

# Final Environmental Assessment for Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen Aguadilla, Puerto Rico

United States Coast Guard  
Facilities Design and Construction Center, Norfolk

September 2021

**Final Environmental Assessment  
for Repair and Replacement of Hurricane Damaged Facilities and for Increased  
Resiliency U.S. Coast Guard Base Detachment Borinquen and Air Station  
Borinquen, Aguadilla, Puerto Rico**

The Final Environmental Assessment (EA) for Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency at USCG Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) (42 U.S. Code [USC]); Council on Environmental Quality (CEQ) *Regulations for Implementing NEPA* (40 Code of Federal Regulations [CFR] Parts 1500-1508); Department of Homeland Security Management Directive 023-01; and Coast Guard Commandant Instruction (COMDTINST) 5090.1, *U.S Coast Guard Environmental Planning Policy and Environmental Planning Implementing Procedures* (April 2019).

This Final EA serves as a concise public document to briefly provide sufficient evidence and analysis for determining the need to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). This Final EA concisely describes the Proposed Action, the need for the Proposed Action, alternatives, and the environmental impacts of the Proposed Action and alternatives. This Final EA also contains a comparative analysis of the action and alternatives, a statement of the environmental significance of the preferred alternative, and a list of the agencies and persons consulted during the Final EA preparation.

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**Finding of No Significant Impact  
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Resiliency U.S. Coast Guard Base Detachment Borinquen and Air Station  
Borinquen, Aguadilla, Puerto Rico**

The U.S. Coast Guard (USCG) proposes to restore hurricane damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities to withstand future storm events at USCG Base Detachment Borinquen and Air Station Borinquen in Aguadilla, Puerto Rico. All new construction, repairs, and renovation would include increased resiliency to ensure the USCG's ability to remain operational during a storm event or other unscheduled electrical outage, independent of the local utility, for extended periods of time or until the outage is over. The Preferred Alternative is Alternative G, as described in the Final Environmental Assessment (EA). The overarching need for the Proposed Action is to provide USCG Base Detachment Borinquen and Air Station Borinquen with facilities and infrastructure that will allow them to adequately execute their mission requirements.

**Summary of the results of the environmental impact evaluation:** The Final EA prepared for this proposal presents the purpose and need for the action, the Proposed Action and its alternatives, a description of the affected environment, and an analysis of the direct and indirect environmental consequences. Based on the findings of the Final EA, the USCG concluded no significant impacts would result from implementing the Proposed Action (Preferred Alternative - Alternative G) or any of the other alternatives evaluated in the Final EA.

**Mitigation commitments that will be implemented to reduce otherwise significant impacts:** The USCG will comply with all regulatory requirements, mitigation measures and best management practices (BMPs) as described in the Final EA to eliminate or reduce adverse impacts, ensuring that no significant adverse impacts will occur. In response to consultation initiated by the USCG, a Memorandum of Agreement with the Puerto Rico State Historic Preservation Officer has been signed in order to mitigate adverse effects on the potential NRHP-eligible Base Borinquen Field Historic District. This agreement is included as an Appendix in the Final EA document.

This FONSI is based on the attached contractor-prepared Final EA that has been independently evaluated by the USCG and determined to adequately and accurately discuss the environmental issues and impacts of the Proposed Action and its alternatives, and provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. USCG takes full responsibility for the accuracy, scope, and content of the attached contractor-prepared Final EA.

I reviewed the Final EA, which is the basis for this FONSI, and submitted my comments to the Proponent.

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Resiliency U.S. Coast Guard Base Detachment Borinquen and Air Station  
Borinquen, Aguadilla, Puerto Rico**

I reviewed the Final EA, which is the basis for this FONSI, and submitted my comments to the Proponent.



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In reaching my decision/recommendation for USCG's Proposed Action, I considered the information contained in this Final EA/FONSI and considered the written comments submitted to me from the Environmental Reviewer(s). Based on the information in the Final EA and this FONSI document, I agree that the Proposed Action as described above, and in the Final EA, will have no significant impact on the environment.



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**Final Environmental Assessment  
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Facilities and for Increased Resiliency  
U.S. Coast Guard Base Detachment Borinquen  
and Air Station Borinquen  
Aguadilla, Puerto Rico**

**Contract Number: 70Z05018DTRANSY01  
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**Prepared for:**

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**September 2021**

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## 1 Acronyms and Abbreviations

2	AADT	Annual Average Daily Traffic
3	ACHP	Advisory Council on Historic Preservation
4	ACM	Asbestos Containing Materials
5	AFB	Air Force Base
6	APE	Area of Potential Effects
7	ASB	Air Station Borinquen
8	ASHRAE	American Society of Heating, Refrigeration and Air-Conditioning Engineers
9	AST	Above Ground Storage Tank
10	ATON	Aids to Navigation
11	BDB	Base Detachment Borinquen
12	BMP	Best Management Practices
13	CAA	Clean Air Act
14	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
15	CEQ	Council on Environmental Quality
16	CFR	Code of Federal Regulations
17	CG	Coast Guard
18	CGP	Construction General Permit
19	COMDTINST	Commandant Instruction
20	CWA	Clean Water Act
21	CZMA	Coastal Zone Management Act
22	dB	Decibels
23	dBA	A-weighted decibels
24	DHS	Department of Homeland Security
25	DNER	Department of Natural and Environmental Resources
26	DoD	Department of Defense
27	EA	Environmental Assessment
28	EIS	Environmental Impact Statement
29	EISA	Energy Independence and Security Act of 2007
30	EO	Executive Order
31	EOC	Energy Operations Center
32	EPA	Environmental Protection Agency
33	EPCRA	Emergency Planning and Community Right to Know Act
34	EQD	Environmental Quality Board
35	ESA	Endangered Species Act
36	FFDOCKET	Federal Facility Hazardous Waste Compliance Docket
37	FHWA	Federal Highway Administration
38	FTA	Federal Transit Administration
39	FONSI	Finding of No Significant Impact
40	GDP	Gross Domestic Product
41	GHG	Greenhouse Gas
42	GIS	Geographic Information System
43	ICP	Institute of Puerto Rican Culture
44	HUD	Department of Housing and Urban Development
45	HVAC	Heating, Ventilation, and Air Conditioning
46	IPaC	Information for Planning and Consultation
47	KM	Kilometer



1	LBP	Lead Based Paint
2	MAC	Military Airlift Command
3	MBTA	Migratory Bird Treaty Act
4	MWR	Morale, Welfare, and Recreation
5	NCA	Noise Control Act of 1972
6	NCO	Non-commissioned Officer
7	NEPA	National Environmental Policy Act
8	NESHAP	National Emission Standards for Hazardous Air Pollutants
9	NHPA	National Historic Preservation Act
10	NMFS	National Marine Fisheries Service
11	NOAA	National Oceanic and Atmospheric Administration
12	NPDES	National Pollutant Discharge Elimination System
13	NRHP	National Register of Historic Places
14	NWI	National Wetlands Inventory
15	OECH	Oficina Estatal de Conservación Historica
16	PA	Programmatic Agreement
17	PCB	Polychlorinated biphenyls
18	PM <sub>10</sub>	Particulate matter less than less than 10 microns in diameter
19	PM <sub>2.5</sub>	Particulate matter less than less than 2.5 microns in diameter
20	PMZCPR	Coastal Zone Management Program of Puerto Rico
21	PPA	Pollution Prevention Act of 1990
22	Ppm	Parts per million
23	PR	Puerto Rico
24	PRASA	Puerto Rico Aqueduct and Sewer Authority
25	PRB	Puerto Rican Boa
26	PREPA	Puerto Rico Electric Power Authority
27	PVC	Polyvinyl chloride
28	RCNM	Roadway Construction Noise Model
29	RCRA	Resource Conservation and Recovery Act
30	SAC	Strategic Air Command
31	SHPO	State Historic Preservation Officer
32	SWPPP	Stormwater Pollution Prevention Plan
33	TSCA	Toxic Substances Control Act
34	UPH	Unaccompanied Personnel Housing
35	UPS	Uninterrupted Power Supply
36	USACE	United States Army Corps of Engineers
37	USC	United States Code
38	USCG	United States Coast Guard
39	USCGX	United States Coast Guard Exchange
40	USFWS	United States Fish and Wildlife Service



## 1 Executive Summary

### 2 Introduction

3 This Environmental Assessment (EA) has been prepared in accordance with the National  
4 Environmental Policy Act of 1969 (NEPA; 42 United States Code [USC] §§ 4321 et seq.); the  
5 President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural  
6 Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); Department of  
7 Homeland Security (DHS) Management Directive 023-01, Implementation of NEPA; and Coast  
8 Guard Commandant Instruction (COMDTINST) 5090.1, U.S. Coast Guard Environmental Planning  
9 Policy.

10 This EA evaluates the environmental effects of the United States Coast Guard's (USCG) proposal to  
11 restore hurricane damaged facilities, bring buildings and infrastructure up to current standards, and  
12 increase the resiliency of facilities and infrastructure to withstand future storm events at Base  
13 Detachment Borinquen (BDB) and Air Station Borinquen (ASB). The information and analysis  
14 contained within this EA will determine whether implementation of the Proposed Action would  
15 have a significant impact on the environment, requiring preparation of an Environmental Impact  
16 Statement (EIS). If no significant impacts would occur, a Finding of No Significant Impact (FONSI)  
17 would be appropriate.

### 18 Purpose and Need for Action

19 In September 2017, BDB and ASB suffered extensive damage to many of its facilities from  
20 Hurricanes Irma and Maria. This damage severely affected the Coast Guard's ability to efficiently  
21 perform its mission, which is search and rescue as well as law enforcement, aerial support for aids to  
22 navigation, and logistic support. In addition, many structures and utilities at BDB are dated and no  
23 longer adequately serve their intended purpose or remain properly functioning after a major event,  
24 such as a hurricane. The purpose of the project is to upgrade existing housing, community services,  
25 and utilities on BDB and ASB to current Coast Guard standards and to include increased resiliency.

26 The project is needed to ensure that BDB and ASB are able to meet their missions by remaining fully  
27 operational during a storm event or unscheduled utility outage, independent of local utility  
28 providers. In addition, the project is needed to provide the appropriate number of safe and  
29 adequately sized housing units to meet current and projected future BDB and ASB needs.

### 30 Proposed Action and Alternatives

31 The Coast Guard identified a suite of six elements that needed to be addressed by any alternative  
32 considered to meet the project's purpose and need. The elements identified are listed below  
33 followed by their descriptions.

- 34 1. Construct a new Community Services/Personnel Support building;
- 35 2. Upgrade the resiliency of the electrical distribution system serving both the BDB  
36 Housing and ASB Areas;
- 37 3. Rebuild and/or repair housing units to meet resiliency thresholds;
- 38 4. Upgrade the water resiliency storage systems to meet resiliency thresholds;
- 39 5. Design a stormwater drainage solution for the BDB Housing Area to meet resiliency



1 thresholds; and  
2 6. Rebuild and/or construct a new sanitary sewer system at BDB Housing Area.

3 Six preliminary alternatives were developed to address the purpose and need. The primary  
4 differences among the alternatives are in the way they address providing a new Community  
5 Services/Personnel Support Building and providing Housing that meets the current needs of BDB  
6 while also increasing resiliency in electrical power, water supply, sanitary sewer, and stormwater  
7 drainage.

8 The Coast Guard assigned parameters within each element that would assist in ranking of each  
9 alternative for further consideration. Using these parameters, the Coast Guard evaluated each  
10 alternative to determine if it resulted in a preferred or non-preferred approach to the project  
11 elements. This approach enabled the Coast Guard to screen the preliminary set of alternatives in a  
12 quantitative manner and rank each alternative based on its ability to provide the best solution for  
13 each project element. Screening of preliminary alternatives resulted in the identification of  
14 Alternative A and Alternative G (Proposed Action) being carried forward for detailed analysis in  
15 this EA.

16 **Alternative A** is a “Main Street” approach, with a cluster of new community center buildings and  
17 parking located on the current Sixth Street. This alternative retains most existing housing and  
18 minimizes new construction and new streets. Under Alternative A, 98 housing units would be  
19 repaired, 88 housing units would be demolished, 38 existing housing units would remain with no  
20 renovation, and 50 new housing units would be constructed. The entirety of La Plaza would be  
21 demolished.

22 **Alternative G (Proposed Action)** is a “Town Square” approach, with four new L shaped community  
23 center buildings creating a town square along the current Sixth Street. It features a new recreational  
24 field and parking. This alternative also features some retained existing housing units and a number  
25 of new housing units and maximizes space for future development. Under Alternative G, 97  
26 housing units would be repaired, 86 housing units would be demolished, 41 housing units would  
27 remain with no renovation, and 24 new housing units in 12 duplexes and a 34-room UPH would be  
28 constructed.



## 1 Summary of Potential Environmental Consequences

**Table ES-1: Summary of Potential Impacts to Affected Environmental Resources**

Technical Resource Area	Proposed Action (Alternative G)	Alternative A	No Action
Biological Resources	<p>Disturbance of local birds and small mammals is not anticipated to be significant due to the presence of greater natural habitat areas near the project area.</p> <p>Pursuant to Section 7 of the ESA, the USCG has determined that the Proposed Action may affect, but is not likely to adversely affect, the PRB with the implementation of Project Design Feature <b>BIO-1: Puerto Rican Boa Avoidance Measures</b>. This determination is pending coordination and concurrence with the USFWS. Pursuant to NEPA, the Proposed Action will have no significant impact on threatened and endangered species.</p> <p>Pursuant to the Migratory Bird Treaty Act, the USCG has determined that the Proposed Action would not result in take of migratory birds or the parts, nests, or eggs of such birds with the implementation of Project Design Feature <b>BIO-2: Migratory Bird Avoidance</b>. Pursuant to NEPA, the Proposed Action will have no significant impact on migratory birds.</p> <p>Pursuant to Section 404 of the Clean Water Act, the USCG has determined there would be no impacts to wetlands as a result of implementation of the Proposed Action. Pursuant to NEPA, the Proposed Action will have no significant impact on wetlands.</p>	<p>Impacts to biological resources are not substantially different under Alternative A as compared to the Proposed Action.</p>	No impact
Cultural Resources	<p>Pursuant to the NHPA, the Proposed Action will have an adverse effect to the housing units. The USCG will continue to consult with the SHPO and other consulting parties to resolve adverse effects through avoidance, minimization, and/or mitigation, resulting in the execution and implementation of a memorandum of agreement. Pursuant to NEPA, the Proposed Action will have no significant impact on the housing units.</p> <p>Pursuant to the NHPA, the Proposed Action will have no adverse effect to Hangar 402. Pursuant to NEPA, the Proposed Action will have no significant impact on Hangar 402.</p>	<p>Impacts to historic resources with implementation of Alternative A would be similar to those under the Proposed Action. However, under Alternative A, two more historic housing structures would be demolished under</p>	No impact

# ENVIRONMENTAL ASSESSMENT



Technical Resource Area	Proposed Action (Alternative G)	Alternative A	No Action
	<p>Pursuant to the NHPA, the Proposed Action will have an adverse effect on La Plaza. The USCG continued to consult with the SHPO and other consulting parties to resolve adverse effects through avoidance, minimization, and/or mitigation, resulting in the execution and implementation of a memorandum of agreement (MOA). An MOA was signed by the U.S. Coast Guard and Puerto Rico State Historic Preservation Officer on August 17, 2021. Pursuant to NEPA, the Proposed Action will have no significant impact on La Plaza.</p> <p>If archaeological resources are encountered during construction activities, Project Design Feature <b>CUL-1: Unanticipated Archaeological Discoveries</b> will be implemented. If the archaeological resource is determined to be eligible, the USCG would reinitiate consultation with the SHPO and other consulting parties to determine a way forward.</p> <p>Pursuant to the NHPA, the Proposed Action will have no effect on archaeological resources. Pursuant to NEPA, the Proposed Action will have no significant impact on archaeological resources.</p> <p>With implementation of Project Design Feature <b>CUL-1: Unanticipated Archaeological Discoveries</b> pursuant to the NHPA, the Proposed Action will have no effect on archaeological resources. Pursuant to NEPA, the Proposed Action will have no significant impact on archaeological resources.</p>	Alternative A than under the Proposed Action.	
Geology and Soils	Pursuant to NEPA, the Proposed Action would have no significant impact on geology and soils.	Impacts would be the same as for the Proposed Action.	No impact
Hydrology and Water Resources	Pursuant to NEPA, development and operation of a new well would have no significant impact on hydrology and water quality. With implementation of Project Design Features <b>WAT-1: Construction Stormwater Pollution Prevention Plan, WAT-2: Construction Equipment Maintenance, and WAT-3: Stormwater Outfall Design</b> pursuant to NEPA, the Proposed Action would have no significant impact on hydrology and water quality.	Impacts would be the same as for the Proposed Action.	No impact
Hazardous Materials and	Project Design Features <b>HAZ-1: Regulatory agency file review, HAZ-2: Asbestos and Lead based paint removal, and HAZ-3: Aboveground</b>	Impacts would be the same as for the Proposed Action.	No impact

# ENVIRONMENTAL ASSESSMENT



Technical Resource Area	Proposed Action (Alternative G)	Alternative A	No Action
Waste	<b>Storage Tanks</b> will be implemented to reduce the potential of adverse impacts associated with Hazardous Materials and Waste. Pursuant to NEPA, the Proposed Action would have no significant hazardous materials or wastes impacts.		
Air Quality and Greenhouse Gases	Through implementation of Project Design Feature <b>AQ-1 Air Quality Best Management Practices</b> , construction air quality impacts would be minimized. Pursuant to NEPA, the Proposed Action would have no significant impact on air quality and greenhouse gases during construction.  Operational emissions would occur from backup generators. The impact of the generators would be temporary because they would only be used during power outages and for testing. Pursuant to the Clean Air Act, the Proposed Action is exempt from the General Conformity Rule, as there would be no reasonably foreseeable direct or indirect emissions in nonattainment or maintenance areas. Pursuant to NEPA, the Proposed Action would have no significant impact on air quality and greenhouse gas emissions from the backup generators.	Impacts would be the same as for the Proposed Action.	No impact
Noise	Project Design Feature <b>NOI-1: Noise Reduction Measure</b> will be implemented to minimize construction noise impacts. Pursuant to NEPA, the Proposed Action would have no significant impact as a result of noise during construction.  Project Design Feature <b>NOI-2: Noise Reduction Measure</b> will be implemented to reduce noise impacts from emergency generators at the Housing Area. Pursuant to NEPA, the Proposed Action would have no significant impacts as a result of noise from operation of the emergency backup generators.	Impacts would be the same as for the Proposed Action.	No impact
Transportation	Project Design Feature <b>T-1: Traffic Management Plan</b> will be implemented to minimize construction traffic impacts. There would be no additional project-related traffic after the construction has been completed. Pursuant to NEPA, the Proposed Action would have no significant impact on transportation.	Impacts would be the same as for the Proposed Action.	No impact

# ENVIRONMENTAL ASSESSMENT



Technical Resource Area	Proposed Action (Alternative G)	Alternative A	No Action
Utilities	Pursuant to NEPA, the Proposed Action would have no significant impact on utilities.	Impacts would be the same as for the Proposed Action.	No Impact
Coastal Zone Management Act Consistency	Pursuant to NEPA, the Proposed Action would have no significant impact to the Coastal Zone, however the USCG will obtain a Coastal Zone Management Certification from the Puerto Rico Planning Board. Pursuant to the CZMA, the Proposed Action will have no reasonably foreseeable effects on coastal uses and resources.	Impacts would be the same as for the Proposed Action.	No Impact
Socioeconomics	The Proposed Action would add up to 4,070 job-years to the local economy which would be a substantial economic benefit to the region. Pursuant to NEPA, the Proposed Action will have a beneficial impact on socioeconomics. Pursuant to E.O. 12898, the Proposed Action would not result in any disproportionately high and adverse human health or environmental effects on minority populations or low-income populations. Pursuant to NEPA, the Proposed Action would have no significant impact to environmental justice communities.	Impacts would be the same as for the Proposed Action except Alternative A would add 3,522 job years to the local economy during the construction period.	No Impact
Visual Resources	Under the Proposed Action there will be a temporary adverse effects to visual resources during construction. The overall visual character of ASB and BDB will not substantially change under the Proposed Action. Pursuant to NEPA, the Proposed Action would have no significant impact to visual resources.	Impacts would be the same as for the Proposed Action although the proposed layout of the community services facilities would be more of a departure from the existing layout than would the Proposed Action.	No Impact



## 1 Resumen Ejecutivo

### 2 Introducción

3 Esta Evaluación Ambiental (EA) ha sido preparada de acuerdo con la Ley de Política Ambiental  
4 Nacional de 1969 (NEPA; Código de los Estados Unidos 42 [USC] §§ 4321 et seq.); las Regulaciones  
5 del Consejo Presidencial de Calidad Ambiental (CEQ) que Implementan las Disposiciones de  
6 Procedimiento de la NEPA (Código 40 de Regulaciones Federales [CFR] Partes 1500-1508); Directiva  
7 de gestión del Departamento de Seguridad Nacional (DHS) 023-01, Implementación de NEPA; y la  
8 Instrucción del Comandante de la Guardia Costera (COMDTINST) 5090.1, Política de planificación  
9 ambiental de la Guardia Costera de EE. UU.

10 Esta EA evalúa los efectos ambientales de la propuesta de la Guardia Costera de los Estados  
11 Unidos (USCG) para restaurar las instalaciones dañadas por el huracán, llevar los edificios y la  
12 infraestructura a los estándares actuales y aumentar la capacidad de recuperación de las  
13 instalaciones y la infraestructura para resistir tormentas futuras en el Base Detachment Borinquen  
14 (BDB) y Air Station Borinquen (ASB). La información y el análisis contenidos en esta EA  
15 determinarán si la implementación de la Acción Propuesta tendría un impacto significativo en el  
16 medio ambiente, requiriendo la preparación de una Declaración de Impacto Ambiental (DIA). Si no  
17 ocurrieran impactos significativos, sería apropiado un Hallazgo de Impacto No Significativo  
18 (FONSI, en Inglés).

### 19 Propósito y Necesidad de Acción

20 En Septiembre de 2017, BDB y ASB sufrieron grandes daños en muchas de sus instalaciones por los  
21 huracanes Irma y María. Este daño afectó gravemente la capacidad de la Guardia Costera para  
22 realizar de manera eficiente su misión, que es búsqueda y rescate, así como aplicación de la ley,  
23 apoyo aéreo para ayudas a la navegación y apoyo logístico. Además, muchas estructuras y servicios  
24 públicos en BDB están anticuados y ya no cumplen adecuadamente su propósito previsto o siguen  
25 funcionando correctamente después de un evento importante, como un huracán. El propósito de el  
26 proyecto es actualizar las viviendas, los servicios comunitarios y los servicios públicos existentes en  
27 BDB y ASB a los estándares actuales de la Guardia Costera e incluir una mayor capacidad de  
28 recuperación.

29 El proyecto es necesario para garantizar que BDB y ASB puedan cumplir con sus misiones  
30 permaneciendo en pleno funcionamiento durante un evento de tormenta o un corte no programado  
31 de servicios públicos, independientemente de los proveedores de servicios públicos  
32 locales. Además, el proyecto es necesario para proporcionar la cantidad adecuada de unidades de  
33 vivienda seguras y de tamaño adecuado para satisfacer las necesidades actuales y futuras  
34 proyectadas de BDB y ASB.

### 35 Acción Propuesta y Alternativas

36 El Guardia Costera identificó un conjunto de seis elementos que deben ser abordados por cualquier  
37 alternativa considerada para cumplir con el propósito y la necesidad del proyecto. Los elementos  
38 identificados se enumeran a continuación seguidos de sus descripciones.

- 39 1. Construir un nuevo edificio de Servicios Comunitarios/ Apoyo al Personal;



- 1                    2. Mejorar la capacidad de recuperación de el sistema de distribución eléctrica que sirve
- 2                    tanto a las áreas BDB Housing como ASB;
- 3                    3. Reconstruir y/o reparar unidades de vivienda para cumplir con los umbrales de
- 4                    resiliencia;
- 5                    4. Actualizar los sistemas de almacenamiento de resiliencia de el agua para cumplir con
- 6                    los umbrales de resiliencia;
- 7                    5. Diseñar una solución de drenaje de aguas pluviales para el Área de Vivienda de BDB
- 8                    para cumplir con los umbrales de resiliencia; y
- 9                    6. Reconstruir y/o construir un nuevo sistema de alcantarillado sanitario en el Área de
- 10                    Vivienda de BDB.

11 Se desarrollaron seis alternativas preliminares para abordar el propósito y la necesidad. Las  
12 principales diferencias entre las alternativas están en la forma en que abordan la provisión de un  
13 nuevo edificio de servicios comunitarios/apoyo al personal y la provisión de viviendas que  
14 satisfagan las necesidades actuales de BDB al tiempo que aumentan la resistencia en energía  
15 eléctrica, suministro de agua, alcantarillado sanitario y drenaje de aguas pluviales.

16 La Guardia Costera asignó parámetros dentro de cada elemento que ayudarían a clasificar cada  
17 alternativa para su consideración adicional. Usando estos parámetros, la Guardia Costera evaluó  
18 cada alternativa para determinar si resultó en un enfoque preferido o no preferido para los  
19 elementos del proyecto. Este enfoque permitió a la Guardia Costera examinar el conjunto preliminar  
20 de alternativas de manera cuantitativa y clasificar cada alternativa en función de su capacidad para  
21 proporcionar la mejor solución para cada elemento de el proyecto. La selección  
22 de alternativas preliminares dio como resultado que la identificación de la Alternativa A y la  
23 Alternativa G (Acción propuesta) se llevara adelante para un análisis detallado en esta EA.

24 **La Alternativa A** es un enfoque de “Main Street”, con un grupo de nuevos edificios de centros  
25 comunitarios y estacionamiento ubicado en la actual Sexta Calle. Esta alternativa conserva la  
26 mayoría de las viviendas existentes y minimiza las nuevas construcciones y calles nuevas. Bajo la  
27 Alternativa A, se repararían 98 unidades de vivienda, se demolerían 88 unidades de vivienda, se  
28 construirían 50 nuevas unidades de vivienda y se quedarían 38 unidades de vivienda existentes sin  
29 renovación. La totalidad de La Plaza sería demolida.

30 **La Alternativa G (Acción propuesta)** es un enfoque de “Plaza de la ciudad”, con cuatro nuevos  
31 edificios de centros comunitarios en forma de L que crean una plaza de la ciudad a lo largo de la  
32 actual Sexta Calle. Cuenta con un nuevo campo recreativo y estacionamiento. Esta alternativa  
33 también presenta algunas unidades de vivienda existentes retenidas y una serie de nuevas unidades  
34 de vivienda y maximiza el espacio para el desarrollo futuro. Bajo la Alternativa G, 97 unidades de  
35 vivienda se pueden reparar, 86 unidades de vivienda serían demolidas, 24 nuevas unidades de  
36 vivienda en 12 dúplex serían construidos, una unidad de Vivienda para Personal No Acompañado  
37 (UPH) de 34 habitaciones, y quedarían 41 unidades de vivienda existentes sin renovación.



## 1 Resumen de las Posibles Consecuencias Ambientales

**Table ES-1: Resumen de Impactos Potenciales Sobre los Recursos Ambientales Afectados**

Área de Recursos Técnicos	Acción Propuesta (Alternative G)	Alternative A	Sin Acción
Recursos Biológicos	<p>No se prevé que la perturbación de aves locales y pequeños mamíferos sea significativa debido a la presencia de áreas de hábitat natural más grandes cerca de el área del proyecto.</p> <p>De conformidad con la Sección 7 de la ESA, el USCG ha determinado que la Acción Propuesta puede afectar, pero no es probable que afecte adversamente al PRB con la implementación de la Característica de Diseño del Proyecto <b>BIO-1: Medidas para Evitar la Boa de Puerto Rico</b>. Esta determinación está pendiente de coordinación y concurrencia con el USFWS. De conformidad con la NEPA, la acción propuesta no tendrá un impacto significativo sobre las especies amenazadas y en peligro de extinción.</p> <p>De conformidad con la Ley del Tratado de Aves Migratorias, el USCG ha determinado que la Acción Propuesta no resultaría en la captura de aves migratorias o las partes, nidos o huevos de dichas aves con la implementación de la Característica de Diseño del Proyecto <b>BIO-2: Evitación de Aves Migratorias</b>. De conformidad con la NEPA, la acción propuesta no tendrá un impacto significativo en las aves migratorias.</p> <p>De conformidad con la Sección 404 de la Ley de Agua Limpia, el USCG ha determinado que no habrá impactos en los humedales como resultado de la implementación de la Acción propuesta. De conformidad con la NEPA, la acción propuesta no tendrá un impacto significativo en los humedales.</p>	<p>Los impactos a los recursos biológicos no son sustancialmente diferentes bajo la Alternativa A en comparación con la Acción Propuesta.</p>	Sin impacto
Recursos Culturales	<p>De conformidad con la NHPA, la Acción Propuesta tendrá un efecto adverso en las unidades de vivienda. La USCG continuará consultando con la SHPO y otras partes consultoras para resolver los efectos adversos mediante la evitación, minimización y/o mitigación, lo que resultará en la ejecución e implementación de un memorando de acuerdo. De conformidad con la NEPA, la acción propuesta no tendrá un impacto significativo en las unidades de vivienda.</p>	<p>Los impactos a los recursos históricos con la implementación de la Alternativa A serían similares a los de la Acción Propuesta. Sin embargo, bajo la Alternativa A, dos</p>	Sin impacto



Área de Recursos Técnicos	Acción Propuesta (Alternative G)	Alternative A	Sin Acción
	<p>De acuerdo con la NHPA, la Acción Propuesta no tendrá ningún efecto adverso en el Hangar 402. De acuerdo con la NEPA, la Acción Propuesta no tendrá un impacto significativo en el Hangar 402.</p> <p>De acuerdo con la NHPA, la Acción Propuesta tendrá un efecto adverso en La Plaza. La USCG continuará consultando con la SHPO y otras partes consultoras para resolver los efectos adversos mediante la evitación, minimización y/o mitigación, lo que resultará en la ejecución e implementación de un memorando de acuerdo (MOA). Un MOA fue firmado por la Guardia Costera de los Estados Unidos y el Oficial de Preservación Histórica del Estado de Puerto Rico el 17 de agosto de 2021. De acuerdo con la NEPA, la Acción Propuesta no tendrá un impacto significativo en La Plaza.</p> <p>Si se encuentran recursos arqueológicos durante las actividades de construcción, se implementará la Característica de Diseño del Proyecto <b>CUL-1: Descubrimientos Arqueológicos No Anticipados</b>. Si se determina que el recurso arqueológico es elegible, el USCG reiniciaría la consulta con la SHPO y otras partes consultoras para determinar el camino a seguir. De acuerdo con la NHPA, la Acción Propuesta no tendrá ningún efecto sobre los recursos arqueológicos. De acuerdo con la NEPA, la Acción Propuesta no tendrá un impacto significativo en los recursos arqueológicos.</p> <p>Con la implementación de la Característica de Diseño del Proyecto <b>CUL-1: Descubrimientos Arqueológicos No Anticipados</b> de conformidad con la NHPA, la Acción Propuesta no tendrá ningún efecto sobre los recursos arqueológicos. De acuerdo con la NEPA, la Acción Propuesta no tendrá un impacto significativo en los recursos arqueológicos.</p>	<p>estructuras de viviendas históricas más serían demolidas bajo la Alternativa A que bajo la Acción Propuesta.</p>	
Geología y Suelos	<p>De acuerdo con la NEPA, la Acción Propuesta no tendría un impacto significativo en la geología y los suelos.</p>	<p>Los impactos serían los mismos que para la acción propuesta.</p>	Sin impacto
Hidrología y Recursos Hídricos	<p>De acuerdo con la NEPA, el desarrollo y la operación de un pozo nuevo no tendría un impacto significativo en la hidrología y la calidad de el agua. Con la implementación de las Características del</p>	<p>Los impactos serían los mismos que para la acción propuesta.</p>	Sin impacto

# ENVIRONMENTAL ASSESSMENT



Área de Recursos Técnicos	Acción Propuesta (Alternative G)	Alternative A	Sin Acción
	Diseño del Proyecto <b>WAT-1: Plan de Prevención de la Contaminación de las Aguas Pluviales de la Construcción, WAT-2: Mantenimiento de los Equipos de Construcción, y WAT-3: Diseño del Emisario de las Aguas Pluviales</b> de conformidad con la NEPA, la Acción Propuesta no tendría un impacto significativo en la hidrología y la calidad del agua.		
Materiales y Desechos Peligrosos	Características del diseño del proyecto <b>HAZ-1: Revisión de archivos de la agencia reguladora, HAZ-2: Eliminación de pintura a base de asbesto y plomo, y HAZ-3: Se implementarán tanques de almacenamiento sobre el suelo</b> para reducir el potencial de impactos adversos asociados con materiales y desechos peligrosos. De acuerdo con la NEPA, la Acción Propuesta no tendría impactos significativos en materiales peligrosos o desechos.	Los impactos serían los mismos que para la acción propuesta.	Sin impacto
Calidad del Aire y Gases de Efecto Invernadero	A través de la implementación de la Característica de Diseño del Proyecto <b>AQ-1 Mejores Prácticas de Gestión de la Calidad del Aire</b> , se minimizarían los impactos de la calidad del aire de la construcción. De acuerdo con la NEPA, la Acción Propuesta no tendría un impacto significativo en la calidad del aire y los gases de efecto invernadero durante la construcción.  Las emisiones operativas se producirían a partir de generadores de respaldo. El impacto de los generadores sería temporal porque solo se usarían durante cortes de energía y para pruebas. De conformidad con la Ley de Aire Limpio, la Acción Propuesta está exenta de la Regla de Conformidad General, ya que no habría emisiones directas o indirectas razonablemente previsibles en áreas de incumplimiento o mantenimiento. De acuerdo con la NEPA, la Acción Propuesta no tendría un impacto significativo en la calidad del aire y las emisiones de gases de efecto invernadero de los generadores de respaldo.	Los impactos serían los mismos que para la acción propuesta.	Sin impacto
Ruido	Proyecto de diseño de funciones <b>NOI-1: Medida de reducción de ruido</b> se puede implementar para minimizar el impacto del ruido de la construcción. De conformidad con la NEPA, la Acción Propuesta no tendría un impacto significativo como resultado del ruido durante la construcción.	Los impactos serían los mismos que para la acción propuesta.	Sin impacto

# ENVIRONMENTAL ASSESSMENT



Área de Recursos Técnicos	Acción Propuesta (Alternative G)	Alternative A	Sin Acción
	Proyecto de diseño de funciones <b>NOI-2: Medida de reducción de ruido</b> se puede implementar para reducir el impacto del ruido de los generadores de emergencia en el área de vivienda. De acuerdo con la NEPA, la Acción Propuesta no tendría impactos significativos como resultado del ruido de la operación de los generadores de respaldo de emergencia.		
Transporte	Proyecto de diseño de funciones <b>T-1: Plan de Gestión de Tráfico</b> se llevará a cabo para minimizar los impactos del tráfico de la construcción. No habrá tráfico adicional relacionado con el proyecto después de que se haya completado la construcción. De conformidad con la NEPA, la acción propuesta no tendría un impacto significativo en el transporte.	Los impactos serían los mismos que para la acción propuesta.	Sin impacto
Utilidades	De conformidad con la NEPA, la acción propuesta no tendría un impacto significativo en los servicios públicos.	Los impactos serían los mismos que para la acción propuesta.	Sin impacto
Coherencia de la Ley de Gestión de la Zona Costera	De conformidad con la NEPA, la Acción Propuesta no tendría un impacto significativo en la Zona Costera, sin embargo, la USCG obtendrá una Certificación de Manejo de la Zona Costera de la Junta de Planificación de Puerto Rico. De conformidad con la CZMA, la Acción propuesta no tendrá efectos razonablemente previsibles sobre los usos y recursos costeros.	Los impactos serían los mismos que para la acción propuesta.	Sin impacto
Socioeconomía	La Acción Propuesta agregaría hasta 4.070 años de trabajo a la economía local, lo que sería un beneficio económico sustancial para la región. De conformidad con la NEPA, la acción propuesta tendrá un impacto beneficioso en la socioeconomía. De conformidad con la EO 12898, la Acción Propuesta no tendría como resultado ningún efecto desproporcionadamente alto y adverso para la salud humana o el medio ambiente en las poblaciones minoritarias o de bajos ingresos. De acuerdo con la NEPA, la Acción Propuesta no tendría un impacto significativo en las comunidades de justicia ambiental.	Los impactos serían los mismos que para la Acción Propuesta, excepto que la Alternativa A agregaría 3,522 años de trabajo a la economía local durante el período de construcción.	Sin impacto

# ENVIRONMENTAL ASSESSMENT



Área de Recursos Técnicos	Acción Propuesta (Alternative G)	Alternative A	Sin Acción
Recursos visuales	Bajo la Acción Propuesta, habrá efectos adversos temporales a los recursos visuales durante la construcción. El carácter visual general de ASB y BDB no cambiará sustancialmente bajo la Acción Propuesta. De acuerdo con la NEPA, la acción propuesta no tendría un impacto significativo en los recursos visuales.	Impactos serían los mismos que para la Acción Propuesta una unque la disposición propuesta de los puestos de atención de la comunidad sería más de una desviación de la disposición existente que lo haría la acción propuesta.	Sin impacto



# 1 Chapter 1 Purpose and Need

## 2 1.1 Introduction

3 U.S. Coast Guard (USCG) Base San Juan, Detachment Borinquen is located near the Rafael  
4 Hernández Airport in Aguadilla, Puerto Rico (**Figure 1.1-1**). Air Station Borinquen (ASB) is a tenant  
5 command of Base Detachment Borinquen (BDB).<sup>1</sup> BDB provides support services for ASB, including  
6 housing for active duty USCG staff, as well as other DoD and federal civilian personnel, facilities  
7 engineering, administration, supply, medical, and morale and welfare services. ASB supports four  
8 MH65 helicopters and fixed wing aircraft deployed from other stateside USCG air stations that  
9 support search and rescue, law enforcement, aids to navigation, and logistic support missions.

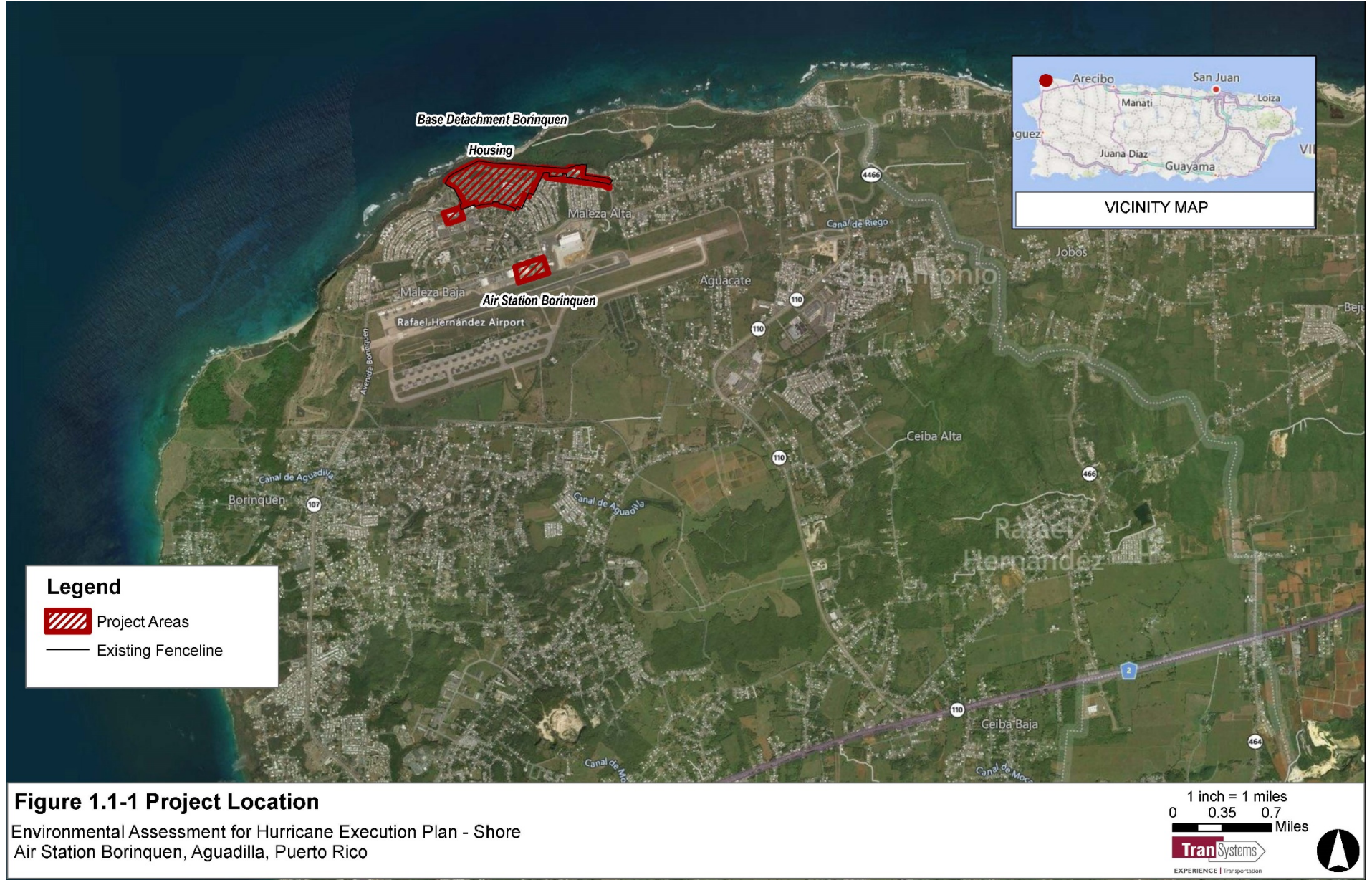
10 For purposes of this Environmental Assessment BDB has been identified as consisting of three  
11 primary areas: Air Station, Housing, and Panhandle (**Figure 1.1-2**) which when referred to  
12 collectively are called BDB. This document has been prepared in accordance with the National  
13 Environmental Policy Act (NEPA) of 1969, as amended (Title 42 United States Code [USC], 4321, et  
14 seq.); the Council on Environmental Quality (CEQ) regulations for implementing the procedural  
15 provisions of NEPA, at Title 40 of the Code of Federal Regulations (CFR), Sections 1500–1508 (40  
16 CFR Parts 1500–1508); and the USCG’s implementing procedures for NEPA outlined in  
17 Commandant Instruction M16475.1D.

18 This Environmental Assessment (EA) is an evaluation of the potential environmental impacts of  
19 conducting the repairs/replacement of BDB and ASB facilities.

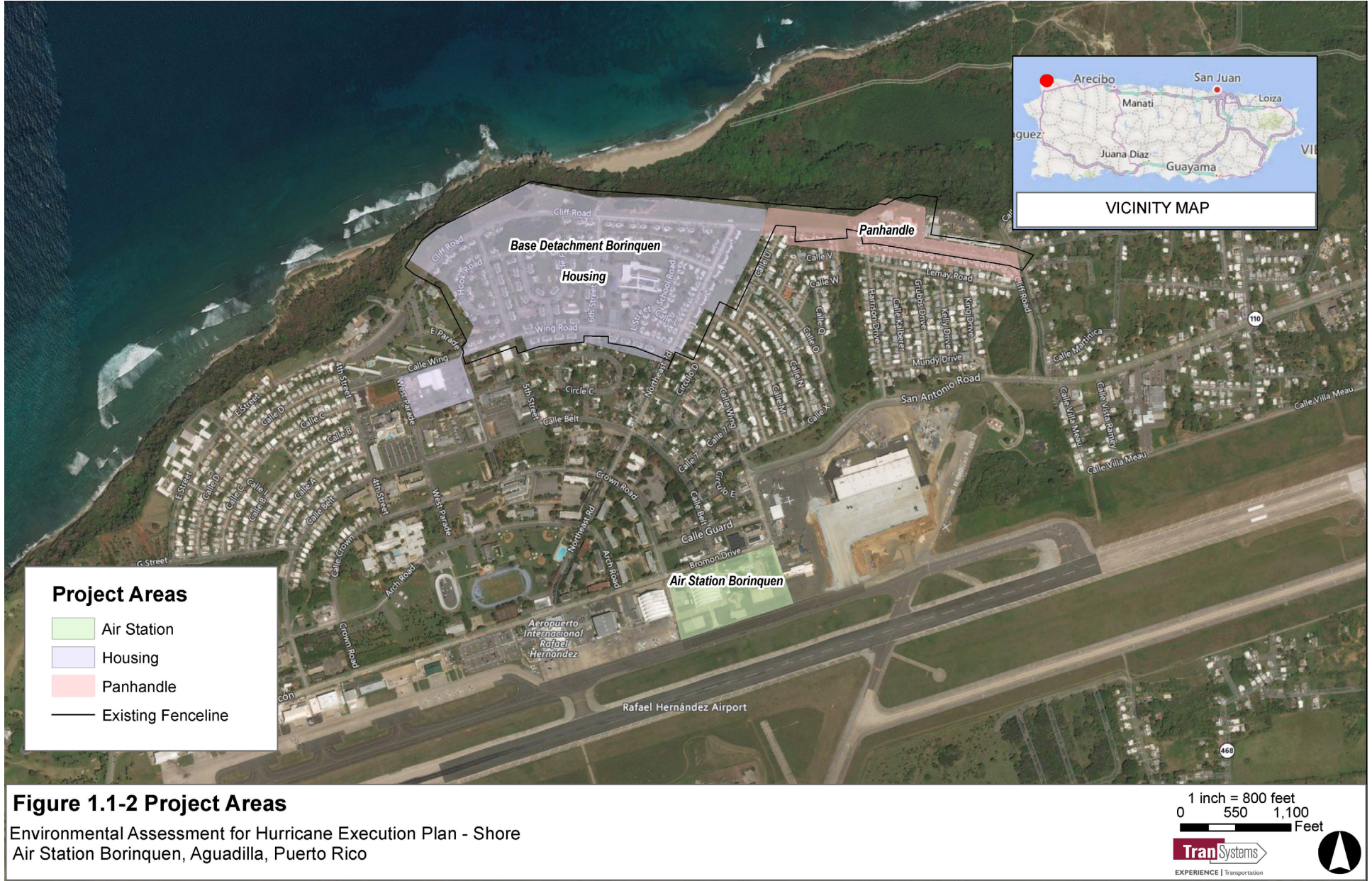
20 Through the EA process, the USCG will determine the potential for the occurrence of adverse  
21 environmental effects from implementation of the proposed action and its alternatives. The process  
22 also serves as a method of informing the public about project alternatives, and allows for public  
23 input on the proposed action. The results of the EA will determine whether an Environmental  
24 Impact Statement is required, or whether a Finding of No Significant Impact (FONSI) will be issued.

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<sup>1</sup> In 2019, Base San Juan was established at what was formerly Sector San Juan. At this time, all USCG facilities and support services at Borinquen were reassigned from the Air Station to Base San Juan as a detachment. This realignment improved efficiency by combining all support services within the Base San Juan and detachment Borinquen, and eliminating the need for the Air Station to provide these services and thereby allowing it to focus on mission execution.



# ENVIRONMENTAL ASSESSMENT





## 1.2 Purpose and Need

In September 2017, Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) suffered extensive damage to many of its facilities from Hurricanes Irma and Maria. This damage severely affected the Coast Guard's ability to efficiently perform its mission, which is search and rescue as well as law enforcement, aerial support for aids to navigation, and logistic support. In addition, many structures and utilities at BDB are dated and no longer adequately serve their intended purpose or remain properly functioning after a major event, such as a hurricane. The purpose of the project is to upgrade existing housing, community services, and utilities on BDB and ASB to current Coast Guard standards and to include increased resiliency.

The project is needed to ensure that BDB and ASB are able to meet their missions by remaining fully operational during a storm event or unscheduled utility outage, independent of local utility providers. In addition, the project is needed to provide the appropriate number of safe and adequately sized housing units to meet current and projected future ASB needs.

The USCG is proposing to restore hurricane damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities and infrastructure to withstand future storm events. The proposed work would be conducted largely in the Housing area of BDB, with limited utility work conducted at the Panhandle and ASB areas (Figure 1.1-2).

## 1.3 Regulatory Framework

NEPA requires federal agencies to consider environmental consequences in their decision-making process. CEQ regulations mandate that all federal agencies use a systematic interdisciplinary approach to environmental planning, and the evaluation of actions that might affect the environment. The USCG's implementation of NEPA is guided by Commandant Instruction M16475.1D. These federal regulations establish both the administrative process and substantive scope of the environmental impact evaluation, which is designed to ensure that deciding authorities have a proper understanding of the potential environmental consequences of a contemplated course of action. In addition to NEPA, the CEQ, and USCG regulations, this EA considers all applicable laws, regulations, and executive orders (EOs), including the following:

- Clean Air Act (CAA)
- Clean Water Act (CWA)
- Coastal Zone Management Act
- Endangered Species Act (ESA)
- Energy Independence and Security Act
- Migratory Bird Treaty Act (MBTA) and Executive Order 13186
- National Historic Preservation Act (NHPA)
- Noise Control Act
- Resource Conservation and Recovery Act
- Comprehensive Environmental Response, Compensation, and Liability Act
- Toxic Substances Control Act
- EO 11990, Protection of Wetlands



## 1 1.3.1 Clean Air Act

2 The Clean Air Act (CAA) (42 U.S.C §§ 7506[c]) regulates air emissions from area, stationary, and  
3 mobile sources and requires federal actions in nonattainment areas or maintenance areas to conform  
4 to an applicable State Implementation Plan (SIP). The SIP is designed to achieve or maintain an  
5 attainment designation for air pollutants as defined by the National Ambient Air Quality Standards  
6 (NAAQS), which protect public health and the environment. The goal of the CAA was to set and  
7 achieve NAAQS in every state by 1975.

8 The CAA was amended in 1977 primarily to set new goals (i.e., dates) for achieving attainment of  
9 NAAQS, because many areas of the country had failed to meet the deadlines. However, the 1990  
10 amendments were intended to meet unaddressed or insufficiently addressed problems such as acid  
11 rain, ground-level ozone, stratospheric ozone depletion, and air toxics. The criteria and procedures  
12 to be used to demonstrate conformity are explained in 40 CFR Parts 51 and 93.

## 13 1.3.2 Clean Water Act

14 The Clean Water Act (CWA) (33 U.S.C §§ 1251 *et seq.*) is the cornerstone of surface water quality  
15 protection in the U.S. The CWA does not directly regulate ground water. The statute employs a  
16 variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into  
17 waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These  
18 tools are employed to achieve the broader goal of restoring and maintaining the physical, chemical,  
19 and biological integrity of the nation's waters so that they can support "the protection and  
20 propagation of fish, shellfish, and wildlife and recreation in and on the water."

21 Starting in the late 1980s, efforts to address pollution from runoff have increased. For "non- point  
22 sources" (i.e., runoff from agricultural areas), voluntary programs are used, whereas regulatory  
23 approaches are used for "wet weather point sources" (i.e., urban storm sewer systems and  
24 construction sites).

25 Under the CWA Section 404, the USACE and the U.S. Environmental Protection Agency (EPA)  
26 regulate the discharge of dredged and fill materials into the waters of the U.S. Project sponsors must  
27 obtain a permit from USACE for discharges of dredged or fill materials into jurisdictional waters of  
28 the U.S. over which the USACE determines that it will exert jurisdiction.

## 29 1.3.3 Coastal Zone Management Act

30 The Coastal Zone Management Act established in 1972 and administered by the NOAA's Office of  
31 Ocean and Coastal Resource Management, provides for management of the nation's coastal  
32 resources. The overall purpose of the act is to balance competing land and water issues in the coastal  
33 zone. The program is administered at the Federal level by NOAA, Office for Coastal  
34 Management. Section 307 of the act requires that Federal actions having reasonably foreseeable  
35 effects on any coastal use (land or water) or natural resource of the coastal zone be consistent  
36 with the enforceable policies of a state's federally approved coastal management program.  
37

38 In July 1978, Puerto Rico entered into the Coastal Zone Management Program of Puerto Rico  
39 (PMZCPR). From that date, federal actions such as the granting of permits, allocation of funds or



1 activities carried out by federal agencies directly, to be carried out within the boundary of the  
2 Coastal Zone of Puerto Rico or affect the resources located in it, has to comply with the Public  
3 Policies of the PMZCPR.

4  
5 The Puerto Rican Department of Natural and Environmental Resources (DNER) serves as the lead  
6 agency responsible for implementing the PMZCPR. Puerto Rico's coastal zone generally extends  
7 1000 meters (one kilometer) inland, but extends further inland in places to include important coastal  
8 resources.

### 9 **1.3.4 Endangered Species Act**

10 The Endangered Species Act (ESA) (16 U.S.C §§ 1531 *et seq.*) applies to federal actions in two  
11 respects. First, the ESA requires that federal agencies, in consultation with the responsible wildlife  
12 agency, ensure that proposed actions are not likely to jeopardize the continued existence of any  
13 endangered or threatened species or result in the adverse modification or destruction of critical  
14 habitat (16 U.S.C. § 1532(19)). Regulations implementing ESA expand the consultation requirement  
15 to include those actions that “may affect” a listed species or adversely modify critical habitat.

16 Second, if an agency’s proposed action would “take” a listed species, then the agency must obtain an  
17 incidental take authorization from the responsible wildlife agency. The ESA defined the term “take”  
18 to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt any  
19 such conduct” (16 U.S.C. §1532(19)). The regulatory definitions of “harm” and “harass” are relevant  
20 to the Coast Guard’s determination as to whether the Proposed Action would result in adverse  
21 effects to listed species.

- 22       ▪ Harm is defined by regulation as “an act which actually kills or injures” fish or wildlife (50  
23       CFR § 222.102).
- 24       ▪ Harass is defined by regulation as an “intentional or negligent act or omission which  
25       creates the likelihood of injury to wildlife by annoying it to such an extent as to  
26       significantly disrupt normal behavioral patterns which include, but are not limited to,  
27       breeding, feeding, or sheltering” (50 CFR § 17.3).

### 28 **1.3.5 Energy Independence and Security Act**

29 Under Section 438 of the Energy Independence and Security Act of 2007 (EISA), federal agencies are  
30 required to reduce stormwater runoff from federal development and redevelopment projects to  
31 protect water resources. Federal agencies can comply using a variety of stormwater management  
32 practices often referred to as "green infrastructure" or "low impact development" practices, including  
33 reducing impervious surfaces and using vegetative practices, porous pavements, cisterns and green  
34 roofs.

### 35 **1.3.6 Migratory Bird Treaty Act and Executive Order 13186**

36 The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C §§ 703-712 *et seq.*) was enacted to ensure  
37 the protection of shared migratory bird resources. The MBTA prohibits the take, possession, import,  
38 export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any migratory  
39 bird, their eggs, parts, and nests, except as authorized under a valid permit.



1 EO 13186, titled Responsibilities of Federal Agencies to Protect Migratory Birds, directs federal  
2 agencies to take certain actions to further implement the MBTA and to conserve migratory birds.  
3 The MBTA protects 1,026 bird species; the list of species protected by the MBTA appears in 50 CFR §  
4 10.13. The order prohibits the take of migratory birds or their eggs, feathers, or nests. Many  
5 waterfowl, songbirds, raptors, and other species are migratory and are protected under the MBTA.  
6 Under this regulation, the Coast Guard must consider the potential environmental effects of its  
7 actions and assess the adverse effects of activities on migratory birds. A significant adverse effect on  
8 a population is defined in 50 CFR § 21.3 as an effect that could, within a reasonable period of time,  
9 diminish the capacity of a population of a migratory bird species to sustain itself at a biologically  
10 viable level.

11 The Coast Guard has entered into a Memorandum of Understanding with the USFWS pursuant to  
12 Executive Order 13186 (66 FR 3853; January 10, 2001) to strengthen migratory bird conservation  
13 through enhanced collaboration between the Coast Guard and the USFWS. If the Coast Guard  
14 determines that the Proposed Action may result in a significant adverse effect on a population of  
15 migratory bird species, the Coast Guard shall consult with the USFWS to develop and implement  
16 appropriate conservation measures to minimize or mitigate these effects. Conservation measures, as  
17 defined in 50 CFR § 21.3, include project designs or mitigation activities that are reasonable from a  
18 scientific, technological, and economic standpoint and are necessary to avoid, minimize, or mitigate  
19 the take of migratory birds or other potentially adverse effects.

### 20 **1.3.7 National Historic Preservation Act**

21 The National Historic Preservation Act of 1966 (NHPA), as amended, sets forth national policy and  
22 procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects  
23 included in or eligible for inclusion in the National Register of Historic Places (NRHP). Section 106  
24 of NHPA requires federal agencies to take into account the effects of their undertakings on such  
25 properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to  
26 comment on those undertakings, following regulations issued by the ACHP (36 CFR 800). As part of  
27 the Section 106 process, federal agencies must consult with the Puerto Rico State Historic  
28 Preservation Officer.

### 29 **1.3.8 Noise Control Act**

30 The Noise Control Act of 1972 is a statute of the United States initiating a federal program to  
31 regulate noise pollution with the intent of protecting human health and welfare. The primary  
32 responsibility of regulating noise is with state and local governments.

### 33 **1.3.9 Resource Conservation and Recovery Act**

34 The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous  
35 waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage,  
36 and disposal of hazardous waste. RCRA also set forth a framework for the management of non-  
37 hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental  
38 problems that could result from underground tanks storing petroleum and other hazardous  
39 substances.



## 1 **1.3.10 Comprehensive Environmental Response, Compensation, and Liability Act**

2 The Comprehensive Environmental Response, Compensation, and Liability Act -- otherwise known  
3 as CERCLA or Superfund -- provides a federal "Superfund" to clean up uncontrolled or abandoned  
4 hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and  
5 contaminants into the environment. Through CERCLA, EPA was given power to seek out those  
6 parties responsible for any release and assure their cooperation in the cleanup.

## 7 **1.3.11 Toxic Substances Control Act**

8 The Toxic Substances Control Act (TSCA) of 1976 provides EPA with authority to require reporting,  
9 record-keeping and testing requirements, and restrictions relating to chemical substances and/or  
10 mixtures. Certain substances are generally excluded from TSCA, including, among others, food,  
11 drugs, cosmetics and pesticides.

12 TSCA addresses the production, importation, use, and disposal of specific chemicals including  
13 polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint.

## 14 **1.3.12 EO 11990, Protection of Wetlands**

15 Executive Order 11990 is an overall wetlands policy for all agencies that manage federal lands,  
16 sponsor federal projects, or provide federal funds to state or local projects. The order requires  
17 federal agencies to follow avoidance, mitigation, and preservation procedures with public input  
18 before they propose new construction in wetlands. When federal lands are proposed for lease or sale  
19 to nonfederal parties, Executive Order 11990 requires that the lease or conveyance include  
20 restrictions to protect and enhance the wetlands on the property.



# 1 Chapter 2 Proposed Action and Alternatives

## 2 2.1 Identification of Site Planning Elements

3 After identifying the purpose of the project, to upgrade existing housing, community services, and  
4 utilities on BDB and ASB to current Coast Guard standards and to include increased resiliency, the  
5 Coast Guard conducted a planning charrette involving stakeholder engagement on 22-23 October  
6 2018 at the BDB Community Center to identify potential site planning elements that would  
7 accomplish the objectives. During this charrette, USCG identified a suite of six elements that needed  
8 to be addressed by any alternative considered to meet the project's purpose and need. The elements  
9 identified are listed below followed by their descriptions.

- 10 1. Construct a new Community Services/Personnel Support building;
- 11 2. Upgrade the resiliency of the electrical distribution system serving both the BDB  
12 Housing and ASB Areas;
- 13 3. Rebuild and/or repair housing units to meet resiliency thresholds;
- 14 4. Upgrade the water resiliency storage systems to meet resiliency thresholds;
- 15 5. Design a stormwater drainage solution for the BDB Housing Area to meet resiliency  
16 thresholds; and
- 17 6. Rebuild and/or construct a new sanitary sewer system at BDB Housing Area.

