Environmental Review Record (ERR) PR-CRP-000252

Environmental Review (ER)

ER Form of the Housing Department of Puerto Rico

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: PR-CRP-000252-Street-Improvement

Responsible Entity: CAGUAS, BOX 907 CAGUAS MUNICIPIO PR, 00726

Grant Recipient (if different than Responsible Entity): Autonomous Municipality of Caguas

State/Local Identifier: Puerto Rico

Preparer: Ana De Jesus-Ortiz

Certifying Officer Name and Title: Guillermo Rivera-Cruz
Director of the Office of Environmental Affairs

Consultant (if applicable):

Direct Comments to: Guillermo Rivera-Cruz
Director of the Office of Environmental Affairs (Certifying Officer)
guillermor@caguas.gov.pr or asuntosambientales@caguas.gov.pr
Phone: (787)653-6354

Project Location: Luis Muñoz Avenue, Gautier Benitez Avenue, Rafael Cordero Avenue, Leoncio Velázquez Boulevard, PR 156 Road, and PR 34 Road

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

In September 2017, Puerto Rico was struck by an atmospheric event, Hurricane Maria. Due to the severity of the impact caused by Hurricane Maria, President Donald J. Trump approved a disaster declaration for Puerto Rico. The factors linked to severe atmospheric events, such as rain and flooding, have affected the infrastructure, specifically the structure and surface of the main avenues at the Autonomous Municipality of Caguas. Therefore, the Autonomous Municipality of Caguas proposed a project to rehabilitate the main avenues, which include Luis Muñoz Ave., Gautier Benitez Ave., Rafael Cordero Ave., Leoncio Velázquez Blvd., PR 156, and PR 34.

The objectives of the project will be implemented as follows on the City's main avenues:

1. The Luis Muñoz Marín Avenue and the interior streets propose road improvements to the avenue and the other selected intersecting streets in the Municipality of Caguas. The objective is to improve traffic and pedestrian safety by providing new pavement and concrete road surfaces, improving traffic and crosswalk markings, repairing damaged sidewalks, and reconstructing curb ramps that comply with current codes and ADA regulations. The activities previously mentioned will be performed at the following locations:
    a. Luis Muñoz Marín Monument Parking Lot
    b. Coral Street, from Muñoz Marín Avenue to Ópalo Street
    c. Garrido Street, from Muñoz Marín Avenue to 4th Street of San Antonio Street
    d. Aramaná Street Urb. Caguax
    e. Calle 1 Urb. Villa Victoria
    f. Georgetti Avenue, from Muñoz Marín Avenue to after the Brisas del Turabo residential area
    g. Calle 6 de Mariolga, from Avenida Muñoz Marín to Calle 25
    h. Calle 2 de Mariolga, from Avenida Muñoz Marín to Calle 23
    i. Edinburgh Street, from Muñoz Marín Avenue to Luxemburgo Street
    j. Parking Lots Recreational Facilities Villa del Rey I
    k. Calle Windsor Villa del Rey I, from Avenida Muñoz Marín to the end

2. Gautier Benítez Avenue and the following interior streets:
    a. San Carlos Street, from Luis Muñoz Marín Avenue to Pino Avenue
    b. Street leading to the Salvation Army

3. Rafael Cordero Avenue and the following interior streets:
    a. Nuñez Street
    b. Market Square Parking
    c. San Andrés Street, from Rafael Cordero Avenue to Millán Clara Track

4. Leoncio Velázquez Boulevard
5. PR-156
6. PR-34

Creation of lanes for cyclists. The bicycle is an alternative and eco-friendly means of transport, which reduces greenhouse gas emissions to protect the environment. The cycle lane will be implemented in the following areas:

1. Bicycle lane on Rafael Cordero Avenue, in the direction of traffic with an approximate length of 600 meters, starting at the Fire Station at the intersection with Dr. Pedro Goyco Street and El Troche Street, and ending at the passive recreation square located at the intersection with Manuel Elzaburu y Vizcarrondo Street and San Andrés Street.

2. Bicycle lane on Rafael Cordero Avenue, in both directions of traffic with an approximate length of 2000 meters starting at the Fire Station at the intersection with Dr. Pedro Goyco

Street and El Troche Street and ending at the vehicular entrance of the Plaza Centro Shopping Center located in the East quadrant of the Complex.

3. Bicycle lane on Luis Muñoz Marín Avenue, in a single direction of traffic, with an approximate length of 540 meters starting at Rafael Cordero Avenue and ending at PR-189.

4. Bicycle lane on PR-189, in a single direction of traffic, with an approximate length of 1,100 meters starting at Luis Muñoz Marín Avenue and ending at Rafael Cordero Avenue.

These bicycle lanes will be developed in the existing avenues without new land acquisition (i.e., geometrical improvements).

Replacement of asphalt and pedestrian crossings on cobblestones, with taxiway and pedestrian crossings in concrete, with their proper marking. This will be implemented in the following areas:

1. Intersection with Garrido Avenue, in Santa Juana
2. Entrance to Plaza Centro II, only what is on the cobblestones
3. Intersection with Calle Aramaná, Urb. Caguax (near Atento)
4. Intersection with Cristóbal Boulevard
5. Intersection with San Carlos Avenue in Mariolga

Additionally, it is worth mentioning that the Estimated Total Project Cost has experienced a substantial increase from **$8,949,687.75** in February 2022 to **$18,485,329.47** as of July 2025.

Maps, photographs, and other documentation of project location and description:

Exhibit A:

1. Aerial Map
2. Memorial

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.35(a)(1) This activity is CEST if the facilities and improvements are in place and retained in the same use without change in size or capacity of more than 20 percent. Acceptable activities include replacement of water or sewer lines, reconstruction of curbs and sidewalks, and repaving of streets. Also, the 24 CFR 58.35(a)(2) Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.

Funding Information

Grant Numbers	HUD Program	Funding Amount
B-17-DM-72-001	Community Development Block Grant (Disaster Recovery Assistance)	1,507,179,000
B-18-DP-72-0001	Community Development Block Grant (Disaster Recovery Assistance)	1,700,000,000

Estimated Total HUD Funded Amount: 8,949,687.75
Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**: 8,949,687.75**

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	The Municipality of Caguas doesn't have a military or civilian airport in its territorial jurisdiction. The nearest civilian or military airport is located approximately 72,547 feet (13.74 miles) (SJU airport) from one of the closest avenues (Leoncio Velázquez Boulevard) **(Exhibit B1 and B2)**. The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. In other words, the project area is not located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ). The project is in compliance with Airport Hazards requirements. **Exhibit B:** 1. Civilian Airport Map 2. Military Airport Map

Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	Puerto Rico is one of the areas with Coastal Barrier Resources Systems (CBRS). However, the project is located approximately 66,568.241 feet (20.29km) from the nearest CBRS (Punta Vacia Talega). This project is not located in a CBRS Unit. Therefore, this project has no potential impact on the CBRS Unit and is in compliance with the Coastal Barrier Resources Act. There are no anticipated adverse effects due to the project's development. **Exhibit C:** **1.** Coastal Barrier Map
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	The project area is partially classified as Zone AE. Specifically, four out of six principal avenues, such as Luis Muñoz Marin Avenue, Leoncio Velázquez Boulevard, PR 156 Road, and PR 34 Road. Every avenue has a partial segment that is designated by FEMA Zone AE. Source of information: FIRM Map 72000C0740J and the 72000C0745J, valid from November 18, 2009. Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), the project includes no activities that require further evaluation under this section. The National Flood Insurance Program (NFIP) does not ensure roads & streets. The project does not require flood insurance or is exempt from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the NIPF. The project complies with Flood Insurance requirements. **Exhibit D:** **1.** FEMA FIRM Map

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STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	The project location is not currently listed as a non-attainment area. Source of information: Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants, the latest updated data was on July 25, 2025 **(Exhibit E1)**. Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), this project includes no activities that would require further evaluation under the Clean Air Act. The project is in compliance with the Clean Air Act. **Exhibit E:** 1. PR Air Quality Attainments – updated on July 25, 2025
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	The proposed project is not located in, nor affects, a coastal zone. The Municipality of Caguas does not have any coastal zone. The nearest coast is approximately 18 miles away; therefore, it is not defined as a Coastal Municipality by the Puerto Rico Coastal Zone Management Program (PRCZM). This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act. **Exhibit F:** 1. Coastal Zone Land Boundary Map
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☒ No ☐	The NEPASSIST Tool identified 287 EPA facilities (269 RCRA and 18 toxic release sites) within a 1-mile radius of each avenue (Luis Muñoz Ave., Gautier Benitez Ave., Rafael Cordero Ave., Leoncio Velázquez Blvd., PR 156, and PR 34) **(Exhibit G5 and G6)**. The nearest EPA facilities for each avenue were:

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		• COSTCO 365 and BANFIELD PET HOSPITAL NUM 2188, located 0.16 miles from Rafael Cordero Ave. **(Exhibit G10 and G13)** • TEXACO PR INC - WILLIAM ALVERIO and APR UNLIMITED GENERAL CONTRACTORS is located 0.25 miles from Luis Muñoz Marín Ave. **(Exhibit G7 and G14)** • USARC MSG DIONISIO M CLAUDIO, located 0.03 miles from the Gautier Benitez Ave. **(Exhibit G8)** • DAEWOOD is located 0.07 miles from Leoncio Velázquez Blvd. **(Exhibit 9)** • CARTAGENA PRINTING is located 0.20 miles from PR 156 Road. **(Exhibit G11)** • CARIBE WATER TECHNOLOGY INC is located 0.20 miles from PR 34 Road. **(Exhibit G12)** The farthest EPA facilities for each avenue were: • MEADWESTVACO HEALTHCARE PACKAGING PR LLC, located 0.99 miles from Rafael Cordero Ave. • PRPHA BRISAS DEL TURABO I is located 0.99 miles from Luis Muñoz Marín Ave. • PRPHA BRISAS DEL TURABO I, located 1.00 miles from the Gautier Benitez Ave. • SACHS PLASTICS DIVISION is located 0.95 miles from Leoncio Velázquez Blvd. • SAM'S CLUB 6689 is located 0.99 miles from PR 156 Road. • B H MICROFILM COMPONENTS INC is located 0.97 miles from PR 34 Road. In ECHO reports, no violations were recorded for sites within a radius of 1 mile from the projects.

