

Environmental Assessment **for HUD-funded Proposals**

*Recommended format per 24 CFR 58.36, revised March 2005
[Previously recommended EA formats are obsolete].*



Project Identification: **ÉGIDA SAGRADO CORAZÓN DE JESÚS**

Preparer: **Eng. Fernando de León Iturriaga**

Responsible Entity: **PUERTO RICO DEPARTMENT OF HOUSING-CDBG-DR
(PRDOH) / PUERTO RICO HOUSING FINANCE AUTHORITY
(PRHFA)**

Month/Year: **December / 2021**

Environmental Assessment

Responsible Entity: PUERTO RICO DEPARTMENT OF HOUSING (PRDOH)
[24 CFR 58.2(a)(7)]

Certifying Officer: SALLY Z. ACEVEDO COSME
[24 CFR 58.2(a)(2)]
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Project Name: ÉGIDA SAGRADO CORAZÓN DE JESÚS

Project Location: AVE. HOSTOS, SECTOR SAN LUIS, BARRIO-PUEBLO,
ARECIBO, P.R. 00612

Estimated Total Project Cost: \$41,200,000.00

Grant Recipient: NATURE HOUSING SENIOR COMMUNITY LLC
[24 CFR 58.2(a)(5)]

Recipient Address: P.O. BOX 3210, HATO ARRIBA STATION, SAN SEBASTIÁN,
P.R. 00685

Project Representative: SR. ERNESTO VALLE

Telephone Number: (787) 547 - 6677

Conditions for Approval: (Included is a List all mitigation measures adopted by the responsible entity to eliminate or minimize adverse environmental impacts. These conditions must be included in project contracts and other relevant documents as requirements). [24 CFR 58.40(d), 40 CFR 1505.2(c)]

The following mitigation measures must be adopted throughout the construction:

1. Permits

a. Non-expired permits prior to construction commencement. These include:

- i. Construction Permit (2018-234715-PCOC-009484)
- ii. Construction Permit (2018-234715-PCO-015517)
- iii. Urbanization Permit (2018-234715-PCU-004030)
- iv. General Consolidated Permit (Permiso General Consolidado)
- v. Incidental Permit
- vi. General Permit – National Pollutant Discharge Elimination System (NPDES) in compliance with EPA
- vi. AAA Endorsed Plan Set, (AAA-RN-17-07-0009)
- vii. AEE Agency Endorsed Plan Set, Endorsement Letter & Project Evaluation and Point of Connection Approval (2017-161216-SRI-022288)
- vii. DTOP Regulatory Permit (2017-161216-SRI-020138)
- ix. Firemen Department Endorsement (2017-161216-REA-001479)
- x. ICP Endorsements (IA & IB) (2017-161216-REA-001479, 2017 and 161216-REA-0014953)
- xi. Certification of Consistency filed with the State Coastal Management Program

b. EPA must be consulted for management of storm water to confirm if a National Pollutant Discharge Elimination System (NPDES) permit is necessary.

c. Must submit the General Permit that establishes the Regulation for the Processing of General Permits that includes an Emission Source Permit (PFE) in the case of electricity generators with a capacity greater than ten (10) horsepower and an operation no greater than five hundred hours a year. If the generator has an operation greater than five hundred hours a year, they will have to obtain the corresponding emission permits from the JCA.

d. If the cutting of trees is necessary, a tree cutting, pruning, transplanting, and planting authorization (ACP) in accordance with chapter 47 cutting, pruning and afforestation of the joint regulation of permits for construction works and land use must be applied for and obtained.

e. The Highways and Transportation Authority has requested that the project plans and evidence of payment of the impact fee (\$55,000.00) are to be submitted to the

Regional Department of Transportation Office in order to obtain the Regulation Permit.

f. The trucks transporting the waste during construction must possess the Permit to Operate Services of Recollection or Transportation of Non-Dangerous Solid Waste (DS-1 Permit, JCA).

g. Adequate measures must be taken to control the area during construction to avoid exposing the vehicles picking up any mud, dust, sticky or viscous substances in their tires or other parts of the vehicle which could then be deposited on the streets or any other public place. Construction debris and waste must not be accumulated in the Project's site surroundings.

h. A Permit Number of Generation of Biomedical Waste must be obtained if the Elderly home will provide medical services.

i. If a Laundry is installed, corresponding permits for compliance with Rules 108 (Installation of Control Equipments) and 4040 (Fugitive Emissions) of the Regulation Number 5300 of August 28, 1995 must be obtained.

2. Compliance Measures

a. An Emergency Plan must be prepared and filed to the Environmental Quality Board in compliance with the Regulations of Water Quality Standards to prevent and/or control diesel spills.

b. The Storage, management and disposition of waste materials must be executed in compliance with the Regulation for the Management of Non-hazardous Solid Waste of the Environmental Quality Board.

c. Full compliance with noise ordinance as established in the "Reglamento para el Control de la Contaminación por Ruido de la Junta de Calidad Ambiental".

d. Must implement and comply with a:

i. CES Plan

ii. Storm Water Pollution Prevention Plan (SWPPP)

iii. Recycling Plan & Quarterly Recycling Report of the Generated Materials during the Construction Work Phase (if the Municipality is responsible for this work, Compromise Evidence from the Municipality must be submitted).

iv. Drawings with the localization of the recycling area inside the Project must be submitted.

e. Compliance with Green Permit pre-qualification requirements as a measure to obtain Green Certification.

