



DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY OF THE NAVY
(ENERGY, INSTALLATIONS AND ENVIRONMENT)
1000 NAVY PENTAGON
WASHINGTON, DC 20305-1000

December 13, 2018

Dr. Mary Abrams
U.S. Fish and Wildlife Service
Pacific Island Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, HI 96850

Dear Dr. Abrams:

SUBJ: 2018 ANNUAL REPORT FOR BIOLOGICAL OPINION 013P1F00-2015-F-0025 AND
01 EPIF00-2016-F-0185

This correspondence is submitted to satisfy the Fiscal Year 2018 (FY 18) annual reporting requirements (Terms and Conditions L.5.a, p. 158) of the U.S. Fish and Wildlife Service Biological Opinion (BO) for the Department of the Navy's (DON) Relocation of the U.S. Marine Corps from Okinawa to Guam and Associated Activities on Guam, initially issued on July 31, 2015 (01 EP 1 F00- 2015-F-0025) with the re-initiation completed on July 19, 2017 (01 EPIF00-2016-F-0185). The conservation measures and terms and conditions implemented are described in Enclosure (1).

If you have any questions regarding this annual report, the DON's technical point of contact is Ms. Coralie Cobb. She can be reached at (720) 542-3085 or email at coralie.cobb@navy.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Warren LeBeau", is positioned above the typed name.

Warren LeBeau, PE, CEM
Commander, CEC, U.S. Navy
Director, Pacific Programs Office

Copy to:
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U.S. Fish and Wildlife Service, Pacific Region

PART I: Biological Opinion 013P1F00-2015-F-0025 of July 31, 2015 (2015 BO)

1. General Conservation Measures to Contribute to the Recovery of Listed Species

a. Forest Enhancement

(1) Action Implementation: The construction contracts for work at Finegayan and the known distance ranges at Northwest Field (rifle range, pistol range, non-standard small arms range and modified record of fire range) were awarded in August of 2017).

(a) To date, construction-related clearing of recovery habitat has occurred at Finegayan (Figure 1-1). For FY18, the total clearing associated with listed species recovery habitat is approximately 504 acres.

(b) In addition, the DON cleared vegetation to create pathways for pre-construction (design) work, to include bore holes, test pits and topographic surveys within the Anderson South Urban Training Complex (J-755) construction footprint to collect data necessary for development of construction request for proposals. This work took place prior to October 1, 2015. Design work (i.e. boring holes, test pits) for known distance ranges (P-715)) occurred prior to the 2017 amendment to the 2015 Biological Opinion, but did not impact listed species as a bio-monitor provided oversight for minor vegetation clearing within the project footprint to avoid listed species (Figure 1-2). The U.S. Fish and Wildlife Service approved the request to initiate work on geotechnical borings within the P-715 area on December 1, 2015. Ultimately, both these design-impacted areas will eventually be cleared by the future construction of the Live Fire Training Range Complex (LFTRC) and Anderson South Urban Training Complex.

(2) Conservation Measure Implementation: The DON awarded a contract in October of 2017 for the establishment of a native plant nursery, collection of seed, salvage of plant materials, propagation of native limestone forest species and the operation of a native plant nursery on Naval Base Guam Telecommunication Site. The nursery installation is in progress and expected to be able to begin operation in early calendar year 2019. The J-001B project includes the construction of ungulate enclosure fence protecting a total of 669 acres of the northern Forest Enhancement Site at Finegayan.

b. Guam *Serianthes* Adult Tree

(1) Action Implementation: There are two construction contracts that will remove portions of the Ritidian ungulate fence. The construction contract for the known distance ranges at Northwest Field was awarded in August of 2017. The construction contract for the Multi-Purpose Machine Gun Range project (the range closest to the adult *Serianthes* tree) is planned for award in January of 2020. To facilitate site access for geotechnical work for P-715, the Ritidian Ungulate Fence was temporarily dismantled to allow easier access.

(2) Conservation Measure Implementation: The construction contract for the known distance ranges at Northwest Field included installation of 3.69 kilometers of security fencing.

c. Sea Turtle Public Outreach and Coordination

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: The DON has developed and distributed sea turtle conservation posters, tri-fold brochures and activity booklets for elementary school children.

d. Brown Treesnake Control and Suppression

(1) Action Implementation: Construction of the cantonment known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: In FY18, DON entered into an Interagency Agreement with USGS to develop a multispecies barrier fence design and prototypes. The period of performance is from 1 May 2018 through 31 Oct 2019. The scope of the project includes conducting a literature review, developing and evaluating a multispecies barrier fence, constructing a prototype, conducting exclusion prototype trails, and estimating annual and long term maintenance costs.