### 18 Element 1: New Community Services/Personnel Support Building

19 The existing Community Service/Personnel Support building, La Plaza building, is a concrete and  
20 masonry building originally constructed in 1953. It was severely damaged by Hurricane Maria in  
21 2017 and requires significant repair. All new structural framing is required in order to reoccupy the  
22 building including exterior walls, interior walls, roof structure, and second floor framing (where it  
23 occurs).

24 Prior to the hurricane damage, the La Plaza building housed various community functions  
25 including Child Development Center; Chapel; Theater; storage; medical facilities; gymnasium;  
26 fitness center; Morale, Well-Being, and Recreation (MWR) offices; library; chief's mess; teen center;  
27 and other various community services. The Community Center on Cliff Road also served  
28 community needs, containing a lunch counter, various multi-purpose spaces, a pub (The Pelican),  
29 and a social club. After the hurricane rendered La Plaza largely unusable, many of its functions  
30 shifted on an interim basis to the Community Center as well as several unoccupied houses on and  
31 around Northeast Road.

32 The La Plaza building is severely damaged, and is largely not ready for re-occupancy based on  
33 minimum standards of current building codes. It also does not offer either the structural resiliency  
34 or the electrical resiliency necessary to withstand major storm events. In order to meet the resiliency  
35 criterion above, it would require full structural repairs. It does not offer any electrical redundancy.

36 The objectives for the New Community Services/Personnel Support Building element are:

- 37 ■ Re-establish the "heart" of the base by putting services in a central walkable location that  
38 connects to housing units as well as to the transportation corridor/parking and the  
39 recreation corridor along Cliff Road; and
- 40 ■ Establish a recreational center (Club and Pool) north of Cliff Road not in direct proximity to  
41 family housing.



## 1 Element 2: Electrical System

2 The existing utility power distribution system in Borinquen, Puerto Rico is owned and maintained  
3 by the Puerto Rico Electric Power Authority (PREPA). The voltage of the PREPA distribution system  
4 in the area is 4,160 Volts (V) and is fed from three PREPA substations. The BDB and ASB are fed  
5 from a PREPA substation located adjacent to the U.S. Coast Guard Hangar at the ASB.

6 The substation adjacent to the hangar is at the end of its useful life and includes work-arounds to  
7 keep the equipment operational. Failures at the substation have been a large factor in outages to the  
8 ASB facilities. The current power distribution system does not provide the required reliability to  
9 support the required mission on-going at BDB and ASB. The U.S. Coast Guard is a first responder  
10 for support before, during, and after severe weather events.

11 The objectives for the Electrical Services element include:

### 12 ■ Redundancy

13 ○ Provide Normal Plus One (normal electrical service plus one back up source) for all  
14 non-critical circuits at all facilities, including housing.

15 ○ Provide Normal Plus Two (normal electrical service plus two back up sources) for all  
16 critical circuits including Command Center, Emergency Operations Center, aircraft  
17 hangar, any additional USCG facilities housing critical communications  
18 infrastructure.

### 19 ■ Duration

20 ○ Power and fuel capacity to provide full load for all circuits for 14 days for Borinquen,  
21 which matches the fuel lead time (time it takes for fuel to arrive after order is placed)  
22 after the 2017 hurricane.

23 ○ Where practical, the generator energy fuel sources shall be diesel.

## 24 Element 3: Housing

25 There are currently 224 housing units at BDB, comprised of seven types of single family homes and  
26 duplexes (Types A through G). The units range from two to five bedrooms and are either one or  
27 two stories. Most are 50 years old or older and have undergone many rounds of renovation.  
28 Some of the renovations have removed portions of interior shear walls. Although most of the  
29 existing housing has been maintained over the years much of it has not been updated to fulfill the  
30 needs of today's Coast Guardsmen and their families.

31 In addition, there is a surplus of housing required to accommodate the current and foreseeable  
32 missions at BDB and ASB resulting in many units being unoccupied and large portions of the  
33 Housing Area appearing abandoned and underutilized.

34 The objectives for the Housing element are:

35 ■ Establish logical transportation flow in Housing Area;

36 ■ Plan for resiliency;

37 ■ Provide separate neighborhoods for family housing vs unaccompanied housing;

38 ■ Create walkable neighborhoods;

39 ■ Plan for future concentration but retain the open feel of Puerto Rico (garden style duplex  
40 preferred); and

41 ■ Reuse existing infrastructure and housing structure where practical and economical.



## 1 **Element 4: Water System**

2 The existing cast iron water mains and galvanized steel water service laterals installed almost 80  
3 years ago are beyond their useful life and need complete replacement. The BDB and ASB are  
4 primarily supplied water from the local utility, Puerto Rico Aqueduct and Sewer Authority  
5 (PRASA). The ASB also contains a well located west of the hangar that is only used when primary  
6 service is interrupted. In addition, there is a 40,000 gallon aboveground storage. Due to the existing  
7 well and water treatment system, domestic water resiliency is met for an indefinite amount of time.  
8 However, storage volume for firewater is inadequate. The calculated ASB need is 128,000 gallons of  
9 firewater storage, but currently there is about 40,000 gallons, providing a gap of 88,000 gallons.

10 The Housing Area is also supplied water from PRASA. The area currently has no resiliency facilities  
11 and was completely without water service for more than 30 days following Hurricane Maria.  
12 Current water service is not continuous since the area still experiences service interruptions or  
13 pressure drops at least once per month. When the local water supply is interrupted, there is no  
14 backup supply and limited storage, and water service merely discontinues.

15 The objectives for the Water System element are:

- 16     ▪ Resiliency
  - 17         ○ Storage capacity to provide contingency requirement for entire duration per below;
  - 18         ○ Potable and fire water resiliency via storage solution(s) integrated into the daily
  - 19             supply system; and
  - 20         ○ Well water to provide extra contingency duration for both domestic and fire water.
- 21     ▪ Duration
  - 22         ○ Water capacity to provide for contingency provisions for 10 days.

## 23 **Element 5: Storm Drainage**

24 Several locations within the Housing Area flood on a regular basis, most notably at the intersection  
25 of Fifth Street and Hook Road, where the issue is serious enough so that several houses are not  
26 habitable as a result. In general, the storm drain system is in fair condition, but many inlets and  
27 pipes are clogged with sediment and other debris as a result of lack of maintenance. The Storm  
28 Water Master Plan completed in 2014 (URS 2014) showed that the existing storm drain system could  
29 have capacity of between a 10-year and 25-year storm, with a few upgrades (e.g. new outfall pipe,  
30 several pipes replaced with larger pipes) as outlined in that study report.

31 Stormwater that does not enter the underground pipe system uphill from the Housing Area flows  
32 mostly in the streets through the Housing Area before finding an overland path out to the cliff.

33 The current system is inadequate to address typical design storms without flooding, and inadequate  
34 to prevent flooding in a 500-year storm. Preliminary modeling and calculations determined that  
35 significant flooding is partly attributable to offsite overland flow onto the site.

36 The objective for the Storm Drainage element is to use the 500-year rainfall event as the resiliency  
37 criterion. Per NOAA Point Precipitation Frequency Estimates, this is 12.2 inches of rain in a 24-hour  
38 period. For comparison, a 25-year rainfall event produces 7.65 inches of rain in a 24-hour period.



## 1 Element 6: Sanitary Sewer

2 The existing sanitary system serving the Housing Area is approximately 80 years old. The sewer  
3 mains are comprised mostly of vitrified clay pipe, except where they have been replaced with  
4 polyvinyl chloride (PVC). Most of the sewer laterals have been replaced with PVC in approximately  
5 the last 20 years. Since the sanitary system is approximately 80 years old, it is being considered for  
6 recapitalization to extend its usable life span. The objective for the Sanitary Sewer element is to  
7 remain functional for a duration of 10 days without municipal power.

8 The existing sanitary system serving the Housing Area also consists of two lift stations, one near the  
9 existing clubhouse on Cliff Road and the other behind existing houses on the east side of Northeast  
10 Road. The lift station on Cliff Road pumps sewage flows from the panhandle area of BDB Housing,  
11 the Army Reserve Base at the east end of Cliff Road, and from the housing neighborhood south of  
12 Cliff Road. As a result, this lift station and force main to Northeast Road will remain, but will be  
13 supplemented by a new backup generator. The lift station at Northeast Road is no longer required  
14 since the remaining houses that drain to it can easily drain to the adjacent gravity collection system.  
15 The project will likely require one new lift station to pump flows from two houses where a gravity  
16 system may not work due to a new storm drain channel.

## 17 2.2 Identification of Preliminary Alternatives

18 The charrette resulted in development of four preliminary alternatives, Alternatives A through D.  
19 One, Alternative B, was quickly eliminated from consideration as it was virtually indistinguishable  
20 from Alternative A. Shortly after the charrette took place, Alternatives E and F, which did not entail  
21 the construction of new housing units, were developed. Alternative G, a hybrid that embodied the  
22 most desirable components of the six previously developed alternatives, was the last alternative  
23 developed.

24 Six preliminary alternatives were developed to address the six elements. Development concepts for  
25 each of the alternatives are illustrated in **Appendix A, Alternatives Plan Sheets**.

26 The primary differences among the alternatives are in the way they address the project components  
27 to Construct New Community Services/Personnel Support Building and Housing (Elements 1 and  
28 3). Project components that address all other project components (Elements 2, 4, 5, and 6) follow the  
29 layout of Elements 1 and 3.

30 Element 2 provides for upgrading the resiliency of the electrical distribution system through  
31 additional N+1 generation and Elements 3 and 6 provide for upgrading the electrical distribution  
32 and sanitary sewer systems at BDB and ASB and essentially follow the layout of the existing  
33 facilities. Implementation of actions to address upgrades to the water resiliency storage systems  
34 (Element 4) will occur primarily within existing streets and will require construction of a new 88,000  
35 gallon water tank in the ASB area, located west of the hangar near the existing storage tank and well  
36 facilities, and two new 165,000 gallon water tanks at the BDB Housing area, located on south side of  
37 Cliff Road, opposite Ray Park. A new stormwater drainage system designed and constructed to  
38 handle a 500 year rainfall event, allowing the USCG mission to continue even in large rain events, is  
39 required to address Element 5. Eleven Type D housing units would be demolished to construct the  
40 new stormwater drainage system under each of the project alternatives. Some existing streets,  
41 pavement, and utilities will be demolished as a result of these actions.



1 Other means of addressing Element 1 are accomplished by constructing new Community  
2 Services/Personnel Support Buildings using a “Main Street” approach or using a Town Square  
3 approach.

4 Element 3 is generally addressed by renovating existing housing units, constructing new housing  
5 units, or a combination of both.

- 6 • **Housing - Demolition:** For all of the alternatives, in order to implement project components  
7 that address all six project elements, particularly Elements 1, 3, and 5, some existing housing  
8 units would have to be demolished.
- 9 • **Housing - All Units to Remain, exterior treatment:** To support the mission of housing U.S.  
10 Coast Guard service members and their families, the housing units to remain will be given  
11 exterior envelope resiliency renovation as necessary, to include re-roofing, patching of  
12 concrete, painting, new windows and doors, as well as structural upgrades for lateral load  
13 (hurricane, wind, seismic) resistance improvements on certain units. For these exterior  
14 renovations, the USCG will consult with SHPO and will endeavor to respect and maintain  
15 the historical appearance and style of the housing units.
- 16 • **Housing - Units to Remain - Preservation Units, interior treatment:** Within the group of  
17 housing units to remain, each of the alternatives include six units slated for interior building  
18 preservation. There are seven different housing types (Types A-G) within the BDB Housing  
19 Area, constructed in either 1940 or 1954. During consultation with the SHPO, it was  
20 determined that building Types A, B, C, D, F and G were eligible for listing on the National  
21 Register. In each alternative, specific units representing each of these building types are  
22 selected and the original remaining interior finishes will be preserved and maintained. Thus,  
23 these six units will have an essentially preserved appearance both inside and out.
- 24 • **Housing - Units to Remain, Non-preservation, interior renovation:** The remainder of  
25 housing units to remain are intended to undergo interior modernization and renovation  
26 sometime in the future, to support the mission of housing USCG families. Interior  
27 renovations are intended to include: replacement of mechanical, electrical and plumbing  
28 systems and fixtures, including code compliance upgrades; new interior finishes; new  
29 cabinetry; and lead and asbestos abatement as required. It should be noted that many of  
30 these units no longer have original interior finishes.

31 The above descriptions of treatment of housing apply to all alternatives; what varies is which houses  
32 are to be demolished and which are to be retained.

33 **Alternative A** is a “Main Street” approach, with a cluster of new community center buildings and  
34 parking located on current Sixth Street. This alternative retains most existing housing and minimizes  
35 new construction and new streets. Under Alternative A, 98 housing units would be repaired, 88  
36 housing units would be demolished, 38 existing housing units would remain with no renovation,  
37 and 50 new housing units would be constructed. The entirety of La Plaza would be demolished.

38 **Alternative C** is a “Town Square” approach, with four new L shaped community center buildings  
39 creating a town square along the current eastern leg of F Circle. It features a new recreational field  
40 and parking. This alternative also features some retained existing housing and a large number of  
41 new housing and maximizes space for future development. Under Alternative C, 42 housing units  
42 would be repaired, 144 housing units would be demolished, 38 existing housing units would remain



1 with no renovation, and 106 new housing units in duplexes would be constructed. The entirety of La  
2 Plaza would be demolished.

3 **Alternative D** retains portions of the existing La Plaza building to serve as Community Services and  
4 Personnel Support, with extensive retrofit, refurbishment, demolition and additions. Existing  
5 parking is demolished and new parking constructed. It features a new recreational field. This  
6 alternative would rebuild La Plaza. This alternative features a mix of existing housing and new  
7 housing. Under Alternative D, 60 housing units would be repaired, 126 housing units would be  
8 demolished, 38 existing housing units would remain with no renovation, and 88 new housing units  
9 in duplexes would be constructed.

10 **Alternative E** is a "Town Square" approach, with two new L shaped community center buildings  
11 creating a town square, in the approximate location of the existing La Plaza building. It features a  
12 new recreational field and parking. This alternative does not construct any new housing but only  
13 renovates existing housing. An Unaccompanied Personnel Housing (UPH) facility is to be provided.  
14 Alternative E.1 retains the northern wing of La Plaza, heavily renovated, as the UPH. The remainder  
15 of La Plaza would be demolished. Alternative E.2 demolishes the entirety of La Plaza, and features a  
16 new UPH building. Under Alternative E, 121 housing units would be repaired, 35 housing units  
17 would be demolished, 68 existing housing units would remain with no renovation, and a 33-room  
18 UPH would be constructed.

19 **Alternative F** is a "Town Square" approach that features a new recreational field and parking. This  
20 alternative does not construct any new housing but only renovates existing housing. Alternative F.1  
21 retains and utilizes the north portion of the existing La Plaza building, with additional building  
22 wings added. The remainder of La Plaza would be demolished. Alternative F.2 includes two new L  
23 shaped community center buildings creating a town square in the approximate location of the  
24 existing La Plaza building. The entirety of La Plaza would be demolished. Under Alternative F, 143  
25 housing units would be repaired, 35 housing units would be demolished, and 46 existing housing  
26 units would remain with no renovation, and no new housing units would be constructed.

27 **Alternative G** is a "Town Square" approach, with four new L shaped community center buildings  
28 creating a town square along the current Sixth Street. It features a new recreational field and  
29 parking. This alternative also features some retained existing housing units and a number of new  
30 housing units, and maximizing space for future development. Under Alternative G, 97 housing  
31 units would be repaired, 86 housing units would be demolished, 41 housing units would remain  
32 with no renovation, and 24 new housing units in 12 duplexes and a 34-room UPH would be  
33 constructed.



## 1 2.3 Preliminary Alternative Screening Process

2 The Coast Guard assigned parameters within Elements 1 (Community Services Building) and 3  
3 (Housing) that would assist in ranking of each alternative for further consideration. These  
4 parameters were characterized as either preferred or non-preferred for the reasons listed below in  
5 **Table 2.3-1**. Elements 2 (Electrical), 4 (Water), and 5 (Stormwater) did not entail any parameters to  
6 differentiate between alternatives, nor did the resiliency repairs/improvements proposed for the  
7 Coast Guard Exchange.

8 Using the parameters in **Table 2.3-1**, the USCG evaluated each alternative to determine if it resulted  
9 in a preferred or non-preferred approach to the project elements. This approach enabled the USCG  
10 to screen the preliminary set of alternatives in a quantitative manner and rank each alternative  
11 based on its ability to provide the best solution for each project element. The results of screening of  
12 preliminary alternatives are shown in **Table 2.3-2**.



**Table 2.3-1. Preliminary Alternative Screening Parameters**

Element	Parameter	Rating
Element 1 (Community Services Building)	Accommodation of La Plaza functions during construction	<b>Preferred</b> would entail logistically simple efforts that involve minimal additional costs to the project (relocating functions to other onsite buildings, etc.). <b>Preferred</b> accommodates demolition of La Plaza after construction of new Community Services Building. <b>Non-Preferred</b> would entail efforts that add substantial additional costs or logistical elements to the project (leasing commercial space offsite or bringing in temporary trailers to relocate functions, etc.). <b>Non-Preferred</b> does not accommodate demolition of La Plaza after construction of new Community Services Building.
	New Construction for Community Services Building	<b>Preferred</b> would entail new construction for the Community Services Building for greater longevity and greater functionality. <b>Non-Preferred</b> would entail utilizing renovated construction with limitation on functionality.
	Location of support services	<b>Preferred</b> would entail a centralized location of community services functions. <b>Non-Preferred</b> would entail a non-centralized location of community services functions.
	Element 2 (Electrical)	Did not entail any parameters to differentiate between alternatives. All alternatives would entail separate generation at the Air Station and the Housing Area.
Element 3 (Housing)	Unaccompanied Personnel Housing (UPH) Functions	<b>Preferred</b> would entail a centralized UPH facility. <b>Non-Preferred</b> would entail placement of UPH functions in housing units.
	New Construction for Unaccompanied Personnel Housing (UPH)	<b>Preferred</b> would entail construction of a new centralized UPH facility for greater longevity and greater functionality. <b>Non-Preferred</b> would entail utilizing renovated construction for UPH functions with limitations on functionality.
	Unrenovated existing housing units	<b>Preferred</b> would not entail the retention of non-renovated excess housing units. <b>Non-Preferred</b> would entail the retention of non-renovated excess housing units.
Element 4 (Water)	Did not entail any parameters to differentiate between alternatives. All alternatives would entail the placement of two new water storage tanks in the Housing Area with the installation of a new well and one new storage tank at the Air Station.	No Rating
Element 5 (Stormwater)	Did not entail any parameters to differentiate between alternatives. All alternatives would receive stormwater upgrades that include repairs and retrofits to address the potential for 25-year storm events, instead of the 10-year storm events the current system is designed to accommodate.	No Rating
Element 6 (Sanitary Sewer)	Did not entail any parameters to differentiate between alternatives. All alternatives would receive, at a minimum, partial sanitary sewer recapitalization to address known areas of deficiency and damage. Full recapitalization would occur if the project budget allows.	No Rating



1 **Table 2.3-2. Results of Screening of Preliminary Alternatives**

Element	Parameters	Alternative A	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
Element 1 (Community Services Building)	Accommodation of La Plaza functions during construction	Preferred	Preferred	Non-Preferred	Non-Preferred	Non-Preferred	Preferred
	New Construction for Community Services Building	Preferred	Preferred	Non-Preferred	Preferred	Non-Preferred	Preferred
	Location of support services	Preferred	Preferred	Preferred	Preferred	Preferred	Preferred
Element 2 (Electrical)	No Parameters						
	UPH functions	Non-Preferred	Non-Preferred	Non-Preferred	Preferred	Non-Preferred	Preferred
	New Construction for UPH	Preferred	Preferred	Preferred	Non-Preferred	Non-Preferred	Preferred
Element 3 (Housing)	Unrenovated existing housing units	Preferred	Preferred	Preferred	Non-Preferred	Non-Preferred	Preferred
Element 4 (Water)	No Parameters						
Element 5 (Stormwater)	No Parameters						
Element 6 (Sanitary Sewer)	No Parameters						
	<b>Total Number of Preferred Ratings</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>6</b>

2



## 2.4 Alternatives Considered but Eliminated from Further Consideration

As a result of the preliminary screening based on the elemental parameters, it was determined that Alternatives D, E, and F did not embody enough preferred parameters to carry forward for further consideration. The remaining three, Alternatives A, C, and G were further ranked based on their estimated design and construction costs. As a result of that ranking, the Coast Guard carried forward two alternatives that met most or all of the elemental parameters and provided a high likelihood that they could be executed within the project's budget. Alternative C was discarded due to substantially higher costs of design and construction.

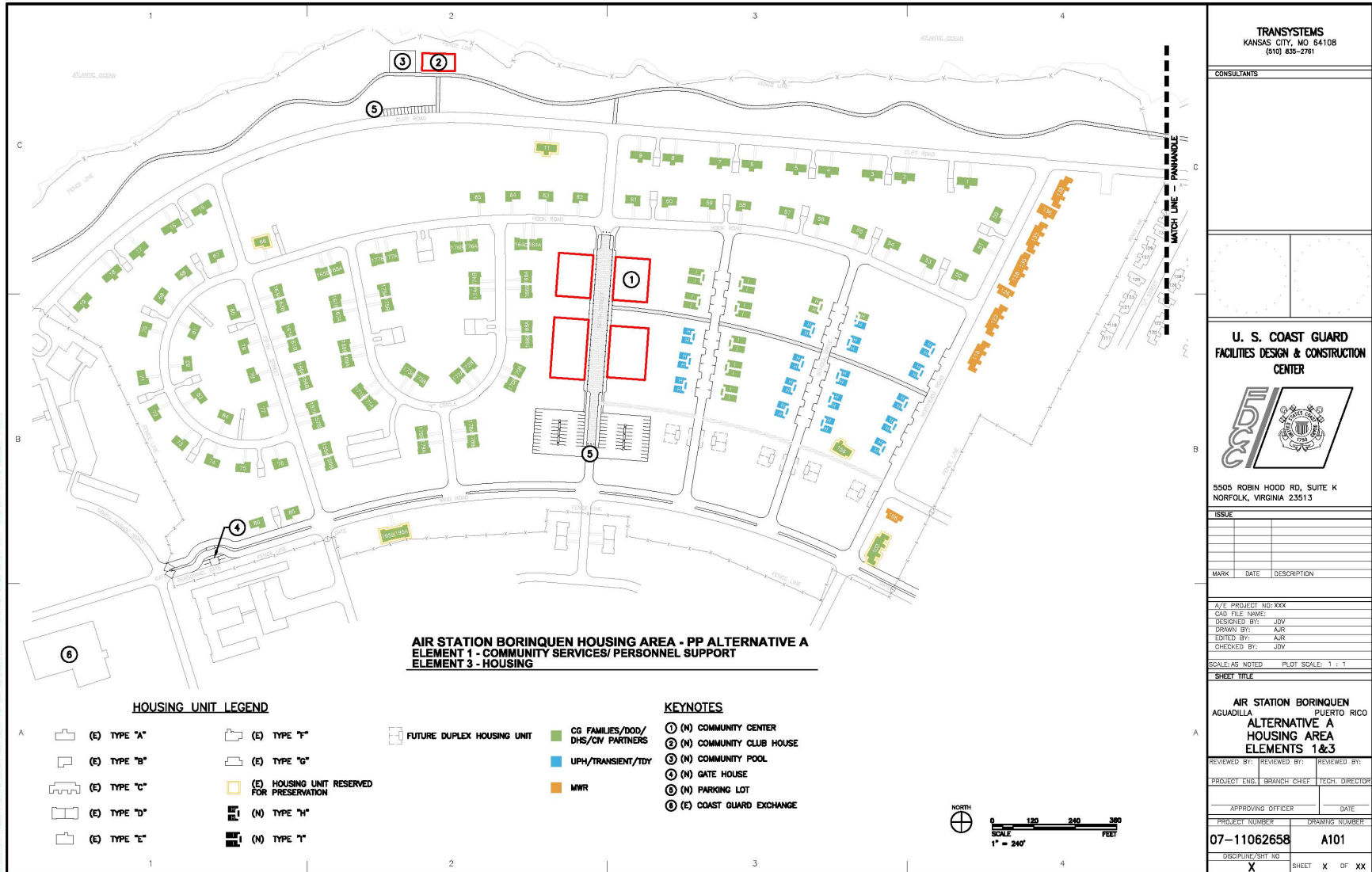
## 2.5 Alternatives Brought Forward for Detailed Analysis

### 2.5.1 Alternative A (Figure 2.5-1)

Alternative A includes:

- Element 1: Construction of a Community Services "Main Street" approach, with a cluster of new community center buildings and parking located on current Sixth Street, including demolition of La Plaza.
- Element 2: Installation of electrical generators (two half-sized generators at the BDB Housing Area, two half-sized generators at the ASB) to provide resiliency in the event of power outage.
- Element 3: Repair of 98 housing units, demolition of 88 housing units, construction of 50 new housing units, and retention (without renovation) of 38 existing housing units. Electrical and water distribution systems would be upgraded.
- Element 4: Improvement of water resiliency system consisting of two new storage tanks and a well at the BDB Housing area for domestic and fire use in event of water utility outage; and a new storage tank for fire water resiliency at the ASB.
- Element 5: Repair and upgrade the stormwater system at the BDB Housing Area designed for the 500-year event to mitigate flooding.
- Element 6: Partial recapitalization of the sanitary sewer system at the BDB Housing Area, addressing those system components in worst shape (with an option for full recapitalization of sanitary sewer system at the Housing Area).
- Alternative A also includes resiliency repairs to the Coast Guard Exchange such as replacement of gas station dispensers, electrical and storm drain improvements, repairs related to building envelope resiliency, improved lighting, and a new 7,500 gallon fuel tank.
- Alternative A includes a new club house and pool toward the western end of Cliff Road on the north side and demolition of the existing club house and pool in the Panhandle area.

# ENVIRONMENTAL ASSESSMENT



1  
2 **Figure 2.5-1. Alternative A Site Plan**



## 1 2.5.2 Proposed Action (Alternative G) (Figure 2.5-2)

2 The Proposed Action includes:

- 3 • Element 1: Construction of a Community Services “Town Square” on Sixth Street including  
4 demolition of La Plaza.
- 5 • Element 2: Installation of electrical generators (two half-sized generators at the BDB Housing  
6 Area, two half-sized generators at the ASB) to provide resiliency in the event of power  
7 outage.
- 8 • Element 3: Repair of 97 housing units, demolition of 86 housing units, construction of 24 new  
9 housing units in 12 duplexes and a 34-room UPH, retention (with no renovation) of 41  
10 housing units; and construction of a new Gate House facility. Electrical and water  
11 distribution systems would be upgraded.
- 12 • Element 4: Improvement of water resiliency system consisting of two new storage tanks and  
13 a well at the BDB Housing area for domestic and fire use in event of water utility outage; and  
14 a new storage tank for fire water resiliency at the ASB.
- 15 • Element 5: Repair and upgrade the stormwater system at the BDB Housing Area designed  
16 for the 500-year event to mitigate flooding.
- 17 • Element 6: Partial recapitalization of the sanitary sewer system at the BDB Housing Area,  
18 addressing those system components in worst shape (with an option for full recapitalization  
19 of sanitary sewer system at Housing Area).
- 20 • The Proposed Action also includes resiliency repairs to the Coast Guard Exchange such as  
21 replacement of gas station dispensers, electrical and storm drain improvements, repairs  
22 related to building envelope resiliency, improved lighting, and a new 7,500 gallon fuel tank.
- 23 • The Proposed Action includes a new club house and pool toward the western end of Cliff  
24 Road on the north side and demolition of the existing club house and pool in the Panhandle  
25 area.

## 26 2.5.3 No Action Alternative

27 Under the No Action Alternative, no improvements would be made at the ASB, BDB  
28 Housing Area, Coast Guard Exchange, or Panhandle. Standard maintenance activities would  
29 continue and the existing facilities would continue to function as they currently do.

# ENVIRONMENTAL ASSESSMENT



USCG AIR STATION BORINQUEN - BDB

**KEY NOTES:**

- |  |   |
|--|---|
| 1. DEMOLISH EXISTING HOUSING UNITS.                                    | 9. FAMILY HOUSING UNIT (3 BEDROOM DUPLEX).  |
| 2. DEMOLISH ROADWAY PAVEMENT.  | 10. FAMILY HOUSING UNIT (3 BEDROOM DUPLEX). |
| 3. PEDESTRIAN TRAIL.   | 11. POOL AND CLUBHOUSE.                     |
| 4. DEMOLISH LA PLAZA COMMUNITY CENTER.                                 | 12. NEW ROADWAYS.                           |
| 5. NEW CSB AND CSB WALKWAYS.   | 13. GATEHOUSE AND SECURITY ENTRANCE.        |
| 6. CSB PARKING LOT.  | 14. OUTDOOR COMMUNITY AREA.                 |
| 7. 20 UNIT UNACCOMPANIED PERSONNEL HOUSING (UPH) AND ADJACENT PARKING. |   |
| 8. 14 UNIT ADDITIONAL UPH.   |   |



USCG AIR STATION BORINQUEN - ASB

1  
2 **Figure 2.5-2 Proposed Action (Alternative G) Site Plan**



## 1 2.6 Project Design Features

2 During project design and construction, the USCG will ensure that the measures outlined below are  
3 implemented to reduce impacts, as discussed in Chapter 3 Affected Environment and  
4 Environmental Consequences.

### 5 2.6.1 Biological Resources

6 To minimize potential impacts to the PRB, Project Design Features BIO-1 will be implemented:

- 7 • **BIO-1: Puerto Rican Boa Avoidance Measures.** Adhere to the U.S. Fish and Wildlife Service  
8 Caribbean Ecological Services Field Office Conservation Measures for the Puerto Rican boa  
9 (*Chilabothrus inornatus*), as updated November 3, 2020. Measures will include education of  
10 construction staff, surveying of suitable vegetation, removal of vegetation in an appropriate  
11 manger according to USFWS guidance, checking equipment for individuals, placement of  
12 construction materials/debris, and communication with USFWS as appropriate.

13 To reduce potential impacts to migratory birds, Project Design Feature BIO-2 will be implemented:

- 14 • **BIO-2: Migratory Bird Avoidance.** Implement measures outlined in the Nationwide  
15 Standard Conservation Measures for migratory birds. Measures generally include education  
16 of workers, avoidance of birds, waste management, protection of habitat, active nest surveys  
17 prior to construction, establishment of buffer zones for active nesting areas, observation of  
18 nesting birds, vegetation maintenance, weed abatement, restriction or avoidance of  
19 nighttime working with lights, placement of nesting deterrents on construction areas, and  
20 implementation of standard good housekeeping construction BMPs.

21 The complete text of project design features BIO-1 and BIO-2 may be found in Appendix B:  
22 Biological Resources Information.

### 23 2.6.2 Cultural Resources

24 To reduce the adverse effects to cultural resources, Project Design Feature CUL-1 will be  
25 implemented:

- 26 • **CUL-1: Unanticipated Archaeological Discoveries.** The USCG will implement standard  
27 protocols for the treatment of unanticipated archaeological discoveries during demolition  
28 and construction activities. If previously unknown resources are encountered, construction  
29 will be halted and the resource evaluated. If it is determined to be historically significant, the  
30 project will be redesigned to reduce or eliminate impacts; if it cannot be avoided, additional  
31 consultation will be conducted with the Puerto Rico State Historic Preservation Officer  
32 (SHPO).

### 33 2.6.3 Hydrology and Water Resources

34 To minimize potential impacts to hydrology and water resources, the following project design  
35 features will be implemented:



- 1 • **WAT-1: Construction Stormwater Pollution Prevention Plan.** Coverage under the National  
2 Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) will  
3 minimize potential effects from soil erosion during construction. As required by the permit a  
4 Stormwater Pollution Prevention Plan (SWPPP) will be developed and implemented to  
5 prevent the transfer of disturbed soil from entering wetlands and waters during project  
6 construction. The SWPPP will provide Best Management Practices (BMPs) to minimize  
7 potential short-term increases in sediment transport caused by construction, including  
8 erosion control requirements and stormwater management. These BMPs will include  
9 measures to provide permeable surfaces where feasible and to retain or detain and treat  
10 stormwater onsite. Other BMPs include strategies to manage the overall amount and quality  
11 of stormwater runoff.
- 12 • **WAT-2: Construction Equipment Maintenance.** Any equipment proposed for use will be  
13 kept in good repair without leaks of fluids. If such leaks or drips occur, they will be  
14 cleaned up immediately. Equipment maintenance and/or repair will be confined to an  
15 upland location. Runoff from this area will be controlled to prevent contamination of  
16 water. Fueling of construction vehicles and equipment will take place at least 50 feet  
17 away from the water (and away from drains), preferably over an impervious surface.
- 18 • **WAT-3: Stormwater Outfall Design.** Include velocity dissipation in stormwater outfall  
19 design to reduce potential erosion.

## 20 2.6.4 Hazardous Materials and Waste

21 To minimize potential impacts of hazardous materials, the following project design features will be  
22 implemented:

- 23 ■ **HAZ-1: Regulatory agency file review.** Further research and investigation into the full  
24 removal of all petroleum contaminated soils will be performed prior to construction.
- 25 ■ **HAZ-2: Asbestos and Lead based paint removal.** Removal of all asbestos containing  
26 materials and lead based paints will be performed prior to demolition or renovation.
  - 27 ○ A complete asbestos and lead based paint survey will be conducted prior to  
28 demolition.
  - 29 ○ A qualified and certified contractor will remove all ACBM and LBP prior to  
30 demolition.
- 31 ■ **HAZ-3: Aboveground Storage Tanks.** Further research and investigation into the full  
32 removal areas where above ground storage tanks will be affected during construction will be  
33 assessed for deficiencies in secondary containment to ensure no soil or water contamination  
34 is evident.

## 35 2.6.5 Air Quality and Greenhouse Gases

36 To minimize potential air quality impacts related to construction, the following project design  
37 feature will be implemented.

38 **AQ-1: Air Quality Best Management Practices.** The project design will incorporate  
39 measures to reduce dust, odors, and engine exhaust during demolition and construction.  
40 These activities will include best management practices to reduce dust, PM<sub>2.5</sub> and PM<sub>10</sub> at  
41 nearby land uses. Construction equipment will include emission-control devices to reduce



1 CO, GHGs, and particulate emissions from gasoline and diesel engines. These features will  
2 be incorporated into construction plans and contractor specifications in the construction  
3 contracts.

## 4 **2.6.6 Noise**

5 To minimize construction noise impacts the following project design feature will be implemented.

- 6 • **NOI-1: Noise Reduction Measure.** Demolition and construction activities will include  
7 restrictions on nighttime construction activities, mufflers and enclosures for equipment,  
8 turning off idling equipment, and locating equipment farther away from receptors (e.g.,  
9 residences, parks, churches). Construction activities will comply with the applicable  
10 provisions of the local noise ordinances. Construction noise reduction measures will be  
11 incorporated into construction plans and contractor specifications in the construction  
12 contract. The Coast Guard will conduct public outreach to ensure nearby residents are  
13 notified of pending construction activities in advance of construction commencement. This  
14 may take the form of publication of notice in local newspapers, posting flyers in the local  
15 neighborhoods, or hosting public meetings.
- 16 • **NOI-2: Noise Reduction Measure.** The two backup emergency generators for the Housing  
17 Area will include sound-attenuated enclosures. These sound-attenuated enclosures will  
18 provide a minimum of an additional 10-dBA noise reduction for each generator. Sound  
19 attenuation will be incorporated into construction plans and contractor specifications in the  
20 construction contract for the two generators at the Housing Area.

## 21 **2.6.7 Transportation**

22 To minimize construction traffic impacts the following project design feature will be implemented:

- 23 • **T-1: Traffic Management Plan.** A construction Traffic Management Plan will be prepared  
24 prior to construction and implemented by the construction contractor. The plan will ensure  
25 that traffic flow and roadway safety are maintained in the project area during construction.  
26 This Traffic Management Plan will include provisions for adequate notices, sign-postings,  
27 detours, phased construction, provisions for pedestrians and bicycles, and the permitted  
28 hours of construction activities. The Traffic Management Plan will be devised so that  
29 construction will not interfere with any emergency response or evacuation plans.

## 30 **2.7 Resource Analysis**

31 As part of the process to determine the potential impact or harm from the Proposed Action and  
32 alternatives, the Coast Guard identified potential resources and issues to be analyzed. Some issues  
33 typically addressed in planning documents were eliminated from further analysis during this NEPA  
34 process.

35 **Table 2.7.1** lists the specific resources eliminated from further analysis and the reason for their  
36 dismissal.



1 **Table 2.7-1. Resources Eliminated from Analysis**

Resource	Reason for Elimination
<b>Agriculture</b>	
	No portion of BDB or ASB are under agricultural use. The proposed alternatives would have no impact on agriculture.
<b>Land Use</b>	
	Land Use at BDB and ASB is governed by the policies of the U.S. Coast Guard. All proposed activities would occur on USCG property. Local land use plans and policies do not apply to USCG property.
<b>Recreation</b>	
	There are several recreation opportunities at BDB and ASB including facilities at the Community Center and an exercise course located at Ray Park. All recreation facilities at BDB and ASB are available to Coast Guard personnel and are not available to the general public.



## 1 Chapter 3 Affected Environment and 2 Environmental Consequences

3 The Affected Environment provides an environmental baseline of each resource category, and the  
4 conditions on and adjacent to the project site at the time this document was prepared. The  
5 regulatory framework of applicable laws, ordinances, regulations, and guidance pertinent to the  
6 resource category is also presented, where appropriate.

7 The environmental consequences discussion provides an analysis of the potential adverse and  
8 beneficial environmental impacts that could result from implementing the Proposed Action and its  
9 alternatives. NEPA does not prescribe specific significance criteria, but rather states that the  
10 environmental impacts should be evaluated in terms of their context, intensity, and duration.  
11 Impacts are described as adverse or beneficial, and in terms of their context, intensity, and duration.

12 Context refers to the geographic area (spatial extent) of impact, which varies with the physical  
13 setting of the activity and the nature of the resource being analyzed. Intensity refers to the severity  
14 of the impact; evaluation of the intensity of an impact considers the sensitivity of the resource and  
15 other factors of context to determine the degree or magnitude of the impact relative to the affected  
16 environment. Duration refers to how long the impact may last, and may be either short- or long-  
17 term.

18 The resources discussed in the sections that follow are:

- 19     ▪ Biological Resources
- 20     ▪ Cultural Resources
- 21     ▪ Geology and Soils
- 22     ▪ Hydrology and Water Resources
- 23     ▪ Hazardous Materials and Waste
- 24     ▪ Air Quality and Greenhouse Gases
- 25     ▪ Noise
- 26     ▪ Transportation
- 27     ▪ Utilities
- 28     ▪ Coastal Zone Management Act Consistency
- 29     ▪ Socioeconomics
- 30     ▪ Visual Resources



## 1 3.1 Biological Resources

2 Biological Resources includes flora (plants) and fauna (animals), and their respective habitats.  
3 Consideration of Biological Resources in this document is governed by regulations appropriate to  
4 the project location, including Section 7 of the Endangered Species Act (ESA) and the Migratory Bird  
5 Treaty Act (MBTA). Assessment of potential impacts entails consideration of the presence of  
6 biological organisms including, but not limited to, threatened and endangered species, critical  
7 habitat for those species, migratory birds, and the potential that the Proposed Action and its  
8 alternatives would impact those organisms.

### 9 3.1.1 Affected Environment

10 The project area is confined to the existing limits of BDB and ASB and a cliffside location for  
11 stormwater discharge to the north of the BDB fence line. Under the Holdridge System<sup>2</sup>, BDB and  
12 ASB are located in a zone of subtropical moist forest (Holdridge 1967). The majority of subtropical  
13 moist forest has been developed or destroyed in the course of agricultural or urban development  
14 (USDA 2009). Land use mapping places BDB and ASB in an area of mixed urban development and  
15 pasture (Helmer 2002). The majority of the project study area was developed years ago, during the  
16 construction of the Ramey Air Base. Historic aerial imagery from 1930 was utilized to evaluate the  
17 earlier history of the project area. Prior to the construction of the air base, the entirety of the project  
18 area and vicinity was utilized for agricultural purposes (Velez-Rodríguez 2017).

19 An initial site reconnaissance was completed by qualified environmental personnel January 22 and  
20 23, 2019. A second reconnaissance was completed on March 29 and 30, 2021. These site  
21 reconnaissance were utilized to characterize the project area and vicinity. Vegetation across the site  
22 is dominated by mowed turf grasses (primarily Bermuda grass (*Cynodon dactylon*) and decorative  
23 tree species (**Figure 3.1-1**). Tree species located around the base include the royal palm (*Roystonea*  
24 *regia*), royal poinciana (*Delonix regia*), *Ficus* species, Athel pine (*Tamarix aphylla*), *Araucaria* species,  
25 and false tamarisk (*Myrciaria borinquena*). Based on the historical review, base trees and other  
26 vegetation was planted or colonized the area after development of the base. Small isolated pockets  
27 of native vegetation are scattered across the northern section of the project area, with the largest  
28 totaling approximately three acres in area (**Figure 3.1-2**). This area of native vegetation is not present  
29 in 1930s imagery. The cliffside on the northern border of the project site is composed of limestone  
30 features typical of the area with typical forest plant species present, such as baybean (*Canavalia rosea*)  
31 (**Figure 3.1-3**).

---

<sup>2</sup> The Holdridge System is a classification system based on the life zones related to mean annual precipitation, mean annual biotemperature, potential evapotranspiration, humidity, latitude, and altitude. This system is useful in characterizing land areas, particularly in tropical and subtropical zones.



1

2 **Figure 3.1-1 Typical Landscape Vegetation including Royal Palms**



3

4 **Figure 3.1-2 View of Native Vegetation Area in the Proposed Water Tank Vicinity**



1

2 **Figure 3.1-3 Typical Cliffside View**

3 *3.1.1.1 Threatened and Endangered Species*

4 A preliminary review of the Information for Planning and Consultation (IPaC) system was  
 5 completed on January 30, 2019. An up to date official species list was generated on January 25, 2021  
 6 (**Appendix B**) (USFWS 2021). The system identified one endangered species, the Puerto Rican Boa  
 7 (*Epicrates inornatus*) (PRB). The PRB can be a habitat generalist, but is known to predominantly  
 8 occupy arboreal or cave areas (Rodriguez 2018, Rodriguez-Durán 1996). Individuals have been  
 9 found in plantations, rural gardens, and urban areas. There are no caves and no contiguous arboreal  
 10 coverage in the project area. Naturally vegetated areas do not contain any larger tree species  
 11 providing arboreal coverage. Although no particularly suitable habitat is present in the project study  
 12 area, the species may be present due to its potential use of garden and urban areas. No critical  
 13 habitat is present.

14 The National Oceanic and Atmospheric Administration (NOAA) website was referenced to obtain  
 15 the most recent official threatened and endangered species and critical habitat list (NOAA 2021). No  
 16 suitable aquatic species habitat is located in the project area. Stormwater outfalls will release water  
 17 at cliffside locations. Treated stormwater runoff will make its way to the shore below the base.  
 18 Release of stormwater is not considered to have a potential aquatic habitat effect, as stormwater is  
 19 already released to the cliffside area and the stormwater runoff will be treated, as necessary. The  
 20 official species list includes the following species in **Table 3.1-1**.



1 **Table 3.1-1. NOAA Threatened and Endangered Species List**

Common Name	Scientific Name	Status
Green sea turtle	<i>Chelonia mydas</i>	Threatened
Leatherback sea turtle	<i>Dermochelys coriacea</i>	Endangered
Loggerhead sea turtle	<i>Caretta caretta</i>	Threatened
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Endangered
Nassau grouper	<i>Epinephelus striatus</i>	Threatened
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	Threatened
Scalloped hammerhead shark	<i>Sphyrna lewini</i>	Threatened
Giant manta ray	<i>Manta birostris</i>	Threatened
Elkhorn coral	<i>Acropora palmata</i>	Threatened
Staghorn coral	<i>Acropora cervicornis</i>	Threatened
Boulder star coral	<i>Orbicella franksi</i>	Threatened
Mountainous star coral	<i>Orbicella faveolata</i>	Threatened
Lobed star coral	<i>Orbicella annularis</i>	Threatened
Rough cactus coral	<i>Mycetophyllia ferox</i>	Threatened
Pillar coral	<i>Dendrogyra cylindrus</i>	Threatened
Fin whale	<i>Balaenoptera physalus</i>	Endangered
Sperm whale	<i>Physeter macrocephalus</i>	Endangered
Sei whale	<i>Balaenoptera borealis</i>	Endangered
Blue whale	<i>Balaenoptera musculus</i>	Endangered

2 **3.1.1.2 Migratory Bird Treaty Act**

3 As the project study area is generally a disturbed urban environment, no particularly suitable  
 4 habitat is present for migratory birds. However, birds may be found nesting in a variety of locations,  
 5 which may include on structures, decorative trees or in preserved vegetated areas in the project  
 6 area. It is likely that birds would prefer to utilize the more suitable undisturbed habitat areas located  
 7 along the coast north of the project location, but would still be expected to utilize vegetation stands  
 8 and trees in the base area. A review of the U.S. Fish and Wildlife Service's Information for Planning  
 9 and Consultation (IPaC) system on January 25, 2021 revealed that no migratory birds of concern are  
 10 documented within the vicinity of the project area. However, **Table 3.1-2** provides a list of the Birds  
 11 of Conservation Concern that may occur in Puerto Rico (USFWS 2008). Across all species, the  
 12 potential nesting season covers all 365 days of the year.

13 **Table 3.1-2. Birds of USFWS Conservation Concern (2008)**

Common Name	Scientific Name
West Indian Whistling Duck	<i>Dendrocygna arborea</i>
White-Cheeked Pintail	<i>Anas bahamensis</i>
Masked Duck	<i>Nomonyx dominicus</i>
Ruddy Duck	<i>Oxyura jamaicensis</i>
Audubon's Shearwater	<i>Puffinus lherminieri</i>
Masked Booby	<i>Sula dactylatra</i>
Brown Booby	<i>Sula leucogaster</i>



Common Name	Scientific Name
Red-Footed Booby	<i>Sula sula</i>
Magnificent Frigatebird	<i>Fregata magnificens</i>
Least Bittern	<i>Ixobrychus exilis</i>
American Flamingo	<i>Phoenicopterus ruber</i>
Black Rail	<i>Laterallus jamaicensis</i>
Yellow-Breasted Crake	<i>Hapalocrex flaviventer</i>
Caribbean Coot	<i>Fulica caribaea</i>
Limpkin	<i>Aramus guarauna</i>
Snowy Plover	<i>Charadrius nivosus</i>
Wilson's Plover	<i>Charadrius wilsonia</i>
American Oystercatcher	<i>Haematopus palliatus</i>
Red Knot	<i>Calidris canutus rufa</i>
Semipalmated Sandpiper	<i>Calidris pusilla</i>
White-Crowned Pigeon	<i>Patagioenas leucocephala</i>
Bridled Quail-Dove	<i>Geotrygon mystacea</i>
Antillean Mango	<i>Anthracothonax dominicus</i>
Loggerhead Kingbird	<i>Tyrannus caudifasciatus</i>
Puerto Rican Vireo	<i>Vireo latimeri</i>
Elfin Woods Warbler	<i>Setophaga angelae</i>
Greater Antillean Oriole	<i>Icterus portoricensis</i>

### 3.1.1.3 Wetlands

The National Wetlands Inventory (NWI) was reviewed for potential Waters of the U.S. (WOTUS) prior to site investigation (USFWS 2019). No NWI features were located within the project study area. Several vegetated drainage swales cross the northern portion of the study area, receiving runoff from existing stormwater outlets. A wetland specialist attended the field reconnaissance, and the site was reviewed in consideration with the Corps of Engineers 1987 Wetlands Delineation Manual and the Caribbean Island Regional Supplement (Version 2.0) parameters. A formal delineation was not conducted, as no need was identified. No wetlands were identified during this field reconnaissance. Shallow swales exhibited uniform grass species coverage with the surrounding areas. Deeper drainage areas were visibly worn down to the limestone with limited vegetation (Figure 3.1-4). Three test soil pits were probed to a depth of up to 14 inches. Soils were found to be sandy loam with a color of 5YR 3/3 or 5YR 3/4 according to a Munsell soil chart. No redoximorphic or other features were noted. These soils do not meet hydric soil indicator criteria.

### 3.1.2 Environmental Consequences

Due to the urbanized nature of the project study environment, there are few potential Biological Resources of concern in the project study area. No build alternative would have greater consequences to biological resources than the other.



1  
2 **Figure 3.1-4 Drainage Swale Worn Down to Limestone with Limited Vegetation**

### 3 **Proposed Action**

4 The Proposed Action would affect a small area of native vegetation less than 0.13 acre, in the context  
 5 of a greater than three acre vegetated patch. Disturbance would also occur at the location of new  
 6 stormwater outfalls. New stormwater outfalls will disturb a limited area dependent on the size of  
 7 outfall. These disturbance areas are small in the context of the approximately one mile of cliff face  
 8 between the “panhandle” and the western base boundary. Stormwater outfalls will be designed  
 9 with velocity dissipation measures, such as a rock baffle or a concrete apron, to reduce the potential  
 10 for erosion. Some trees would be removed during the course of project construction. The majority of  
 11 tree removal would occur in the vicinity of La Plaza. Tree removal would constitute removal of  
 12 individual species, many of which were likely planted during base development, and include the  
 13 species described in the existing environment. Tree removal will be minimized during the  
 14 demolition and construction process. Removal of trees would constitute a temporary disturbance to  
 15 local wildlife. The Puerto Rico Forest Law (Ley de Bosques de Puerto Rico) requires that anyone  
 16 proposing to remove a tree must obtain a permit from the Forest Service Bureau in the Department  
 17 of Natural and Environmental Resources. The Coast Guard will obtain this permit prior to any tree  
 18 removal associated with the Proposed Action. Roosting birds and small terrestrial animals may be  
 19 forced to find temporary refuge elsewhere during the construction period. Disturbance of local birds



1 and small mammals is not anticipated to be significant due to the presence of greater natural habitat  
2 areas near the project area.

### 3 *Threatened and Endangered Species*

4 No high quality PRB habitat is present. There is a limited likelihood of PRB being found in the  
5 project area. Pursuant to Section 7 of the ESA, the USCG has determined that the Proposed Action  
6 may affect, but is not likely to adversely affect, the PRB with the implementation of Project Design  
7 Feature **BIO-1: Puerto Rican Boa Avoidance Measures**. This determination is pending coordination  
8 and concurrence with the USFWS. A letter from the Coast Guard to the USFWS requesting their  
9 concurrence with this determination is included in Appendix E. No other threatened or endangered  
10 species of concern is likely to be present. The Proposed Action, as described, would not affect the  
11 aquatic or shoreline environment north of the project area. Pursuant to NEPA, the Proposed Action  
12 will have no significant impact on threatened and endangered species.

### 13 *Migratory Birds*

14 No particularly suitable migratory bird nesting habitat is present in the project area. Pursuant to the  
15 Migratory Bird Treaty Act, the USCG has determined that the Proposed Action would not result in  
16 take of migratory birds or the parts, nests, or eggs of such birds with the implementation of Project  
17 Design Feature **BIO-2: Migratory Bird Avoidance**. Pursuant to NEPA, the Proposed Action will  
18 have no significant impact on migratory birds.

### 19 *Wetland Habitat*

20 There are no wetlands located in the project area. Project activities would not extend to the shoreline  
21 where tidal wetlands may be present. Stormwater runoff will be treated, as necessary, and would  
22 not harm any tidal wetlands that may be located on the shoreline. Pursuant to Section 404 of the  
23 Clean Water Act, the USCG has determined there would be no impacts to wetlands as a result of  
24 implementation of the Proposed Action. Pursuant to NEPA, the Proposed Action will have no  
25 significant impact on wetlands.

## 26 **Alternative A**

27 Impacts to biological resources are not substantially different under Alternative A as compared to  
28 the Proposed Action. Proposed features, including placement of water tanks, tree removal, and  
29 placement of stormwater outfalls, are similar or the same under Alternative A and the Proposed  
30 Action in regards to Biological Resources.

### 31 *Threatened and Endangered Species*

32 The potential for impacts under Alternative A would be the same or comparable as the Proposed  
33 Action. Pursuant to Section 7 of the ESA, the USCG has determined that Alternative A may affect,  
34 but is not likely to adversely affect, the PRB with the implementation of Project Design Feature **BIO-**  
35 **1: Puerto Rican Boa Avoidance Measures**. Pursuant to NEPA, Alternative A will have no significant  
36 impact on threatened and endangered species.

### 37 *Migratory Birds*

38 The potential for impacts under Alternative A would be the same or comparable to the Proposed  
39 Action. Pursuant to the MBTA, the USCG has determined that Alternative A will not result in take  
40 of migratory birds or the parts, nests, or eggs of such birds with the implementation of Project



1 Design Feature **BIO-2: Migratory Bird Avoidance**. Pursuant to NEPA, Alternative A will have no  
2 significant impact on migratory birds.

### 3 *Wetland Habitat*

4 The potential for impacts under Alternative A would be the same or comparable to the Proposed  
5 Action. Pursuant to Section 404 of the Clean Water Act, the USCG has determined there would be no  
6 impacts to wetlands as a result of implementation of Alternative A. Pursuant to NEPA, Alternative  
7 A will have no significant impact on wetlands.

### 8 **No Action Alternative**

9 The No Action Alternative would not result in impacts to any special-status species or sensitive  
10 habitats because no construction activities would take place. Pursuant to NEPA, the No Action  
11 Alternative will have no significant impact on threatened and endangered species, migratory birds,  
12 or wetlands.

## 13 **3.2 Cultural Resources**

14 The term “cultural resources” is used to describe tangible remains of past human activity and past  
15 human use of the landscape. These resources can be either below (archaeological resources) or above  
16 ground (history/architecture resources). The built environment may include buildings, structures,  
17 prehistoric sites, historic or prehistoric objects or collections rock inscriptions, earthworks, canals or  
18 landscapes, as well as traditional resources, such as sacred sites and traditional cultural properties.  
19 The NHPA of 1966 is the primary federal legislation that outlines the federal government’s  
20 responsibility to consider cultural resources.

21 Section 110 of the NHPA sets out the broad historic preservation responsibilities of federal agencies  
22 and is intended to ensure that historic preservation is fully integrated into the ongoing programs of  
23 all federal agencies. Section 110 states federal agency responsibility for identifying and protecting  
24 historic properties, and avoiding unnecessary damage to them. Section 110 also charges each federal  
25 agency with the affirmative responsibility for considering projects and programs that further the  
26 purposes of the NHPA, and it declares that the costs of preservation activities are eligible project  
27 costs in all undertakings conducted or assisted by a federal agency.

28 Section 106 of the NHPA requires that effects on historic properties be taken into consideration in  
29 any federal project. Historic properties are those cultural resources listed or eligible to be listed on  
30 the National Register of Historic Places (NRHP). The criteria used to determine whether a cultural  
31 resource is a historic property, and therefore eligible for inclusion on the NRHP, are defined in 36  
32 CFR, Part 60.4. The process has four steps: (1) initiating the Section 106 process, which includes  
33 identifying and initiating consultation with the State Historic Preservation Officer (SHPO), Native  
34 American tribes, local governments, and other interested parties; (2) identifying the area of potential  
35 effects (APE) and determining if historic properties are present within that APE; (3) assessing  
36 adverse effects; and (4) delineating stipulations by which to resolve adverse effects in an agreement  
37 document. The implementing regulations for Section 106 are at 36 C.F.R. Part 800.



## 1 3.2.1 Affected Environment

2 The APE for history/architecture (above ground) resources is considered to be approximately the  
3 boundary of the BDB and ASB properties and includes utility rights-of-way between the BDB  
4 Housing Area and ASB area. Due to the localized nature of the project impacts within the USCG  
5 property, this APE captures the potential direct and indirect effects from demolition and  
6 construction-related activities associated with the undertaking. The APE for the archaeological  
7 (below ground) resources is limited to the footprint of the ground disturbing activity, including  
8 staging and utility work.

## 9 Regional Historic Context

10 The regional historic context presented below has been summarized from *U.S. Coast Guard Air*  
11 *Station Borinquen Aguadilla, Puerto Rico Historic and Architectural Resources Survey and Evaluation*  
12 (MHW Americas, Inc. 2004). For a more detailed description of the regional historic context see  
13 Appendix C.

14 Puerto Rico was called Borinquen by its indigenous inhabitants, the Arawak Indians. When  
15 Christopher Columbus landed on the island's northwest coast in 1493 near the present city of  
16 Aguadilla, he claimed it for Spain and renamed it San Juan Bautista, to honor the heir to the Spanish  
17 throne. In 1508, Juan Ponce de Leon located a large well-protected harbor on the island's north shore  
18 that later became the site of San Juan, and he renamed the island Puerto Rico (rich port).  
19 Colonization resulted in significant growth and prosperity on the island, which encouraged raids  
20 not only by pirates/corsairs but also by English, French and Dutch fleets through the four centuries  
21 of Spanish rule.

22 During the second half of the nineteenth century, tensions between Spain and her colonies frayed.  
23 Cuba was Spain's chief possession in the Caribbean. The declining price of sugar and tobacco in the  
24 1890s brought widespread discontent, and the demand for Cuban independence intensified. While  
25 the U.S. government endeavored to maintain a policy of strict neutrality, there was growing public  
26 sympathy for the Cuban revolutionaries. The sinking of the American battleship Maine in February  
27 of 1898 finally precipitated a declaration of war against Spain. The Spanish-American War was  
28 ended in August of that year, and as a condition of peace the island of Puerto Rico (as well as Guam  
29 and the Philippines) was ceded to the U.S. American military and civilian administration of the  
30 island followed, with mixed success.

31 Under the Foraker Act (1900), Puerto Rico occupied a position midway between that of a colony and  
32 a territory, with a governor and council appointed by the President of the U.S. The island's residents  
33 were treated as secondary U.S. citizens until 1917, when the Jones Act granted American citizenship  
34 to all Puerto Ricans. Through the early twentieth century, Puerto Rican self-government resulted in  
35 widespread government programs for health and sanitation, improved public facilities, and  
36 education.



## 1 Borinquen Army Air Field Historic Context

2 In 1936, the U.S. Army Air Corps initiated studies revealing the need for a Puerto Rican airfield to  
3 assist in air defense for the Panama Canal and the eastern part of the Caribbean. Punta Borinquen  
4 was determined in 1939 to be the best site for a major air base. The War Department authorized the  
5 acquisition of Borinquen Point in July 1939 and construction began in September 1939. Tents and  
6 temporary wood-frame structures were erected as dormitories and mess halls for the soldiers as  
7 permanent construction moved ahead.

8 Initial construction focused on completing the administrative buildings, housing and a hospital,  
9 followed by a system of landing strips and aprons, hangars, workshops, and warehouses.  
10 Approximately 4,000 civilians were employed in the construction of the permanent landing fields. In  
11 November 1939, the officers and 160 men of the 27th Reconnaissance Squadron, Long Range, arrived  
12 at Borinquen from Langley Field, Virginia, with several tons of equipment. They were the first  
13 ground echelon Air Corps unit stationed at the facility, in support of the squadron's air echelon,  
14 consisting of nine B-18A aircraft, 18 officers, and 28 enlisted men. Construction had progressed  
15 rapidly by December 1940, with aircraft hangars, runways, barracks, a base hospital, officer, NCO,  
16 and enlisted men's quarters, an instrument repair building, a photo laboratory, morgue, and  
17 administrative buildings all nearing completion.

18 By 1943, Borinquen Field had become a very active military transport node, processing 5,291 tactical  
19 aircraft and 4,836 cargo/passenger aircraft, carrying 51,274 officers, 34,891 enlisted men, and 6,325  
20 civilians, while the ground echelon repaired or serviced 1,982 aircraft during the year, with the air  
21 depot employing 6,247 officers, enlisted men and civilians. Transient aircraft and passenger traffic  
22 through Borinquen Field remained heavy during 1944, totaling 7,125 tactical and 3,342  
23 cargo/passenger aircraft, carrying 42,867 officers, 47,228 enlisted men, and 14,341 civilians to or  
24 from combat theaters. In 1945, Borinquen Field supported the Green Project, which was the massive  
25 airlift of combat troops from the U.S. to Europe, and the White Project, which was the return of  
26 combat aircraft from Europe to the U.S. After this surge in activity and personnel, base strength that  
27 had been artificially inflated to support those projects dropped, and demobilization took a heavy toll  
28 on base personnel, declining from 1,120 officers and 3,928 enlisted men in July of 1945, to 180  
29 officers and 778 enlisted men by December of the same year.

