. Construction design specifications for P-103 shall reference the 2006 CNMI and Guam Storm Water Management Manual, and indicate that all development shall comply with the US Navy's Low Impact Development (LID) policy, which sets a goal of no net increase in storm water and sediment or nutrient loading from major renovation and construction projects.

Since this is a new water project that proposes significant alterations to a public water system, P-103's construction design will be subject to Guam EPA's Design Approval Construction Permitting (DACP) process, where design documents shall be submitted to Guam EPA for their review and approval prior to construction. Wells would be sited away from potential sources of contamination existing on or near

AAFB, including Installation Restoration Program sites, previous hazardous activity locations, sewer lines, fuel storage, fuel transmission lines, and fuel pumping locations. The proposed wells would be constructed in accordance with the Guam Water Resource Development and Operating Regulations, and well drilling permits shall need to be obtained from Guam EPA for each of the proposed wells prior to construction. As part of the permitting process, Guam EPA would conduct a review of each well location and review site-specific data. The two proposed exploratory/test wells would be tested for water quality before converting them into production wells. If elevated contaminant levels such as chlorides are detected, then affected well(s) would need to be relocated.

The Navy and the Guam Waterworks Authority (GWA) signed a Memorandum of Agreement (MOU) in July 2010 establishing objectives and an interagency framework for further discussions regarding solutions to address increased wastewater and potable water requirements for the Marine Corps relocation. The Guam Water Resources Development Group (GWRDG) was formed under this MOU and consists of the Navy, Guam EPA, GWA, the Consolidated Commission on Utilities, and the University of Guam's Water and Environmental Research Institute (WERI). The mission of the GWRDG is to protect Guam's water supply for quantity, quality, reliability, sustainability, and availability for all of Guam - present and future.

Due to concerns over increased groundwater withdrawal, the US Marine Corps funded the US Geological Survey (USGS) to conduct a groundwater availability study that would provide information and tools to more effectively manage Guam's groundwater resources. The goals of this study were to (1) advance the understanding of regional groundwater dynamics in the NGLA; (2) provide a new estimate of groundwater recharge for the entire island; and (3) develop a numerical groundwater flow and transport model for northern Guam that would serve as a tool to assist water resource managers in estimating the effects of selected groundwater-pumping and climate scenarios on the water supply. The groundwater model was used to simulate changes in water levels and salinity under several hypothetical withdrawal and recharge scenarios, and the results were published in *The Effects of Withdrawals and Drought on Groundwater Availability in the Northern Guam Lens Aquifer, Guam* (USGS 2013). The USGS groundwater model is being used to estimate the regional effects to groundwater availability from various withdrawal and recharge scenarios that included the increased withdrawal due to P-103 and other future DoD well construction. The results from the model would assist water resource managers to plan, design, and manage water systems that would produce a sustainable and reliable freshwater supply.

Also included in the 2015 ROD for the Military Relocation is DoD's commitment to support the GWRDG/USGS recommendation to rehabilitate and expand the hydrologic data collection network and monitoring necessary to ensure sustainable management of NGLA. In August 2016, the DoD's Office of Economic Adjustment awarded GWA a $3.7-million grant for the expansion and rehabilitation of the NGLA monitoring system. Referred to as the *One-Guam Well Installation and Rehabilitation Project*, this work is a collaboration amongst DoD, GWA, WERI and USGS, and the well construction/rehabilitation efforts are scheduled to begin during fiscal year 2018. Completion of this project will allow for implementation of the *One-Guam Aquifer Monitoring Program*, which will provide the long-term hydrologic data and information needed for effective management of Guam's drinking-water resources.

The USGS groundwater model, along with an improved network of wells to monitor groundwater levels and water quality, would be used to sustainably manage the NGLA. As part of the GWRDG, the USGS and WERI would conduct periodic monitoring of the aquifer groundwater chemistry to optimize the system, and the Navy or GWA could adjust pumping rates if necessary. This would ensure increased pumping does not adversely affect military or non-military sources of potable water. This approach would also allow adjustments in pumping to address changes in precipitation patterns due to climate change or long-term drought.

The new P-103 potable water system, once placed in production and serving customers, shall comply with all federal and local safe drinking water standards (e.g., Guam Primary Safe Drinking Water Regulations) for the protection and provision of safe drinking water through public water systems. A mandated 1,000-foot (305-meter) buffer identified as a wellhead protection zone would be established around the new wells constructed by P-103. Within this zone, prior to undertaking future activities and/or development, DoD is required to consult with and seek approval from Guam EPA to ensure appropriate measures and BMPs are implemented to protect the integrity of the NGLA.

*Terrestrial Habitat*

The P-103 project will remove approximately 41 acres (16.6 hectares) of recovery habitat for federally-listed threatened and/or endangered species, as this project occurs within designated Overlay Refuge. In accordance with the Endangered Species Act (ESA), consultations with the US Fish and Wildlife Service (USFWS) have concluded with the issuance of the 2015 and 2017 Biological Opinions (BO) for the Military Relocation. These Biological Opinions detail conservation measures that would require minimization and offset of impacts to threatened or endangered species. Conservation measures from the 2015 and 2017 BO that are applicable to P-103 include the following:

- Forest enhancement will be implemented by the Navy at Finegayan to offset the impacts of vegetation loss due to construction projects associated with the Military Relocation to Guam. Forest enhancement shall include: ungulate management consisting of exclusion fencing and active control (i.e. trapping, snaring, shooting) with the goal of eradication within the fenced areas; non-native, invasive vegetation removal, and; propagation, planting, and establishment of native species that are characteristic of native limestone forest habitats (e.g.*, A. mariannensis, G. mariannae, F. prolixa, M. citrifolia, W. elliptica*). The proposed forest enhancement areas set aside to compensate for vegetation loss due to the main Marine Corps cantonment are identified in **Figure 1-2**.
- All project contractors will receive natural resource awareness training and will implement risk reduction relative to spread of invasive species through measures applied to shipments and cargo (i.e. Hazard Analysis and Critical Control Point planning).
- High-value plant species within the P-103 project footprint, such as cycads and ESA-listed orchids, would be salvaged to the maximum extent practicable during construction activities and translocated to suitable habitat. The ability to salvage the plants would be dependent on the health of the plant and whether or not it would survive translocation. Plants deemed salvageable shall be transplanted into the proposed forest enhancement areas at Finegayan.
- Preconstruction surveys for the Mariana fruit bat shall be conducted prior to the onset of P-103 construction work intended to prevent, avoid, and minimize potential effects to Mariana fruit bats. If a Mariana fruit bat is present within 492 feet (150 meters) of the project site, the work will be postponed until the bat has left the area.
- Educational materials regarding Mariana fruit bat appearance, behavior, and biology shall be provided to all pertinent Navy personnel so that they can correctly identify any Mariana fruit bats near or within the proposed action.
- A Take Monitoring Plan for the Mariana fruit bat shall be prepared by the Navy in close coordination with and the approval of USFWS within 60 days of the date of issuance of the 2017 BO.

Also, all green waste generated from P-103 shall be processed 100% onsite (i.e. within the project's construction boundaries) for reuse. The Navy's construction contractor shall be responsible to perform green waste management. Cleared vegetation shall be mulched/chipped, then spread at applicable areas within the project footprint not to exceed two inches in thickness, and/or properly composted with the composted material reused as topsoil. The construction contractor shall obtain a solid waste processing permit from Guam EPA.

*Cultural Resources*

The P-103 layout was designed specifically for its Area of Potential Effect (APE) to avoid historic properties that are eligible for listing in the National Register of Historic Properties; hence the Navy finds that no historic properties are affected by P-103. In accordance with the 2011 Programmatic Agreement (PA) for the Military Relocation, the PA Memo for P-103 was posted on the Navy's cultural resources website (http://go.usa.gov/kZWG) for public review and comment, and the memo was submitted to the Guam State Historic Preservation Office (SHPO) in July 2017. Guam SHPO responded to the Navy in September 2017 expressing disagreement with the Navy's finding. The Navy has taken SHPO's comments into account and intends to address these comments directly with SHPO, with the goal of reaching consensus on the finding of effect.

If a consensus between the Navy and SHPO still cannot be reached in accordance with the procedures and within timelines specified in Stipulation V.B.2.c of the PA, then the Navy will provide written notice of the Navy's decision to the 2011 PA Signatories, Invited Signatories, and Concurring Parties. Any further disagreement shall be addressed in accordance with Stipulation XIII.B.3 of the PA, where:

- The Navy shall forward relevant documentation to the Advisory Council on Historic Preservation (ACHP) with the Navy's proposed resolution.

- Within 30 days of receiving the Navy's proposed resolution, ACHP shall: Concur with the Navy's proposed resolution, or; provide the Navy with recommendations on the proposed resolution.
- Within 30 days of receiving comments from ACHP, the Navy shall: Take into account ACHP's recommendations in making a final decision on the matter, and; provide written documentation of Navy's decision to the Signatories, Invited Signatories, Concurring Parties, and the public; and proceed consistent with its decision.
- If ACHP has not responded within 30 days, the Navy shall provide written documentation of the Navy's decision to the Signatories, Invited Signatories, Concurring Parties, and the public and proceed with its decision.