2. Conservation Measures to Minimize the Effects of Construction

a. Contractor Education Program

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: Contractors from J-001B, J-007, P-102, P-230, P-240, P-715, P-735, P-290, P-295, J-755, J-200, J-200IV, P-103, P601, Little Fire Ant, Bio-monitor, HACCP Evaluation Surveys, Native Plant Nursery, Defense Access Road projects were provided training by the Marine Corps Activity Guam Natural Resources staff in FY18.

b. Contractor Plans and Specifications

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: Language included in Unified Facilities Guide Specifications under Temporary Environmental Controls SECTION 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS 1.6.1 Preconstruction Survey and Protection of Features. Officer in Charge of Construction continues emphasis to contractors to stay within project limits. There have been two non-compliance issues associated with J-001B and P-715 where the contractor went outside the project limits. J-001B involved damage to native plant

habitat and *Tuberolabium guamense*. The DON issued a construction contract non-compliance notice on 16 May 2018. In addition, the Contracting Officer issued a Letter of Concern related to the protection of natural resources on 17 May 2018. The construction contractor is required to provide corrective action items. The contractor for J-001B is developing a restoration plan to repair the damage to the vegetation. The contractor for P-715 went outside the project limits and trimmed of branches of *Heritiera longipetiolata*. This action was noticed by MCAG bio-monitors on 16 April 2018 who were escorting construction related surveyors. The surveyors showed the MCAG bio-monitors a plan that identified a more efficient way of taking topographic sight-lines, a clear violation of contract that required prior Contracting Officer approval. The DON issued a construction contract non-compliance notice on 17 April 2018. The following day, the Contracting Officer issued a Letter of Concern related to the protection of natural resources. The tree sustained minor damage but is not expected to have long-term or permanent effects from the incident. The tree has produced fruit in September of 2018 (Figures 1-3 through 1-6).

c. Pre-Construction Surveys for the Mariana Fruit Bat

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: In accordance with the requirement included in Unified Facilities Guide Specifications under Supplemental Temporary Environmental Controls DPRI SECTION 01 57 19.04 3.1.1 Natural Resources Management Procedures, MCAG EV bio-monitors conducted surveys at J-001B, P-102, and P-715. MCAG provides Natural Resources awareness training to all contractor and DON personnel working within proposed action footprint. Pamphlets are distributed to aide in the identification of Mariana fruit bat in the field and provide information on reporting protocols for sightings of Mariana fruit bat.

d. Guam Landscaping Guidelines

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: Guam Landscaping Guidelines are included in all construction specifications awarded to date.

e. LFTRC Range Berm Controls

(1) Action Implementation: No construction has occurred related to the LFTRC.

f. Lighting Installation

(1) Action Implementation: No construction has occurred related to the LFTRC.

(2) Conservation Measure Implementation: Lighting design is addressed in the construction contract awarded in August of 2017.

g. Monitoring Construction Contractors

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: Oversight for natural resources compliance completed monthly by bio-monitor staff for J-001B, J-007, P-102, P-230, P-240, P-715. Contractors from J-001B, J-007, P-102, P-230, P-240, P-715, P-735, P-290, P-295, J-755, J-200, J-200IV, P-103, P601, little fire ant, bio-monitor, Native Plant Nursery, Federal Highways were provided biological monitoring by the Marine Corps Activity Guam natural resources staff in FY 18.

3. Conservation Measures to Minimize the Effects of Invasive Species

a. Onsite Vegetation Waste Management

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: Onsite vegetation waste management procedures are included in all construction specifications awarded to date.

b. DON's Final Guam Landscaping Guidelines

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: Guam Landscaping Guidelines are included in all construction specifications awarded to date.

c. Biosecurity Outreach and Education

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: The DON has initiated and will continue to implement a targeted, comprehensive outreach and education program for DoD and civilian populations for biosecurity focused on prevention. As a starting point, the DON contracted for the development of biosecurity outreach and education materials. The contractor has designed and produced an activity booklet, a two-sided, tri-fold, educational brochure with an associated poster that differentiates native from introduced species, defines invasive species, describes the known impacts of invasive species on native species and ecosystems, and what can be done to prevent and control invasive species. In FY18, the outreach and education project awarded additional radio, television and social media ads. DON is working cooperatively with Guam Dept. of Agriculture (DAWR) to improve the effectiveness of the social media content.