30 In October 1946, Borinquen Field was re-designated Borinquen Army Airfield (however, the base's  
31 name was officially changed back to Borinquen Field on December 15, 1947 after the Air Force had  
32 separated from the Army, and the "Army" portion of the base name no longer applied). Borinquen  
33 Field was re-designated as Ramey AFB in January 1948 in honor of Brigadier General Howard K.  
34 Ramey. Ramey AFB was transferred from Caribbean Air Command to the Strategic Air Command  
35 (SAC), and came under the jurisdiction of Second Air Force. All base organizations were included in  
36 the transfer and, as military hostilities spread worldwide, the character of the installation changed  
37 from a support facility for transient aircraft to that of strategic reconnaissance. (MHW Americas Inc.  
38 and The Mannik Smith Group 2004).

39 To meet its evolving mission and related personnel needs, Ramey initiated other improvements,  
40 including a \$6,000,000 contract for the construction of 575 Wherry housing units awarded in October  
41 1951 (and completed in 1954). These homes were funded under the Wherry bill, which was  
42 introduced in 1949 to answer a severe post-war housing shortage. Under this bill, developers were  
43 issued low-interest loans by the Federal Housing Authority for the construction of family housing



1 on or around military installations. The Wherry units authorized at the Ramey base were subsidized  
2 under this program and constructed by the Fullana Construction Company of San Juan, a family  
3 firm that had recently received wide attention for building a 1,000-unit urbanizacion (housing  
4 development) for Puerto Rico's working class, as well as the Coconut Grove and Coqui Gardens  
5 housing at U.S. Army Fort Buchanan outside San Juan. In January 1952, work began on a new two-  
6 story nurses' quarters and a new base school, the Ramey AFB Elementary School (Building 850),  
7 currently known as La Plaza. During 1953, airman dormitories, a new mess hall, and administrative  
8 buildings were constructed. Ground was broken for the new base chapel and the new NCO Club  
9 (Building 821) in March 1955. In June, the base was approved for 425 additional Wherry housing  
10 units, which included 252 units for airmen and 168 units for officers, through authorization by the  
11 Federal Housing Authority.

12 SAC began operating B-52 aircraft at Ramey in late 1959, and in 1960 extended the runway to two  
13 miles, making it the longest in the Caribbean. Additional support facilities were constructed at the  
14 same time for its B-52 Bomber Wing. The construction was timely, and enhanced the support  
15 capabilities offered at Ramey during the Cuban Missile Crisis in 1961; the installation was on high  
16 alert and provided logistical support throughout the confrontation.

17 In July 1971, SAC operations at Ramey AFB ceased and the Military Airlift Command (MAC)  
18 assumed the position of host unit for the facility. Later that fall, the Coast Guard Air Station Puerto  
19 Rico moved to this location from Isla Grande. In 1973, Ramey was decommissioned as a U.S. Air  
20 Force installation, and 9,000 military personnel vacated the base. The facilities were declared excess  
21 and federal agencies were notified of the available facilities. The U.S. Navy acquired 291 housing  
22 units and administrative buildings at that time, and the Coast Guard took possession of Hangar No.  
23 2 and several administrative buildings for its search and rescue operations. In accordance with  
24 Federal Land Transfer guidelines, the Commonwealth of Puerto Rico was offered the first right of  
25 refusal on the remaining land and facilities in August 1974.

26 The U.S. Navy assumed control of the base in 1973, and for a time the installation was referred to as  
27 Naval Station Roosevelt Roads West Annex. In July 1976 the U.S. Coast Guard assumed primary  
28 jurisdiction and renamed the installation Air Station Borinquen. The primary mission of Coast  
29 Guard Air Station Borinquen is search and rescue. Secondary missions include law enforcement,  
30 aerial support for Aids to Navigation (ATON), and logistic support. The Air Station is under the  
31 operational control of Commander, Sector San Juan, located in San Juan, Puerto Rico. Sector San  
32 Juan's area of responsibility encompasses 1.3 million square miles within the Eastern Caribbean. Air  
33 Station Borinquen has a housing area, clinic and dispensary, station library, community center,  
34 swimming pool, exchange, mini-mart, package store, gymnasium and other fitness facilities, chapel,  
35 and theater.

36 On behalf of the Commonwealth, the Puerto Rico Industrial Development Company temporarily  
37 held nearly 70 percent of the former Ramey property, and in 1979 the Authority for the  
38 Administration and Development of Borinquen Point was created for the sale of 1,442 owner-  
39 occupied homes there. Since that time, surplus property has also become home to the regional  
40 college of the University of Puerto Rico, and numerous other government buildings, sports facilities,  
41 social clubs, schools, shopping centers, and professional offices. The surplus hangars and runway  
42 (under a shared lease agreement with the Coast Guard) are now part of the Rafael Hernandez  
43 Airport, which boasts the longest runway of any aviation facility in the Caribbean and South  
44 America, measuring more than two miles long. The base is currently home to the U.S. Coast Guard,



1 the Puerto Rican Air National Guard, and U.S. Customs and Immigration (MWH Americas Inc.  
2 2004).

### 3 **Previous Cultural Resources Survey**

4 In 2004, a Historic and Architectural Resource Survey and Evaluation was completed for the U.S.  
5 Coast Guard Air Station Borinquen in Aguadilla, Puerto Rico (MWH Americas Inc. 2004). The  
6 structural resources that were evaluated included the seven architectural types labeled A through G  
7 Floor Plan housing structures, La Plaza, and Flight Hangar No. 2.

8 These resources evaluated in 2004 were part of two construction phases. The first wave of  
9 construction began in 1939 and included nearly 500 residences at the north end of the base. The  
10 second major construction period began after 1950 and nearly 1,000 housing units were completed  
11 at the former AFB by 1955. Buildings from both construction periods are represented in the 2004  
12 survey boundaries, which comprise only a small portion of the original base area.

13 Located approximately three-quarters of a mile from the Coast Guard Base, the Punta Borinquen  
14 Lighthouse and Keeper's Quarters is listed on the National Register of Historic Places (1981) as part  
15 of the *Lighthouse System of Puerto Rico* thematic nomination (National Register of Historic Places:  
16 1981).

17 The 2004 historic and architectural survey identified and deemed eligible the Flight Hangar No. 2  
18 (also known as Hangar 402) (**Figure 3.2-1**), constructed in 1940 and was one of the first major flight  
19 related structures completed during the early period of Borinquen development and it functioned  
20 throughout the Cold War. An example of barrel-vaulted, thin-shell concrete Zeiss-Dwydig  
21 construction the hangar was deemed eligible under NRHP Criterion A and C (SHPO 2005). This is  
22 currently known as Building 402.



1  
2 **Figure 3.2-1 Flight Hangar No. 2**

3 The 2004 survey also concluded that the residential area between Cliff Road and Wing Road, which  
4 consists of house types A, B, and D (**Figures 3.2-2, 3.2-3, and 3.2-4**), was eligible for listing on the  
5 NRHP as a historic district under Criterion A for its significance in the areas of military history and  
6 twentieth-century community planning, and under Criterion C as an intact assemblage of  
7 transitional Modernist architecture. All other structures evaluated in the 2004 survey were  
8 considered to not be eligible for the NRHP.

9 A draft Programmatic Agreement was development between the SHPO and U.S. Coast Guard  
10 regarding treatment of the resources identified in the 2004 survey. In 2005 the SHPO modified the  
11 draft Programmatic Agreement to include housing types C, F, and G (**Figures 3.2-5, 3.2-6, and 3.2-7**)  
12 as being NRHP eligible based on Criterion A for being an example of the residential construction at  
13 the former Base Ramey during the Cold War operations in 1954 funded under the Wherry bill. The  
14 SHPO also found that the La Plaza building meets Criterion A under the NRHP.

15 The La Plaza complex is located at the center of the Coast Guard housing area. It faces north across a  
16 lawn towards Hook Road. The building is a one- and two-story, reinforced concrete structure with a  
17 smooth, cement plaster finish (painted) (**Figure 3.2-8**). It sits at-grade on a poured foundation and  
18 has an irregular, E-shaped footprint. The building occupies an area of 60,000 square feet (MHW  
19 Americas, Inc. 2004).



1  
2

**Figure 3.2-2 Type A Housing Unit**



3  
4

**Figure 3.2-3 Type B Housing Unit**



1  
2

**Figure 3.2-4 Type C Housing Unit**



3  
4

**Figure 3.2-5 Type D Housing Unit**



1  
2

Figure 3.2-6 Type F Housing Unit



3  
4

Figure 3.2-7 Type G Housing Unit



**Figure 3.2-8 North Side of La Plaza**

1  
2

3 La Plaza was originally designed as a 40-classroom elementary school. Under the Community  
4 Facilities Services Office of Puerto Rico's Housing and Home Finance Agency, plans for a 40-  
5 classroom elementary school were approved in 1951 for the Ramey base. The building was  
6 referred to as the Ramey Air Force Base Elementary School on original plans, but a notation on the  
7 drawings indicates that "elementary" was removed from the name before construction began. In  
8 later years it was more commonly known as the Ramey School, the Ramey Children's School, or the  
9 Hook Road School (to differentiate from the two other school buildings then operating on the base).  
10 Construction of the building was completed in 1953. With the departure of the Air Force in 1973, the  
11 building was converted to a multi-purpose facility and rededicated as La Plaza, which until  
12 Hurricanes Irma and Maria housed a chapel, exchange, mini-mart, daycare center, theater, fitness  
13 center, library, and offices, among other varied functions (MHW Americas, Inc. 2004).

14 The Ramey School was designed by the firm of O'Kelly & Mendez of Caparra. One of Puerto Rico's  
15 most accomplished architects, Joseph J. O'Kelly was born in New York City. Construction of the La  
16 Plaza complex is associated with America's Cold War activities, which essentially began at Ramey in  
17 1950. The 2004 MWH report concluded the following *"Periodic repairs and improvements have resulted  
18 in significant loss of architectural integrity over the years, and because it is not an outstanding example of the  
19 work of the architect, the building does not appear to meet the criteria for listing in the NRHP"* (MHW  
20 Americas, Inc. 2004).

21 The 2005 Draft SHPO PA that followed concluded that the La Plaza building meets Criterion A of  
22 the National Register of Historic Places as a building that is associated with events that have made a  
23 specific contribution to the broad patterns of our history (SHPO 2005).



## 1 Current Investigations

2 Due to the 2017 Hurricanes of Irma and Maria, the Coast Guard suffered extensive damage to the  
3 structures on the Borinquen base. As such, investigation into conducting repairs and improvements  
4 at the station to make the station more resilient to survive major storms and allow the USCG to carry  
5 out its mission during and after such events began soon after. Consultation with the SHPO, was  
6 initiated and on October 14, 2020, an on-site visit with pertinent parties from the Coast Guard and  
7 Puerto Rico SHPO took place. This meeting set at SHPO's request established the plan moving  
8 forward including (1) firsthand visualization of potential impact and historic properties within the  
9 Coast Guard's fence line; (2) Consult and collaborate in order to seek ways to avoid, minimize, or  
10 mitigate potential adverse effects with respect to the Proposed Action. Additionally, the eligibility  
11 criterion for La Plaza was clarified as eligible under Criteria A and C. The architectural/engineering  
12 firm that initially designed La Plaza was located in San Juan, and the school has "island  
13 significance" compared to other Puerto Rican buildings that were designed in the United States. La  
14 Plaza is eligible for listing on the National Register of Historic Places under criterion A, association  
15 with events that have made a significant contribution to broad patterns of our history and C,  
16 embodiment of the distinctive characteristics of a type, period, or method of construction;  
17 representation of the work of a master; possession of high artistic values; or representation of a  
18 significant and distinguishable entity whose components may lack individual distinction.

19 **Table 3.2-1** summarizes the potential historic resources located at the Air Station.

# ENVIRONMENTAL ASSESSMENT



**Table 3.2-1. Structures Potentially Affected by the Proposed Action and Alternative**

Historic						Not Historic			
Housing						Hangar No. 2	La Plaza	Housing	Community
Type A	Type B	Type C	Type D	Type F	Type G			Type E	Center
Cliff 1	Fifth 77	Cliff 151	F Circle 166	Cliff 105	Cliff 101	Hangar 402	850 La Plaza	NE 116	Cliff 821
Cliff 2	Fifth 78	Cliff 155	F Circle 167	Cliff 115	Cliff 103			NE 136	Cliff 822
Cliff 3	Fifth 79	Cliff 161	F Circle 168	Cliff 121	Cliff 107				Cliff 826
Cliff 4	Fifth 80	NE 102	F Circle 169	Cliff 123	Cliff 109				Cliff 827
Cliff 5	Hook 52	NE 118	F Circle 170	Cliff 127	Cliff 111				Cliff 831
Cliff 6	Hook 53	NE 122	F Circle 171	Cliff 133	Cliff 113				
Cliff 7	Hook 54	NE 132	F Circle 172	Cliff 137	Cliff 117				
Cliff 8	Hook 55	NE 138	F Circle 173	Cliff 143	Cliff 119				
Cliff 9	Hook 56	NE 148	F Circle 174	Hook 103	Cliff 125				
Cliff 10	Hook 57		F Circle 175	L Street 155	Cliff 129				
Cliff 11	Hook 58		F Circle 178	L Street 156	Cliff 131				
Cliff 12	Hook 59		F Circle 179	L Street 159	Cliff 135				
Cliff 13	Hook 60		Fifth 155	NE 108-110	Cliff 139				
Cliff 14	Hook 61		Fifth 157	NE 111	Cliff 141				
Cliff 15	Hook 62		Fifth 159	NE 112-114	Cliff 145				
Cliff 16	Hook 63		Fifth 161	NE 117	Cliff 149				
Cliff 17	Hook 64		Fifth 163	NE 121	Cliff 159				
Cliff 18	Hook 65		Hook 164	NE 128-130	Harrison 145				
Cliff 19	Hook 66		Hook 165	School 102	Harrison 147				
	Hook 67		Hook 176	School 106	Hook 101				
	Hook 68		Hook 177	School 112	Hook 105				
	Hook 69		Sixth 154	School 116	Hook 107				
	Hook 70		Sixth 156	Wing 148	L Street 151				
	Hook 71		Sixth 158	Wing 158	L Street 153				
	Hook 72		Sixth 160		L Street 157				
	Hook 73		Sixth 162		NE 103				
	Hook 74		Sixth 220		NE 104				
	Hook 75		Sixth 221		NE 105				
	Hook 76		Sixth 222		NE 106				

# ENVIRONMENTAL ASSESSMENT



**Table 3.2-1. Structures Potentially Affected by the Proposed Action and Alternative**

Historic							Not Historic		
Housing						Hangar No. 2	La Plaza	Housing	Community
Type A	Type B	Type C	Type D	Type F	Type G			Type E	Center
	Hook 81		Sixth 223		NE 107				
	Hook 82		Wing 150		NE 109				
	Hook 83		Wing 151		NE 113				
	Hook 84		Wing 152		NE 115				
	NE 50		Wing 153		NE 119				
	NE 51		Wing 194		NE 126				
	Wing 85		Wing 195		School 100				
	Wing 86		Wing 196		School 104				
	Wing 87		Wing 197		School 108				
	Wing 88		Wing 198		School 110				
			Wing 199		School 114				
			Wing 200		School 118				
			Wing 201		Wing 146				
					Wing 154				
					Wing 156				
					Wing 160				
<b>TOTAL BY BUILDING TYPE</b>									
A	B	C	D	F	G			E	
19	39	9	42	24	45	1	1	2	5



## 1 Archaeological Resources

2 The APE has not been surveyed for the identification of archaeological resources.

3 According to the State Office of Historical Conservation of Puerto Rico National Register of Historic  
 4 Places database and geographic information system (GIS) interface, there are no known  
 5 archaeological sites within the APE. The 2016 study evaluated the archaeological sensitivity of the  
 6 ASB for the potential to contain intact prehistoric and historic archaeological deposits. This  
 7 assessment concluded that due to heavy ground disturbance at ASB existing prehistoric  
 8 archaeological deposits or material would have lost any contextual information with the exception  
 9 of the potentially undisturbed northwest portion of the ASB that exhibits some potential to contain  
 10 intact, natural soils. This undisturbed area is outside of this project’s APE.

11 As reported in the 2016 study (Michael Baker International, Inc. 2016), according to the Institute of  
 12 Puerto Rican Culture’s (ICP) archaeological sites and surveys databases and Oficina Estatal de  
 13 Conservación Histórica (OECH) archives, no prehistoric archaeological sites have been previously  
 14 recorded within a 1.6 km (1 mi) radius of USCG Air Station Borinquen.

### 15 3.2.2 Environmental Consequences

16 On September 16, 2020, the Puerto Rican State Historic Preservation Office concurred with the  
 17 finding of “adverse effects” for the impacts to above-ground architectural resources, including La  
 18 Plaza and historic houses, as a result of the Proposed Action.

## 19 Proposed Action

20 The potential for the Proposed Action to affect above ground historic resources in the APE is  
 21 discussed below. This includes a discussion of potential effects to housing units by type (Types A-G;  
 22 see **Table 3.2-1**), as well as La Plaza and Hanger 402.

### 23 Housing Structures Types A, B, C, D, F, and G

24 As evaluated in 2004, the base housing on Borinquen is in good condition and retains sufficient  
 25 integrity under Criterion A and C. Alterations to individual structures are largely cosmetic and  
 26 reversible and do not diminish the integrity of the buildings as a collective district. The base housing  
 27 units were built as part of a new suburban planning concept and the work of a “firm with  
 28 outstanding achievements in the field of architecture and planning” (MWH Americas, 2004: 90).  
 29 Additionally, the base housing clusters are significant under Criterion A within the context of  
 30 military history locally and nationally. Under the Proposed Action 118 housing buildings of Types  
 31 A, B, C, D, F, and G would be retained with structural improvements that will allow the district to  
 32 continue to convey integrity under Criterion C while retaining their collective strengths as a  
 33 historical district under Criterion A. Prime examples of each housing structure type will be retained  
 34 as indicated in **Table 3.2-2** below. However, under the Proposed Action 97 housing units would be  
 35 repaired, 86 housing units would be demolished, and 41 would be remain with no renovation.  
 36 Pursuant to the NHPA, the Proposed Action will have an adverse effect to the housing units. The  
 37 USCG will continue to consult with the SHPO and other consulting parties to resolve adverse effects  
 38 through avoidance, minimization, and/or mitigation, resulting in the execution and implementation  
 39 of a memorandum of agreement. Pursuant to NEPA, the Proposed Action will have no significant  
 40 impact on the housing units.



1 **Table 3.2-2. Proposed Retained Structure Type by Address**

Structure Type	Address
Type A	11 Cliff
Type B	66 Hook
Type C	102 Northeast
Type D	171 Circle F
Type F	156 L Street
Type G	103 Cliff

2 Hangar 402

3 Hangar 402 was evaluated in 2004 (MWH Americas, Inc. 2004) and identified as an individual  
 4 resource for eligibility on the National Register under Criteria A and C. For its association with early  
 5 mobilization efforts during the Ramey AFB inspection and prior to U.S. involvement in World War  
 6 II, Hangar 402 is part of the contribution to the World War II and Cold War as part of American  
 7 History. Under Criterion C, Hangar 402 is a character defining architectural style not only for Puerto  
 8 Rico but also for the base itself. Its structural integrity and innovative method of concrete  
 9 construction, although moderately damaged from hurricanes, is still conveyed due to craftsmanship,  
 10 materials, and setting. The Proposed Action will upgrade electrical and install a larger water tank,  
 11 replacing one existing tank adjacent to the structure. None of these improvements will alter or have  
 12 an adverse effect on the ability of this resource to convey its integrity under Criterion A or C.  
 13 Therefore, pursuant to the NHPA, the Proposed Action will have no adverse effect to Hangar 402.  
 14 Pursuant to NEPA, the Proposed Action will have no significant impact on Hangar 402.

15 La Plaza

16 Under the Proposed Action La Plaza (built in 1953) would be demolished and a new community  
 17 center would be constructed using a Town Square approach in a different location, proposed along  
 18 the current Sixth Street.

19 SHPO requested in the 2005 draft PA that La Plaza be retained and determined that it was eligible  
 20 under Criterion A. Since La Plaza is considered to be NRHP-eligible under Criteria A and C, and  
 21 under the Proposed Action La Plaza would be demolished, this would be considered an adverse  
 22 effect. As such, mitigation measures would be implemented to compensate for those negative  
 23 effects. Such mitigation may include documenting La Plaza at a HABS/HAER level, creating a  
 24 public information pamphlet, and/or relocating the inscribed concrete sign from the original Ramey  
 25 Air Force Base School to another location. Pursuant to the NHPA, the Proposed Action will have an  
 26 adverse effect on La Plaza. The USCG will continue to consult with the SHPO and other consulting  
 27 parties to resolve adverse effects through avoidance, minimization, and/or mitigation, resulting in  
 28 the execution and implementation of a memorandum of agreement. Pursuant to NEPA, the  
 29 Proposed Action will have no significant impact on La Plaza.

30 Archaeological Resources

31 No known archaeological resources exist within the APE. However, it is possible that presently  
 32 unknown archaeological resources could be encountered during ground disturbing activities  
 33 associated with construction of the Proposed Action. If archaeological resources are encountered  
 34 during construction activities, Project Design Feature **CUL-1: Unanticipated Archaeological**  
 35 **Discoveries** will be implemented. If the archaeological resource is determined to be eligible, the  
 36 USCG would reinitiate consultation with the SHPO and other consulting parties to determine a way



1 forward. Pursuant to the NHPA, the Proposed Action will have no effect on archaeological  
2 resources. Pursuant to NEPA, the Proposed Action will have no significant impact on archaeological  
3 resources.

#### 4 **Alternative A**

5 Impacts to historic resources with implementation of Alternative A would be similar to those under  
6 the Proposed Action. However, under Alternative A, 98 housing units would be repaired, 88  
7 housing structures would be demolished and 38 housing structures would be retained. The same  
8 prime examples of each housing type would be retained as under the Proposed Action. However,  
9 two more historic housing structures would be demolished under Alternative A than under the  
10 Proposed Action. Pursuant to the NHPA, Alternative A will have an adverse effect to the housing  
11 units. The USCG will continue to consult with the SHPO and other consulting parties to resolve  
12 adverse effects through avoidance, minimization, and/or mitigation, resulting in the execution and  
13 implementation of a memorandum of agreement. Pursuant to NEPA, the Proposed Action will have  
14 no significant impact on the housing units.

15 As under the Proposed Action, none of the same improvements to Hangar 402 under Alternative A  
16 will alter or have an adverse effect on the ability of this resource to convey its integrity under  
17 Criterion A or C. Therefore, pursuant to the NHPA, the Alternative A will have no adverse effect to  
18 Hangar 402. Pursuant to NEPA, Alternative A will have no significant impact on Hangar 402.

19 Under the Alternative A La Plaza would be demolished and a new community center would be  
20 constructed using a "Main Street" approach, with a cluster of new community center buildings and  
21 parking located on current Sixth Street. Pursuant to the NHPA, Alternative A will have an adverse  
22 effect on La Plaza. The USCG will continue to consult with the SHPO and other consulting parties to  
23 resolve adverse effects through avoidance, minimization, and/or mitigation, resulting in the  
24 execution and implementation of a memorandum of agreement. Pursuant to NEPA, Alternative A  
25 will have no significant impact on La Plaza.

26 No known archaeological resources exist within the APE. In the unlikely event that previously  
27 undiscovered archaeological resources are encountered, construction would be halted and the  
28 resource evaluated to determine its eligibility for listing in the NRHP. If it is determined to be  
29 eligible, the USCG would reinitiate consultation with the SHPO and other consulting parties to  
30 determine a way forward. Pursuant to the NHPA, Alternative A will have no effect on  
31 archaeological resources. Pursuant to NEPA, Alternative A will have no significant impact on  
32 archaeological resources.

#### 33 **No Action Alternative**

34 Under the No Action Alternative, the improvements would not be constructed and no historic  
35 resources would be affected. Pursuant to the NHPA, the No Action Alternative will have no  
36 effect on cultural resources. Pursuant to NEPA, the No Action Alternative will have no  
37 significant impact on cultural resources.



### 1 3.2.3 Development of Memorandum of Agreement

2 The USCG has continued to consult with the SHPO and other interested parties. Due to the  
3 determination of finding of adverse effect, execution and implementation of a project-specific  
4 Memorandum of Agreement, pursuant to 36 CFR Part 800.6(c), is necessary. Such an agreement  
5 document would be implemented in order to outline agency commitments and procedures to  
6 avoid, minimize, or mitigate those effects. Pursuant to CFR Part 800.6(a)(1), the Coast Guard invited  
7 the ACHP to participate in the development of the Memorandum of Agreement and they declined  
8 to participate.

9 A Memorandum of Agreement was developed between the USCG and SHPO and was signed by  
10 them and two other consulting parties. This Memorandum of Agreement is included in Appendix  
11 E.

## 12 3.3 Geology and Soils

### 13 3.3.1 Affected Environment

14 Geology and soils include those aspects of the natural environment related to the earth, which may  
15 be affected by the Proposed Action and alternatives. These features include physiography, geologic  
16 units and their structure, the presence/availability of mineral resources, soil conditions and  
17 capabilities, the potential for natural hazards, and topography.

18 Air Station Borinquen is in a relatively level plateau that rises approximately 180 to 200 feet above  
19 sea level in limestone terrain with a relatively shallow cover of blanket sands and man-made fill.  
20 The north boundary and northwest boundary of BDB is characterized by steep cliffs that descend to  
21 the narrow beach or directly into the ocean.

22 The project site is located within the karst physiographic region of Puerto Rico. The karst region  
23 features both volcanic rock and limestone and extends east from Aguadilla to the east of San Juan. In  
24 the northern and northwestern portions of Puerto Rico, the area is underlain by thick limestone  
25 formations of the Oligocene and Miocene age. In these regions the karst formations are more highly  
26 developed than within the rest of the Commonwealth. The northern side of BDB is located in a karst  
27 protection area, roughly defined by the area from the topographic top of the cliff to the beach and  
28 shoreline below (Castro-Prieto et al. 2019). The protected zone is defined in the 2019 update to  
29 protected areas of Puerto Rico by the USDA Forest Service (Castro-Prieto et al. 2019).

30 The general geologic setting underlying the project site principally consists of the Aymamón  
31 Limestone Formation according to the Geologic Map of the Aguadilla Quadrangle, Puerto Rico  
32 prepared by Watson H. Monroe for the U.S. Geologic Survey (Misc. Geologic Inv. Map I - 569 1969).  
33 The limestone formation within the project site consists of the upper member of the Aymamón  
34 Limestone, very pale orange to bright yellow chalk containing many beds of large *Ostrea haitensis*  
35 Gabb (an oyster) and other fossils; interbedded with hard vuggy very pale orange to white  
36 limestone, some fossiliferous; in upper part commonly hard, white, very pure, and commonly  
37 recrystallized limestone like lower member.



1 The limestone formation is overlain by Blanket Sands. The USGS Geologic Map describes the  
2 Blanket Sand deposits as consisting of unstratified mixtures of fine to medium quartz sand and light  
3 to moderate brown clay. All material mapped in this category have been lowered from less than 16.4  
4 feet (5 meters) to as much as 98.4 feet (30 meters) by solutioning of underlying limestone (Geo Cim  
5 2019). At the beach, there are Beach deposits; Quartz sand, shell fragments and scattered grains of  
6 other minerals resistant to weathering. Cementation to beach rock is common.

7 A geotechnical investigation was conducted of the project site in November/December 2018 (Geo  
8 Cim 2019). Twenty one soil borings were obtained and analyzed ranging in depths from 1.5 feet to  
9 20.5 feet and are in general agreement with the descriptions included in the USGS map. In general  
10 terms, all the soil borings showed a soil profile that starts with the blanket sands, which consist of  
11 sand, sandy clay or clay with sand in a medium stiff to very stiff or hard consistencies for a few feet,  
12 and then changes to the weathered limestone.

### 13 3.3.2 Environmental Consequences

14 Some existing housing units and community facilities will be demolished, roadways moved, and  
15 new housing units and community facilities constructed, In addition, some existing utilities be  
16 removed and new ones installed including water for domestic use and fire suppression, wastewater  
17 lines, stormwater drainage pipelines, a water well installed, and water storage tanks erected. There  
18 will be excavation of existing building foundations (footings) which will require placement of new  
19 compacted earth fill and also for the new roadway. Any new fill to be placed in the excavated areas  
20 or for any new fill needed to raise the grades to a final grade elevation shall consist of a non-  
21 expansive select fill.

22 In addition to excavation of existing foundations and placement and compaction of soil, excavation  
23 will be required to construct spread footing foundation for the new housing and community  
24 facilities as well as the water tanks.

### 25 Proposed Action

26 Demolition and construction activities will disturbed on site soils and could cause soil erosion.  
27 Under the Proposed Action, cutting, filling, grading, and paving activities related to demolition and  
28 construction of building facilities, as well as the installation of utility lines would adversely affect  
29 topsoil. Removal and compaction during construction would also expose and disturb soils,  
30 increasing the potential for soil erosion and sedimentation. Overall, adverse impacts on soils are  
31 anticipated to be minimal because Project Design Feature **WAT-1: Construction Stormwater**  
32 **Pollution Prevention Plan** will be developed and implemented to minimize soil erosion during  
33 construction. After construction, all disturbed soils will be stabilized by compaction and seeding  
34 with appropriate vegetation compatible with existing onsite vegetation. Therefore, pursuant to  
35 NEPA, the Proposed Action would have no significant impact on soils.

36 Stormwater conveyance work would occur in the karst protection zone on the north border of BDB.  
37 The Proposed Action, as described, does not meet the definitions described under prohibitions and  
38 penalties under Chapters 122A. Protection and Preservation of Puerto Rico's Karst Region (§ 1152).  
39 All activities not described in this section do not require further coordination (§1155). However,  
40 construction of new stormwater outfalls in this area could result in substantial erosion downslope of  
41 the outfalls from the water exiting them. Erosion protection in the form of rock placement or



1 construction of concrete aprons will be implemented to minimize such erosion. Pursuant to NEPA,  
2 the Proposed Action would have no significant impact on geology.

### 3 **Alternative A**

4 Implementation of Alternative A would have the same impacts associated with geology and soils as  
5 the Proposed Action. Pursuant to NEPA, Alternative A would have no significant impact on  
6 geology and soils.

### 7 **No Action Alternative**

8 Under the No Action Alternative, the improvements would not be constructed and no impacts  
9 associated with geology and soils would occur. Pursuant to NEPA, the No Action Alternative would  
10 have no significant impact on geology and soils.

## 11 **3.4 Hydrology and Water Resources**

12 Water Resources are natural waters, including, but not limited to, wetlands, streams, river, lakes,  
13 ponds, oceans, and other water bodies.

### 14 **3.4.1 Affected Environment**

15 Puerto Rico has abundant rivers, including underground rivers in the limestone karst region. Rivers  
16 are known to increase rapidly to high velocity and discharge during heavy rains, flooding the  
17 coastal areas (USDA 2009). Desktop review shows that no rivers, streams, or wetlands are located in  
18 the project study area (USGS 2019, USFWS 2019). Site reviews described in the Biological Resources  
19 section included reconnaissance for Hydrology and Water Resources. There are several drainage  
20 swales on the northern open grass area discharging from the cliff at the northern bounds of the  
21 project study area. The top of the cliff is located approximately 200 feet above sea level. The project  
22 study area does not encompass the coastal waters located directly to the north.

23 A geotechnical investigation for this project was conducted at the project site in late 2018 (Geo Cim  
24 2019). Twenty one borings were drilled ranging in depth from approximately 1.5 feet to 20.5 feet.  
25 Groundwater was not encountered in any of the borings during drilling. This was expected since the  
26 surface runoff in this limestone terrain typically infiltrates vertically, even if slowly, due to the  
27 naturally occurring dissolution of the limestone, which leads to a low ground water level to be  
28 established near or only slightly above the mean sea level. Thus, in the entire project site, the ground  
29 water level is relatively deep. The nearest north coast USGS groundwater gauge is USGS  
30 182637066475900 Paloma Well, Hatillo PR, approximately 25 miles east of Air Station Borinquen.  
31 The gauge is at elevation an approximately 340 feet above sea level, compared to the water tank  
32 location at approximately 200 feet above sea level. The average depth to groundwater at this  
33 location is between 300 and 325 feet below the ground surface (USGS 2021). An existing well in the  
34 base area is 400 feet deep. Air Station Borinquen is located in area that is defined as "Not a principal  
35 aquifer" (USGS 1998). The USGS estimates there is no perceptible groundwater withdrawal for  
36 public water sources in Aguadilla, as measured in millions of gallons per day (Molina-Rivera 2014).



## 1 3.4.2 Environmental Consequences

### 2 Proposed Action

3 Water quality in Puerto Rico is governed by the U.S. Environmental Protection Agency (EPA).  
4 Under the National Pollutant Discharge Elimination System (NPDES) program, disturbance due to  
5 construction totaling more than an acre would require coordination with the EPA for coverage  
6 under a General Construction Permit. A Stormwater Pollution Prevention Plan (SWPPP) and Notice  
7 of Intent (NOI) would be required under the Proposed Action. The SWPPP would be prepared and  
8 implemented prior to and during construction activities. Due to the potential high velocity of  
9 discharged stormwater, there is the potential for cliffside erosion. The potential for erosion will be  
10 reduced through design features such as rock baffles or a concrete apron located in the outfall area.  
11 The underlying karst geography of the limestone region is formed and shaped by erosive forces, and  
12 is not likely to be substantially affected.

13 The Proposed Action includes development and operation of a new well at the BDB Housing Area.  
14 The well water would be a backup supply if the local utility water supply is not available such as  
15 after a major hurricane. The amount of water to be extracted would be a maximum of 2,000 gallons  
16 per day for a total 730,000 gallons annually. This water draw would only occur during emergency  
17 situations, and would not approach the annual maximum. The Aguadilla population relies on  
18 surface water, rather than groundwater, as a public water source. Due to the substantial depth of  
19 groundwater, groundwater in the area would not affect surface water conditions. The draw of  
20 groundwater would therefore have no impact to the public water supply. Pursuant to the  
21 requirements of the Safe Drinking Water Act (42 U.S.C. Part 300f et seq.), an annual water extraction  
22 report and yearly water quality laboratory analysis results must be submitted to Puerto Rico  
23 Department of Environmental and Natural Resources (DRNA). Pursuant to NEPA, development  
24 and operation of the new well would have no significant impact on hydrology and water quality.

25 The Proposed Action would have no measureable impacts on water quality, and pollutant  
26 concentrations would be below or within existing conditions or designated uses. To preserve water  
27 quality and minimize cliffside erosion from stormwater discharge, Project Design Features **WAT-1:**  
28 **Construction Stormwater Pollution Prevention Plan, WAT-2: Construction Equipment**  
29 **Maintenance, and WAT-3: Stormwater Outfall Design** will be implemented. Pursuant to NEPA,  
30 the Proposed Action would have no significant impact on hydrology and water quality.

### 31 Alternative A

32 Design features of Alternative A are the same or similar to the Proposed Action in respect to  
33 Hydrology and Water Resources. As with the Proposed Action, Alternative A would have no  
34 measureable impacts on water quality, and pollutant concentrations would be below or within  
35 existing conditions or designated uses. Project Design Features **WAT-1: Construction Stormwater**  
36 **Pollution Prevention Plan, WAT-2: Construction Equipment Maintenance, and WAT-3:**  
37 **Stormwater Outfall Design** would be implemented to minimize water quality impacts during  
38 construction and minimize cliffside erosion from stormwater discharge. Pursuant to NEPA,  
39 Alternative A would have no significant impact on hydrology and water quality.



## 1 No Action Alternative

2 Under the No Action Alternative, the USCG would continue to operate Base Detachment Borinquen  
3 and Air Station Borinquen in its current configuration. No impact to water resources would occur.  
4 Pursuant to NEPA, the No Action Alternative would have no significant impact on hydrology and  
5 water quality.

## 6 3.5 Hazardous Materials and Waste

7 Several federal laws, regulations, and executive orders relate to the control and handling of  
8 hazardous substances, clean-up of releases of hazardous wastes, and protection from harm of the  
9 public from these materials. These include the Comprehensive Environmental Response,  
10 Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA),  
11 the Pollution Prevention Act (PPA) of 1990, the Emergency Planning and Community Right to  
12 Know Act (EPCRA), the Toxic Substances Control Act (TSCA), Executive Order 12088- Federal  
13 Compliance with Pollution Control Standards, and Executive Order 12856- Federal Compliance with  
14 Right-To-Know Laws and Pollution Prevention Requirements. Federal agencies are required to  
15 coordinate with the EPA and applicable local environmental protection programs to ensure  
16 consistency of major federal actions with all federal hazardous substances and waste laws,  
17 regulations, and executive orders.

### 18 3.5.1 Affected Environment

19 U.S. Coast Guard BDB and ASB are a RCRA conditionally exempt small quantity generator. This  
20 designation is given based on the use of small amounts of waste associated with logistical support  
21 and maintenance operations, such as the application of paints and engine maintenance, generated  
22 on site. The last RCRA inspection of the BDB and ASB was completed on May 4, 2017 and no  
23 violations were identified. BDB and ASB are together listed on the Federal Facility Hazardous Waste  
24 Compliance Docket (FFDOCKET), required by Section 120(C) of CERCLA. This means that the BDB  
25 and ASB are a federal facility that is currently managing or has managed hazardous wastes, or has  
26 had a release of hazardous waste. The Coast Guard's transport, handling, and disposal of hazardous  
27 wastes and materials are conducted in compliance with RCRA and the TSCA. BDB also follows the  
28 procedures for the management of pharmaceutical waste per the EPA Hazardous Waste  
29 Pharmaceutical Rule Technical Guidance.

30 In 2008, a suspected release of petroleum was confirmed from underground storage tanks (USTs)  
31 located just to the west of the existing hangar at ASB. Four tanks were located in this tank farm area.  
32 The soil around all four tanks was analyzed for petroleum hydrocarbons per EPA guidance.  
33 Contaminated soil was over excavated and shipped to Florida for proper disposal. Tanks that were  
34 found to not be leaking were left in place. These tanks were vacuumed dry and filled with concrete  
35 and are no longer in operation.

36 The remainder of the storage tanks within the project site are above ground storage tanks (ASTs)  
37 with secondary containment measures, including the fuel tank at USCGX.

38 A hazardous materials survey was completed for housing types A-H, La Plaza, and Light House  
39 Units 1 and 2 within the BDB (The NDN Companies, Inc. 2019). The survey included lead based



1 paints (LBP), asbestos containing materials (ACM), and lead in surrounding soils. This survey  
2 concluded that lead based paints are found throughout the project site, in both interior and exterior  
3 paints. Soil samples taken throughout the site indicate that lead concentrations in the soil are below  
4 the regulatory threshold of 400 parts per million (ppm). Assumed ACM were observed throughout  
5 the BDB. A full asbestos investigation was completed for La Plaza in July 2016 and revealed that  
6 asbestos is present within heating, ventilation, and air conditioning (HVAC) mastic, black mastic on  
7 walls behind old chalk boards, floor tile, spray on sink coating, window caulking, and roof  
8 treatment.

### 9 **3.5.2 Environmental Consequences**

10 Both Alternative A and the Proposed Action would entail demolition and renovation of structures  
11 throughout the BDB that contain asbestos and lead based paints. Alternative A and the Proposed  
12 Action also would install a 7,500 gallon fuel tanks at USCGX and a new 88,000 gallon above ground  
13 water storage tank located west of the hangar near an existing storage tank and well facilities. This  
14 area has been previously assessed for petroleum contaminated soils. Further research and  
15 investigation into the full removal of all petroleum contaminated soils will need to be performed  
16 prior to construction. Removal of all asbestos containing materials and lead based paints will also  
17 need to be performed prior to demolition or renovation.

18 Project construction would require use of fuels, lubricants, and solvents for construction vehicles  
19 and equipment. Any hazardous materials needed for construction would be stored and used in  
20 accordance with the applicable regulations that specify hazardous materials storage and handling  
21 requirements, such as proper container types, spill containment, and usage methods for minimizing  
22 the potential for releases and harmful exposures. Best Management Practices (BMPs) designed to  
23 prevent pollutants from contacting stormwater and moving off site into receiving waters would be  
24 followed during construction. Examples of hazardous materials BMPs to protect surface and  
25 groundwater from possible sources of contamination include conducting routine inspections for  
26 leaks, placing drip pans underneath parked vehicles, protecting the ground surface with tarps in  
27 equipment and materials storage areas, storing incompatible hazardous materials separately, using  
28 secondary containment for hazardous materials storage, keeping spill clean-up kits available on site,  
29 designating appropriate sites in the construction area as refueling stations for construction vehicles,  
30 and maintaining compliance records. Following these requirements would minimize any potential  
31 impacts associated with the use of these materials.

### 32 **Proposed Action**

33 Under the Proposed Action 86 housing structures would be demolished that contain ACM and LBP.  
34 All ACM and LBP would be removed and disposed of at an appropriate disposal site. The Proposed  
35 Action would also construct a new water storage tank in an area that was previously assessed for  
36 petroleum contaminated soils. Further soils investigation in that area would be performed to  
37 confirm that all contaminated soil has been removed. Use of hazardous materials during  
38 construction would follow appropriate procedures and BMPs thus minimizing any potential  
39 impacts associated with their use. Project Design Features **HAZ-1: Regulatory agency file review**,  
40 **HAZ-2: Asbestos and Lead based paint removal**, and **HAZ-3: Aboveground Storage Tanks** will be  
41 implemented to reduce the potential of adverse impacts associated with Hazardous Materials and



1 Waste. Pursuant to NEPA, the Proposed Action would have no significant hazardous materials or  
2 wastes impacts.

### 3 **Alternative A**

4 Under the Alternative A, 88 housing structures would be demolished that contain ACM and LBP.  
5 Hazardous materials and waste impacts under Alternative A would be similar to those under the  
6 Proposed Action. Project Design Features **HAZ-1: Regulatory agency file review**, **HAZ-2: Asbestos**  
7 **and Lead based paint removal**, and **HAZ-3: Aboveground Storage Tanks** will be implemented to  
8 reduce the potential of adverse impacts associated with Hazardous Materials and Waste. Pursuant  
9 to NEPA, Alternative A would have no significant hazardous materials and waste impacts.

### 10 **No Action Alternative**

11 Under the No Action Alternative, no change would occur to the site regarding continued  
12 maintenance and repairs that would cause interaction with or generation of hazardous materials or  
13 wastes. Maintenance and repairs would continue at ASB. The Coast Guard would continue to  
14 transport, handle, and dispose of hazardous wastes and materials in compliance with RCRA and the  
15 TSCA. They would also continue to follow the procedures for the management of pharmaceutical  
16 waste per the EPA Hazardous Waste Pharmaceutical Rule Technical Guidance. Pursuant to NEPA,  
17 the No Action Alternative would have no significant hazardous materials or wastes impacts.

## 18 **3.6 Air Quality and Greenhouse Gases**

19 Air quality programs based on ambient air quality standards typically address air pollutants  
20 produced in large quantities by widespread types of emission sources, and that are a public health  
21 concern because of their toxic properties. The U.S. Environmental Protection Agency (EPA)  
22 established national ambient air quality standards for several different pollutants, often referred to  
23 as criteria pollutants (i.e., ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, suspended  
24 particulate matter, and lead). Standards for suspended particulate matter have been set for two size  
25 fractions: coarse particulate matter (PM<sub>10</sub>) and fine particulate matter (PM<sub>2.5</sub>), both of which are  
26 inhalable. National ambient air quality standards are based primarily on evidence of acute and  
27 chronic health effects, and apply to outdoor locations to which the general public has access. The  
28 status of areas with respect to these standards is generally categorized as attainment (better than  
29 national standard), maintenance (nonattainment areas that have been redesignated based on a  
30 maintenance plan), and nonattainment. Section 176(c) of the Clean Air Act requires federal agencies  
31 to ensure that actions undertaken in nonattainment or maintenance areas are consistent with the  
32 Clean Air Act and with federally enforceable air quality management plans. The EPA general  
33 conformity rule applies to federal actions occurring in nonattainment or maintenance areas when  
34 the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed  
35 specified thresholds.

36 Greenhouse gas (GHG) compounds in the atmosphere absorb infrared radiation and re-radiate a  
37 portion of that back toward the earth's surface, trapping heat and warming the earth's atmosphere.  
38 The most important naturally occurring GHG compounds are carbon dioxide, methane, nitrous  
39 oxide, ozone, and water vapor. Carbon dioxide, methane, and nitrous oxide are produced naturally  
40 by respiration and other physiological processes of plants, animals, and microorganisms; by



1 decomposition of organic matter; by volcanic and geothermal activity; by naturally occurring  
2 wildfires; and by natural chemical reactions in soil and water. Ozone is not released directly by  
3 natural sources; it forms during complex chemical reactions in the atmosphere among organic  
4 compounds and nitrogen oxides in the presence of ultraviolet radiation. Ozone in the lower  
5 atmosphere is so chemically reactive that it has a short residence time that limits its actual climate  
6 change effects. Although water vapor is a strong GHG, its concentration in the atmosphere is  
7 primarily a result of, not a cause of, changes in surface and lower atmospheric temperature  
8 conditions.

9 Although naturally present in the atmosphere, concentrations of carbon dioxide, methane, and  
10 nitrous oxide also are affected by emissions from industrial processes, transportation technology,  
11 urban development, agricultural practices, and other human activity.

### 12 **3.6.1 Affected Environment**

13 The EPA sets the national air quality standards for six common pollutants (referred to as “criteria”  
14 pollutants). These standards consist of threshold levels for carbon monoxide, lead, nitrogen oxides,  
15 ozone, particulate matter (PM), and sulfur dioxide. The Clean Air Act requires EPA to designate  
16 each area in one of three ways: attainment (meeting a standard), nonattainment (failing to meet a  
17 standard), and unclassifiable (not enough information to classify).

18 The project site is located entirely in the municipality of Aguadilla, which is in an attainment area  
19 for all regulated air pollutants (USEPA 2019). Because the project site is located in an attainment  
20 area, Alternative A and the Proposed Action are exempt from the EPA general conformity  
21 regulations under the Clean Air Act.

### 22 **3.6.2 Environmental Consequences**

23 The structures have been sampled and asbestos containing materials (ACM) and lead based paint  
24 (LBP) have been found to be present. ACM and LBP have been verified in all of the structures  
25 proposed for demolition. It is not anticipated that the removal would contribute to a lowering of air  
26 quality since the demolition contractor would be required to follow National Emission Standards for  
27 Hazardous Air Pollutants (NESHAP) regulations during abatement and also would be required to  
28 have proper EPA and OSHA credentials, certifications, and training in LBP and asbestos removal.

### 29 **Proposed Action**

30 The Proposed Action would likely result in localized increases of criteria pollutants and greenhouse  
31 gases from the operation of diesel- and gasoline-powered equipment during construction, which is  
32 estimated to be between 26 and 30 months. This would temporarily represent a slight increase over  
33 background concentrations. Based upon the good air quality conditions in the project area, this  
34 temporary increase would not affect regional air quality. Fugitive dust emissions are typically  
35 generated during construction. Application of best management practices (BMPs) at construction  
36 sites would reduce fugitive dust. BMPs, such as watering of construction sites during demolition  
37 and earth moving activities, would be conducted to minimize air quality impacts from construction-  
38 related fugitive dust.



1 Under the Proposed Action localized increases of air pollutants from the operation of diesel- and  
 2 gasoline-powered equipment would occur during construction. In addition fugitive dust emissions  
 3 would be generated during construction but both of these effects would be minimized through  
 4 implementation of Project Design Feature **AQ-1 Air Quality Best Management Practices**. Pursuant  
 5 to NEPA, the Proposed Action would have no significant impact on air quality and greenhouse  
 6 gases during construction.

7 Operational emissions would occur from backup generators. The Proposed Action would employ  
 8 two 1,500 kW generators for the Housing Area and two 750 kW generators for the ASB facilities, for  
 9 a total of 4,500 kW of backup generation, to provide emergency power to the BDB and ASB. These  
 10 backup generators and associated fuel storage have been sized to provide 14 days of independent  
 11 power, during power outages. In general, during power outages caused by a catastrophic event such  
 12 as a hurricane, any emergency engine of any size could operate without meeting federal control  
 13 requirements or emission limits. During most years, the backup generators would operate for  
 14 testing and maintenance. The backup generators would be tested once a month for an hour and then  
 15 run on the system once a year for an hour under load. The generators would run on diesel fuel.

16 Diesel generators would emit nitrogen oxides, carbon monoxide, particulate matter, sulfur oxides,  
 17 and hazardous air pollutants. The calculated annual emissions from the backup generators are  
 18 shown in **Table 3.6-1**. The diesel fuel emissions have been estimated from the emission factors in  
 19 EPA’s AP-42: Compilation of Air Emissions Factors (EPA 1996). The emissions in **Table 3.6-1**  
 20 assume the generators would operate for 100 hours per year, at a fuel usage of 356 gallons/hour of  
 21 diesel fuel for all generators running simultaneously (Appendix D - Generator Emission  
 22 Calculations).

23 **Table 3.6-1 Annual Backup Generator Emissions (tons/year)**

Pollutant	Diesel Fuel
Nitrogen Oxides (NO <sub>x</sub> )	9.9
Carbon Monoxide (CO)	2.0
Sulfur Oxides (SO <sub>x</sub> )	0.6
Particulates (PM-10)	0.6
Notes: Assumes two 1,500 kW and two 750 kW electrical generators running simultaneously for 100 hours.	

24 The backup generators will comply with the EPA’s standards for diesel engines and diesel fuel. The  
 25 new diesel generators will be certified by their manufacturers that their engines meet the latest EPA  
 26 standards for stationary emergency engines. EPA also has adopted requirements for use of ultra low  
 27 sulfur diesel fuel. Using cleaner burning fuel would result in lower emissions of hazardous air  
 28 pollutants, particulate matter, and sulfur dioxide.

29 The generator emissions in **Table 3.6-1** would be below the thresholds that would classify the  
 30 generators as a major source requiring a Title V permit (i.e., 100 tons/year of any pollutant or 25  
 31 tons/year of hazardous air pollutants). Because the generators would be used for emergency backup  
 32 only and would comply with the latest EPA emission standards, no ongoing or permanent air  
 33 quality impacts from their installation would occur. The impact of the generators would be  
 34 temporary because they would only be used during power outages and for testing.



1 Pursuant to the Clean Air Act, the Proposed Action is exempt from the General Conformity Rule, as  
2 there would be no reasonably foreseeable direct or indirect emissions in nonattainment or  
3 maintenance areas. Pursuant to NEPA, the Proposed Action would have no significant impact on air  
4 quality and greenhouse gas emissions from the backup generators.

## 5 **Alternative A**

6 As with the Proposed Action, under the Alternative A localized increases of air pollutants from the  
7 operation of diesel- and gasoline-powered equipment would occur during construction which is  
8 estimated to be between 26 and 30 months. Fugitive dust emissions would be minimized through  
9 implementation of Project Design Feature **AQ-1 Air Quality Best Management Practices**. During  
10 operation, the emissions from the backup generators under Alternative A would be the same as for  
11 the Proposed Action. Air quality impacts would be the same under Alternative A as under the  
12 Proposed Action.

13 Pursuant to the CAA, Alternative A is exempt from the General Conformity Rule, as there will be no  
14 reasonably foreseeable direct or indirect emissions in nonattainment or maintenance areas. Pursuant  
15 to NEPA, Alternative A would have no significant impact on air quality and greenhouse gas  
16 emissions.

## 17 **No Action Alternative**

18 As the current structural conditions of the study area continue to deteriorate, the structures  
19 proposed to be rebuilt would still need to be fully demolished. Demolition activities could result in a  
20 temporary increase in localized air pollutant concentrations, primarily from operation of diesel- and  
21 gasoline-powered equipment. These potential pollutant increases would be temporary (for the  
22 duration of demolition) and localized. Pursuant to NEPA, the No Action Alternative would have no  
23 significant impact on air quality and greenhouse gas emissions.

## 24 **3.7 Noise**

25 The Noise Control Act of 1972 (NCA) is a statute of the United States initiating a federal program of  
26 regulating noise pollution with the intent of protecting human health and minimizing annoyance of  
27 noise to the general public. The primary responsibility of regulating noise is with state and local  
28 governments. The U.S. Coast Guard BDB and ASB are located in the municipality of Aguadilla.

29 Noise is defined as unwanted sound, indicating that perceived noise impacts are inherently  
30 subjective. There are health consequences of elevated and continued increased sound levels. The  
31 potential health consequences of elevated and continued increased sound levels can cause hearing  
32 impairment, annoyance or anxiety leading to increased stress, and hypertension. Severe cases of  
33 reactions to increased levels of noise include workplace accidents due to lack of focus, aggressive  
34 behavior, anti-social behavior, and decreased productivity. In general, people can acclimate to  
35 surrounding background noise. Additionally, due to the fact that the project is within an active  
36 Coast Guard base with active aircraft operations, sudden bursts of heightened noise are to be  
37 expected.



1 Environmental noise is commonly expressed on a logarithmic scale as A-weighted decibels (dBA),  
 2 which approximate how an average person hears a sound. Typical sounds are presented in **Table**  
 3 **3.7-1**.

4 **Table 3.7-1. Typical Sound Levels**

Source	Decibels	Description
Large rocket engine (nearby)	180	
Jet takeoff (nearby)	150	
Pneumatic riveter	130	
Jet takeoff (60 meters)	120	Pain threshold
Construction noise (3 meters)	110	
Subway train	100	
Heavy truck (15 meters), and Niagara Falls	90	Constant exposure endangers hearing
Average factory	80	
Busy traffic	70	
Normal conversation (1 meter)	60	
Quiet office	50	Quiet
Library	40	
Soft whisper (5 meters)	30	Very quiet
Rustling leaves	20	
Normal breathing	10	Barely audible
Hearing threshold	0	

Source: Tipler 1976

## 5 **3.7.1 Affected Environment**

6 Existing noise sources in the project vicinity include roadway traffic, aircraft operations, and  
 7 localized residential and park noise. A major source of existing noise is aircraft traffic at the Rafael  
 8 Hernandez Airport, which is an active commercial airport with daily passenger, cargo, and military  
 9 flights. Several residential areas are located adjacent to the project sites and the closest are  
 10 approximately 200 feet from project facilities. Other sensitive noise receptors farther away in the  
 11 project vicinity include local parks and open green spaces (baseball, football and soccer fields),  
 12 recreational beaches, residential outside areas, school, community center, and multiple hotels.

13 The Puerto Rico Environmental Quality Board (EQD) has established regulations for the control of  
 14 noise pollution (EQD 2011). The EQD noise regulations provide that construction and demolition  
 15 noise cannot endanger health and safety or affect use of property, and that nighttime use (10:01 PM



1 to 7:00 AM) of construction equipment is prohibited. The EQD noise regulations also exempt noise  
 2 produced during emergency work, to protect the health, safety, and welfare of the community.

3 While the Coast Guard does not have noise regulations directly applicable to the proposed project,  
 4 the Department of Housing and Urban Development (HUD) has developed guidelines to evaluate  
 5 the compatibility of noise with residential areas. Although the HUD noise guidelines apply only to  
 6 housing projects supported by HUD, they provide a useful tool to evaluate potential impacts on  
 7 residential areas. The HUD guidelines identify 65 dBA or less as acceptable, above 65 dBA to 75 dBA  
 8 as normally unacceptable, and above 75 dBA as unacceptable (HUD 2009). These HUD noise  
 9 guidelines represent averages of acoustical energy over a 24-hour period, which would allow  
 10 occasional higher noise levels as long as a sufficient amount of relative quiet is experienced for the  
 11 remaining period of time.

12 The Coast Guard has developed noise guidelines for commercial vessels, to protect crew members  
 13 from permanent noise-induced hearing loss and to provide a safe working environment (USCG  
 14 1982). The Coast Guard noise exposure limit is 82 dBA for a 24-hour exposure. While this 82-dBA  
 15 threshold is not applicable to the proposed project, it provides a useful guideline to evaluate the  
 16 health-based effects of project noise.

### 17 3.7.2 Environmental Consequences

#### 18 Proposed Action

19 Noise impacts of the Proposed Action would include temporary increases in local noise levels due to  
 20 construction activities. The noisiest activities would likely take place in the early stages of  
 21 construction when demolition of existing concrete buildings would occur. The hours of construction  
 22 would be limited between normal working hours (8:00 a.m. and 5:00 p.m.). In addition, Project  
 23 Design Feature **NOI-1: Noise Reduction Measure** will be implemented to minimize construction  
 24 noise impacts.

25 Noise levels for typical construction equipment at various distances are provided in **Table 3.7-2**. The  
 26 Federal Highway Administration’s (FHWA’s) Roadway Construction Noise Model (RCNM)  
 27 predicts both the maximum sound level ( $L_{max}$ ) for typical construction equipment, and the  
 28 equivalent sound level ( $L_{eq}$ ) based on the amount of time that a piece of construction equipment  
 29 would operate (FHWA 2006). Noise levels in **Table 3.7-1** are for outside uses, while interior noise  
 30 levels would be 10 to 35 dBA lower depending on the building type and window conditions  
 31 (FHWA, 2011).

**Table 3.7-2. Noise Levels for Typical Construction Equipment**

Equipment	200 Feet from Source	200 Feet from Source	600 Feet from Source	600 Feet from Source	1200 Feet from Source	1200 Feet from Source
	$L_{max}$	$L_{eq}$	$L_{max}$	$L_{eq}$	$L_{max}$	$L_{eq}$
Backhoe/Front End Loader	68	64	58	54	52	48
Compactor (Ground)	68	61	58	51	52	45
Concrete Mixer Truck	73	69	63	59	57	53



Equipment	200 Feet from Source	200 Feet from Source	600 Feet from Source	600 Feet from Source	1200 Feet from Source	1200 Feet from Source
	L <sub>max</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>eq</sub>
Concrete Pump Truck	70	63	60	53	54	47
Concrete Saw	78	71	68	61	62	55
Crane	73	65	63	56	57	49
Dozer	73	69	63	59	57	53
Drill Rig Truck	72	65	62	55	56	49
Generator	70	67	60	57	54	51
Gradall (excavator)	73	69	63	59	57	53
Jack Hammer	73	66	63	56	57	50
Mounted Impact Hammer, Hoe Ram (hydraulic)	78	71	68	61	62	55
Pavement Scarifier/Roller	73	66	63	56	57	50
Paver	73	70	63	60	57	54
Pneumatic Tools	73	70	63	60	57	54
Pumps	65	62	55	52	49	46
Truck (Dump/Flat Bed)	72	68	62	58	56	52
Combined Two Noisiest (Concrete Saw and Impact Hammer)	81	74	71	64	65	58

Sources: FHWA 2006; FTA 2018

1 At the adjacent residential area to the east, the construction noise levels would range from 74 dBA at  
 2 200 feet to 58 dBA at 1,200 feet, based on the combined Leq noise levels for the two loudest pieces of  
 3 equipment (FTA 2018). Construction noise of 58 to 74 dBA would be below the 82-dBA threshold to  
 4 protect against hearing loss, and would not be considered unacceptable under the HUD noise  
 5 guidelines.

6 Under the Proposed Action construction noise impacts would be limited to intermittent increases in  
 7 local noise levels during construction. Construction noise would be temporary or short term, and  
 8 would be limited to between the hours of 8:00 a.m. and 5:00 p.m. to comply with the prohibitions of  
 9 nighttime construction noise in the Puerto Rico Environmental Quality Board (EQD) noise  
 10 regulations. Pursuant to NEPA, the Proposed Action would have no significant impact as a result of  
 11 noise during construction.

12 The Proposed Action would employ two 1,500 kW generators for the Housing Area and two 750  
 13 kW generators for the Air Station, for emergency situations when electric power from the local  
 14 utility would be interrupted. During most years, the backup generators would be tested once a  
 15 month for an hour and then run on the system once a year for an hour under load. The impact of



1 the generators would be temporary because they would only be used during power outages during  
 2 emergencies and for testing. Noise from backup generators running during emergency situations  
 3 would be exempt from the EQB noise regulations.