**PROJECT COASTAL CONSISTENCY DETERMINATION:**

Based on prior programmatic review, the following Coastal Policies are potentially applicable to this project. The following are the project-specific assessments of applicability and consistency:

*Development Policy (DP) 1 (Shore Area Development)*: Development does not affect the Seashore Reserve.

*DP2 (Urban Development)*: Area not subject to designations of the Land Use Districting Map.

*DP3 (Rural Development)*: Area not subject to designations of the Land Use Districting Map.

*DP4 (Major Facility Siting)*: Not a major facility (e.g. utilities, fuel and transportation facilities) subject to policy.

*DP5 (Hazardous Areas)*: The project does not develop within flood plains or upon major fault lines. P-103 may be sited within or near karst depressions and other potential sinkholes. To be consistent with DP5 to the maximum extent practicable and with Guam EPA oversight, the Navy would avoid direct modification to sinkholes or other surface depressions where feasible, or would modify these features without adverse effect as required by the Guam Soil Erosion and Sediment Control Regulations. Although the P-103 well field will be located within the AAFB MSA, the wells are proposed to be sited outside of the MSA's explosive safety arcs.

*DP6 (Housing)*: No housing development proposed for the project.

*DP7 (Transportation)*: No major transportation roadway networks proposed.

*DP8 (Erosion and Siltation)*: P-103 would not have any reasonably foreseeable spillover effects to Guam's coastal uses or resources with respect to DP8, since P-103 does not propose large-scale land clearing and ground disturbance that would have reasonably foreseeable effects on coastal uses or resources governed by this policy. Nevertheless, P-103 would be conducted in a manner that would control erosion, sediment and storm water runoff via adherence with the requirements of the Guam EPA clearing/grading permit and the US EPA 2017 CGP, implementation of a site-specific SWPPP and storm water control BMPs, and compliance with the Navy's LID policy.

*Resource Policy (RP) 1 (Air Quality)*: The minor air emission sources to be installed or built as part of P-103 are not anticipated to result in spillover coastal impacts to air quality. Regardless, all emission sources to be installed as part of each project (fuel-fired emergency generators) will require a construction and operating permit per the Guam Air Pollution Control Standards and Regulations. BMPs to control pollutant emissions, including fugitive dust, would be documented in the Environmental Protection Plan submitted for approval to Guam EPA prior to implementation.

*RP2 (Water Quality):* P-103 would have short-term, localized significant but mitigable impacts from groundwater extraction to the affected basin within the NGLA, but less than significant impacts to the NGLA overall. The Navy is committed to mitigating these short-term effects via its participation in the GWRDG and its full support of the *One-Guam Well Installation and Rehabilitation Project* and the subsequent *Aquifer Monitoring Program* for the sustainable management of the NGLA. P-103 would be consistent to the maximum extent practicable with RP2 and would fully comply with all federal and local

regulations for the protection of surface, ground, and drinking water quality.

*RP3 (Fragile Areas):* Impacts of P-103 to recovery habitat will be mitigated through implementation of conservation measures identified in the 2015 and 2017 Final Biological Opinions, which specify non-discretionary terms and conditions that would require minimization and offset of impacts to threatened or endangered species.

The P-103 contractor shall be required to mark pre-identified environmentally-sensitive sites (i.e. areas where threatened/endangered species and high-value trees are present), and not disturb the sites until authorized by the Navy and until mitigation actions are complete (e.g. plant salvage and translocation). The P-103 contractor shall coordinate with the Navy regarding the scheduling of all subsurface and horizontal groundwork (test borings, grubbing, grading, trenching, etc.) around or through these sites.

The P-103 layout was designed specifically to avoid historic properties, and the Navy will comply with Appendices F and G of the 2011 PA to protect cultural resources inadvertently discovered during construction.

*RP4 (Living Marine Resources):* No proposed activities affect the marine environment.

*RP5 (Visual Quality):* Project will not degrade views from scenic overlooks, highways or trails. The resulting view shed will be consistent with nearby facilities, since there are existing ground water wells in the immediate vicinity of the proposed P-103 development area.

*RP6 (Recreation Areas):* Project does not propose to develop recreational facilities.

*RP7 (Public Access):* In accordance with the 2011 PA, the Navy would generally meet the public access policy's intent on federal lands to the maximum extent practicable, as it would allow regular visits to or through federal lands to visit historic sites, culturally-important natural resources and traditional cultural places, subject to the Joint Region Marianas Public Access Plan for Historic and Cultural Sites.

*RP8 (Agricultural Lands):* No agricultural lands or activity in this area.

**Coastal Determination: <u>Consistent to the Maximum Extent Practicable</u>**

**Figure 1-1 P-103 Project Location and Preliminary Site Plan**

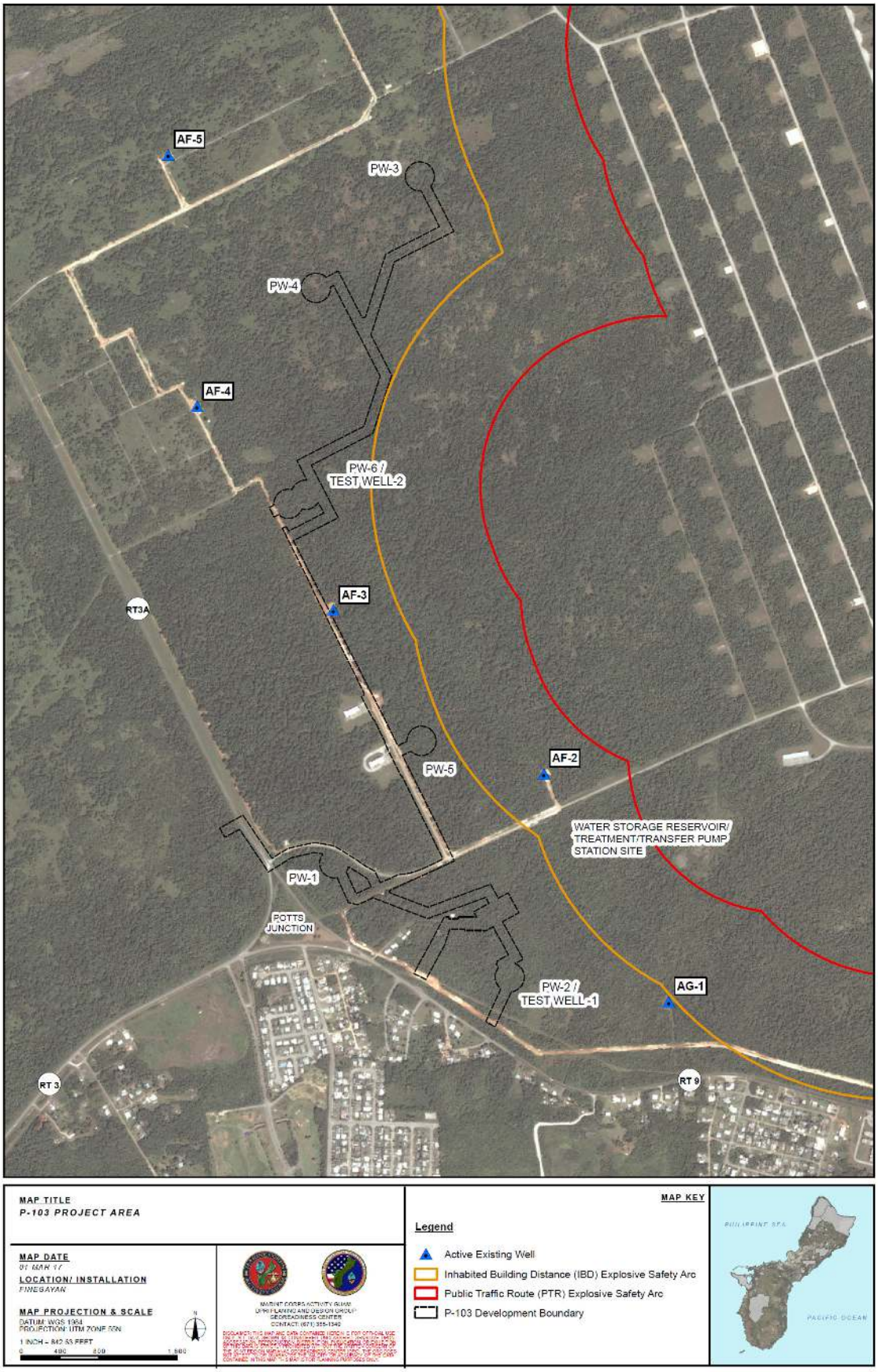
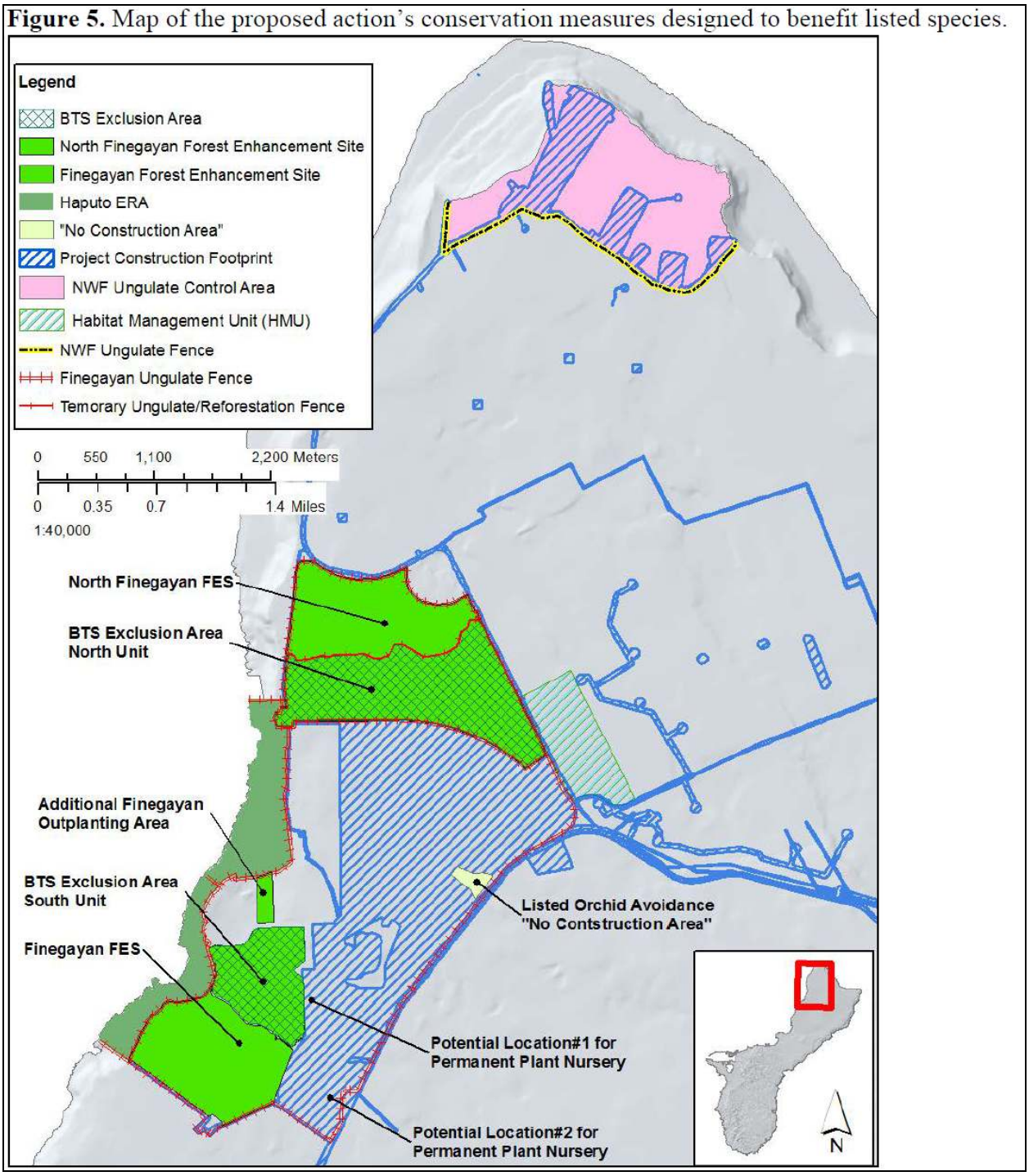