- f. The project must comply with ADS rules and regulations.
- g. Prior to any extraction of the terrestrial crust, Developer and Contractor must comply with Chapter 46 of the Conjoined Regulations of Permits for Construction Work and Terrain Usage for Extraction, Excavation, Removal & Dredging (also known as Incidental Permit).
- h. The project must comply with the Requirements of the concerning Agencies and with their recommendations (2017-161216-REA-001479 and 2017-161216-DEA-00148) emitted for the Project.
- i. The Project must follow the recommendations of the realized Soil Study for the Project.
- j. A reforestation program using native species, which, in addition to helping to minimize erosion, benefits wildlife must be established. This measure is consistent with the Law to Encourage the Planting of Trees Whose Fruits and / or Seeds Provide Food for Wild Bird Species of Puerto Rico (Law No. 97 of June 24, 1998).
- k. Take the necessary measures to prevent residues of organic and inorganic substances such as: oils, fuels, or other chemical substances, from being washed away by runoff and gaining access to any body of water or the rainwater system.
- l. Project must comply with the Regulations for the Control and Prevention of Luminic Contamination.

3. Demolition and Construction

- a. Contractor must detain all construction work if archaeological deposits and/or elements of historical value are encountered during any phase of the construction. Contractor must inform the ICPR and Contracting Officer within 24 hours of the finding.
- b. If a superficial or subterranean body of water is discovered while construction work is taking place, it must be informed to the Department of Natural Resources.
- c. All pertaining permits must be obtained prior to construction commencement.

FINDING: [58.40(g)]

Finding of No Significant Impact
(The project will not result in a significant impact on the quality of the human environment)

Finding of Significant Impact
(The project may significantly affect the quality of the human environment)

Preparer Signature:  **Date:** 12/3/2021

Name/Title/Agency: **ENG. FERNANDO DE LEÓN, PE**
D/C ENGINEERS, PSC

RE Approving Official Signature:  **Date:** 12/6/2021

Name/Title/Agency: Puerto Rico Department of Housing (PRDOH)

Statement of Purpose and Need for the Proposal: [40 CFR 1508.9(b)]

Description of the Proposal: Must include all contemplated actions which logically are either geographically or functionally a composite part of the project, regardless of the source of funding. [24 CFR 58.32, 40 CFR 1508.25]

Property located at the Hostos Avenue of the Pueblo Ward in the municipality of Arecibo. The project will be developed in a two point six three nine one (2.6391) "cuerdas" lot (Catastral#012-084-127-01) with an identified zoning of Residential-Agricultural (R-A) as determined by the Puerto Rico Planning Board. The property is located outside the flood zone (Zone X). The project has available utilities typical of urban neighborhoods such as water distribution, electric power distribution and telephone and cable services to support its intended use at typical connection costs. The property is located outside the flood zone and does not require environmental remediation. The proposed rental housing project will consist of a 6-story apartment building with 120 units, with one bedroom each, to be rented to low-income elderly; particularly adapted to their construction and social needs. The units will be developed under Section 42 of the Internal Revenue Code Program, also known as the Low-Income Housing Tax Credit Program, and Community Development Block Grant – Disaster Relief program funds. Further, the project has an approved Project-Based Section 8 from the Municipality of Arecibo, for the operation of the project.

The building, its units, the facilities and common areas were designed (based on designer's certifications) in strict compliance with the federal, state and local laws, rules, regulations, requirements and ordinances, including but not limited to, the standards of The American with Disabilities Act (ADA), the Uniform Federal Accessibility Standards (UFAS), as well as, the Federal Housing Act (FHA), and Section 504 of the Rehabilitation Act of 1973, as amended, and as applicable. A minimum of 12% out of the 120 units will be identified as adapted units and an additional 3% (of the units have been designed for the hearing and visual impaired (sensory impairment).

Existing Conditions and Trends: Must include a description of the existing conditions of the project area and its surroundings, and trends likely to continue in the absence of the project. [24 CFR 58.40(a)]

The project is conveniently located in the midst of the Pueblo urban center. Economic, social and cultural development will be promulgated for the tenants of the Project, as well as, for the Municipality's constituents. Moreover, all infrastructures, mass –public and private transportation, and government (police & firemen stations), religious, commercial, and medical/pharmacy services, among other urban amenities of the Pueblo ward are available to the Project site at close proximity/walking distance.

Statutory Checklist

[24CFR §58.5]

A record of the determinations made regarding each listed statute, executive order or regulation. Provide appropriate source documentation. Note reviews or consultations completed as well as any applicable permits or approvals obtained or required. Note dates of contact or page references. Provide compliance or consistency documentation. Attach additional material as appropriate. Note conditions, attenuation or mitigation measures required.

Factors	Determination and Compliance Documentation
<p>Historic Preservation [36 CFR 800]</p>	<p>The letters from SHPO dated May 10, 2018 & December 15, 2020, for this project states that no historic property was affected. No instance was found regarding the eligible historic district and the historic properties within the area of potential effect</p> <p>An archeological study prepared as per recommendations by the 'Instituto de Cultura Puertorriqueña' concluded that the project should be endorsed by all agencies with jurisdiction over this matter.</p> <p>The Historical Building Heritage Program and the Archeology and Ethnohistory Program of the Institute of Puerto Rican Culture provided no objection towards the construction of the project based on the Archeological Evaluation (Phase IA-IB) prepared by Arqueología, Inc.</p> <p>The endorsements from the Program of Archaeology and Ethnohistory & Office of Historical Heritage of the Institute of Puerto Rican Culture of ICP were obtained on August 2, 2017 & August 7, 2017 respectively and need to be renewed as they expired on August 2018.</p> <p>See Annex V.15 – SHPO Determination See Annex V.13 – ICPR Recommendations See Annex II.6 – Archaeological Study</p>
<p>Floodplain Management [24 CFR 55, Executive Order 11988]</p>	<p>The subject property is located in a Zone X, outside the 1% annual chance of flood area as per FEMA Emergency Flood Map No. 72000C0230H with an effective date as of April 19, 2005. The Zone X is area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone X may have pond prone areas and local drainage problems that don't warrant a detailed study or designation as base floodplain. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood. The Subject Site is assumed to be free of adverse floodable conditions that might affect its intended development, and no liability or responsibility is assumed in this respect.</p> <p>The design of the special distribution of the installations has been designed accordingly to the recommendations in the Hydraulic-Hydrologic Study.</p> <p>All Municipalities of Puerto Rico participate in the National Flood Insurance Program and are currently in good standing with the agency.</p>

