June 8, 2026

MEMORANDUM FOR THE RECORD

From: Joe Barger
NEPA Coordinator

Subject: Categorical Exclusion
Record of Environmental Consideration

Project Title: Aerospace Institute for Research

Location: University of Puerto Rico at Mayaguez
Caobos Avenue
Mayaguez, Puerto Rico

The National Environmental Policy Act (NEPA) and associated implementing regulations (40 CFR Parts 1500-1508) require that all major actions by federal agencies be reviewed with respect to the environmental consequences on the human environment. The National Institute of Standards and Technology (NIST) is providing a congressionally directed funding grant for construction of the Aerospace Institute for Research at the University of Puerto Rico at Mayaguez. Consequently, NEPA and the associated implementing regulations apply to this project.

This memorandum provides a Record of Environmental Consideration and summarizes the determination that the Aerospace Institute for Research at the University of Puerto Rico at Mayaguez has been found by NIST to be categorically excluded from further environmental review under NEPA.

Description of the Action

This project includes the construction and operation of a new building to house the Aerospace Institute for Research (AIR) on the University of Puerto Rico's Mayagüez Campus. The AIR building is planned to have approximately 1,150 square meters of building area. The AIR building will be located on vacant parcel of land adjacent to the Antonio Lucchetti Mechanical Engineering Building and other Science and Engineering buildings. The proposed site

encompasses approximately 535 square meters. The footprint of the AIR Building will be approximately 450 square meters, and the building will be three stories tall.

The new structure will house resilient and energy-efficient teaching facilities, research and development laboratories, support facilities and a sensitive compartmented information facility (SCIF). The basement, second, and third levels will contain research laboratories and offices. The first level (main-entry level) will accommodate an auditorium, a large conference room, and lounge area. Administrative offices will be located on the ground floor. The existing service road at the project site will be rehabilitated to access a loading area on the back of the building

The AIR is intended to expand and improve upon the scientific, technological, and educational capacity of Puerto Rico and the United States. The new building will house research and development facilities in the thrust areas of propulsion technologies, material sciences, navigational technologies, atmospheric sciences, human factors, and high-performance computing. This new facility will promote partnerships and collaborations with numerous existing aerospace and aeronautics companies and with startups that want to establish operations in Puerto Rico.

This project will be accomplished in accordance with all applicable environmental and safety regulations. All applicable regulatory permitting will be obtained.

Specific Considerations of this Action and any Extraordinary Circumstances

- **Existing Site**

The proposed site for the new AIR Building is within a previously disturbed and developed portion of the University of Puerto Rico at Mayaguez; a government-owned urban university campus. The proposed site encompasses approximately 535 square meters located adjacent to existing university buildings. The site currently consists of a parking area, open field, concrete pad, and paved service access. Vegetation consists of grasses and shrub-tree species.

No conservation areas or forested areas exist at the project site.

- **Endangered Species and Critical Habitats**

The U.S. Fish and Wildlife Service (U.S. FWS) was consulted regarding this project. One endangered species was noted to exist in the vicinity of this project site: the Puerto Rican Boa. No critical habitats were noted on the project site and no effect to this species is anticipated. U.S. FWS acknowledged this no effect determination in correspondence on 3/11/26.

Conservation measures for the Puerto Rican Boa prepared by the U.S. FWS, Caribbean Ecological Service Field Office (3/19/20) shall be implemented for this project to minimize any potential impacts (Attachment A).

- **Water Resources, Wetlands, Flooding Potential and Resilience**

There are no surface water bodies within the project site. The nearest surface water bodies are the Rio Yaguez (approximately 950 meters south of the site) and the Mayaguez Bay (approximately 1.6 kilometers west of the site). The project site is not located in a coastal zone and is not subject to the Coastal Zone Management Act or the Coastal Barriers Resources Act.

There are no groundwater wells on the project site; however, there are drinking water, industrial and agricultural wells within one mile of the project site. No impacts to groundwater resources are anticipated.

According to the U.S Fish and Wildlife Service National Wetlands Inventory and site review, there are no wetlands on or adjacent to the proposed site.