d. HACCP planning

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: All construction contracts will contain a requirement to develop a Hazard Analysis Critical Control Point (HACCP) Plan, which will identify risks and potential pathways for non-native species and will outline procedures for controlling and removing risks identified. All contracts with HACCP programs include: J-001B/J-007/P-102/P-230/P-240/P-715, little fire ant, bio-monitor and HACCP evaluation surveys. Monthly natural resource inspections were conducted by the DON in FY18 to ensure the HACCP programs were being implemented. An HACCP Plan for all on-going construction were developed and approved by the Government in FY18.

e. Monitoring to Evaluate Effectiveness of HACCP

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: The requirement to evaluate effectiveness of HACCP has been included in Unified Facilities Guide Specifications under Supplemental Temporary Environmental Controls DPRI SECTION 01 57 19.04 3.1.4 Biosecurity. Ongoing construction activities are implementing their approved HACCP plan. In FY18, long term vegetation program HACCP evaluation surveys were conducted for J-001B, P-102, P-715, P-735, J-755, P-103, J-006, J-007. In additional, baseline surveys have been completed for P-102, P-715, P-103, and J-007, and the first follow on survey was completed for J-007. Monthly natural resources inspections were conducted by the DON in FY18 to ensure the HACCP programs were being implemented. An HACCP Plan for all on-going construction was developed and approved by the DON in FY18.

f. Brown Treesnake Interdiction

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: JRM has established a comprehensive brown treesnake interdiction program to ensure that military activities, including the transport of civilian and military personnel and equipment to and from Guam, do not contribute to the spread of brown treesnake to other islands or regions. Brown treesnake interdiction requirements are specified in DoD instructions (i.e., 36 Wing Instruction 32-7004, Brown Tree Snake Control Plan and COMNAVMAR Instruction 5090.10A, Brown Tree Snake Control and Interdiction Plan). The proposed action will continue to comply with these established procedures.

(a) The DON has worked with USDA and the Service to determine brown tree snake interdiction cost increases. To date, there has been no measurable increase in interdiction costs

according to USDA. Coordination with the USGS regarding the Brown Treesnake Research Closed Population Facility at NWF. Pre-construction topographic and geotechnical surveys for the LFTRC is underway there are no restrictions to ongoing research at the Closed Population Facility at NWF.

4. Conservation Measures to Minimize the Effects of Fire

a. Fire Management Plan for the LFTRC

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: A cooperative agreement was entered into with Colorado State University, Center for Environmental Management of Military Lands in September of 2017 for the development of a Fire Management Plan for the LFTRC on Guam. A site visit to Guam is planned for November of 2018.

5. Conservation Measures to Minimize the Effects of Training

a. Aviation Training in NMS.

(1) Action Implementation: No aviation training has been conducted to date.

b. Ground Training in NMS

(1) Action Implementation: No ground training has been conducted to date.

6. Other Actions Considered for The Analysis

a. GMK Memorandum of Agreement

(1) Since the signing of the Guam Micronesia Kingfisher Memorandum of Agreement (MOA) in 2015, the DON has funded a number of projects in support of the MOA objectives, including brown tree snake eradication trials, allocating funds for staffing, and planning and compliance activities in support of management actions.

(2) In FY2016, MOA expenditures by the DON amounted to approximately \$525,400. Trial eradication of brown tree snakes within the USGS Closed Population Facility using aerial toxicants began in August 2016 and was completed in February 2018. In addition, the DON funded in FY2016 a MOA coordinator position.

(3) In FY2017, MOA expenditures by the DON amounted to approximately \$1.5 million. These projects included Haputo fence planning (with the completion of 1391/SAR/EV planning), which enables fence construction along the northern segment of the Haputo fence alignment to proceed. The DON also funded biological resource surveys for the northern fence segment, which will provide information to finalize the scope of work and independent government cost

estimate for fence construction. In addition, cultural resource surveys were funded, and once completed will support the SHPO consultation. These required cultural resource surveys and consultations will enable construction along the southern segment of the Haputo fence alignment. Other FY2017 projects included the ADS Toxicant Drop/ABMS Winder System Cost Share project, which addressed a critical requirement for Brown Tree Snake Working Group and brings landscape level suppression capability earlier in the time horizon. The DON also funded the second phase of the USGS Closed Population Facility eradication study.

(4) In FY2018, awarded approximately \$1.9 million for various projects. These projects included 1) demographic and ecological effects of sustained ADS in the Habitat Management Unit (HMU), 2) brown tree snake (BTS) monitoring: bait tubes, 3) landscape suppression planning phase III: infrastructure, and 4) artificial bait optimization for landscape-scale BTS suppression. These projects primarily support development of BTS suppression technologies and tools, which is a focus area of the GMK MOA.