	<p>See Annex II.3 – Updated Environmental Site Assessment Phase I See Annex I.4 – ESCJ – FEMA Map See Annex II.4 – Hydrologic & Hydraulic Study – Non-Flood Certification</p>
<p>Wetlands Protection [Executive Order 11990]</p>	<p>No evidence of wetlands was noted on the subject property. The vicinity surrounding the Subject Property was evaluated using U.S. Fish and Wildlife Service Natural Wetland Inventory. A copy of the National Wetland Inventory for the subject property vicinity issued by the U.S. Fish and Wildlife Service is included in this report.</p> <p>The project site is not located on any riparian nor wetland. Furthermore, a permit won't be required as per Section 404 of the Clean Water Act as the project will not require the discharge of dredged or fill material into wetlands</p> <p>See Annex II.3 – Updated Environmental Site Assessment Phase I See Annex I.4 – FEMA Map See Annex I.3 – Wetland Inventory Map</p>
<p>Coastal Zone Management Act [Sections 307(c), (d)]</p>	<p>Puerto Rico's coastal zone generally extends 1,000 meters (one kilometer) inland. The municipality of Arecibo is bordered on the north by the Atlantic Ocean, on the south by the municipality of Utuado, on the east by the municipality of Barceloneta, and to the west by the municipality of Hatillo. Because of its location on the coast, the municipality is part of the northern coastal plain region. The project site is located approximately 0.02 MILES South of the Northern Coast of Puerto Rico which pertains to the Atlantic Ocean. There are no anticipated adverse effects due to the project's development.</p> <p>As this is a new construction within a Coastal Zone, confirmation to from Coastal Zone Management Program or consultation with the DRNA is required.</p> <p>See Annex II.3 – Updated Environmental Site Assessment Phase I See Annex I.4 – FEMA Map</p>
<p>Sole Source Aquifers [40 CFR 149]</p>	<p>Puerto Rico is included in a sole-source aquifer region designated as Region II of the USA EPA.</p> <p>The project is not connected to a direct potable water line which provides water from a designated sole-source aquifer nor is it located within a sole source aquifer watershed. This was confirmed with the EPA Sole Source Aquifers Map.</p>

	<p>Eventhough there are no sole-source aquifers designated by the EPA in the Project's site immediacies, there are various geologic units that comprise the water-table aquifer in the Arecibo-Manatí region.</p> <p>See Annex II.3 – Updated Environmental Site Assessment Phase I See Annex VI.1 - Aquifers Map</p>
<p>Endangered Species Act [50 CFR 402]</p>	<p>The proposed site is located in a mixed-use urban area with a classified zoning of DT-G. The letter from the DRNA dated May 5, 2017 for this particular project, states that none of the federally listed, proposed threatened or endangered species are known to occur at the project site.</p> <p>See Annex V.8 - DRNA Habitat Categorization See Annex II.3 - Environmental Assessment Phase I Study</p>
<p>Wild and Scenic Rivers Act [Sections 7(b), (c)]</p>	<p>Puerto Rico has approximately 5,385 river miles. Only 8.9 miles of three rivers are designated as wild & scenic. The portions of these rivers that qualify under the afore mentioned category are located more than 80 miles east of the project site. They are not in harm's way from this project.</p> <p>See Annex II.3 – Updated Environmental Site Assessment Phase I See Annex VI.6 - Wild & Scenic Rivers Map</p>
<p>Air Quality [Clean Air Act, Sections 176(c) and (d), and 40 CFR 6, 51, 93]</p>	<p>The Arecibo Municipality shows a violation of the 2008 Lead NAAQS. Therefore, some area in Arecibo County and possibly additional areas in surrounding counties must be designated as non-attainment areas. The absence of a violating monitor alone is not a sufficient reason to eliminate nearby counties and this Project as candidates for non-attainment status. Each area has been evaluated based on the weight of evidence of the eight factors collectively combined into five like groupings and other relevant information. The violating monitor located in Arecibo County is located in close proximity to The Battery Recycling Company, Road No.2 km 72.2 Barrio Cambalache in Arecibo, Puerto Rico.</p> <p>The contractor must endeavor to keep dust from becoming a nuisance to neighboring areas as efforts to reduce impact to Air Quality during the construction period.</p> <p>A General Consolidated Permit from the “Junta de Calidad Ambiental” is required. This permit is to be expected prior to the start of construction start.</p> <p>See Annex II.3 – Updated Environmental Site Assessment Phase I See Annex V.6 – REA Environmental Evaluation See List of Sources: 16. Air Quality, EPA Nonattainment Areas – Arecibo</p>