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		Since the project is not linked to a building, residential property, or any structure, there is no need to proceed with the radon test. Thus, the proposed project is exempt from the radon test. It is essential to note that the HUD regulation in 24 CFR 35 primarily focuses on housing structures and does not specify a limit on LBP for infrastructure, such as streets or highways. Regardless, we carry out the following survey to comply with the established regulations. On December 3, 2022, and February 21-22, 2023, a survey of asbestos was conducted on PR 34 road, PR 156 road, Leoncio Velázquez Boulevard, and Jose Gautier Benitez Avenue. The results showed no presence of asbestos. **(Exhibit G1 and G3)** However, a Lead-Based Paint (LBP) survey was conducted on December 3, 2022, by Global Environmental Services LLC, which revealed positive components with LBP (above 1.0 mg/cm2) in various segments of PR 34, PR 156, and the Leoncio Velázquez Boulevard. **(Exhibit G1)** Yellow Curb positive components with LBP on the following avenues: • Road PR-34 Int. Road PR-7785 • Road PR-156 Km. 57.7 • Road PR-156 Int. Barcelona Street Km. 57.8 • Road PR-156 Int. A Street • Leoncio Velázquez Boulevard Sub-Station Yellow Pipe Barrier positive components with LBP on the following avenues: • Leoncio Velázquez Boulevard Sub-Station Light Pole Bases positive components with LBP on the following avenues:

		• Road PR-34 Int. Degetau Avenue • Road PR-156 Int. PR-33 In the case of Jose Gautier Benitez Avenue, a survey was conducted on February 21-22, 2023, by Share Tech Group. The following areas that showcase a high concentration of LBP were at the José Gautier Benítez Avenue and San Carlos Street at the center curb, bollard, sidewalk marking, marking line, curb island, curb ramp, and post. (**Exhibit G4**) That being the case, the situation can repeat in various areas throughout the project. However, the presence of an elevated concentration of LBP (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site. **Exhibit G:** **1.** Asbestos and Lead Base Paint Report at PR34, PR156, and Leoncio Blvd **2.** Letters from the DNER properties near PR34, PR156, and Leoncio Blvd **3.** Certification of no presence of Asbestos at the Gautier Benitez Avenue **4.** Lead Base Paint Report from Gautier Benitez **5.** RCRA List near the project **6.** TRI List near the project **7.** ECHO report from TEXACO PR INC WILLIAM ALVERIO **8.** ECHO report from MSG DIONISIO M CLAUDIO **9.** ECHO report from DAEWOOS CAGUAS **10.** ECHO report from COTSCO WHOLESALE **11.** ECHO report from CARTAGENA PRINTING **12.** ECHO report from CARIBE WATER TECHNOLOGY INC

		13. ECHO report from BANFIELD PET HOSPITAL NUM 2188 **14.** ECHO report from APR UNLIMITED GENERAL CONTRACTORS **15.** UST List near the project
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☐ No ☒	USFW issued a Blanket Clearance Letter for HUD federally sponsored projects, last revised in April 2025. Our project complies with criteria #1 & #2 of this clearance letter. According to the USFW Puerto Rico Field Office, the Municipality Self-Certification for Compliance with the Blanket Letter dated April 29, 2025, will be included in the case documentation to comply with the Endangered Species Act. This project will have No Effect on listed species based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by the local HUD office. This project is in compliance with the Endangered Species Act. **Exhibit H:** **1.** Response from the USFW for CDBG-DR
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	The project area does not include any hazardous facilities (facilities that mainly store, handle, or process flammable or combustible chemicals, such as bulk fuel storage facilities and refineries). Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), the project activities will not increase residential densities or convert other uses into residential ones. Therefore, the project is in compliance with explosive and flammable hazard requirements.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	The project area has been impacted previously. The proposed project consists of scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily

		populated urban area. The project is out of agricultural reserves, experimental stations, and soils classified as of agricultural capacity or classified as prime agricultural land, according to the Soil Survey from the NRCS. Caguas does not have protected areas covered by the Farmlands Protection Policy Act. This project does not include any activities that could potentially convert agricultural land to non-agricultural use. The project is in compliance with the Farmland Protection Policy Act. **Exhibit I:** **1.** Soil Report
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	In September 2017, Puerto Rico was struck by an atmospheric event, Hurricane Maria. Due to the severity of the impact caused by Hurricane Maria, President Donald J. Trump approved a disaster declaration for Puerto Rico. The factors linked to severe atmospheric events, such as rain and flooding, have affected the infrastructure, specifically the structure and surface of the main avenues at the Autonomous Municipality of Caguas. Therefore, the principal objective of the project involves a series of integrated activities aimed at enhancing pedestrian and vehicular accessibility, safety, and overall compliance with the applicable standards. The scope of the project includes scarification of existing pavement surfaces, asphalt deposits, reconstruction of pedestrian crosswalks, the installation of ADA-compliant accessibility ramps, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. To analyze the project area as a source, we use FEMA Puerto Rico Advisory Base Flood Elevations (ABFE's) effective on December 11, 2018. The proposed project areas are partly in the 100-year and 500-year floodplains. Although some segments are established as a 100-year floodplain, HUD financial assistance may not be approved; however, is in compliance

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		with 24 CFR 55.8(a)(1)(ii) any rehabilitation, including reconstruction following Presidentially-declared disasters, that does not expand the footprint of the buildings or the number of units on the site is allowable within the FFRMS floodplain outside of the onsite floodway. Also, the area met the following criteria because the segments of the project that are 100-year floodplains are functionally dependent (24 CFR 55.8(a)(1)(ii)(A)), as defined in 24 CFR 55.2(b)(7), a land use that must necessarily be conducted close to water, for example, a bridge. Additionally, the project meets with the exception at 24 CFR 55.12. The reason is that one of the scopes of the project is the installation of ADA-compliant accessibility ramps as defined in 24 CFR 55.12(i), which indicates that special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility. Therefore, the project is in compliance with Executive Order 11988. **Exhibit J:** **1.** ABFEs Map **2.** 24 CFR 55.8(a)(1)(ii)(A) **3.** 24 CFR 55.12(i) **4.** 24 CFR 55.2(b)(7)
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	The Autonomous Municipality of Caguas submitted the documentation to start the consultation with SHPO on April 15, 2025. SHPO communication dated May 23, 2025, determined to support our findings of no historic properties will be affected within the project. Based on the project Section 106 consultation, there are **No Historic Properties Affected** because there are no historic properties present. The project is in compliance with Section 106. **Exhibit K:** **1.** SHPO Consultation

		2. Map of historical areas **3.** SHPO-CF-05-13-25-08-Carta
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), this project includes no activities that would require further evaluation under HUD's noise regulation. The project is in compliance with HUD's Noise regulations.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	The project is limited to scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. There are no designated Sole Source Aquifers in Puerto Rico. According to the EPA Sole Source Aquifers Map, the project is not located in a sole source aquifer area. The project is in compliance with the Sole Source Aquifer requirements. **Exhibit L:** **1.** SSA **2.** SSA Region II EPA **3.** SSA Puerto Rico
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	The proposed project does not involve new construction as defined in Executive Order 11990, the expansion of a building's footprint, or ground disturbance (including draining, dredging, channelizing, filling, or diking) in a wetland. The scope of the project includes scarification of existing pavement surfaces, asphalt deposits, reconstruction of pedestrian crosswalks, the installation of ADA-compliant accessibility ramps, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. This project includes no activities that would require further evaluation under this section. The project is in compliance with Executive Order 11990. **Exhibit M:**

		1. Wetland Map
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	The Municipality of Caguas does not have any rivers registered as a Wild and Scenic River, Study River, or listed in the Nationwide Rivers Inventory (NRI). The nearest Wild and Scenic River (Rio Icacos) is 84,480 feet (16 miles) from the project area. Thus, the project is not within proximity of the NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act. **Exhibit N:** 1. Wild and Scenic Rivers Map 2. WSR Inventory 3. National Park Service Puerto Rico

Field Inspection (Date and completed by):

1. August 12, 2021, a visual inspection was conducted by Jose J. Rivera González, Director of the Department of Public Works and Secretariat of Infrastructure.
2. December 3, 2022, an inspection of asbestos and LBP was conducted by Global Environmental Services LLC on PR 34, PR 156, and the Leoncio Velázquez Boulevard.
3. February 21- 22, 2023, an inspection of asbestos and LBP was conducted by Share Tech Group in Gautier Benitez Avenue.

Summary of Findings and Conclusions:

The principal objective of the project involves a series of integrated activities aimed at enhancing pedestrian and vehicular accessibility, safety, and overall compliance with the applicable standards. The scope of the project includes scarification of existing pavement surfaces, asphalt deposits, reconstruction of pedestrian crosswalks, the installation of ADA-compliant accessibility ramps, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. After completing the other portions of the environmental review, we determined that neither the project site nor the surrounding neighborhood suffered from adverse environmental conditions. The project is out: (a) of the airport hazard zones, (b) it is in a flood zone AE (according to FEMA FIRM Maps); however, based on the project activities is an exemption (24 CFR 55.8(a)(1)(ii)(A) & 24 CFR 55.12(i)), (c) out of coastal barrier zones (according to Puerto Rico Coastal Zone Management Program), (d) compliance with Clean Air Act, (e) the project will not result in an increased number of people in the area, (f) there are not AST's in the project surroundings; (g) doesn't impact a farmland, sole aquifer, wild rivers or wetlands areas (according to location map), (h) is not a hazardous or flammable facility, (i) is not a new construction that exceeds the building footprint, (j) no noise abatement needed, (k) SHPO determined that the project have no historic properties affected in the area and (l) comply with USFW Blanket Clearance Letter for HUD funding projects and concur with our determination, (m) no violations on RCRA permits are found in sites surrounding the project area (according to NEPA Assist & ECHO reports); however, a

report of a LBP resulted in positive results, therefore a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
Contamination and Toxic Substances	Due to the presence of an elevated concentration of LBP (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.

Determination:

☐ This categorically excluded activity/project converts to Exempt, per 58.34(a)(12) because there are no circumstances which require compliance with any of the federal laws and authorities cited at §58.5. **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt because there are circumstances which require compliance with one or more federal laws and authorities cited at §58.5. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: _____ Date: 8/14/25

Name/Title/Organization: Ana De Jesus-Ortiz, Environmental Technician, Autonomous Municipality of Caguas

Responsible Entity Agency Official Signature (Certifying Officer):

_____ Date: 8/14/2025

Name/Title: Guillermo Rivera-Cruz, Environmental Affairs Director, Autonomous Municipality of Caguas

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

ER Form of the U.S. Department of Housing and Urban Development (HUD)

U.S. Department of Housing and Urban Development
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Washington, DC 20410
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Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: PR-CRP-000252-Street-Improvement

HEROS Number: 900000010485480

Start Date: 07/22/2025

State / Local Identifier:

Project Location: Various locations, Caguas, PR 00725

Additional Location Information:
Luis Munoz Avenue, Gautier Benitez Avenue, Rafael Cordero Avenue, Leoncio Velazquez Boulevard, PR 156 Road, and PR 34 Road

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:
In September 2017, Puerto Rico was struck by an atmospheric event, Hurricane Maria. Due to the severity of the impact caused by Hurricane Maria, President Donald J. Trump approved a disaster declaration for Puerto Rico. The factors linked to severe atmospheric events, such as rain and flooding, have affected the infrastructure, specifically the structure and surface of the main avenues at the Autonomous Municipality of Caguas. Therefore, the Autonomous Municipality of Caguas proposed a project to rehabilitate the main avenues, which are the Luis Munoz Ave., Gautier Benitez Ave., Rafael Cordero Ave., Leoncio Velazquez Blvd., PR 156, and PR 34. The objectives of the project will be implemented as follows on the City's main avenues: The Luis Munoz Marin Avenue and the interior streets propose road improvements to the avenue and the other selected intersecting streets in the Municipality of Caguas. The objective is to improve traffic and pedestrian safety by providing new pavement and concrete road surfaces, improving traffic and crosswalk markings, repairing damaged sidewalks, and reconstructing curb ramps that comply with current codes and ADA regulations. The activities previously mentioned will be performed at the following locations: -Luis Munoz Marin Monument Parking Lot -Coral Street, from Munoz Marin Avenue to Opalo Street -Garrido Street, from Munoz Marin Avenue to 4th Street of San Antonio Street -Aramana Street Urb. Caguax -Calle 1 Urb. Villa Victoria -Georgetti Avenue, from Munoz Marin Avenue to after the Brisas del Turabo residential area -Calle 6 de Mariolga, from Avenida Munoz Marin to Calle 25 -Calle 2 de Mariolga, from Avenida Munoz Marin to Calle 23 -Edinburgh Street, from Munoz Marin Avenue to Luxemburgo Street -Parking Lots Recreational Facilities Villa del Rey I -Calle Windsor Villa del Rey I, from Avenida Munoz Marin to the end Gautier Benitez Avenue and the following interior streets: -San Carlos Street, from Luis Munoz Marin Avenue to Pino Avenue -Street leading to the Salvation Army Rafael Cordero Avenue and the following interior streets: -Nunez Street -Market Square Parking -San Andres Street, from Rafael Cordero Avenue to Millan Clara Track Leoncio Velazquez Boulevard PR-156 PR-34 Creation of lanes for cyclists. The cycle lane will

be implemented in the following areas: -Rafael Cordero Avenue, in the direction of traffic, with an approximate length of 600 meters starting at the Fire Station at the intersection with Dr. Pedro Goyco Street and El Troche Street and ending at the passive recreation square located at the intersection with Manuel Elzaburu y Vizcarrondo Street and San Andres Street. -Rafael Cordero Avenue, in both directions of traffic with an approximate length of 2000 meters, starting at the Fire Station at the intersection with Dr. Pedro Goyco Street and El Troche Street, and ending at the vehicular entrance of the Plaza Centro Shopping - Center located in the East quadrant of the Complex. -Luis Munoz Marin Avenue, in a single direction of traffic, with an approximate length of 540 meters starting at Rafael Cordero Avenue and ending at PR-189. - PR-189, in a single direction of traffic, with an approximate length of 1,100 meters starting at Luis Munoz Marin Avenue and ending at -Rafael Cordero Avenue. Replacement of asphalt and pedestrian crossings on cobblestones, with taxiway and pedestrian crossings in concrete, with their proper marking. This will be implemented in the following areas: -Intersection with Garrido Avenue, in Santa Juana -Entrance to Plaza Centro II, only what is on the cobblestones -Intersection with Calle Aramana, Urb. Caguax (near Atento) - Intersection with Cristobal Boulevard -Intersection with San Carlos Avenue in Mariolga Additionally, it is worth mentioning that the Estimated Total Project Cost has experienced a substantial increase from $8,949,687.75 in February 2022 to $18,485,329.47 as of July 2025.