4  
 5 The noise levels from the emergency generators at nearby residential areas are presented in **Table**  
 6 **3.7-3**. The noise levels were estimated from noise measurements of similar generators from a  
 7 manufacturer specification sheet (Cummins 2008). The noise levels in **Table 3.7-3** are for exterior  
 8 areas, and would decrease with distance and intervening buildings.

9 **Table 3.7-3. Emergency Generator Noise Emission Levels**

Generator	Distance To Closest Residences (feet)	Generator Noise With Weather Protective Enclosure (dBA)
Housing Generators:		
Two Generators	200	74
At 1,500 kVA each		
Air Station Facilities		
Two Generators	500	65
At 750 kVA each		

10 The two generators for the Air Station running simultaneously would operate at a combined noise  
 11 of 61 dBA at the closest residences 500 feet to the north, which is a noise level considered acceptable  
 12 for residential areas under the HUD noise guidelines. The two generators for the Housing Area  
 13 running simultaneously would operate at a combined noise of 64 dBA with additional noise  
 14 attenuation, at the closest residences 200 feet to the south, which is considered acceptable for  
 15 residential areas under the HUD noise guidelines.

16 Noise from the backup generators would occur during emergency conditions, and would be  
 17 considered a temporary impact. Project Design Feature **NOI-2: Noise Reduction Measure** will be  
 18 implemented to reduce noise impacts from emergency generators at the Housing Area with a  
 19 sound-attenuation enclosure for an additional 10-dBA noise reduction. Pursuant to NEPA, the  
 20 Proposed Action would have no significant impacts as a result of noise from operation of the  
 21 emergency backup generators.

22 **Alternative A**

23 Under Alternative A noise impacts would be the same as under the Proposed Action. There would  
 24 be minimal adverse noise impacts resulting from construction and no increase in operational noise  
 25 would occur as a result of implementing Alternative A. Project Design Feature **NOI-1: Noise**  
 26 **Reduction Measure** will be implemented to minimize construction noise impacts. During operation,  
 27 noise impacts from operation of the backup generators under Alternative A would be the same as  
 28 for the Proposed Action. Project Design Feature **NOI-2: Noise Reduction Measure** will be  
 29 implemented to reduce noise impacts from emergency generators for the Housing Area. Pursuant to  
 30 NEPA, Alternative A would have no significant impacts as a result of noise.



## 1 No Action Alternative

2 The No-Action Alternative would have no effect on the noise environment. Noise would continue to  
 3 be generated as part of normal Air Station operations at their current levels. Pursuant to NEPA, the  
 4 No Action Alternative would have no significant impact as a result of noise.

## 5 3.8 Transportation

### 6 3.8.1 Affected Environment

7 BDB and ASB are located in the northwest portion of Puerto Rico, approximately 85 miles west of  
 8 San Juan, approximately 23 miles north of Mayaguez, and approximately 40 miles west of Arecibo.  
 9 These cities are some of the more populous areas in Puerto Rico. It is assumed that most  
 10 construction materials and construction workers would come from those areas and that demolition  
 11 debris would be disposed of in appropriate construction landfills in those areas or beyond. For  
 12 purposes of this analysis it is therefore assumed that most construction-related traffic would utilize  
 13 Highway 2 and Routes 110 and 107.

14 Annual Average Daily Traffic (AADT) is the term used to show the average traffic volume in both  
 15 directions on a section of road. It is the total volume of vehicle traffic on a highway or road for a  
 16 year divided by 365 days. AADT is a useful measurement of how busy a road is. The AADT for  
 17 selected road segments along the routes described above are presented in **Table 3.8-1**.

**Table 3.8-1. AADT for Selected Road Segments in Project Area**

PR	KM	System	Municipality	Description	Year	AADT
2	117	Primary	Aguadilla	Between PR-464 and PR-110	2008	32,658
2	126.4	Primary	Aguadilla	Between PR-107 and PR-2R	2012	42,947
107	0.35	Intermodal Connector	Aguadilla	Between PR-111 and Calle Borinquen	2013	19,904
107	3.03	Intermodal Connector	Aguadilla	Between PR-458 and PR-4467	2013	21,892
107	4.3	Intermodal Connector	Aguadilla	Between Base Ramey (gate) and PR-4467	2012	17,083
107	3	Secondary	Aguadilla	Between PR-458 and PR-4467	2007	19,497
107	1.15	Secondary	Aguadilla	Between PR-467 and PR-458	2007	21,928
110	27.5		Aguadilla	Between PR110R and PR-471	2002	14,000
110	27.1	Urban Primary	Aguadilla	Between PR-459 and PR-110R	2003	19,121
110	25.1	Urban Primary	Aguadilla	Between PR-2 and PR-459	2003	13,990

Source: ACITS 2019

PR=Puerto Rico, KM=Kilometer, AADT=Annual Average Daily Traffic



## 1 3.8.2 Environmental Consequences

2 The hauling of demolition debris and excess soil from the project site and new materials to the site  
3 would generate truck traffic during construction. Construction related truck traffic for these  
4 activities was estimated for Alternative A and the Proposed Action. This additional traffic is then  
5 compared to the AADT for the roadways that would be used by these trucks.

### 6 Proposed Action

7 Total truck trips associated with construction of the Proposed Action are estimated to be  
8 approximately 9,600 one way trips (4,800 round trip) over an approximately 26-month construction  
9 period (approximately 550 work days). If these truck trips are spread out evenly over the 550-day  
10 construction period then an average of 18 one way truck trips per day, or 9 round trip truck trips per  
11 day, would be added to the project vicinity roadways over the 26 month construction period. Given  
12 that the AADT for the area roadways ranges from 14,000 to 43,000, this equates to an increase of  
13 between 0.04% and 0.13% during the 26-month construction period. This does not represent a  
14 substantial increase in the project area over the 26-month construction period. This additional daily  
15 traffic is not anticipated to have any operational impact to local intersection capacity or operation.  
16 Further, Project Design Feature **T-1: Traffic Management Plan** will be implemented to minimize  
17 construction traffic impacts. There would be no additional project-related traffic after the  
18 construction has been completed. Pursuant to NEPA, the Proposed Action would have no  
19 significant impact on transportation.

### 20 Alternative A

21 Total truck trips associated with construction of Alternative A is expected to be similar to that of the  
22 Proposed Action. As with the Proposed Action, this does not represent a substantial increase in the  
23 project area over the 26-month construction period. This additional daily traffic is not anticipated to  
24 have any operational impact to local intersection capacity or operation. Further, Project Design  
25 Feature **T-1: Traffic Management Plan** will be implemented to minimize construction traffic  
26 impacts. There would be no additional project-related traffic after the construction has been  
27 completed. Pursuant to NEPA, Alternative A would have no significant impact on transportation.

### 28 No Action Alternative

29 Under the No Action Alternative the demolition and construction activities associate with the  
30 Proposed Action would not occur. There **would be no additional traffic associated with the No**  
31 **Action Alternative and no traffic impacts would occur.** Pursuant to NEPA, the No Action  
32 Alternative would have no significant impact to transportation.

## 33 3.9 Utilities

### 34 3.9.1 Affected Environment

35• Electricity is provided to BDB and ASB by the Puerto Rico Electric Power Authority (PREPA), an  
36 electric power company owned by the Commonwealth of Puerto Rico responsible for electricity  
37 generation, power distribution, and power transmission on the island. PREPA is the only entity



1 authorized to provide electricity in Puerto Rico. Almost three-fourths of the energy used in  
2 Puerto Rico comes from petroleum products which are all imported. Under the Puerto Rico  
3 Energy Public Policy Act PREPA must obtain 40% of its electricity from renewable sources by  
4 2025, 60% by 2040, and 100% by 2050 (U.S. Energy Information Administration 2021). In the last  
5 five years, Puerto Rico's electrical infrastructure has suffered several setbacks. In September  
6 2017, Hurricanes Irma and Maria made landfall two weeks apart and destroyed much of Puerto  
7 Rico's electricity transmission and distribution infrastructure. A 6.4 magnitude earthquake, and  
8 subsequent aftershocks, that struck Puerto Rico in January 2020 left two-thirds of the  
9 Commonwealth's residents without power. The earthquake, and subsequent aftershocks,  
10 significantly damaged the island's two natural gas-fired power plants.

11 Water and wastewater services are provided to BDB and ASB by the Puerto Rico Aqueduct and  
12 Sewer Authority (PRASA). PRASA is a public utility responsible for the production and  
13 distribution of potable water and collection, treatment, and disposal of a large portion of domestic  
14 and industrial pretreated wastewater in Puerto Rico. PRASA serves a population of approximately  
15 3.2 million residents. PRASA owns a large variety of assets, including eight dams, 249 wells, 113  
16 water and 51 wastewater treatment facilities, 1,906 pump stations, and 1,557 water storage tanks  
17 (Acueductospr 2021).

18 During 2010, public-supply water withdrawals by the PRASA from surface-water equaled 587  
19 million gallons per day (Mgal/d) and groundwater (83 Mgal/d) sources constituted the major  
20 freshwater use category at 670 Mgal/d. The population served by public-supply water facilities  
21 operated by the PRASA was estimated to be 96 percent of the total resident population (about  
22 3,586,000 residents) (USGS 2021).

23 There are no offsite facilities that treat or convey stormwater from BDB or ASB.

## 24 **3.9.2 Environmental Consequences**

25 The Proposed Action and Alternative A both involve increasing resiliency for power supply, water  
26 supply, and wastewater treatment for BDB and ASB. For electrical power supply, under the  
27 Proposed Action and Alternative A the PREPA owned electrical grid for the BDB will be replaced  
28 with a new power grid owned and maintained by the USCG. To improve resiliency at the ASB, the  
29 existing USCG owned power grid will be replaced with new. At both the ASB and BDB, the USCG  
30 power grid will include (2) half sized generators to power the grid in the event of a PREPA power  
31 outage. To provide additional protection for the micro-grid, a Battery Energy Storage System will be  
32 provided at each PREPA service to the micro-grid. All new USCG power distribution would utilize  
33 underground infrastructure and would occur within the BDB and ASB areas.

34 For domestic and fire suppression water supply two new 165,000-gallon storage tanks, monitoring  
35 and treatment system, and distribution pump located on south side of Cliff Road, opposite Ray Park  
36 would be installed. One well with associated water treatment equipment would be installed as  
37 potable water source for use during contingencies only. A new 88,000 gallon storage tank for fire  
38 water resiliency at ASB would be installed to augment the existing tank. This tank would use the  
39 existing water treatment facilities at ASB and could be filled by either PRASA water or the existing  
40 well at ASB. New water distribution pipes would be installed to serve the new housing and  
41 community service buildings. All work associated with upgrading and increasing the resiliency of  
42 the water supply system would occur with BDB or ASB.



1 Under both the Proposed Action and Alternative A the sanitary sewer systems would be partially  
2 upgraded in the Housing Area at BDB. This would involve demolition of all sewer mains and  
3 laterals in conflict with any of the proposed construction; installing new sanitary sewer mains,  
4 manholes, and laterals where new housing and community service buildings are proposed; and  
5 installing a lift station to pump up to three dwelling units to drain past new storm drain  
6 infrastructure.

7 Stormwater drainage is handled on site at BDB. Stormwater is collected and drains to outfalls at the  
8 cliff edge north of Cliff Road. On site stormwater drainage would be improved under the Proposed  
9 Action and Alternative A by upgrading certain portions to allow conveyance of 25-year rainfall  
10 events, constructing open channels along existing flow paths, installing box culverts under  
11 roadways, and adding four new outfalls along the cliff to discharge the stormwater.

## 12 **Proposed Action**

13 Construction activities associated with upgrading and increasing the resiliency of onsite utilities  
14 would occur primarily within BDB and ASB with the exception of upgrading the electrical  
15 transmission service from PREPA to USCGX. Upgrading this service could result in a temporary  
16 disruption of service to nearby electricity customers outside of BDB. This disruption would be  
17 temporary and short term. Furthermore, customers would be notified in advance of any temporary  
18 disruption to their electrical service. No other impacts to utilities would result from upgrading  
19 utilities associated with the Proposed Action. Pursuant to NEPA, the Proposed Action would have  
20 no significant impact on utilities.

## 21 **Alternative A**

22 Upgrading electrical service associated with Alternative A could result in a temporary disruption of  
23 service to nearby electricity customers outside of BDB. This disruption would be temporary and  
24 short term. Furthermore, customers would be notified in advance of any temporary disruption to  
25 their electrical service. No other impacts to utilities would result from upgrading utilities associated  
26 with the Alternative A. Pursuant to NEPA, the Proposed Action would have no significant impact  
27 on utilities.

## 28 **No Action Alternative**

29 Under the No Action Alternative construction and operation activities associated with upgrading  
30 utilities at BDB and ASB would not occur. There would be no disruption to electrical service at  
31 nearby electricity customers. Pursuant to NEPA, the No Action Alternative would have no  
32 significant impact on utilities.

## 33 **3.10 Coastal Zone Management Act Consistency**

### 34 **3.10.1 Affected Environment**

35 BDB and ASB are located in the northwest portion of Puerto Rico, directly on the coastline and  
36 therefore all proposed improvements will require a Coastal Zone Consistency Determination. The  
37 Puerto Rico DNER is responsible for implementing the Puerto Rico Coastal Zone Management



1 Program, for the island. The designated coastal zone extends to 1,000 meters from the coastline and  
2 includes coastal natural systems, territorial waters, and the submerged lands beneath them that  
3 extend three nautical leagues out to sea (9 nautical miles or 10.35 statute miles). All projects  
4 occurring in the coastal zone management area must comply with/be consistent with the policies of  
5 the Coastal Zone protections, and obtain a Coastal Zone Management Certification from the Puerto  
6 Rico Planning Board.

7 Nearly the entirety of BDB is within 1,000 meters of the coastline/ocean and all of the proposed  
8 improvements fall within 1,000 feet. Given the appropriate proximity to the coastline and coastal  
9 resources, an evaluation is needed.

10 The ASB falls beyond the 1,000 meters of the coastline/ocean, and therefore would not likely  
11 necessitate a coastal zone consistency determination. In addition, the nature of the improvements at  
12 ASB focuses mainly on electrical and water system upgrades and enhancements, improvements that  
13 by their nature would not likely alter the environment within the coastal zone.

### 14 **3.10.2 Environmental Consequences**

15 To assess coastal zone consistency, each project alternative was examined to determine if it would  
16 have an adverse impact on the coastal zone and coastal resources, and if it would substantially alter  
17 the coastal zone or induce activities that would be inconsistent with Puerto Rico's coastal  
18 management policies.

19 In all cases, implementation of any of the project alternatives would have no operational impact on  
20 the Coastal Zone. USGC operations, and use of the station, are not expected to change and would  
21 function as they currently do.

22 The Coast Guard prepared a Federal Consistency Determination and an Application for  
23 Certification of Consistency with the Puerto Rico Coastal Management Program and submitted it to  
24 the Office of the Program for the Management of the Coastal Zone and Climate Change in the  
25 Department of Natural and Environmental Resources for their concurrence (Appendix E).

#### 26 **Proposed Action**

27 Construction of the Proposed Action would occur in the coastal zone management area. While  
28 elements of the Proposed Action will involve demolition, ground disturbance and temporary  
29 construction impacts within the coastal zone, no long term nor permanent impacts are anticipated.  
30 Pursuant to NEPA, the Proposed Action would have no significant impact to the Coastal Zone,  
31 however the USCG will obtain a Coastal Zone Management Certification from the Puerto Rico  
32 Planning Board. Pursuant to the CZMA, the Coast Guard has determined that the Proposed Action  
33 will be conducted in a manner fully consistent or consistent to the maximum extent practicable with  
34 the federally approved enforceable policies of the Puerto Rico coastal management program.

#### 35 **Alternative A**

36 Construction of Alternative A would occur in the coastal zone management area. While elements of  
37 Alternative A will involve demolition, ground disturbance and temporary construction impacts  
38 within the coastal zone, no long term nor permanent impacts are anticipated. Pursuant to NEPA,  
39 Alternative A would have no significant impact to the Coastal Zone, however the USCG will obtain



1 a Coastal Zone Management Certification from the Puerto Rico Planning Board. Pursuant to the  
2 CZMA, the Coast Guard has determined that Alternative A will be conducted in a manner fully  
3 consistent or consistent to the maximum extent practicable with the federally approved enforceable  
4 policies of the Puerto Rico coastal management program.

## 5 **No Action Alternative**

6 Under the No Action Alternative no construction and operation changes at BDB and ASB would not  
7 occur, therefore no impact on the Coastal Zone is expected. Existing conditions would remain, and  
8 there would be no changes in coastal zone resources or topography. Pursuant to NEPA, the No  
9 Action Alternative would have no significant impact to the Coastal Zone.

## 10 **3.11 Socioeconomics**

### 11 **3.11.1 Affected Environment**

12 After over 200 years of growth, the population of Puerto Rico is now declining. From 2000 to 2010,  
13 the Puerto Rico's population declined for the first time in census history, dropping 2.2% from  
14 3,808,610 to 3,725,789. Since then, the decline has been more severe. In 2019, Puerto Rico's  
15 population was 3,193,694, a 14% decrease from the 2010 United States Census count. According to  
16 the 2010 Census, the number of Puerto Ricans living in one of the 50 states of the United States far  
17 exceeded those living in Puerto Rico itself. Migration out of Puerto Rico exceeds the migration into  
18 the territory.

19 Total employment in Puerto Rico in June 2017 was about 853,000, with the largest sectors including  
20 public administration (15%), retail trade (15%), and health care and social assistance (11%).  
21 Manufacturing comprised approximately 9% of all employment, declining by 30% overall from 2007  
22 through 2016. Given its natural amenities and resources, Puerto Rico attracted about five million  
23 visitors in 2015 and tourism comprised about 8% of its gross domestic product (GDP). Fisheries and  
24 the ocean economy also accounted for a similar share of overall activity (Bond et al. 2020). Relative  
25 to the rest of the United States, Puerto Rico was characterized by high unemployment (10.4% versus  
26 4.4% in the U.S. overall) just prior to Hurricanes Irma and Maria in September 2017. By August of  
27 2019, unemployment had decreased to 7.0% (Statista 2021). Since mid-2019, Puerto Rico's  
28 unemployment rate has bounced up and down, ending 2020 at 10.5%. Unemployment rate for  
29 Aguadilla Municipio is higher than Puerto Rico overall, at 12.0% in December 2020.

30 Census tract data is presented in **Table 3.11-1** for Puerto Rico, Municipio Aquadilla (US Census  
31 Bureau county equivalent entity), and Census Tract 4001 in order to characterize the social and  
32 economic conditions of the project area in relation to larger areas for context.

33 Census Tract 4003, Aguadilla, Puerto Rico, contains BDB and ASB, as well as the residential area to  
34 the east of the bases. Since this census tract contains data for the Coast Guard personnel who live at  
35 BDB, it does not accurately reflect the data for civilians who live in the census tract but outside of  
36 BDB. In particular, the Coast Guard personnel are not representative of the neighboring residential  
37 areas, skewing the household income and racial diversity data for Census Tract 4003 higher.  
38 Therefore, Census Tract 4001, just to the east of Census Tract 4003, is deemed more representative of  
39 the Puerto Rican residential areas near the proposed project and this analysis presents its census data



1 in lieu of that for Tract 4003. In 2019, Census Tract 4001, Aguadilla, Puerto Rico, had a population of  
 2 4,708 people with a median age of 45.6 and a median household income of \$16,673. Over half, 50.5%,  
 3 of this population lived below the poverty line. One hundred percent of the population in this  
 4 census tract identified as Hispanic (includes respondents of any race).

5 **Table 3.11-1 Census Data**

	Puerto Rico	Aguadilla Municipio	Census Tract 4001
Total Census	3,193,694	52,803	4,708
Median Age (years)	43.1	42	45.6
Race			
Hispanic	98%	98%	100%
White	1%	2%	0%
Median Household Income	\$20,474	\$16,269	\$16,673
Population Below Poverty Line	43.5%	51.6%	50.5%

Source: Census Reporter 2021  
 American Community Survey 2015-2019 5-Year Data

## 6 3.11.2 Environmental Consequences

7 Construction of the Proposed Action and Alternative A would create a number of jobs. It is expected  
 8 that the local communities surrounding the project area will supply the majority of the construction  
 9 labor force. It is also likely that most construction materials will be sourced from within Puerto Rico.  
 10 Accordingly, the Proposed Action and Alternative A would create both direct construction jobs  
 11 associated with the labor required to implement the project and indirect manufacturing jobs  
 12 associated with producing manufactured goods required for the project. Furthermore, the  
 13 construction and manufacturing jobs will induce even more jobs in Puerto Rico as the workers  
 14 spend their household incomes locally on retail goods and services. **Table 3.11-2** provides the total  
 15 estimated construction cost, construction labor, manufacturing costs, manufacturing labor and  
 16 estimated direct and indirect job-years (for construction and manufacturing, respectively), as well as  
 17 additional jobs induced by increased household spending. Construction jobs would develop over  
 18 the estimated 26-month construction period for the Proposed Action and Alternative A.  
 19 Manufacturing jobs would occur prior to construction jobs, while induced jobs would lag the  
 20 manufacturing and construction jobs an indefinite period.

21 **Table 3.11-2 Estimated Construction Costs (in millions) and Jobs for the Proposed Action and**  
 22 **Alternative A**

Description	Proposed Action		Alternative A	
	Costs	Job-years	Costs	Job-years
Total Construction	\$128.5		\$111.2	
Construction Labor <sup>1</sup>	\$45.102	2,019	\$39.030	1,747
Indirect Manufacturing	\$45.087		\$39.017	
Manufacturing Labor <sup>2</sup>	\$8.187	327	\$7.085	283
Induced Jobs <sup>3</sup>		1,724		1,492
Total Jobs		4,070		3,522

23 <sup>1</sup> Calculated using 2019 industry data from U.S. Department of Commerce, Bureau of Economic  
 24 Analysis



1 <sup>2</sup> Calculated using 2020 average wage data for Puerto Rico from U. S. Bureau of Labor Statistics  
2 <sup>3</sup> Calculated using statistics from Economic Policy Institute, Josh Bivens (Jan. 23, 2019), *Updated*  
3 *employment multipliers for the U.S. economy*, epi.org/publication/updated-employment-multipliers-  
4 for-the-u-s-economy/

## 5 **Proposed Action**

6 As can be seen in **Table 3.11-2**, the Proposed Action is estimated to create 2,019 direct construction  
7 job-years over the project's 26-month construction period, as well as indirectly create 327  
8 manufacturing job-years with construction suppliers and induce another 1,724 job-years for a total  
9 of 4,070 job-years. This would be a substantial economic benefit to the region. Pursuant to NEPA,  
10 the Proposed Action will have a beneficial impact on socioeconomics.

## 11 **Alternative A**

12 As can be seen in **Table 3.11-2**, Alternative A is estimated to create 1,747 direct construction job-  
13 years over the project 26-month construction period, 283 manufacturing jobs, and 1,492 additional,  
14 induced job-years for a total of 3,522 job-years. Alternative A would also generate an economic  
15 benefit to the region, albeit less robust than that of the Proposed Action due to the lower project cost;  
16 Pursuant to NEPA, the Alternative A will have a beneficial impact on socioeconomics.

## 17 **No Action Alternative**

18 Under the No Action Alternative the demolition and construction activities associated with the  
19 Proposed Action would not occur. There would be no additional construction-related jobs. Pursuant  
20 to NEPA, the No Action Alternative would have no significant impact to socioeconomics.

## 21 **3.11.3 Environmental Justice**

22 Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations*  
23 *and Low-Income Populations* and EO 13045, *Protection of Children* require Federal agencies to evaluate a  
24 proposed action's potential effects on Environmental Justice communities of concern and on  
25 children. Impacts on environmental justice would be considered significant if the Proposed Action  
26 has a disproportionately high and adverse effect on minority and low-income populations.

27 For the purposes of this environmental justice analysis, the Proposal Action and Alternative A  
28 present the same types and quantities of disruptions from construction noise, air quality or  
29 transportation impacts. There is no large and discernible difference in these alternatives to  
30 environmental justice communities and will therefore be discussed collectively.

31 As noted above, Census Tract 4003, Aguadilla, Puerto Rico, which contains BDB and ASB, is not  
32 reflective of civilians who live in project area but outside of BDB. The surrounding Census Tracts  
33 such as 4001 or 4004, just to the east and west respectively of Census Tract 4003, are more  
34 representative of Puerto Rican communities in this part of the island. These areas have between 50.5-  
35 56.9% populations below the poverty line. In terms of race and ethnicity, there is little differentiation  
36 between the population in Aquadilla, Puerto Rico and the other Census Tracts surrounding BDB  
37 and ASB. All census tracks have between greater than 90% of the populations identifying  
38 themselves as Hispanic.



1 Both BDB and ASB are not directly located in an area that would be considered an Environmental  
2 Justice community of concern. ASB houses personnel with families and children, which will benefit  
3 from the activities in the Proposed Action. Activities in the Proposed Action are typical of common  
4 construction and demolition projects that occur with relative frequency in suburban areas and  
5 would not generate particularly unusual effects that could adversely impact the general public, or  
6 children on or within BDB or ASB. While construction activities will also be recognized outside of  
7 the Census Tract 4003 containing BDB and ASB, the proposed project construction activities are  
8 typical of construction and demolition projects that occur with relative frequency in suburban areas,  
9 and these communities will not bear a disproportionate burden of construction related noise, air  
10 quality or transportation disruptions.

11 Thus, pursuant to E.O. 12898, the Proposed Action would not result in any disproportionately high  
12 and adverse human health or environmental effects on minority populations or low-income  
13 populations. Pursuant to NEPA, the Proposed Action would have no significant impact to  
14 environmental justice communities.

## 15 **3.12 Visual Resources**

16 Visual resources are defined as the natural and manufactured features that comprise the aesthetic  
17 qualities of an area. These features form the overall impressions that an observer receives of an area  
18 or its landscape character. Landforms, water surfaces, vegetation, and manufactured features are  
19 considered characteristic of an area if they are inherent to the structure and function of a landscape.

20 The significance of a change in visual character is influenced by social considerations including  
21 public value placed on the resource, public awareness of the area, and general community concern  
22 for visual resources in the area. These social considerations are addressed as visual sensitivity and  
23 are defined as the degree of public interest in a visual resource and concern over potential adverse  
24 changes in the quality of that resource.

### 25 **3.12.1 Affected Environment**

26 BDB and ASB are located in the northwest portion of Puerto Rico, approximately 85 miles west of  
27 San Juan, approximately 23 miles north of Mayaguez, and approximately 40 miles west of Arcibo.  
28 They are located on a coastal bluff approximately 200 feet above the Atlantic Ocean facing north.  
29 Both BDB and ASB are highly developed and have been since this area was developed as an Army  
30 Air Corp airfield beginning in 1939.

#### **Housing Area**

31 The Housing Area is located on BDB. It is comprised of approximately 224 housing units (single  
32 family homes and duplexes) built in the 1940s and 1950s. They are primarily one and two-story  
33 structures laid out in a fan-shaped grid street pattern (**Figure 3.12-1**) and are reminiscent of  
34 suburban American neighborhoods from that period. The housing units are landscaped with  
35 manicured lawns, shrubs and royal palms (**Figures 3.12-2 and 3.12-3**).

36 A building that once housed many of the base's community services is La Plaza, located at the center  
37 of the Coast Guard housing area. It faces north across a lawn towards Hook Road. The building is a  
38 one- and two-story, reinforced concrete structure with a smooth, cement plaster finish (painted)



1 (Figure 3.12-4). It sits at-grade on a poured foundation and has an irregular, E-shaped footprint. The  
2 building was originally designed as a 40-classroom elementary school. Construction of the building  
3 was completed in 1953. With the departure of the Air Force in 1973, the building was converted to a  
4 multi-purpose facility and rededicated as La Plaza, which until Hurricanes Irma and Maria housed a  
5 chapel, exchange, mini-mart, daycare center, theater, fitness center, library, and offices, among other  
6 varied functions (MHW Americas, Inc. 2004). Almost all of the housing units and La Plaza are  
7 historic resources.



1



1  
2

**Figure 3.12-2 Housing Unit with Landscaping**



3  
4

**Figure 3.12-3 Street View of Housing Units with Landscaping**



1  
2 **Figure 3.12-4 North Side of La Plaza Facing South**

3 The Housing Area is bordered on the north by Cliff Road. Along the south side of Cliff Road are  
4 primarily single family residences. Along the north side of Cliff Road is primarily open green space  
5 covered mostly by manicured lawn with a small area of native vegetation at the western end  
6 (Figures 3.12-5 and 3.12-6). The USCGX is characterized by a two story concrete structure that  
7 houses the store and commissary, a paved parking area, gas station, and above ground fuel storage  
8 tanks.

9 **Air Station**

10 ASB is covered with paved parking lots, roadways, tarmac, and various building including a large  
11 hangar. Open areas not covered by buildings or pavement are primarily covered by grass lawns.  
12 The dominant feature is the U.S. Coast Guard hangar, Flight Hangar No. 2. Flight Hangar No. 2  
13 (Figure 3.12-7), constructed in 1940, is an example of barrel-vaulted, thin-shell concrete Zeiss-  
14 Dwydig construction. Flight Hangar No. 2 is a historic resource.

15 **3.12.2 Environmental Consequences**

16 Both the Proposed Action and Alternative A would result in short-term, temporary impacts to  
17 visual resources associated with the presence of heavy construction equipment at the BDB and ASB.  
18 Following the completion of construction activities, changes in the visual character of BDB and ASB  
19 would not be substantial as described further below.

20 It should be noted that any change to the visual resource environment at BDB will only be able to be  
21 viewed by Coast Guard personnel and other civilian employees since the general public does not  
22 have access to BDB. Also, any adverse effects to the historic housing units and La Plaza will be  
23 addressed through the NHPA Section 106 Process.



1  
2 **Figure 3.12-5 Open Green Space North of Cliff Road Looking South**



3  
4 **Figure 3.12-6 Open Green Space North of Cliff Road Looking East**



1  
2

**Figure 3.12-7 Flight Hangar No. 2 Looking West**

### 3 **Proposed Action**

4 The Proposed Action includes demolition of La Plaza as well as 86 of the historic housing units. It  
 5 also includes construction of a Community Services “Town Square” on Sixth Street, construction of  
 6 24 new housing units in 12 duplexes, and construction of a 34-room Unaccompanied Personnel  
 7 Housing building and a new Gate House facility. One hundred existing housing units would be  
 8 repaired and 6 excess housing units would be renovated. A new well would be installed at the  
 9 western end of Cliff Road on the south side and contain a small potable water treatment facility as  
 10 well as a large water storage tank. An existing water tank at ASB on the west side of Flight Hangar  
 11 No. 2 would be replaced with a larger water tank. Resiliency repairs to the Coast Guard Exchange  
 12 would be conducted such as replacement of gas station dispensers, electrical and storm drain  
 13 improvements, repairs related to building envelope resiliency and improved lighting. A new club  
 14 house and pool would be constructed toward the western end of Cliff Road on the north side and  
 15 the existing club house and pool in the Panhandle area would be demolished.

16 Since the existing housing structures and La Plaza are historic resources, demolition of those  
 17 structures and construction of new structures in their vicinity will be conducted in consultation with  
 18 the SHPO and potentially other consulting parties. The purpose of this consultation will be to  
 19 develop methods to reduce affects to the existing historic resources which will culminate with the  
 20 development and implementation of a Programmatic Agreement. This agreement will describe how  
 21 the new structures should be designed and constructed in such a way as to reflect historical  
 22 architecture and building types, as well as to minimize effects to the remaining intact historic  
 23 structures. As such, the new housing and community facilities will be designed and constructed in a  
 24 manner to be compatible with, and not conflict with, the scale and appearance of the existing  
 25 historic structures. Furthermore, the “Town Square” approach to the Community Services facilities  
 26 under the Proposed Action will be reminiscent of the existing La Plaza which by its placement and  
 27 configuration is somewhat similar to a Town Square. Also, as many existing trees as possible will be



1 retained and any trees removed will be replaced in kind. Landscaping surrounding the new  
2 structures will be compatible with the existing landscaping and over time will mature to become  
3 indistinguishable from the existing landscaping.

4 The water well, tank, and small treatment facility will be built in an existing vegetated area on the  
5 south side of Cliff Road. The tank and facilities will be painted a color to allow them to blend in to  
6 the surrounding vegetation. Once constructed, the disturbed area surrounding the facilities will be  
7 revegetated with native vegetation that exists there.

8 Constructing a new clubhouse and pool on the north side of Cliff Road will provide a locale for  
9 Coast Guard personnel and their family members to enjoy a beautiful vista of the Atlantic Ocean.  
10 The scale of the facility will be similar to the existing clubhouse and pool in the Panhandle area and  
11 will not obstruct the ocean views of the homes located on the south side of Cliff Road.

12 Replacing the water tank on the west side of Flight Hangar No. 2 at ASB will not be noticeably  
13 different from the existing tank given the large scale of the adjacent hangar itself. The larger tank  
14 will be visually compatible with the existing structures at ASB.

15 Under the Proposed Action there will be a temporary adverse effects to visual resources during  
16 construction. Upon completion of construction and with the passage of time landscaping will  
17 mature and new buildings will weather reducing the differences in appearance between the old and  
18 new. The overall visual character of ASB and BDB will not substantially change under the Proposed  
19 Action. Pursuant to NEPA, the Proposed Action would have no significant impact to visual  
20 resources.

## 21 **Alternative A**

22 Alternative A includes demolition of La Plaza as well as 88 of the historic housing units. It also  
23 includes construction of a Community Services “Main Street” on Sixth Street, construction of 50 new  
24 housing units in 25 two and three bedroom duplexes, and retention without renovation of 38  
25 existing housing units. A new well would be installed at the western end of Cliff Road on the south  
26 side and contain a small potable water treatment facility as well as a large water storage tank. An  
27 existing water tank at ASB on the west side of Flight Hangar No. 2 would be replaced with a larger  
28 water tank. Resiliency repairs to the Coast Guard Exchange would be conducted such as  
29 replacement of gas station dispensers, electrical and storm drain improvements, repairs related to  
30 building envelope resiliency and improved lighting. A new club house and pool would be  
31 constructed toward the western end of Cliff Road on the north side and the existing club house and  
32 pool in the Panhandle area would be demolished.

33 As under the Proposed Action, with Alternative A the new housing structures and community  
34 services facilities will be designed and constructed in a manner to be compatible with the remaining  
35 historic structures in scale and appearance. Landscaping will be conducted the same as under the  
36 Proposed Actin and over time will assist with blending the old with the new. Although the  
37 proposed layout of the community services facilities would be more of a departure from the existing  
38 layout than would the Proposed Action, it will still be compatible with the remaining historic  
39 structures in scale and appearance. Pursuant to NEPA, Alternative A would have no significant  
40 impact to visual resources.



## 1 No Action Alternative

2 Under the No Action Alternative, the USCG would not take any action to repair or increase  
3 resiliency of facilities at BDB or ASB. Therefore, there would be no short-term, construction-related  
4 impacts to visual resources as a result of the implementation of the No Action Alternative, and  
5 conditions would remain as they are at present. Pursuant to NEPA, the No Action Alternative  
6 would have no significant impact to visual resources.



## 1 Chapter 4 Comparison of Alternatives and 2 Conclusion

3 This section compares the impacts of the Proposed Action, Alternative A, and the No Action  
4 Alternative.

### 5 4.1 Comparison of the Environmental Consequences of the 6 Alternatives

#### 7 4.1.1 Proposed Action

8 The Proposed Action would result in no adverse impacts to biological resources, geology and soils,  
9 hydrology and water resources, hazardous materials and waste, transportation, utilities, coastal  
10 zone management, environmental justice, and visual resources with implementation of project  
11 design features. The Proposed Action would have a beneficial socioeconomic effects due to the  
12 addition of 4,070 job-years to the local economy during the construction period. The Proposed  
13 Action would result in temporary impacts from construction to air quality and noise however these  
14 impacts would be reduced through implementation of project design features as would noise  
15 impacts from operation of emergency backup generators. The Proposed Action would result in an  
16 adverse effect to historic resources, including housing units and La Plaza. This impact would be  
17 reduced through implementation of measures identified in a Programmatic Agreement to be  
18 developed with the Puerto Rico State Historic Preservation Office. The Proposed Action would meet  
19 the project's Purpose and Need.

#### 20 4.1.2 Alternative A

21 Alternative A would have essentially the same impacts to the environment as the Proposed Action.  
22 Impacts to visual resources would be the same as for the Proposed Action although the proposed  
23 layout of the community services facilities under Alternative A would be more of a departure from  
24 the existing layout than would the Proposed Action. Alternative A would have a beneficial  
25 socioeconomic effects due to the addition of 3,522 job-years to the local economy during the  
26 construction period, however this is approximately 550 job-years fewer than under the Proposed  
27 Action. As with the Proposed Action, Alternative A would result in an adverse effect to historic  
28 resources, including housing units and La Plaza. However, under Alternative A, four additional  
29 Type A housing units would be demolished and two fewer Type G housing units would be  
30 demolished compared with the Proposed Action. This impact would be reduced through  
31 implementation of measures identified in a Programmatic Agreement or Memorandum of  
32 Agreement to be developed with the Puerto Rico State Historic Preservation Office. Alternative A  
33 would meet the project's Purpose and Need.



## 1 4.1.3 No Action Alternative

2 The No Action Alternative would have fewer adverse impacts than the Proposed Action or  
3 Alternative A; however, the No Action Alternative would not create the beneficial socioeconomic  
4 impacts associate with the Proposed Action and Alternative A. Although the No Action Alternative  
5 would not have adverse impacts on the natural and human environment, the No Action Alternative  
6 would not meet the project's purpose and need.

## 7 4.2 Conclusion

8 This EA concludes that there would be no significant impacts to the local physical and natural  
9 environment as a result of implementing the Proposed Action, with adherence to the project design  
10 features specified in this EA. Therefore, an EIS is unnecessary for implementing the Proposed Action,  
11 and a FONSI is appropriate.

12 Alternative A intends to house single Coast Guard personnel without families ("unaccompanied  
13 personnel") within many houses, which continues a current pattern of use which is not desired nor  
14 optimal. Alternative A would also demolish four more Type A housing structures and two fewer  
15 Type G housing structures compared with the Proposed Action.

16 The Proposed Action (Alternative G) was determined by the USCG to best meet the purpose of and  
17 need for the project and thus is the Preferred Alternative.

18 The Proposed Action would house unaccompanied personnel in a single facility, the  
19 Unaccompanied Personnel Housing (UPH) building, which is preferred. A UPH offers many  
20 advantages, including co-located amenities such as laundry, sea-bag storage, and TV rooms, and  
21 advantages of community with other unaccompanied personnel. It is more cost efficient than  
22 building a large number of houses to accommodate the same population. It has another advantage  
23 of taking up less space than a number of individual houses so the Proposed Action is able to include  
24 a recreation field where Alternative A does not. The Proposed Action would also provide more  
25 construction jobs than would Alternative A and thus have a greater benefit to the local economy.

26 The No Action Alternative would not satisfy the project's purpose and need. Alternative A would  
27 satisfy the project's purpose and need but not as well as the Proposed Action. As such, this EA  
28 recommends implementation of the Preferred Alternative, Alternative G.

29 Subsequent to publication of the Draft EA the USCG continued to consult with the SHPO to develop  
30 measures to reduce and avoid effects to historic resources. During this consultation the SHPO  
31 recommended that the layout for new housing for the Proposed Action be modified to retain School  
32 Drive. According to the SHPO, School Drive is the character defining feature of a potential  
33 Borinquen Field historic district, inherent to its original street and block layouts. Retaining School  
34 Drive reduces effects to historic resources as well as minimizes impacts to visual resources by  
35 reducing changes to the original street configuration. This modified layout may be seen as  
36 Attachment B to the MOA which is included in Appendix E to this Final EA. The proposed  
37 modifications to the Proposed Action would not result in an increase in the amount or intensity of  
38 environmental impacts analyzed in this EA but would result in a decrease of impacts related to  
39 historic and visual resources.



## 1 Chapter 5 Agency and Public Coordination

2 This section discusses the agency and public outreach conducted during the development of this  
 3 EA. The USCG is committed to communicating with federal and state agencies, stakeholders and the  
 4 public to help ensure that potentially affected communities and other interested parties understand  
 5 proposed action and are given the opportunity to participate in decisions that may affect them.

### 6 5.1 Agency Coordination

7 Federal statutes, such as the ESA (16 U.S.C. § 1531 et seq.), MMPA of 1972 (16 U.S.C. Chapter 31),  
 8 NHPA (16 U.S.C. § 470 et seq.), and the CWA (33 U.S.C. § 1251 et seq.), require consultation and  
 9 coordination by the USCG with Federal, state, and local agencies. As part of the development of this  
 10 EA, the individuals and agencies listed in **Table 5-1** were contacted.  
 11

**Table 5-1. Consultation and Coordination List**

Affiliation	Point of Contact	Mailing Address and Phone Number
Gobierno de Puerto Rico Oficina Estatal de Conservación Histórica	Carlos A. Rubio-Cancela State Historic Preservation Officer	Cuartel de Ballajá San Juan, PR PO Box 9023935 San Juan, PR 787-721-3737
U.S. Fish and Wildlife Service	Marelisa Rivera Deputy Field Supervisor	P.O. Box 491 Boqueron, PR 00622 787-851-7297
Coastal Zone Management Consistency Office	Rafael Machargo Maldonado Secretary	Puerto Rico Planning Board P.O. Box 41119 Minillas Station San Juan, PR 00940
Puerto Rico Permits Management Office	Ing. Gabriel Hernández Rodríguez, Secretary	P.O. Box 41179 Minillas Station San Juan PR 00940-1179
Puerto Rico Department of Health	Dr. Nelson Valle Campos Regional Director	Norte Medical Center Calle Periferial Interior Bo, Monacillos rio Piedras, PR
Puerto Rico Planning Board	Manuel AG Hidalgo Rivera President Designated	P.O. Box 41119 San Juan PR 00940-1119
Puerto Rico Department of Transportation and Public Works	Carlos M. Contreras Aponte	P.O. Box 41269 Minillas Station San Juan, PR 00940-1269
Puerto Rico Department of Economic Development and Commerce	Manuel Cidre Secretary	355 Av. Franklin Delano Roosevelt San Juan, PR 00918



Affiliation	Point of Contact	Mailing Address and Phone Number
Puerto Rico Tourism Company	Carlos Mercedo Santiago Executive Director	2 Paseo La Princesa San Juan, PR 00902
Puerto Rico Aqueduct and Sewer Authority	Doriel I. Pagan Crespo Executive President	P.O. Box 7066 San Juan, PR 00916-7066
Puerto Rico Electric Power Authority	Efran Paredes Maisonet, CEO	P.O. Box 364267 San Juan, PR 00936-4267
Municipality of Aguadilla	Carlos Méndez Martínez Mayor	City Hall Aguadilla P.O. Box 1008 Aguadilla PR 00605
Rafael Hernandez International Airport	Joel A. Pizá-Batiz Executive Director	Hangar Rd, Aguadilla Pueblo Aguadilla 00603, PR
Federal Aviation Administration	Mr. Larry Clark ADO Manager	Atlanta Airports District Office 1701 Columbia Avenue Suite 2201 College Park, Georgia 30337

## 1 5.2 Stakeholder and Public Outreach

### 2 5.2.1 Agency Consultations

3 The USCG consulted with the SHPO pursuant to Section 106 of the NHPA on potential effects to  
4 historic resources during preparation of this EA. Correspondence from the USCG to the SHPO and  
5 responses from the SHPO may be found in Appendix E.

6 Consultation with USFWS has been initiated requesting their concurrence on the Coast Guard's  
7 finding that the Proposed Action will not impact endangered species or destroy or adversely modify  
8 their critical habitat. This correspondence is included in Appendix E.

9 Additionally, the Coast Guard completed a Coastal Zone Management Federal Consistency Review  
10 and submitted an Application for Certification of Consistency with the Puerto Rico Coastal  
11 Management Program to the Puerto Rico Planning Board. This correspondence is also included in  
12 Appendix E.

### 13 5.2.2 Public Outreach

14 The local agencies and other parties listed in Table 5-1 were sent letters requesting their comments  
15 on the project. Correspondence from received from these agencies and officials is contained in  
16 Appendix E in this Final EA.

17 In December 2020, the USCG published notices in four newspapers soliciting public comments on  
18 the project's potential effects; *El Nuevo Dia*, *El Vocero de Puerto Rico*, *Primera Hora*, and the *San Juan*  
19 *Daily Star*. Copies of these notices are provided in Appendix E. These notices engendered three  
20 response; one email and two letters. One response was soliciting work associated with construction



1 of the Proposed Action. Another response expressed concern over the demolition of historic  
2 buildings. The third response inquired if the USCG knew anything about the proposed restoration  
3 of a medical facility on Vieques Island, Puerto Rico.

4 This Draft EA was made available at the Biblioteca Poblado San Antonio, San Antonio Montaña,  
5 Aguadilla Pueblo, Aguadilla and electronically at [https://www.dcms.uscg.mil/Our-  
6 Organization/Assistant-Commandant-for-Engineering-Logistics-CG-4-/Program-  
7 Offices/Environmental-Management/Environmental-Planning-and-Historic-Preservation/](https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Engineering-Logistics-CG-4-/Program-Offices/Environmental-Management/Environmental-Planning-and-Historic-Preservation/). The  
8 USCG invited the public to participate in a 30-day project review and comment between June 11,  
9 2021 and July 11, 2021. This invitation was published in local newspapers, to include the *El Vocero*,  
10 *Primera Hora*, *Nuevo Dia*, and *San Juan Daily Star*. Copies of these notices are provided in Appendix  
11 E.

12 No comments were received on the Draft EA during the 30-day public review period.



## 1 Chapter 6 Preparers of the Document

### U.S. COAST GUARD COMMANDING OFFICER

Facilities Design and Construction Center

Name	Title/Role
Rick Hylton	Environmental Engineer
Lesley Dobbins-Noble	Environmental Protection Specialist

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Name	Title/ Role	Degree	Years Experience
David Fee	Senior Environmental Planner	B.A. Anthropology, M.A. Anthropology	35
Lynne Marie Whately, AICP	Senior Environmental Planner	B.S. Planning and Public Administration M.S. Urban and Regional Planning	25
Amber Taylor	Senior Environmental Scientist	B.A. Anthropology, B.A. History, M.A. Historical Archaeology	15
Brian Metz	Senior Environmental Scientist	B.S. Environmental Science	20
Jessica Deeds	Environmental Scientist	B.S., Biological Sciences, M.S., Environmental Studies	8
Kelsey Kropp	Biologist	B.S., Biology: Ecology, Environment and Evolution, B.S., Zoology	15
Susan Paterson, P.E.	Transportation Engineer	B.S. Civil Engineering M.S. Civil Engineering	10
Tim Krause	Senior Environmental Scientist	B.S. Environmental Science M.S. Environmental Systems Engineering J.D. Environmental Law	30



## 1 Chapter 7 References

- 2 Acueductospr. 2021. <https://acueductospr.com/prasa-at-a-glance>. Accessed March 19, 2021.
- 3 Autoridad de Carreteras Y Transportacio (ACITS). 2019. Average Annual Daily Traffic (AADT).  
4 Accessed February 20, 2019. <https://data.pr.gov/>
- 5 Bond, Craig A. et al, 2020. Challenges and Opportunities for the Puerto Rico Economy.  
6 [https://www.rand.org/content/dam/rand/pubs/research\\_reports/RR2600/RR2600/RAN](https://www.rand.org/content/dam/rand/pubs/research_reports/RR2600/RR2600/RAN)  
7 [D\\_RR2600.pdf](https://www.rand.org/content/dam/rand/pubs/research_reports/RR2600/RR2600/RAN).
- 8 Castro-Prieto et al, 2019. Castro-Prieto, Jessica; Gould, William A.; Ortiz-Maldonado, Coralys; Soto-  
9 Bayó, Sandra; Llerandi-Román, Ivan, Gaztambide-Arandes, Soledad; Quiñones, Maya; Cañón,  
10 Marcela; Jacobs, Kasey R. 2019. A Comprehensive Inventory of Protected Areas and other  
11 Land Conservation Mechanisms in Puerto Rico. Gen. Tech. Report IITF-GTR-50. San Juan, PR:  
12 U.S. Department of Agriculture Forest Service, International Institute of Tropical Forestry. 161  
13 p.
- 14 Census Reporter, 2021. <https://censusreporter.org/profiles/04000US72-puerto-rico/>. Accessed  
15 March 19, 2021.
- 16 Census Tract Reference Map. 2021. 2010 Census – Census Tract Reference Map: Aguadilla  
17 Municipio, PR.  
18 [https://www2.census.gov/geo/maps/dc10map/tract/st72\\_pr\\_eng/c72005\\_aguadilla/DC10](https://www2.census.gov/geo/maps/dc10map/tract/st72_pr_eng/c72005_aguadilla/DC10)  
19 [CT\\_C72005\\_001.pdf](https://www2.census.gov/geo/maps/dc10map/tract/st72_pr_eng/c72005_aguadilla/DC10). Accessed March 19, 2021.
- 20 Commonwealth of Puerto Rico, State Historic Preservation Office (SHPO). 2005. U.S. Coast Guard  
21 Air Station Borinquen, Aguadilla, Puerto Rico. Coordination and Programmatic Agreement.  
22 Prepared for U.S. Coast Guard, July 7, 2005
- 23 Cummins Power Generation Inc. (Cummins), 2008. Sound-Attenuated and Weather-Protective  
24 Enclosures. Accessed at: <https://www.cummins.com/sites/default/files/2018-08/F-1493->  
25 [Enclosures-en.pdf](https://www.cummins.com/sites/default/files/2018-08/F-1493-). Accessed on: April 5, 2021.
- 26 Environmental Quality Board, 2011. Regulation of the Environmental Quality Board for the Control  
27 of Noise Pollution, Amended Version. Accessed at:  
28 <http://app.estado.gobierno.pr/ReglamentosOnLine/Reglamentos/2809ING.pdf> . Accessed  
29 on April 7, 2021.
- 30 Federal Highway Administration (FHWA) 2006. FHWA Roadway Construction Noise Model User's  
31 Guide. FHWA-HEP-05-054, DOT-VNTSC-FHWA-05-01. January 2006. Accessed at:  
32 [https://www.fhwa.dot.gov/environment/noise/construction\\_noise/rcnm/](https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/). Accessed on:  
33 April 7, 2021.
- 34 Federal Highway Administration (FHWA) 2011. Highway Traffic Noise: Analysis and Abatement  
35 Guidance. FHWA-HEP-10-025, December 2011. Accessed at:  
36 [https://www.fhwa.dot.gov/environment/noise/regulations\\_and\\_guidance/](https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/). Accessed on:  
37 April 7, 2021.



- 1 Federal Transit Administration (FTA) 2018. Transit Noise and Vibration Impact Assessment  
 2 Manual. FTA Report No. 0123, John A. Volpe National Transportation Systems Center,  
 3 September 2018. Accessed at: [https://www.transit.dot.gov/research-innovation/transit-](https://www.transit.dot.gov/research-innovation/transit-noise-and-vibration-impact-assessment-manual-report-0123)  
 4 [noise-and-vibration-impact-assessment-manual-report-0123](https://www.transit.dot.gov/research-innovation/transit-noise-and-vibration-impact-assessment-manual-report-0123). Accessed on: April 7, 2021.
- 5 Geo Cim 2019. Report on Geotechnical Investigation and Foundation Recommendations for  
 6 Improvements to Residential Area at Coast Guard Air Station Borinquen Aguadilla, PR. Geo  
 7 Cim Project No. 5171. January 15, 2019.
- 8 Helmer, E.H.; Ramos, O.; López, T. del M.; Díaz, W. 2002. Mapping the forest type and land cover of  
 9 Puerto Rico, a component of the Caribbean biodiversity hotspot. *Caribbean Journal of Science*.  
 10 38(3-4): 165-183.
- 11 Holdridge, L.R. 1967. Life zone ecology. San Jose, Costa Rica: Tropical Science Center. 372 p.
- 12 Housing and Urban Development (HUD), 2009. HUD Noise Guidebook. Accessed at:  
 13 <https://www.hudexchange.info/resource/313/hud-noise-guidebook/>. Accessed on April 7, 2021.
- 14 Michael Baker International, Inc. 2016. *Historical, Cultural, and Natural Resources Assessment, USCG*  
 15 *Sector San Juan, Puerto Rico and Virgin Islands*
- 16 MHW Americas Inc. and The Mannik Smith Group. 2004. U.S. Coast Guard Air Station Borinquen  
 17 Aguadilla, Puerto Rico. Historical and Architectural Resources Survey and Evaluation.  
 18 Volume 1. Prepared for U.S. Coast Guard.
- 19 Molina-Rivera, W.L. 2014. Estimated water use in Puerto Rico, 2010: U.S. Geological Survey Open-  
 20 File Report 2014-1117, 35 p., (<http://dx.doi.org/10.3133/ofr20141117>)
- 21 National Oceanic and Atmospheric Administration (NOAA). 2021. ESA Threatened and  
 22 Endangered Species List, Southeast Region. ([https://www.fisheries.noaa.gov/species-](https://www.fisheries.noaa.gov/species-directory/threatened-endangered)  
 23 [directory/threatened-endangered](https://www.fisheries.noaa.gov/species-directory/threatened-endangered)) Accessed January, 2021.
- 24 Perez, Ahmed, Environmental Protection Specialist, USCG, Onsite Interview, January 22, 2019.
- 25 Rodriguez, C., Mayer, G.C. & Tolson, P.J. 2018. *Chilabothrus inornatus*. The IUCN Red List of  
 26 Threatened Species 2018.
- 27 Rodríguez-Durán, A. 1996. Foraging Ecology of the Puerto Rican Boa (*Epicrates inornatus*): Bat  
 28 Predation, Carrion Feeding, and Piracy. *Journal of Herpetology*, 30(4), 533-536.  
 29 doi:10.2307/1565698
- 30 State Historic Preservation Office. Faro de Punta Borinquen. Accessed February 18, 2019.  
 31 [http://www.agencias.pr.gov/oech/oech/RegistroNacional/Pages/](http://www.agencias.pr.gov/oech/oech/RegistroNacional/Pages/%C2%BFQu%C3%A9eselRegistroNacional.aspx)  
 32 [%C2%BFQu%C3%A9eselRegistroNacional.aspx](http://www.agencias.pr.gov/oech/oech/RegistroNacional/Pages/%C2%BFQu%C3%A9eselRegistroNacional.aspx)
- 33 State Office of Historic Conservation, Puerto Rico State Historic Preservation Office. Accessed  
 34 February 18, 2019.  
 35 <http://www.agencias.pr.gov/oech/oech/Pages/default.aspx>



- 1 Statista 2021. Puerto Rico Unemployment rate from 1999 to 2020.  
2 <https://www.statista.com/statistics/397861/unemployment-rate-in-puerto-rico/>. Accessed  
3 March 19, 2021.  
4
- 5 The NDN Companies, Inc. HAZARDOUS MATERIALS SURVEY PLANNING DOCUMENTS For  
6 the Reconstruction of USCG AIR STATION BORINQUEN AGUADILLA, PUERTO  
7 RICO,USCG SFRL Project No: 07-11062658, USCG Contract No: 70Z05018DTRANSY01  
8 Prepared for U.S. Coast Guard and TranSystems. 2019.  
9
- 10 Tipler, Paul A., 1976. Physics. Worth Publishers, New York, N.Y.  
11
- 12 URS 2014. Storm Water Master Plan for U.S. Coast Guard Air Station Borinquen, Aguadilla, PR.  
13 Prepared by URS Caribe LLP, San Juan. December 2014.  
14
- 15 U. S. Bureau of Labor Statistics 2021. Occupational Employment Wage Statistics. May 2020 State  
16 Occupational Employment and Wage Estimates, Puerto Rico.  
17 [https://www.bls.gov/oes/current/oes\\_pr.htm#51-0000](https://www.bls.gov/oes/current/oes_pr.htm#51-0000)  
18 Accessed March 14, 2021.  
19
- 20 U.S. Coast Guard (USCG) 1982: Navigation and Vessel Inspection Circular NO. 12-82. June 2, 1982.  
21 Accessed at:  
22 <https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/NVIC/1982/n12-82.pdf>. Accessed on April 7, 2021.  
23  
24
- 25 U.S. Department of Agriculture, Natural Resources Conservation Service. Accessed February 14,  
26 2019. [https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/](https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=PR)  
27 [?stateId=PR](https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=PR)  
28
- 29 U.S. Department of Agriculture. 2009. General Technical Report IITF-GTR-35 Guide to the Ecological  
30 Systems of Puerto Rico.  
31
- 32 U.S. Department of Commerce. 2021. Bureau of Economic Analysis, Input-Output Accounts Data,  
33 Use of Commodities by Industry Tables, [https://www.bea.gov/industry/input-output-](https://www.bea.gov/industry/input-output-accounts-data)  
34 [accounts-data](https://www.bea.gov/industry/input-output-accounts-data)  
35 Accessed March 14, 2021.  
36
- 37 U. S. Department of the Interior National Park Service. National Register of Historic Places  
38 Inventory Nomination Form. 1981. *Historic: Faro de Punta Borinquen Common: Punta Borinquen*  
39 *Light*.  
40
- 41 U.S. Energy Information Administration. 2021. <https://www.eia.gov/state/print.php?sid=RQ>.  
42 Accessed March 19, 2021.  
43
- 44 U.S. Environmental Protection Agency 1996. AP-42, Fifth Edition, Compilation of Air Emissions  
45 Factors, Section 3.3 Gasoline and Diesel Industrial Engines, Supplement B, October 1996.  
46 Accessed at: [https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-](https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors)  
47 [compilation-air-emissions-factors](https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors). Accessed on: February 10, 2021.