<p>Farmland Protection Policy Act [7 CFR 658]</p>	<p>The proposed use is in harmony with the surrounding developments area and does not impact agricultural projects. The project land lies within a mixed use and populated urban area in the Arecibo pueblo Ward. The site's soils are <u>not</u> designated as 'Prime' for agricultural purposes and is not considered an agricultural land.</p> <p>See Annex I.1 – Technical & Feasibility Project Narrative See Annex V.14 - Agriculture Endorsement Letter See Annex A2.2 – Google Earth Aerial Images – Farmland Protection Policy Act</p>
<p>Environmental Justice [Executive Order 12898]</p>	<p>The proposed multi-family housing development is meant to serve the pressing need for affordable housing in Arecibo's low-income population. The Municipality of Arecibo expressed their complete support in the Municipality's Endorsement Letter.</p> <p>The Phase I Environmental Study determined that the probability of the Site being contaminated is very low, that no substantial environmental issues were found and that no potential environmental impact issues to the residents of the Project were determined.</p> <p>See Annex V.11 - Municipal Endorsement Letter See Annex II.3 – Updated Environmental Site Assessment Phase I</p>

HUD Environmental Standards Determination and Compliance Documentation

<p>Noise Abatement and Control [24 CFR 51 B]</p>	<p>Existing noise levels were measured at two different strategic points of the project area in accordance with the DTPW Noise Policy dated July 2011. Noise levels are not forecast to exceed the noise level of 67 dBA established in the federal guidelines for residential areas; therefore, the need to have to run the model with the end to build a noise attenuation barrier was not considered.</p> <p>See Annex II.2 – Noise Study</p>
<p>Toxic/Hazardous/Radioactive Materials, Contamination, Chemicals or Gases [24 CFR 58.5(i)(2)]</p>	<p>No standing surface water, pools or sumps containing liquids likely to be hazardous substances or petroleum products were observed during the site reconnaissance. The Phase I Environmental Study determined that the probability of the Site being contaminated is very low. No Toxic/Hazardous/Radioactive Materials, Contamination, Chemicals or Gases were observed or reported. The study's opinion was based on the historical and environmental review of records, visits to the site, interviews, and electronic data from local and federal agencies. No further investigation of the site was recommended in the Phase I Environmental Study.</p> <p>In addition, the Hazardous Operations Certification completed by Professional Engineer Julio I. Valentín Pérez states that the Project is not located near a hazardous or contaminant area.</p> <p>See Annex II.3 – Updated Environmental Site Assessment Phase I See Annex VI.4 – Nearby Hazardous Operations Certification & Map</p>
<p>Siting of HUD-Assisted Projects near Hazardous Operations [24 CFR 51 C]</p>	<p>The proposed project is located in a high density, mixed-use urban area within Arecibo's urban district. Project is surrounded by commercial, residential, and institutional buildings that do not use above ground storage of explosive or flammable materials.</p> <p>The Hazardous Operations Certification completed by Professional Engineer Julio I. Valentín Pérez states that the Project is not located near a hazardous or contaminant area.</p> <p>See Annex II.3 – Updated Environmental Site Assessment Phase I See Annex VI.4 – Nearby Hazardous Operations Certification & Map See Annex A2.1 - Google Maps Aerial Image – Siting of HUD-Assisted Projects near Hazardous Operations</p>

<p>Airport Clear Zones and Accident Potential Zones [24 CFR 51 D]</p>	<p>The project site is 40.8 miles (215,424 feet) away from Isla Grande Airport, 25.2 miles (133,056 feet) from Rafael Hernández Airport in Aguadilla and over 46.8 miles (247,104 feet) away from Luis Muñoz Marín International airport which happens to be a joint civil-military airport. The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport.</p> <p>See Annex VI.3 - FAA Endorsement See Annex A2.3 - Google Earth Aerial Image - No Hazard to Air Navigation (Isla Grande Airport) See Annex A2.4 - Google Earth Aerial Image - No Hazard to Air Navigation (Luis Muñoz Marín Airport) See Annex A2.5 - Google Earth Aerial Image - No Hazard to Air Navigation (Aguadilla Airport)</p>
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Environmental Assessment Checklist

[Environmental Review Guide HUD CPD 782, 24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]

An evaluation of the significance of the effects of the proposal on the character, features and resources of the project area. Enter relevant base data and verifiable source documentation will be entered to support the finding. The appropriate impact code will be entered from the following list to make a determination of impact. **Impact Codes:** (1) - No impact anticipated; (2) - Potentially beneficial; (3) - Potentially adverse; (4) - Requires mitigation; (5) - Requires project modification. Note names, dates of contact, telephone numbers and page references. Attach additional material as appropriate. Note conditions or mitigation measures required.

Land Development	Code	Source or Documentation
Conformance with Comprehensive Plans and Zoning	2	The property is in zone DT-G; and was approved by Puerto Rico Planning Board for construction as determined in the Location Consultation Resolution ("Resolución Consulta de Ubicación"). There is no need for any changes or variances to the aforementioned. In addition, the Municipality of Arecibo has eagerly endorsed the multi-family housing development.
Compatibility and Urban Impact	2	The project lies within a densely populated area of mixed occupancies. Single and multi-family homes, commercial and institutional facilities are found throughout the immediate vicinity. The project also conforms to the best interest of a population in dire need of affordable housing and in accordance to the Municipality's plans for land usage.
Slope	1	The Project's site is currently flat and does not possess a slope.
Erosion	1	The contractor must provide erosion control by strictly adhering to the procedures and methods established in a CES plan. There is no anticipated adverse effect on erosion expected as a result of the development of this new project.
Soil Suitability	2	The Geotechnical Evaluation ('Soil Study') completed by Advanced Soil Engineering uncovered loose to medium sand material at the uppermost 45 to 55 ft. This natural soil deposit results unfavorable to materials and the seat of settlements greater than those normally accepted in the standard of foundation design practice when stressed by the intended loads of the proposed structure. Under the above established site soil conditions, the study found that the existing natural soil deposits are not competent geologic material to carry the proposed structure foundations loads on conventional footing system and seat settlements greater than those normally accepted in the standard of foundation practice when stressed by the intended loads of the proposed structure. The Soil Study concluded that the use of deep foundation as Geopiers foundations along the proposed buildable area was recommended in order to support the loads of the intended structure. The contractor must work in compliance with all recommendations presented in the geotechnical report. It is imperative that a soil technician working directly under the direct supervision of the Project Geotechnical Engineer is to be present during all excavation, backfill, compaction and foundation preparation work to verify that the work is being completed according to plans and specifications.