**Figure 1-2 Proposed Forest Enhancement, Finegayan (from 2017 USFWS BO)**



# EFFECTS TEST AND DETERMINATION UNDER COASTAL ZONE MANAGEMENT ACT

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| **Project:** H-280 Replace Andersen Housing Phase II | **Date:** 27 October 2017 |
| **Project Location:** Andersen Air Force Base | **Prepared By:** MCAG PWD PRF5.1.2 |

**PROJECT DESCRIPTION:**

The H-280 project is the 2nd phase of an eleven-year phased project scheduled to replace existing family housing units at Andersen Air Force Base (AAFB). The selected site is bounded by Plumeria Boulevard to the north, Marianas Boulevard to the south and Ulithi Boulevard to the east. The western project limits are located between Okinawa Lane and Palau Loop. The total project construction site limit is approximately 13.6 acres (5.5 hectares).

The H-280 project shall design and construct 60 family housing duplex units (30 buildings) constructed of reinforced concrete and/or pre-cast reinforced concrete typhoon shelter/housing structures for Guam's hot, humid climate. There will be a total of 58 three-bedroom and two four-bedroom family housing units.

Each unit will be provided with 3- or 4-bedroom units with 1-car garage, two bathrooms, laundry room, interior bulk storage, sufficient closet space and exterior storage. Other amenities include ceiling fans in all major rooms, ceramic tile floors in living areas, and overhang on the roof systems. Exterior building features will include concrete driveway and parking, covered screened patio with storm shutters, exterior storage, an entrance porch, and trash enclosure with gate.

The H-280 project location and the preliminary site plan are depicted in **Figures 2-1** and **2-2**, respectively.

**PROJECT EFFECTS TEST:**

Resources of Primary Coastal Concern (note that all could trigger reasonably foreseeable spillover impacts even if activities are confined to lands under federal jurisdiction):

*Water Quality*
The entire H-280 development occurs over the Northern Guam Lens Aquifer and will be bordering an existing ponding basin on Palau Loop. Within the ponding basin are several underground injection control (UIC) wells drilled into the karst limestone which serve to drain the basin. Because these UIC wells are located near the coast and are not upgradient of any drinking water production wells, they will not have any impact to the aquifer. Additionally, through appropriate implementation of design and construction mitigations and/or best management practices (BMPs) committed to in the 2015 Record of Decision (ROD) for the Military Relocation, impacts to the aquifer would be minimized. Such measures include obtaining a Guam Environmental Protection Agency (EPA) Clearing and Grading Permit and coverage under the U.S. EPA Construction General Permit (CGP), which include implementing an Environmental Protection Plan as well as the CGP-required Stormwater Pollution Prevention Plan.

Stormwater hydrology and hydraulics have been designed in accordance with federal, local and military requirements. The drainage system has been designed for both flood control and water quality management. Design criteria used for H-280 include Unified Facilities Criteria (UFC) 3-201-01 Civil Engineering, UFC 3-210-10 Low Impact Development (LID), the Guam Department of Public Works Transportation Stormwater Drainage Manual, and the 2006 CNMI and Guam Stormwater Management Manual.

The proposed LID treatments for H-280 are bioswales and infiltration chambers. These treatment facilities are decentralized and intended to manage runoff close to its source. The bioswales are an engineered natural treatment, small in size, distributed throughout the H-280 project area. They are intended to retain, treat and percolate roadway runoff. The bioswales are grassed channels underlain by layers of engineered soil, drain rock, and sand. The bioswales receive flow via sidewalk culverts to capture roadway runoff. The infiltration chambers are an engineered subsurface treatment, dedicated one per

housing unit, and are intended to retain and percolate roof runoff.

All new water, stormwater and/or sewer projects, or projects that make significant alterations to these systems, are required to obtain design approval from Guam EPA prior to construction. Initial feedback from Guam EPA advised that overall comments from their design review of the H-279 (Replace Andersen Housing Phase I) project were also applicable to H-280; hence, Guam EPA's comments are being considered as part of the design process for H-280.

*Terrestrial Habitat*
Construction of H-280 occurs entirely over previously-developed areas and outside the designated Overlay Refuge. In accordance with the Endangered Species Act, the Navy has consulted with the U.S. Fish and Wildlife Service (USFWS), and this has concluded with the issuance of the 2015 and 2017 Biological Opinions (BO) for the Military Relocation by USFWS. These BOs detail conservation measures that would require minimization and offset of impacts to threatened or endangered species. Appropriate conservation measures shall be carried out by the Navy and its contractors to comply with ESA.

The Micronesian starling, a Guam-listed endangered species, is present in the proposed H-280 housing area at AAFB. During proposed construction and demolition activities, some Micronesian starlings would relocate to other suitable areas on AAFB, particularly to the north and south of the proposed family housing area. To the maximum extent practicable, the mature palm trees that starlings use for nesting and roosting within the existing housing area would not be removed during the proposed construction activities. Since construction and demolition would occur in phases, the entire starling population within the existing housing area would not be impacted at one time. After construction, starlings could return to the new housing area. It is also expected that the new housing area may potentially increase the area of suitable habitat on AAFB by increasing potential nesting habitat (i.e., man-made structures, palm trees, areas with brown tree snake control). Therefore, as the loss of a portion of existing Micronesian starling habitat on AAFB would be temporary and there would be an increase in starling habitat during and after construction, there would be less than significant impacts to the Micronesian starling associated with H-280.

Although no non-discretionary measures for the Micronesian starling are identified in the 2015 ROD or in the 2015/2017 Biological Opinions, the Navy is currently implementing measures at AAFB that are highly beneficial to the starlings, as part the Joint Region Marianas Integrated Natural Resources Management Plan (INRMP). The Navy has installed and is monitoring 73 nest boxes at AAFB, and these boxes were designed to create a snake- and rat-resistant nesting site.