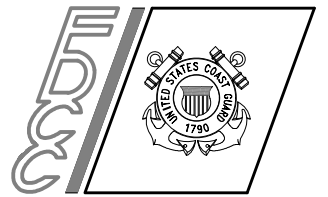
- 1 U. S. Environmental Protection Agency, Puerto Rico Nonattainment/Maintenance Status for Each  
2 County by Year for All Criteria Pollutants. Accessed February 12, 2019.  
3 [https://www3.epa.gov/airquality/greenbook/anayo\\_pr.html](https://www3.epa.gov/airquality/greenbook/anayo_pr.html)  
4
- 5 U.S. Environmental Protection Agency, Clean Air act overview, Clean Air Act Title IV-Noise  
6 Pollution. Accessed February 13, 2019. [https://www.epa.gov/clean-air-act-overview/  
7 clean-air-act-title-iv-noise-pollution](https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution)  
8
- 9 U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern 2008. United States Department  
10 of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington,  
11 Virginia. 85 pp. (<http://www.fws.gov/migratorybirds>)  
12
- 13 U.S. Fish and Wildlife Service. 2019. Information for Planning and Consultation.  
14 <https://ecos.fws.gov/ipac>  
15
- 16 U.S. Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation.  
17 (<https://ecos.fws.gov/ipac>) Accessed January, 2021.  
18
- 19 U.S. Fish and Wildlife Service. 2019. National Wetlands Inventory website.  
20 <http://www.fws.gov/wetlands>  
21
- 22 U.S. Geological Survey (USGS). 1998. Principal aquifers of Puerto Rico and the U.S. Virgin Islands.  
23 ([https://catalog.data.gov/dataset/principal-aquifers-of-puerto-rico-and-the-u-s-virgin-  
24 islands#sec-dates](https://catalog.data.gov/dataset/principal-aquifers-of-puerto-rico-and-the-u-s-virgin-islands#sec-dates)) Accessed March, 2021.  
25
- 26 US. Geological Survey (USGS). 2019. National Hydrography Dataset.  
27
- 28 U.S. Geological Survey (USGS). 2019. National Hydrography Dataset. [https://www.usgs.gov/core-  
29 science-systems/ngp/national-hydrography/national-hydrography-dataset](https://www.usgs.gov/core-science-systems/ngp/national-hydrography/national-hydrography-dataset) Accessed  
30 [January 2021](https://www.usgs.gov/core-science-systems/ngp/national-hydrography/national-hydrography-dataset).  
31
- 32 U.S. Geological Survey (USGS). 2021. Groundwater for USA: Water Levels  
33 (<https://nwis.waterdata.usgs.gov/nwis/gwlevels?>) Accessed April, 2021.  
34
- 35 U.S. Geological Survey (USGS). 2021. Water-Use in Puerto Rico.  
36 [https://www.usgs.gov/centers/car-fl-water/science/water-use-puerto-rico?qt-  
37 science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/centers/car-fl-water/science/water-use-puerto-rico?qt-science_center_objects=0#qt-science_center_objects). Accessed March 19, 2021.  
38
- 39 Velez-Rodríguez, L. 2017. Turning Point: Avances en la tecnología a geoespecial'.  
40 (<http://revistatp.com>). Accessed January, 2021



**Appendix A: ALTERNATIVES PLAN SHEETS**

CONSULTANTS

U. S. COAST GUARD  
FACILITIES DESIGN & CONSTRUCTION  
CENTER



5505 ROBIN HOOD RD, SUITE K  
NORFOLK, VIRGINIA 23513

ISSUE

MARK	DATE	DESCRIPTION

A/E PROJECT NO: XXX  
CAD FILE NAME:  
DESIGNED BY: JDV  
DRAWN BY: AJR  
EDITED BY: AJR  
CHECKED BY: JDV

SCALE: AS NOTED PLOT SCALE: 1 : 1

SHEET TITLE

AIR STATION BORINQUEN  
AGUADILLA PUERTO RICO  
**ALTERNATIVE A  
HOUSING AREA  
ELEMENTS 1&3**

REVIEWED BY: REVIEWED BY: REVIEWED BY:

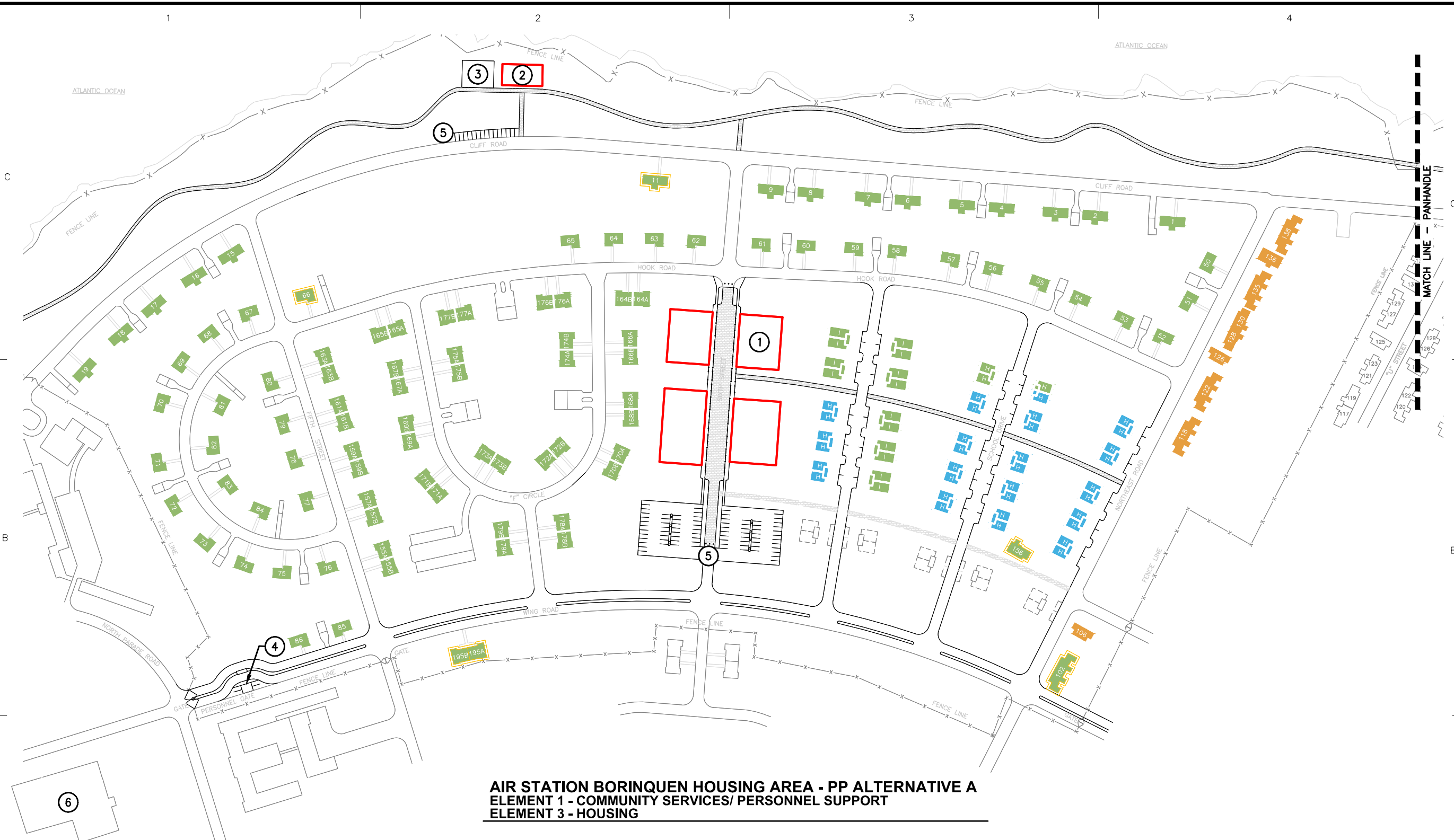
PROJECT ENG. BRANCH CHIEF TECH. DIRECTOR

APPROVING OFFICER DATE

PROJECT NUMBER DRAWING NUMBER

07-11062658 A101

DISCIPLINE/SHT NO SHEET X OF XX



**AIR STATION BORINQUEN HOUSING AREA - PP ALTERNATIVE A  
ELEMENT 1 - COMMUNITY SERVICES/ PERSONNEL SUPPORT  
ELEMENT 3 - HOUSING**

**HOUSING UNIT LEGEND**

- |              |  |                            |                                  |
|--------------|--|----------------------------|----------------------------------|
| (E) TYPE "A" | (E) TYPE "F"                               | FUTURE DUPLEX HOUSING UNIT | CG FAMILIES/DOD/DHS/CIV PARTNERS |
| (E) TYPE "B" | (E) TYPE "G"                               | UPH/TRANSIENT/TDY          | MWR                              |
| (E) TYPE "C" | (E) HOUSING UNIT RESERVED FOR PRESERVATION | (N) TYPE "H"               |                                  |
| (E) TYPE "D" | (N) TYPE "I"                               |                            |                                  |
| (E) TYPE "E" |  |                            |                                  |

**KEYNOTES**

- ① (N) COMMUNITY CENTER
- ② (N) COMMUNITY CLUB HOUSE
- ③ (N) COMMUNITY POOL
- ④ (N) GATE HOUSE
- ⑤ (N) PARKING LOT
- ⑥ (E) COAST GUARD EXCHANGE



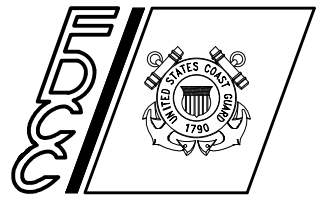
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CONSULTANTS

PREFERRED  
 ALTERNATIVE  
 11/23/2020

U. S. COAST GUARD  
 FACILITIES DESIGN & CONSTRUCTION  
 CENTER



5505 ROBIN HOOD RD, SUITE K  
 NORFOLK, VIRGINIA 23513

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: XXX
CAD FILE NAME:
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DRAWN BY: AJR
EDITED BY: AJR
CHECKED BY: RWS

SCALE: AS NOTED PLOT SCALE: 1 : 1  
 SHEET TITLE

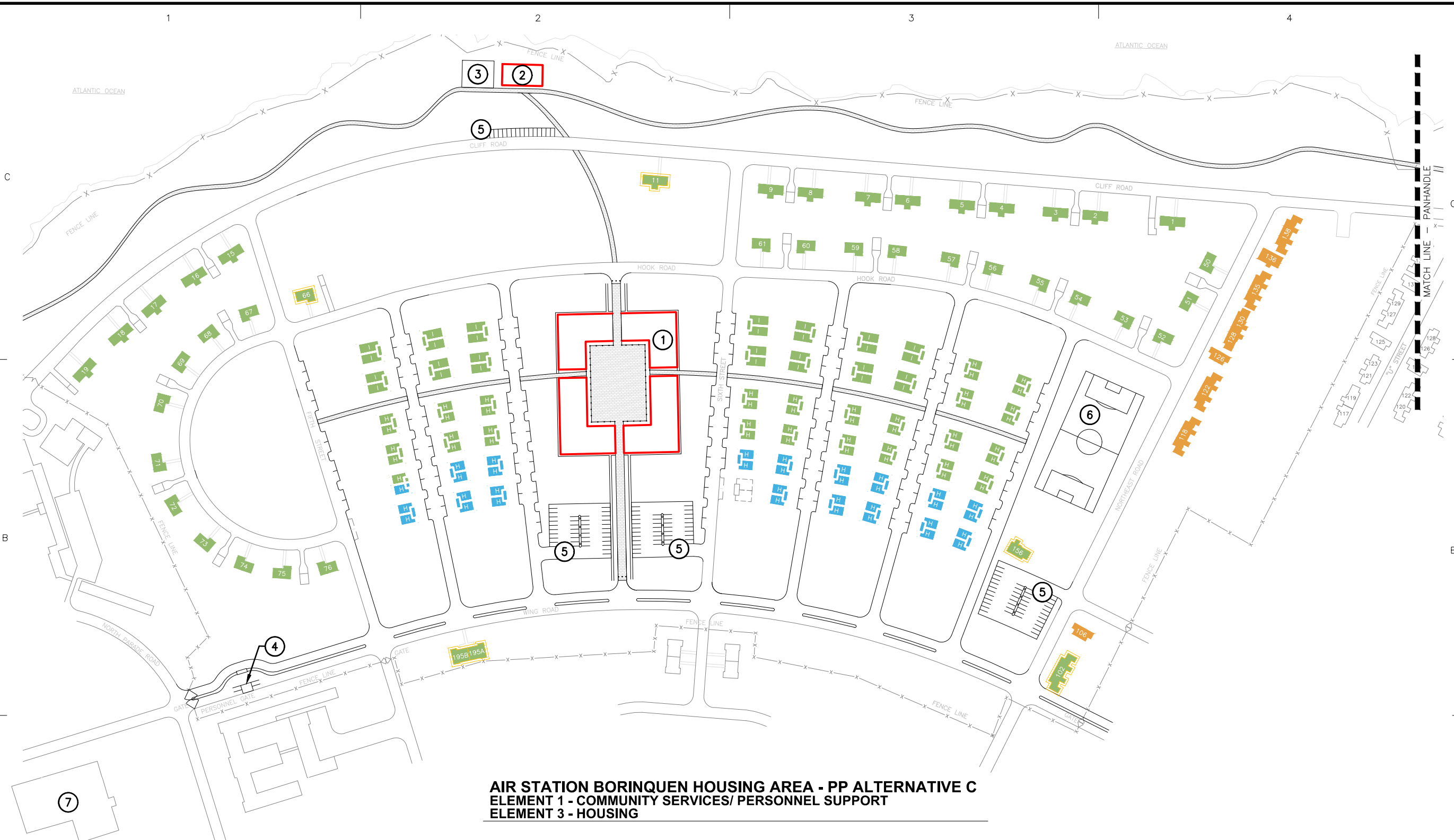
AIR STATION BORINQUEN  
 AGUADILLA PUERTO RICO  
 ALTERNATIVE C  
 HOUSING AREA  
 ELEMENTS 1&3

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

APPROVING OFFICER \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT NUMBER	DRAWING NUMBER
07-11062658	A103

DISCIPLINE/SHT NO X SHEET X OF XX



AIR STATION BORINQUEN HOUSING AREA - PP ALTERNATIVE C  
 ELEMENT 1 - COMMUNITY SERVICES/ PERSONNEL SUPPORT  
 ELEMENT 3 - HOUSING

HOUSING UNIT LEGEND

- (E) TYPE "A"
- (E) TYPE "B"
- (E) TYPE "C"
- (E) TYPE "D"
- (E) TYPE "E"
- (E) TYPE "F"
- (E) TYPE "G"
- (E) HOUSING UNIT RESERVED FOR PRESERVATION
- (N) TYPE "H"
- (N) TYPE "I"

- FUTURE DUPLEX HOUSING UNIT
- CG FAMILIES/DOD/DHS/CIV PARTNERS
- UPH/TRANSIENT/TDY
- MWR

KEYNOTES

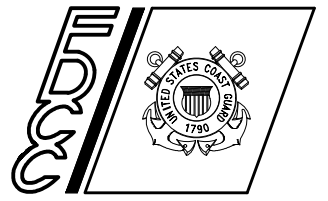
- ① (N) COMMUNITY CENTER
- ② (N) COMMUNITY CLUB HOUSE
- ③ (N) COMMUNITY POOL
- ④ (N) GATE HOUSE
- ⑤ (N) PARKING LOT
- ⑥ (N) RECREATIONAL FIELD
- ⑦ (E) COAST GUARD EXCHANGE



CONSULTANTS

PREFERRED  
ALTERNATIVE  
11/23/2020

U. S. COAST GUARD  
FACILITIES DESIGN & CONSTRUCTION  
CENTER



5505 ROBIN HOOD RD, SUITE K  
NORFOLK, VIRGINIA 23513

MARK	DATE	DESCRIPTION

A/E PROJECT NO: XXX
CAD FILE NAME:
DESIGNED BY: RWS
DRAWN BY: AJR
EDITED BY: AJR
CHECKED BY: RWS

SCALE: AS NOTED PLOT SCALE: 1 : 1

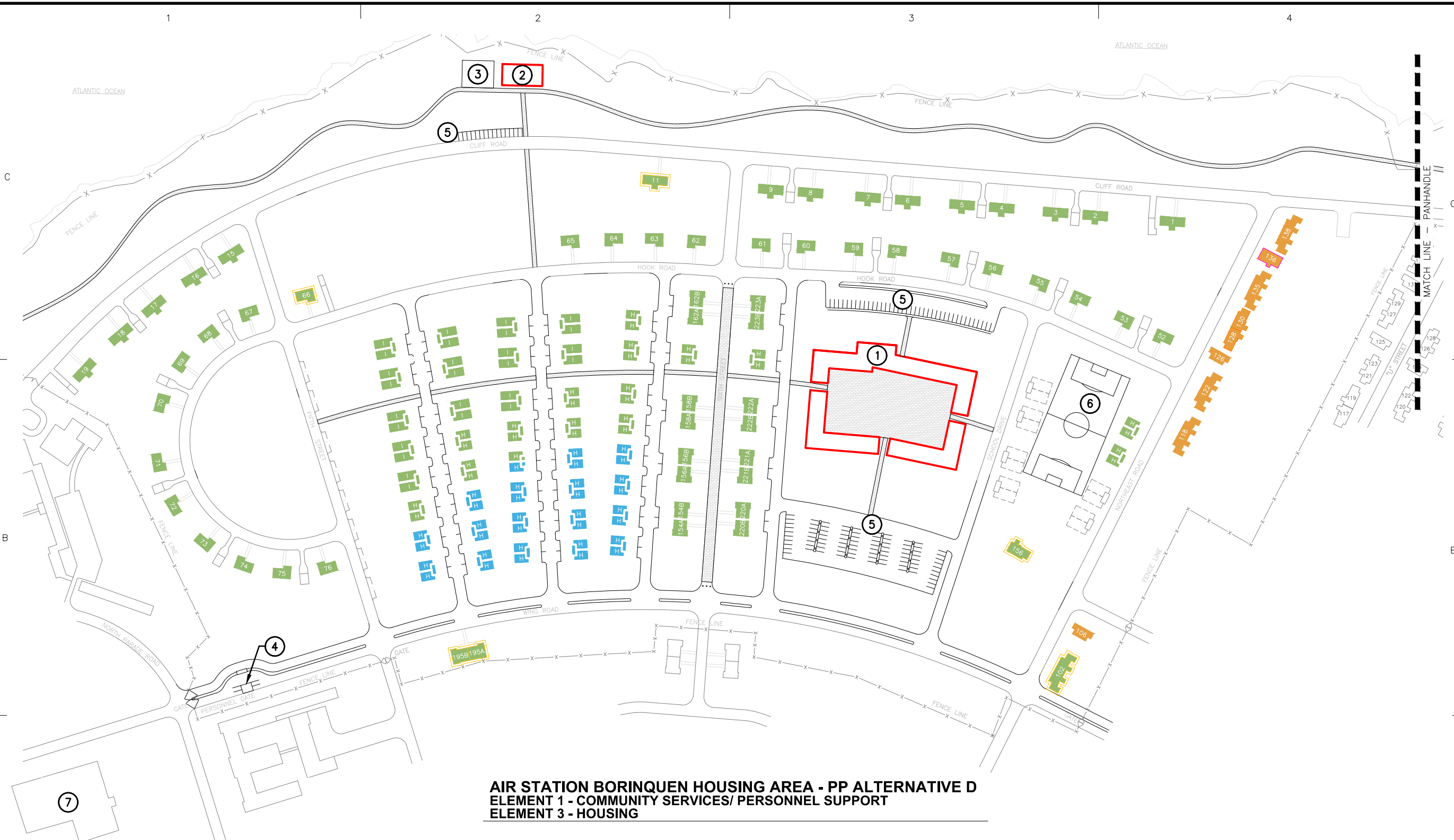
AIR STATION BORINQUEN  
AGUADILLA PUERTO RICO  
ALTERNATIVE D  
HOUSING AREA  
ELEMENTS 1&3

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

APPROVING OFFICER \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT NUMBER	DRAWING NUMBER
07-11062658	A104

DISCIPLINE/SHT NO X SHEET X OF XX



AIR STATION BORINQUEN HOUSING AREA - PP ALTERNATIVE D  
ELEMENT 1 - COMMUNITY SERVICES/ PERSONNEL SUPPORT  
ELEMENT 3 - HOUSING

HOUSING UNIT LEGEND

- (E) TYPE "A"
- (E) TYPE "B"
- (E) TYPE "C"
- (E) TYPE "D"
- (E) TYPE "E"
- (E) TYPE "F"
- (E) TYPE "G"
- (E) HOUSING UNIT RESERVED FOR PRESERVATION
- (N) TYPE "H"
- (N) TYPE "I"

- FUTURE DUPLEX HOUSING UNIT
- CG FAMILIES/DOD/DHS/CIV PARTNERS
- UPH/TRANSIENT/TDY
- MWR

KEYNOTES

- ① (N) COMMUNITY CENTER
- ② (N) COMMUNITY CLUB HOUSE
- ③ (N) COMMUNITY POOL
- ④ (N) GATE HOUSE
- ⑤ (N) PARKING LOT
- ⑥ (N) RECREATIONAL FIELD
- ⑦ (E) COAST GUARD EXCHANGE









**USCG AIR STATION BORINQUEN - BDB**



**USCG AIR STATION BORINQUEN - ASB**

**KEY NOTES:**

- |  |   |
|--|---|
| 1. DEMOLISH EXISTING HOUSING UNITS.                                    | 9. FAMILY HOUSING UNIT (3 BEDROOM DUPLEX).  |
| 2. DEMOLISH ROADWAY PAVEMENT.  | 10. FAMILY HOUSING UNIT (3 BEDROOM DUPLEX). |
| 3. PEDESTRIAN TRAIL.   | 11. POOL AND CLUBHOUSE.                     |
| 4. DEMOLISH LA PLAZA COMMUNITY CENTER.                                 | 12. NEW ROADWAYS.                           |
| 5. NEW CSB AND CSB WALKWAYS.   | 13. GATEHOUSE AND SECURITY ENTRANCE.        |
| 6. CSB PARKING LOT.  | 14. OUTDOOR COMMUNITY AREA.                 |
| 7. 20 UNIT UNACCOMPANIED PERSONNEL HOUSING (UPH) AND ADJACENT PARKING. |   |
| 8. 14 UNIT ADDITIONAL UPH.   |   |



MARK	DESCRIPTION	DATE	SCALE: AS SHOWN
1	35% SITE PLAN	2/8/2021	

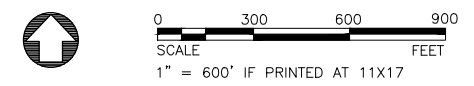
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TRANSYSTEMS  
2000 UNIVERSITY ST., BERKELEY, CA 94704  
510-835-9763  
A/E PROJECT NO.:  
P501180057  
CONSULTING A/E:  
CONSULTING COMPANY NAME  
CONSULTANT'S CITY, STATE

FACILITIES DESIGN & CONSTRUCTION CENTER (FDCC)  
5505 ROBIN HOOD RD., SUITE K  
NORFOLK, VA 23513  
PROJECT ENGINEER:  
LT. JOEL AMENDOLARA / TRANSYSTEMS  
DESIGNED BY:  
EDITED BY:  
DRAWN BY:  
CHECKED BY:

USCG PROJECT NO.  
11062658  
USCG DRAWING NO.  
CG DRAWING NUMBER  
USCG FILENAME  
CG FILENAME  
SHEET 00 OF 00

**H517A BORINQUEN HURRICANE REBUILD  
BASE DETACHMENT AND AIR STATION BORINQUEN  
AGUADILLA PUERTO RICO**  
CIVIL  
**OVERALL SITE PLAN**

SHEET ID  
CIVIL  
ALT G





**Appendix B: BIOLOGICAL RESOURCES INFORMATION**



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Caribbean Ecological Services Field Office  
Post Office Box 491  
Boqueron, PR 00622-0491  
Phone: (787) 851-7297 Fax: (787) 851-7440  
<http://www.fws.gov/caribbean/es>

In Reply Refer To:

January 25, 2021

Consultation Code: 04EC1000-2019-SLI-0726

Event Code: 04EC1000-2021-E-00324

Project Name: USCG Borinquen Hurrigan Execution Plan-Shore

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

**\*THE FOLLOWING SPECIES LIST IS NOT A SECTION 7 CONSULTATION. PLEASE CONTACT OUR OFFICE TO COMPLETE THE CONSULTATION PROCESS\***

The purpose of the Endangered Species Act (Act) is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect those species and/or their designated critical habitat.

Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

The enclosed species list provides information to assist with the consultation process with the U.S. Fish and Wildlife Service (Service) under section 7 of the Act. However, the enclosed species list **does not complete the required consultation process**. The species list identifies threatened, endangered, proposed and candidate species, as well as proposed and designated critical habitats, that may occur within the boundary of your proposed project and/or may be affected by your proposed project.

A discussion between the Federal agency and the Service should include what types of listed species may occur in the proposed action area, and what effect the proposed action may have on those species. This process initiates informal consultation.

When a Federal agency, after discussions with the Service, determines that the proposed action is not likely to adversely affect any listed species, or adversely modify any designated critical habitat, and the Service concurs, the informal consultation is complete and the proposed project

moves ahead. If the proposed action is suspected to affect a listed species or modify designated critical habitat, the Federal agency may then prepare a Biological Assessment (BA) to assist in its determination of the project's effects on species and their habitat.

However, a BA is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a BA where the agency provides the Service with an evaluation on the likely effects of the action to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a BA are described at 50 CFR 402.12.

If a Federal agency determines, based on its BA or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to further consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation process.

More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in

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the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

**For more information:**

**U.S. Fish and Wildlife Service  
Caribbean Ecological Services Field Office**

**Road 301, Km. 5.1 / Bo. Corozo**

**Boquerón, PR 00622**

**Telephone: (787) 851-7297**

**Fax: (787) 851-7440**

**Email: [caribbean\\_es@fws.gov](mailto:caribbean_es@fws.gov)**

**<http://www.fws.gov/caribbean/es>**

**Send all documents to:**

**U.S. Fish and Wildlife Service**

**P.O. Box 491**

**Boquerón, Puerto Rico 00622**

**Attachment(s):**

- Official Species List
  - USFWS National Wildlife Refuges and Fish Hatcheries
  - Migratory Birds
  - Wetlands
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Caribbean Ecological Services Field Office**

Post Office Box 491

Boqueron, PR 00622-0491

(787) 851-7297

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## Project Summary

Consultation Code: 04EC1000-2019-SLI-0726

Event Code: 04EC1000-2021-E-00324

Project Name: USCG Borinquen Hurrigan Execution Plan-Shore

Project Type: \*\* OTHER \*\*

Project Description: Project activities include repair/replacement of facilities in Air Station Borinquen. facilities. The work would include but is not limited to: repair exterior, interior, utilities and fixtures for multiple buildings; recapitalization; repair/replace fencing, grounds, site utilities, pavement, and exterior lighting; replacement and/or improvement of the existing electrical and potable water distribution systems. All new construction, major renovations, and critical utilities including electrical and water distribution systems shall include increased resiliency in the site's ability to remain operational during an event, or unscheduled outage, and the ability to return to full operation, independent of the local utility for extended periods of time, or until the outage is over. Sustainable and standard sources of energy/water/sanitary are being considered and reviewed for vulnerabilities and shall be strengthened where feasible. Redundancy may be applied, where feasible, to minimize vulnerabilities and increase resiliency. Clean and renewable energy/water/ sanitary systems are considered where appropriate and technically feasible.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.50490376562379,-67.13508761860137,14z>



Counties: Aguadilla County, Puerto Rico

## Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Reptiles

NAME	STATUS
Puerto Rican Boa <i>Epicrates inornatus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a> General project design guidelines: <a href="https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6757.pdf">https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6757.pdf</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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# USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

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1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

### Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

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### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

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[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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## Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

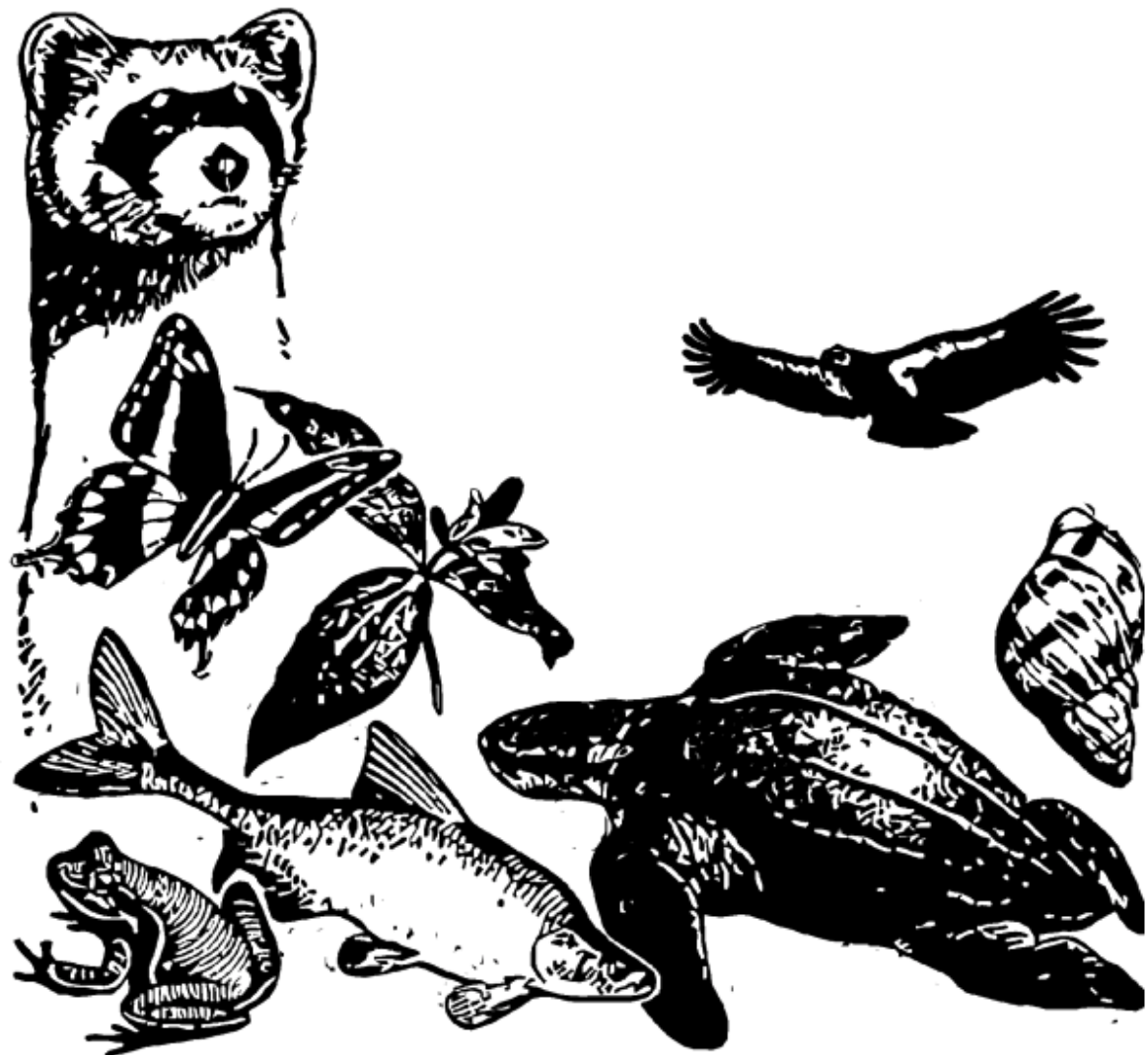
Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

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# General Project Design Guidelines (1 Species)

Generated January 25, 2021 06:10 PM MST, IPaC v5.55.3



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# Species Document Availability

## Species with general design guidelines

Puerto Rican Boa *Epicrates inornatus*



## U.S. FISH AND WILDLIFE SERVICE CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE

### Conservation Measures for the Puerto Rican boa (*Chilabothrus inornatus*)

Section 7 (a)(1) of the Endangered Species Act (ESA) charges Federal agencies to aid in the conservation of listed species, and section 7 (a)(2) requires the agencies, through consultation with the U.S. Fish and Wildlife Service (Service), to ensure their activities are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. Section 7 applies to the management of Federal lands as well as Federal actions that may affect listed species, such as Federal approval of private activities through the issuance of Federal funding, permits, licenses, or other actions. Any person that injures, captures, or kills a Puerto Rico boa is subject to penalties under the ESA. If Federal funds or permits are needed, the funding or permitting agency should initiate Section 7 consultation with the Service. To initiate a consultation under the Section 7 of the ESA, you must submit a project package with the established minimum requirements. These conservation measures should be incorporated into the project plans to minimize possible impacts to the species.

The endangered Puerto Rican (PR) boa (*Chilabothrus inornatus*, formerly *Epicrates inornatus*) is the largest endemic snake species that inhabits Puerto Rico. The PR boa is non-venomous and does not pose any life threatening danger to humans, but some individuals may try to bite if disturbed or during capture or handling. Its body color ranges from tan to dark brown with irregular diffuse marking on the dorsum, but some individuals lack marking and are uniformly dark. Juveniles may have a reddish color with more pronounced markings. In general, as they mature, their body color tends to darken.



The Puerto Rican boa was federally listed in 1970. Currently, the species has an island-wide distribution and occurs in a wide variety of habitat types ranging from wet montane to subtropical dry forest, and can be found from mature forest to areas with different degrees of human disturbance like roadsides or houses, especially if near their habitat in rural areas. This boa is considered mostly nocturnal, remaining less active, concealed or basking under the sun during the day.

The Service has developed the following conservation measures with the purpose of assisting others to avoid or minimize adverse effects to the PR boa and its habitat. These recommendations may be incorporated into new project plans and under certain circumstances into existing projects. Depending on the project, additional conservation measures can be implemented besides the ones presented in this document.

#### Conservation Measures:

1. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site.
2. Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas.
3. Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or personnel with experience on this species should survey the areas to be cleared to verify the presence of any PR boa within the work area.
4. The PR boa is considered more active at night. Thus, in order to maximize its detection, the species should be searched at nights prior to habitat disturbance.
5. Once the area has been searched for PR boas, vegetation should first be cleared by hand to the maximum extent possible. Vegetation should be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow boas present on site to move away on their own to adjacent available habitat. Any stone walls or naturally occurring rock piles must be carefully dismantled by hand as these are refuges for the snake. This will allow any boas present to vacate the site without injury.
6. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior.

7. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #6). **Do not capture the boa.** If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue.
8. If a PR boa is captured by the PRDNER, record the name of the PRDNER staff and information on where the PR boa will be taken. This information should be reported to the Service.
9. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #7). If not possible, the animal should be left alone until it leaves the vehicle on its own.
10. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.
11. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #6). If the PR boa was accidentally? killed as part of the project actions, please include information on what conservation measures had been implemented and what actions that will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.
12. Projects must comply with all state laws and regulations. Please contact the PRDNER for further guidance.

If you have any questions regarding the above conservation measures, please contact the Service:

- Marelisa Rivera, Deputy Field Supervisor
  - Email: [marelisa\\_rivera@fws.gov](mailto:marelisa_rivera@fws.gov)
  - Office phone 787-851-7297 ext. 206 or mobile 787-510-5219
- José Cruz-Burgos, Endangered Species Coordinator
  - Email: [jose\\_cruz-burgos@fws.gov](mailto:jose_cruz-burgos@fws.gov)
  - Office phone 787-851-7297 ext. 218 or mobile 787-510-5206

# Project Design Features

## Biological Resources

During project design and construction, the USCG would ensure that the measures outlined below are implemented to reduce impacts.

### Puerto Rican Boa

To minimize potential impacts to the PRB, the following project design features would be implemented:

- **BIO-1: Puerto Rican Boa Avoidance Measures.** Adhere to the U.S. Fish and Wildlife Service Caribbean Ecological Services Field Office Conservation Measures for the Puerto Rican boa (*Chilabothrus inornatus*), as updated to November 3, 2020:

Inform all project personnel about the potential presence of the PRB in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PRBs. An educational poster or sign with photo or illustration of the species should be displayed at the project site.

- Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas.
- Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or personnel with experience on this species should survey the areas to be cleared to verify the presence of any PRB within the work area.
- The PRB is considered more active at night. Thus, in order to maximize its detection, the species should be searched at nights prior to habitat disturbance.
- Once the area has been searched for PRBs, vegetation should first be cleared by hand to the maximum extent possible. Vegetation should be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow boas present on site to move away on their own to adjacent available habitat. Any stonewalls or naturally occurring rock piles must be carefully dismantled by hand, as these are refuges for the snake. This will allow any boas present to vacate the site without injury.
- For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PRB data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior.
- If a PRB is found within any of the working or construction areas, activities should stop at that area and information recorded (see #6). Do not capture the

boa. If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue.

- If a PRB is captured by the PRDNER, record the name of the PRDNER staff and information on where the PRB will be taken. This information should be reported to the Service.
- Measures should be taken to avoid and minimize PRB casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PRB habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PRBs are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal. If not possible, the animal should be left alone until it leaves the vehicle on its own.
- PRBs may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.
- If a dead PRB is found, immediately cease all work in that area and record the information accordingly (see #6). If the PRB was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions that will be taken to avoid further killings. A dead boa report should be sent by email ([marelisa\\_rivera@fws.gov](mailto:marelisa_rivera@fws.gov) or [jose\\_cruz-burgos@fws.gov](mailto:jose_cruz-burgos@fws.gov)) to the Service within 48 hours of the event.

## **Migratory Birds**

To reduce potential impacts to migratory birds, Project Design Feature BIO-2 would be implemented:

- **BIO-2: Migratory Bird Avoidance.** Implement the following measures, as outlined in the Nationwide Standard Conservation Measures for migratory birds:
  - General Measures:
    - Educate all employees, contractors, and/or site visitors of relevant rules and regulations that protect wildlife.
    - Prior to removal of an inactive nest, ensure that the nest is not protected

under the Endangered Species Act (ESA) or the Bald and Golden Eagle Protection Act (BGEPA). Nests protected under ESA or BGEPA cannot be removed without a valid permit.

- Do not collect birds (live or dead) or their parts (e.g., feathers) or nests without a valid permit.
  - Provide enclosed solid waste receptacles at all project areas. Non-hazardous solid waste (trash) would be collected and deposited in the on-site receptacles. Solid waste would be collected and disposed of by a local waste disposal contractor
  - Report any incidental take of a migratory bird, to the local USFWS field office.
- Habitat Protection:
    - .Minimize project creep by clearly delineating and maintaining project boundaries (including staging areas).
    - Maximize use of disturbed land for all project activities (i.e., siting, lay-down areas, and construction).
    - Implement standard soil erosion and dust control measures.
  - Stressor Management
    - Breeding birds may be present any time of year in Puerto Rico. Conduct surveys prior to scheduled activity to determine if active nests are present within the area of impact and buffer any nesting locations found during surveys.
      - Generally, the surveys should be conducted no more than five days prior to scheduled activity.
      - Timing and dimensions of the area to be surveyed vary and will depend on the nature of the project, location, and expected level of vegetation disturbance.
      - If active nests or breeding behavior (e.g., courtship, nest building, territorial defense, etc.) are detected during these surveys, no vegetation removal activities should be conducted until nestlings have fledged or the nest fails or breeding behaviors are no longer observed. If the activity must occur, establish a buffer zone around the nest and no activities will occur within that zone until nestlings have fledged and left the nest area. The dimension of the buffer zone will depend on the proposed activity, habitat type, and species present and should be coordinated with the local or regional Service office.
      - When establishing a buffer zone, construct a barrier (e.g., plastic fencing) to protect the area. If the fence is knocked down or destroyed, work will suspend wholly, or in part, until the fence is

satisfactorily repaired.

- When establishing a buffer zone, a qualified biologist will be present onsite to serve as a biological monitor during vegetation clearing and grading activities to ensure no take of migratory birds occurs. Prior to vegetation clearing, the monitor will ensure that the limits of construction have been properly staked and are readily identifiable. Any associated project activities that are inconsistent with the applicable conservation measures, and activities that may result in the take of migratory birds will be immediately halted and reported to the appropriate Service office within 24 hours.
  - If establishing a buffer zone is not feasible, contact the Service for guidance to minimize impacts to migratory birds associated with the proposed project or removal of an active nest. Active nests may only be removed if you receive a permit from your local Migratory Bird Permit Office. A permit may authorize active nest removal by a qualified biologist with bird handling experience or by a permitted bird rehabilitator.
- Prepare a vegetation maintenance plan that outlines vegetation maintenance activities and schedules so that direct bird impacts do not occur.
  - Prepare a weed abatement plan that outlines the areas where weed abatement is required and the schedule and method of activities to ensure bird impacts are avoided.
  - For temporary and permanent habitat restoration/enhancement, use only native and local (when possible) seed and plant stock. To the maximum extent practicable, limit construction activities to the time between dawn and dusk to avoid the illumination of adjacent habitat areas.
  - If construction activity time restrictions are not possible, use down shielding or directional lighting to avoid light trespass into bird habitat (i.e., use a 'Cobra' style light rather than an omnidirectional light system to direct light down to the roadbed). To the maximum extent practicable, while allowing for public safety, low intensity energy saving lighting (e.g. low-pressure sodium lamps) will be used.
  - Minimize illumination of lighting on associated construction or operation structures by using motion sensors or heat sensors.
  - Bright white light, such as metal halide, halogen, fluorescent, mercury vapor and incandescent lamps should not be used.
  - Minimize collision risk with project infrastructure (e.g., temporary and permanent) by increasing visibility through appropriate marking and design features (e.g., lighting, wire marking, etc.).
  - Use the appropriate deterrents to prevent birds from nesting on

structures where they cause conflicts, may endanger themselves, or create a human health and safety hazard.

- During the time that the birds are trying to build or occupy their nests, potential nesting surfaces should be monitored at least once every three days for any nesting activity, especially where bird use of structures is likely to cause take. It is permissible to remove non-active nests (without birds or eggs), partially completed nests, or new nests as they are built (prior to occupation). If birds have started to build any nests, the nests shall be removed before they are completed. Water shall not be used to remove the nests if nests are located within 50 feet of any surface waters.
  - If an active nest becomes established (i.e., there are eggs or young in the nest), all work that could result in abandonment or destruction of the nest shall be avoided until the young have fledged or the nest is unoccupied. Construction activities that may displace birds after they have laid their eggs and before the young have fledged should not be permitted. If the project continues into the following spring, this cycle shall be repeated. When work on the structure is complete, all netting shall be removed and be properly disposed.
- Minimize an increase in noise above ambient levels during project construction by installing temporary structural barriers such as sand bags.
  - Avoid chemical contamination of the project area by implementing a Hazardous Materials Plan.
  - Avoid soil contamination by using drip pans underneath equipment and containment zones at construction sites and when refueling vehicles or equipment.
  - Avoid contaminating natural aquatic and wetland systems with runoff by limiting all equipment maintenance, staging laydown, and dispensing of fuel, oil, etc., to designated upland areas.
  - Any use of pesticides or rodenticides shall comply with the applicable Federal and State laws.
    - Choose non-chemical alternatives when appropriate.
    - Pesticides shall be used only in accordance with their registered uses and in accordance with the manufacturer's instructions to limit access to non-target species.



**Appendix C: CULTURAL RESOURCES REGIONAL HISTORIC  
CONTEXT**

# 1 **USCG Base Detachment Borinquen and Air Station Borinquen**

## 2 **Regional Historic Context**

3 Puerto Rico was called Borinquen by its indigenous inhabitants, the Arawak Indians. When  
4 Christopher Columbus landed on the island's northwest coast in 1493 near the present city of  
5 Aguadilla, he claimed it for Spain and renamed it San Juan Bautista, to honor the heir to the Spanish  
6 throne. In 1508, Juan Ponce de Leon located a large well-protected harbor on the island's north shore  
7 that later became the site of San Juan, and he renamed the island Puerto Rico (rich port).  
8 Colonization resulted in significant growth and prosperity on the island, which encouraged raids  
9 not only by pirates/corsairs but also by English, French and Dutch fleets through the four centuries  
10 of Spanish rule.

11 Although San Juan was the center of Puerto Rican settlement, outlying areas of the island eventually  
12 experienced development as well. Thus, Aguadilla, the principal settlement in the northwest region,  
13 was founded in 1780. The importance and influence of the city was enhanced by the immigration of  
14 Spanish radicals from Santo Domingo soon after that island nation had gained its independence.  
15 The harbor at Aguadilla was frequented by ships that traveled to the Gulf of Mexico and the Upper  
16 Antilles. The local economy at that time was based on sugar cane, small fruits, livestock, tobacco and  
17 fishing.

18 During the second half of the nineteenth century, tensions between Spain and her colonies frayed.  
19 Cuba was Spain's chief possession in the Caribbean. The declining price of sugar and tobacco in the  
20 1890s brought widespread discontent, and the demand for Cuban independence intensified. While  
21 the U.S. government endeavored to maintain a policy of strict neutrality, there was growing public  
22 sympathy for the Cuban revolutionaries. The sinking of the American battleship Maine in February  
23 of 1898 finally precipitated a declaration of war against Spain. The Aguadilla region participated  
24 weakly in the Caribbean independence movement, but due to Puerto Rico's profitable commercial  
25 relationships, ties to Spain remained strong. Spain rewarded the island's loyalty with such privileges  
26 as land grants, loose controls on immigration, and liberal trading terms. Regardless, the Spanish-  
27 American War was ended in August of that year, and as a condition of peace the island of Puerto  
28 Rico (as well as Guam and the Philippines) was ceded to the U.S. American military and civilian  
29 administration of the island followed, with mixed success.

30 Under the Foraker Act (1900), Puerto Rico occupied a position midway between that of a colony and  
31 a territory, with a governor and council appointed by the President of the U.S. The island's residents  
32 were treated as secondary U.S. citizens until 1917, when the Jones Act granted American citizenship  
33 to all Puerto Ricans who did not officially decline it. However, those who rejected this construct  
34 were not eligible to vote or be elected to public office, and no Puerto Rican born after 1917 had the  
35 option of rejecting U.S. citizenship.

36 Through the early twentieth century, Puerto Rican self-government resulted in widespread  
37 government programs for health and sanitation, improved public facilities, and education. The U.S.  
38 invested heavily in civil projects such as harbor improvements, road construction, and drainage and  
39 irrigation systems. After the Great Depression, agrarian reform, progressive income taxes, and  
40 various infrastructure authorities improved life on the island, and in 1947 the voters of Puerto Rico

1 received the right to elect their own Governor and Congress by universal suffrage.

2 Puerto Rico played a significant role during World War II in the defense of the Panama Canal and  
3 the Caribbean in general. U.S. military expenditures to construct, expand, and staff defense  
4 installations provided a large stimulus to the island economy, but in the decade following the war  
5 the local economy stagnated. Largely dependent on the U.S. market for sugar exports, the island  
6 was unable to produce sufficient food and commodities for its rapidly growing population, and  
7 nearly a quarter-million Puerto Ricans migrated to the U.S. mainland. During the 1950s the Puerto  
8 Rican government adopted an aggressive industrialization and manufacturing program to increase  
9 agricultural output and stimulate new industries. Finally, in 1952, after years of negotiations at the  
10 United Nations, Puerto Rico became a self-governing commonwealth organized around a  
11 constitutional government. Since that time, the island has continued to play a major military role in  
12 U.S. defense through the Cold War and in countering regional problems such as illegal immigration  
13 and drug trafficking.

#### 14 **Borinquen Army Air Field Historic Context**

15 In 1936, the U.S. Army Air Corps initiated studies revealing the need for a Puerto Rican airfield to  
16 assist in air defense for the Panama Canal and the eastern part of the Caribbean. The report issued in  
17 1938 summarized the limitations of existing defense and outlined a plan for the War Department  
18 suggesting that an air base and auxiliary landing fields be constructed in Puerto Rico. After  
19 examining forty-two potential sites across the island, Punta Borinquen was determined in 1939 to be  
20 the best site for a major air base.

21 The War Department authorized the acquisition of Borinquen Point in July 1939 at an estimated cost  
22 of \$15,000,000. The base was to cover 1,500 acres and be staffed by 2,700 enlisted men and 350  
23 officers and aviators. The people of the Aguadilla region were initially positive at the prospect,  
24 assuming the American base would be constructed on lands of inferior agricultural quality. Instead,  
25 the U.S. acquired the municipios of Aguacate, Borinquen, Upper Maleza, and Lower Maleza, the  
26 latter two comprising Aguadilla's most prosperous and productive agricultural districts. To  
27 complicate matters, many of the affected landowner families had cultivated the land for multiple  
28 generations, and had previously declined offers for their land from large sugar interests.

29 Acquiring the funds from the U.S. government to establish an airfield in Puerto Rico was an uphill  
30 battle. Not until World War II began in 1939 did the appropriation of \$30,000,000 to build air and  
31 naval bases in Puerto Rico become a priority. Under Congressional authorization, private architects  
32 and engineers were employed for a number of massive projects on the island, including the design  
33 and construction of Borinquen Army Air Field.

34 In September 1939, under judicial order, the U.S. seized 1,877 plots of land belonging to 400  
35 landowners, and was immediately granted title after providing an indemnity of \$199,999. This  
36 action marked the first time that the Federal government had ever seized private lands for national  
37 defense. Residents were given twenty days from the signing of the decree to move their homes and  
38 many were forcibly evicted. Led by Puerto Rican infantry, men and equipment arrived at Borinquen  
39 two hours after the decree deadline expired to start construction, and hundreds of unskilled laborers  
40 began clearing a provisional landing site. Tents and temporary wood-frame structures were erected  
41 as dormitories and mess halls for the soldiers as permanent construction moved ahead.

1 War Department plans proposed a virtual city at Borinquen's Army Air Field, an installation with its  
2 own aqueduct, a complete system of roads, pedestrian paths and railroad grades, a sewage system,  
3 schools, homes, an athletic field, fire stations, and a chapel for military personnel and their families.  
4 Initial construction focused on completing the administrative buildings, housing and a hospital,  
5 followed by a system of landing strips and aprons, hangars, workshops, and warehouses.  
6 Approximately 4,000 civilians were employed in the construction of the permanent landing fields. In  
7 November 1939, the officers and 160 men of the 27th Reconnaissance Squadron, Long Range, arrived  
8 at Borinquen from Langley Field, Virginia, with several tons of equipment. They were the first  
9 ground echelon Air Corps unit stationed at the facility, in support of the squadron's air echelon,  
10 consisting of nine B-18A aircraft, 18 officers, and 28 enlisted men.

11 By some accounts, the U.S. wartime mobilization of Puerto Rico produced an economic boom:  
12 military building projects on the island received \$200,000,000 during the war, while another  
13 \$100,000,000 was distributed through salaries to service personnel. Thousands of Puerto Ricans  
14 enlisted in the U.S. Armed Forces, which relieved the unemployment crisis there and brought  
15 additional capital into the economy. Construction had progressed rapidly by December 1940, with  
16 aircraft hangars, runways, barracks, a base hospital, officer, NCO and enlisted men's quarters, an  
17 instrument repair building, a photo laboratory, morgue, and administrative buildings all nearing  
18 completion. At this time, base construction was shifted from the Borinquen Field Quartermaster as  
19 part of the national transfer of all military construction and maintenance work from the U.S. Army  
20 Quartermaster Corps to the Corps of Engineers. Works Progress Administration (WPA) crews were  
21 also brought in to assist the U.S. Army in building the Air Field and related roads and  
22 infrastructure.

23 In 1942, other military units began arriving at Borinquen, as the installation's structural assemblage  
24 was completed and it assumed an active role in hemisphere defense. Functional air unit  
25 classifications for this period included: Air Depot, Service Squadron, Bombardment Squadron,  
26 Reconnaissance Squadron, and Ferrying Squadron.

27 By 1943, Borinquen Field had become a very active military transport node, processing 5,291 tactical  
28 aircraft and 4,836 cargo/passenger aircraft, carrying 51,274 officers, 34,891 enlisted men, and 6,325  
29 civilians, while the ground echelon repaired or serviced 1,982 aircraft during the year, with the air  
30 depot employing 6,247 officers, enlisted men and civilians. In addition to aircraft operation and  
31 servicing, Borinquen was a training center for coast artillery firing. Other base activities during this  
32 period were the operation of a "liner diner" offering 24-hour lunch service on the flight line;  
33 development of a "quarantine trailer" system that met incoming aircraft with a mobile medical  
34 examination trailer that allowed doctors to examine passengers for communicable diseases;  
35 implementation of an extensive base bus system; cultivation of open acreage to raise fresh  
36 vegetables; and the erection of a monument at the Borinquen Field cemetery to honor war dead.  
37 Notable construction projects at that time included a 150-bed hospital and the opening of an athletic  
38 and recreational building with indoor basketball, tennis, and badminton courts, a boxing ring, and a  
39 theater. In March 1943, the Antilles Air Task Force (later renamed the Antilles Air Command)  
40 assumed jurisdiction over the base.

41 Transient aircraft and passenger traffic through Borinquen Field remained heavy during 1944,  
42 totaling 7,125 tactical and 3,342 cargo/passenger aircraft, carrying 42,867 officers, 47,228 enlisted  
43 men, and 14,341 civilians to or from combat theaters. To service this traffic and increased support  
44 units, construction began on several large warehouses along both sides of the east-west runway.

1 Although the first B-29 aircraft landed at Borinquen in February 1944, the base became primarily a  
2 servicing facility for transient aircraft operating between the U.S. and theaters in Europe, the  
3 Mediterranean, and the Middle East.

4 The significance of the Air Base in terms of national defense is revealed by the establishment of the  
5 Second Air Force Command Post #1 at the installation in December 1944. This command post  
6 supervised an extensive training program for B-17 and B-29 aircraft in the Caribbean area before  
7 deployment to the Far East. Although transient air traffic through Borinquen Field remained high  
8 through 1945, with the end of the War in Europe and the Pacific, fewer combat and cargo aircraft  
9 were destined for war theaters. Still, the number of B-29s at the installation increased from 7 to 39 in  
10 early 1945, and the Second Air Force deployed twelve P-63 fighters to provide interceptor training  
11 for bomber crews, involving approximately 2,000 personnel.

12 In 1945, Borinquen Field supported the Green Project, which was the massive airlift of combat  
13 troops from the U.S. to Europe, and the White Project, which was the return of combat aircraft from  
14 Europe to the U.S. During June 1945, the Green Project moved 655 aircraft and 6,600 passengers and  
15 the White Project moved 304 aircraft and 6,656 passengers through Borinquen Field. Numbers  
16 peaked in July, with 1,302 aircraft and 15,954 passengers for the Green Project and 995 aircraft and  
17 6,243 passengers for the White Project. After this surge in activity and personnel, base strength that  
18 had been artificially inflated to support those projects dropped, and demobilization took a heavy toll  
19 on base personnel, declining from 1,120 officers and 3,928 enlisted men in July of 1945, to 180  
20 officers and 778 enlisted men by December of the same year.

21 Despite the reduction in mission, activity, and personnel, a number of new construction projects  
22 were undertaken at Borinquen Field in 1945, including swimming pools for the Officer and NCO  
23 clubs, a dry cleaning plant, finance building, base restaurant, bowling alleys, beer garden, sewer  
24 lines, a 500,000-gallon water storage tank (for fire suppression), and extended runways. Camouflage  
25 markings were removed and base buildings were repainted. The Antilles Air Command  
26 Headquarters returned to Borinquen Field, and the installation's active post-war mission was  
27 realized through the 4th Tactical Reconnaissance Squadron, which operated four B-29 aircraft and  
28 performed radar scope photography of all islands between Miami, Florida and Trinidad.

29 In a post-war reorganization that inactivated many of the wartime military units, the Antilles  
30 Department relinquished control of Borinquen Field to the Caribbean Air Command on July 31,  
31 1946, while the 4th Tactical Reconnaissance Squadron left the base. Base Headquarters vacated the  
32 elementary school building it had occupied through the duration of the war and moved into  
33 Barracks #12, the school building reverting to its original intended use.

34 In October 1946, Borinquen Field was re-designated Borinquen Army Airfield (however, the base's  
35 name was officially changed back to Borinquen Field on December 15, 1947 after the Air Force had  
36 separated from the Army, and the "Army" portion of the base name no longer applied). The  
37 following month Borinquen was designated as the airport of entry for all aircraft of the 24th  
38 Composite Wing, which controlled, in addition to this base, Atkinson, Beane, Coolidge, Vernam,  
39 and Waller Fields in the Antilles region. The assignment of the 330th Station Hospital from Antilles  
40 Department to Caribbean Air Command in January 1947 completed the transition from U.S. Army  
41 to Army Air Forces jurisdiction of all organizations at Borinquen.

1 Borinquen Field was re-designated as Ramey AFB in January 1948 in honor of Brigadier General  
2 Howard K. Ramey, who was killed while commanding a reconnaissance mission for the V Bomber  
3 Command in the Southwest Pacific during World War II. During this period, the base continued to  
4 evolve and several new buildings were completed, while actions were also taken to dispose of the  
5 temporary wood-framed buildings that were used during early base activation. Between August  
6 and December 1949, other outlying airfields reporting to Ramey AFB, such as Atkinson, Beane, and  
7 Coolidge, were inactivated.

8 At the same time, tensions were increasing between Eastern Communist powers and the Western  
9 democracies. On May 16, 1950, less than a month before the invasion of South Korea by North  
10 Korean troops (supplied with Russian equipment and led by Russian trained officers), Ramey AFB  
11 was transferred from Caribbean Air Command to the SAC, and came under the jurisdiction of  
12 Second Air Force. All base organizations were included in the transfer and, as military hostilities  
13 spread worldwide, the character of the installation changed from a support facility for transient  
14 aircraft to that of strategic reconnaissance. Activities of the base included charting photography,  
15 electronic geodetic mapping and surveying, and related reconnaissance functions for the SAC. For  
16 the duration of the Korean War, Ramey AFB was a SAC base with a radar approach control covering  
17 forty miles of airspace up to 20,000 feet, one of the largest in the Air Force. SAC's mission was to be a  
18 global command "standing ready to launch nuclear attacks which could destroy an enemy to the  
19 extent that they would not have the will or ability to wage war" (MWH Americas Inc., 2004).

20 At this time, plans were drafted for the Long Range Proving Ground guided missile range, while  
21 simultaneously, new construction at the base included improvements and resurfacing of runways,  
22 taxiways, and aprons, and other improvements to maintain and operate the SAC wing's large WB-50  
23 and KB-29 aircraft. To meet its evolving mission and related personnel needs, Ramey initiated other  
24 improvements, including a \$6,000,000 contract for the construction of 575 Wherry housing units  
25 awarded in October 1951 (and completed in 1954). In January 1952, work began on a new two-story  
26 nurses' quarters and a new \$598,000 base school. Currently known as La Plaza, the Ramey AFB  
27 Elementary School (Building 850) is described in Section 4.19. During 1953, airman dormitories, a  
28 new mess hall, and administrative buildings were constructed at a total cost of \$1,943,226. Ground  
29 was broken for the new base chapel and the new NCO Club (Building 821) in March 1955. In June,  
30 the base was approved for 425 additional Wherry housing units, which included 252 units for  
31 airmen and 168 units for officers, through authorization by the Federal Housing Authority.

32 SAC began operating B-52 aircraft at Ramey in late 1959, and in 1960 extended the runway to two  
33 miles, making it the longest in the Caribbean. Additional support facilities were constructed at the  
34 same time for its B-52 Bomber Wing. The construction was timely, and enhanced the support  
35 capabilities offered at Ramey during the Cuban Missile Crisis in 1961; the installation was on high  
36 alert and provided logistical support throughout the confrontation. In 1962, a \$2,904,564 project  
37 rehabilitated all 995 Wherry housing units at the base, and a new elementary school was constructed  
38 at a cost of \$806,800.

39 In 1965 Ramey AFB units supported extensive U.S. Army and U.S. Air Force tactical forces that were  
40 deployed to Puerto Rico during a political crisis in the Dominican Republic. Unrest in that country  
41 had resulted in a bloodless coup against the elected government of Julian Bosch in 1962, and in the  
42 spring of 1965 young military officers precipitated a civil war in order to restore constitutional  
43 government. Reports of Communist influences there caused the U.S. to dispatch airlift assault units  
44 through Ramey AFB to San Isidro airfield near Santo Domingo for security purposes.

1 The Air Force began rehabilitating 236 Lanham Act Housing units the following year. Between 1968  
2 and 1970, construction projects on the base included a \$362,600 annex to the base chapel, a new  
3 Junior-Senior high school complex accommodating 1,000 students for \$3,555,000, and infrastructure  
4 upgrades such as a new sewage treatment plant costing \$943,789.

5 In July 1971, SAC operations at Ramey AFB ceased and the Military Airlift Command (MAC)  
6 assumed the position of host unit for the facility. Later that fall, the Coast Guard Air Station Puerto  
7 Rico moved to this location from Isla Grande. In 1973, Ramey was decommissioned as a U.S. Air  
8 Force installation, and 9,000 military personnel vacated the base. The facilities were declared excess  
9 and federal agencies were notified of the available facilities. The U.S. Navy acquired 291 housing  
10 units and administrative buildings at that time, and the Coast Guard took possession of Hangar No.  
11 2 and several administrative buildings for its search and rescue operations. In accordance with  
12 Federal Land Transfer guidelines, the Commonwealth of Puerto Rico was offered the first right of  
13 refusal on the remaining land and facilities in August 1974.

14 The U.S. Navy assumed control of the base in 1973, and for a time the installation was referred to as  
15 Naval Station Roosevelt Roads West Annex. In July 1976 the U.S. Coast Guard assumed primary  
16 jurisdiction and renamed the installation Air Station Borinquen. The primary mission of Coast  
17 Guard Air Station Borinquen is search and rescue. Secondary missions include law enforcement,  
18 aerial support for Aids to Navigation (ATON), and logistic support. The Air Station is under the  
19 operational control of Commander, Sector San Juan, located in San Juan, Puerto Rico. Sector San  
20 Juan's area of responsibility encompasses 1.3 million square miles within the Eastern Caribbean. Air  
21 Station Borinquen has a housing area, clinic and dispensary, station library, community center,  
22 swimming pool, exchange, mini-mart, package store, gymnasium and other fitness facilities, chapel,  
23 and theater.

24 On behalf of the Commonwealth, the Puerto Rico Industrial Development Company temporarily  
25 held nearly 70 percent of the former Ramey property, and in 1979 the Authority for the  
26 Administration and Development of Borinquen Point was created for the sale of 1,442 owner-  
27 occupied homes there. Since that time, surplus property has also become home to the regional  
28 college of the University of Puerto Rico, and numerous other government buildings, sports facilities,  
29 social clubs, schools, shopping centers, and professional offices. The surplus hangars and runway  
30 (under a shared lease agreement with the Coast Guard) are now part of the Rafael Hernandez  
31 Airport, which boasts the longest runway of any aviation facility in the Caribbean and South  
32 America, measuring more than two miles long. The base is currently home to the U.S. Coast Guard,  
33 the Puerto Rican Air National Guard, and U.S. Customs and Immigration (MWH Americas Inc.  
34 2004).