(5) In September 2017 a task order to develop a "Courses of Action" report and the development of a 10-year plan for the implementation of the MOA for the conservation of Guam Micronesian Kingfisher Recovery Habitat in Northern Guam was awarded. The draft Courses of Action (COA) report was submitted to DON on August 8, 2018. DON provided a copy of the draft COA report to USFWS on September 19, 2018.

7. Terms and Conditions. Terms and Conditions from the 2015 BO are superseded by the 2017 BO Amendment.

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PART II: Biological Opinion 01EPIF00-2016-F-0185 of July 19, 2017 (2017 BO Amendment)

1. General Conservation Measures to Contribute to the Recovery of Listed Species

a. Fencing of the Haputo Ecological Reserve Area (ERA) Access Trail, Signage, and Education

(1) Action Implementation: Construction in the area is focused on utilities and site improvement. There are new buildings associated with the main cantonment portion of the proposed action.

(2) Conservation Measure Implementation: Fencing of the Haputo ERA has not been initiated

b. Pre-construction Surveys, General Listed Plant Salvage and Translocation

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: DON has conducted pre-construction surveys for five construction projects (J-001B, P-715, P-102, P-103 and J-755) to identify all listed plant species prior to the commencement of construction activities. To date, 6,257 *Tuberolabium guamense*, 20 *Dendrobium guamense*, and 71 *Bulbophyllum guamense* have been salvaged and translocated into forest enhancement sites.

c. Native Plant Nursery

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: The DON awarded a contract in October of 2017 for the establishment of a native plant nursery, collection of seed, salvage of plant materials, propagation of native limestone forest species and the operation of a native plant nursery on Naval Base Guam Telecommunication Site. The nursery installation is in progress and expected to be able to begin operation in early calendar year 2019.

d. Authorized Biologist Qualifications and Propagation/Translocation Authorization Process

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: The DON has submitted statements of qualifications to FWS prior to commencing translocation of the Mariana eight spot butterfly, Guam tree snail, humped tree snail, and fragile tree snail associated with the known distance

ranges, multi-purpose machine gun range and the Urban Combat Training Area at Andersen South.

e. Annual Reporting of Conservation Measures

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: No annual reports have been submitted by the authorized biologist because there has not been one year of work conducted to date.

f. Avoidance of Listed Orchid Species in a Small Location at Finegayan

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: No construction has occurred within the area designated as “No Construction Area” within the proposed Main Cantonment.

g. Forest Enhancement Sites (See Part I, Section 1 (a) of this report.

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: The DON awarded a contract in October of 2017 for the establishment of a native plant nursery, collection of seed, salvage of plant materials, propagation of native limestone forest species and the operation of a native plant nursery on Naval Base Guam Telecommunication Site. The nursery installation is in progress and expected to be able to begin operation in early calendar year 2019. Forest enhancement and restoration activities include:

(a) Identify forest restoration/enhancement blocks.

(b) Map the proposed forest restoration/enhancement area boundaries.

(c) Received authorization for specific area of forest to be restored or enhanced and vegetation clearance approach for permanent ungulate fences, access-grid trails, and temporary cross fencing.

(d) Obtain clearance for any ground disturbing activities from UXO specialist.

h. Brown Tree Snake Exclusion Fences

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: In FY18, DON entered into an Interagency Agreement with USGS to develop a multispecies barrier fence design and prototypes. The scope of the project includes conducting a literature review, developing and evaluating a multispecies barrier fence, constructing a prototype, conducting exclusion prototype trials, and estimating annual and long term maintenance costs.

i. Northwest Field (NWF) Ungulate Control Area

(1) Action Implementation: The construction contract for work at the known distance ranges at Northwest Field (rifle range, pistol range, non-standard small arms range and modified record of fire range) was awarded in August of 2017.

(2) Conservation Measure Implementation: The construction contract included installation of 3.69 kilometers of security fencing. Fence construction has not started, but is anticipated in FY19

2. Conservation Measures for Specific Species

a. Mariana eight spot butterfly

(1) Action Implementation: No earthen berms have been constructed within the LFTRC ranges to date.

(2) Conservation Measure Implementation: The field assessments of Mariana eight-spot butterfly host plants within the P-715 project footprint were conducted by Dr. Curt Fiedler, Shannon Cauley, Sheeka Tareyama, and Julie Anne Duay on December 26, 28, and 29, 2017 and January 3 and 4, 2018.

(a) Butterfly life stages were translocated from the P-715 project footprint to the recipient sites on 9, 10, and 12 July 2018.