The site is located outside of any 100- and 500-year flood hazard areas (FEMA). Based on the Federal Flood Risk Management Standard (FFRMS), the Federal Flood Standard Support Tool was used to generate an FFRMS Flood Plain (Freeboard Value Approach) and the project site was also found to be outside of this flood plain.

The project is located approximately 1.6 kilometers from Mayaguez Bay (sea level). The new building site is approximately 21.8 to 24.7 meters above sea level. The elevation of the project site is approximately 16 meters above the nearest existing flood plain which is located approximately 182 meters to the southwest of the project site. Due to the horizontal distance and elevation difference between the project site and existing flood plains, the project site is not considered to be susceptible to current flood risks or increased flooding that may occur in the future.

- **Stormwater**

The proposed project will comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) Stormwater Regulations as they apply in Puerto Rico under the U.S. Environmental Protection Agency (EPA) 2022 Construction General Permit (CGP). Best management practices (BMPs) will be implemented during the construction phase to minimize soil erosion and prevent sediment transport from the site. These measures may include, but are not limited to, silt fences, stabilized construction entrances, and proper material handling procedures.

However, authorization under the EPA's 2022 CGP is not required for this project. The estimated area of disturbance is approximately 2,800 square feet, which is below the one-acre (43,560 square feet) threshold that triggers the requirement for NPDES stormwater permit coverage for construction activities. Additionally, the project is not part of a larger common plan of development or sale that would exceed this threshold. Therefore, no stormwater permit will be required for this project during either the construction or post-construction phases.

In addition, the project will comply with applicable Commonwealth of Puerto Rico regulations, including the 2023 Joint Regulation for Construction and Land Use Permits administered by the Oficina de Gerencia de Permisos, as well as relevant environmental requirements of the Puerto Rico Department of Natural and Environmental Resources (DNER).

- **Building Staffing/Utilities**

Staffing and student populations are not expected to increase significantly due to the operation of the new building. Some staff and students will move from existing buildings to the new Aerospace Institute for Research.

Local roadways have capacity for a temporary increase in traffic during construction and for the ongoing increase in traffic expected for staff and students at the new building.

Local utilities have confirmed that they have the capacity to supply the following to the planned building: drinking water, sewer, and electricity.

- **Air Quality/Greenhouse Gas Emissions**

EPA Criteria Air Pollutants and Greenhouse Gas emissions are expected to increase insignificantly due to the energy requirements of the new building. The main air emissions produced by the new facility would result from the added heating and cooling load required for the new building.

To minimize air emissions associated with energy consumption, the Aerospace Institute for Research Building has been designed in agreement with the International Building Code of 2018 (IBC) and the Puerto Rico Building Code 2019. To mitigate the increased energy use and air emissions resulting from the new building, the following energy conservation measures will be implemented:

- Installation of energy-efficient lighting systems, including LED fixtures, to reduce electrical demand.

- Use of high-efficiency air conditioning systems designed for tropical climates, incorporating energy-saving technologies such as variable speed drives and high Seasonal Energy Efficiency Ratio (SEER) ratings.
- Incorporation of occupancy sensors and automatic lighting controls to reduce unnecessary energy use in unoccupied spaces.
- Maximization of natural daylighting, where feasible, to reduce reliance on artificial lighting.
- Implementation of efficient building envelope design, including insulation and reflective materials, to minimize heat gain and cooling loads.
- Selection of ENERGY STAR® or equivalent certified equipment and appliances, where applicable.
- Adoption of preventive maintenance practices for mechanical and electrical systems to ensure optimal efficiency throughout the building's lifecycle.

These measures collectively will reduce overall energy consumption, minimize associated air emissions, and contribute to improved environmental performance of the facility during its operational phase.

Other potential air emissions associated with this project include fugitive dust from site disturbance, exhaust from construction equipment, and minor emissions from material handling. Given the limited disturbance area of approximately 2,800 square feet, these emissions will be negligible, localized and temporary. Standard best management practices (BMPs), such as dust suppression, proper equipment maintenance, and limiting idling times, will be implemented to further minimize impacts.

An emergency generator included in this project may require an air emission permit or authorization from the PRDNER and must meet applicable emission standards.