*Cultural Resources*
In accordance with the 2011 Programmatic Agreement (PA) for the Military Relocation, consultation for H-279 with the Guam State Historic Preservation Office (SHPO) for effects to historical/cultural resources has concluded with the Navy's finding of no historic properties affected. The Area of Potential Effect indicated in this PA Memo was for the entire 11-year phased project, and includes not only the H-279 and H-280 project areas, but also all other subsequent projects as part of this housing renovation at AAFB. So as to ensure clarity with the Guam SHPO, H-280 was listed as an upcoming project in the Navy's Semi-Annual Report required by the 2011 PA to be distributed to, and cited the H-279 consultation as satisfying the consultation requirements for H-280. The PA Memo for this project can be found on DoD's website: http://go.usa.gov/kZWG.

**PROJECT COASTAL CONSISTENCY DETERMINATION:**

Based on prior programmatic review, the following Coastal Policies are potentially applicable to this project. The following are the project-specific assessments of applicability and consistency:

*Development Policy (DP) 1 (Shore Area Development)*: Development does not affect the Seashore Reserve.

*DP2 (Urban Development)*: Area not subject to designations of the Land Use Districting Map.

*DP3 (Rural Development)*: Area not subject to designations of the Land Use Districting Map.

*DP4 (Major Facility Siting)*: Not a major facility (e.g. utilities, fuel and transportation facilities) subject to policy. Development occurs adjacent to an existing military airfield area (AAFB Northwest Field).

*DP5 (Hazardous Areas)*: The project does not develop within flood plains or upon major fault lines. The existing ponding basin on Palau Loop is a sinkhole; however, the H-280 development footprint will not alter the existing drainage basin area for this sinkhole.

*DP6 (Housing)*: H-280 does not propose housing development within lands under the Government of Guam's jurisdiction. The Navy's activities on federal lands would generally meet the policy's intent to the maximum extent practicable as actions would be implemented in conformance with efficient community design per published Navy planning criteria, along with proposed improvements to off-base civilian infrastructure that would be needed to support the Marine Corps relocation.

*DP7 (Transportation)*: No major transportation roadway networks proposed.

*DP8 (Erosion and Siltation)*: H-280 construction activities will meet requirements of Guam EPA-issued clearing and grading permits and will comply with the 2017 NPDES General Permit for Discharges from Construction Activities. Development shall comply with the Navy's Low Impact Development (LID) policy, which sets a goal of no net increase in stormwater and sediment or nutrient loading from major renovation and construction projects; this policy is in addition to the aforementioned stormwater management program permit requirements.

*Resource Policy (RP) 1 (Air Quality)*: No emission sources (e.g. fuel-fired emergency generators, paint booths) are proposed as part of the H-280 project that will require a construction and operating permit under the Guam Air Pollution Control Standards and Regulations. BMPs to control pollutant emissions, including fugitive dust, would be documented in the Environmental Protection Plan submitted for approval to Guam EPA prior to implementation.

*RP2 (Water Quality):* Reasonably foreseeable direct and indirect impacts to coastal zone water quality are not anticipated for H-280, although the Navy will still comply with protective regulations mentioned under DP8 for the protection of aquifer water quality. Although UIC wells are in the vicinity of the project, implementation of applicable BMPs, compliance with applicable EPA permit requirements, and the proposed construction of rain gardens and infiltration chambers for stormwater control all contribute to a much-reduced risk for spills to have far-ranging impacts that could result in effects to coastal zone resources. The 2006 CNMI Guam Stormwater Manual and the Navy's LID policy have been referenced for the design of stormwater management BMPs. Green waste processing and composting facilities will be sited outside wellhead protection areas and will implement controls and BMPs in accordance with the Guam EPA-issued Solid Waste Processing permit.

*RP3 (Fragile Areas):* Impacts of H-280 to wildlife habitat will be mitigated through implementation of conservation measures identified in the 2015 and 2017 Final BO; these BOs detail conservation measures that would require minimization and offset of impacts to threatened or endangered species. No historic properties are affected by the H-280 project.

*RP4 (Living Marine Resources):* There are no anticipated direct impacts to marine resources as a result of construction activities associated with H-280, although there would be reasonably foreseeable spillover effects to fish and coral from the likely general increase of activities such as recreational fishing, snorkeling and diving activities in waters within GovGuam jurisdiction from the new population associated with the Marine Corps relocation. To increase the awareness of military, civilian and contractor personnel associated with the Marine Corps relocation, the Navy would require education and awareness training that would emphasize the importance of coastal ecosystems, compliance with posted rules, and the proper way to interact with marine resources so as to avoid and minimize damage to reefs caused by recklessness in anchor use, reefwalking, scuba diving, snorkeling or fishing activities. Violation of Department of Agriculture regulations within GovGuam jurisdiction would be subject to penalties and/or sanction. In recreational areas within federal lands, the Navy imposes its own fishing instructions that are consistent with GovGuam regulations and does not authorize the taking of any other marine resources besides fish in authorized areas. The Navy would manage access to the Haputo Beach and Ecological

Reserve Area by placing fencing at the trail entrance and could restrict such access if evidence of environmental damage is observed by Navy biologists as part of the monitoring requirements in the Joint Region Marianas Integrated Natural Resources Management Plan.

*RP5 (Visual Quality):* Project will not degrade views from scenic overlooks, highways or trails. The resulting view shed will be consistent with adjacent housing areas within AAFB after all phases of the proposed housing construction are completed.

*RP6 (Recreation Areas):* Project does not propose to develop recreational facilities.

*RP7 (Public Access):* No impacts on public access.

*RP8 (Agricultural Lands):* No agricultural lands or activity in this area.

**Coastal Determination: <u>Consistent to the Maximum Extent Practicable</u>**

**Figure 2-1 H-280 Project Location**

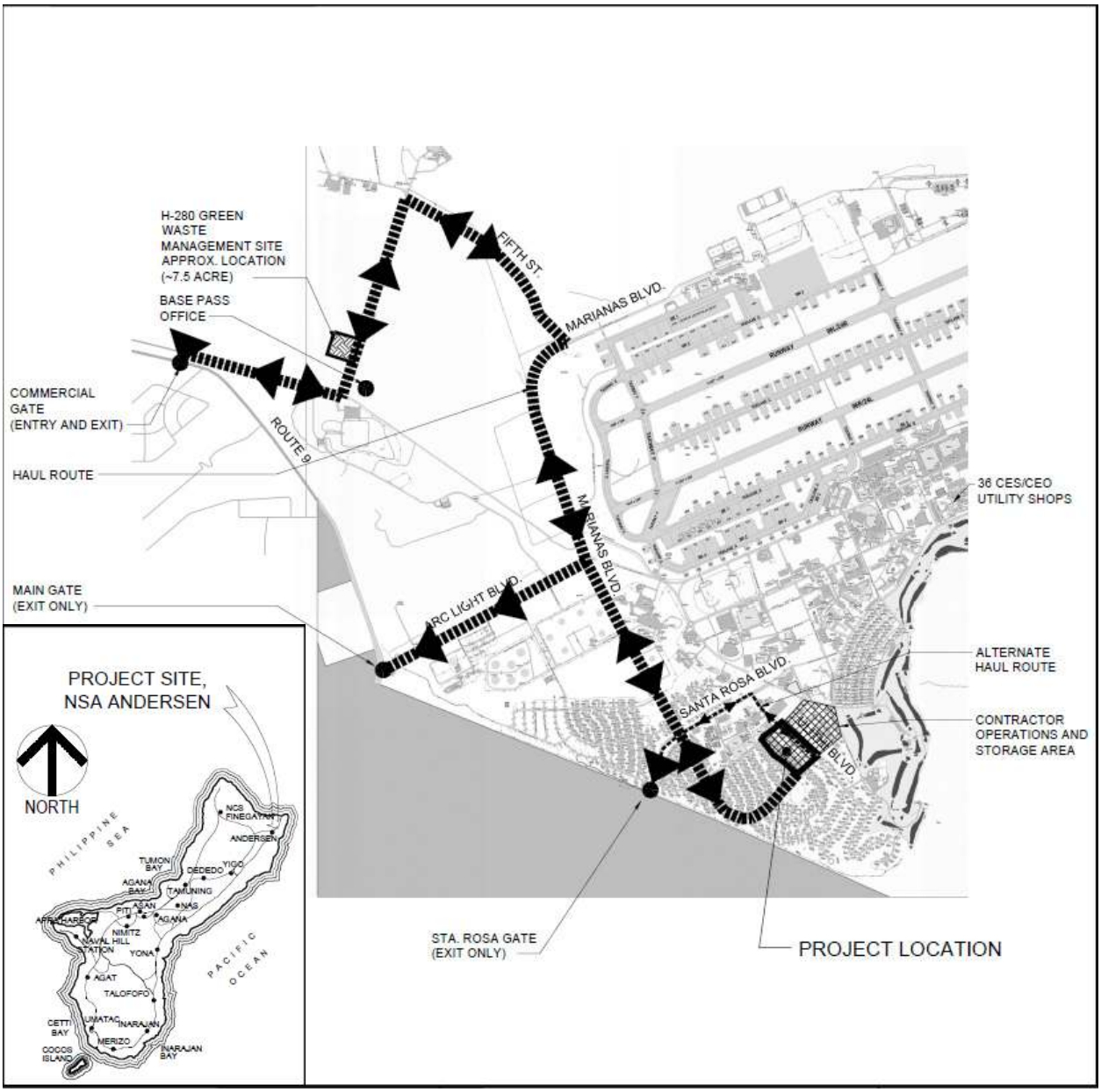


**Figure 2-1 H-280 Preliminary Site Plan**

# EFFECTS TEST AND DETERMINATION UNDER COASTAL ZONE MANAGEMENT ACT

| | |
|---|---|
| **Project:** J-006 Apra Medical/Dental Clinic | **Date:** 27 October 2017 |
| **Project Location:** Naval Base Guam | **Prepared By:** MCAG PWD PRF5.1.2 |