(b) To date, no Mariana eight-spot host plants (*P. pedunculata* and *E. calcareum*) have been planted within the Forest Enhancement Sites or on the backside of the earthen berms of LFTRC ranges. No earthen berms have been constructed within the LFTRC ranges and the Forest Enhancement Sites have not been fenced to preclude ungulates.

b. Guam Tree Snails [Guam, fragile and the humped tree snail]

(1) Action Implementation: Construction of cantonment area has commenced.

(2) Conservation Measure Implementation: The DON survey team commenced surveys at Finegayan on June 4, 2018 and surveys were completed on July 11, 2018. No snails were observed. The DON survey team consisted of Natural Resources Specialists, Lauren Gutierrez and Christiana-Jo Quinata, and Biological Monitors, Wien Winner, Joshua Salas, and Kathleen Plaza. Six survey sites within and adjacent to the J-001B footprint were selected to represent favorable forest habitat for snail presence (canopy coverage, ground cover, and humidity).

Transects lines were spaced twenty meters apart latitudinally east to the west. The project footprint, survey sites, and transect lines were downloaded into a Geo7X Trimble Global Position System (GPS) unit.

c. Mariana Fruit Bat

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: The requirement is included in Unified Facilities Guide Specifications under Supplemental Temporary Environmental Controls DPRI SECTION 01 57 19.04 3.1.1 Natural Resources Management Procedures. MCAG EV biomonitors conducted surveys at J-001B, P-102, and P-715. MCAG provides Natural Resources awareness training to all contractor and DON personnel working within proposed action footprint. Pamphlets are distributed to identify Mariana fruit bat in the field and provides information on reporting protocols.

d. Listed Plant Species

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Conservation Measure Implementation: DON has conducted plant salvage at three construction sites (J-001B, P-715 and P-103). To date, DON has salvaged *Tuberolabium guamense*, *Dendrobium guamense*, *Bulbophyllum guamense*, and *Cycas micronesica*. No *Tabernaemontana rotensis* or *Heritiera longipetiolata* seeds have been collected because they were either not in the project footprint (J-001B and P-103) or the trees have not produced seed (P-715).

3. Conservation Measures to Minimize the Effects of Construction. Addressed under the response for the July 31, 2015 Biological Opinion on the Department of the Navy's Relocation of U.S. Marine Corps from Okinawa to Guam and Associated Activities on Guam. See Part I, Paragraph 2 of this report.

4. Conservation Measures to Minimize the Effects of Invasive Species. Addressed under the response for the July 31, 2015 Biological Opinion on the Department of the Navy's Relocation of U.S. Marine Corps from Okinawa to Guam and Associated Activities on Guam. See Part I, Paragraph 3 of this report

5. Conservation Measures to Minimize the Effects of Fire. Addressed under the response for the July 31, 2015 Biological Opinion on the Department of the Navy's Relocation of U.S. Marine Corps from Okinawa to Guam and Associated Activities on Guam. See Part I, Paragraph 4 of this report.

6. Conservation Measures to Minimize the Effects of Training

a. Aviation Training in NMS

(1) Action Implementation: No aviation training has been conducted to date.

b. Ground Training in NMS

(1) Action Implementation: No ground training has been conducted to date.

c. Designated No Wildlife Disturbance Areas

(1) Action Implementation: No ground training has been conducted to date.

7. Terms and Conditions

a. Implementation of the Conservation Measures. Addressed previously in this document.

b. Mariana Fruit Bat. (*NOTE: Paragraph numbering below in this section corresponds to the paragraph number in the 2017 BO amendment*)

a. Surveys have been conducted for Mariana fruit bats. No bats have been observed to date within 492 ft (150 m) of a construction site.

b. Hooded lighting is being planned for actions within 482 ft (150 m) of all potential Mariana fruit bat roost habitat.

c. Educational materials regarding Mariana fruit bat appearance, behavior, and biology have been provided to all pertinent DON personnel so that they can correctly identify any Mariana fruit bats near or within the proposed action. The LFTRC is not operational.

d. 1) There have been no changes to the noise contour as it relates to the proposed action; and 2) To date, no Mariana fruit bat habitat subject to increased noise levels from aircraft operations. Operation of the LFTRC is greater than one year out at this point in time.

e. 1) There have been no changes to the noise contour as it relates to the proposed action; and 2) To date, no Mariana fruit bat habitat has been subjected to increased noise levels from aircraft operations. Operation of the LFTRC is greater than one year out at this point in time.

f. No noise studies at the GNWR and at Ritidian Point have been initiated to date. The construction contract for the MPMG range has not been awarded.