Hazards and Nuisances including Site Safety	1	<p>The project site does not present any construction logistic difficulties to the contractor. Hence, the contractor should not be facing any safety, hazard, or nuisances other than those typical to construction projects. Nevertheless, the contractor must endeavor to provide a safe environment, on and off-site, throughout the construction. This includes compliance with all safety and environmental measures established by, but not limited to, OSHA, EPA and the Environmental Quality Board (JCA).</p> <p>No standing surface water, pools or sumps containing liquids likely to be hazardous substances or petroleum products were observed during the site reconnaissance. The Phase I Environmental Study determined that the probability of the Site being contaminated is very low. No Toxic/Hazardous/Radioactive Materials, Contamination, Chemicals or Gases were observed or reported. The study's opinion was based on the historical and environmental review of records, visits to the site, interviews, and electronic data from local and federal agencies. No further investigation of the site was recommended.</p> <p>The Hazardous Operations Certification completed by Professional Engineer Julio I. Valentín Pérez states that the Project is not located near a hazardous or contaminant area.</p>
Energy Consumption	1	<p>The design has been pre-qualified by the National Green Building Standard with the intent to pursue the Silver Certification from ICC-700 Green Building Standard. In the absence of energy consumption reduction measures, the demand for electricity generated by the project won't require a major expansion of power facilities nor would it have any anticipated adverse effects. The project has been endorsed by the AEE.</p>
Noise - Contribution to Community Noise Levels	1	<p>Given that the neighborhood is mixed use with commercial, institutional, multi-family residential projects and single-family homes within walking distance, the noise contribution to the community will be no different to that which already exists.</p> <p>The construction noise must be mitigated utilizing standard procedures and measures as requested by Puerto Rico's environmental quality board and required in the 'Reglamento para el Control de la Contaminación por Ruido'.</p>
Air Quality Effects of Ambient Air Quality on Project and Contribution to Community Pollution Levels	1	<p>The Arecibo Municipality shows a violation of the 2008 Lead NAAQS. Therefore, some area in Arecibo County and possibly additional areas in surrounding counties must be designated as non-attainment areas. The absence of a violating air contaminants emitter alone is not a sufficient reason to eliminate nearby counties and this Project as candidates for non-attainment status. Each area has been evaluated based on the weight of evidence of the eight factors collectively combined into five like groupings and other relevant information. The violating air contaminants emitter in Arecibo County is The Battery Recycling Company (Road No.2 km 72.2 Barrio Cambalache in Arecibo, Puerto Rico.)</p> <p>The contractor must endeavor to keep dust from becoming a nuisance to neighboring areas as efforts to reduce impact to Air Quality during the construction period.</p> <p>The General Consolidated Permit from the "Junta de Calidad Ambiental" is required. This permit is to be required prior to the start of construction.</p>

Environmental Design Visual Quality - Coherence, Diversity, Compatible Use and Scale	2	<p>The environment surrounding the proposed project site serves the residential, commercial and institutional needs of Arecibo. The building's architecture is of modern aesthetics and does not impact the areas façade.</p> <p>The height and scale of the proposed building will stand out within the area and is in full compliance with the zoning requirements. The project's development is in the best interest of the Municipality's plans for this particular area. A new building will always help to improve the urban fabric of the area. For specifics on design considerations that improve the urban fabric of Arecibo.</p>
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Socioeconomic Code Source or Documentation

Demographic Character Changes	2	The project will be built within a mixed-use, populated sector of Arecibo. Additional housing will contribute to the Municipalities ongoing effort to attend the demand for affordable housing as well as to attract and maintain a steady population in this district.
Displacement	2	There will not be displacement of existing tenants nor adverse socioeconomic effects.
Employment and Income Patterns	2	<p>The new building will require maintenance and upkeep. The project will require administrative staff and maintenance personnel which will translate into the creation of new jobs.</p> <p>In addition, the new tenants will add to the market for the neighboring commercial facilities. Hence, potentially improving regional commerce.</p>

Community Facilities and Services

Code Source or Documentation

Educational Facilities	1	The Project is surrounded by various public and private schools as well as universities such as the University of Puerto Rico – Arecibo, Catholic University of PR – Arecibo, NUC University, Interamerican University of PR – Arecibo, and many more.
Commercial Facilities	2	There are numerous small and mid-scale and large-scale mixed-use Commercial and industrial facilities throughout the urban district of Arecibo, which will benefit from the new potential client base.
Health Care	2	Several Hospitals, Clinics, medical offices, and CDTs are found within a 5-mile radius of the site.
Social Services	2	The project intends to fulfill the current demand for affordable housing for low-income families in Arecibo. Qualified participants will receive the financial support for suitable housing within a planned community. The effort conforms to the best interest of the Municipality and its population.
Solid Waste	1	<p>Existing solid waste removal services are available to the existing surrounding commerce, neighborhood, and residential complexes. The proposed project calls for the adaptive reuse of the existing structure. Recycling will be implemented and enforced as per standards set by the Solid Waste Authority (Autoridad de Desperdicios Sólidos' - ADS). A recycling plan must be submitted by the contractor to the ADS. The ADS does not object the proposed development. During Construction, the proponent needs to comply with the laws and regulations related to the management and disposal of solid waste and recyclable materials:</p> <ol style="list-style-type: none"> 1. Ley Núm. 70, de 18 de septiembre de 1992, Ley para la Reducción y Reciclaje de los Desperdicios Sólidos. 2. Reglamento para la Reducción, Reutilización y Reciclaje de Desperdicios Sólidos (Reglamento Núm. 6825 de 15 de junio de 2004)