Level of Environment Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5:
58.35(a)(1)
58.35(a)(2)
58.35(a)(6)

Funding Information

Grant Number	HUD Program	Program Name	
B-17-DM-72-001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	$1,507,179,000.00
B-18-DP-72-0001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	$1,700,000,000.00

Estimated Total HUD Funded Amount: $8,949,687.75

Estimated Total Project Cost [24 CFR 58.2 (a) (5)]: $8,949,687.75

Mitigation Measures and Conditions [CFR 1505.2(c)]:

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed Measures	Complete
Contamination and Toxic Substances	The presence of an elevated concentration of Lead-Based Paint (LBP) (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.	N/A	

Determination:

☐	This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR
☒	This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
☐	This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: A. de Jesus Ortiz **Date:** 8/14/25

Name / Title/ Organization: Ana De Jesus-Ortiz / / CAGUAS

Responsible Entity Agency Official Signature: _____ **Date:** 8/14/25

Name/ Title: Guillermo Rivera Cruz, Certifying Officer CDBG-DR

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environment Review Record (ERR) for the activity / project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov
espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: PR-CRP-000252-Street-Improvement

HEROS Number: 900000010485480

Start Date: 07/22/2025

Responsible Entity (RE): CAGUAS, BOX 907 CAGUAS MUNICIPIO PR, 00726

State / Local Identifier:

RE Preparer: Ana De Jesus-Ortiz

Certifying Officer: Guillermo Rivera-Cruz

Grant Recipient (if different than Responsible Entity):

Point of Contact:

Point of Contact:
Consultant (if applicable):

40 CFR 1506.5(b)(4): The lead agency or, where appropriate, a cooperating agency shall prepare a disclosure statement for the contractor's execution specifying that the contractor has no financial or other interest in the outcome of the action. Such statement need not include privileged or confidential trade secrets or other confidential business information.

- ✓ By checking this box, I attest that as a preparer, I have no financial or other interest in the outcome of the undertaking assessed in this environmental review.

Project Location: Various locations, Caguas, PR 00725

Additional Location Information:
Luis Munoz Avenue, Gautier Benitez Avenue, Rafael Cordero Avenue, Leoncio Velazquez Boulevard, PR 156 Road, and PR 34 Road

Direct Comments to: Email: asuntosambientales@caguas.gov.pr
Physical Address: Casa Alcaldia de Caguas William Miranda Marin; Second Floor at the Office of Environmental Affairs; 111 Alejandro Tapia y Rivera Street

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

In September 2017, Puerto Rico was struck by an atmospheric event, Hurricane Maria. Due to the severity of the impact caused by Hurricane Maria, President Donald J. Trump approved a disaster declaration for Puerto Rico. The factors linked to severe atmospheric events, such as rain and flooding, have affected the infrastructure, specifically the structure and surface of the main avenues at the Autonomous Municipality of Caguas. Therefore, the Autonomous Municipality of Caguas proposed a project to rehabilitate the main avenues, which are the Luis Munoz Ave., Gautier Benitez Ave., Rafael Cordero Ave., Leoncio Velazquez Blvd., PR 156, and PR 34. The objectives of the project will be implemented as follows on the City's main avenues: The Luis Munoz Marin Avenue and the interior streets propose road improvements to the avenue and the other selected intersecting streets in the Municipality of Caguas. The objective is to improve traffic and pedestrian safety by providing new pavement and concrete road surfaces, improving traffic and crosswalk markings, repairing damaged sidewalks, and reconstructing curb ramps that comply with current codes and ADA regulations. The activities previously mentioned will be performed at the following locations: -Luis Munoz Marin Monument Parking Lot -Coral Street, from Munoz Marin Avenue to Opalo Street -Garrido Street, from Munoz Marin Avenue to 4th Street of San Antonio Street -Aramana Street Urb. Caguax -Calle 1 Urb. Villa Victoria -Georgetti Avenue, from Munoz Marin Avenue to after the Brisas del Turabo residential area -Calle 6 de Mariolga, from Avenida Munoz Marin to Calle 25 -Calle 2 de Mariolga, from Avenida Munoz Marin to Calle 23 -Edinburgh Street, from Munoz Marin Avenue to Luxemburgo Street -Parking Lots Recreational Facilities Villa del Rey I -Calle Windsor Villa del Rey I, from Avenida Munoz Marin to the end Gautier Benitez Avenue and the following interior streets: -San Carlos Street, from Luis Munoz Marin Avenue to Pino Avenue -Street leading to the Salvation Army Rafael Cordero Avenue and the following interior streets: -Nunez Street -Market Square Parking -San Andres Street, from Rafael Cordero Avenue to Millan Clara Track Leoncio Velazquez Boulevard PR-156 PR-34 Creation of lanes for cyclists. The cycle lane will be implemented in the following areas: - Rafael Cordero Avenue, in the direction of traffic, with an approximate length of 600 meters starting at the Fire Station at the intersection with Dr. Pedro Goyco Street and El Troche Street

and ending at the passive recreation square located at the intersection with Manuel Elzaburu y Vizcarrondo Street and San Andres Street. -Rafael Cordero Avenue, in both directions of traffic with an approximate length of 2000 meters, starting at the Fire Station at the intersection with Dr. Pedro Goyco Street and El Troche Street, and ending at the vehicular entrance of the Plaza Centro Shopping -Center located in the East quadrant of the Complex. -Luis Munoz Marin Avenue, in a single direction of traffic, with an approximate length of 540 meters starting at Rafael Cordero Avenue and ending at PR-189. -PR-189, in a single direction of traffic, with an approximate length of 1,100 meters starting at Luis Munoz Marin Avenue and ending at - Rafael Cordero Avenue. Replacement of asphalt and pedestrian crossings on cobblestones, with taxiway and pedestrian crossings in concrete, with their proper marking. This will be implemented in the following areas: -Intersection with Garrido Avenue, in Santa Juana - Entrance to Plaza Centro II, only what is on the cobblestones -Intersection with Calle Aramana, Urb. Caguax (near Atento) -Intersection with Cristobal Boulevard -Intersection with San Carlos Avenue in Mariolga Additionally, it is worth mentioning that the Estimated Total Project Cost has experienced a substantial increase from $8,949,687.75 in February 2022 to $18,485,329.47 as of July 2025.

Maps, photographs, and other documentation of project location and description:

Exhibit A2_Memorial.pdf
Exhibit A1_Aerial Map PR-CRP-000252.pdf
Visual Inspection Photos.pdf

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at 58.5:

58.35(a)(1)
58.35(a)(2)
58.35(a)(6)

Determination:

	This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR
✓	This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

	This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Approval Documents:

7015.15 certified by Certifying Officer on:

7015.16 certified by Authorizing Officer on:

Funding Information

Grant / Project Identification Number	HUD Program	Program Name	Funding Amount
B-17-DM-72-001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	$1,507,179,000.00
B-18-DP-72-0001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	$1,700,000,000.00

Estimated Total HUD Funded, Assisted or Insured Amount: $8,949,687.75

Estimated Total Project Cost: $8,949,687.75

Compliance with 24 CFR §50.4, §58.5 and §58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6	Are formal compliance steps or mitigation required?	Compliance determination (See Appendix A for source determinations)
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.6		

Airport Hazards Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D	☐ Yes ☑ No	The Municipality of Caguas doesn't have a military or civilian airport in its territorial jurisdiction. The nearest civilian or military airport is located approximately 72,547 feet (13.74 miles) (SJU airport) from one of the closest avenues (Leoncio Velazquez Boulevard). The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. In other words, the project area is not located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ). The project is in compliance with Airport Hazards requirements.
Coastal Barrier Resources Act Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	☐ Yes ☑ No	Puerto Rico is one of the areas with Coastal Barrier Resources Systems (CBRS). However, the project is located approximately 66,568.241 feet (20.29km) from the nearest CBRS (Punta Vacia Talega). This project is not located in a CBRS Unit. Therefore, this project has no potential impact on the CBRS Unit and is in compliance with the Coastal Barrier Resources Act. There are no anticipated adverse effects due to the project's development.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	☐ Yes ☑ No	The project area is partially classified as Zone AE. Specifically, four out of six principal avenues, such as Luis Munoz Marin Avenue, Leoncio Velazquez Boulevard, PR 156 Road, and PR 34 Road. Every avenue has a partial segment that is designated by FEMA Zone AE. Source of information: FIRM Map 72000C0740J and the 72000C0745J, valid from November 18, 2009. Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), the project includes no activities that require further evaluation under

		this section. The NIPF does not ensure roads & streets. The project does not require flood insurance or is exempt from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project complies with Flood Insurance requirements.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.5		
Air Quality Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	☐ Yes ☑ No	The project location is not currently listed as a non-attainment area. Source of information: Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants, the latest updated data was on July 25, 2025. Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), this project includes no activities that would require further evaluation under the Clean Air Act. The project is in compliance with the Clean Air Act.
Coastal Zone Management Act Coastal Zone Management Act, sections 307(c) & (d)	☐ Yes ☑ No	The proposed project is not located in, nor affects, a coastal zone. The Municipality of Caguas does not have any coastal zone. The nearest coast is approximately 18 miles away; therefore, it is not defined as a Coastal Municipality by the Puerto Rico Coastal Zone Management Program (PRCZM). This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act.
Contamination and Toxic Substances 24 CFR 50.3(i) & 58.5(i)(2)]	☑ Yes ☐ No	The NEPASSIST Tool identified 287 EPA facilities (269 RCRA and 18 toxic release sites) within a 1-mile radius of each

		avenue (Luis Munoz Ave., Gautier Benitez Ave., Rafael Cordero Ave.,Leoncio Velazquez Blvd., PR 156, and PR 34). The nearest EPA facilities for each avenue were: -COSTCO 365 and BANFIELD PET HOSPITAL NUM 2188, located 0.16 miles from Rafael Cordero Ave. -TEXACO PR INC - WILLIAM ALVERIO and APR UNLIMITED GENERAL CONTRACTORS is located 0.25 miles from Luis Munoz Marin Ave. -USARC MSG DIONISIO M CLAUDIO, located 0.03 miles from the Gautier Benitez Ave. - DAEWOOD is located 0.07 miles from Leoncio Velazquez Blvd. -CARTAGENA PRINTING is located 0.20 miles from PR 156 Road. -CARIBE WATER TECHNOLOGY INC is located 0.20 miles from PR 34 Road. The farthest EPA facilities for each avenue were: - MEADWESTVACO HEALTHCARE PACKAGING PR LLC, located 0.99 miles from Rafael Cordero Ave. -PRPHA BRISAS DEL TURABO I is located 0.99 miles from Luis Munoz Marin Ave. - PRPHA BRISAS DEL TURABO I, located 1.00 miles from the Gautier Benitez Ave. -SACHS PLASTICS DIVISION is located 0.95 miles from Leoncio Velazquez Blvd. -SAM'S CLUB 6689 is located 0.99 miles from PR 156 Road. -B H MICROFILM COMPONENTS INC is located 0.97 miles from PR 34 Road. In ECHO reports, no violations were recorded for sites within a radius of 1 mile from the projects. Since the project is not linked to a building, residential property, or any structure, there is no need to proceed with the radon test. It is essential to note that the HUD regulation in 24 CFR 35 primarily focuses on housing structures and does not specify a limit on LBP for infrastructure, such as streets or highways. Regardless, we carry out the following survey to comply with the established regulations. On December 3,