- **Hazardous Materials**

Any hazardous materials used at the new AIR Building, or hazardous waste generated, will be managed appropriately through the existing University of Puerto Rico–Mayagüez (UPR-M) institutional environmental health and safety services. Management of hazardous materials and wastes will be conducted in accordance with applicable federal regulations including the Resource Conservation and Recovery Act.

At the local level, hazardous waste management in Puerto Rico is administered through a dual regulatory framework implemented by the Puerto Rico Environmental Quality Board (PREQB)—now under the Department of Natural and Environmental Resources (DRNA)—

in coordination with the U.S. Environmental Protection Agency (EPA Region 2). Applicable requirements include the Puerto Rico Regulation for the Control of Hazardous and Non-Hazardous Solid Wastes, which establishes standards for handling, storage, transport, treatment, and disposal of hazardous wastes, as well as permitting, reporting, and recordkeeping obligations.

In addition, the project will be consistent with the public policy of the Commonwealth of Puerto Rico regarding hazardous waste management, as established in Title 12, Chapter 127B of the Laws of Puerto Rico, which prioritizes source reduction, reuse, recycling, treatment, and proper disposal to protect human health and the environment. Hazardous materials expected to be used at the facility will be typical of academic and research environments and will be handled in accordance with established UPR-M protocols, including proper labeling, storage in designated areas, and use of appropriate containment systems.

With adherence to these regulatory frameworks and institutional procedures, no significant adverse impacts related to hazardous materials management are anticipated for the proposed project.

- **Historic/Cultural Significance**

The State Historic Preservation Officer (SHPO) has concurred that the AIR Building Project will have no adverse effect on historic properties. (Attachment B).

- **Environmental Justice**

Due to nature of the project and the proposed site location on University of Puerto Rico at Mayaguez Campus, this project is not expected to have disproportional adverse human health or environmental impacts to overburdened and underserved communities, including minority, Tribal, or low-income populations.

Effects of the Action

No significant adverse impacts on the environment are expected from this action.

Categorical Exclusion

The activities associated with this project fall within the criteria of the following Department of Commerce Categorical Exclusion (CATEX):

> A–2, New construction upon or improvement of land where all of the following conditions are met:
> (a) The site is in a developed area and/or a previously disturbed site,
> (b) The structure and proposed use are compatible with applicable Federal, Tribal, State, and local planning and zoning standards and consistent with Federally approved State coastal management programs,
> (c) The proposed use will not substantially increase the number of motor vehicles at the facility or in the area,
> (d) The site and scale of construction or improvement are consistent with those of existing, adjacent, or nearby buildings, and
> (e) The construction or improvement will not result in uses that exceed existing support infrastructure capacities (roads, sewer, water, parking, *etc.*). This CE does not apply where the project must be submitted to the National Capital Planning Commission (NCPC) for review and NCPC determines that it does not have an applicable Categorical Exclusion. DOC is not a major land managing agency in the Federal government. Department activities involving new construction or improvements of land typically involve single buildings and supporting infrastructure in a single locality. Any potential for environmental impacts would be of a small scale and confined to more localized impacts.

The proposed project meets the criteria of CATEX A-2 as follows:

(a) The proposed site has been disturbed during previous construction of university buildings.
(b) Located on the campus of University of Puerto Rico at Mayaguez, the project is compatible with applicable Federal, Tribal, State, and local planning and zoning standards.
(c) Increases in the number of motor vehicles at the facility or in the area are not expected to be significant.
(d) The proposed new building will not result in uses that exceed existing infrastructure capacities. The project does not require review by the NCPC.

The proposed project: Aerospace Institute for Research at the University of Puerto Rico at Mayaguez is categorically excluded from the need for further environmental review under NEPA. Any changes to the above project will require additional NEPA review.