**PROJECT DESCRIPTION:**

The J-006 project shall design and construct a single-level outpatient medical and dental facility in Apra Harbor, Naval Base Guam. An adequately sized, modern outpatient clinic is required to provide the space to accommodate the clinical staffing and workload for existing beneficiaries, outpatient functions to be relocated from US Naval Hospital, Guam and the increase in beneficiaries expected as a result of the relocation of military units to Guam as part of the Marine Corps Relocation.

The new clinic will replace the existing Branch Health Clinic and Branch Dental Clinic. There will be limited demolition required for this project. There are small areas of asphalt pavement and curb and gutter remnants left over from previous facilities that were located on the site. Additionally, there are underground water, sanitary sewer and storm sewer lines and utility structures located within the site that served previous facilities that were located on the site. These utility features will be removed as needed to provide for the construction of this project.

The facility will be constructed of reinforced concrete with slab on grade foundations. All components such as exterior walls, windows, roofing, mechanical and electrical systems will be compatible with the Guam environment and Commander, Joint Region Marianas design standards. The facility includes spaces for administration, medical, mental health, urgent care and dental clinics, preventive medicine, ancillary services and required support functions.

Information systems include basic telephone, computer network, fiber optic, cable television, security and fire alarm systems and infrastructure. Built in equipment includes a generator. Special construction features include canopies for the main, emergency and staff entrances. Site preparation includes site clearing, excavation and preparation for construction. Paving and site improvements include grading, landscaping, sidewalks, curbs, roadways, fencing, storm-water drainage and parking facilities for personal vehicles and emergency vehicles. Site soil conditions and seismic concerns require construction with enhanced materials for the parking areas. New parking will be developed around the new Clinic; total new parking space provided is 183 spaces.

Electrical utilities include primary and secondary distribution systems, lighting, transformers, and tele-communications infrastructure. Mechanical utilities include heating, ventilation and air conditioning, water lines, plumbing and plumbing fixtures, sanitary sewer lines, fire protection systems and supply lines. The project will be designed to Leadership in Energy and Environmental Design (LEED) certification and includes a storm water management system.

The J-006 project location and the overall site layout plan are depicted in **Figures 3-1** and **3-2**, respectively.

**PROJECT EFFECTS TEST:**

Resources of Primary Coastal Concern (note that all could trigger reasonably foreseeable spillover impacts even if activities are confined to lands under federal jurisdiction):

*Water Quality*
The proposed J-006 development does not occur over the Northern Guam Lens Aquifer, but is less than half a mile from the Inner Apra Harbor and wetland areas. Although construction of J-006 is not anticipated to directly impact these waters, during the construction phase of the proposed project, there is a potential to increase the amount of sediment in the runoff that could eventually flow into these waters. However, these potential temporary effects would be minimized through compliance with the Guam Soil

Erosion and Sediment Control Regulations, as well as appropriate implementation of design and construction mitigations and/or best management practices (BMPs) committed to in the 2015 Record of Decision (ROD) for the Military Relocation. J-006 shall obtain a Clearing and Grading Permit from the Guam Environmental Protection Agency (EPA), which includes the preparation and implementation of an Environmental Protection Plan as a permit stipulation. In accordance with the Clean Water Act, J-006 shall also obtain coverage under the US EPA 2017 Construction General Permit (CGP), which includes the implementation of and compliance with a site-specific Storm Water Pollution Prevention Plan (SWPPP) as a condition of coverage.

A storm water management plan was developed for J-006 to reduce impervious cover, promote onsite infiltration, and capture and treat storm water runoff from 90% of the average annual rainfall. The resulting storm water management system proposed for J-006 provides a treatment train of methods to meet the intent of LEED and the US Navy's Low Impact Development (LID) policy, by reducing runoff volume and improving water quality by the combined effects of infiltration, evaporation, retention and retardation of runoff. This system's design follows the 2006 CNMI and Guam Storm Water Management Manual for the conveyance system, detention sizing, and for water quality and bio-retention design. Storm water greater than the underground system's capacity will be conveyed by surface flow to storm water detention areas, where this runoff is detained using an underground storm chamber and stone system. Additional storm water quantity shall be removed by means of bio-retention swales, where storm water enters the bio-retention swales from surface flow, which allows removal of pollutants prior to onsite infiltration/percolation.

The future J-006 storm water system is designed to pre-treat the "first flush" of each storm event; as storm water enters each water quality basin inlet, pollutants are removed to catch the "first flush" and the storm water is then conveyed into the underground detention basin where the flow is isolated for additional pollutant removal. For storm water that leaves the underground detention basin into the bio-retention swales, a minimum of 80% of the total suspended solids will have been removed.

Once construction activities for J-006 are complete and in accordance with the Clean Water Act, this facility shall be included and subject to the terms and conditions of the Navy's Municipal Separate Storm Sewer System (MS4) permit issued by US EPA. Permit conditions in the Navy's MS4 permit include the following:

- Prevention of illicit connections and illegal dumping of pollutants into the MS4
- Minimum control measures e.g. public education/outreach and involvement/participation, illicit discharge detection/elimination, accurate MS4 mapping, post-construction storm water management in new developments, pollution prevention/good housekeeping etc.
- Total Maximum Daily Load (TMDL) requirements
- Compliance with Guam Water Quality Standards (22 Guam Administrative Rules, Guam EPA, Division II, Water Control, Chapter 5); and
- Storm water pollutant monitoring, evaluation and reporting requirements.

When the J-006 medical/dental facility is operational, the Apra Harbor Wastewater Treatment Plant (AHWWTP) at Naval Base Guam shall receive and treat the domestic and non-domestic wastewater discharges from this future facility, prior to discharging the treated water to nearshore waters. J-006 is not anticipated to cause the AHWWTP to exceed their effluent limitations stipulated in their National Pollutant Discharge Elimination System (NPDES) permit. Furthermore, non-domestic wastewater discharges from the future medical/dental facility will be subject to the Joint Region Marianas Wastewater Pollutant Minimization and Discharge Certificate Program, which sets limits and procedures for discharges into the sanitary sewer system.

*Terrestrial Habitat*

The total J-006 development area is approximately 10 acres (4.1 hectares), is entirely over previously-disturbed areas, and occurs outside of designated Overlay Refuge. Although no threatened or endangered species are known to be present in the J-006 development area, the project shall encroach on potential recovery habitat for the Guam rail (*Gallirallus owstoni*, also known as the ko'ko'), which exists only in captivity. In accordance with the Endangered Species Act (ESA), consultations with the US Fish and Wildlife Service (USFWS) have concluded with the issuance of the 2015 and 2017 Biological Opinions (BO) for the Military Relocation. These Biological Opinions detail conservation measures that

would require minimization and offset of impacts to threatened or endangered species. Required conservation measures from these Biological Opinions, such as the Navy's implementation of biosecurity conservation measures (including brown tree snake eradication/control and Hazard Analysis and Critical Control Point planning), the protection and management of approximately 5,234 acres in northern Guam (accomplished via a Memorandum of Agreement between the Navy and USFWS regarding conservation of Guam Micronesian Kingfisher recovery habitat), and forest enhancement on approximately 1,000 acres in Finegayan, will all benefit the Guam rail by increasing/enhancing the species' recovery habitat, thus improving the likelihood that the rail could eventually be reintroduced successfully.

Only common migratory bird species widespread on Guam are known from the Naval Base Guam area. However, the proposed location of J-006 is within an area where there is minimal habitat for avian species. Navy contractors shall receive natural resources awareness training that will discuss actions as to when suspected migratory bird nests are found at their jobsite, where they are not to pursue, hunt, take, capture, or kill these birds, or to attempt to do these aforementioned actions (which would be prohibited activities under the Migratory Bird Treaty Act, MBTA), and contractors shall immediately notify their contracting officer if a nesting site is found at their jobsite. If Navy biologists confirm that the nesting is indeed a specie (or species) protected by MBTA, the contractor shall be advised to avoid the nest(s) if possible, although incidental disturbance to MBTA-nests is not unlawful.