		2022, and February 21-22, 2023, a survey of asbestos was conducted on PR 34 road, PR 156 road, Leoncio Velazquez Boulevard, and Jose Gautier Benitez Avenue. The results showed no presence of asbestos. However, a Lead-Based Paint (LBP) survey was conducted on December 3, 2022, by Global Environmental Services LLC, which revealed positive components with LBP (above 1.0 mg/cm2) in various segments of PR 34, PR 156, and the Leoncio Velazquez Blvd. Yellow Curb positive components with LBP on the following avenues: -Road PR-34 Int. Road PR-7785 -Road PR-156 Km. 57.7 -Road PR-156 Int. Barcelona Street Km. 57.8 - Road PR-156 Int. A Street -Leoncio Velazquez Blvd Sub-Station Yellow Pipe Barrier positive components with LBP on the following avenues: -Leoncio Velazquez Blvd Sub-Station Light Pole Bases positive components with LBP on the following avenues: -Road PR-34 Int. Degetau Avenue -Road PR-156 Int. PR-33 In the case of Jose Gautier Benitez Avenue, a survey was conducted on February 21-22, 2023, by Share Tech Group. The following areas that showcase a high concentration of LBP where at the Jose Gautier Benitez Avenue and San Carlos Street at the center curb, bollard, sidewalk marking, marking line, curb island, curb ramp, and post. Thereby the presence of an elevated concentration of LBP (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site. That being the case, the situation can repeat in various areas throughout the project. However, the presence of an elevated concentration of LBP (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified

		DNER contractor to remove and dispose of the paint before any work at the project site.
Endangered Species Act Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	☐ Yes ☑ No	USFW issued a Blanket Clearance Letter for HUD federally sponsored projects, last revised in April 2025. Our project complies with criteria #1 & #2 of this clearance letter. According to the USFW Puerto Rico Field Office, the Municipality Self-Certification for Compliance with the Blanket Letter dated April 29, 2025, will be included in the case documentation to comply with the Endangered Species Act. This project will have No Effect on listed species based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by the local HUD office. This project is in compliance with the Endangered Species Act.
Explosive and Flammable Hazards Above-Ground Tanks)[24 CFR Part 51 Subpart C	☐ Yes ☑ No	The project area does not include any hazardous facilities (facilities that mainly store, handle, or process flammable or combustible chemicals, such as bulk fuel storage facilities and refineries). Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), the project activities will not increase residential densities or convert other uses into residentials ones. Therefore, the project is in compliance with explosive and flammable hazard requirements.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	☐ Yes ☑ No	The project area has been impacted previously. The proposed project consists of scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing

		streets in a heavily populated urban area. The project is out of agricultural reserves, experimental stations, and soils classified as of agricultural capacity or classified as prime agricultural land, according to the Soil Survey from the NRCS. Caguas does not have protected areas covered by the Farmlands Protection Policy Act. This project does not include any activities that could potentially convert agricultural land to non-agricultural use. The project is in compliance with the Farmland Protection Policy Act.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	☐ Yes ☑ No	In September 2017, Puerto Rico was struck by an atmospheric event, Hurricane Maria. Due to the severity of the impact caused by Hurricane Maria, President Donald J. Trump approved a disaster declaration for Puerto Rico. The factors linked to severe atmospheric events, such as rain and flooding, have affected the infrastructure, specifically the structure and surface of the main avenues at the Autonomous Municipality of Caguas. Therefore, the principal objective of the project involves a series of integrated activities aimed at enhancing pedestrian and vehicular accessibility, safety, and overall compliance with the applicable standards. The scope of the project includes scarification of existing pavement surfaces, asphalt deposits, reconstruction of pedestrian crosswalks, the installation of ADA-compliant accessibility ramps, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. To analyze the project area as a source, we use FEMA Puerto Rico Advisory Base Flood Elevations (ABFE's) effective on December 11, 2018. The proposed project areas are partly in the 100-year and 500-year floodplains. Although some segments are established as a

		100-year floodplain, HUD financial assistance may not be approved; however, is in compliance with 24 CFR 55.8(a)(1)(ii) any rehabilitation, including reconstruction following Presidentially-declared disasters, that does not expand the footprint of the buildings or the number of units on the site is allowable within the FFRMS floodplain outside of the onsite floodway. Also, the area met the following criteria because the segments of the project that are 100-year floodplains are functionally dependent (24 CFR 55.8(a)(1)(ii)(A)), as defined in 24 CFR 55.2(b)(7), a land use that must necessarily be conducted close to water, for example, a bridge. Additionally, the project meets with the exception at 24 CFR 55.12. The reason is that one of the scopes of the project is the installation of ADA-compliant accessibility ramps as defined in 24 CFR 55.12(i), which indicates that special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility. Therefore, the project is in compliance with Executive Order 11988.
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	☐ Yes ☑ No	The Autonomous Municipality of Caguas submitted the documentation to start the consultation with SHPO on April 15, 2025. SHPO communication dated May 23, 2025, determined to support our findings of no historic properties will be affected within the project. Based on the project Section 106 consultation, there are No Historic Properties Affected because there are no historic properties present. The project is in compliance with Section 106.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	☐ Yes ☑ No	Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and

		rehabilitation of sidewalks on existing streets in a heavily populated urban area), this project includes no activities that would require further evaluation under HUD's noise regulation. The project is in compliance with HUD's Noise regulations. HUD's noise regulation is not applicable to this project per 24 CFR 51.101(a)(3).
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	☐ Yes ☑ No	The project is limited to scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. There are no designated Sole Source Aquifers in Puerto Rico. According to the EPA Sole Source Aquifers Map, the project is not located in a sole source aquifer area. The project is in compliance with the Sole Source Aquifer requirements.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	☐ Yes ☑ No	The proposed project does not involve new construction as defined in Executive Order 11990, the expansion of a building's footprint, or ground disturbance (including draining, dredging, channelizing, filling, or diking) in a wetland. The scope of the project includes scarification of existing pavement surfaces, asphalt deposits, reconstruction of pedestrian crosswalks, the installation of ADA-compliant accessibility ramps, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. This project includes no activities that would require further evaluation under this section. The project is in compliance with Executive Order 11990.
Wild and Scenic Rivers Act Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	☐ Yes ☑ No	The Municipality of Caguas does not have any rivers registered as a Wild and Scenic River, Study River, or listed in the Nationwide Rivers Inventory (NRI). The nearest Wild and Scenic River (Rio

		Icacos) is 84,480 feet (16 miles) from the project area. Thus, the project is not within proximity of the NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act.
HUD HOUSING ENVIRONMENTAL STANDARDS		
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	☐ Yes ☑ No	Meeting this criteria is the summary of findings and the conclusions. The activities involved in this project are rehabilitation activities on existing streets and avenues. After completing the other portions of the environmental review, we determined that neither the project site nor the surrounding neighborhood suffered from adverse environmental conditions. The project is out: (a) of the airport hazard zones, (b) it is in a flood zone AE (according to FEMA FIRM Maps); however, based on the project activities is an exemption, (c) out of coastal barrier zones (according to Puerto Rico Coastal Zone Management Program), (d) compliance with Clean Air Act, (e) the project will not result in an increased number of people in the area, (f) there are not AST's in the project surroundings; (g) doesn't impact a farmland, sole aquifer, wild rivers or wetlands areas (according to location map), (h) is not a hazardous or flammable facility, (i) is not a new construction that exceeds the building footprint, (j) no noise abatement needed, (k) SHPO determined that the project have no historic properties affected in the area and (l) comply with USFW Blanket Clearance Letter for HUD funding projects and concur with our determination, (m) no violations on RCRA permits are found in sites surrounding the project area (according to NEPA Assist & ECHO reports); however, a report of a LBP resulted in

		positive results, therefore a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]:

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed Measures	Mitigation Plan	Complete
Contamination and Toxic Substances	The presence of an elevated concentration of Lead-Based Paint (LBP) (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.	N/A		

Project Mitigation Plan

The presence of an elevated concentration of Lead-Based Paint (LBP) (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.

Supporting documentation on completed measures

APPENDIX A: Related Federal Laws and Authorities

Airport Hazards

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

✓ **No**

Based on the response, the review is in compliance with this section. Document and upload the map showing that the site is not within the applicable distances to a military or civilian airport below

Yes

Screen Summary

Compliance Determination

The Municipality of Caguas doesn't have a military or civilian airport in its territorial jurisdiction. The nearest civilian or military airport is located approximately 72,547 feet (13.74 miles) (SJU airport) from one of the closest avenues (Leoncio Velazquez Boulevard). The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. In other words, the project area is not located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ). The project is in compliance with Airport Hazards requirements.

Supporting documentation

Exhibit B1_Civilian Airport- Airport Hazards.pdf
Exhibit B2_Military Airport- Airport Hazards.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Barrier Resources

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	

1. Is the project located in a CBRS Unit?

✓ No

Document and upload map and documentation below.

Yes

Screen Summary

Compliance Determination

Puerto Rico is one of the areas with Coastal Barrier Resources Systems (CBRS). However, the project is located approximately 66,568.241 feet (20.29km) from the nearest CBRS (Punta Vacia Talega). This project is not located in a CBRS Unit. Therefore, this project has no potential impact on the CBRS Unit and is in compliance with the Coastal Barrier Resources Act. There are no anticipated adverse effects due to the project's development.

Supporting documentation

Exhibit C1_Coastal Barrier.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Flood Insurance

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).

1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?

✓ No. This project does not require flood insurance or is excepted from flood insurance.

Based on the response, the review is in compliance with this section.

Yes

4. While flood insurance is not mandatory for this project, HUD strongly recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Will flood insurance be required as a mitigation measure or condition?

Yes

✓ No

Screen Summary

Compliance Determination

The project area is partially classified as Zone AE. Specifically, four out of six principal avenues, such as Luis Munoz Marin Avenue, Leoncio Velazquez Boulevard, PR 156 Road, and PR 34 Road. Every avenue has a partial segment that is designated by FEMA Zone AE. Source of information: FIRM Map 72000C0740J and the 72000C0745J, valid from November 18, 2009. Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), the project includes no activities that require further evaluation under this section. The NIPF does not ensure roads & streets. The project does not require flood insurance or is exempt from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable

structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project complies with Flood Insurance requirements.

Supporting documentation
Exhibit D1_FEMA FIRM Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Air Quality

General requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93

1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?

Yes

✓ No

Based on the response, the review is in compliance with this section.

Screen Summary

Compliance Determination

The project location is not currently listed as a non-attainment area. Source of information: Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants, the latest updated data was on July 25, 2025. Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), this project includes no activities that would require further evaluation under the Clean Air Act. The project is in compliance with the Clean Air Act.