		3. Reglamento Conjunto de Permisos para Obras de Construcción y Usos de Terrenos (Reglamento Conjunto) de 29 de noviembre de 2010
Waste Water	1	The project will be serviced by the existing aqueduct infrastructure provided from the local water and sewer service company known as 'La Autoridad de Acueductos y Alcantarillados' (aka AAA). The project was endorsed by the AAA and the Municipality.
Storm Water	1	The subject property is located in a Zone X, outside the 1% annual chance of flood area as per FEMA Emergency Flood Map No. 72000C0230H with an effective date as of April 19, 2005. The Zone X is area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. The Subject Site is assumed to be free of adverse floodable conditions that might affect its intended development. The lot is outside of all and any flood zone nearby, within a 100-mile radius. The excess runoff water is to be controlled through a rainwater treatment system and different wells of the rainwater system.
Water Supply	1	The project will be serviced by the existing aqueduct infrastructure provided from the local water and sewer service company known as 'La Autoridad de Acueductos y Alcantarillados' (aka AAA). The project was endorsed by the AAA and the Municipality.
Public Safety - Police	1	A Police Station is located a mere 0.06 miles from the project entrance at Ave. Hostos, Arecibo, P.R.
- Fire	1	The nearest fire station is located is located a mere 0.06 miles from the project entrance at Ave. Hostos, Arecibo, P.R.
- Emergency Medical	1	Several Hospitals, Clinics, medical offices and CDTs were found within a 5-mile radius of the site. Hospitals include: Hospital Pavía Arecibo, Hospital Distrito, Hospital del Veterano, Arecibo & Hospital Metropolitano Dr. Susoni.
Open Space and Recreational & Cultural Facilities	2	The project will be built in a populated, mixed-use, urban area at the Municipality of Arecibo. The project is conveniently located in the midst of the Pueblo urban center, near to economic, social and cultural development area. All infrastructures, mass public and private transportation, and government, religious, commercial and medical/pharmacy services, among other urban amenities of the Pueblo ward are available to the Project site at close proximity/walking distance. Recreational and Cultural facilities in Arecibo include Arecibo Lighthouse, Cambalache State Forest, Lago Dos Bocas, Poza del Obispo, Lago Dos Bocas, Plaza del Atlántico, Coliseo Manuel Iguina and Casa Ulanga Cultural Center.
Transportation	1	Arecibo is serviced by the Arecibo Municipal Trolley (local bus transit), the nearest Trolley stop is located at Avenida Hostos right beside the main gate of the Project. The nearest subway stop is 44.68 miles from the project's main entrance (Deportivo Bayamón Urban Train Station).

Natural Features

Source or Documentation

Water Resources	1	All potable water supply services will be provided by the Puerto Rico Aqueduct and Sewer Authority (aka AAA), the local water and sewer service company. The project has been endorsed by this agency.
Surface Water	1	The subject property is located in a Zone X, outside the 1% annual chance of flood area as per FEMA Emergency Flood Map No. 72000C0230H with an effective date as of April 19, 2005. The Zone X is area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone X is the area determined to be outside the 500-year flood. The Subject Site is assumed to be free of adverse floodable conditions that might affect its intended development, and no liability or responsibility is assumed in this respect. Bodies of water in the vicinity include the Atlantic Ocean, Río Tanamá, Ciénaga Tiburones, Lago Dos Bocas and Río Grande de Arecibo.
Unique Natural Features and Agricultural Lands	1	The site is within a densely populated mixed use urban landscape with limited landscaping. There will be no impact on Natural Features and Agricultural Lands.
Vegetation and Wildlife	1	The site is within a densely populated mixed use urban landscape with limited landscaping. There will be no impact on Vegetation and Wildlife.

Other Factors

Source or Documentation

Flood Disaster Protection Act [Flood Insurance] [§58.6(a)]	1	The subject property is located in a Zone X, outside the 1% annual chance of flood area as per FEMA Emergency Flood Map No. 72000C0230H with an effective date as of April 19, 2005. The Zone X is area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. The lot is outside of all and any flood zone nearby, within a 100-mile radius. The design of the special distribution of the installations have been designed accordingly to the recommendations in the Hydraulic-Hydrologic Study.
Coastal Barrier Resources Act/ Coastal Barrier Improvement Act [§58.6(c)]	1	The Coastal Barrier Act is not applicable to the Project since the site to be completed in a developed urban area of the Municipality of Arecibo. The project site is located outside the Coastal Barrier System (CBRS) boundary. The lot is outside the 100' radius of all flood zones, as per FEMA Flood Insurance Rate Map 72000C0230J with effective date 23/03/2018 (ABFE Map). See Annex 1.5 – USFWS Coastal Barrier Map
Airport Runway Clear Zone or Clear Zone Disclosure [§58.6(d)]	1	The project site is 40.8 miles (215,424 feet) away from Isla Grande Airport, 25.2 miles (133,056 feet) from Rafael Hernández Airport in Aguadilla and over 46.8 miles (247,104 feet) away from Luis Muñoz Marín International airport which happens to be a joint civil-military airport. The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The Project is not located near an airport facility; therefore, the document of “Determination of No Hazard to Air Navigation” is not required for this Project.
Other Factors		N/A

Summary of Findings and Conclusions

ALTERNATIVES TO THE PROPOSED ACTION

Alternatives and Project Modifications Considered [24 CFR 58.40(e), Ref. 40 CFR 1508.9]

(Identify other reasonable courses of action that were considered and not selected, such as other sites, design modifications, or other uses of the subject site. Describe the benefits and adverse impacts to the human environment of each alternative and the reasons for rejecting it.)