*Cultural Resources*
The Navy finds that no historic properties are affected by J-006. In accordance with the 2011 Programmatic Agreement (PA) for the Military Relocation, the PA Memo for J-006 was posted on the Navy's cultural resources website (http://go.usa.gov/kZWG) for public review and comment, and the memo was submitted to the Guam State Historic Preservation Office (SHPO) in March 2011. The Navy's consultation with Guam SHPO for J-006 has concluded, as documented in Stipulation V.A.1.a of the 2011 PA.

**PROJECT COASTAL CONSISTENCY DETERMINATION:**

Based on prior programmatic review, the following Coastal Policies are potentially applicable to this project. The following are the project-specific assessments of applicability and consistency:

*Development Policy (DP) 1 (Shore Area Development)*: Development does not affect the Seashore Reserve.

*DP2 (Urban Development)*: Area not subject to designations of the Land Use Districting Map.

*DP3 (Rural Development)*: Area not subject to designations of the Land Use Districting Map.

*DP4 (Major Facility Siting)*: Not a major facility (e.g. utilities, fuel and transportation facilities) subject to policy.

*DP5 (Hazardous Areas)*: The J-006 project does not develop within flood plains or upon major fault lines, and is not sited within or near karst depressions and other potential sinkholes. The geotechnical investigation for J-006 was completed in July 2010, and recommendations were utilized in support of project design.

*DP6 (Housing)*: No housing development proposed for the project.

*DP7 (Transportation)*: No major transportation roadway networks proposed.

*DP8 (Erosion and Siltation)*: J-006 would not have any reasonably foreseeable spillover effects to Guam's coastal uses or resources with respect to DP8, since J-006 does not propose large-scale land clearing and ground disturbance that would have reasonably foreseeable effects on coastal uses or resources governed by this policy. Construction activities for J-006 would be conducted in a manner that would control erosion, sediment and stormwater runoff via adherence with the requirements of the Guam EPA clearing/grading permit and the US EPA 2017 CGP, implementation of a site-specific SWPPP and stormwater control BMPs, and compliance with the Navy's LID policy.

*Resource Policy (RP) 1 (Air Quality)*: The minor air emission sources to be installed or built as part of P-103 are not anticipated to result in spillover coastal impacts to air quality. Regardless, all emission sources to be installed as part of each project (fuel-fired emergency generator) will require a construction and operating permit per the Guam Air Pollution Control Standards and Regulations. BMPs to control pollutant emissions, including fugitive dust, would be documented in the Environmental Protection Plan submitted for approval to Guam EPA prior to implementation.

*RP2 (Water Quality):* The J-006 project would be consistent to the maximum extent practicable with RP2, achieved through compliance with the Guam EPA Clearing/Grading and US EPA 2017 CGP/MS4 permit stipulations, the appropriate design of the future facility's storm water management system, and the future facility's adherence to the Joint Region Marianas Wastewater Pollutant Minimization and Discharge Certificate Program.

*RP3 (Fragile Areas):* Although J-006 is proposed entirely over previously-disturbed areas, its impact to potential recovery habitat for the Guam rail will be mitigated through implementation of the non-discretionary conservation measures identified in the 2015 and 2017 Final Biological Opinions, as discussed in Terrestrial Habitat under the Project Effects Test (page 2-2). No historic properties are present within the J-006 area of potential effect, and the Navy will comply with Appendices F and G of the 2011 PA to protect cultural resources inadvertently discovered during construction.

*RP4 (Living Marine Resources):* No proposed activities affect the marine environment.

*RP5 (Visual Quality):* Project will not degrade views from scenic overlooks, highways or trails. The resulting view shed will be consistent with nearby facilities inside Naval Base Guam.

*RP6 (Recreation Areas):* Project does not propose to develop recreational facilities.

*RP7 (Public Access):* Project is located within Naval Base Guam and does not propose new restrictions on public access.

*RP8 (Agricultural Lands):* No agricultural lands or activity in this area.

**Coastal Determination: <u>Consistent to the Maximum Extent Practicable</u>**

**Figure 3-1 J-006 Project Location**

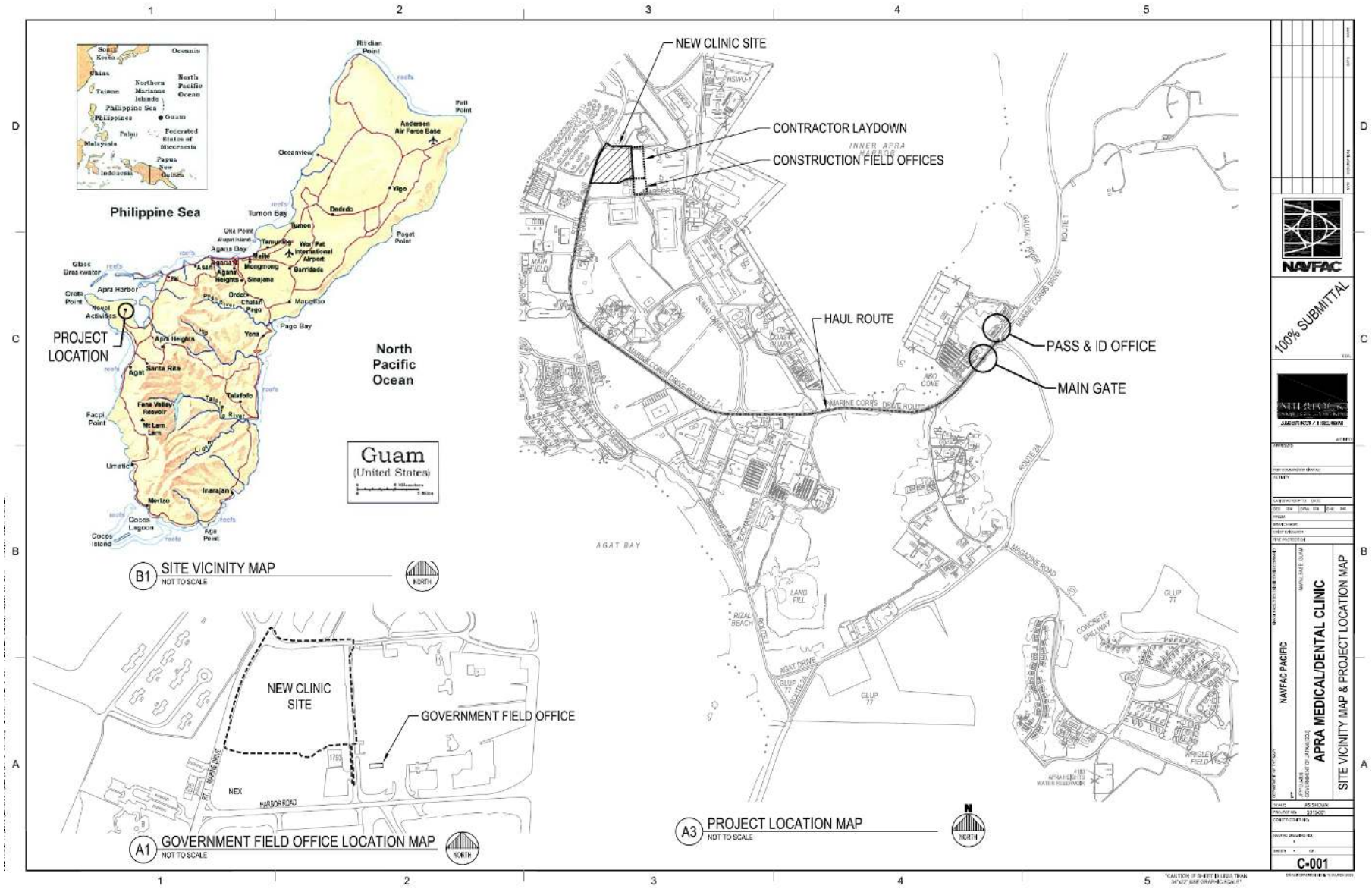
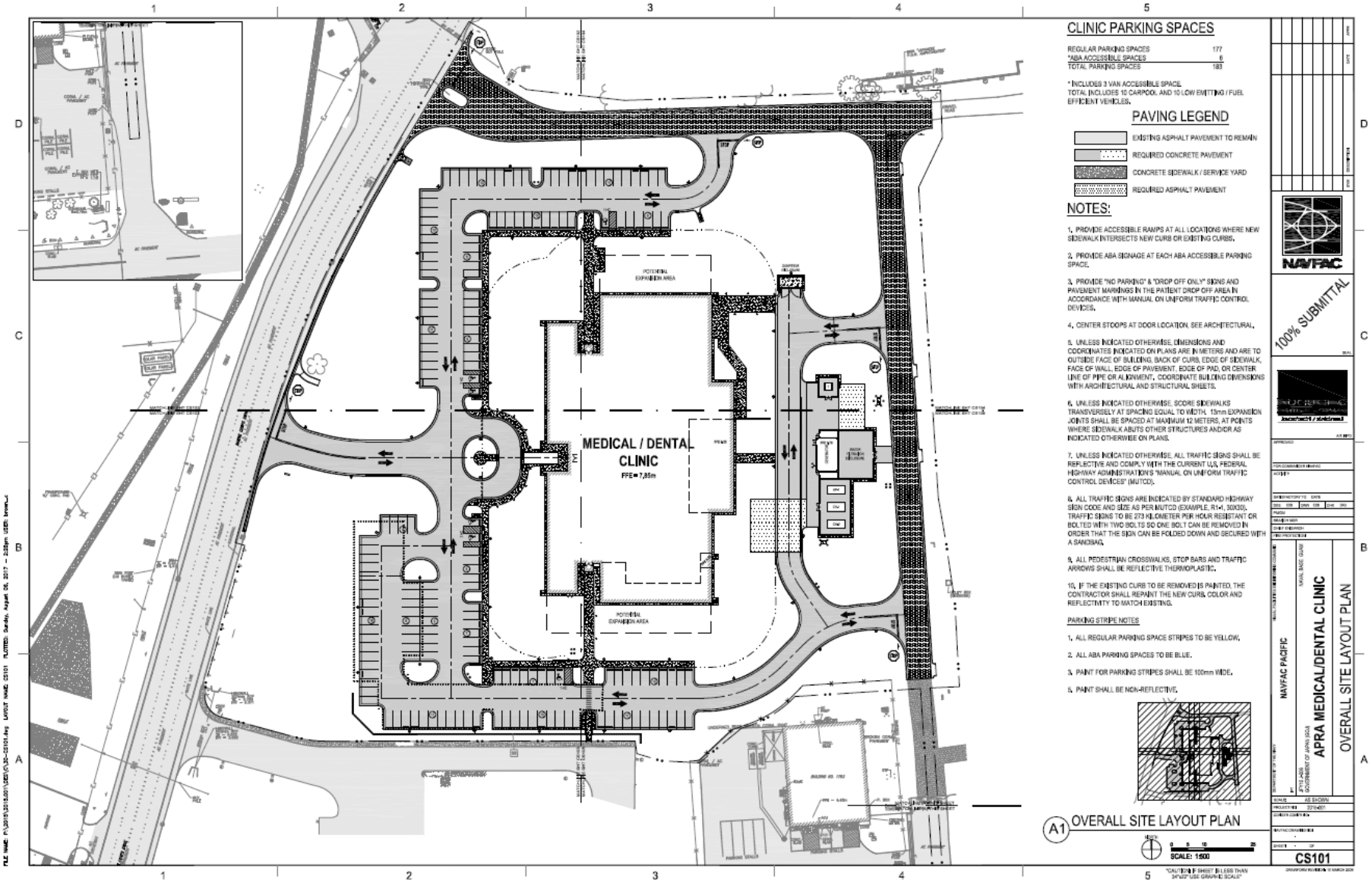