Supporting documentation

Exhibit E1_PR Air Quality Attainments -2025.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Zone Management Act

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes

✓ No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Screen Summary

Compliance Determination

The proposed project is not located in, nor affects, a coastal zone. The Municipality of Caguas does not have any coastal zone. The nearest coast is approximately 18 miles away; therefore, it is not defined as a Coastal Municipality by the Puerto Rico Coastal Zone Management Program (PRCZM). This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act.

Supporting documentation

Exhibit F1_Coastal Zone Land Boundary Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Contamination and Toxic Substances

General Requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)
Reference		
https://www.onecpd.info/environmental-review/site-contamination		

1. How was site contamination evaluated?* Select all that apply.

ASTM Phase I ESA

ASTM Phase II ESA

Remediation or clean-up plan

ASTM Vapor Encroachment Screening.

✓ None of the above

* HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site.
For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

2. Were any on-site or nearby toxic, hazardous, or radioactive substances* (excluding radon) found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

Provide a map or other documentation of absence or presence of contamination** and explain evaluation of site contamination in the Screen Summary at the bottom of this screen.

No

Explain:

✓ Yes

* This question covers the presence of radioactive substances excluding radon. Radon is addressed in the Radon Exempt Question.
** Utilize EPA's Enviromapper, NEPAssist, or state/tribal databases to identify nearby dumps, junk yards, landfills, hazardous waste sites, and industrial sites, including EPA National Priorities List Sites (Superfund sites), CERCLA or state-equivalent sites, RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. Additional supporting documentation may include other inspections and reports.

3. Evaluate the building(s) for radon. Do all buildings meet any of the exemptions* from having to consider radon in the contamination analysis listed in CPD Notice CPD-23-103?

✓ Yes

Explain:

Since the project is not linked to a building, residential property, or any structure, there is no need to proceed with the radon test.

No

* Notes:
- Buildings with no enclosed areas having ground contact.
- Buildings containing crawlspaces, utility tunnels, or parking garages would not be exempt, however buildings built on piers would be exempt, provided that there is open air between the lowest floor of the building and the ground.
- Buildings that are not residential and will not be occupied for more than 4 hours per day.
- Buildings with existing radon mitigation systems - document radon levels are below 4 pCi/L with test results dated within two years of submitting the application for HUD assistance and document the system includes an ongoing maintenance plan that includes periodic testing to ensure the system continues to meet the current EPA recommended levels. If the project does not require an application, document test results dated within two years of the date the environmental review is certified. Refer to program office guidance to ensure compliance with program requirements.
- Buildings tested within five years of the submission of application for HUD assistance: test results document indoor radon levels are below current the EPA's recommended action levels of 4.0 pCi/L. For buildings with test data older than five years, any new environmental

review must include a consideration of radon using one of the methods in Section A below.

8. Mitigation

Document the mitigation needed according to the requirements of the appropriate federal, state, tribal, or local oversight agency. If the adverse environmental impacts cannot be mitigated, then HUD assistance may not be used for the project at this site.

For instances where radon mitigation is required (i.e. where test results demonstrated radon levels at 4.0 pCi/L and above), then you must include a radon mitigation plan*.

Can all adverse environmental impacts be mitigated?

No, all adverse environmental impacts cannot feasibly be mitigated. Project cannot proceed at this location.

✓ Yes, all adverse environmental impacts can be eliminated through mitigation, and/or consideration of radon and radon mitigation, if needed, will occur following construction.
Provide all mitigation requirements** and documents in the Screen Summary at the bottom of this screen.

* Refer to CPD Notice CPD-23-103 for additional information on radon mitigation plans.
** Mitigation requirements include all clean-up requirements required by applicable federal, state, tribal, or local law. Additionally, please upload, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

9. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls*, or use of institutional controls.**

The presence of an elevated concentration of Lead-Based Paint (LBP) (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.

If a remediation plan or clean-up program was necessary, which standard does it follow?

✓ Complete removal

Risk-based corrective action (RBCA)

Other

* Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, caps, covers, dikes, trenches, leachate collection systems, radon mitigation systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, slurry walls and ground water pumping systems.
** Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

Screen Summary

Compliance Determination

The NEPASSIST Tool identified 287 EPA facilities (269 RCRA and 18 toxic release sites) within a 1-mile radius of each avenue (Luis Munoz Ave., Gautier Benitez Ave., Rafael Cordero Ave.,Leoncio Velazquez Blvd., PR 156, and PR 34). The nearest EPA facilities for each avenue were: -COSTCO 365 and BANFIELD PET HOSPITAL NUM 2188, located 0.16 miles from Rafael Cordero Ave. -TEXACO PR INC - WILLIAM ALVERIO and APR UNLIMITED GENERAL CONTRACTORS is located 0.25 miles from Luis Munoz Marin Ave. -USARC MSG DIONISIO M CLAUDIO, located 0.03 miles from the Gautier Benitez Ave. -DAEWOOD is located 0.07 miles from Leoncio Velazquez Blvd. -CARTAGENA PRINTING is located 0.20 miles from PR 156 Road. -CARIBE WATER TECHNOLOGY INC is located 0.20 miles from PR 34 Road. The farthest EPA facilities for each avenue were: -MEADWESTVACO HEALTHCARE PACKAGING PR LLC, located 0.99 miles from Rafael Cordero Ave. -PRPHA BRISAS DEL TURABO I is located 0.99 miles from Luis Munoz Marin Ave. -PRPHA BRISAS DEL TURABO I, located 1.00 miles from the Gautier Benitez Ave. -SACHS PLASTICS DIVISION is located 0.95 miles from Leoncio Velazquez Blvd. -SAM'S CLUB 6689 is located 0.99 miles from PR 156 Road. -B H MICROFILM COMPONENTS INC is located 0.97 miles from PR 34 Road. In ECHO reports, no violations were recorded for sites within a radius of 1 mile from the projects. Since the project is not linked to a building, residential property, or any structure, there is no need to proceed with the radon test. It is essential to note that the HUD regulation in 24 CFR 35 primarily focuses on housing structures and does not specify a limit on LBP for infrastructure, such as streets or highways. Regardless, we carry out the following survey to comply with the established regulations. On December 3, 2022,

and February 21-22, 2023, a survey of asbestos was conducted on PR 34 road, PR 156 road, Leoncio Velazquez Boulevard, and Jose Gautier Benitez Avenue. The results showed no presence of asbestos. However, a Lead-Based Paint (LBP) survey was conducted on December 3, 2022, by Global Environmental Services LLC, which revealed positive components with LBP (above 1.0 mg/cm2) in various segments of PR 34, PR 156, and the Leoncio Velazquez Blvd. Yellow Curb positive components with LBP on the following avenues: -Road PR-34 Int. Road PR-7785 -Road PR-156 Km. 57.7 -Road PR-156 Int. Barcelona Street Km. 57.8 -Road PR-156 Int. A Street -Leoncio Velazquez Blvd Sub-Station Yellow Pipe Barrier positive components with LBP on the following avenues: -Leoncio Velazquez Blvd Sub-Station Light Pole Bases positive components with LBP on the following avenues: -Road PR-34 Int. Degetau Avenue -Road PR-156 Int. PR-33 In the case of Jose Gautier Benitez Avenue, a survey was conducted on February 21-22, 2023, by Share Tech Group. The following areas that showcase a high concentration of LBP where at the Jose Gautier Benitez Avenue and San Carlos Street at the center curb, bollard, sidewalk marking, marking line, curb island, curb ramp, and post. Thereby the presence of an elevated concentration of LBP (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site. That being the case, the situation can repeat in various areas throughout the project. However, the presence of an elevated concentration of LBP (greater than 1.0 mg/cm2), a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.

Supporting documentation

EX558F~1.PDF
EX1B04~1.PDF
EX3AF6~1.PDF
EX7FC9~1.PDF
EX0156~1.PDF
EXEFAB~1.PDF
EX8751~1.PDF
EX1EBE~1.PDF
EXFDD5~1.PDF
EXEC8B~1.PDF
EXHIBI~4.PDF
EX622A~1.PDF
EXHIBI~3.PDF
EXHIBI~1.PDF
EXHIBI~2.PDF

Are formal compliance steps or mitigation required?

✓ Yes

No

Endangered Species

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service ("FWS" and "NMFS" or "the Services").	The Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*); particularly section 7 (16 USC 1536).	50 CFR Part 402

1. Does the project involve any activities that have the potential to affect specifies or habitats?

No, the project will have No Effect due to the nature of the activities involved in the project.

✓ No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office

Explain your determination:

USFW issued a Blanket Clearance Letter for HUD federally sponsored projects, last revised in April 2025. Our project complies with criteria #1 & #2 of this clearance letter. According to the USFW Puerto Rico Field Office, the Municipality Self-Certification for Compliance with the Blanket Letter dated April 29, 2025, will be included in the case documentation to comply with the Endangered Species Act. This project will have No Effect on listed species based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by the local HUD office. This project is in compliance with the Endangered Species Act.

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Yes, the activities involved in the project have the potential to affect species and/or habitats.

Screen Summary

Compliance Determination

USFW issued a Blanket Clearance Letter for HUD federally sponsored projects, last revised in April 2025. Our project complies with criteria #1 & #2 of this clearance letter. According to the USFW Puerto Rico Field Office, the Municipality Self-Certification for Compliance with the Blanket Letter dated April 29, 2025, will be included in the case documentation to comply with the Endangered Species Act. This project will have No Effect on listed species based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by the local HUD office. This project is in compliance with the Endangered Species Act.

Supporting documentation

Exhibit H1_Response from the USFW for CDBG-DR.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Explosive and Flammable Hazards

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C

1. Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?

✓ No

Yes

2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?

✓ No

Based on the response, the review is in compliance with this section.

Yes

Screen Summary

Compliance Determination

The project area does not include any hazardous facilities (facilities that mainly store, handle, or process flammable or combustible chemicals, such as bulk fuel storage facilities and refineries). Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), the project activities will not increase residential densities or convert other uses into residentials ones. Therefore, the project is in compliance with explosive and flammable hazard requirements.

Supporting documentation

Are formal compliance steps or mitigation required?

Yes

✓ No

Farmlands Protection

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	7 CFR Part 658

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

Yes

✓ No

If your project includes new construction, acquisition of undeveloped land or conversion, explain how you determined that agricultural land would not be converted:

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Screen Summary

Compliance Determination

The project area has been impacted previously. The proposed project consists of scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. The project is out of agricultural reserves, experimental stations, and soils classified as of agricultural capacity or classified as prime agricultural land, according to the Soil Survey from the NRCS. Caguas does not have protected areas covered by the Farmlands Protection Policy Act. This project does not include any activities that could potentially convert agricultural land to non-agricultural use. The project is in compliance with the Farmland Protection Policy Act.

Supporting documentation

Exhibit I1_Soil_Report.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Floodplain Management

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988 * Executive Order 13690 * 42 USC 4001-4128 * 42 USC 5154a * only applies to screen 2047 and not 2046	24 CFR 55

1. Does this project meet an exemption at 24 CFR 55.12 from compliance with HUD's floodplain management regulations in Part 55?

✓ Yes

(a) HUD-assisted activities described in 24 CFR 58.34 and 58.35(b).

(b) HUD-assisted activities described in 24 CFR 50.19, except as otherwise indicated in § 50.19.

(c) The approval of financial assistance for restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property, where a permanent covenant or comparable restriction is place on the property's continued use for flood control, wetland projection, open space, or park land, but only if:
(1) The property is cleared of all existing buildings and walled structures; and
(2) The property is cleared of related improvements except those which:
(i) Are directly related to flood control, wetland protection, open space, or park land (including playgrounds and recreation areas);
(ii) Do not modify existing wetland areas or involve fill, paving, or other ground disturbance beyond minimal trails or paths; and
(iii) Are designed to be compatible with the beneficial floodplain or wetland function of the property.