g. The DON is developing a work plan for the salvage and translocation of partulid snails. The methodology for pre-construction surveys is as follows "To ensure that all tree snails are located and salvaged, each tree snail salvage site will be searched on multiple occasions. Salvage searches will occur once a day to allow hidden tree snails to move overnight and become

visible to search teams during subsequent searches. Searches will continue until three negative searches are documented.”

h. The one-year maintenance and monitoring period for the life stages of the Mariana eight spot butterflies relocated from the P715 project footprint began on 17 July 2018 and is scheduled for completion by August of 2019. Monthly monitoring at the recipient sites will be conducted to document the occurrences and activities of eight-spot butterflies or their life stages at the sites.

c.. LFTRC Fence

(1) Action Implementation: The construction contracts for work at the known distance ranges (P-715) at Northwest Field (rifle range, pistol range, non-standard small arms range and modified record of fire range) were awarded in August of 2017. The construction contract included 3.69 kilometers of security fencing.

(2) Term and Condition Status: The NWF ungulate fence has not been constructed to date.

d. A Take Monitoring Plan (Plan)

(1) Action Implementation: Construction of the cantonment, known distance ranges and airfield facilities has begun.

(2) Term and Condition Status: A Take Monitoring Plan for the Mariana fruit bat, Mariana eight spot butterfly, Guam tree snail, humped tree snail, and the fragile tree snail was provided to the USFWS on September 19, 2017. In FY18, no listed species habitat was subjected to excessive noise levels and no clearing for construction and operation activities occurred in areas of known occurrences of snails, butterflies or bats.