**Figure 3-2 J-006 Overall Site Layout Plan**



# EFFECTS TEST AND DETERMINATION UNDER COASTAL ZONE MANAGEMENT ACT

| | |
|---|---|
| **Project:** Construct Northern Haputo Ungulate Fence (Guam Micronesian Kingfisher Memorandum of Agreement) | **Date:** 27 October 2017 |
| **Project Location:** Haputo Ecological Reserve Area, Naval Base Guam Telecommunications Station | **Prepared By:** MCAG PWD PRF5.1.2 |

**PROJECT DESCRIPTION:**

The proposed action is to construct fencing to exclude ungulates (feral pigs and deer) from the Haputo Ecological Reserve Area (ERA), as part of conservation actions identified in the *Memorandum of Agreement between the Navy and the US Fish and Wildlife Service (USFWS) regarding Conservation of Guam Micronesian Kingfisher Recovery Habitat in Northern Guam* (referred to in this document as the GMK MOA). This ungulate fencing for GMK MOA will be completed in two phases, with this northern section scheduled to start in FY18 and the southern section planned for FY19. The northern fence section is approximately 2,556 meters (8,386 feet. The fence uses galvanized livestock panels approximately 4.8 meters (16 feet) long by 1.06 meter (3.5 feet) wide secured to studded T-posts 2.7 meters (9 feet) in length. The fence includes a hog wire mesh apron at the bottom and heavy duty flat extruded polypropylene deer mesh on the upper part to form an overall height of not less than 2.1 meters (7 feet). All metal parts used in the fence are galvanized steel with the exception of aluminum hog rings that are used for attaching neoprene deer mesh. Gates shall be provided at strategic locations for maintenance and recreational personnel ingress and egress. T-posts will be buried, emplaced with concrete or driven through the ground at a varying depth (typically 0.6 meters or 2 feet). Project site work includes up to 0.9 meters (3 feet) wide on each side and surface clearing of vegetation up to 4.6 meters (15 feet) wide on each side, both widths measured from centerline. Slight adjustments to the alignment of the fence may be required to minimize vegetation disturbance, and to avoid all threatened/endangered species, eligible historic properties and/or munitions and explosives of concern (MEC)/unexploded ordnance (UXO) anomalies during finalization of the location of footings. Future maintenance of the fence and the area surrounding the fence vicinity shall include grounds maintenance, shrub/tree pruning, herbicide application, removal of invasive vines, and fence post/panel repair or replacement.

Project location and the proposed fence layout are depicted in **Figure 4-1**.

**PROJECT EFFECTS TEST:**

Resources of Primary Coastal Concern (note that all could trigger reasonably foreseeable spillover impacts even if activities are confined to lands under federal jurisdiction):

*Water Quality*
Construction activities are not in proximity and will not be of sufficient scale to influence any surface water conveyance or injection wells to affect coastal zone ground or surface water (marine) resources. It is very unlikely that coastal zone drinking water or marine habitat water quality would be affected by silt from erosion, hazardous material spills and other pollution sources that may be generated as a result of construction activities. Although this ungulate fence occurs over the Northern Guam Lens Aquifer, impacts related to fence construction would be minimized through compliance with the Guam Soil Erosion and Sediment Control Regulations, as well as appropriate implementation of design and construction mitigations and/or best management practices (BMPs) committed to in the 2015 Record of Decision (ROD) for the Military Relocation. Project shall obtain a Clearing and Grading Permit from the Guam Environmental Protection Agency (EPA), which includes the preparation and implementation of an Environmental Protection Plan as a permit stipulation. Project shall also obtain coverage under the US EPA 2017 Construction General Permit (CGP), which includes the implementation of and compliance with a site-specific Storm Water Pollution Prevention Plan (SWPPP) as a condition of coverage. Construction design specifications shall reference the 2006 CNMI and Guam Storm Water Management Manual.

*Terrestrial Habitat*
As part of environmental planning for the Military Relocation and during the consultation process with the USFWS as required under Section 7 of the Endangered Species Act (ESA), the Navy and USFWS entered into a Memorandum of Agreement in 2015 (i.e. the GMK MOA), where the Navy agreed to designate approximately 5,234 acres (2,118 hectares) of land under the custody and control of the Department of Defense (DoD) in northern Guam to a status that will provide durable habitat protection needed to support native habitat restoration and land management for the survival and recovery of the extirpated Guam Micronesian kingfisher. These 5,234 acres, which includes the Haputo ERA, have been identified by USFWS as needed to offset impacts of the Guam Military Relocation, and USFWS required enhanced management activity (e.g. construction of ungulate fencing) for the land identified to ensure this habitat supports the reintroduction of the kingfisher. Designation of the 5,234 acres may also provide a conservation benefit to other Federally-listed species with similar habitat requirements (e.g. Mariana crow, Mariana fruit bat). A map of GMK MOA lands is provided as **Figure 4-2**.

The fence construction will remove approximately 3.6 acres (1.46 hectares) of vegetation (total i.e. both northern and southern fence sections), but this fence is essential for the improvement of recovery habitat for federally-listed threatened and/or endangered species, as specified in the GMK MOA and the 2015 and 2017 Biological Opinions (BO) for the Military Relocation. Work occurs within designated Overlay Refuge. Final fence alignment shall be laid out so as to avoid any impacts to threatened/endangered plant species. Conservation measures from the 2015 and 2017 BO that are applicable to the construction of this ungulate fence include the following:

- All project contractors will receive natural resource awareness training and will implement risk reduction relative to spread of invasive species through measures applied to shipments and cargo (i.e. Hazard Analysis and Critical Control Point planning).
- Preconstruction surveys for the Mariana fruit bat shall be conducted prior to the onset of construction work, intended to prevent, avoid, and minimize potential effects to Mariana fruit bats. If a Mariana fruit bat is present within 492 feet (150 meters) of the project site, the work will be postponed until the bat has left the area.

*Cultural Resources*
Consultation for the construction of the northern fence section with the Guam State Historic Preservation Office (SHPO) has concluded, and the SHPO has concurred with the Navy's finding of no adverse effect to historic properties. A copy of SHPO's concurrence letter is provided as **Figure 4-3**.