**Appendix D: GENERATORS EMISSION CALCULATIONS**

1

2

Air Emissions from Emergency Generators, diesel fuel  
 USCG Borinquen NEPA Environmental Assessment (EA)  
 Tim Krause  
 TranSystems  
 4/8/2021 Revision

**AP-42 Emission Factors- U.S. Environmental Protection Agency (EPA)**

Pollutant	AP-42 Emission Factor <sup>(1)</sup> (lb/MMBtu)	Fuel Usage <sup>(2)</sup> (gal/hr)	Yearly Hours Usage <sup>(3)</sup> (hrs/yr)	Heating Value of Diesel <sup>(4)</sup> (Btu/lb)	Density of Diesel <sup>(5)</sup> (lb/gal)	conversion factor to tons (1 ton/2000lb)	predicted Emissions (tons/yr)
NO <sub>x</sub>	4.41	300	100	19300	7.1	2000	9.1
CO	0.95	300	100	19300	7.1	2000	2.0
SO <sub>x</sub>	0.29	300	100	19300	7.1	2000	0.6
PM-10	0.31	300	100	19300	7.1	2000	0.6
CO <sub>2</sub>	164	300	100	19300	7.1	2000	337.1

**Notes**

- 1) MMBTU, or MBTU, stands for one million British Thermal Units (BTU). Source of EPA Emission Factors is Table 3.3-1 of AP-42, Fifth Edition, Compilation of Air Emissions Factors, Volume 1 Section 3.3, Gasoline And Diesel Industrial Engines. Available at <https://www.epa.gov/sites/production/files/2020-10/documents/c03s03.pdf>
- 2) Fuel Usage of 300 gal/hr for combined (2) 1500 kW at Housing Area and (2) 750 kW at Air Station. Source is email of 4-8-21 from James Smith, BCE Engineers, Inc.
- 3) Assumes the emergency generators would operate for 100 hours per year
- 4) Heating Value of Diesel used to convert Emission Factor from MMBtu's to gallons. Source = Appendix A of the Background Document, AP-42, Fifth Edition, Compilation of Air Emissions Factors, Volume 1 Section 3.3, Gasoline And Diesel Industrial Engines. Available at <https://www.epa.gov/sites/production/files/2020-10/documents/b03s03.pdf>
- 5) Density of Diesel is used to convert Emission Factor from MMBtu's to gallons. Source = Appendix A of the Background Document, AP-42, Fifth Edition, Compilation of Air Emissions Factors, Volume 1 Section 3.3, Gasoline And Diesel Industrial Engines. Available at <https://www.epa.gov/sites/production/files/2020-10/documents/b03s03.pdf>

Alternative Method to get the same results, based on State of Michigan spreadsheet  
 available at [https://www.michigan.gov/documents/deq/deq-ess-caap-pte-generatorPTE\\_234315\\_7.pdf](https://www.michigan.gov/documents/deq/deq-ess-caap-pte-generatorPTE_234315_7.pdf)  
 The Michigan Department of Environment, Great Lakes, and Energy (EGLE)

Pollutant	Emission Factor <sup>(1)</sup> (lb/1000 gal of fuel)	Fuel Usage <sup>(2)</sup> (gal/hr)	Yearly Hours Usage <sup>(3)</sup> (hrs/yr)	predicted Emissions (tons/yr)
NO <sub>x</sub>	604	300	100	9.1
CO	130	300	100	2.0
SO <sub>x</sub>	39.7	300	100	0.6
PM-10	42.5	300	100	0.6

- 1) Source of Emission Factors is Potential to Emit, Diesel Fired Generator Calculation Worksheet
- 2) Fuel Usage of 300 gal/hr for combined (2) 1500 kW at Housing Area and (2) 750 kW at Air Station. Source is email of 4-8-21 from James Smith, BCE Engineers, Inc.
- 3) Assumes the emergency generators would operate for 100 hours per year



## Appendix E: AGENCY AND PUBLIC COORDINATION

- 1        **Appendix E-1: State Historic Preservation Office**
- 2        **Appendix E-1a: SHPO Correspondence**
- 3        **Appendix E-1b: Memorandum of Agreement**
- 4        **Appendix E-2: Advisory Council on Historic Preservation**
- 5        **Appendix E-3: U.S. Fish and Wildlife Service**
- 6        **Appendix E-4: Office of the Program for the Management of the**
- 7        **Coastal Zone and Climate Change Department of Natural and**
- 8        **Environmental Resources**
- 9        **Appendix E-5: Federal Aviation Administration**
- 10       **Appendix E-6: Municipality of Aguadilla**
- 11       **Appendix E-7: Public Notices**
- 12       **Appendix E-7a: Section 106 Notification**
- 13       **Appendix E-7b: Environmental Assessment Notice of Availability**



**Appendix E-1: State Historic Preservation Office**



**Appendix E-1a: SHPO Correspondence**

U.S. Department of  
Homeland Security

**United States  
Coast Guard**



Commanding Officer  
United States Coast Guard  
Facilities Design and Construction Center

5505 Robin Hood Road  
Suite K  
Norfolk, VA 23513-2431  
Phone: (757) 852-3400  
Fax: (757) 852-3495

11000  
July 1, 2020

Mr. Carlos Rubio Cancela  
Office of the Governor, Commonwealth of Puerto Rico  
State Historic Preservation Officer  
P.O. Box 9023935  
San Juan, Puerto Rico 00902-3935

Greetings Mr. Rubio Cancela:

The United States Coast Guard (USCG) is proposing a reconstitution and resiliency project to repair or replace certain facilities damaged by the 2017 hurricanes at USCG Base Detachment Borinquen and Air Station Borinquen in Aguadilla, Puerto Rico - i.e., the Proposed Undertaking.

The existing facilities and infrastructure covered under the Proposed Undertaking are beyond their service life and no longer effectively serve their intended purpose. Furthermore, the facilities are not adequately fortified for resiliency to support personnel and critical missions in the event of hurricanes or similar large-scale disasters. Base Detachment Borinquen sustained extensive damage as a result of Hurricanes Irma and Maria, which severely affected the USCG's mission readiness and the ability to conduct operations, both before and after those storms. As a result, the USCG is proposing to upgrade and fortify the Base Detachment Borinquen facilities and is initiating consultation with your office for the Proposed Undertaking pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 Code of Federal Regulations (CFR) Part 800, "Protection of Historic Properties" (Section 106).

The USCG is also preparing an Environmental Assessment (EA) to evaluate the potential physical, environmental, cultural, and socioeconomic effects associated with the Proposed Action pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code § 4321 et seq.), the Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and USCG Commandant Instruction 5090.1 (Environmental Planning Policy).

Enclosure (1) provides details regarding the Proposed Undertaking, details regarding the historic character of Base Detachment Borinquen, description of the "Area of Potential Effect" (APE), and the basis for the USCG effect determination. Enclosure (2) contains maps of the vicinity, topography, and APE; graphics that depict the demolition associated with the Proposed Undertaking; and excerpts from past archaeological and architectural historic resource studies conducted at Base Detachment Borinquen.

The USCG seeks concurrence from your office on the delineated APE, plan for consulting party coordination, determination of effects, and the USCG's intent to continue consultation with the expectation to develop and implement a Memorandum of Agreement (MOA) or Programmatic Agreement (PA) to resolve any potential adverse effects.

Your prompt response to the request for concurrence at the earliest possible opportunity will be greatly appreciated. Normally, we would request a 30-day turnaround period for the initial review and response. That said, we fully recognize that the current circumstances and

uncertainty associated with the COVID-19 pandemic may prevent that and delay your response. If so, please let us know what would be a reasonable timeframe so we can plan and proceed accordingly with the many other interconnected elements associated with the Proposed Undertaking.

The USCG is available to meet with you or your staff to discuss the project, virtually or in person. If you would like to schedule a meeting, have any questions, or need more information about the Proposed Undertaking, please feel free to call on me directly or reach out to my point of contact, Ms. Lesley Dobbins-Noble at [lesley.c.dobbinsnoble@uscg.mil](mailto:lesley.c.dobbinsnoble@uscg.mil) or at (757) 852-3410.

Very sincerely,

A handwritten signature in blue ink, appearing to read "J. F. Barresi".

J. F. BARRESI  
Captain  
U. S. Coast Guard

- Enclosures:
- (1) Hurricane Reconstitution Project Execution Plan, USCG Base Detachment Borinquen and USCG Air Station Borinquen
  - (2) Hurricane Reconstitution Project Execution Plan, USCG Base Detachment Borinquen and USCG Air Station Borinquen, Appendices



GOBIERNO DE PUERTO RICO  
Oficina Estatal de Conservación Histórica

Wednesday, September 16, 2020

**CAPT J.F. Barresi, P.E.**

Commanding Officer  
U.S. Coast Guard Facilities Design and Construction Center  
5505 Robin Hood Road, Suite K  
Norfolk, VA 23513

**SHPO 07-06-20-02: USCG HURRICANE RECONSTRUCTION PROJECT  
EXECUTION PLAN, USCG BASE DETACHMENT BORINQUEN AND AIR  
STATION BORINQUEN, AGUADILLA, PUERTO RICO**

Dear Captain Barresi:

We have reviewed the documentation submitted regarding the above referenced project. We concur with your preliminary finding of adverse effect for this undertaking. If you have not done so, you should notify the Advisory Council on Historic Preservation of your finding and continue consultation with our Office in order to seek ways to avoid, minimize or mitigate the adverse effects of this undertaking on historic properties.

As part of the consultation to resolve project effects, we request a site visit to view first hand the project's area of potential effects and the historic properties within. If a visit is feasible under the current circumstances, please inform us when such a visit may be scheduled.

If you have any questions please contact our Office at (787) 721-3737 or or email, [ediaz@prshpo.pr.gov](mailto:ediaz@prshpo.pr.gov).

*Sincerely,*

**Carlos A. Rubio-Cancela**  
State Historic Preservation Officer

CARC/GMO/MDT/MB





# GOBIERNO DE PUERTO RICO

Oficina Estatal de Conservación Histórica

Friday, March 26, 2021

## Capt. John F. Barresi

US Coast Guard  
US Department of Homeland Security  
5505 Robin Hood Rd.  
Suite K  
Norfolk, VA 23513

### SHPO: 07-06-20-02 U.S. COAST GUARD HURRICANE RECONSTITUTION PROJECT EXECUTION PLAN, AGUADILLA, PUERTO RICO

Dear Captain Barresi,

The SHPO has received and reviewed the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the National Historic Preservation Act, as amended) and 36 CFR Part 800: *Protection of Historic Properties*. The State Historic Preservation Officer (SHPO) is to advise and assist federal agencies and other responsible entities when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce the project's effects.

Our evaluation of the proposed undertaking and the following comments are based on the Project Execution Plan and its corresponding appendices, originally submitted in July 2020, the topics discussed on our October 2020 meeting and on-site inspection of the properties and the additional information requested by our Office on said occasion:

1. Regarding the project's Area of Potential Effects (APE), we agree with the finding presented in the *Historical, Cultural and Natural Resources Assessment, US Coast Guard Sector, Puerto Rico and St. Thomas* (September 2016) that the US Coast Guard Air Station Borinquen properties are contributing resources to a potential Borinquen Field historic district. The SHPO has always considered said geographic area the APE for undertakings carried out by any of the multiple federal and non-federal jurisdictions that operate within its boundaries. Direct or indirect effects on APEs usually depend on the extent and scale of the proposed undertaking. The activities to be carried out in the execution of the proposed reconstitution project are both extensive and large-scale within the geographic area.



2. In accordance with the plan, the preferred alternative and proposed undertaking (Alternative G) entails, at a minimum, the full demolition of the former 40 Classroom Elementary School to give way for a new community support building. Also, sixty-four B, D, E, F and G types of housing units will be demolished to fulfill other needs. As a result, portions of the district's block and street layout will be irreversibly altered. The aforementioned are all contributing buildings and features of Borinquen Field. Thus, a significant part of the district's integrity would be substantially diminished through physical destruction, damage, alteration and change in character. We reiterate you our opinion, which was previously expressed in our on-site inspection, that the U. S. Coast Guard should reconsider Alternative D as an effort to minimize irreversible effects upon historic properties.
  
3. The planned measures for the preservation of housing units include activities that might have the potential to cause permanent or irreversible effects on historic properties. We agree with with your suggestion to continue consultation with our Office to develop a Programmatic Agreement (PA) regarding the housing units whose draft evaluation dates back to 2005.

In light of the above, the proposed undertaking, as submitted, meets the criteria of **adverse effect**, per 36 CFR § 800.5 (a)(2)(i) - "physical destruction of historic properties" - and (a)(2)(iv) - "change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance." Therefore, the U. S. Coast Guard will need to consult further with the SHPO to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize or mitigate adverse effects on historic properties, per § 800.6 (a)(1). Said agency official is also required to notify the Advisory Council on Historic Preservation of the adverse effect finding as per § 800.6 (a)(1) and include a copy of this letter with the required background documentation, as specified in 36 CFR § 800.11 (e).

If you have any questions concerning our comments, do not hesitate to contact our Office.

*Sincerely,*



**Carlos A. Rubio-Cancela**  
State Historic Preservation Officer

CARC/GMO/SGA



U.S. Department of  
Homeland Security

**United States  
Coast Guard**



Commanding Officer  
United States Coast Guard  
Facilities Design and Construction Center

5505 Robin Hood Road, Suite K  
Norfolk, VA 23513-2431  
Phone: 757-852-3404  
Fax: 757-852-3495

11000  
13 May 2021

Mr. Carlos Rubio Cancela  
Office of the Governor, Commonwealth of Puerto Rico  
State Historic Preservation Officer  
P.O. Box 9023935  
San Juan, Puerto Rico 00902-3935

Greetings Mr. Rubio Cancela,

Thank you for the feedback in your recent letter dated March 26, 2021 following our consultation letter of July 1, 2020. For additional background, we had also discussed the proposed undertaking at our site meeting held on October 15, 2020 with the SHPO staff and explained the urgency of the U. S. Coast Guard's (USCG) reconstitution and resiliency projects to repair or replace facilities damaged by the 2017 hurricanes at USCG Base Detachment Borinquen and Air Station Borinquen in Aguadilla, Puerto Rico.

At your request, the USCG has once again reviewed Alternative "D", which would retain and incorporate portions of the existing La Plaza building complex. During the development of alternatives, the focus by all involved was cooperation and unity of effort to achieve consensus on the best course of action taking into consideration several important factors including but not limited to: attention and respect for the historic character and significance of the area, USCG missions and operational requirements, Federal resiliency mandates, and input from other jurisdictional authorities. In the end, development of the proposed undertaking involved exhaustive analysis of several alternatives and meticulous deliberation to select the best course of action.

Unfortunately, Alternative "D" does not meet the USCG's functional and mission requirements. Additionally, without significant building improvements, alterations, and code compliance upgrades, the existing building does not meet modern construction standards for occupancy due to presence of hazardous materials, inadequate configuration for the intended use, structural vulnerabilities, and serious safety and environmental health deficiencies. Furthermore, incorporating La Plaza building under Alternative "D" is cost prohibitive; approximately 30% more expensive or roughly an additional \$10 to \$15 million compared to building a new community services facility in accordance with the proposed undertaking.

The proposed undertaking meets the USCG mission and operational requirements, provides modern and resilient family housing and supporting facilities, minimizes impacts to historical and cultural resources, and is consistent with the objectives of the Congressional Appropriations set aside to rebuild facilities in Puerto Rico.

Enclosure (1) provides additional details on our comparison of Alternative “D” and Alternative “G”. Enclosure (2) provides a preliminary conceptual rendering of the community building that would replace the La Plaza building complex.

The USCG has a long history in Aguadilla, with operations beginning in 1976. Generations of USCG service members and families have been stationed there the past 45 years and certainly appreciate the rich local culture, character, and sense of community. However, it is now necessary to make much needed resiliency improvements to USCG infrastructure in order to meet current and future missions in the region. The USCG is committed to working with your office to develop appropriate measures to minimize or mitigate adverse effects on historical resources.

I look forward to the opportunity to move forward responsibly on this effort and am ready to continue working with all the consulting parties to begin the process of developing a meaningful Memorandum of Agreement that will govern how we execute the proposed undertaking.

Finally, please note that our project must be awarded by September 30, 2022, or risk losing the Congressional Appropriation funds available for this critical reconstitution and resiliency project. In order to meet the required milestones, my goal is to complete all NHPA Section 106 consultation no later than August 2021.

I would like to coordinate a meeting in the next two weeks as a follow-up to this letter to discuss this project and our pathway forward. If further information is required, please contact Mr. Richard Hylton, at (757) 852-3404 or by e-mail at [rick.d.hylton@uscg.mil](mailto:rick.d.hylton@uscg.mil).

Sincerely,

J. F. BARRESI  
Captain, U. S. Coast Guard

Enclosures: (1) Comparison of Alternative “D” and Alternative “G”  
(2) Preliminary Conceptual Rendering of the Town Square and Community Center

Copy: ACHP, Mr. Christopher Wilson

## Comparison of Alternative “D” and Alternative “G”

- Alternative “D”  
Full restoration, recapitalization, and alterations to La Plaza building complex
  
- Alternative “G”  
Demolish La Plaza building complex and construct a modern Community Center

**Cost Comparison:** Alternative “D” is estimated at 30% more expensive than Alternative “G” or roughly an additional \$10 to \$15 million compared to building a new community services facility. The existing La Plaza building is a concrete and masonry building originally constructed in 1953. It does not meet modern building codes. In order to meet the structural, seismic, and electrical resiliency required of this project, major (and expensive) retrofitting and structural repairs would be required throughout. All new structural framing is required in order to reoccupy the building, including exterior walls, interior walls, roof structure, and second floor framing (where occurs). Additionally, abatement of lead based paint, asbestos, and other hazardous materials must also be completed.

**Space Requirements:** The existing configuration is suboptimal and available space is insufficient to meet the functional and mission requirements. Approximately 75,000 SF of space is required to meet requirements. Restoration of La Plaza would, at best, create 60,000 SF, Therefore an additional 15,000 SF of new construction would be required. Many of the elements of the existing building will also need to be demolished to reconfigure spaces for the intended use which results in adverse effects and diminished historic integrity.

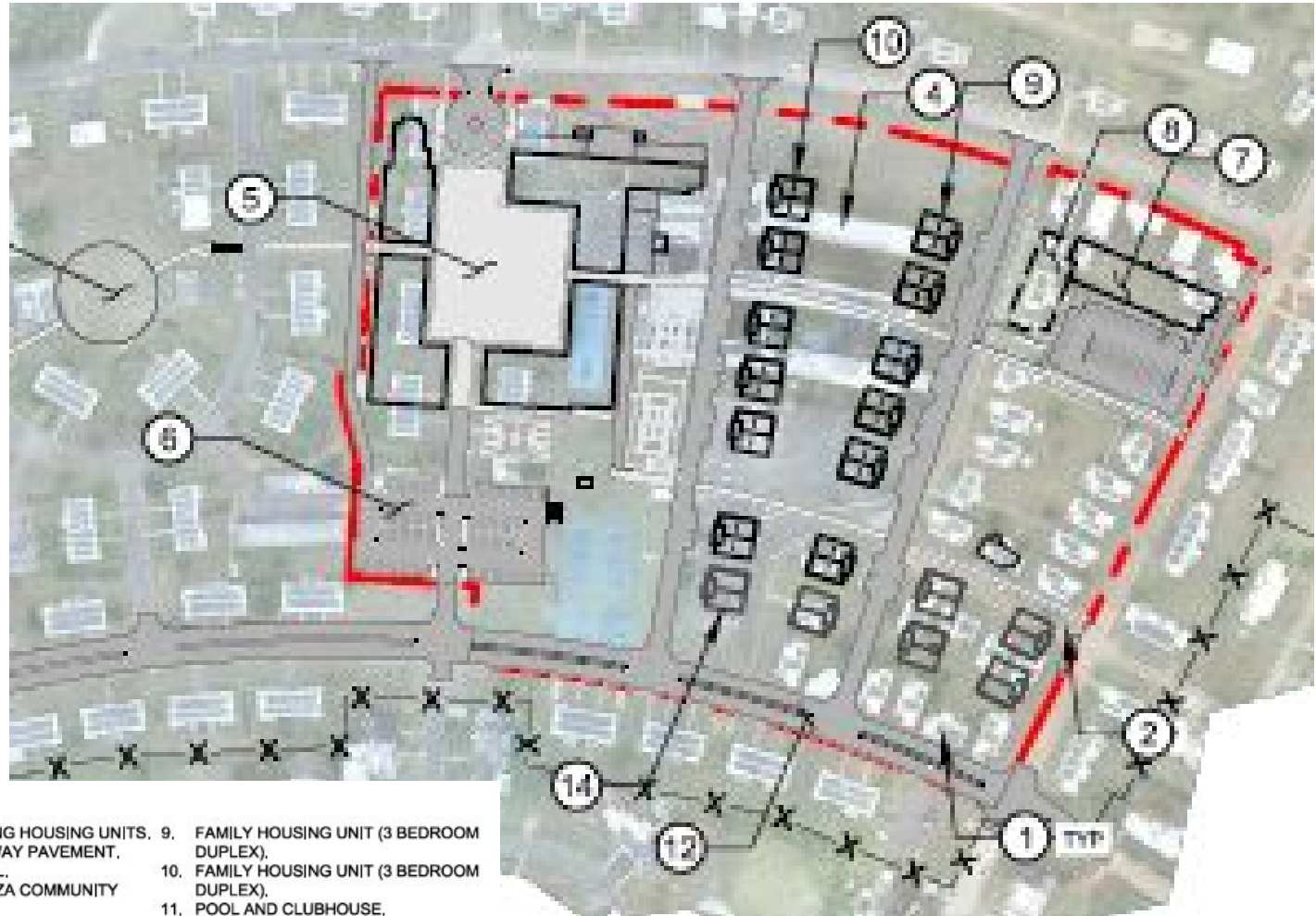
**Other Factors:** Alternative “G” allows for optimal reconstitution and resiliency improvements to the overall community, including better layout and functionality housing and community support services. Therefore, the proposed undertaking is far superior in meeting the USCG objectives for mission support and operational requirements while remaining within the boundaries of the Congressional Appropriations budget.

### Housing

	Alternative “D”	Alternative “G”	Comparison
<b>Demolish Existing Homes</b>	126	86	Alternative “D” demolishes 40 more existing houses
<b>Repair Existing Homes</b>	60	100	Alternative “G” repairs 40 more existing houses
<b>Construct New Duplex Housing Units</b>	88 units	24 units	Alternative “D” adds 64 more duplexes than Alternative “G”
<b>Construct Unaccompanied Personnel Housing</b>	0	34 units	Alternative “G” includes a new 34-unit complex
<b>No Action on Existing Homes</b>	41	6	Alternative “D” leaves 35 existing housing units as-is with no repairs

Under these comparisons, Alternative “G” demolishes fewer existing houses and repairs (preserves) more existing houses.

## Preliminary Conceptual Design – Site Plan

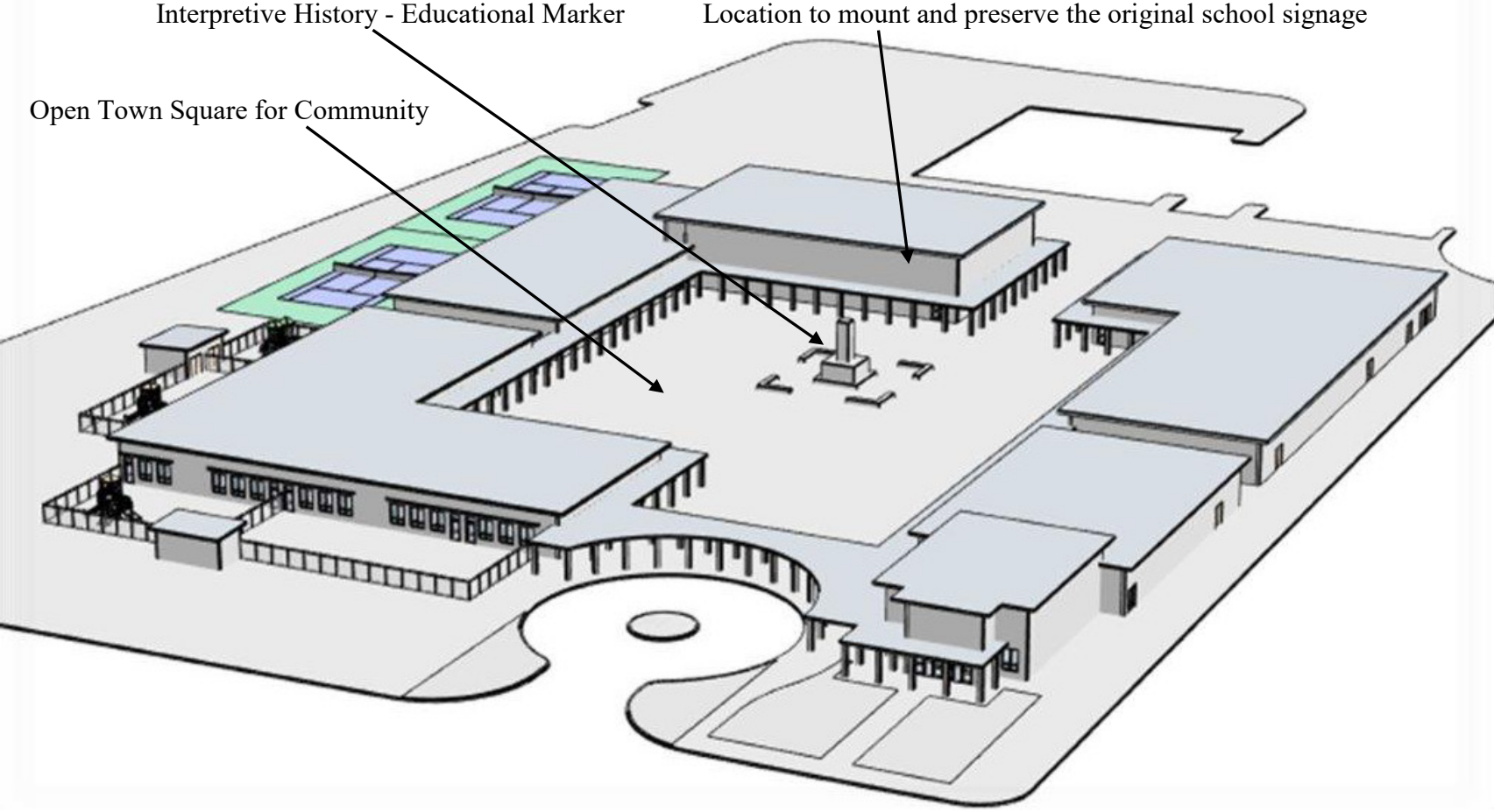


**KEY NOTES:**

- |  |   |
|--|---|
| 1. DEMOLISH EXISTING HOUSING UNITS.                                    | 9. FAMILY HOUSING UNIT (3 BEDROOM DUPLEX).  |
| 2. DEMOLISH ROADWAY PAVEMENT.  | 10. FAMILY HOUSING UNIT (3 BEDROOM DUPLEX). |
| 3. PEDESTRIAN TRAIL.   | 11. POOL AND CLUBHOUSE.                     |
| 4. DEMOLISH LA PLAZA COMMUNITY CENTER.                                 | 12. NEW ROADWAYS.                           |
| 5. NEW CSB AND CSB WALKWAYS,   | 13. GATEHOUSE AND SECURITY ENTRANCE.        |
| 6. CSB PARKING LOT.  | 14. OUTDOOR COMMUNITY AREA,                 |
| 7. 20 UNIT UNACCOMPANIED PERSONNEL HOUSING (UPH) AND ADJACENT PARKING. |   |
| 8. 14 UNIT ADDITIONAL UPH.   |   |

Notes 3, 6, 11,13 not shown on this partial Site Plan.

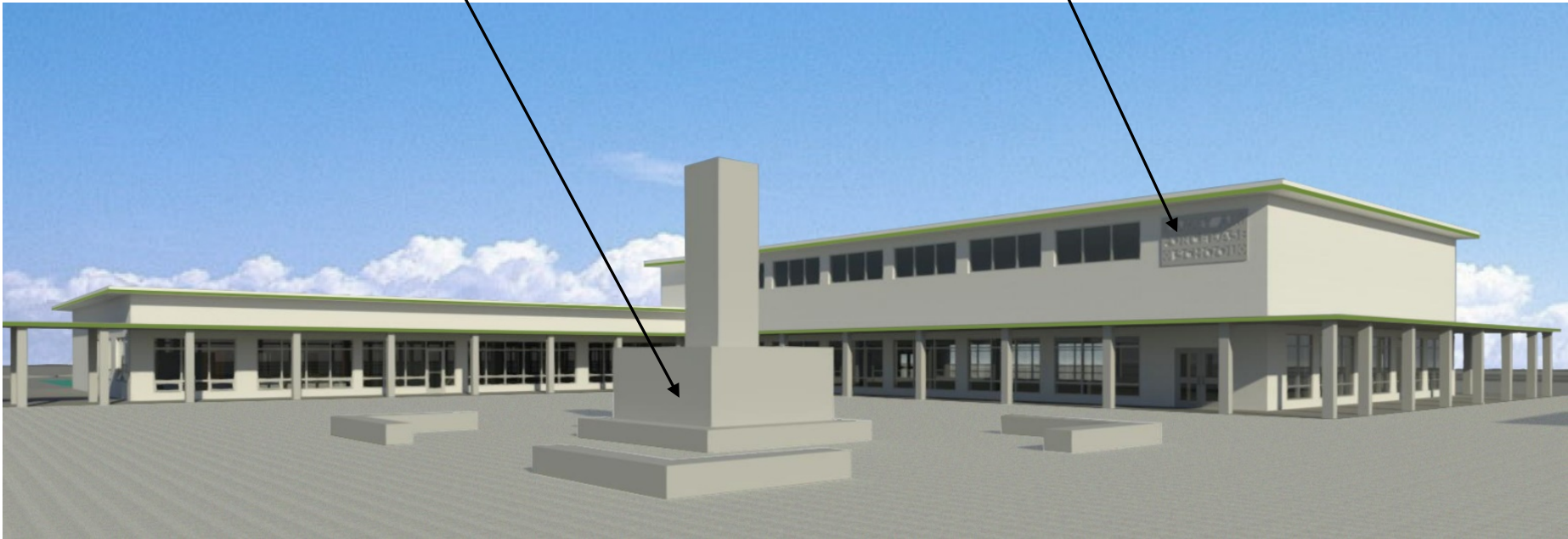
**Conceptual Model of New Community Service Center**



**Partial Conceptual Rendering/Design of the New Community Services and Town Square Center**

Historic Ramey School Sign  
Mounted on New Community Center Building

Interpretive History - Educational Marker





**Appendix E-1b: Memorandum of Agreement**

**MEMORANDUM OF AGREEMENT**  
**BETWEEN THE UNITED STATES COAST GUARD (USCG)**  
**AND**  
**THE PUERTO RICO STATE HISTORIC PRESERVATION OFFICER (SHPO)**  
**REGARDING**  
**HURRICANE RECONSTITUTION PROJECT**  
**USCG BASE DETACHMENT BORINQUEN AND AIR STATION BORINQUEN,**  
**AGUADILLA, PUERTO RICO**  
**SHPO: 07-06-20-02**

**WHEREAS**, the USCG plans to repair and replace hurricane-damaged facilities that are located within Base Detachment Borinquen and Air Station Borinquen, in Aguadilla, Puerto Rico as part of the Hurricane Reconstitution Project (hereinafter, the “Project”); and

**WHEREAS**, the USCG plans to carry out the Project on federally controlled land and is therefore, considered an undertaking that is subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306 § 108 et seq., and its implementing regulations, see 36 C.F.R. Part 800; and

**WHEREAS**, the USCG in consultation with the SHPO has defined the undertaking’s area of potential effects (APE) as the area identified in Attachment (A); and

**WHEREAS**, the USCG in consultation with the SHPO has determined that the potential Base Borinquen Field Historic District is eligible for listing in the National Register of Historic Places (NRHP); and

**WHEREAS**, the USCG in consultation with the SHPO has determined that the undertaking will have an adverse effect on the potential NRHP-eligible Base Borinquen Field Historic District, resulting from the demolition of the La Plaza Complex, the demolition of 86 housing units, the repair of 97 housing units, the construction of 12 housing duplexes, the construction of a new 34 unit Unaccompanied Personnel Housing facility, the construction of a new pool and clubhouse, the construction of a new security facility, and the construction of a new community center. These actions will also permanently alter the district’s street layouts. Site plans illustrating the demolition and new construction are provided by Attachment (B); and

**WHEREAS**, the USCG in consultation with the SHPO has determined that the La Plaza Complex and 85 of the 86 of the housing units to be demolished are NRHP-eligible under Criteria A and Criteria C; and

**WHEREAS**, the USCG consulted with the Ramey Air Force Base Historical Association and the City of Aguadilla, PR and both parties have been invited to sign this MOA as Concurring Parties; and

**WHEREAS**, in accordance with 36 CFR Part 800.6 (a)(4), the USCG invited the public to participate in a 30-day project review and comment between June 11, 2021 and July 11, 2021. This invitation was published in local newspapers, to include the *El Vocero*, *Primera Hora*, *Nuevo Dia*, and *San Juan Daily Star* and provided a project overview and information on how to access both electronic and written copies of the draft Environmental Assessment that contained a project specific Cultural Resources Evaluation; and

**WHEREAS**, in accordance with 36 C.F.R. § 800.6(a)(1), the USCG has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination providing the specified documentation, and the ACHP has chosen not to participate in the consultation, pursuant to 36 C.F.R. § 800.6(a)(1)(iii);

**NOW, THEREFORE**, the USCG and the SHPO enter into this Memorandum of Agreement (MOA) to ensure that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

### STIPULATIONS

The USCG shall ensure that the following measures are carried out by a professional meeting the applicable Secretary of the Interior’s Professional Qualifications Standards:

#### A. ARCHITECTURAL DOCUMENTATION

Prior to demolition, all structures to be demolished within the potential Borinquen Field Historic District (as illustrated and described by Attachment (B)), will be documented using the HABS Level II format. The USCG shall ensure that all documentation is completed and accepted by SHPO prior to demolition and that copies are made available to the appropriate local archives designated by the SHPO.

#### B. REHABILITATION

Six housing structures representing each category of historical housing will be repaired and preserved going forward in accordance with *The Secretary of the Interior’s Standards for Rehabilitation with Guidelines for Rehabilitating Historic Buildings* (NPS 1992). The six housing units are as follows:

<u>Address</u>	<u>Structure Type</u>
11 Cliff Rd	Type A
66 Hook Rd	Type B
102 Northeast Road	Type C
171 Circle F	Type D
156 L St.	Type F
103 Cliff Rd.	Type G

These buildings will be repaired and preserved going forward in accordance with *The Secretary of the Interior's Standards for Rehabilitation with Guidelines for Rehabilitating Historic Buildings* (NPS 1992).

### **C. NEW CONSTRUCTION**

The basis of design for the new Community Center, the UPH facility, and duplexes are the conceptual renderings provided by Attachment (C).

The SHPO shall be given the opportunity to review and comment on the design of the new Community Center, the UPH facility, the new duplexes, and all associated infrastructure. Review and comment will occur at the 35% Building and Site Design and 65% Building and Site Design phases. The SHPO will have 30 days to provide written comments on the 35% design and the 65% design, respectively. The USCG will review all comments and provide written responses to the SHPO detailing how each comment is being incorporated or in the event the comment cannot be incorporated, the budget and mission constraints that drove that decision.

The USCG shall ensure that the design for each new building is compatible with guidelines set forth in the *Secretary of the Interior's Standards for Rehabilitation* (NPS 1992), specifically Standard 9 which states:

New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

Design of new buildings shall be compatible with the historic and architectural qualities of the potential NRHP-eligible Borinquen Field Historic District

### **D. ARCHAEOLOGY**

A phase IA archeological literature study and a pedestrian study will be completed prior to beginning construction. Draft reports will be provided to the SHPO. The SHPO will provide any comments back to the USCG within 30 days for incorporation into final reports, which will also be provided to the SHPO.

Based on the results of the phase 1A study, the USCG will determine, in consultation with the SHPO, whether additional identification efforts are necessary, in accordance with 36 CFR 800.4(b) and (c), or to implement an Unanticipated Discovery Plan.

Prior to commencing any earth moving activities, the USCG will develop an Unanticipated Discovery Plan to cover all areas disturbed by the Project. The plan will be written by a qualified archeologist. Should a potential resource be encountered, Administration Condition III (Post Review Discoveries) of this agreement will be followed.

Additionally, an archeologist will be on-site during all ground disturbing activities and will monitor for the discovery of any potential cultural resources.

#### **E. INTERPRETATIVE HISTORICAL DISPLAYS AND MARKERS**

The USCG will provide a qualified architectural historian to research, develop, and design appropriate interpretative displays and wayside markers at the following locations:

- a. The New Community Center – In the Center Plaza
- b. Preserved Housing Units – Prominent Location in front yard

Displays and waysides shall meet NPS graphic identity standards. Examples are provided by Attachment (D).

Draft displays and wayside text and graphics will be submitted to the SHPO for review and comment. The SHPO will have 30 days to respond with written comments. Accepted wayside and interpretive displays/markers will be installed by the USCG within one (1) year of the completion of the project. Photographs of all installed interpretive displays/markers and waysides will be submitted to the SHPO for their project file.

### **ADMINISTRATIVE CONDITIONS**

#### **I. AUTHORITY.**

The MOA is generally authorized under the provisions of Section 106 of the NHPA and its implementing regulations. In accordance with 14 U.S.C. § 701(b), the USCG is authorized to enter into this MOA with the SHPO.

#### **II. DURATION**

This Agreement will expire with the completion of the undertaking and its stipulations or if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, the USCG may consult with the other signatories to reconsider the terms of the Agreement and amend it in accordance with Administration Condition V (Amendments).

### **III. POST-REVIEW DISCOVERIES**

If during construction previously unknown archeological resources are discovered, all work in the immediate vicinity of the discovery will be halted, signatories to the MOA will be notified, and procedures of 36 C.F.R. § 800.13(c) followed. In the event that human remains are discovered during construction, the ACHP's *Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects* will be followed.

### **IV. DISPUTE RESOLUTION**

Should any signatory to this MOA object to any actions proposed or the manner in which the terms of this MOA are implemented, the USCG shall consult with such party to resolve the objection. If the USCG determines that such objection cannot be resolved, the USCG will:

- a. Forward all documentation relevant to the dispute, including the USCG's proposed resolution, to the ACHP. The ACHP shall provide the USCG with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the USCG shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. The USCG will then proceed according to its final decision.
- b. If the ACHP does not provide its advice regarding the dispute within the thirty (30)-day time period, the USCG may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the USCG shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA and provide them and the ACHP with a copy of such written response.
- c. The USCG's responsibilities to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

### **V. AMENDMENTS**

This Agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

### **VI. TERMINATION**

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an

amendment per Administrative Condition V (Amendments). If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated and prior to work continuing on the undertaking, the USCG must either (a) execute an Agreement pursuant to 36 C.F.R. § 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 C.F.R. § 800.7. The USCG shall notify the signatories as to the course of action it will pursue.

## **VII. ANTI-DEFICIENCY**

Nothing in this MOA shall require or authorize any agency or employee of the Federal Government to make or authorize any expenditure or obligation of funds exceeding appropriated funding, to obligate any payment of money before it is appropriated, to indemnify any other party absent specific statutory authorization, or to violate the Anti-Deficiency Act, 31 U.S.C. §§ 1341(a)(1)(A) and 1341 (a)(1)(B).

## **VIII. OTHER PROVISIONS**

Nothing in this MOA is intended to conflict with current law or regulation or the directives of the Department of Homeland Security, the USCG, or any other party. If a term of this MOA is inconsistent with such authority, then that term shall be invalid, but the remaining terms and conditions of this MOA shall remain in full force and effect.

**EXECUTION** of this MOA by the USCG and the SHPO, its subsequent acceptance by the ACHP, and implementation of its terms confirm and document that the USCG has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

Regarding the Hurricane Reconstitution Project Execution Plan  
U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen, in Aguadilla, Puerto Rico

**SIGNATORIES:**

**United States Coast Guard**



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BERRY JOHN 1013996373  
Date 2021.08.17 16:40:48  
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\_\_\_\_\_ Date

J. D. Berry, P.E.  
Captain, U.S. Coast Guard  
Commanding Officer, Facilities Design and Construction Center

**Puerto Rico State Historic Preservation Officer**



\_\_\_\_\_ Date

Carlos A. Rubio-Cancela  
Puerto Rico State Historic Preservation Officer,  
Puerto Rico State Historic Preservation Office

Regarding the Hurricane Reconstitution Project Execution Plan  
U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen, in Aguadilla, Puerto Rico

**CONSULTING PARTIES SIGNATORIES:**

**Ramey Air Force Base Historical Association**

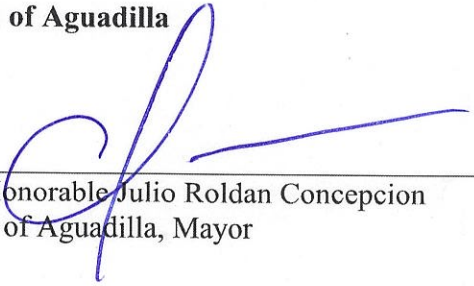
**Garred Giles**

Digitally signed by Garred Giles  
Date: 2021.08.24 16:36:33  
-04'00'

\_\_\_\_\_ Date

Garred Giles, Museum Director  
Ramey Air Force Base Historical Association

**Town of Aguadilla**



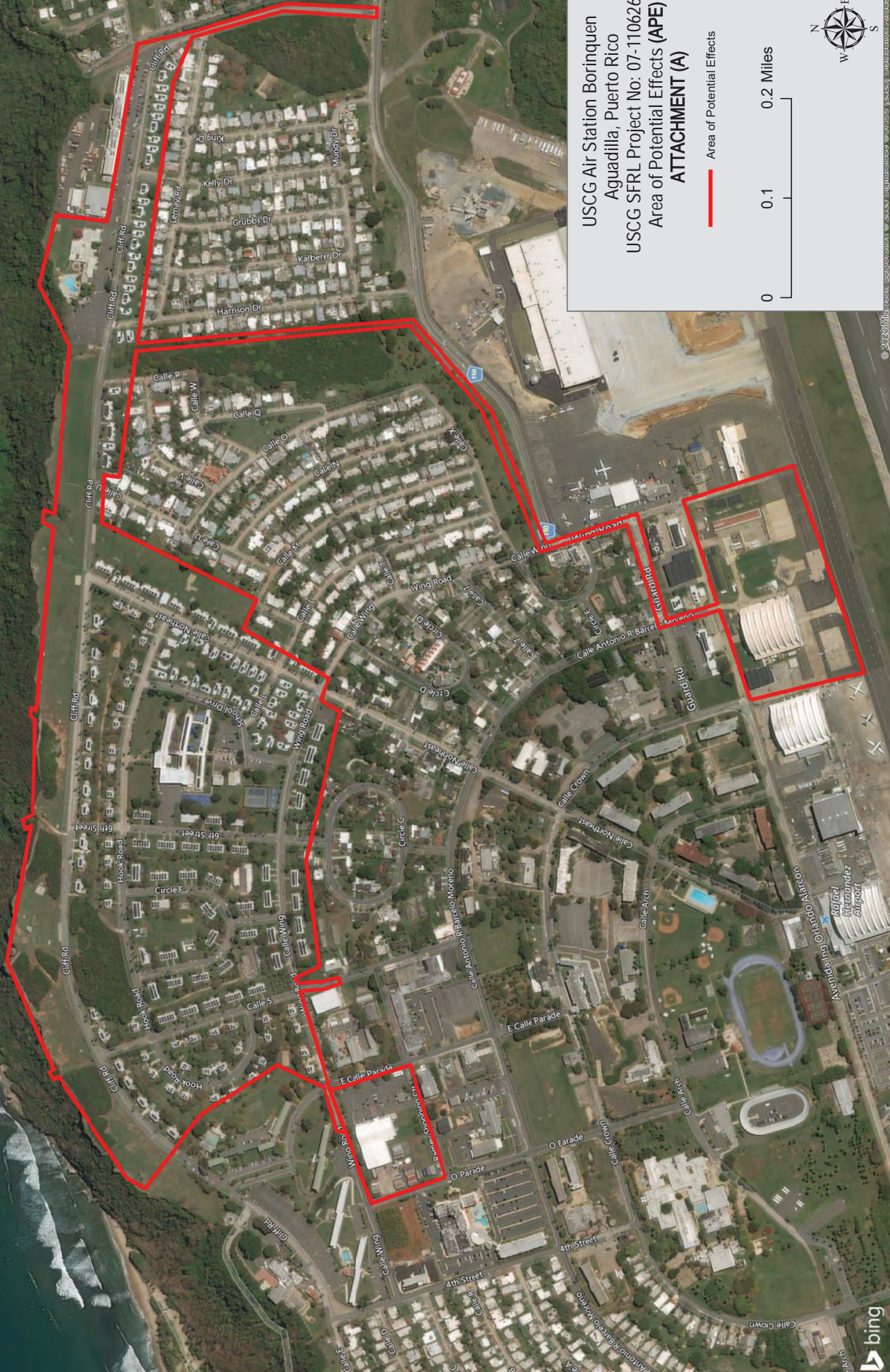
\_\_\_\_\_ The

The Honorable Julio Roldan Concepcion  
Town of Aguadilla, Mayor

**ATTACHMENT A:**

**Area of Potential Effects (APE) Map**

USCG Air Station Borinquen  
Aguadilla, Puerto Rico  
USCG SFRL Project No: 07-11062658  
Area of Potential Effects (APE)  
**ATTACHMENT (A)**



**ATTACHMENT B:**

**Impacts to Potential Base Borinquen Field  
Historic District**

USCG PROJECT NO. 11062658  
 USCG DRAWING NO. 11062658  
 USCG FILENAME: 11\_001\_AAGUADILLA / TRANSISTMS  
 PROJECT ENGINEER: J. J. AMENOLARA / TRANSISTMS  
 DRAWN BY: RMS  
 CHECKED BY: RMS  
 DATE: 5/28/2021  
 TASK DESCRIPTION: FINAL G-B RFP SUBMITTAL  
 DATE: 5/28/2021  
 PLOTTING SCALE: 1:1  
 SCALES SHOWN:

FACILITIES DESIGN & CONSTRUCTION CENTER (FDCC)  
 A/E COMPANY: TRANSISTMS  
 2000 CENTER ST., BERKELEY, CA 94704  
 510-855-2761  
 M/A PROJECT NO.: 510180057  
 CONSULTING A/E: TRANSISTMS

EXISTING SITE PLAN  
 BASE DETACHMENT AND AIR STATION HURRICANE REBUILD  
 PUERTO RICO  
 AGUADILLA

SHEET ID  
 ARCHITECTURAL  
 2A-100  
 10870644  
 CHIEF WORK OFFICE

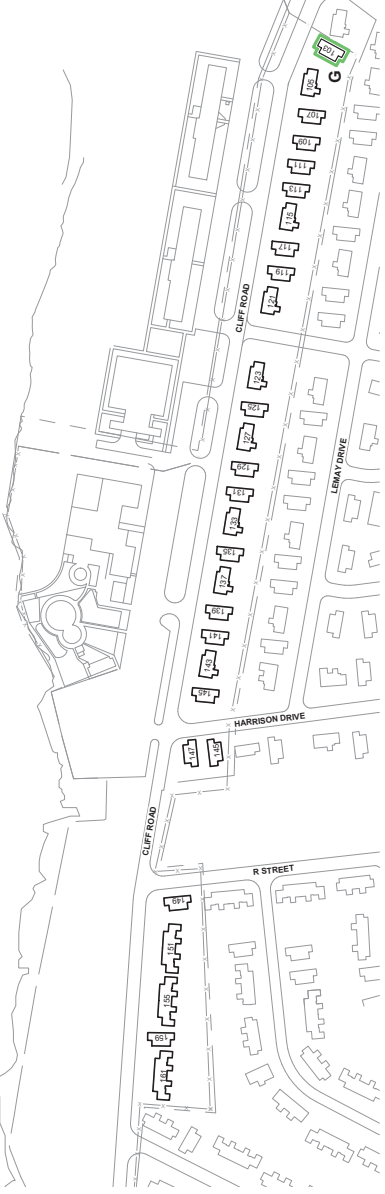
10 9 8 7 6 5 4 3 2 1



C2 OVERALL EXISTING SITE PLAN  
 1" = 10'-0"

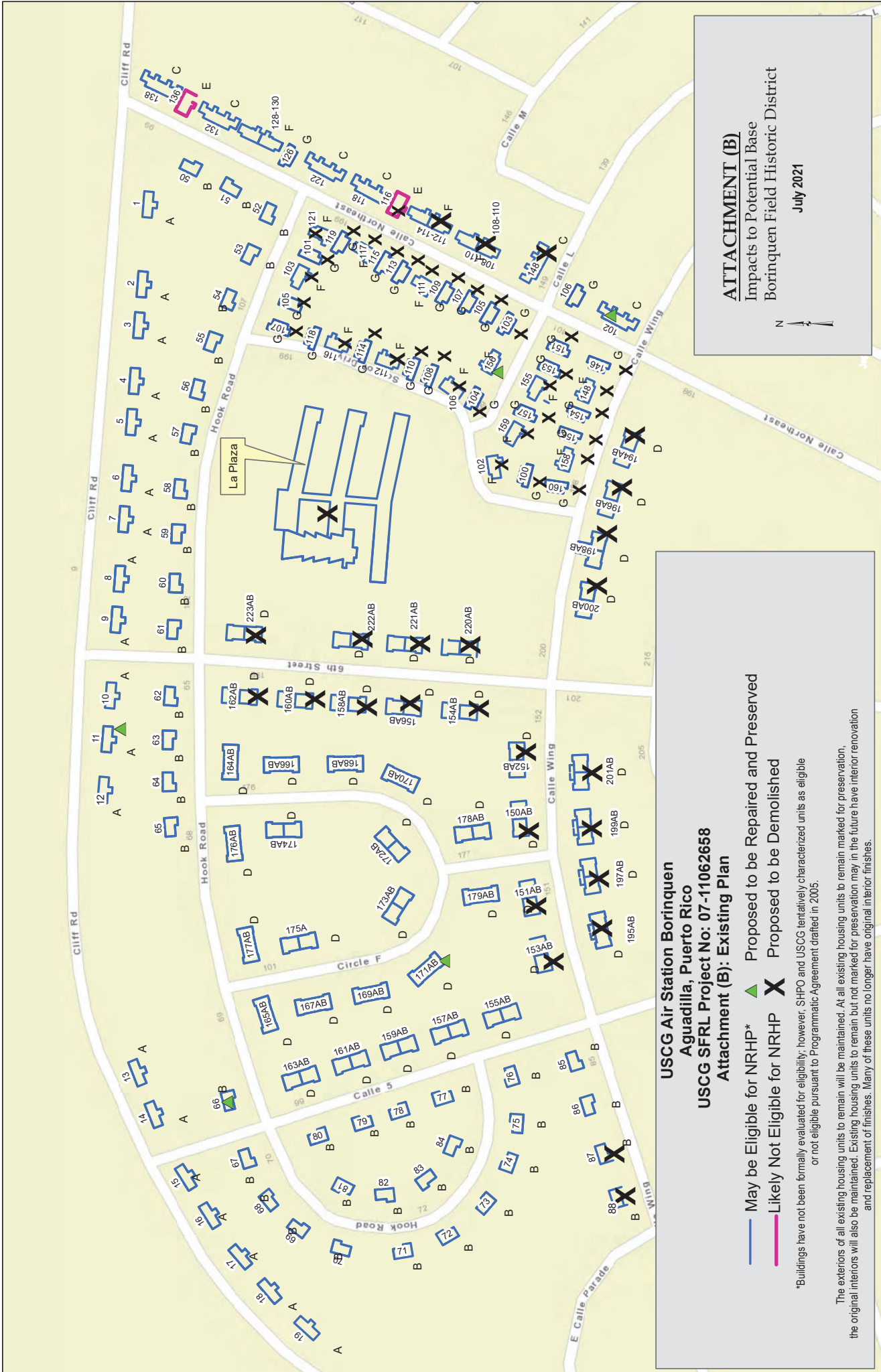
LEGEND

- HOUSING UNITS / BLDGS TO BE DEMOLISHED UNDER RFP-1
- HOUSING UNITS TO BE REPAIRED
- HOUSING UNITS TO BE REPAIRED & PRESERVED (5 STRUCTURES TOTAL)
- NO ACTION, BUT PRESERVED
- NO ACTION
- HOUSING UNITS / BLDGS TO BE DEMOLISHED



A1 OVERALL EXISTING SITE PLAN - "PANHANDLE" AREA  
 1" = 10'-0"

ATTACHMENT (B)



**ATTACHMENT (B)**  
 Impacts to Potential Base  
 Borinquen Field Historic District  
 July 2021

**USCG Air Station Borinquen**  
**Aguadilla, Puerto Rico**  
**USCG SFRL Project No: 07-11062658**  
**Attachment (B): Existing Plan**

— May be Eligible for NRHP\* ▲ Proposed to be Repaired and Preserved  
— Likely Not Eligible for NRHP X Proposed to be Demolished

\*Buildings have not been formally evaluated for eligibility; however, SHPO and USCG tentatively characterized units as eligible or not eligible pursuant to Programmatic Agreement drafted in 2005.

The exteriors of all existing housing units to remain will be maintained. At all existing housing units to remain marked for preservation, the original interiors will also be maintained. Existing housing units to remain but not marked for preservation may in the future have interior renovation and replacement of finishes. Many of these units no longer have original interior finishes.

Existing Community Center

C

ATTACHMENT (B)

July 2021



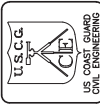
**USCG Air Station Borinquen  
Aguadilla, Puerto Rico  
USCG SFRL Project No: 07-11062658  
Attachment (B)**

- Likely Eligible for NRHP\* ▲ Proposed to be repaired and preserved
- Likely Not Eligible for NRHP X Proposed to be Demolished

\*Buildings have not been formally evaluated for eligibility; however, SHPO and USCG tentatively characterized units as eligible or not eligible pursuant to Programmatic Agreement drafted in 2005.

The exteriors of all existing housing units to remain will be maintained. At all existing housing units to remain marked for preservation, the original interiors will also be maintained. Existing housing units to remain but not marked for preservation may in the future have interior renovation and replacement of finishes. Many of these units no longer have original interior finishes.





MARK DESCRIPTION	DATE
1 FINAL D-B RFP SUBMITTAL	5/29/2021
PLOTING SCALE: 1" = 120'	
SCALE: AS SHOWN	

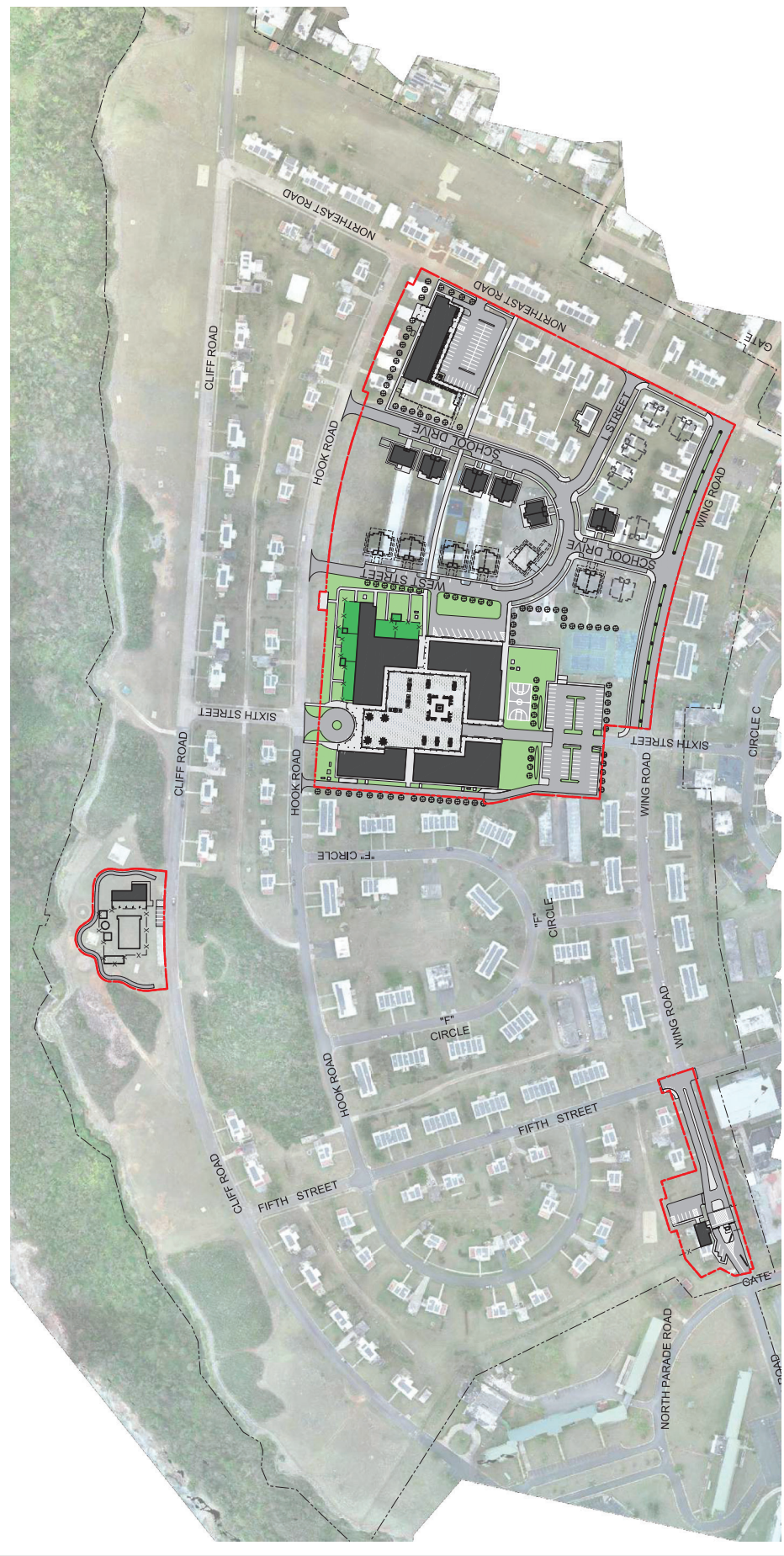
USGC PROJECT NO.	1102658
USGC DRAWING NO.	1102658
USGC TITLE NAME	BASE DETACHMENT AND AIR STATION BORQUEN
USGC CLIENT NAME	AGUADILLA CIVIL
SHEET 2 OF 74	
DESIGNED BY:	LT. JOEL MENDOZA / TRANSSYSTEMS
DRAWN BY:	AMR
CHECKED BY:	RMS
AIR	
PROJECT ENGINEER:	5505 ROBIN HOOD RD., SUITE K NORFOLK, VA 23513
A/E COMPANY:	TRANSSYSTEMS CONSULTING A/E, 2000 CENTER ST. BERKELEY, CA 94704

ALTERNATE SITE PLAN

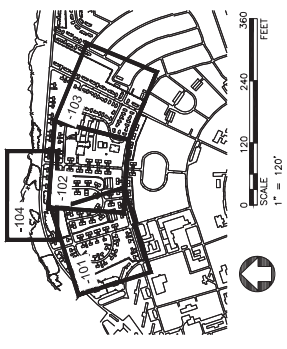
SHEET ID CIVIL 2CS100

CHILD WORK CODE NO. 1087884

10 9 8 7 6 5 4 3 2 1



KEYMAP:



PROPOSED CONSERVATION OF SCHOOL DRIVE PER SHPO LETTER OF JUNE 23, 2021, ITEM 1

ATTACHMENT (B)

CONTRACT NO.

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

SOLE FIDELITY NO.