The Municipality is highly interested in residential developments for affordable housing within its urban limits. Given that the site area is densely populated, highly developed, its available infrastructure, its access to principal roads and highways, and its readily accessible location, and its nearby amenities deem it perfectly suitable for the intended use.

Alternative:

1. Building fewer units would mean a reduction in the number of apartments available for affordable housing. Noise, air pollution, pollution, traffic, demand for water and electricity would be decreased proportionally. However, this is not necessarily attractive given that a reduced density would be inconsistent with the municipality's interest in providing a solution for the high demand for affordable housing.

No Action Alternative [24 CFR 58.40(e)]

(Discuss the benefits and adverse impacts to the human environment of not implementing the preferred alternative).

In the absence of the development, current economic trends suggest that this site and building would continue to deteriorate without any potential use in the near future (possibly decades). This option would ignore the need for affordable housing to low-income single-headed households that the Municipality and local population desperately need.

Mitigation Measures Recommended [24 CFR 58.40(d), 40 CFR 1508.20]

(Recommend feasible ways in which the proposal or its external factors should be modified in order to minimize adverse environmental impacts and restore or enhance environmental quality.)

The following mitigation measures must be adopted throughout the construction:

1. Permits

a. Project must ensure non-expired permits prior to construction commencement.

These include:

- viii. Construction Permit (2018-234715-PCOC-009484)
- ix. Construction Permit (2018-234715-PCO-015517)
- x. Urbanization Permit (2018-234715-PCU-004030)
- xi. General Consolidated Permit (Permiso General Consolidado)
- xii. Incidental Permit
- xiii. General Permit – National Pollutant Discharge Elimination System (NPDES) in compliance with EPA
- vi. AAA Endorsed Plan Set, (AAA-RN-17-07-0009)
- vii. AEE Agency Endorsed Plan Set, Endorsement Letter & Project Evaluation and Point of Connection Approval (2017-161216-SRI-022288)
- xiv. DTOP Endorsement Letter (2017-161216-SRI-020138)
- ix. Firemen Department Endorsement (2017-161216-REA-001479)
- x. ICP Endorsements (IA & IB) (2017-161216-REA-001479, 2017 and 161216-REA-0014953)
- xi. Certification of Consistency filed with the State Coastal Management Program

b. Project must consult EPA for management of storm water to confirm if a National Pollutant Discharge Elimination System (NPDES) permit is necessary.

c. Project must submit the General Permit that establishes the Regulation for the Processing of General Permits that includes an Emission Source Permit (PFE) in the case of electricity generators with a capacity greater than ten (10) horsepower and an operation no greater than five hundred hours a year. If the generator has an operation greater than five hundred hours a year, they will have to obtain the corresponding emission permits from the JCA.

d. If the cutting of trees is necessary, a tree cutting, pruning, transplanting, and planting authorization (ACP) in accordance with chapter 47 cutting, pruning and afforestation of the joint regulation of permits for construction works and land use must be applied for and obtained.

e. The Highways and Transportation Authority has requested that the project plans in conjunction with evidence of payment of the impact fees (\$55,000.00) are to be

submitted to the Regional Department of Transportation Office in order to obtain the Regulation Permit.

f. The trucks transporting the waste during construction must possess the Permit to Operate Services of Recollection or Transportation of Non-Dangerous Solid Waste (DC-1 Permit, JCA).

g. Adequate measures must be taken in order to control the area during construction to avoid exposing the vehicles picking up any mud, dust, sticky or viscous substances in their tires or other parts of the vehicle which could then be deposited on the streets or any other public place. Construction debris and waste must not be accumulated in the Project's site surroundings.

h. A Permit Number for Generation of Biomedical Waste must be obtained if the Elderly home will provide medical services.

i. If a Laundry is installed, corresponding permits for compliance with Rules 108 (Installation of Control Equipments) and 4040 (Fugitive Emissions) of the Regulation Number 5300 of August 28, 1995 must be obtained.

2. Compliance Measures

a. Project must prepare and File to the Environmental Quality Board an emergency plan in compliance with the Regulations of Water Quality Standards to prevent and/or control diesel spills.

b. The Storage, management and disposition of waste materials must be executed in compliance with the Regulation for the Management of Non-hazardous Solid Waste of the Environmental Quality Board.

c. Compliance with noise ordinance as established in the "Reglamento para el Control de la Contaminación por Ruido de la Junta de Calidad Ambiental".

d. Project must implement and comply with a:

i. CES Plan

ii. Storm Water Pollution Prevention Plan (SWPPP)

iii. Recycling Plan & Quarterly Recycling Report of the Generated Materials during the Construction Work Phase (if the Municipality is responsible for this work, Compromise Evidence from the Municipality must be submitted).

iv. Drawings with the localization of the recycling area inside the Project must be submitted.

e. Compliance with Green Permit pre-qualification requirements is needed as a measure to obtain Green Certification.

- f. The project must comply with ADS rules and regulations.
- g. Prior to any extraction of the terrestrial crust, Developer and Contractor must comply with Chapter 46 of the Conjoined Regulations of Permits for Construction Work and Terrain Usage for Extraction, Excavation, Removal & Dredging (also known as Incidental Permit).
- h. The project must comply with the Requirements of the concerning Agencies and with their recommendations (2017-161216-REA-001479 and 2017-161216-DEA-00148) emitted for the Project.
- i. The Developer & Contractor must follow the recommendations of the realized Soil Study for the Project.
- j. Project must include a reforestation program using native species, which, in addition to helping to minimize erosion, benefits wildlife must be established. This measure is consistent with the Law to Encourage the Planting of Trees Whose Fruits and / or Seeds Provide Food for Wild Bird Species of Puerto Rico (Law No. 97 of June 24, 1998).
- k. The Project must take the necessary measures to prevent residues of organic and inorganic substances such as: oils, fuels, or other chemical substances, from being washed away by runoff and gaining access to any body of water or the rainwater system.
- l. The Project must comply with the Regulations for the Control and Prevention of Lighting Contamination.