JOSEPH BARGER Digitally signed by JOSEPH BARGER Date: 2026.06.08 14:37:20 -04'00'

Joe Barger
NIST NEPA Coordinator

6/8/2026
Date

ANDREW WRIGHT Digitally signed by ANDREW WRIGHT Date: 2026.06.09 08:38:28 -04'00'

Andrew Wright
NIST Chief Facilities Management Officer

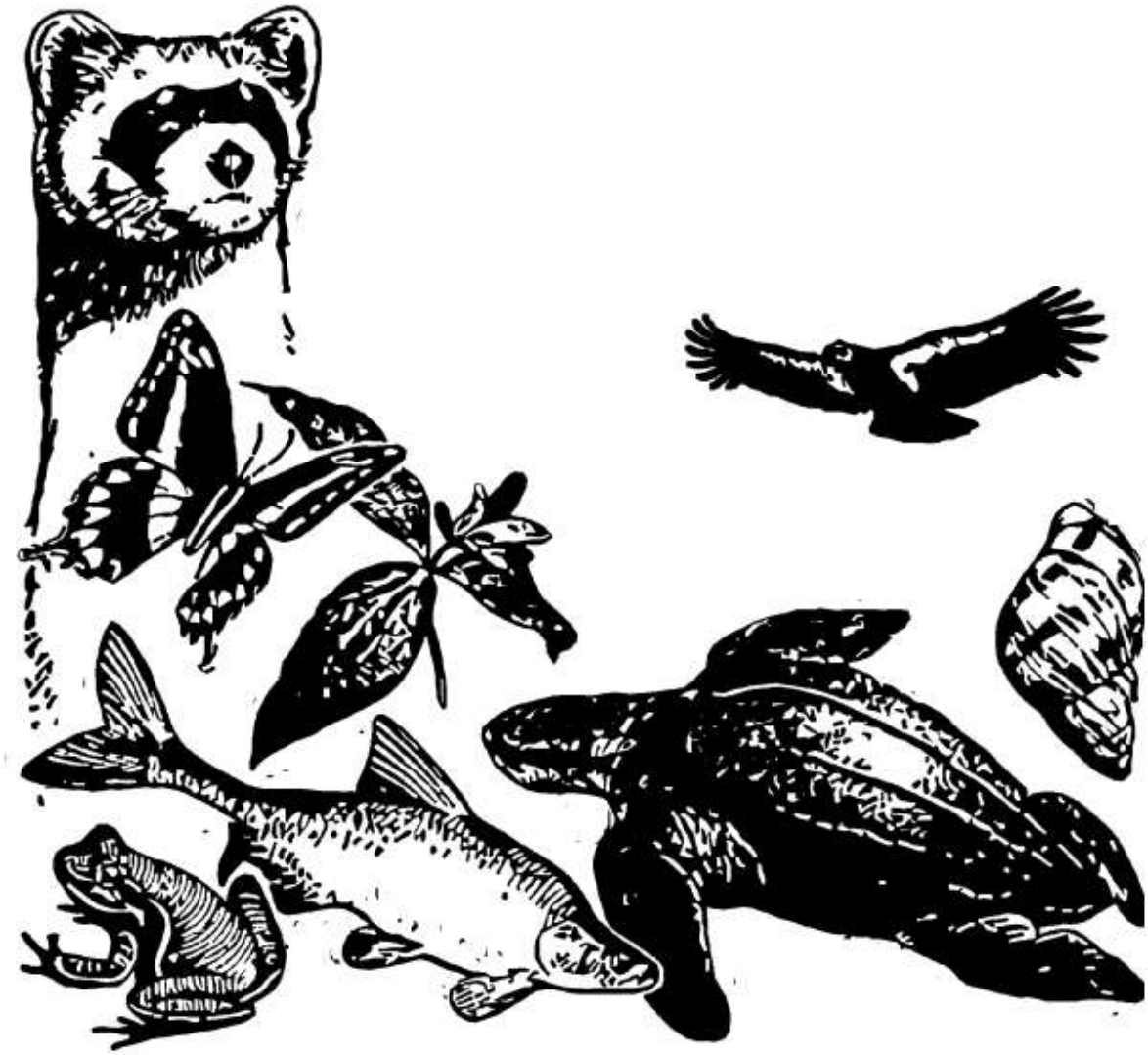
Date

Attachment A, Conservation Measures for the Puerto Rican Boa

U.S. Fish & Wildlife Service

General Project Design Guidelines (1 Species)

Generated October 07, 2025 07:00 PM UTC, IPaC v6.128.16-rc6



IPaC - Information for Planning and Consultation (https://ipac.ecosphere.fws.gov/): A project planning tool to help streamline the U.S. Fish and Wildlife Service environmental review process.