Type A Housing Unit



Type D Housing Unit



Type B Housing Unit



Type F Housing Unit



Type C Housing



Type G Housing



**LA Plaza - North Side**

**ATTACHMENT C:**  
**Conceptual Renderings**

# Concept Design of Community Service Building

## Conceptual design

- Utilize modern architectural features not found at existing buildings



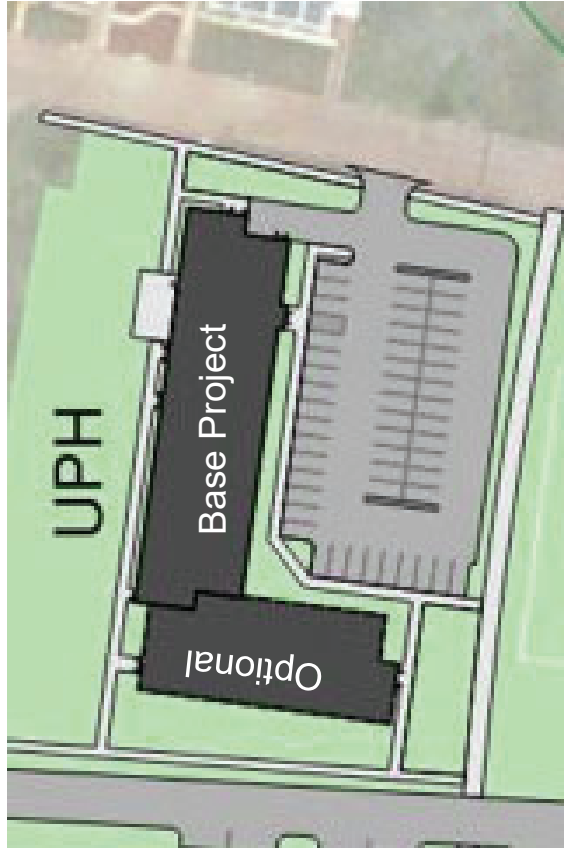
## Ramey Air Force School Sign

- Concept integrated and proposed as educational marker
- Final design determined in consultation with SHPO

## Plaza

- Introduces actual community plaza space. Strengthens interactions of the community, which is a traditional aspect found throughout Puerto Rico

# Unaccompanied Personnel Housing (UPH) Building



## Requirements

- Architectural design differentiated with existing area
- Base project includes 20 suites
- Expansion option for total of 34 suites
- Exterior colors and finish subject to adjustment

## Duplex Housing Buildings



### Requirements

- Architectural design differentiated with existing area
- Base project of 6 duplex homes totaling 12 units (3-bed, 2-bath each)
- Other build-ready lots for future growth
- Optional project for additional 6 totaling 24 units

**ATTACHMENT D:**

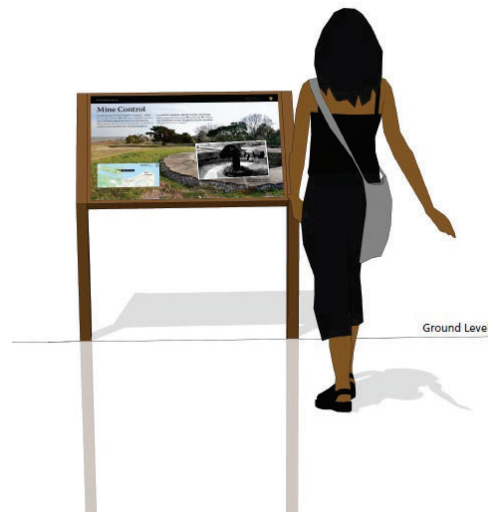
**Wayside and Interpretive Markers/Monuments Examples**

Regarding the Hurricane Reconstitution Project Execution Plan  
U.S. Coast Guard Base Detachment Borinquen and Air Station  
Borinquen, in Aguadilla, Puerto Rico

## ATTACHMENT (D) – EXAMPLES WAYSIDE MARKERS AND INTERPRETIVE DISPLAYS



### WAYSIDE MARKER EXAMPLE



### WAYSIDE MARKER CONCEPTUAL SCALE AND DESIGN



EXAMPLE OF MONUMENT OR HISTORICAL INTERPETATION



**Appendix E-2: Advisory Council on Historic Preservation**

U.S. Department of  
Homeland Security

**United States  
Coast Guard**



Commanding Officer  
United States Coast Guard  
Facilities Design and Construction Center

5505 Robin Hood Road  
Suite K  
Norfolk, VA 23513-2431  
Phone: (757) 852-3400  
Fax: (757) 852-3495

11000  
October 6, 2020

Mr. Thomas McCulloch  
Assistant Director, Federal Property Management Section  
Advisory Council on Historic Preservation  
401 F Street NW  
Suite 308  
Washington, DC 20004

Greetings Mr. McCulloch:

The United States Coast Guard (USCG) is proposing a reconstitution and resiliency project to repair or replace certain facilities damaged by the 2017 hurricanes at USCG Base Detachment Borinquen and Air Station Borinquen in Aguadilla, Puerto Rico – i.e., the Proposed Undertaking.

The existing facilities and infrastructure covered under the Proposed Undertaking are beyond their service life and no longer effectively serve their intended purpose. Furthermore, the facilities are not adequately fortified for resiliency to support personnel and critical missions in the event of hurricanes or similar large-scale disasters. Base Detachment Borinquen sustained extensive damage as a result of Hurricanes Irma and Maria, which severely affected the USCG's mission readiness and the ability to conduct operations. As a result, the USCG is proposing to upgrade and fortify the Base Detachment Borinquen facilities and commenced consultation for the Proposed Undertaking with the Puerto Rico State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations at 36 Code of Federal Regulations (CFR) Part 800, "Protection of Historic Properties."

The USCG has determined that the Proposed Undertaking will result in adverse effects to properties eligible for listing on the National Register of Historic Places, including residential units on the base and a school that is currently being used as a community services center. The letter initiating consultation with the Puerto Rico SHPO is included as enclosure (1). The Puerto Rico SHPO's letter indicating concurrence with the USCG's finding of adverse effect was issued on 16 September 2020 and is included as enclosure (2).

The USCG is also preparing an Environmental Assessment (EA) to evaluate the potential physical, environmental, cultural, and socioeconomic effects associated with the Proposed Action pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code § 4321 et seq.), the Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and USCG Commandant Instruction 5090.1 (Environmental Planning Policy).

Enclosure (3) provides details regarding the Proposed Undertaking, details regarding the historic character of Base Detachment Borinquen, description of the "Area of Potential Effect" (APE), and the basis for the USCG effect determination. Enclosure (4) contains maps of the vicinity, topography, and APE; graphics that depict the demolition associated with the Proposed Undertaking; and excerpts from past archaeological and architectural historic resource studies conducted at Base Detachment Borinquen.

If you wish to participate in the continued planning for this project and the consultations necessary to resolve adverse effects and develop appropriate mitigation, or if you desire further information, please feel free to call on me directly or reach out to my point of contact, Ms. Lesley Dobbins-Noble at [lesley.c.dobbinsnoble@uscg.mil](mailto:lesley.c.dobbinsnoble@uscg.mil) or at (757) 852-3410.

Sincerely,

J. F. BARRESI  
Captain  
U. S. Coast Guard

- Enclosures:
- (1) Letter initiating USCG consultation with Puerto Rico SHPO (dated 1 Jul 2020)
  - (2) Puerto Rico SHPO concurrence with finding of adverse effect (dated 16 Sep 2020)
  - (3) Hurricane Reconstitution Project Execution Plan – USCG Base Detachment Borinquen and USCG Air Station Borinquen
  - (4) Hurricane Reconstitution Project Execution Plan – USCG Base Detachment Borinquen and USCG Air Station Borinquen, Appendices

Copy:

- Mr. Christopher Wilson, ACHP
- Mr. Carlos Rubio Cancela, Puerto Rico SHPO
- USCG Director for Hurricane Reconstitution Program (CG-4DHRP)
- USCG Office of Environmental Management (CG-47)
- USCG Office of Civil Engineering (CG-43)
- USCG Shore Infrastructure Logistics Center (CG SILC)



**Appendix E-3: U.S. Fish and Wildlife Service**

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commanding Officer  
United States Coast Guard  
Facilities Design and Construction Center

5505 Robin Hood Road, Suite K  
Norfolk, VA 23513-2431  
Phone: 757-852-3404  
Fax: 757-852-3495

11000

MAY 19 2021

Ms. Marelisa Rivera  
Deputy Field Supervisor  
USFWS Caribbean Ecological Services Field Office  
Road 301, Km. 5.1/Bo. Corozo  
Boquerón, PR 00622

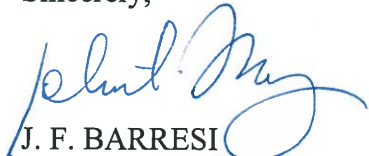
Greetings Ms. Rivera,

U.S. Coast Guard (USCG) Air Station Borinquen (ASB) and Base Detachment Borinquen (BDB) are located adjacent to each other in Maleza Alta, Aguadilla, Puerto Rico. This station suffered substantial damage during Hurricanes Irma and Maria, impairing operational ability. Additionally, many structures and utilities are dated and no longer adequately serve their intended purpose or function after a major event, such as a hurricane.

The USCG now plans to reconstruct various structures with modern facilities that meet our modern standards and allow us to meet our missions by remaining fully operational under any means. We plan to restore damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities and infrastructure so we may withstand storm events at BDB and ASB. In addition to these refurbishments, the potable water, stormwater, and wastewater systems will all be upgraded.

In accordance with the National Environmental Policy Act, the USCG is completing an Environmental Assessment (EA) for these proposed actions. Part of this process includes an evaluation of the project's impact on endangered species and critical habitat. The enclosed document provides this evaluation, which concludes that the Proposed Action will not impact endangered species or destroy or adversely modify their critical habitat. We respectfully request your concurrence with this evaluation. If further information is required, please contact Mr. Richard Hylton at (757) 852-3404 or by e-mail at [rick.d.hylton@uscg.mil](mailto:rick.d.hylton@uscg.mil).

Sincerely,

  
J. F. BARRESI  
Captain, U.S. Coast Guard

Enclosure: USFWS Consultation Package

# USCG Base Detachment Borinquen and Air Station Borinquen Repair and Replacement of Hurricane Damaged Facilities for Increased Resiliency - Evaluation of Effects on Federally Listed Species and Critical Habitats

## Proposed Action

The USCG identified a suite of six elements that needed to be addressed by any alternative considered to meet the project's purpose and need. The elements identified included:

1. Construct a new Community Services/Personnel Support building;
2. Upgrade the resiliency of the electrical distribution system serving both the BDB Housing and ASB Areas;
3. Rebuild and/or repair housing units to meet resiliency thresholds;
4. Upgrade the water resiliency storage systems to meet resiliency thresholds;
5. Design a stormwater drainage solution for the BDB Housing Area to meet resiliency thresholds;
6. Rebuild and/or construct a new sanitary sewer system at BDB Housing Area

The Proposed Action meets the project's purpose and need and encompasses a "Town Square" approach, with four new L shaped community center buildings creating a town square along the current Sixth Street. It features a new recreational field and parking. The Proposed Action also features some retained existing housing units and a number of new housing units and maximizes space for future development. Under the Proposed Action, 97 housing units would be repaired, 86 housing units would be demolished, 41 housing units would remain with no renovation, and 24 new housing units in 12 duplexes and a 34-room UPH would be constructed.

A more detailed description of the Proposed Action is provided in **Attachment 1**.

## Endangered Species Act Federally Listed Species

The USFWS, Georgia Ecological Services Field Office was contacted through the Information, Planning, and Conservation System (IPaC) regarding the potential presence of species under the jurisdiction of the USFWS within the area of the Proposed Action (Consultation Code: 04EC1000-2019-SLI-0726). The USFWS Official Species List is included in **Attachment 2** to this document. The IPaC system review indicates that one (1) threatened, endangered, or candidate species may occur within the project area: Puerto Rican Boa (*Epicrates inornatus*). Table 1 presents a list of the federally listed species and their preferred habitat. Additional description of this species and its habitat is summarized below.

**Table 1: USFWS IPaC Identified Species**

Common Name	Scientific Name	Status	Habitat	Regulatory Agency Authority
Puerto Rican Boa	<i>Epicrates inornatus</i>	E	Generalist, preferring arboreal or cave areas. Critical habitat not designated	Endangered

Status Key: C = Candidate, CH = Critical Habitat, E = Endangered, T = Threatened

### **May Affect, But Is Not Likely To Adversely Affect**

The USCG has determined that implementation of the Proposed Action may affect, but is not likely to adversely affect the Puerto Rican Boa. The species can be a habitat generalist, but is known to predominantly occupy arboreal or cave areas (Rodríguez 2018, Rodríguez-Durán 1996). Individuals have been found in plantations, rural gardens, and urban areas. There are no caves and no contiguous arboreal coverage in the project area. Naturally vegetated areas do not contain any larger tree species providing suitable arboreal coverage. Although no particularly suitable habitat is present in the project study area, the species may be present due to its potential use of garden and urban areas. No critical habitat is present. Due to the potential for the species to occur in the vicinity as a habitat generalist, the USCG intends to implement General Project Design Guidelines for the Puerto Rican Boa identified during the IPaC review. A copy of the guidelines is provided as **Attachment 3** to this document.

### **Conclusion**

The USCG respectfully requests USFWS review and provide its concurrence with the effect determinations stated in this letter. Please advise if there are any further actions needed to facilitate the implementation of the Proposed Action in a manner that avoids or minimizes adverse effects to federally listed species. Any issues identified by your office will be addressed in the EA. Please provide any comments, concerns, information, studies, or other data you may have regarding the Proposed Action within 30 days of receipt of this letter to enable to complete this phase of the project within the scheduled timeframe.

### **References**

- Rodriguez, C., Mayer, G.C. & Tolson, P.J. 2018. *Chilabothrus inornatus*. The IUCN Red List of Threatened Species 2018.
- Rodríguez-Durán, A. 1996. Foraging Ecology of the Puerto Rican Boa (*Epicrates inornatus*): Bat Predation, Carrion Feeding, and Piracy. *Journal of Herpetology*, 30(4), 533-536. doi:10.2307/1565698
- U.S. Fish and Wildlife Service (USFWS). 2021. Environmental Conservation Online System Species Profile: Puerto Rican boa (*Epicrates inornatus*). (<https://ecos.fws.gov/ecp/species/6628>) Accessed May, 2021.
- U.S. Fish and Wildlife Service (USFWS). 2021. Information for Planning and Consultation. (<https://ecos.fws.gov/ipac>) Accessed May, 2021.

# ATTACHMENT 1

## Project Scope Description

**Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency  
U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen  
Aguadilla, Puerto Rico**

**Project Scope Description**

In September 2017, Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) suffered extensive damage to its many facilities from Hurricanes Irma and Maria. This damage severely affected the Coast Guard's ability to efficiently perform its missions, such as, search and rescue, law enforcement, aerial support for navigation aid, and logistics support. In addition to the damage, many structures and utilities at BDB are dated and no longer serve their intended purpose or retain their proper function after a major event, such as a hurricane. The Proposed Action is necessary in order to ensure the BDB and ASB are able to meet their missions by remaining fully operational during a storm event or unscheduled utility outage. Additionally, the project is needed to provide the appropriate number of safe and adequately sized housing units to meet current and projected future BSB and ASB needs.

The scope of work for the Proposed Action includes work within BDB and ASB existing compound area as follows:

1. Construct a new Community Services/Personnel Support Building;
2. Upgrade the resiliency of the electrical distribution system serving both the BDB Housing and ASB Areas;
3. Rebuild and/or repair housing units to meet resiliency thresholds;
4. Upgrade the water resiliency storage systems to meet resiliency thresholds;
5. Design a stormwater drainage solution for the BDB Housing Area to meet resiliency thresholds; and
6. Rebuild and/or construct new sanitary sewer system at BDB Housing Area.

The general project site and specific work areas are showing on the attached figures:

Figure 1-1.1 Project Location Map

Figure 1-1.2 Project Areas

Figure 1-1.3 Alternative A Site Plan

Figure 1-1.4 Proposed Action Alternative G Site Plan

In accordance with the National Environmental Policy Act (NEPA) of 1969, the USCG is completing an environmental analysis of the project that will be documented in an Environmental Assessment (EA). The EA will evaluate the possible environmental consequences of the following alternative actions:

1. *Alternative A* - This is a "Main Street" approach where a new community center buildings and parking will be clustered. This alternative retains most existing housing and minimizes new construction and new streets. Under Alternative A, 98 housing units would be repaired, 88 housing units would be demolished, 38 existing housing units would remain with no renovation, and 50 new housing units would be constructed. The entirety of La Plaza would be demolished.

2. *Alternative G (Proposed Action)* - This is a "Town Square" approach where four L-shaped community buildings will create a town square. It features a new recreational field and parking. This alternative also features some retained existing housing units and a number of new housing units and maximizes space for future development. Under Alternative G, 97 housing units would be repaired, 86 housing units would be demolished, 41 housing units would remain with no renovation, and 24 new housing units in 12 duplexes and a 34-room UPH would be constructed. The entirety of La Plaza would be demolished.



**Figure 1.1-1 Project Location**  
 Environmental Assessment for Hurricane Execution Plan - Shore  
 Air Station Borinquen, Aguadilla, Puerto Rico



- Project Areas**
- Air Station
  - Housing
  - Panhandle
  - Existing Fenceline

**Figure 1.1-2 Project Areas**

Environmental Assessment for Hurricane Execution Plan - Shore  
 Air Station Borinquen, Aguadilla, Puerto Rico

1 inch = 800 feet  
 0 500 1,100 Feet

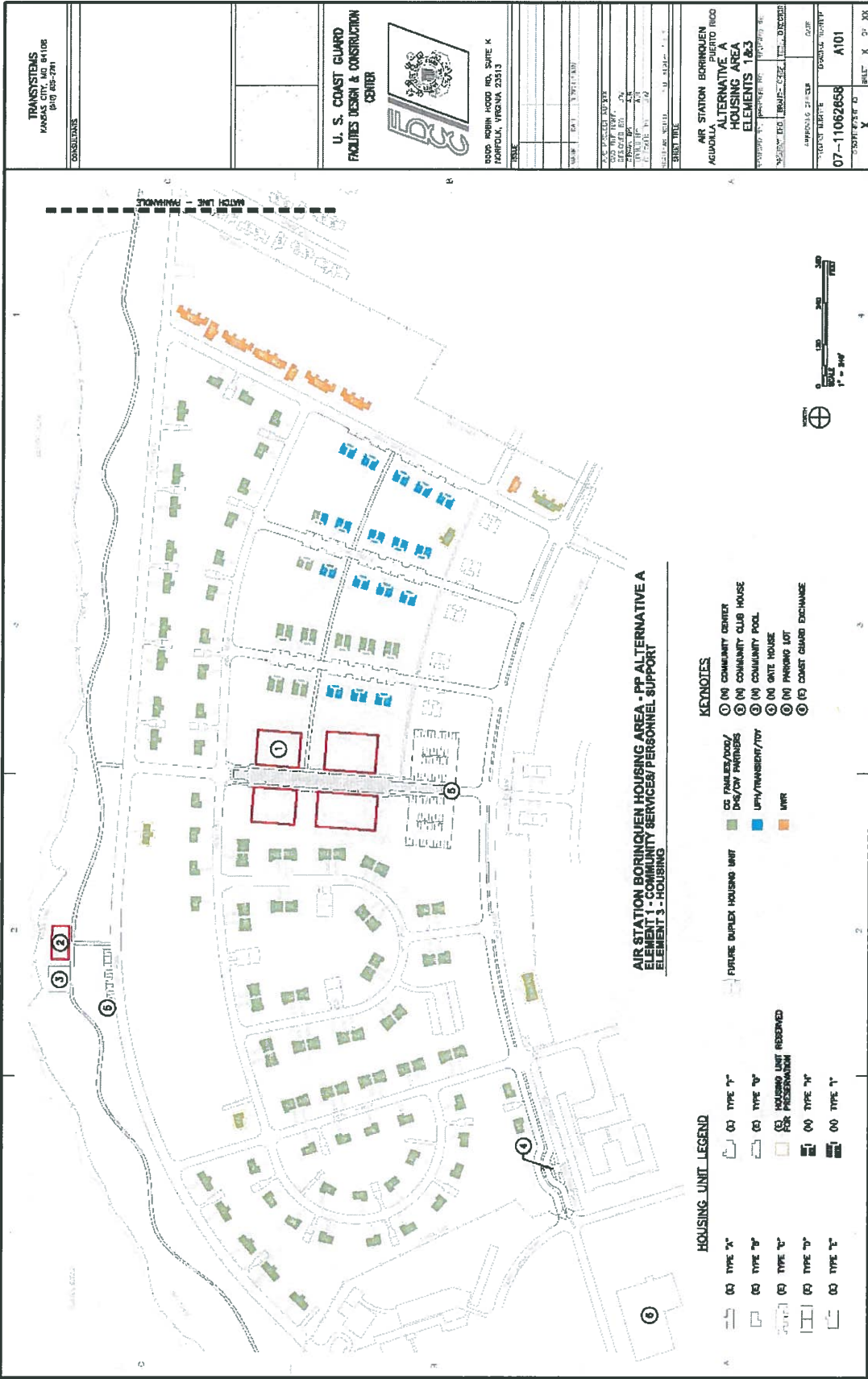


Figure 1-1.3 Alternative A Site Plan



## **ATTACHMENT 2**

**U.S. Fish and Wildlife Service  
Information for Planning and  
Consultation (IPAC) Report**



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Caribbean Ecological Services Field Office  
Post Office Box 491  
Boqueron, PR 00622-0491  
Phone: (787) 851-7297 Fax: (787) 851-7440  
<http://www.fws.gov/caribbean/es>

In Reply Refer To:

May 05, 2021

Consultation Code: 04EC1000-2019-SLI-0726

Event Code: 04EC1000-2021-E-01276

Project Name: USCG Borinquen Hurrican Execution Plan-Shore

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

**\*THE FOLLOWING SPECIES LIST IS NOT A SECTION 7 CONSULTATION. PLEASE CONTACT OUR OFFICE TO COMPLETE THE CONSULTATION PROCESS\***

The purpose of the Endangered Species Act (Act) is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect those species and/or their designated critical habitat.

Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

The enclosed species list provides information to assist with the consultation process with the U.S. Fish and Wildlife Service (Service) under section 7 of the Act. However, the enclosed species list **does not complete the required consultation process**. The species list identifies threatened, endangered, proposed and candidate species, as well as proposed and designated critical habitats, that may occur within the boundary of your proposed project and/or may be affected by your proposed project.

A discussion between the Federal agency and the Service should include what types of listed species may occur in the proposed action area, and what effect the proposed action may have on those species. This process initiates informal consultation.

When a Federal agency, after discussions with the Service, determines that the proposed action is not likely to adversely affect any listed species, or adversely modify any designated critical habitat, and the Service concurs, the informal consultation is complete and the proposed project

moves ahead. If the proposed action is suspected to affect a listed species or modify designated critical habitat, the Federal agency may then prepare a Biological Assessment (BA) to assist in its determination of the project's effects on species and their habitat.

However, a BA is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a BA where the agency provides the Service with an evaluation on the likely effects of the action to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a BA are described at 50 CFR 402.12.

If a Federal agency determines, based on its BA or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to further consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation process.

More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in

the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

**For more information:**

**U.S. Fish and Wildlife Service  
Caribbean Ecological Services Field Office  
Road 301, Km. 5.1 / Bo. Corozo  
Boquerón, PR 00622  
Telephone: (787) 851-7297  
Fax: (787) 851-7440  
Email: [caribbean\\_es@fws.gov](mailto:caribbean_es@fws.gov)  
<http://www.fws.gov/caribbean/es>**

**Send all documents to:**

**U.S. Fish and Wildlife Service  
P.O. Box 491  
Boquerón, Puerto Rico 00622**

**Attachment(s):**

- Official Species List
  - USFWS National Wildlife Refuges and Fish Hatcheries
  - Migratory Birds
  - Wetlands
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Caribbean Ecological Services Field Office**

Post Office Box 491

Boqueron, PR 00622-0491

(787) 851-7297

## Project Summary

Consultation Code: 04EC1000-2019-SLI-0726

Event Code: 04EC1000-2021-E-01276

Project Name: USCG Borinquen Hurrigan Execution Plan-Shore

Project Type: \*\* OTHER \*\*

Project Description: Project activities include repair/replacement of facilities in Air Station Borinquen. facilities. The work would include but is not limited to: repair exterior, interior, utilities and fixtures for multiple buildings; recapitalization; repair/replace fencing, grounds, site utilities, pavement, and exterior lighting; replacement and/or improvement of the existing electrical and potable water distribution systems. All new construction, major renovations, and critical utilities including electrical and water distribution systems shall include increased resiliency in the site's ability to remain operational during an event, or unscheduled outage, and the ability to return to full operation, independent of the local utility for extended periods of time, or until the outage is over. Sustainable and standard sources of energy/water/sanitary are being considered and reviewed for vulnerabilities and shall be strengthened where feasible. Redundancy may be applied, where feasible, to minimize vulnerabilities and increase resiliency. Clean and renewable energy/water/ sanitary systems are considered where appropriate and technically feasible.

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.50490376562379,-67.13508761860137,14z>



Counties: Aguadilla County, Puerto Rico

## Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Reptiles

NAME	STATUS
Puerto Rican Boa <i>Epicrates inornatus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a> General project design guidelines: <a href="https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6757.pdf">https://ecos.fws.gov/docs/tess/ipac_project_design_guidelines/doc6757.pdf</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

### Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

#### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

#### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

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## ATTACHMENT 3

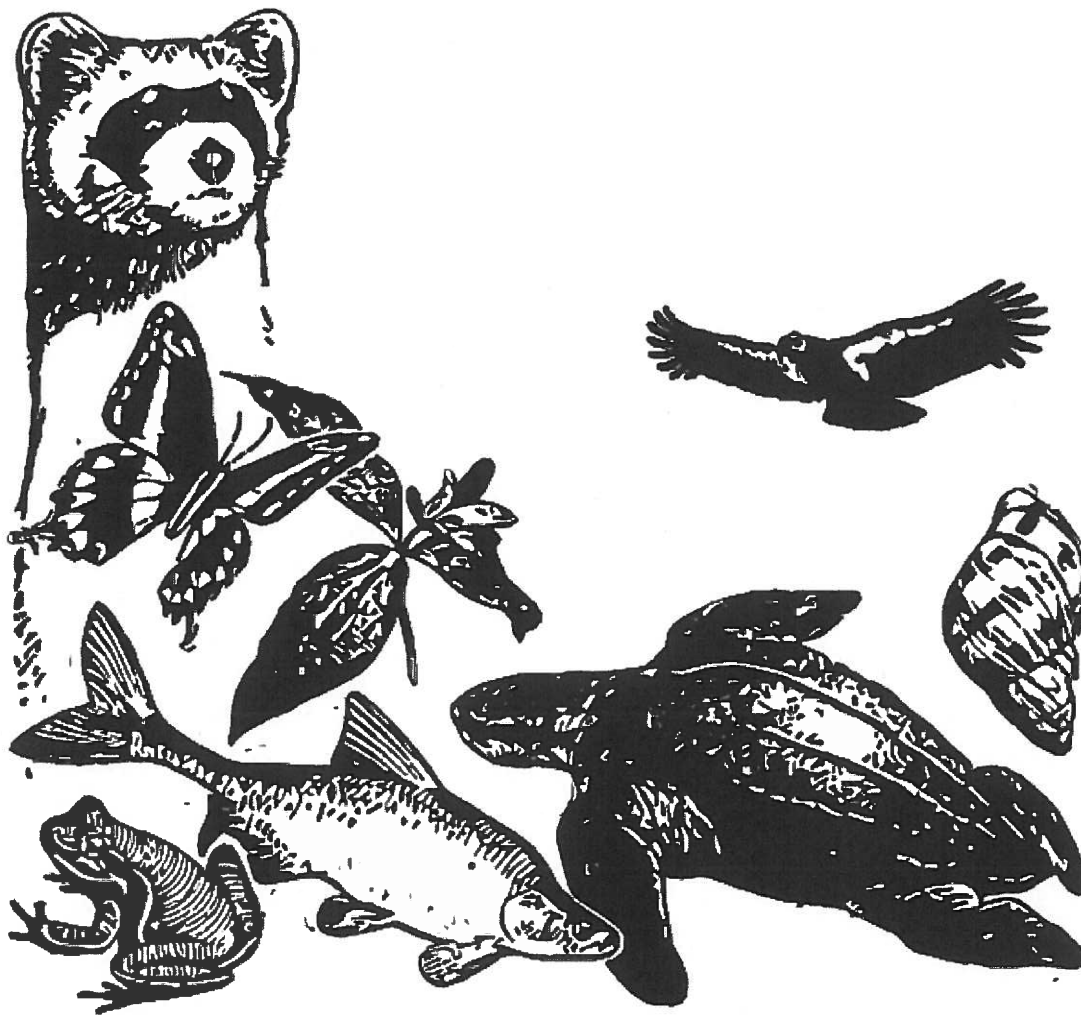
U.S. Fish and Wildlife Service

General Project Design Guidelines

Puerto Rican Boa (*Epicrates inornatus*)

# General Project Design Guidelines (1 Species)

Generated January 25, 2021 06:10 PM MST, IPaC v5.55.3



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# Species Document Availability

## Species with general design guidelines

**Puerto Rican Boa** *Epicrates inornatus*



## U.S. FISH AND WILDLIFE SERVICE CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE

### Conservation Measures for the Puerto Rican boa (*Chilabothrus inornatus*)

Section 7 (a)(1) of the Endangered Species Act (ESA) charges Federal agencies to aid in the conservation of listed species, and section 7 (a)(2) requires the agencies, through consultation with the U.S. Fish and Wildlife Service (Service), to ensure their activities are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. Section 7 applies to the management of Federal lands as well as Federal actions that may affect listed species, such as Federal approval of private activities through the issuance of Federal funding, permits, licenses, or other actions. Any person that injures, captures, or kills a Puerto Rico boa is subject to penalties under the ESA. If Federal funds or permits are needed, the funding or permitting agency should initiate Section 7 consultation with the Service. To initiate a consultation under the Section 7 of the ESA, you must submit a project package with the established minimum requirements. These conservation measures should be incorporated into the project plans to minimize possible impacts to the species.

The endangered Puerto Rican (PR) boa (*Chilabothrus inornatus*, formerly *Epicrates inornatus*) is the largest endemic snake species that inhabits Puerto Rico. The PR boa is non-venomous and does not pose any life threatening danger to humans, but some individuals may try to bite if disturbed or during capture or handling. Its body color ranges from tan to dark brown with irregular diffuse marking on the dorsum, but some individuals lack marking and are uniformly dark. Juveniles may have a reddish color with more pronounced markings. In general, as they mature, their body color tends to darken.



Last Revised: November 2020

The Puerto Rican boa was federally listed in 1970. Currently, the species has an island-wide distribution and occurs in a wide variety of habitat types ranging from wet montane to subtropical dry forest, and can be found from mature forest to areas with different degrees of human disturbance like roadsides or houses, especially if near their habitat in rural areas. This boa is considered mostly nocturnal, remaining less active, concealed or basking under the sun during the day.

The Service has developed the following conservation measures with the purpose of assisting others to avoid or minimize adverse effects to the PR boa and its habitat. These recommendations may be incorporated into new project plans and under certain circumstances into existing projects. Depending on the project, additional conservation measures can be implemented besides the ones presented in this document.

#### Conservation Measures:

1. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site.
2. Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas.
3. Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or personnel with experience on this species should survey the areas to be cleared to verify the presence of any PR boa within the work area.
4. The PR boa is considered more active at night. Thus, in order to maximize its detection, the species should be searched at nights prior to habitat disturbance.
5. Once the area has been searched for PR boas, vegetation should first be cleared by hand to the maximum extent possible. Vegetation should be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow boas present on site to move away on their own to adjacent available habitat. Any stone walls or naturally occurring rock piles must be carefully dismantled by hand as these are refuges for the snake. This will allow any boas present to vacate the site without injury.
6. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior.

7. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #6). **Do not capture the boa.** If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: 787-724-5700, 787-230-5550, 787-771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue.
8. If a PR boa is captured by the PRDNER, record the name of the PRDNER staff and information on where the PR boa will be taken. This information should be reported to the Service.
9. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #7). If not possible, the animal should be left alone until it leaves the vehicle on its own.
10. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.
11. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #6). If the PR boa was accidentally? killed as part of the project actions, please include information on what conservation measures had been implemented and what actions that will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.
12. Projects must comply with all state laws and regulations. Please contact the PRDNER for further guidance.

If you have any questions regarding the above conservation measures, please contact the Service:

- Marelisa Rivera, Deputy Field Supervisor
  - Email: [marelisa\\_rivera@fws.gov](mailto:marelisa_rivera@fws.gov)
  - Office phone 787-851-7297 ext. 206 or mobile 787-510-5219
- José Cruz-Burgos, Endangered Species Coordinator
  - Email: [jose\\_cruz-burgos@fws.gov](mailto:jose_cruz-burgos@fws.gov)
  - Office phone 787-851-7297 ext. 218 or mobile 787-510-5206



United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Caribbean Ecological Services Field Office  
PO Box 491  
Boquerón, PR 00622



In Reply Refer to:  
FWS/R4/CESFO/72005-019

Captain John F. Barresi  
U.S. Coast Guard  
5505 Robin Hood Road, Suite K  
Norfolk, VA 23513-2431

Re: USCG Base Repair Facilities  
Aguadilla, Puerto Rico

Dear Captain Barresi:

Thank you for your letter of May 19, 2021 requesting comments on the above referenced project. As per your request, our comments are provided under the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The United States Coast Guard (USCG) is proposing to reconstruct the USCG Air Station Borinquen (ASB) and Base Detachment Borinquen (BDB) located in Aguadilla, Puerto Rico. The proposed actions for this project include:

- Construct a new Community Services/Personnel Support building
- Upgrade the resiliency of the electrical distribution system serving both the BDB Housing and ASB Areas
- Rebuild and/ or repair housing units to meet resiliency thresholds
- Upgrade the water resiliency storage systems to meet resiliency thresholds
- Design a stormwater drainage solution for the BDB Housing Area to meet resiliency Thresholds
- Rebuild and/ or construct a new sanitary sewer system at BDB Housing Area

The USCG has determined that the proposed actions may affect, but is not likely to adversely affect the Puerto Rican boa (*Epicrates inornatus* now known as *Chilabothrus inornatus*) and if any encounter with the specie occur, they will implement the conservation measures previously provided by the Service

We have reviewed the information provided in your letter and our files, and concur with your determination that the proposed actions may affect, but is not likely to adversely affect the above mentioned species. No adverse impacts to designated critical habitat are anticipated.

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed or critical habitat determined that may be affected by the identified action.

Thank you for the opportunity to comment on this project. If you have any questions or require additional information, please contact Marelisa Rivera at [marelisa\\_rivera@fws.gov](mailto:marelisa_rivera@fws.gov).

Sincerely yours,

Edwin E. Muñiz  
Field Supervisor

drr



## **Appendix E-4: Office of the Program for the Management of the Coastal Zone and Climate Change Department of Natural and Environmental Resources**

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commanding Officer  
United States Coast Guard  
Facilities Design and Construction Center

5505 Robin Hood Road, Suite K  
Norfolk, VA 23513-2431  
Phone: 757-852-3404  
Fax: 757-852-3495

11000

**MAY 19 2021**

Mr. Rafael Machargo Maldonado  
Secretary  
Office of the Program for the Management of the Coastal Zone and Climate Change  
Department of Natural and Environmental Resources  
San José Industrial Park  
1375 Ave Ponce de León  
San Juan PR 00926


Greetings Mr. Maldonado,

In accordance with the Federal Consistency requirements of the Coastal Zone Management Act and Puerto Rico's approved Coastal Zone Management Program, the U.S. Coast Guard (USCG) Facilities Design and Construction Center has conducted a Coastal Zone Management Federal Consistency Review for a proposed construction and resiliency project at USCG Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB). We plan to restore damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities and infrastructure so they will withstand future storm events at BDB and ASB. In addition to these refurbishments, the potable water, stormwater, and wastewater systems will all be upgraded.

Due to extensive damage from Hurricanes Irma and Maria, many structures fail to adequately serve their intended purposes. The project is necessary so that BDB and ASB may be able to meet their missions by remaining fully operational during a storm even or unscheduled utility outage. This project would be considered a redevelopment project, as the existing Station is fully developed, and there are no increases in the number of personnel proposed at the facility.

Enclosed for your review and concurrence is the USCG's Consistency determination that this project is consistent with Puerto Rico's coastal zone management program and policies to the maximum extent feasible. If you have any questions or need further information, please contact Mr. Richard Hylton at (757) 852-3404 or [rick.d.hylton@uscg.mil](mailto:rick.d.hylton@uscg.mil).

Sincerely,

  
J. F. BARRESI  
Captain, U. S. Coast Guard

Enclosure: (1) Federal Consistency Determination

## **ENCLOSURE 1**

**Federal Consistency Determination**

**FEDERAL CONSISTENCY DETERMINATION**  
**Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency**  
**U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen**  
**Aguadilla, Puerto Rico**

**INTRODUCTION**

United States Coast Guard's (USCG) is proposing to restore hurricane damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities and infrastructure to withstand future storm events at Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) in Aguadilla, Puerto Rico. This Proposed Action requires preparation of an Environmental Assessment in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [USC] §§ 4321 et seq.); the President's Council on Environmental Quality (CEQ) *Regulations Implementing the Procedural Provisions of NEPA* (40 CFR Parts 1500-1508); Department of Homeland Security (DHS) Management Directive 023-01, *Implementation of NEPA*; and Coast Guard Commandant Instruction (COMDTINST 5090.1) *U.S. Coast Guard Environmental Planning Policy* and National Park Service (NPS) *Director's Order 12*.

**PROJECT BACKGROUND**

The designated coastal zone extends to 1,000 meters from the coastline and includes coastal natural systems, territorial waters, and the submerged lands beneath them that extend three nautical leagues out to sea (9 nautical miles or 10.35 statute miles). All projects occurring in the coastal zone management area must comply with/be consistent with the policies of the Coastal Zone protections, and obtain a Coastal Zone Management Certification from the Puerto Rico Planning Board.

Nearly the entirety of BDB is within 1,000 meters of the coastline/ocean and all of the proposed improvements fall within 1,000 feet. The ASB falls beyond the 1,000 meters of the coastline/ocean, and while this would not likely necessitate a coastal zone consistency determination, it is included herein as part of the complete USCG Proposed Action. Although USCG BDB and ASB, as federally owned properties, are statutorily exempt from a state's coastal zone policies, the Proposed Action could have reasonably foreseeable effects on coastal zone resources and enforceable policies of Puerto Rico's federally approved Coastal Management Program (CMP). Therefore, the USCG has prepared this Federal Consistency Determination in accordance with Section 307(d) of the Coastal Zone Management Act (CZMA) of 1972 and 15 Code of Federal Regulations (CFR) Part 930, Subpart F to evaluate the Proposed Action's effects on those resources and enforceable policies. The USCG has determined that the Proposed Action would be consistent to the maximum extent practicable with the enforceable policies of Coastal Zone Management Program of Puerto Rico (PMZCPR).

In September 2017, BDB and ASB suffered extensive damage to many of its facilities from Hurricanes Irma and Maria. This damage severely affected the Coast Guard's ability to efficiently perform its mission, which is search and rescue as well as law enforcement, aerial support for aids to navigation, and logistic support. In addition, many structures and utilities at BDB are dated and no longer adequately serve their intended purpose or remain properly functioning after a major event, such as a hurricane. The purpose of the project is to upgrade existing housing, community services, and utilities on BDB and ASB to current Coast Guard standards and to include increased resiliency. The project is needed to ensure that BDB and ASB are able to meet their missions by remaining fully operational during a storm event or unscheduled utility outage, independent of local utility providers. In addition, the project is needed to provide the appropriate number of safe and adequately sized housing units to meet current and projected future BDB and ASB needs.

**PROPOSED ACTION**

The USCG identified a suite of six elements that needed to be addressed by any alternative considered to meet the project's purpose and need. The elements identified included:

1. Construct a new Community Services/Personnel Support building;
2. Upgrade the resiliency of the electrical distribution system serving both the BDB Housing and ASB Areas;

3. Rebuild and/or repair housing units to meet resiliency thresholds;
4. Upgrade the water resiliency storage systems to meet resiliency thresholds;
5. Design a stormwater drainage solution for the BDB Housing Area to meet resiliency thresholds;
6. Rebuild and/or construct a new sanitary sewer system at BDB Housing Area

The Proposed Action meets the project's purpose and need and encompasses a "Town Square" approach, with four new L shaped community center buildings creating a town square along the current Sixth Street. It features a new recreational field and parking. The Proposed Action also features some retained existing housing units and a number of new housing units and maximizes space for future development. Under the Proposed Action, 100 housing units would be repaired, 86 housing units would be demolished, 24 new housing units in 12 duplexes would be constructed, a 34-room Unaccompanied Personnel Housing (UPH) unit would be constructed, and 6 excess housing units would remain with renovation.

### **RELEVANT ENFORCEABLE POLICIES**

In July 1978, Puerto Rico entered into the Coastal Zone Management Program of Puerto Rico (PMZCPR). The Department of Natural and Environmental Resources (DNER), through the Office of the Coastal Zone and Climate Change Program, is the lead agency for the implementation of the Program. From its onset, federal actions such as the granting of permits, allocation of funds or activities carried out by federal agencies directly, to be carried out within the boundary of the Coastal Zone of Puerto Rico or affect the resources located in it, has to comply with the Public Policies of the PMZCPR.

### VISION AND MISSION

The approach of the Coastal Zone Management Program is reflected in the guiding principles or main components of the Plan:

1. Guide the sustainable development of the public and private sectors in the coastal zone.
2. Promote active management of the coast.
3. Promote environmental education, scientific research and citizen participation in the management of coastal resources.

The PMZCPR has the primary purpose of expanding, refining and improving the state and federal government programs that are directed at managing issues associated with the coastal zone, so that they respond effectively to coastal problems. Recognizing the need to focus on climate change and the resulting implications within Puerto Rico of natural weather events/hurricanes, DNER outlines strategies for adaptation and resilience development in land use planning to reduce vulnerability and increase resilience to the effects of climate change.

### **CONCLUSION**

Construction of the Proposed Action would occur in the coastal zone management area. While elements of the Proposed Action will involve demolition, ground disturbance and temporary construction impacts within the coastal zone, no long term nor permanent impacts are anticipated. In addition, the purpose and need of the Proposed Action is fundamentally consistent with the PMZCPR and seeks to upgrade the BDB and ASB to reduce vulnerability and increase resilience to the effects of climate change.

Pursuant to NEPA, the Proposed Action would have no significant impact to the Coastal Zone, however the USCG is applying for a Coastal Zone Management Certification from the Puerto Rico Planning Board.

In accordance with Section 307 (c)(1) of the Federal Coastal Zone Management Act of 1972, as amended, the USCG has determined that the proposed action is consistent to the maximum extent practicable with the enforceable policies of approved coastal management program. This determination is based on the review of the proposed project's conformance with the enforceable policies of the Puerto Rico coastal program.

## **ENCLOSURE 2**

**Application for Certification with the  
Puerto Rico Coastal Zone Management Program**

Commonwealth of Puerto Rico  
Office of the Governor  
Puerto Rico Planning Board  
Physical Planning Area  
Land Use Planning Bureau

**Application for Certification of Consistency with the  
Puerto Rico Coastal Management Program**

General Instructions:

- A. Attach a 1:20,000 scale, U.S. Geological Survey topographic quadrangular base map of the site.
- B. Attach a reasonably scaled plan or schematic design of the proposed object, indicating the following:
  - 1. Peripheral areas
  - 2. Bodies of water, tidal limit and natural systems.
- C. You may attach any further information you consider necessary for proper evaluation of the proposal.
- D. If any information requested in the questionnaire does not apply in your case, indicate by writing "N/A"(not applicable).
- E. Submit a minimum of seven (7) copies of this application.

<b>DO NOT WRITE IN THIS BOX</b>	
Type of application: _____	Application Number: _____
Date received: _____	Date of Certification: _____
Evaluation result: <input type="checkbox"/> Objection <input type="checkbox"/> Acceptance <input type="checkbox"/> Negotiation	
Technician: _____	Supervisor: _____
Comments: _____	

- 1. Name of Federal Agency: United States Coast Guard (USCG)
- 2. Federal Program Catalog Number: \_\_\_\_\_
- 3. Type of Action:
  - Federal Activity       License or permit       Federal Assistance
- 4. Name of Applicant: United States Coast Guard (USCG), ATTN: Rick D. Hylton, PE  
Postal Address: U.S. Coast Guard FDCC, 5505 Robin Hood Rd. Suite K, Norfolk, VA 23613-2431  
Telephone: (757) 852 - 3404      Email: rick.d.hylton@uscg.mil      Fax: N/A
- 5. Project name: Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency, U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen, Aguadilla, Puerto Rico
- 6. Physical Description of Project Location: Restore hurricane damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities and infrastructure to withstand future storm events at Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB).

Lambert Coordinates:                      X = \_\_\_\_\_                      Y = \_\_\_\_\_

7. Type of construction or other work proposed:

- drainage     
  channeling     
  landfill     
  sand extraction  
 pier     
  bridge     
  residential     
  tourist

others (specify and explain) See below.

Description of proposed work: Construct a new Community Services/Personnel Support building; upgrade resiliency of the electrical distribution system serving the BDB Housing and ASB Areas; rebuild/repair housing units to meet resiliency thresholds; upgrade the water resiliency storage systems; design stormwater drainage for BDB Housing Area; and rebuild sanitary sewer system at BDB Housing Area.

8. Natural, artificial, historic or cultural systems likely to be affected by the project

Place an X opposite any of the systems indicated below that are in the project area or its surroundings, which are likely to be affected by that activity. Indicate the distance from the project to any outside system that would likely be affected.

System	Within Project	Outside Project	Distance (meters)	Local name of affected system
beach, dunes				
marshes				
coral, reefs				
river, estuary				
bird sanctuary				
pond, lake, lagoon				
agricultural unit				
forest, wood				
cliff, breakwater				
cultural or tourist area	X			BDB Housing and La Plaza Building
other (explain)				

Describe the likely impact of the project on the identified system (s).

Positive

Negative

Explain:

An Adverse Effect is anticipated under Section 106 for the proposed demolition of historic housing units and the La Plaza Building.

---



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---



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	Yes	No	Pending	Application Number
a. Planning Board	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>TBD; Coastal Zone Management</u>
b. Regulation and Permits Administration	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>To be obtained in Construction</u>
c. Environmental Quality Board	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
d. Department of Natural Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>TBD; Coastal Zone Management</u>
e. State Historic Preservation Office	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>TBD; Section 106</u>
f. U.S. Army Corps of Engineers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
g. U.S. Coast Guard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>USCG Project</u>
h. Other (s) (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>TBD; US Fish and Wildlife Service</u>

### CERTIFICATION

I CERTIFY THAT (project name) the **Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency, U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen, Aguadilla, Puerto Rico** is consistent with the Puerto Rico Coastal Zone Management Program, and that to the best of my knowledge the above information is true.

\_\_\_\_\_  
 J. F. Barresi  
 Name (legible)  
 Captain, U. S. Coast Guard  
 \_\_\_\_\_  
 Position

  
 \_\_\_\_\_  
 Signature  
 5 /19/ 2021  
 \_\_\_\_\_  
 Date



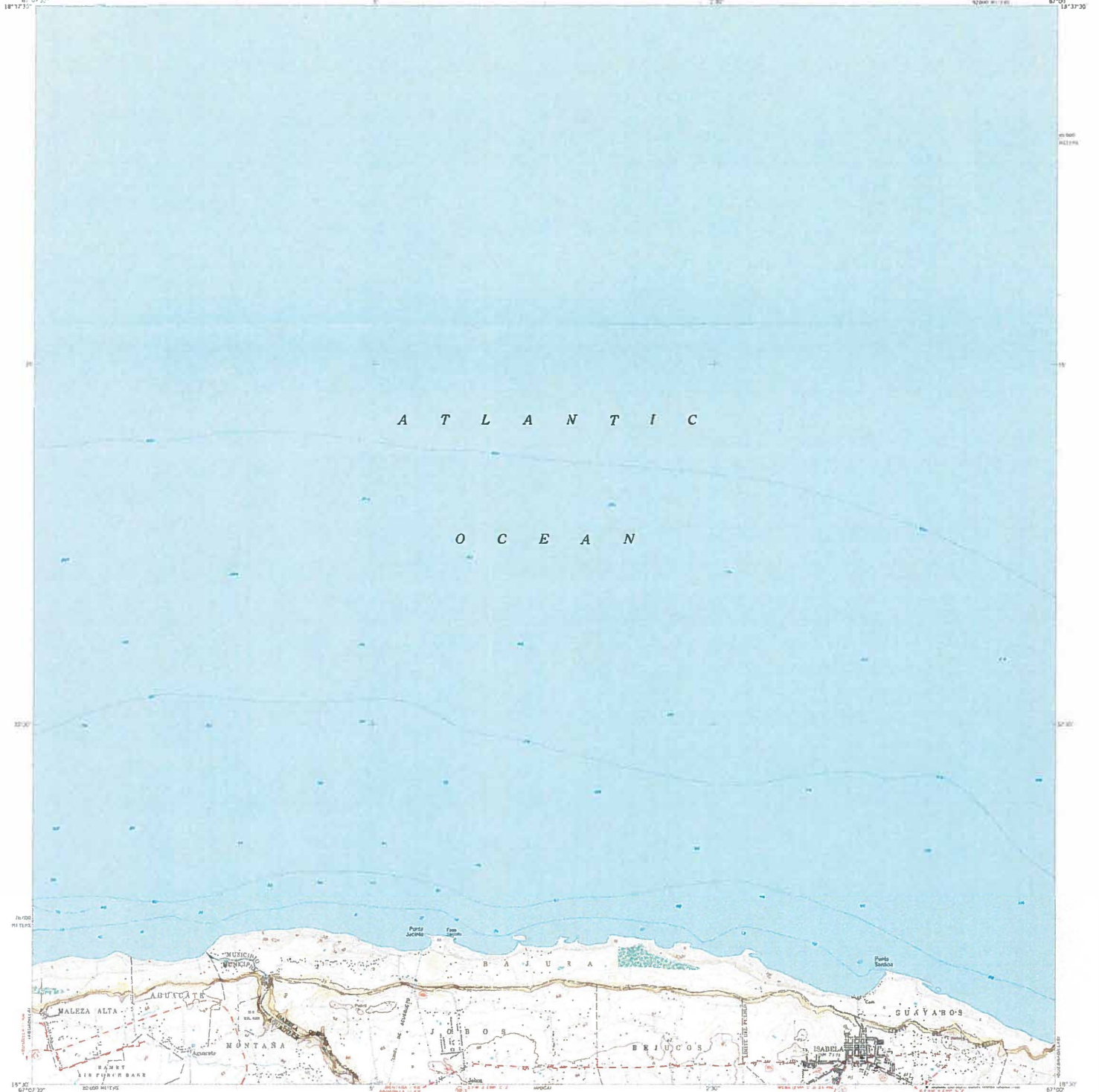
Revised, edited, and published by the Geological Survey  
Controlled by USGS and USCAGS  
Topographic by available surveys: 5572 and 5537. Printed 1960  
Selected topographic data derived from USGS Chart 995, 1957  
This information is not intended for navigation purposes  
Photocopy prepared: Puerto Rico Geomorphology, 1960 adaptation  
2000 contour grid based on Puerto Rico geodetic datum  
Contour and municipality boundaries by the Puerto Rico  
Planning Board  
Pie cut symbols used in which only highest buildings are shown  
Character reference distances shown in red



ROAD CLASSIFICATION	
Heavy duty	Light duty
Highway duty	Unimproved dirt
	Tractor Route

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR RESTON, VIRGINIA 22092  
AND DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS, SAN JUAN, P. R. 00910  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

AQUADILLA, P. R.  
18275-5-75  
1960



Mapped, edited, and published by the Geological Survey  
Control by USGS and USCGS  
Topography by photostereosurveys 1947-52 Revised 1960  
Selected hydrographic data compiled from USCGC charts 901 (1957)  
This information is not intended for navigational purposes  
Reference projection Puerto Rico datum 1942 adjustment  
2022 datum gtd based on Puerto Rico coordinate system  
Bench and monument boundaries by the Puerto Rico  
Turning Board



CONTOUR INTERVAL: 5 METERS  
(BASED ON MEAN SEA LEVEL)  
DEPTH: FATHOMS AND SOUNDINGS IN FEET—DEPTH IS MEAN LOW WATER  
SOUNDING NUMBER INDICATES THE APPROXIMATE DEPTH FROM MEAN  
LOW WATER TO THE BOTTOM OF THE SOUNDING



FOR SALE BY U.S. GEOLOGICAL SURVEY RESTON, VIRGINIA 22092  
AND DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS, SAN JUAN, P.R. 00910  
A FOLDER INCLUDING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ISABELA, P. R.  
11230-11200175  
1980

## ENCLOSURE 3

Project Description

**Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency  
U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen  
Aguadilla, Puerto Rico**

**Project Scope Description**

In September 2017, Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) suffered extensive damage to its many facilities from Hurricanes Irma and Maria. This damage severely affected the Coast Guard's ability to efficiently perform its missions, such as, search and rescue, law enforcement, aerial support for navigation aid, and logistics support. In addition to the damage, many structures and utilities at BDB are dated and no longer serve their intended purpose or retain their proper function after a major event, such as a hurricane. The Proposed Action is necessary in order to ensure the BDB and ASB are able to meet their missions by remaining fully operational during a storm event or unscheduled utility outage. Additionally, the project is needed to provide the appropriate number of safe and adequately sized housing units to meet current and projected future BSB and ASB needs.

The scope of work for the Proposed Action includes work within BDB and ASB existing compound area as follows:

1. Construct a new Community Services/Personnel Support Building;
2. Upgrade the resiliency of the electrical distribution system serving both the BDB Housing and ASB Areas;
3. Rebuild and/or repair housing units to meet resiliency thresholds;
4. Upgrade the water resiliency storage systems to meet resiliency thresholds;
5. Design a stormwater drainage solution for the BDB Housing Area to meet resiliency thresholds; and
6. Rebuild and/or construct new sanitary sewer system at BDB Housing Area.

The general project site and specific work areas are showing on the attached figures:

Figure 1-1.1 Project Location Map

Figure 1-1.2 Project Areas

Figure 1-1.3 Alternative A Site Plan

Figure 1-1.4 Proposed Action Alternative G Site Plan

In accordance with the National Environmental Policy Act (NEPA) of 1969, the USCG is completing an environmental analysis of the project that will be documented in an Environmental Assessment (EA). The EA will evaluate the possible environmental consequences of the following alternative actions:

1. *Alternative A* – This is a “Main Street” approach where a new community center buildings and parking will be clustered. This alternative retains most existing housing and minimizes new construction and new streets. Under Alternative A, 98 housing units would be repaired, 88 housing units would be demolished, 38 existing housing units would remain with no renovation, and 50 new housing units would be constructed. The entirety of La Plaza would be demolished.

2. *Alternative G (Proposed Action)* – This is a “Town Square” approach where four L-shaped community buildings will create a town square. It features a new recreational field and parking. This alternative also features some retained existing housing units and a number of new housing units and maximizes space for future development. Under Alternative G, 97 housing units would be repaired, 86 housing units would be demolished, 41 housing units would remain with no renovation, and 24 new housing units in 12 duplexes and a 34-room UPH would be constructed. The entirety of La Plaza would be demolished.





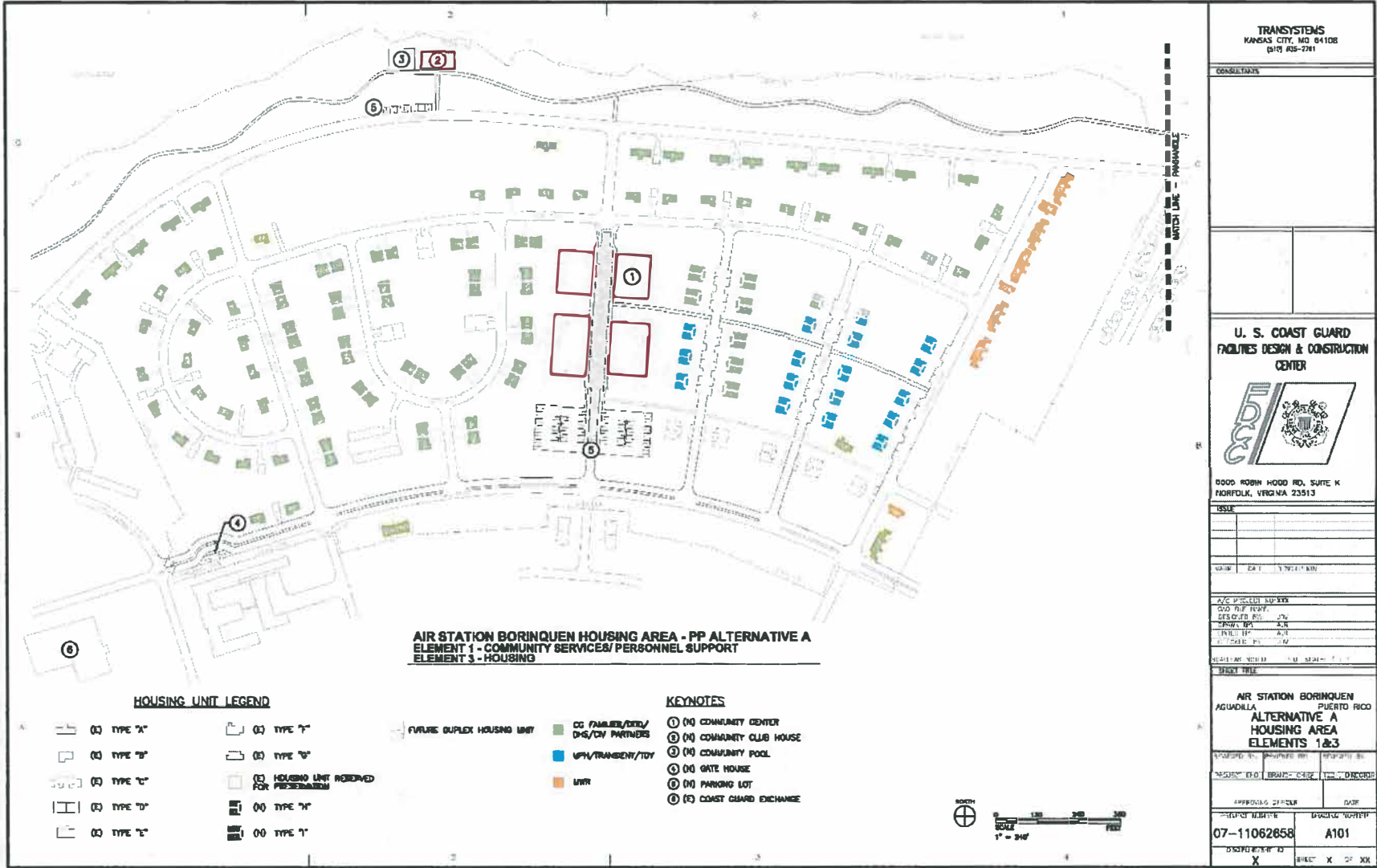


Figure 1-1.3 Alternative A Site Plan

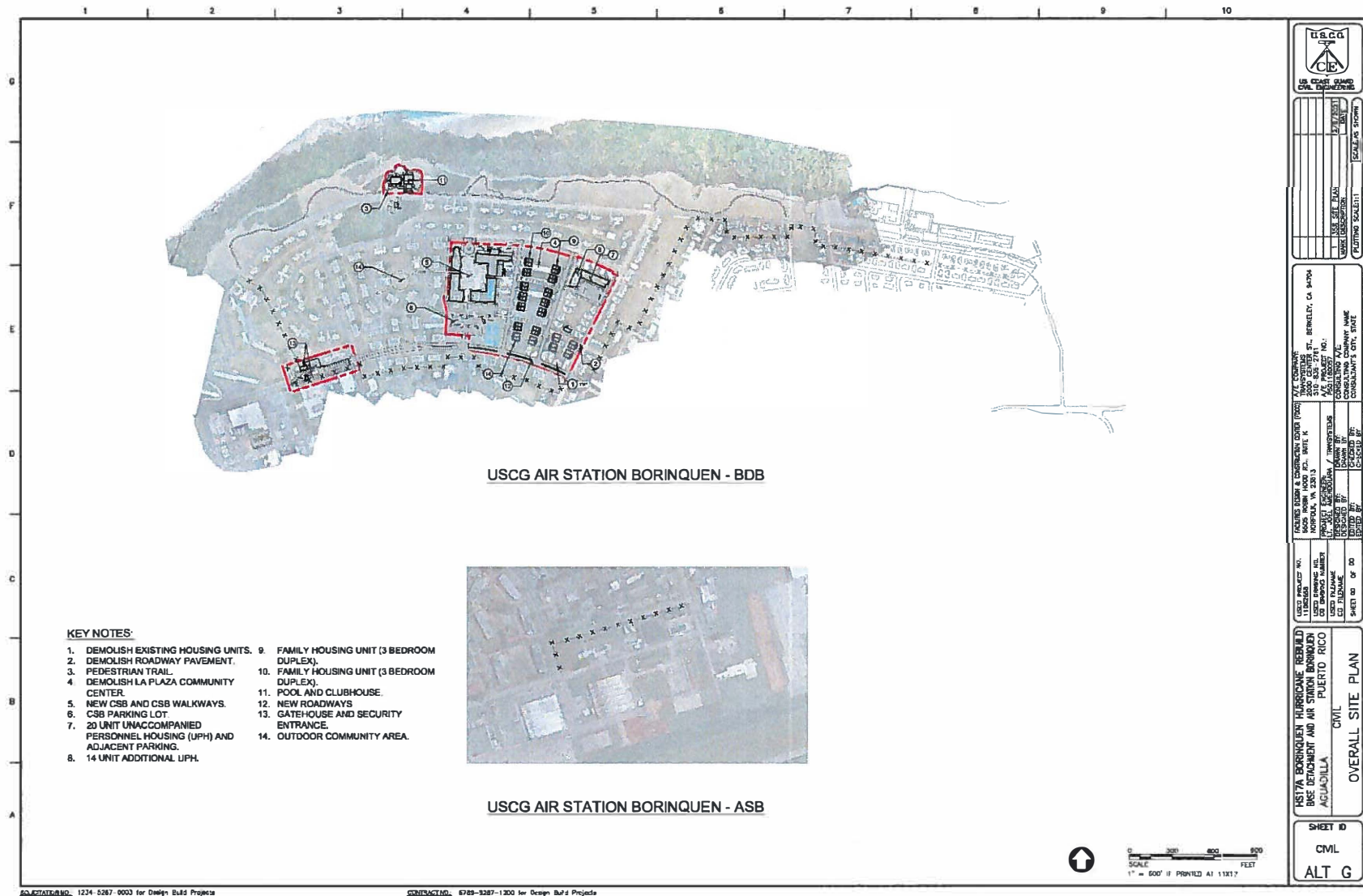


Figure 1-1.4 Proposed Action Alternative G Site Plan



# GOVERNMENT OF PUERTO RICO

Department of Natural and Environmental Resources

July 6, 2021

CAPT J F BARRESI  
FACILITIES DESIGN AND CONSTRUCTION CENTER  
U S COAST GUARD  
5505 ROBIN HOOD RD STE K  
NORFOLK VA 23513-2431

ATTN: Eng. Richard D. Hylton  
(rick.d.hylton@uscg.mil)

Dear Captain Barresi:

**Repair and Replacement of Hurricane Damaged Facilities  
Base Detachment Borinquen and Air Station Borinquen  
Maleza Ward, Aguadilla**

**File No. O-CO-OTR10-SJ-02408-10062021**

The Department of Natural and Environmental Resources (DNER) has reviewed the documents submitted for the above subject matter. The U.S. Coast Guard (USCG) Facilities Design and Construction Center proposes a construction and resiliency project at Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB). According to your letter of May 19, 2021, due to hurricanes Irma and María (occurring on September 6 and 20, 2017, respectively), many of the structures at BDB and ASB sustained extensive damages affecting their operational ability and the performance of their intended missions. Therefore, the project calls for restoring damaged facilities, bringing buildings and infrastructure up to current standards, and increase the resiliency of these facilities and infrastructure to withstand future storm events or even unscheduled utility outages. In addition, there will be an upgrading of the potable water, stormwater and wastewater systems. As stated in your letter, this project will be considered as a redevelopment project, since both BDB and ASB are fully developed.