(d) An action involving a repossession, receivership, foreclosure, or similar acquisition of property to protect or enforce HUD's financial interests under previously approved loans, grants, mortgage insurance, or other HUD assistance.

(e) Policy-level actions described at 24 CFR 50.16 that do not involve site-based decisions.

(f) A minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland.

(g) HUD's or the responsible entity's approval of a project site, an incidental portion of which is situated in the FFRMS floodplain (not including the floodway, LiMWA, or coastal high hazard area) but only if: (1) The proposed project site does not include any existing or proposed buildings or improvements that modify or occupy the FFRMS floodplain except de minimis improvements such as recreation areas and trails; and (2) the proposed project will not result in any new construction in or modifications of a wetland .

(h) Issuance or use of Housing Vouchers, or other forms of rental subsidy where HUD, the awarding community, or the public housing agency that administers the contract awards rental subsidies that are not project-based (i.e., do not involve site-specific subsidies).

✓ (i) Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and persons with disabilities.

Describe:

The project involves a series of integrated activities aimed at enhancing pedestrian and vehicular accessibility, safety, and overall compliance with the applicable standards. The scope of the project includes scarification of existing pavement surfaces, asphalt deposits, reconstruction of pedestrian crosswalks, the installation of ADA-compliant accessibility ramps, and rehabilitation of sidewalks on existing streets in a heavily populated urban area.

No

Screen Summary

Compliance Determination

In September 2017, Puerto Rico was struck by an atmospheric event, Hurricane Maria. Due to the severity of the impact caused by Hurricane Maria, President Donald J. Trump approved a disaster declaration for Puerto Rico. The factors linked to severe

atmospheric events, such as rain and flooding, have affected the infrastructure, specifically the structure and surface of the main avenues at the Autonomous Municipality of Caguas. Therefore, the principal objective of the project involves a series of integrated activities aimed at enhancing pedestrian and vehicular accessibility, safety, and overall compliance with the applicable standards. The scope of the project includes scarification of existing pavement surfaces, asphalt deposits, reconstruction of pedestrian crosswalks, the installation of ADA-compliant accessibility ramps, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. To analyze the project area as a source, we use FEMA Puerto Rico Advisory Base Flood Elevations (ABFE's) effective on December 11, 2018. The proposed project areas are partly in the 100-year and 500-year floodplains. Although some segments are established as a 100-year floodplain, HUD financial assistance may not be approved; however, is in compliance with 24 CFR 55.8(a)(1)(ii) any rehabilitation, including reconstruction following Presidentially-declared disasters, that does not expand the footprint of the buildings or the number of units on the site is allowable within the FFRMS floodplain outside of the onsite floodway. Also, the area met the following criteria because the segments of the project that are 100-year floodplains are functionally dependent (24 CFR 55.8(a)(1)(ii)(A)), as defined in 24 CFR 55.2(b)(7), a land use that must necessarily be conducted close to water, for example, a bridge. Additionally, the project meets with the exception at 24 CFR 55.12. The reason is that one of the scopes of the project is the installation of ADA-compliant accessibility ramps as defined in 24 CFR 55.12(i), which indicates that special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility. Therefore, the project is in compliance with Executive Order 11988.

Supporting documentation

Exhibit J4_24 CFR 55 2(b)(7).pdf
Exhibit J3_24 CFR 55 12(i).pdf
Exhibit J2_24 CFR 55 8(a)(1)(ii)(A).pdf
Exhibit J1_Floodplain Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Historic Preservation

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 "Protection of Historic Properties" https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf

Threshold

Is Section 106 review required for your project?

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the PA Database to find applicable PAs.)
No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].
✓ Yes, because the project includes activities with potential to cause effects (direct or indirect).

Step 1 – Initiate Consultation

Select all consulting parties below (check all that apply):

✓ State Historic Preservation Offer (SHPO) Completed

✓ Advisory Council on Historic Preservation Not Required

✓ Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native Hawaiian Organizations (NHOs)

Other Consulting Parties

Describe the process of selecting consulting parties and initiating consultation here:

In compliance with Section 106 because HUD federal funds will be used for this project and after our determination that this project doesn't affect historic properties in the APE, we want SHPO concur with our determination.

Document and upload all correspondence, notices and notes (including comments and objections received below).

Was the Section 106 Lender Delegation Memo used for Section 106 consultation?

Yes
No

Step 2 – Identify and Evaluate Historic Properties

1. **Define the Area of Potential Effect (APE), either by entering the address(es) or uploading a map depicting the APE below:**

   Caguas Urban Zone (Pueblo, Bairoa, Tomas de Castro, Turabo, Canabon and Canaboncito wards)

   In the chart below, list historic properties identified and evaluated in the APE. Every historic property that may be affected by the project should be included in the chart.

   Upload the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination below.

Address / Location / District	National Register Status	SHPO Concurrence	Sensitive Information

   Additional Notes:

   The Municipality prepared a historical determination for the property using information from SHPO and Puerto Rico Cultural Institute that indicated the rehabilitation activities have no effect on any historical property in the area or the property isn't a historical property.

2. **Was a survey of historic buildings and/or archeological sites done as part of the project?**

   Yes
   ✓ No

Step 3 –Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. (36 CFR 800.5)] Consider direct and indirect effects as applicable as per guidance on direct and indirect effects.

Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.

✓ No Historic Properties Affected

Based on the response, the review is in compliance with this section. Document and upload concurrence(s) or objection(s) below.

Document reason for finding:

✓ No historic properties present.

Historic properties present, but project will have no effect upon them.

No Adverse Effect

Adverse Effect

Screen Summary

Compliance Determination

The Autonomous Municipality of Caguas submitted the documentation to start the consultation with SHPO on April 15, 2025. SHPO communication dated May 23, 2025, determined to support our findings of no historic properties will be affected within the project. Based on the project Section 106 consultation, there are No Historic Properties Affected because there are no historic properties present. The project is in compliance with Section 106.

Supporting documentation

Exhibit K3_SHPO-CF-05-13-25-08-Carta.pdf
Exhibit K2_ Map of historical areas.pdf
Exhibit K1_SHPO CONSULTATION.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Noise Abatement and Control

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972 General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B

1. What activities does your project involve? Check all that apply:

New construction for residential use

Rehabilitation of an existing residential property

A research demonstration project which does not result in new construction or reconstruction

An interstate land sales registration

✓ Any timely emergency assistance under disaster assistance provision or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster

None of the above

Screen Summary

Compliance Determination

Based on the project description (scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area), this project includes no activities that would require further evaluation under HUD's noise regulation. The project is in compliance with HUD's Noise regulations. HUD's noise regulation is not applicable to this project per 24 CFR 51.101(a)(3).

Supporting documentation

PR-CRP-000252-Street-Improvement	Caguas, PR	900000010485480

Are formal compliance steps or mitigation required?

Yes

✓ No

Sole Source Aquifers

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149

1. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

Yes

✓ No

2. Is the project located on a sole source aquifer (SSA)?

A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

< No

✓

Based on the response, the review is in compliance with this section. Document and upload documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area, below.

Yes

3. Does your region have a memorandum of understanding (MOU) or other working agreement with Environmental Protection Agency (EPA) for HUD projects impacting a sole source aquifer?

Yes

No

Screen Summary

Compliance Determination

The project is limited to scarification, asphalt deposit, reconstruction of crosswalks and handicapped ramps to comply with current codes and regulations, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. There are no designated Sole Source Aquifers in Puerto Rico. According to the EPA Sole Source Aquifers Map, the project is not located in a sole source aquifer area. The project is in compliance with the Sole Source Aquifer requirements.

Supporting documentation

Exhibit L3_ssa puerto rico.pdf
Exhibit L2_ssa Region II EPA.pdf
Exhibit L1_SSA.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Wetlands Protection

General requirements	Legislation	Regulation
Executive Order 11990 discourages direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance? The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order

✓ No

Based on the response, the review is in compliance with this section.

Yes

Screen Summary

Compliance Determination

The proposed project does not involve new construction as defined in Executive Order 11990, the expansion of a building's footprint, or ground disturbance (including draining, dredging, channelizing, filling, or diking) in a wetland. The scope of the project includes scarification of existing pavement surfaces, asphalt deposits, reconstruction of pedestrian crosswalks, the installation of ADA-compliant accessibility ramps, and rehabilitation of sidewalks on existing streets in a heavily populated urban area. This project includes no activities that would require further evaluation under this section. The project is in compliance with Executive Order 11990.

Supporting documentation

Exhibit M1_Wetland.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Wild and Scenic Rivers Act

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297

1. Is your project within proximity of a NWSRS river?

✓ No

Yes, the project is in proximity of a Designated Wild and Scenic River or Study Wild and Scenic River.
Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

Screen Summary

Compliance Determination

The Municipality of Caguas does not have any rivers registered as a Wild and Scenic River, Study River, or listed in the Nationwide Rivers Inventory (NRI). The nearest Wild and Scenic River (Rio Icacos) is 84,480 feet (16 miles) from the project area. Thus, the project is not within proximity of the NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act.

Supporting documentation

Exhibit N3_National Park_PR.PDF
Exhibit N2_Wild and Scenic Rivers Map.pdf
Exhibit N1_WSR Inventory.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Environmental Justice

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?

✓ Yes

No

2. Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?

Yes

✓ No

Explain:
N/

Based on the response, the review is in compliance with this section. Document and upload any supporting documentation below.

Screen Summary

Compliance Determination

Meeting this criteria is the summary of findings and the conclusions. The activities involved in this project are rehabilitation activities on existing streets and avenues. After completing the other portions of the environmental review, we determined that neither the project site nor the surrounding neighborhood suffered from adverse

environmental conditions. The project is out: (a) of the airport hazard zones, (b) it is in a flood zone AE (according to FEMA FIRM Maps); however, based on the project activities is an exemption, (c) out of coastal barrier zones (according to Puerto Rico Coastal Zone Management Program), (d) compliance with Clean Air Act, (e) the project will not result in an increased number of people in the area, (f) there are not AST's in the project surroundings; (g) doesn't impact a farmland, sole aquifer, wild rivers or wetlands areas (according to location map), (h) is not a hazardous or flammable facility, (i) is not a new construction that exceeds the building footprint, (j) no noise abatement needed, (k) SHPO determined that the project have no historic properties affected in the area and (l) comply with USFW Blanket Clearance Letter for HUD funding projects and concur with our determination, (m) no violations on RCRA permits are found in sites surrounding the project area (according to NEPA Assist & ECHO reports); however, a report of a LBP resulted in positive results, therefore a mitigation measure will be conducted by a certified DNER contractor to remove and dispose of the paint before any work at the project site.

Supporting documentation

Are formal compliance steps or mitigation required?