**PROJECT COASTAL CONSISTENCY DETERMINATION:**

Based on prior programmatic review, the following Coastal Policies are potentially applicable to this project. The following are the project-specific assessments of applicability and consistency:

*Development Policy (DP) 1 (Shore Area Development)*: Although the Haputo ungulate fence shall be within Navy property and not in Guam's Seashore Reserve, its purpose is fully aligned with the intent of DP1 to *"enhance the surrounding coastal area's environmental quality,"* where this ungulate fence shall protect critical habitat within the Haputo ERA.

*DP2 (Urban Development)*: Area not subject to designations of the Land Use Districting Map.

*DP3 (Rural Development)*: Area not subject to designations of the Land Use Districting Map.

*DP4 (Major Facility Siting)*: Not a major facility (e.g. utilities, fuel and transportation facilities) subject to policy.

*DP5 (Hazardous Areas)*: The project does not develop within flood plains or upon major fault lines. Proposed fence may be sited within or near karst depressions and other potential sinkholes. To be consistent with DP5 to the maximum extent practicable and with Guam EPA oversight, the Navy would avoid direct modification to sinkholes or other surface depressions where feasible, or would modify these features without adverse effect as required by the Guam Soil Erosion and Sediment Control Regulations.

*DP6 (Housing)*: No housing development proposed for the project.

*DP7 (Transportation)*: No major transportation roadway networks proposed.

*DP8 (Erosion and Siltation)*: This project would not have any reasonably foreseeable spillover effects to Guam's coastal uses or resources with respect to DP8, since it does not propose large-scale land clearing and ground disturbance that would have reasonably foreseeable effects on coastal uses or resources governed by this policy. Nevertheless, fence construction would be conducted in a manner that would control erosion, sediment and storm water runoff via adherence with the requirements of the Guam EPA clearing/grading permit and the US EPA 2017 CGP, implementation of a site-specific SWPPP and storm water control BMPs, and compliance with the Navy's LID policy.

*Resource Policy (RP) 1 (Air Quality)*: No air emission sources are proposed.

*RP2 (Water Quality):* This project would be consistent to the maximum extent practicable with RP2, achieved through compliance with the Guam EPA Clearing/Grading and US EPA 2017 CGP permit stipulations.

*RP3 (Fragile Areas):* Impacts of the fence construction to recovery habitat will be mitigated through implementation of conservation measures identified in the 2015 and 2017 Final Biological Opinions. Once completed, this ungulate fence will have a beneficial impact to critical habitat, and is fully aligned with RP3's intent to *"protect natural terrestrial wildlife and plant habitats."* The fence layout was designed and shall be constructed specifically to have no adverse effect on eligible historic properties, and the Navy will comply with Appendices F and G of the 2011 Programmatic Agreement (PA) to protect cultural resources inadvertently discovered during construction.

*RP4 (Living Marine Resources):* No proposed activities affect the marine environment.

*RP5 (Visual Quality):* Project will not degrade views from scenic overlooks, highways or trails. The resulting view shed will be consistent with the surrounding environment within the Haputo ERA.

*RP6 (Recreation Areas):* Project does not propose to develop recreational facilities.

*RP7 (Public Access):* In accordance with the 2011 PA, the Navy would generally meet the public access policy's intent on federal lands to the maximum extent practicable, as it would allow regular visits to or through federal lands to visit historic sites, culturally-important natural resources and traditional cultural places (such as the Haputo ERA), subject to the Joint Region Marianas Public Access Plan for Historic and Cultural Sites.

*RP8 (Agricultural Lands):* No agricultural lands or activity in this area.

**Coastal Determination: <u>Consistent to the Maximum Extent Practicable</u>**

**Figure 4-1 Northern Haputo Fence Project Location and Proposed Fence Layout**

**Figure 4-2 Kingfisher Recovery Habitat (from Memorandum of Agreement between US Navy and US Fish and Wildlife Service)**

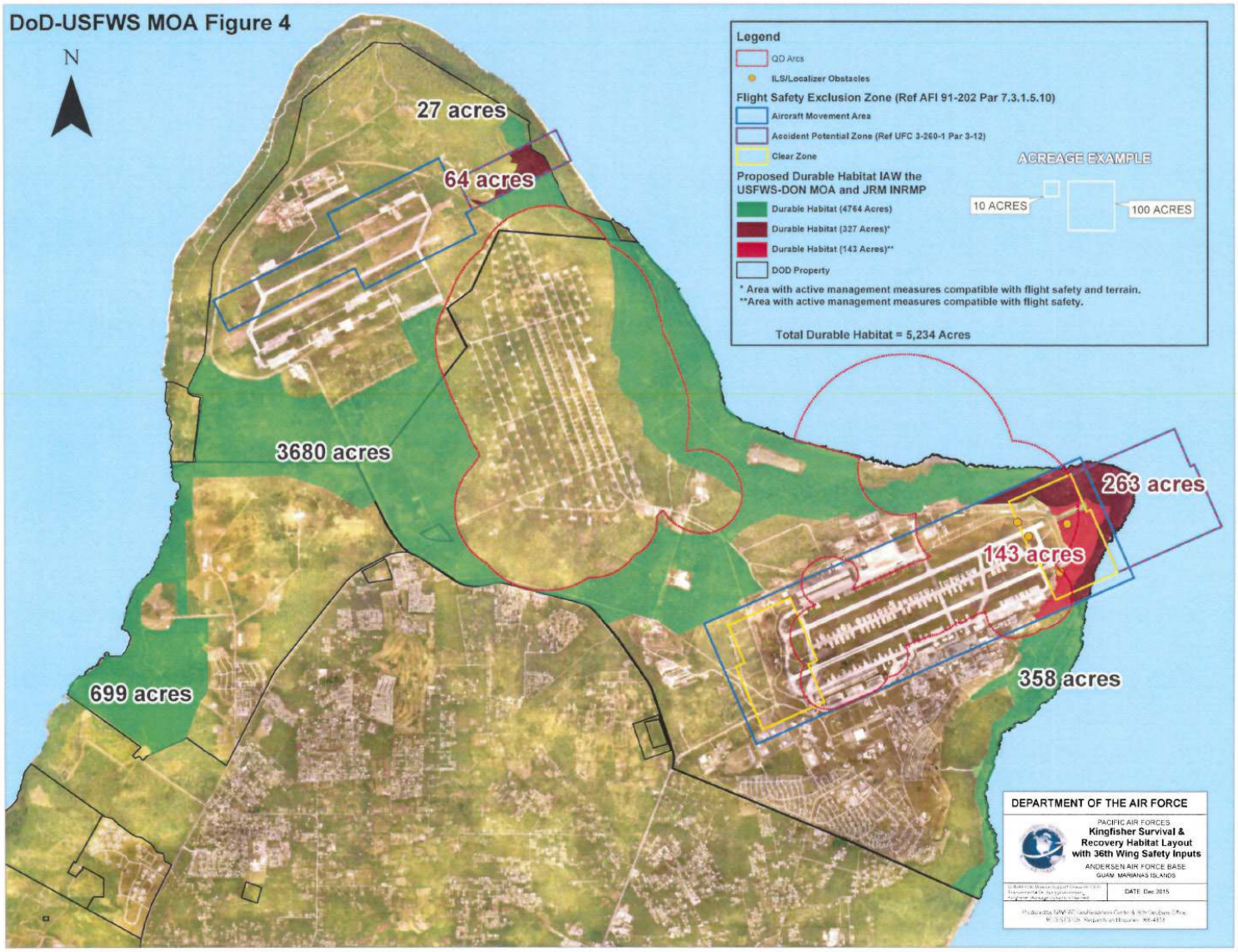


**Figure 4-3 Guam SHPO Concurrence Letter for Northern Haputo Fence**


**Eddie B. Calvo**
*Governor*
**Ray Tenorio**
*Lt. Governor*

**Department of Parks and Recreation**
**Government of Guam**
**490 Chalan Palasyo, Agana Heights, Guam 96910**
**Director's Office: (671) 475-6288**
**Parks Division: (671) 475-6291**
**Guam Historic Resources Division: (671) 475-6294/5**
**Facsimile: (671) 477-2822**

**William N. Reyes**
*Director*
**John P. Taitano**
*Deputy Director*


In reply refer to:
RC2016-0946

August 8, 2017

E.E. Moon
Installation Environmental Program Director
Department of the Navy
U.S. Naval Base Guam
PSC 455 Box 152
FPO AP 96540-1000-

Subject: Review of Construction of Ungulate (Deer and Pig) Fence at Haputo Ecological Reserve Area (ERA) at Naval Base Guam Telecommunications Station (NBTGTS), Finegayan, RC2016-0946

Dear Mr. Moon,

We have reviewed and concur with the No Adverse Effect for the subject proposed Revised Fence Alignment of the North Haputo fence for the Marine Corps Activity Guam. We request for an overview report to be submitted to our office detailing the efforts taken to include a buffer for the historic properties, and the areas that will be monitored for the fencing.

In case of inadvertent discoveries, stop all activities and contact our office in accordance with 36 CFR 800.13 Post-review discoveries. Should you have any questions please do not hesitate to contact our office.

Sincerely,

William N. Reyes
Director

Lynda Bordallo Aguon
State Historic Preservation Office