3. Demolition and Construction

- a. Contractor must detain all construction work if archaeological deposits and/or elements of historical value are encountered during any phase of the construction. Contractor must inform the ICPR and Contracting Officer within 24 hours of the finding.
- b. If a superficial or subterranean body of water is discovered while construction work is taking place, it must be informed to the Department of Natural Resources.
- c. All pertaining permits must be obtained prior to construction commencement.

Additional Studies Performed

(Attach studies or summaries)

No further investigations or studies of the site are recommended.

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]

1. National Parks Services
 - a. <https://www.nps.gov/subjects/nlandmarks/index.htm>
2. FEMA Flood Map Service Center
 - a. <https://msc.fema.gov/portal/home>
3. The National Flood Insurance Program Community Status Book
 - a. <https://www.fema.gov/cis/PR.html>
4. Junta de Planificación de Puerto Rico
5. National Wetlands Inventory
 - a. <https://www.fws.gov/wetlands/data/mapper.html>
6. Puerto Rico Coastal Zone Management Program
 - a. <http://drna.pr.gov/historico/oficinas/arn/recursosvivientes/costasreservasrefugios/pmzc/pmzc2009/PMZCPR%20ingles%202009%20final.pdf>
7. Office for Coastal Zone Management
 - a. <https://coast.noaa.gov/czm/mystate/#puertorico>
8. United States Environmental Protection Agency
 - a. <https://www.epa.gov/dwssa>
 - b. <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>
 - c. <https://www3.epa.gov/airquality/greenbook/tnc.html>
 - d. <https://www3.epa.gov/airquality/greenbook/anayopr.html>
9. National Wildlife Refuge System
 - a. <https://www.fws.gov/refuges/>
 - b. <https://www.fws.gov/refuges/refugeLocatorMaps/PuertoRico.html>
 - c. https://www.fws.gov/refuges/maps/NWRS_National_Map.pdf
10. USA National Wild and Scenic Rivers
 - a. www.rivers.gov
11. Federal Aviation Administration
 - a. https://www.faa.gov/airports/planning_capacity/npas/reports/media/NPIAS-Report-2019-2023-Appendix-B.pdf
12. Google Earth
 - a. <https://earth.google.com>
13. Google Maps
 - a. <https://maps.google.com>
14. USFWS Coastal Barrier Resources System
 - a. <https://www.fws.gov/cbra>
15. National Pollutant Discharge Elimination System (NPDES)
 - a. <https://www.epa.gov/npdes>
16. Air Quality, EPA Nonattainment Areas – Arecibo
 - a. [02_pr_epatsd.pdf](#)

Annexes:

I. ESCJ – General Requirements

1. Technical & Feasibility Project Narrative
2. USGS Topographic Quadrangle Map
3. Wetland Inventory Map
4. FEMA Map
5. USFWS Coastal Barrier Map
6. Site Plan
7. Photographs
8. As-Found Plan
9. ALTA Survey
10. Designer's Preliminary Certification
11. Zoning Certification
12. Fair Housing Act Checklist
13. Project Timeline

II. ESCJ – Studies

1. Soil Study + Geotechnical Engineer Certification + Structural Engineer Certification
2. Noise Study
3. Updated Phase I Environmental Site Assessment 09.20.2021
4. Hydraulic-Hydrological Study + Non-Flood Certification
5. SHPO Final Determination Letter
6. Archaeological Study + Architect SHPO Letter

III. ESCJ – Design & Costs

1. Architect Contract
2. Construction Contract
3. Inspector Contract
4. Construction Cost Breakdown
5. Development Budget & Cash Flow
6. Plans
7. Technical Specifications

IV. ESCJ - CDBG-DR Design Requirements

1. ICC-700 NBGS Scoring Tool
2. Notification of Green Building Standard Being Pursued
3. Green Building Person-In-Charge
4. Green Building Checklist Annex U
5. Green Building Certificate of Compliance

6. Evidence of ICC-700 NGBS Registration
7. Broadband Infrastructure Certification
8. Accessibility Inspection Certification
9. Architect Accessibility Requirements Certification
10. Green Building Project Narrative & Design Parameters

V. ESCJ - Permits & Endorsements

1. OGPe Notification of Requirements for Approval of Construction Permit
2. Consulta de Ubicación & Enmienda
3. PRASA Recommendations, Endorsements & Plans
4. PRASA Recommendations, Endorsements & Plans
5. Telecommunications Endorsement Letter and Stamped Plan
6. OGPe DEA + REA Environmental
7. DRNA Recommendations
8. DRNA Habitat Categorization
9. ADS Recommendations
10. ACT Recommendations
11. Municipal Endorsement Letters
12. Fire Department Recommendations
13. ICP Recommendations
14. Agriculture Endorsement Letter
15. SHPO Final Determination
16. USFWS Technical Assistance Final Determination
17. Corps of Engineers
18. Department of Health Recommendations
19. Tourism Endorsement
20. USPS Endorsement
21. Green Building Standard Certification

VI. ESCJ – Other Documents for Environmental Assessment

1. Aquifers Map
2. Location of Query Resolution & Amendment
3. FAA Endorsement
4. Nearby Hazardous Operations Certifications & Map
5. Social Interest Housing Certification
6. Wild & Scenic Rivers Map