Table of Contents

Species Document Availability

Species with general design guidelines

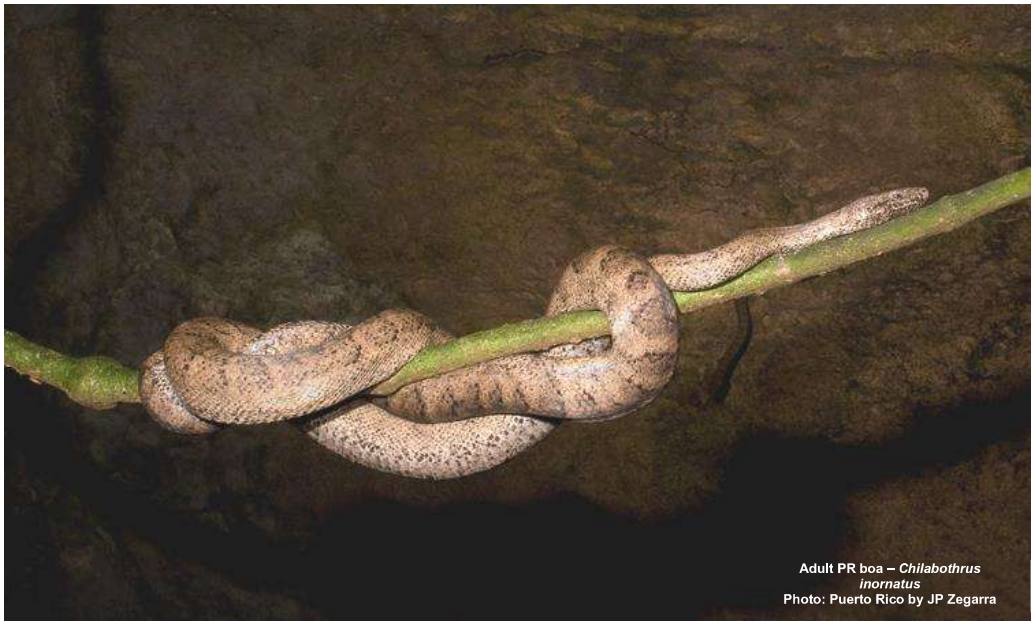
Puerto Rican Boa *Chilabothrus inornatus*

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 federally 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.



Adult PR boa – *Chilabothrus inornatus*
Photo: Puerto Rico by JP Zegarra

Last Revised: January 2024

The PR 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 such as roadsides or houses, especially if near their habitat in rural areas. The PR 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 project 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. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #5). **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 that 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.

5. 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.

6. If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.

7. 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 #4). If not possible, the animal should be left alone until it leaves the vehicle on its own.

8. 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.

9. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #5). 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 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.

10. 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:

- José Cruz-Burgos, Endangered Species Program Coordinator
  - Email: jose_cruz-burgos@fws.gov
  - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
  - Email: jan_zegarra@fws.gov
  - Office phone (786) 933-1451

Last Revised: January 2024

Attachment B, Letter from the Historic Preservation Officer

STATE HISTORIC
PRESERVATION
OFFICE
GOVERMENT OF PUERTO RICO

Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

April 29, 2026

TaJonique R Martin Martin
100 Bureau Drive
PR 20899

SHPO-CF-04-08-26-02 - Aerospace Institute for Research (AIR) at UPR Mayagüez

Dear Ms. Martin,

Our Office has received and reviewed the information submitted for 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* from the Advisory Council on Historic Preservation.

Based on our review of the additional documentation, the SHPO concurs with your finding that the proposed project will have **no adverse effect** upon historic properties.

Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. 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/MDC

SHPO
OFICINA ESTATAL DE CONSERVACIÓN HISTÓRICA
OFICINA DEL GOBERNADOR
STATE HISTORIC PRESERVATION OFFICE
OFFICE OF THE GOVERNOR
OECH