Through our review, from the standpoint of natural resources, we find that the proposed works will be performed over the existing BDB and ASB footprints, which are not proposed for expansion, and that these works will not entail the creation of new or additional footprints. In consequence, no ecological features will be affected at both BDB and ASB.

Therefore, the DNER, in recognizing the need and importance of the proposed works, has no objection to this project. However, the project must comply with the following:

- The project must comply with Rule 3.4.1 (Unique Incidental Operational Permit or "*Permiso Único Incidental Operacional*"), and Sections 5.1.9.3 (Stormwater Management) and 5.1.9.4 (Stormwater Works) of the Joint Permit Regulation of 2020 (Regulation No. 9233, effective as of January 2, 2021), as adopted by the Puerto Rico Planning Board (hereafter, JP). For stormwater management, measures should be taken to avoid erosion and the movement of materials and debris to lower topographic elevations.



- According to the “*Information for Planning and Consultation*” (IPaC) web page of the U.S. Fish and Wildlife Service (USFWS) (<https://ecos.fws.gov/ipac/>), the project is located within the range of the endangered, ESA-listed Puerto Rican Boa (*Chilabothrus inornatus*). Note that the Boa is also protected under Act 241 of September 15, 1999 (in Spanish, “*Nueva Ley de Vida Silvestre*”; Act 241-1999). If Boa individuals are found within the project area during its development phase, project work must be stopped immediately, so that they can be relocated by DNER biologists or members of the DNER Ranger Corps (“*Cuerpo de Vigilantes*”), or by professional-contract biologists acting as *agents* for the DNER for that purpose. Relocations must occur not more than 24 hours following the sighting (or by the end of the next workday) and, to the extent possible, must be to lands near the project area.
- All surplus construction materials and debris must be removed from the project sites as soon as possible, especially considering the nature of the ASB facility (which is located close to Runway 8-26 of the Rafael Hernández Airport), as well as safety and security concerns. These materials and debris should be disposed of in a certified sanitary landfill or other approved and certified solid waste disposal facility, capable of receiving and handling these waste types.

This endorsement only applies to the statement of facts and the data as presented and reviewed in this case, and the Secretary reserves the right to reassess, vary or modify it at any moment prior to permit issuance or to the corresponding administrative action by the applicant, when new, specific official information comes to light stating that the applicable law or the environmental conditions at the site have changed substantially, or when the original endorsement was issued under false and/or fraudulent assumptions.

Cordially,

Eng. Luis Sierra  
Assistant Secretary  
Office of the Assistant Secretary of Permits, Endorsements and Specialized Services

LS/GFS/LDBB/ldb



## Appendix E-5: Federal Aviation Administration

U.S. Department of  
Homeland Security  
**United States  
Coast Guard**



Commanding Officer  
United States Coast Guard  
Facilities Design and Construction Center

5505 Robin Hood Road, Suite K  
Norfolk, VA 23513-2431  
Phone: 757-852-3404  
Fax: 757-852-3495

11000

**MAY 19 2021**

Mr. Larry Clark, ADO Manager  
Federal Aviation Administration  
Atlanta Airports District Office  
1701 Columbia Avenue, Suite 2201  
College Park, Georgia 30337

Greetings Mr. Clark,


The U.S. Coast Guard (USCG) Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) are located in Aguadilla, Puerto Rico. These facilities suffered extensive damage from Hurricanes Irma and Maria. The USCG plans to construct this project so that BDB and ASB may be able to meet their missions by remaining fully operational during a storm even or unscheduled utility outage. This project is considered a redevelopment project with potentially minor changes in the number of personnel proposed at the facility.

The scope of the work of the proposed project includes: restoring damaged facilities, bringing buildings and infrastructure up to current standards, and increasing the resiliency of facilities and infrastructure so they may withstand storm events. In addition to these refurbishments, the potable water, stormwater, and wastewater systems will all be upgraded.

As part of our initial planning and in accordance with the National Environmental Policy Act (NEPA) of 1969, the USCG is completing an environmental assessment. Please find enclosed additional information regarding the project description. We respectfully request you provide any project comments you may have to Mr. Richard Hylton either via email at [rick.d.hylton@uscg.mil](mailto:rick.d.hylton@uscg.mil) or by mail at U.S. Coast Guard, Facilities Design and Construction Center, 5505 Robin Hood Road, Suite K, Norfolk, VA 23513.

Thank you for your assistance with this critical USCG project.

Sincerely,

  
J. F. BARRESI  
Captain, U. S. Coast Guard

Enclosure: (1) Project Scope Description

**Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency  
U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen  
Aguadilla, Puerto Rico**

**Project Scope Description**

In September 2017, Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) suffered extensive damage to its many facilities from Hurricanes Irma and Maria. This damage severely affected the Coast Guard's ability to efficiently perform its missions, such as, search and rescue, law enforcement, aerial support for navigation aid, and logistics support. In addition to the damage, many structures and utilities at BDB are dated and no longer serve their intended purpose or retain their proper function after a major event, such as a hurricane. The Proposed Action is necessary in order to ensure the BDB and ASB are able to meet their missions by remaining fully operational during a storm event or unscheduled utility outage. Additionally, the project is needed to provide the appropriate number of safe and adequately sized housing units to meet current and projected future BSB and ASB needs.

The scope of work for the Proposed Action includes work within BDB and ASB existing compound area as follows:

1. Construct a new Community Services/Personnel Support Building;
2. Upgrade the resiliency of the electrical distribution system serving both the BDB Housing and ASB Areas;
3. Rebuild and/or repair housing units to meet resiliency thresholds;
4. Upgrade the water resiliency storage systems to meet resiliency thresholds;
5. Design a stormwater drainage solution for the BDB Housing Area to meet resiliency thresholds; and
6. Rebuild and/or construct new sanitary sewer system at BDB Housing Area.

The general project site and specific work areas are showing on the attached figures:

Figure 1-1.1 Project Location Map

Figure 1-1.2 Project Areas

Figure 1-1.3 Alternative A Site Plan

Figure 1-1.4 Proposed Action Alternative G Site Plan

In accordance with the National Environmental Policy Act (NEPA) of 1969, the USCG is completing an environmental analysis of the project that will be documented in an Environmental Assessment (EA). The EA will evaluate the possible environmental consequences of the following alternative actions:

1. *Alternative A* – This is a “Main Street” approach where a new community center buildings and parking will be clustered. This alternative retains most existing housing and minimizes new construction and new streets. Under Alternative A, 98 housing units would be repaired, 88 housing units would be demolished, 38 existing housing units would remain with no renovation, and 50 new housing units would be constructed. The entirety of La Plaza would be demolished.

2. *Alternative G (Proposed Action)* - This is a "Town Square" approach where four L-shaped community buildings will create a town square. It features a new recreational field and parking. This alternative also features some retained existing housing units and a number of new housing units and maximizes space for future development. Under Alternative G, 97 housing units would be repaired, 86 housing units would be demolished, 41 housing units would remain with no renovation, and 24 new housing units in 12 duplexes and a 34-room UPH would be constructed. The entirety of La Plaza would be demolished.



**Figure 1.1-1 Project Location**  
 Environmental Assessment for Hurricane Execution Plan - Shore  
 Air Station Borinquen, Aguadilla, Puerto Rico



**Figure 1.1-2 Project Areas**

Environmental Assessment for Hurricane Execution Plan - Shore  
 Air Station Borinquen, Aguadilla, Puerto Rico



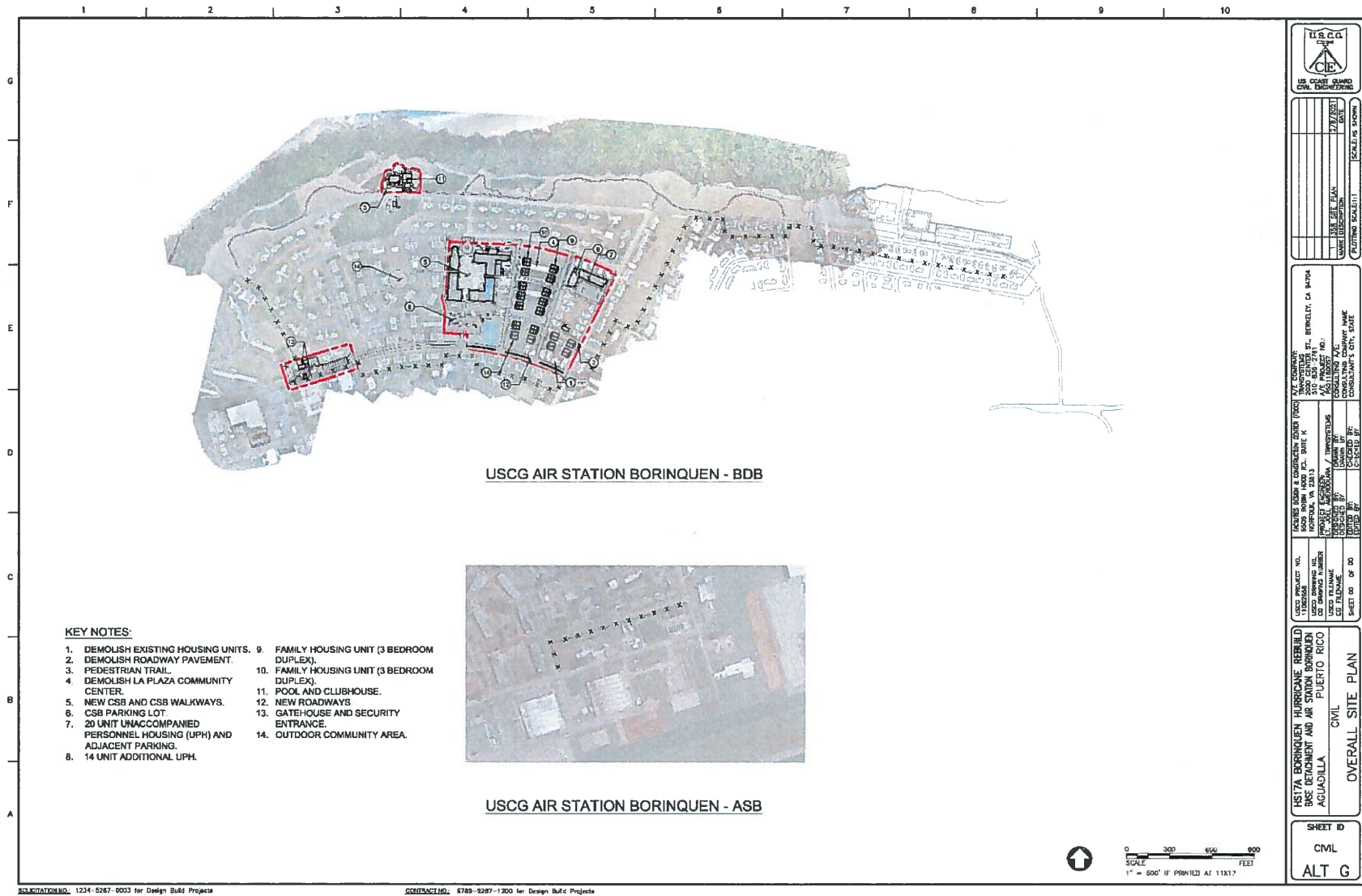


Figure 1-1.4 Proposed Action Alternative G Site Plan



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Atlanta Airports District Office  
1701 Columbia Ave.  
Atlanta, GA 30337  
(404) 305-6799 FAX: (404) 305-6798

June 14, 2021

Mr. Richard Hylton  
U.S. Coast Guard  
Facilities Design and Construction Center  
5505 Robin Hood Road, Suite K  
Norfolk, VA 23513

Dear Mr. Hylton:

We received your letter dated March 19, 2021 to Mr. Larry Clark, FAA ADO Manager soliciting comment on the U.S. Coast Guard Base Detachment Borinquen (BDB) and the Air Station Borinquen (ASB) located in Aguadilla, Puerto Rico. The proposed redevelopment project consists of restoring damaged facilities, bringing buildings and infrastructure up to current standards, increasing the resiliency of facilities and infrastructure. Upgrades to potable water, stormwater and wastewater systems are also included.

Our comments concerning the proposal are as follows:

Last year the FAA issued a Finding of No Significant Impact (FONSI) for construction of a new permanent Runway 8-26 south of the existing runway. In coordination with the Puerto Rico State Historic Preservation Office (PRSHPO), the FAA concurred in the PRSHPO's position that the entire airport is eligible for listing as an historic district and developed a Memorandum of Agreement (MOA). Therefore we recommend that your coordination outreach include the PRSHPO for comment.

Under Federal Regulation Title 14 Part 77, any person/organization who intends to sponsor construction or alteration which exceeds surfaces as described in § 77.9 must notify the FAA Administrator. This applies to all obstruction, whether permanent or temporary such as a building or crane. For more information, please see the following link:

<https://www.faa.gov/airports/central/engineering/part77/>

Thank you for the opportunity to review the scope of work. Please contact me at [Lee.Kyker@faa.gov](mailto:Lee.Kyker@faa.gov) if you have any questions.

Sincerely,

*Lee Kyker*

Lee Kyker  
Environmental Specialist



**Appendix E-6: Municipality of Aguadilla**

U.S. Department of  
Homeland Security  
  
United States  
Coast Guard



Commanding Officer  
United States Coast Guard  
Facilities Design and Construction Center

5505 Robin Hood Road, Suite K  
Norfolk, VA 23513-2431  
Phone: 757-852-3404  
Fax: 757-852-3495

11000

MAY 19 2021

Mr. Carlos Méndez Martínez, Mayor  
Municipality of Aguadilla  
City Hall Aguadilla  
P.O. Box 1008  
Aguadilla PR 006057

Greetings Mr. Martínez,


The U.S. Coast Guard (USCG) Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) are located in Aguadilla, Puerto Rico. These facilities suffered extensive damage from Hurricanes Irma and Maria. The USCG plans to construct this project so that BDB and ASB may be able to meet their missions by remaining fully operational during a storm even or unscheduled utility outage. This project is considered a redevelopment project with potentially minor changes in the number of personnel proposed at the facility.

The scope of the work of the proposed project includes: restoring damaged facilities, bringing buildings and infrastructure up to current standards, and increasing the resiliency of facilities and infrastructure so they may withstand storm events. In addition to these refurbishments, the potable water, stormwater, and wastewater systems will all be upgraded.

As part of our initial planning and in accordance with the National Environmental Policy Act (NEPA) of 1969, the USCG is completing an environmental assessment. Please find enclosed additional information regarding the project description. We respectfully request you provide any project comments you may have to Mr. Richard Hylton either via email at [rick.d.hylton@uscg.mil](mailto:rick.d.hylton@uscg.mil) or by mail at U.S. Coast Guard, Facilities Design and Construction Center, 5505 Robin Hood Road, Suite K, Norfolk, VA 23513.

Thank you for your assistance with this critical USCG project.

Sincerely,

  
J. F. BARRESI  
Captain, U. S. Coast Guard

Enclosure: (1) Project Scope Description

**Repair and Replacement of Hurricane Damaged Facilities and for Increased Resiliency  
U.S. Coast Guard Base Detachment Borinquen and Air Station Borinquen  
Aguadilla, Puerto Rico**

**Project Scope Description**

In September 2017, Base Detachment Borinquen (BDB) and Air Station Borinquen (ASB) suffered extensive damage to its many facilities from Hurricanes Irma and Maria. This damage severely affected the Coast Guard's ability to efficiently perform its missions, such as, search and rescue, law enforcement, aerial support for navigation aid, and logistics support. In addition to the damage, many structures and utilities at BDB are dated and no longer serve their intended purpose or retain their proper function after a major event, such as a hurricane. The Proposed Action is necessary in order to ensure the BDB and ASB are able to meet their missions by remaining fully operational during a storm event or unscheduled utility outage. Additionally, the project is needed to provide the appropriate number of safe and adequately sized housing units to meet current and projected future BSB and ASB needs.

The scope of work for the Proposed Action includes work within BDB and ASB existing compound area as follows:

1. Construct a new Community Services/Personnel Support Building;
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3. Rebuild and/or repair housing units to meet resiliency thresholds;
4. Upgrade the water resiliency storage systems to meet resiliency thresholds;
5. Design a stormwater drainage solution for the BDB Housing Area to meet resiliency thresholds; and
6. Rebuild and/or construct new sanitary sewer system at BDB Housing Area.

The general project site and specific work areas are showing on the attached figures:

Figure 1-1.1 Project Location Map

Figure 1-1.2 Project Areas

Figure 1-1.3 Alternative A Site Plan

Figure 1-1.4 Proposed Action Alternative G Site Plan

In accordance with the National Environmental Policy Act (NEPA) of 1969, the USCG is completing an environmental analysis of the project that will be documented in an Environmental Assessment (EA). The EA will evaluate the possible environmental consequences of the following alternative actions:

1. *Alternative A* – This is a “Main Street” approach where a new community center buildings and parking will be clustered. This alternative retains most existing housing and minimizes new construction and new streets. Under Alternative A, 98 housing units would be repaired, 88 housing units would be demolished, 38 existing housing units would remain with no renovation, and 50 new housing units would be constructed. The entirety of La Plaza would be demolished.

2. *Alternative G (Proposed Action)* - This is a "Town Square" approach where four L-shaped community buildings will create a town square. It features a new recreational field and parking. This alternative also features some retained existing housing units and a number of new housing units and maximizes space for future development. Under Alternative G, 97 housing units would be repaired, 86 housing units would be demolished, 41 housing units would remain with no renovation, and 24 new housing units in 12 duplexes and a 34-room UPH would be constructed. The entirety of La Plaza would be demolished.



**Figure 1.1-1 Project Location**  
 Environmental Assessment for Hurricane Execution Plan - Shore  
 Air Station Borinquen, Aguadilla, Puerto Rico



**Project Areas**

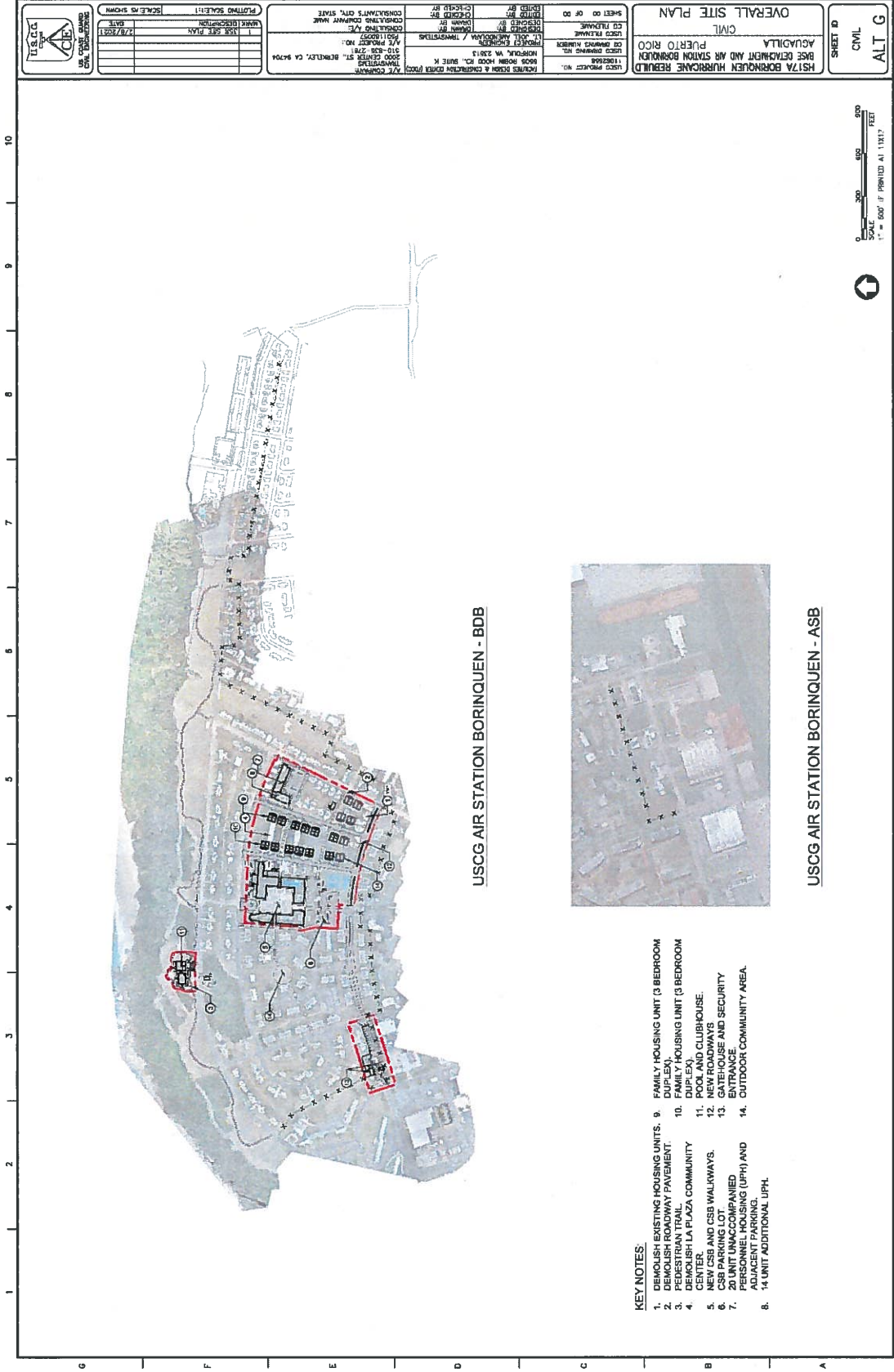
- Air Station
- Housing
- Panhandle
- Existing Fenceline

**Figure 1.1-2 Project Areas**  
 Environmental Assessment for Hurricane Execution Plan - Shore  
 Air Station Borinquen, Aguadilla, Puerto Rico

1 inch = 800 feet  
 0 550 1,100 Feet

**TranSystems**  
 EXPERIENCE | INNOVATION





**KEY NOTES:**

1. DEMOLISH EXISTING HOUSING UNITS.
2. DEMOLISH ROADWAY PAVEMENT.
3. DEMOLISH TRAIL.
4. CENTER FOR LA PUCA COMMUNITY CENTER.
5. NEW CSB AND CSB WALKWAYS.
6. CSB PARKING LOT.
7. 20 UNIT UNACCOMPANIED PARKING (UPH) AND ADJACENT PARKING AREA.
8. 14 UNIT ADDITIONAL UPH.
9. FAMILY HOUSING UNIT (3 BEDROOM DUPLEX).
10. FAMILY HOUSING UNIT (3 BEDROOM TRIPLE).
11. POOL AND CLUBHOUSE.
12. NEW ROADWAYS.
13. GATEHOUSE AND SECURITY ENTRANCE.
14. OUTDOOR COMMUNITY AREA.

SCALE: 1" = 600' IF PRINTED AT 11X17"

1234 1267 603 for Design Build Projects

202505102L 1234 1267 603 for Design Build Projects

Figure 1-1.4 Proposed Action Alternative G Site Plan

23 de junio de 2021

**A: Quien Pueda Interesar**


**RE: Evaluación Proyectos de Reconstrucción 1 y 2 en Estación Aérea, el Coast Guard Exchange y la Zona Residencial dentro de las facilidades del Coast Guard en la Antigua Base Ramey.**

De acuerdo con el Reglamento Conjunto para la Evaluación y Expedición de Permisos Relacionados al Desarrollo, Uso de Terrenos y Operación de Negocios mejor conocido como REGLAMENTO CONJUNTO 2020 (RC2020), con vigencia del 2 de enero de 2021, debemos informar que los proyectos dentro de las propiedades o jurisdicciones del Gobierno de los Estados Unidos de América le aplica la siguiente Regla:

**REGLA 1.6.4 APLICABILIDAD**

- a. Este Reglamento Conjunto aplicará a:
  1. Toda la extensión territorial de Puerto Rico y a toda persona natural y jurídica, pública o privada, o cualquier agrupación de ellas, **sobre las cuales el Gobierno de Puerto Rico tenga jurisdicción**; y
  2. Regirá todos los aspectos procesales relacionados a la evaluación y adjudicación de una solicitud por parte de la OGPe, los Municipios Autónomos con Jerarquía de la I a la III, del PA, y las Agencias Concernidas.
- b. Estas disposiciones **no se aplicarán** a ninguna mejora o adquisición pública autorizada, o de otro modo emprendida, **exclusivamente por el Gobierno de los Estados Unidos de América (EEUU)**.
- c. Estarán exentos de su aplicación proyectos en armonía con las disposiciones de acuerdos colaborativos o contratos ejecutados entre las Entidades Gubernamentales Concernidas o los Municipios para cuya ejecución no exista otra Entidad Gubernamental Concernida con injerencia.

Sin embargo, en todo lo relacionado a la preservación del medioambiente deberá realizar la correspondiente consulta ambiental con el Departamento de Recursos Naturales y Ambientales de Puerto Rico. Para cualquier pregunta o duda puede comunicarse con nuestra oficina a la dirección y teléfono abajo indicado.



José L. Ruiz Concepción, PE  
Director  
Oficina de Permisos  
Municipio Autónomo de Aguadilla



**Appendix E-7: Public Notices**



**Appendix E-7a: Section 106 Notification**



# El Nuevo Día

11 Dec 2020 | 33...



## AVISO PÚBLICO

La Guardia Costera de los Estados Unidos (GC) propone restaurar instalaciones afectadas por los huracanes recientes, modernizar edificios e infraestructura según los estándares y códigos de construcción vigentes y aumentar la resiliencia de sus instalaciones para resistir eventos futuros en la Base Destacamento Borinquen, Aguadilla, Puerto Rico. Toda nueva construcción, reparación, y renovación poseerá una mayor capacidad de recuperación para garantizar la capacidad de operaciones durante un evento de tormenta o de interrupción eléctrica no programada, durante períodos prolongados de tiempo, o hasta que termine la interrupción.

La Acción Propuesta propone la creación de una "Plaza Comunal" definida por cuatro nuevos edificios a lo largo de la Calle Sexta, y que además poseerá un nuevo campo recreativo y estacionamiento. La Acción Propuesta presenta una mezcla de viviendas existentes para retención junto con una cantidad de nuevas unidades de vivienda, maximizando el espacio y flexibilidad para desarrollo en el futuro. Esta acción conlleva la demolición de 64 viviendas, la retención de 118 viviendas existentes, y la construcción de 13 nuevas viviendas. La Acción Propuesta también propone la demolición de "La Plaza," un edificio histórico donde ubicó la Escuela Primaria Ramey Air Force Base. Como tal, la GC ha determinado que la Acción Propuesta afectará negativamente a propiedades elegibles para ser incluidas en el Registro Nacional de Lugares Históricos.

La GC publica este aviso de acuerdo con las regulaciones federales para la Sección 106 de la Ley de Preservación Histórica Nacional del Código 36 de Regulaciones Federales, Parte 800.6(a)(4). Por este medio, se invita respetuosamente a toda parte interesada en comentar sobre los posibles efectos del proyecto en las propiedades culturales o históricas a enviar comentarios a: USCG Facilities Design and Construction Center, Attention: Lesley Dobbins-Noble, 5505 Robin Hood Road, Suite K, Norfolk, VA 23513 dentro de 30 días de publicación de este aviso.



## PUBLIC NOTICE

The U.S. Coast Guard (USCG) proposes to restore hurricane damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities to withstand future storm events at USCG Base Detachment Borinquen in Aguadilla, Puerto Rico. All new construction, repairs, and renovation would include increased resiliency to ensure the USCG's ability to remain operational during a storm event or other unscheduled electrical outage, independent of the local utility, for extended periods of time or until the outage is over.

The Proposed Action involves a "Town Square" approach where four new community center buildings create a town square along Sixth Street, featuring a new recreational field and parking. In addition, the Proposed Action retains a combination of existing housing units along with construction of a number of new housing units, maximizing space and flexibility for future development. The Proposed Action would entail the demolition of 64 housing units, the retention of 118 existing housing units, and the construction of 13 new housing units. The Proposed Action would also entail the demolition of La Plaza, the site of the historic Ramey Air Force Base Elementary School. As such, the USCG has determined that the Proposed Action will adversely affect historic properties eligible for listing in the National Register of Historic Places.

The USCG is publishing this notice in accordance with federal regulations for Section 106 of the National Historic Preservation Act at 36 Code of Federal Regulations Part 800.6(a)(4). Parties interested in commenting on the project's potential effects on cultural or historic properties are respectfully invited to provide comments to: USCG Facilities Design and Construction Center, ATTN: Lesley Dobbins-Noble, 5505 Robin Hood Road, Suite K, Norfolk, VA 23513 within 30 days of publication of this notice.

33 EL NUEVO DÍA Viernes, 11 de diciembre de 2020



# DEAR SANTA, I'VE BEEN GOOD,

ASISTENCIA EN LA CARRETERA 24/7



**Atlas S 2.0T 2021<sup>1</sup>**  
\$409 Mensual  
21/24 MPG



**Jetta S<sup>2</sup>**  
\$275 Mensual  
30/40 MPG



**Tiguan S 2020<sup>3</sup>**  
\$340 Mensual  
22/29 MPG

0% APR  
EN MODELOS 2020\*

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flagshipvolkswagen.com

MEJOR SERVICIO, MAYOR INVENTARIO, MEJOR EXPERIENCIA



# AVISO PÚBLICO

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## Programa hipico

VIERNES/  
FRIDAY  
**11**  
DICIEMBRE/  
DECEMBER  
2020

POST TIME APROX. 2:15 PM

### EXACTA \* DAILY DOUBLE 1-2

#### 1RA. CARRERA

1200 METROS (6 Furlongs)  
Bandit Bomber (4), 118 lbs; 1:09.00  
(08-16-95)

Premio \$6,000  
Imp./Nat. Tres Años y Mayores  
MÁIDENS Reclamables \$4,000  
Sofisticado y Mr. Benitez Rec.  
\$20,000

1 E.V. Stable N. Lebron (L) KY  
Azul, mangas verde. Lleva ciruelo  
verde EV azul en espalda  
EF(la)(T) **\*BIG MAN** 120

2 Est. Bulls Farm (L) J. Esquilin  
Alexis Rivera (P) (L) KY  
Azul y anaranjado JTR negro en esp.  
EFGs(la) **\*TWO BULLS** 116

3 Establo Naranjito Francisco Maysonett  
O. Osorio (P) (L) FL  
Azul, mangas naranja con aro azul  
3-C-Mc: Lianison en Simple Symphony  
**\*KIDNOW** 116

4 Sonata Stable \*\*Maria Maysonett  
V. Garcia Orozco (P) (L) Pot. Hermosura  
Verde con aro azul y esp.  
EFGs **SOFTICADO** 109

5 Hernandez Racing Juan Carlos Diaz  
Avel J. Cruz (P) (L) KY  
Negra, mangas color oro. GGG en espalda  
EFG(T) **\*STRONG LEGACY** 117

6 Arca de Noe Jose M. Morales (L) KY  
Rosa neon. Sardinetas verde en mangas.  
3-A-Mc: Mr. Indy en La Sangre  
EFG(la) **MR. BENITEZ** 116

Un producto de InCompass Solutions, Inc.

1 2 3 4 5 6 7

Morning Line 1 5 3 6 3 5 3 4 6 2 1 6

Revista Hipica 1 5 4 5 6 3 3 6 7 2 1 3 4 2 1 4 8 9 4 5 6

Luis F. Sanchez 1 5 3 5 6 3 6 3 7 2 1 4 4 2 5 4 9 6 6 4 1

Alfredo Arias 1 5 2 6 3 1 6 4 7 2 1 3 4 2 5 9 4 7 4 6 1

Melvin Torres Ortiz 6 2 1 3 5 6 6 4 2 2 4 1 5 7 6 1 2 8 6 4 7

### VALIDA POOL 6

POST TIME APROX. 2:45 PM

#### PICK 6 \* EXACTA \* DAILY DOUBLE 2-3

#### 2DA. CARRERA

1300 METROS (6 1/2 Furlongs)  
Criador (4), 116 lbs; 1:16.10 (07-22-07)

Premio \$6,000  
Nativos Cuatro Años y Mayores  
Reclamables \$4,000

1 R. Racing Sashá Ortiz  
V. Garcia Orozco (P) (L) Hacienda Los Nietos  
Azul, mangas con aros. APR frente y R en  
espalda  
EFGs(Go) **IBACARO** 117

2 Fonseca Stable \*\*Alondra Maldonado  
L.O. Colorado (P) (L) Jorge R. Jimenez  
Camisa en franjas azul y rojas. Mangas azul  
con aro rojo y puños blancos  
EF(la)(T) **MR. CORONEL** 109

3 B & W Racing Jorge I. Velez  
Luis Adorno (L) Wilfredo Alvarez  
Rosa turcsina, mangas blancas. B en círculo  
blanco en centro  
EF(la)(T) **EL PELOTERO** 116

4 Malave Racing \*\*Maria Maysonett  
Santos Martinez (L) Pot. Los Llanos  
Amarilla, mangas con aros azul marino M  
azul en espalda  
EF(la) **CONDominio** 109

5 Denian Stable Edwin Castro  
V. Garcia Orozco (P) (L) Guillermo Cotto  
Naranja, cuello negro. DENIAN en espalda  
EF(la)(T) **TREN URBANO** 117

6 Abar Racing Jomar Garcia  
H. López (L) Pot. Los Llanos  
Amarilla; "PR" frente, "Abar" esp  
EF(la) **EL PRODUCTOR** 118

Un producto de InCompass Solutions, Inc.

1 2 3 4 5 6 7

1 5 3 6 3 5 3 4 6 2 1 6

1 5 4 5 6 3 3 6 7 2 1 3 4 2 1 4 8 9 4 5 6

1 5 3 5 6 3 6 3 7 2 1 4 4 2 5 4 9 6 6 4 1

1 5 2 6 3 1 6 4 7 2 1 3 4 2 5 9 4 7 4 6 1

6 2 1 3 5 6 6 4 2 2 4 1 5 7 6 1 2 8 6 4 7

### VALIDA POOL 6

POST TIME APROX. 3:10 PM

#### PICK 5 (3-7) \* EXACTA \* TRIFECTA

#### \* DAILY DOUBLE 3-4

#### 3RA. CARRERA

1 1/16 MILLA (1 1/16 Mile)  
Shake Shake Shake (4), 116 lbs; 1:42.80  
(06-25-78)

Premio \$6,500  
Importados Tres Años  
Reclamables \$8,000

1 Establo Astroboy Joshua Rodriguez  
E. Texidor, Jr. (P) (L) FL  
Marron, mgs amarilla ASTROBOY espalda  
EFGs(la) **\*EMERGENCY CODE116**

2 C.A.C., Inc. \*\*Luis F. Rivera  
A. Rondón (P) (L) KY  
Azul marino, aros gris en mangas. Diamante  
gris frente y espalda  
F(la) **\*ARCH D'AMOUR** 113

3 Sebastian Racing Juan Carlos Diaz  
Jose Luis Diaz (L) FL  
Rosa y negra mangas rosas  
EF **\*RUN BLACK RUN** 117

4 JAL Racing Edwin Castro  
Kevin Velez (L) KY  
Negra, aros verde y azul mangas JAL en  
espalda  
EFGs(la)(T) **\*BLAKE** 120

5 Jarab Racing Jorge I. Velez  
Maximo Gomez (P) (L) KY  
Blanca, mangas anaranjado, turquesa y  
verde. JARAB en espalda  
EF(la)(T) **\*J. C'S DYNASTY** 116

6 G.C.A. Racing Nicky Figueroa  
N. Lebron (L) KY  
Amarilla, banda azul frente y espalda. G  
azul en frente  
EFGs(la)(T) **\*ORION'S TEMPLE** 120

7 Est. Baru, Inc. Joshua Navarro  
E. Texidor, Jr. (P) (L) KY  
Rosa y amarilla  
EF(la)(T) **\*THREE IN A YEAR** 116

Un producto de InCompass Solutions, Inc.

1 2 3 4 5 6 7

4 2 7 7 8 9 4 6 1

4 2 1 4 8 9 4 5 6

4 2 5 4 9 6 6 4 1

4 2 5 9 4 7 4 6 1

5 7 6 1 2 8 6 4 7

### VALIDA POOL 6

POST TIME APROX. 3:40 PM

#### PICK 4 (4-7) \* PICK 3

#### (4-6) \* EXACTA \* TRIFECTA \* DAILY DOUBLE 4-5 \*

#### 4TA. CARRERA

1300 METROS (6 1/2 Furlongs)  
Criador (4), 116 lbs; 1:16.10 (07-22-07)

Premio \$11,500  
Nativos Tres Años  
No Reclamables

1 Sonata Stable Angel Diaz  
Raymond Morales (P) (L) Maria M. Ubarri  
Azul marino, aros gris en mangas. Diamante  
gris frente y espalda  
Vde diamante naranja fle y esp  
EF(la) **CABILDERO** 116

2 Denian Stable Juan Carlos Diaz  
Jose Dan Velez (P) (L) Eduardo Maldonado  
Verde con aro amarillo. EVR esp  
EFGs **LOVELY MERY** 117

3 Est. Villa Real Joshua Rodriguez  
E. Texidor, Jr. (P) (L) Hacienda Los Nietos  
Verde con aro amarillo. EVR esp  
EFGs(la) **PROFETICA** 116

4 E.V. Stable Nicky Figueroa  
N. Lebron (L) Haras Sta. Isabel  
Azul royal, mangas verde. Lleva ciruelo  
verde EV azul en espalda  
EF(la) **SEGUIAS WAY** 116

5 Sonata Stable Jean C. Diaz  
Raymond Morales (P) (L) Haras Nortena  
Vde diamante naranja fle y esp  
EFGs(la) **DECLARADOR** 116

6 Est. Quintana Jorge G. Robles  
Maximo Gomez (P) (L) Pot. Los Llanos  
Blanca y azul "EMR" fle "Q" esp  
EFG(T) **EL AVENTURERO** 118

Un producto de InCompass Solutions, Inc.

1 2 3 4 5 6 7

4 2 7 7 8 9 4 6 1

4 2 1 4 8 9 4 5 6

4 2 5 4 9 6 6 4 1

4 2 5 9 4 7 4 6 1

5 7 6 1 2 8 6 4 7

### VALIDA POOL 6

POST TIME APROX. 4:10 PM

#### PICK 3 (5-7) \* EXACTA \* TRIFECTA

#### \* QUINELLA \* SUPERFECTA \* DAILY DOUBLE 5-6

#### 5TA. CARRERA

1 1/16 MILLA (1 1/16 Mile)  
Ribot's Verset (3), 118 lbs; 1:42.80  
(05-29-78)

Premio \$6,800  
Nativas Potrancas Tres Años  
Reclamables \$8,000

1 Est. El Señorial Angel Diaz  
Daniel Encarnacion (P) (L) Hacienda Los Nietos  
Naranja, cuadros verdes mgs fljs verde  
EFG **LIBERTADORA** 116

2 Denian Stable Juan Carlos Diaz  
V. Garcia Orozco (P) (L) Hacienda Los Nietos  
Naranja, cuello negro. DENIAN en espalda  
EFGs **LOVELY MERY** 117

3 Est. Villa Real Joshua Rodriguez  
E. Texidor, Jr. (P) (L) Hacienda Los Nietos  
Verde con aro amarillo. EVR esp  
EFGs(la) **PROFETICA** 116

4 E.V. Stable Nicky Figueroa  
N. Lebron (L) Haras Sta. Isabel  
Azul royal, mangas verde. Lleva ciruelo  
verde EV azul en espalda  
EF(la) **SEGUIAS WAY** 116

5 Sonata Stable Jean C. Diaz  
Raymond Morales (P) (L) Haras Nortena  
Vde diamante naranja fle y esp  
EFGs(la) **DECLARADOR** 116

6 Est. Quintana Jorge G. Robles  
Maximo Gomez (P) (L) Pot. Los Llanos  
Blanca y azul "EMR" fle "Q" esp  
EFG(T) **EL AVENTURERO** 118

Un producto de InCompass Solutions, Inc.

1 2 3 4 5 6 7

4 2 7 7 8 9 4 6 1

4 2 1 4 8 9 4 5 6

4 2 5 4 9 6 6 4 1

4 2 5 9 4 7 4 6 1

5 7 6 1 2 8 6 4 7

### VALIDA POOL 6

POST TIME APROX. 4:40 PM

#### QUINELLA \* TRIFECTA \* SUPERFECTA \* DAILY DOUBLE 6-7

#### 6TA. CARRERA

1 1/16 MILLA (1 1/16 Mile)  
Shake Shake Shake (4), 116 lbs; 1:42.80  
(06-25-78)

Premio \$6,000  
Importadas Yeguas Cuatro Años y  
Mayores  
Reclamables \$4,000

1 Los Juanes Angel Diaz  
Juan A. Morales (L) NY  
Rosa y blanca. LOS JUANES frente. JOSE  
JUAN, JUAN JOSE, JUAN ANTONIO en  
espalda  
EFGs **\*BROOKLYN GAL** 116

2 Molinari Racing Juan Carlos Diaz  
A. Molinari (L) NY  
Amarilla y blanca, diamantes amarillos en  
mangas  
EF(la)(Go) **\*BOOMERANG BECKY** 117

3 Est. San Judas Tadeo Anthony Rodriguez  
S. Correa (P) (L) FL  
Amarilla, tachs naranja "SE" espalda  
EFG **\*LADY PLAYER** 109

4 Chiky Santiago Sashá Ortiz  
A. P. Salinas (L) NY  
Rosa, Cruz blanca en frente  
EF **\*DESCARADA** 117

5 Est. Los Santos Jorge I. Velez  
Justo Figueroa (L) FL  
Blanca con aro rojo y mangas con aros rojos  
EFGs(la) **\*STRICKLY WICKED** 116

6 Pucho Morales Stable Kernel Pellet  
A. L. Andino (L) PA  
Blanca. PM al frente. Franjas negras,  
amarillas y rojas en espalda  
EF **\*OFRENDA** 118

7 Est. Llavona Antonio Jomar Garcia  
Jason Lisboa (P) (L) FL  
Azul y rosa. Mangas azul y rosa. JLL en  
espalda  
EFGs(la) **\*CHAPECOENSE** 118

8 Three Kings Racing Jean C. Diaz  
Juan P. Rios (P) (L) NY  
Negra y roja Three Kings Racing en espalda  
EFGs(la) **\*MISS TAPIZAR** 120

9 D&M Stable Jorge G. Robles  
Jose L. Almedina (L) KY  
Negra, cuello amarillo. DM en cuadro en  
espalda  
EF(la) **\*TAPIZAR STAR** 118

Un producto de InCompass Solutions, Inc.

1 2 3 4 5 6 7

4 2 7 7 8 9 4 6 1

4 2 1 4 8 9 4 5 6

4 2 5 4 9 6 6 4 1

4 2 5 9 4 7 4 6 1

5 7 6 1 2 8 6 4 7

### VALIDA POOL 6

POST TIME APROX. 5:10 PM

#### EXACTA \* TRIFECTA \* SUPERFECTA

#### \* SUPERFECTA

#### 7MA. CARRERA

1300 METROS (6 1/2 Furlongs)  
Their Approval (4), 120 lbs; 1:15.14  
(02-16-09)

Premio \$15,200  
Importadas Potrancas Dos Años  
No Reclamables

1 Willie Racing Juan Carlos Diaz  
E.A. Betancourt (P) (L) NY  
Azul y naranja cdo's mgs azul "LERO" esp  
EFGs(la) **\*THE GIRL OF N. Y.** 117

2 Jarab Racing Jorge G. Robles  
Maximo Gomez (P) (L) KY  
Blanca, mangas anaranjado, turquesa y  
verde. JARAB en espalda  
EF(la) **\*LALILA** 118

3 Guillermo Berrios Erik Ramirez  
Samuel Diaz (P) (L) KY  
Cuadros verde y anaranjados, mangas  
negras  
EFGs **\*LOVELY DANA** 116

4 Establo Veterano Edwin Carrasquillo  
Ghislaine Henriquez (P) (L) KY  
Gris y roja, aros múltiples. V en espalda  
EF **\*GEM VALLEY** 116

5 Guillermo Berrios Jean C. Diaz  
Samuel Diaz (P) (L) KY  
Cuadros verde y anaranjados, mangas  
negras  
FGs **\*RIGHT PRICE** 116

6 Est. Comerio Javier Santiago  
Maximo Gomez (P) (L) NY  
Azul, "Comerio Racing" esp  
F **\*ALWAYS COMERIO** 116

7 Maletero Racing Nicky Figueroa  
Marie Maldonado (L) FL  
Oro y franja negra en centro Signos \$\$ en  
frente y maleta negra en espalda  
EFGs(la) **\*LADY AKIRAH** 116

Un producto de InCompass Solutions, Inc.

1 2 3 4 5 6 7

4 2 7 7 8 9 4 6 1

4 2 1 4 8 9 4 5 6

4 2 5 4 9 6 6 4 1

4 2 5 9 4 7 4 6 1

5 7 6 1 2 8 6 4 7

# Red Cross visit to Guantánamo limited by virus measures

By CAROL ROSENBERG

Delegates from the International Committee of the Red Cross visiting Guantánamo Bay, Cuba, for the first time during the coronavirus pandemic were unable to meet some of prisoners held there because restrictions imposed by the U.S. military made it impossible for the two sides to converse, lawyers for the prisoners say.

The delegation from the Red Cross, which seeks humane conditions for prisoners of war around the world, left the base Tuesday after a three-week visit that began with two weeks of quarantine, which the military requires of all visitors during the COVID-19 crisis.

The Red Cross canceled two visits earlier this year because of the pandemic, depriving the prisoners of their only contact with an independent outside organization monitoring the conditions in which they are held.



An older prisoner in the Guantánamo Bay detention center, in Guantánamo Bay, Cuba, April 17, 2019.

During the visits with detainees that began last week, the first by the organization since March, prisoners and Red Cross delegates were

kept 6 feet apart in a meeting room, separated by a Plexiglas barrier. Prisoners and delegates both wore a prison-issue hooded white biohazard jumpsuits and N95 respirators.

Lawyers for several prisoners at the base's classified compound, Camp 7, said one or two prisoners did meet with a Red Cross delegate but found that health protections imposed by the military made it impossible to hold a conversation. Soon after, the rest of the prisoners had their appointments canceled.

Elizabeth Gorman Shaw, a spokeswoman for the International Red Cross, which considers its conversations with both the prisoners and the military confidential, declined to discuss the problems that arose during the meetings, but said the delegation "conducted its quarterly visit to Guantánamo Bay to the best of its ability under COVID-related constraints."

The organization has visited the prison at least four times a year since it opened in January 2002 but canceled two quarterly visits this year because of the pandemic.

A prison spokesman at the U.S. Southern Command in Doral, Florida, Maj. Gregory J. McElwain, said the decision to combine personal protective equipment with "engineering controls, such as Plexiglas barriers" was driven by guidelines of the Centers for Disease Control and Prevention.

The prison task force of 1,500 troops "has a responsibility to maintain the health and safety of the detainees and guards," he said.

Neither the military nor the Red Cross would disclose how many of the 40 wartime detainees had scheduled appointments, and how many were canceled.

McElwain said the military made efforts to accommodate the Red Cross team.

In the spring, the military disclosed that two people on the base of 6,000 residents were infected with the virus, one of them assigned to the prison staff, but then imposed a blackout on such disclosures. The base imposed a heightened state of health alert for a week in October while it sent tests to the mainland that lawyers briefed on the scare said came back negative.

Brig. Gen. John G. Baker, a Marine defense lawyer who met with a detainee under similar conditions last month, said the distance and barriers made his conversation difficult and muffled. It was held in a meeting room that typically has both an air-conditioner and dehumidifier blowing. He was forbidden to give or show documents to the detainee.

Baker said that once he donned the prison's required attire, which included surgical booties, only his eyes and forehead could be seen,

and the same was true of the prisoner.

The detainees for the most part have been kept in a bubble of sorts since the start of the pandemic, with just two lawyers reaching the base and reduced contact with the guard force.

One prisoner wrote his lawyer in a letter this week that the Red Cross "decided to cancel the remaining appointments in protest against the exaggerated measures." The lawyer spoke on the condition of anonymity and declined to name the prisoner without first seeking his permission, which would require several days because of delayed communications between lawyers and prisoners through a secure mail system.

James Connell, a death penalty defense lawyer, said his client, Ammar al Baluchi, was among several former CIA prisoners who had an appointment with the Red Cross canceled. He said the outcome of the meeting did not bode well for Pentagon efforts to resume hearings early next year in the case of al Baluchi and four other men who are accused of conspiring in the hijackings on Sept. 11, 2001, that killed nearly 3,000 people.

"Communicating through a Plexiglas wall about complicated issues is impossible," he said. "If the ICRC can't speak to prisoners through a Plexiglas wall, how do they expect to have a court hearing through a wall?"

No proceedings have been held in the case since February. Military contractors have installed Plexiglas inside the cavernous national security courtroom, including a barrier between lawyers and the prisoners, in anticipation of the hearings starting up again before the end of the pandemic.

The prospect of resuming pretrial proceedings in the capital Sept. 11 case hit a new snag this week. Prosecutors filed a motion on Tuesday asking the Air Force judge assigned to the case to step down as unqualified because he has not served a full two years as a military judge, which is required under the rules for military commissions.

The prosecution opposed the choice of Lt. Col. Matthew N. McCall on the day he was assigned to the case, Oct. 16, and have repeatedly asked him to quit the case in notices and other court filings. Tuesday's filing explicitly asked him to either recuse himself or stop issuing rulings.

McCall, the sixth judge to handle the death penalty case since the defendants' arraignment in 2012, has extended litigation deadlines in the case in light of the virus. In effect, that postpones jury selection until after next year's anniversary of the Sept. 11 attacks.



## PUBLIC NOTICE

The U.S. Coast Guard (USCG) proposes to restore hurricane damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities to withstand future storm events at USCG Base Detachment Borinquen in Aguadilla, Puerto Rico. All new construction, repairs, and renovation would include increased resiliency to ensure the USCG's ability to remain operational during a storm event or other unscheduled electrical outage, independent of the local utility, for extended periods of time or until the outage is over.

The Proposed Action involves a "Town Square" approach where four new community center buildings create a town square along Sixth Street, featuring a new recreational field and parking. In addition, the Proposed Action retains a combination of existing housing units along with construction of a number of new housing units, maximizing space and flexibility for future development. The Proposed Action would entail the demolition of 64 housing units, the retention of 118 existing housing units, and the construction of 13 new housing units. The Proposed Action would also entail the demolition of La Plaza, the site of the historic Ramey Air Force Base Elementary School. As such, the USCG has determined that the Proposed Action will adversely affect historic properties eligible for listing in the National Register of Historic Places.

The USCG is publishing this notice in accordance with federal regulations for Section 106 of the National Historic Preservation Act at 36 Code of Federal Regulations Part 800.6(a)(4). Parties interested in commenting on the project's potential effects on cultural or historic properties are respectfully invited to provide comments to: USCG Facilities Design and Construction Center, ATTN: Lesley Dobbins-Noble, 5505 Robin Hood Road, Suite K, Norfolk, VA 23513 within 30 days of publication of this notice.



**Appendix E-7b: Environmental Assessment Notice of Availability**

**U.S. COAST GUARD  
BASE DETACHMENT BORINQUEN AND AIR STATION  
BORINQUEN, AGUADILLA, PUERTO RICO  
NOTICE OF AVAILABILITY**

**Draft Environmental Assessment for  
Rebuild U.S. Coast Guard Base Detachment Borinquen and Air  
Station Borinquen, Aguadilla, Puerto Rico**

The U.S. Coast Guard (USCG) proposes to restore hurricane damaged facilities, bring buildings and infrastructure up to current standards, and increase the resiliency of facilities to withstand future storm events at USCG Base Detachment Borinquen and Air Station Borinquen in Aguadilla, Puerto Rico. All new construction, repairs, and renovation would include increased resiliency to ensure the USCG's ability to remain operational during a storm event or other unscheduled electrical outage, independent of the local utility, for extended periods of time or until the outage is over.

The Draft EA provides evidence and analysis for determining whether a Finding of No Significant Impact (FONSI) is appropriate, or whether an Environmental Impact Statement (EIS) is necessary. The Draft EA presents the purpose and need for the action; describes the proposed action and alternatives; characterizes the affected environment; and provides an analysis of environmental consequences.

The Draft EA is available for public review at the Biblioteca Poblado San Antonio, San Antonio Montaña, Aguadilla Pueblo, Aguadilla or electronically at <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Engineering-Logistics-CG-4/Program-Offices/Environmental-Management/Environmental-Planning-and-Historic-Preservation/>.

The USCG is publishing this notice in accordance with federal regulations for the National Environmental Policy Act (NEPA) at 40 Code of Federal Regulations (CFR) Part 1501.7 and Section 106 of the National Historic Preservation Act at 36 CFR Part 800.6(a)(4). Parties interested in commenting on the EA or the project's potential effects on cultural or historic properties are respectfully invited to provide comments to: USCG Facilities Design and Construction Center, ATTN: Richard Hylton, 5505 Robin Hood Road, Suite K, Norfolk, VA 23513 or via electronic mail at [Rick.D.Hylton@uscg.mil](mailto:Rick.D.Hylton@uscg.mil) within 30 days of publication of this notice.

**GUARDIA COSTERA DE EE. UU. DESTACAMENTO  
BASE BORINQUEN Y ESTACION AEREA BORINQUEN  
AGUADILLA, PUERTO RICO  
AVISO DE DISPONIBILIDAD**

**Borrador de Evaluación Ambiental Para  
Reconstruir el Destacamento de la Base de la Guardia Costera de  
EE. UU. en Borinquen y La Estación Aérea de Borinquen,  
Aguadilla, Puerto Rico**

La Guardia Costera de los Estados Unidos (USCG) propone restaurar las instalaciones dañadas por el huracán, llevar los edificios y la infraestructura a los estándares actuales y aumentar la capacidad de recuperación de las instalaciones para resistir tormentas futuras en el Destacamento Base Borinquen y la Estación Aérea Borinquen de la USCG en Aguadilla, Puerto Rico. Todas las nuevas construcciones, reparaciones y renovaciones incluirían una mayor capacidad de recuperación para garantizar la capacidad del USCG de permanecer operativo durante una tormenta u otra interrupción eléctrica no programada, independientemente de la empresa de servicios públicos local, durante períodos prolongados de tiempo o hasta que finalice la interrupción.

El Borrador de EA proporciona evidencia y análisis para determinar si un Hallazgo de Impacto No Significativo (FONSI) es apropiado, o si es necesaria una Declaración de Impacto Ambiental (DIA). El borrador de EA presenta el propósito y la necesidad de la acción; describe la acción propuesta y las alternativas; caracteriza el medio ambiente afectado; y proporciona un análisis de las consecuencias ambientales.

El Borrador de EA está disponible para revisión pública en Biblioteca Prof. Enrique A. Laguerre, 127-129 Crown Road, Aguadilla Pueblo, Aguadilla y la Biblioteca Poblado San Antonio, San Antonio Montaña, Aguadilla Pueblo, Aguadilla o electrónicamente en <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Engineering-Logistics-CG-4/Program-Offices/Environmental-Management/Environmental-Planning-and-Historic-Preservation/>.

La USCG publica este aviso de acuerdo con las regulaciones federales para la Ley de Política Ambiental Nacional (NEPA) en el Código de Regulaciones Federales 40 (CFR) Parte 1501.7 y la Sección 106 de la Ley de Preservación Histórica Nacional en 36 CFR Parte 800.6 (a) (4). Se invita respetuosamente a las partes interesadas en comentar sobre la EA o los efectos potenciales del proyecto en las propiedades culturales o históricas a: Centro de Diseño y Construcción de Instalaciones de la USCG, ATTN: Richard Hylton, 5505 Robin Hood Road, Suite K, Norfolk, VA 23513 o por correo electrónico a [Rick.D.Hylton@uscg.mil](mailto:Rick.D.Hylton@uscg.mil) dentro de los 30 días posteriores a la publicación de este aviso.



**Este Verano** conocerás la historia de una **mujer que enfrentó a sus colonizadores** para defender a su pueblo.

Gran Estreno

**Este Lunes | 8:30<sup>PM</sup>**

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