END OF REPORT

Figure 1-1: Construction of Main Cantonment at Finegayan

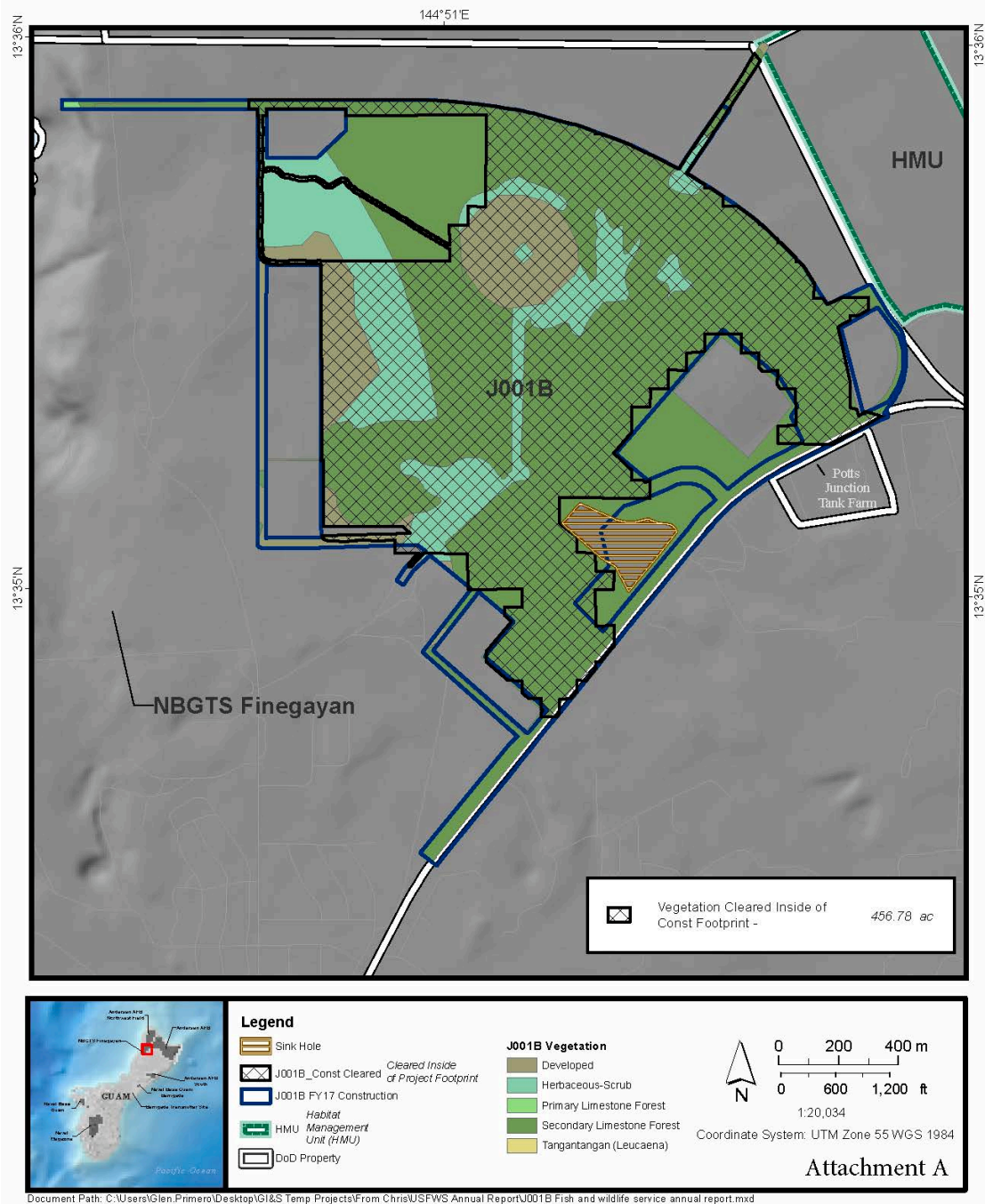
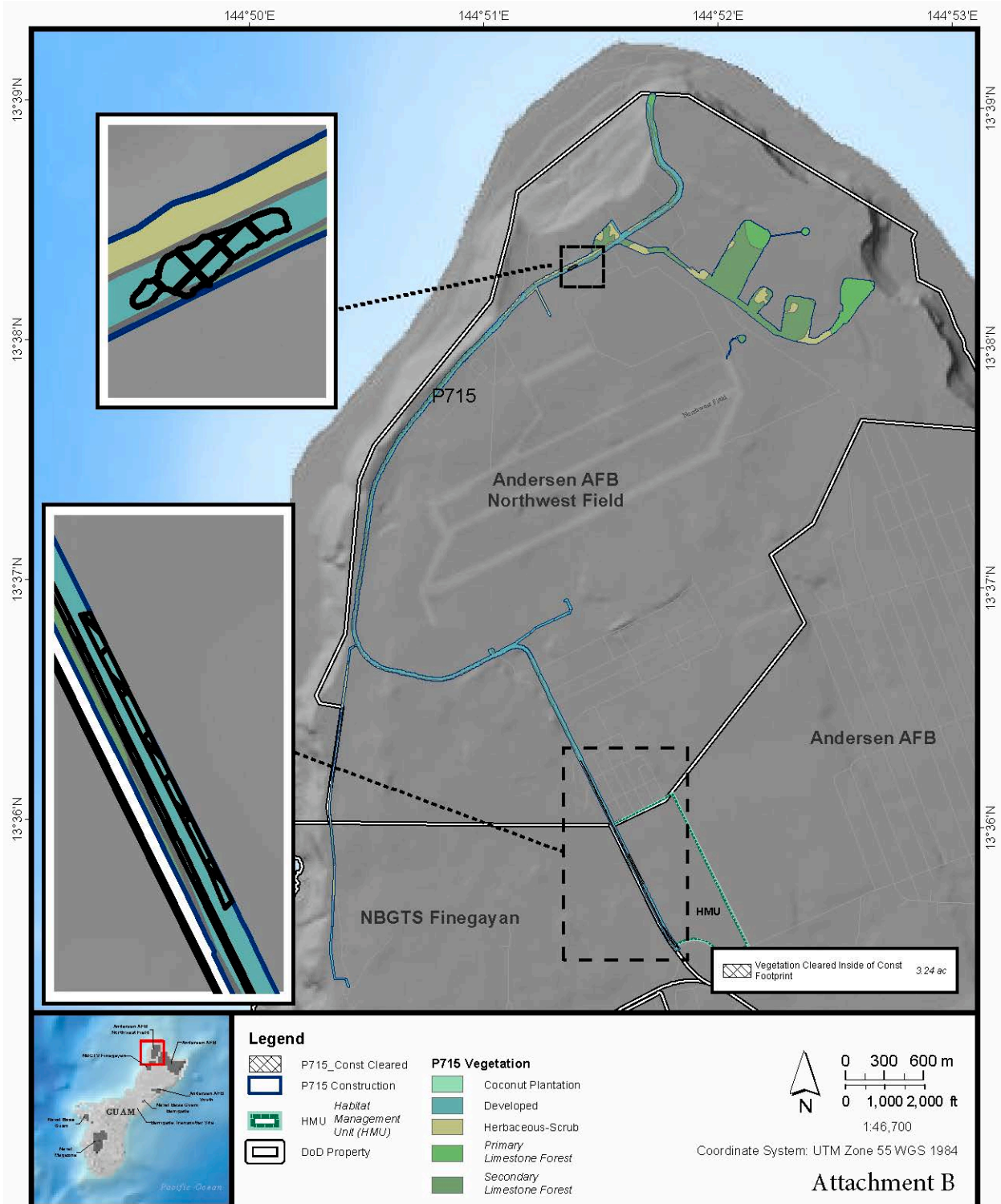
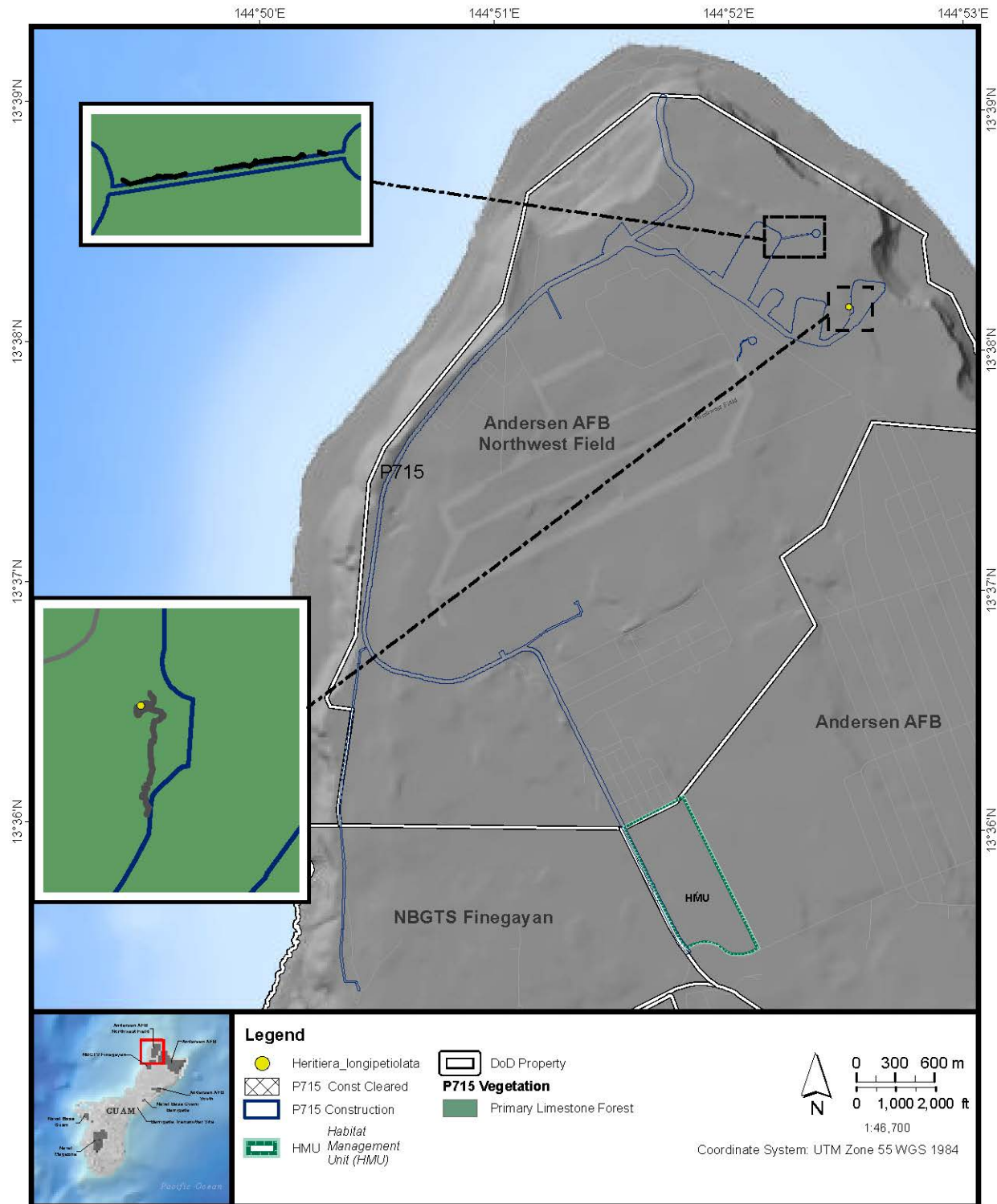


Figure 1-2: P-715 Bio-Monitoring and Pre-Construction Design Work



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Figures 1.3 -1.6: *Heritiera longipetiolata* from outside the project limits of P-715



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Figure 1.4: *Heritiera longipetiolata* with the branch trimmed by construction contractor circled in yellow



Figure 1.5: *Heritiera* branch trimmed by construction contractor (P715)



Figure 1.6: October 2018 immature *Heritiera* fruits (P715)