Yes

✓ No

List of Exhibits

Exhibit A. General Information

1. Aerial Map
2. Memorial

Exhibit B. Airport Hazard

1. Civilian Airport Hazard Map
2. Military Airport Hazard Map

Exhibit C. Coastal Barrier Resource

1. Coastal Barrier Map

Exhibit D. Flood Insurance

1. FEMA FIRM Map

Exhibit E. Clean Air

1. PR Air Quality Attainments - updated on July 25, 2025

Exhibit F. Coastal Zone Management

1. Coastal Zone Land Boundary Map

Exhibit G. Contamination and Toxic Substances

1. Asbestos and Lead Base Paint Report at PR34, PR156, and Leoncio Blvd
2. Letters from the DNER properties near PR34, PR156, and Leoncio Blvd
3. Certification of no presence of Asbestos at the Gautier Benitez Avenue
4. Lead Base Paint Report from Gautier Benitez
5. RCRA list near the project area
6. TRI list near the project area
7. ECHO report from TEXACO PR INC WILLIAM ALVERIO
8. ECHO report from MSG DIONISIO M CLAUDIO
9. ECHO report from DAEWOOS CAGUAS
10. ECHO report from COTSCO WHOLESALE
11. ECHO report from CARTAGENA PRINTING
12. ECHO report from CARIBE WATER TECHNOLOGY INC
13. ECHO report from BANFIELD PET HOSPITAL NUM 2188
14. ECHO report from APR UNLIMITED GENERAL CONTRACTORS
15. UST list near the project

Exhibit H. Endangered Species

1. Respond from the USFW for CDBG-DR 252 262

Exhibit I. Farmland Protection

1. Soil Report

Exhibit J. Flood Management

1. ABFEs Map
2. 24 CFR 55 8(a)(1)(ii)(A)
3. 24 CFR 55 12(i)
4. 24 CFR 55 2(b)(7)

Exhibit K. Historic Preservation

1. SHPO CONSULTATION
2. Map of historical areas
3. SHPO-CF-05-13-25-08-Carta

Exhibit L. Sole Source Aquifers

1. SSA Map
2. SSA Regio II
3. SSA Puerto Rico

Exhibit M. Wetland Protection

1. Wetland Map

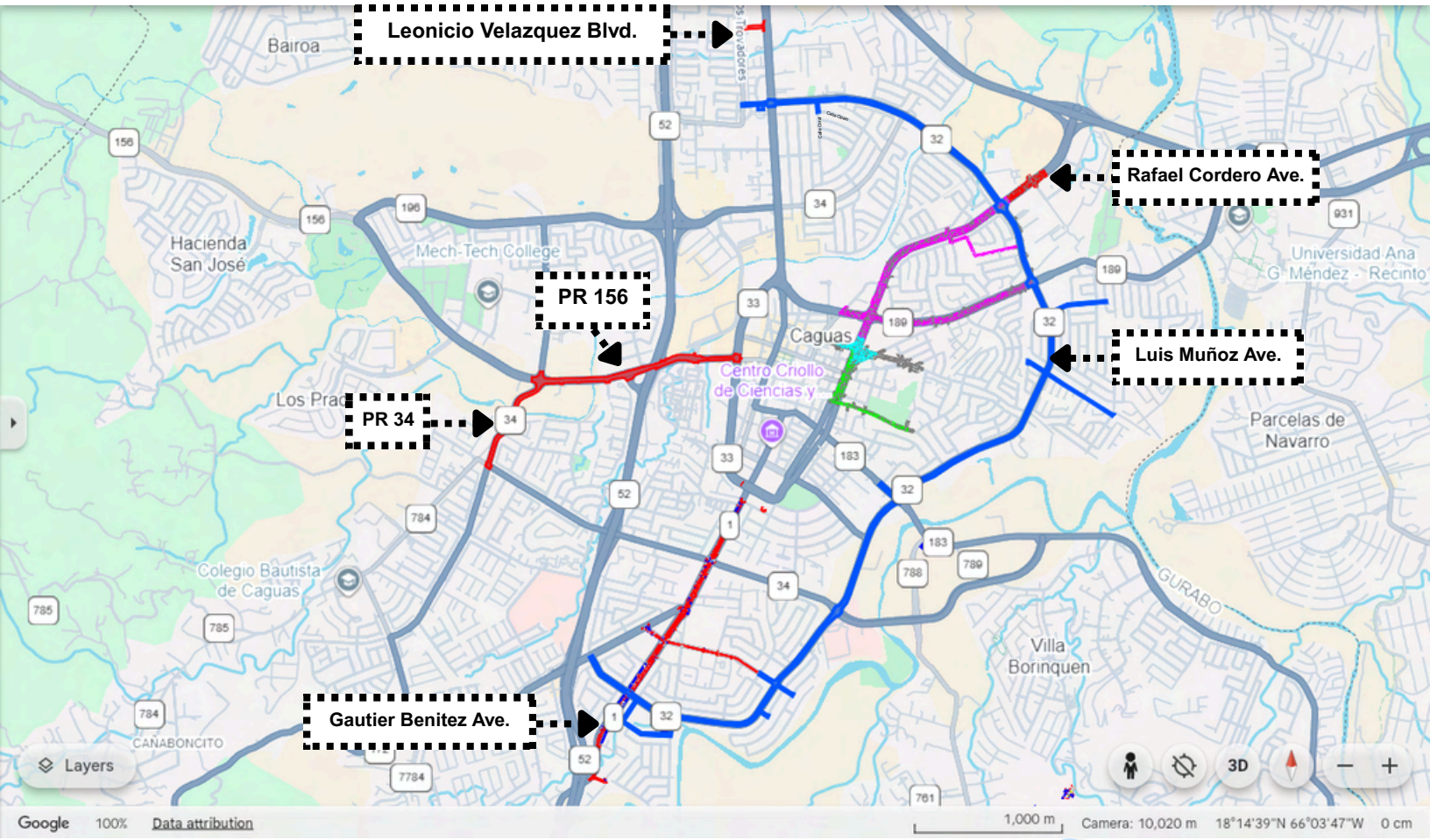
Exhibit N. Wild and Scenic Rivers

1. WSR Inventory
2. Wild and Scenic Rivers Map
3. National Park Service Puerto Rico

Exhibit A. General Information

Exhibit A
1. Aerial Map

Aerial Map for Streets Improvements at Luis Muñoz Ave., Gautier Benitez Ave., Rafael Cordero Ave., Leonicio Velazquez Blvd., PR 156 and PR 34



June 6, 2025

Google Earth

Exhibit A
2. Memorial

Apartado 907 Caguas, PR 00726
Tel. (787) 653-5400 ext. 3224

12 de agosto de 2021

Rehabilitación Avenidas Principales de la Ciudad (PR-CRP-000252)

ALCANCE DEL PROYECTO

El proyecto propuesto impacta las principales avenidas de la Ciudad. Estas avenidas proveen acceso al tránsito desde las áreas urbanas hacia diferentes comunidades en áreas urbanas y rurales de la Ciudad.

Con el paso del huracán María, estas avenidas sufrieron serios daños en cuanto a su infraestructura. De igual forma, muchos de los árboles que estaban en las áreas de siembra, fueron derribos por los fuertes vientos del huracán.

El rodaje sufrió varias reparaciones de infraestructura eléctrica y de comunicaciones. Este factor, junto a la pérdida de vida útil del asfalto por las áreas inundadas a causa de las lluvias asociadas al huracán, tienen estas avenidas en malas condiciones y susceptibles a un daño mayor con el paso de otro evento atmosférico.

El objetivo de estos proyectos es atender todas estas problemáticas y poner la Ciudad en mejor posición para afrontar otro evento atmosférico futuro. De igual manera se implantarán medidas que fomentarán la movilidad peatonal. En esta fase preliminar del proyecto, consideramos que todos los trabajos y excavaciones se realizarán dentro del derecho de vía de la carretera sin la necesidad de adquisiciones.

Para la realización de los trabajos se requerirá lo siguiente:

- Renovación de la superficie asfáltica mediante escarificación de las áreas y depósito de asfalto a 2” de espesor, marcado de líneas de carril, reconstrucción de rampas que cumplan con la Ley ADA y reglamentaciones vigentes con su respectivo marcado de pasos peatonales, reforestación con árboles autóctonos y limpieza general de estructura gris. Esto se implementará en las siguientes áreas:
    - Ave. Luis Muñoz Marín y las siguientes calles interiores:
        - Estacionamiento Monumento Luis Muñoz Marín
        - Calle Coral, desde la Ave. Muñoz Marín hasta la Calle Ópalo
        - Calle Garrido, desde la Ave. Muñoz Marín hasta la Calle 4 de la Urb. San Antonio
        - Calle Aramaná Urb. Caguax
        - Calle 1 Urb. Villa Victoria

- Ave. Georgetti, desde la Ave. Muñoz Marín hasta después del residencial Brisas del Turabo
- Calle 6 de Mariolga, desde la Ave. Muñoz Marín hasta la calle 25
- Calle 2 de Mariolga, desde la Ave. Muñoz Marín hasta la calle 23
- Calle Edimburgo, desde la Ave. Muñoz Marín hasta la calle Luxemburgo
- Estacionamientos instalaciones recreativas Villa del Rey I
- Calle Windsor Villa del Rey I, desde la Ave. Muñoz Marín hasta el final

o Ave. Gautier Benítez y las siguientes calles interiores:
- Calle San Carlos, desde Ave. Luis Muñoz Marín hasta la Ave. Pino
- Calle que dirige hacia el Salvation Army

o Ave. Rafael Cordero y las siguientes calles interiores:
- Calle Nuñez
- Estacionamiento Plaza del Mercado
- Calle San Andrés, desde la Ave. Rafael Cordero hasta la Pista Millán Clara

o Bulevar Leoncio Velázquez

o PR-156

o PR-34

- Creación de carriles para ciclistas. La bicicleta es un medio de transporte alternativo y eco-amigable, el cual reduce las emisiones de gases por efecto invernadero para proteger el medio ambiente. El carril ciclista se implantará en las siguientes áreas:
  - Carril ciclista en la avenida Rafael Cordero, en dirección del tránsito con una longitud aproximada de 600 metros comenzando en la Estación de Bomberos en intersección con la calle Dr. Pedro Goyco y la calle El Troche y finalizando en la plazoleta de recreación pasiva localizada en la

intersección con la calle Manuel Elzuburu y Vizcarrondo y la calle San Andrés.

- Carril ciclista en la avenida Rafael Cordero, en ambas direcciones del tránsito con una longitud aproximada de 2000 metros comenzando en la Estación de Bomberos en intersección con la calle Dr. Pedro Goyco y la calle El Troche y finalizando en la entrada vehicular del Centro Comercial Plaza Centro localizada en el cuadrante Este de Complejo.

- Carril ciclista en la avenida Luis Muñoz Marín, en una sola dirección del tránsito, con una longitud aproximada de 540 metros comenzando en la avenida Rafael Cordero y finalizando en la PR-189.

- Carril ciclista en la PR-189, en una sola dirección del tránsito, con una longitud aproximada de 1,100 metros comenzando en la avenida Luis Muñoz Marín y finalizando en la avenida Rafael Cordero.

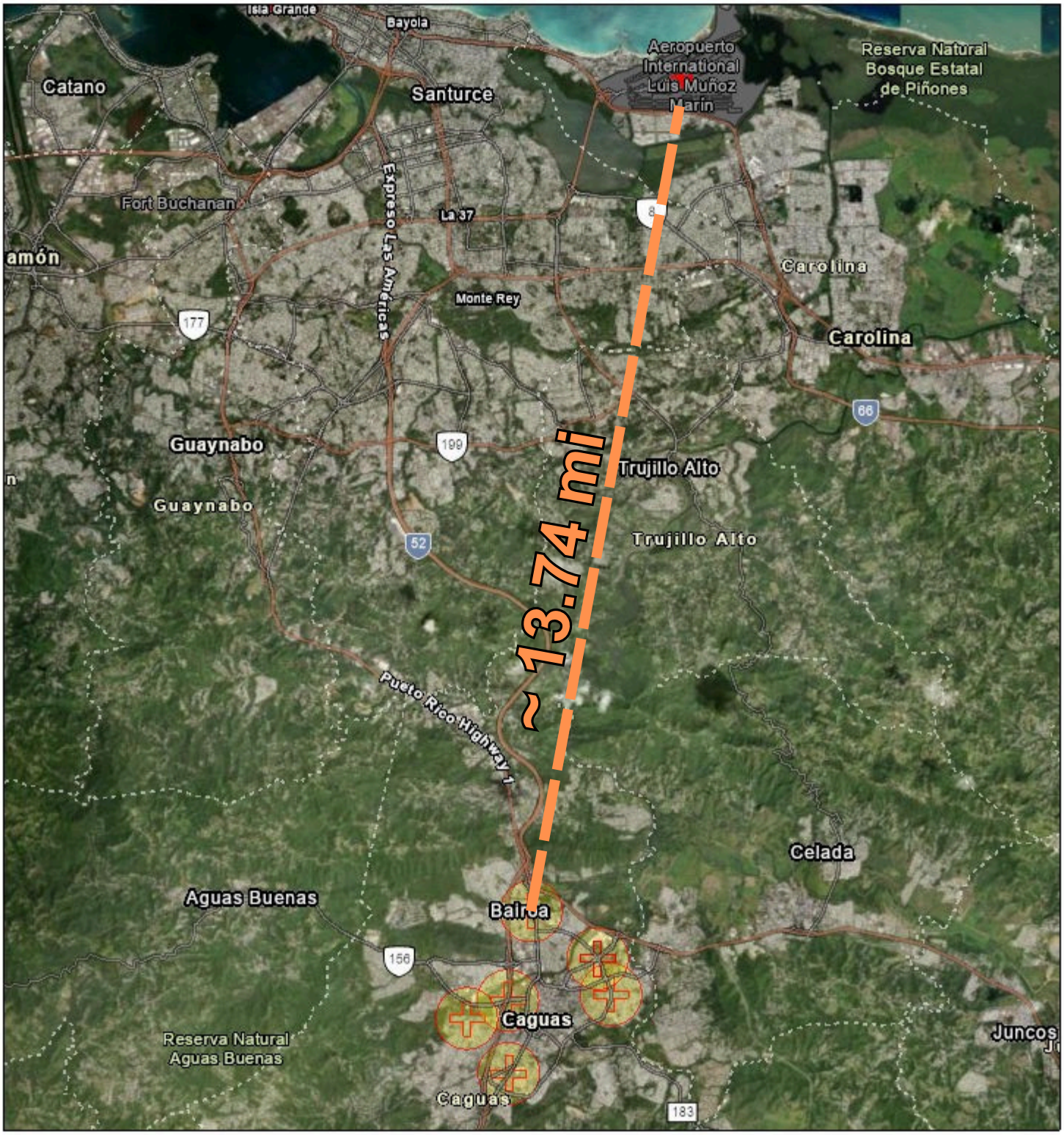
- Reemplazo de asfalto y pasos peatonales en adoquines, por rodaje y pasos peatonales en concreto con su debido marcado. Esto se implementará en las siguientes áreas:
  - Intersección con la Ave. Garrido, en Santa Juana
  - Entrada de Plaza Centro II, solo lo que está en adoquines
  - Intersección con Calle Aramaná, Urb. Caguax (cerca de Atento)
  - Intersección con el Bulevar Cristóbal
  - Intersección con la Ave. San Carlos en Mariolga

José J. Rivera González, PE
Director
Departamento de Obras Públicas
Secretaría de Infraestructura, Ornato y Conservación

Exhibit B.
Airport Hazard

Exhibit B
1. Civilian Airport Hazard Map

Airport Hazards Map distance between the Projects to Civilian Airport



June 5, 2025

1:144,448

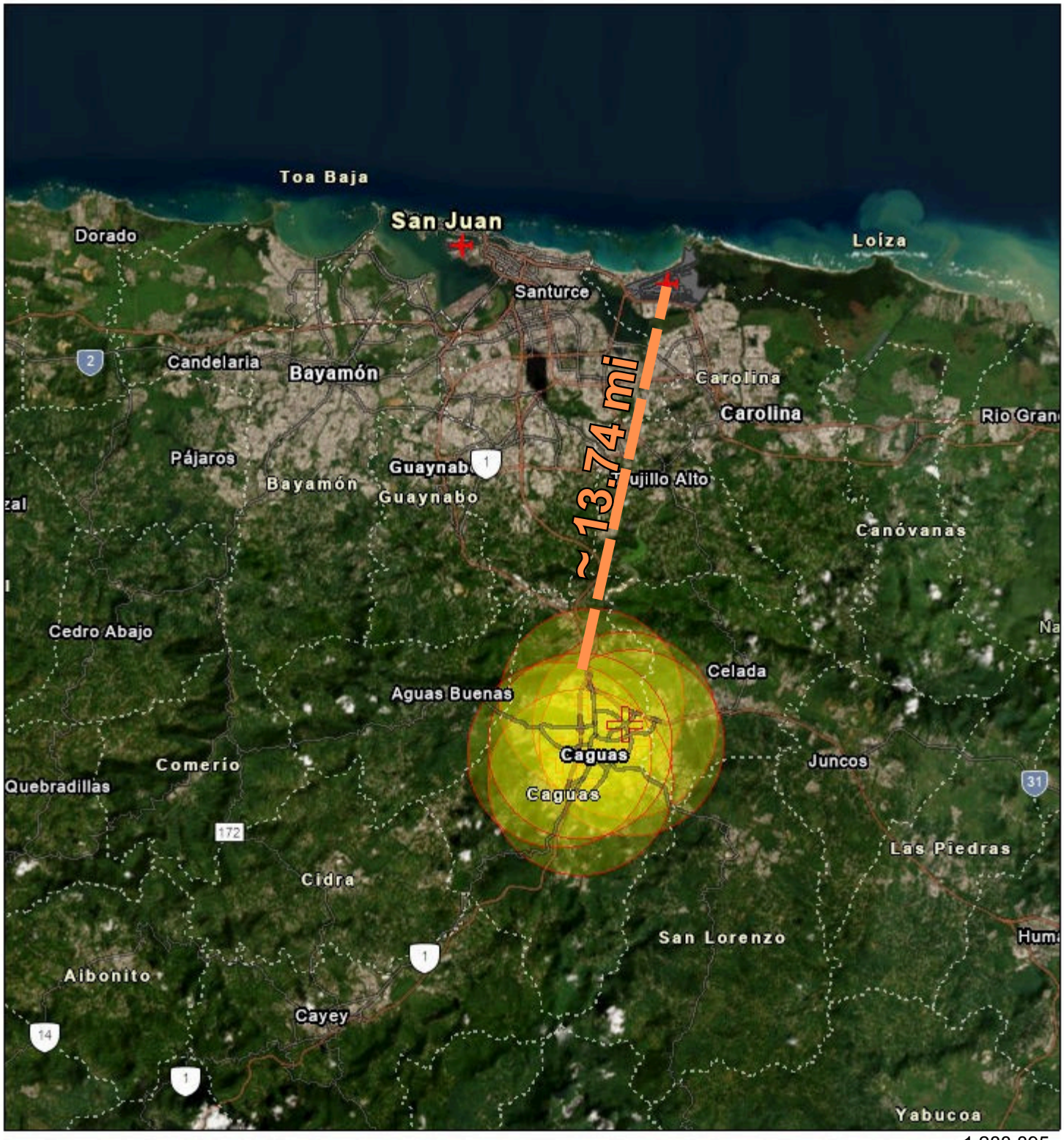
- Rafael Cordero Ave
- Project Buffer
- PR 34
- PR 156
- Gautier Benitez Ave.
- Leonicio Velazquez Blvd.
- Luis Muñoz Ave.
- Airport Points
- Airport Polygons
- Distance between the Projects to Civilian Airport

0 1 2 4 mi
0 1.75 3.5 7 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community. EPA OEI

Exhibit B
2. Military Airport Hazard Map

Airport Hazards Map distance between the Projects to Military Airport



June 5, 2025

1:288,895

Rafael Cordero Ave

Leonicio Velazquez Blvd.

Project Buffer

Luis Muñoz Ave

PR 34

Airport Points

PR 156

Airport Polygons

Gautier Benitez Ave.

Distance between the Projects to Civilian Airport

0 2.25 4.5 9 mi

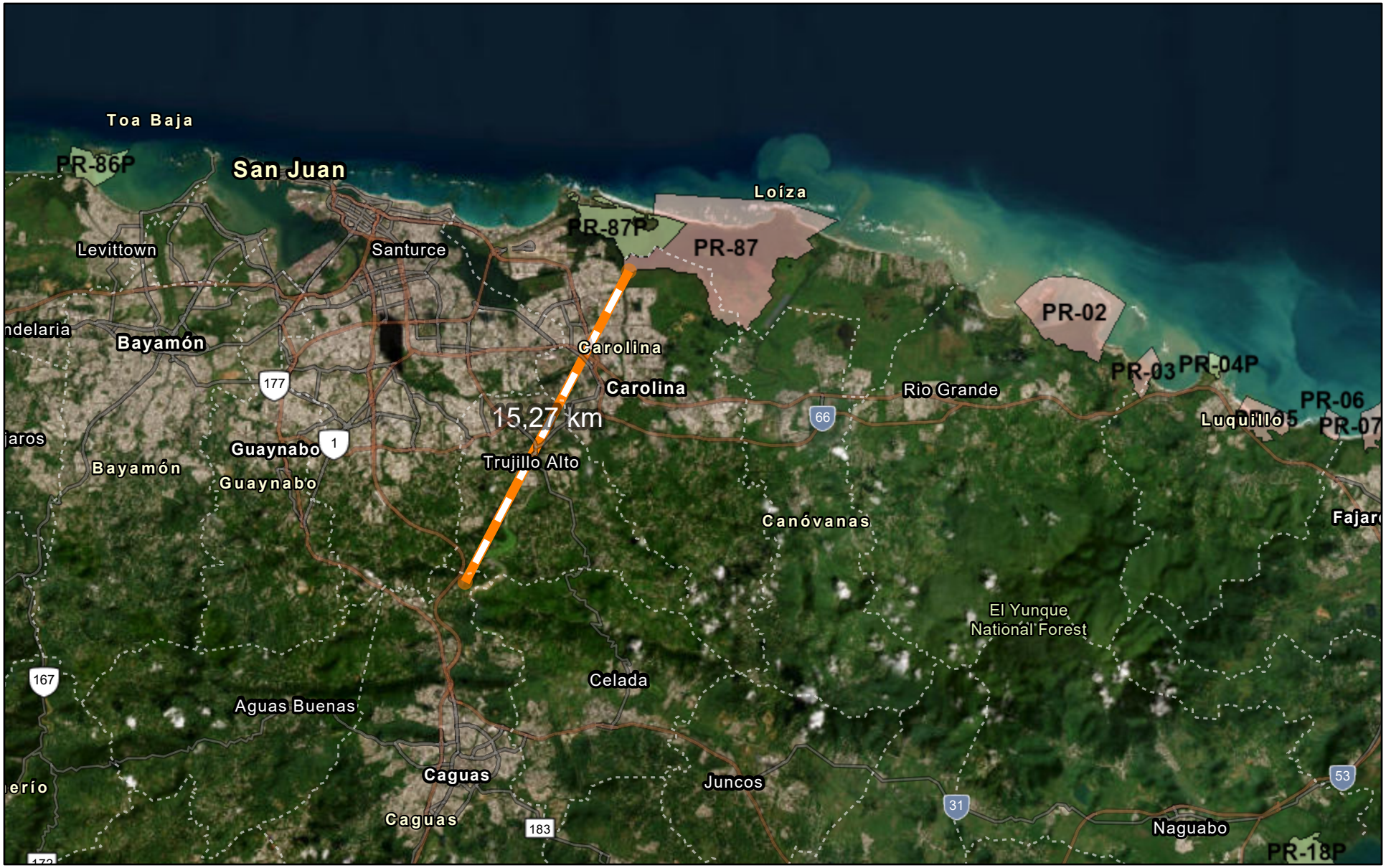
0 3.75 7.5 15 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community. EPA OEI

Exhibit C.
Coastal Barrier Resource

Exhibit C
1. Coastal Barrier Map

Coastal Barrier Resources System Map



9/6/2025

CBRS Units

Otherwise Protected Area

System Unit

World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations

75m Resolution Metadata

1:249,173

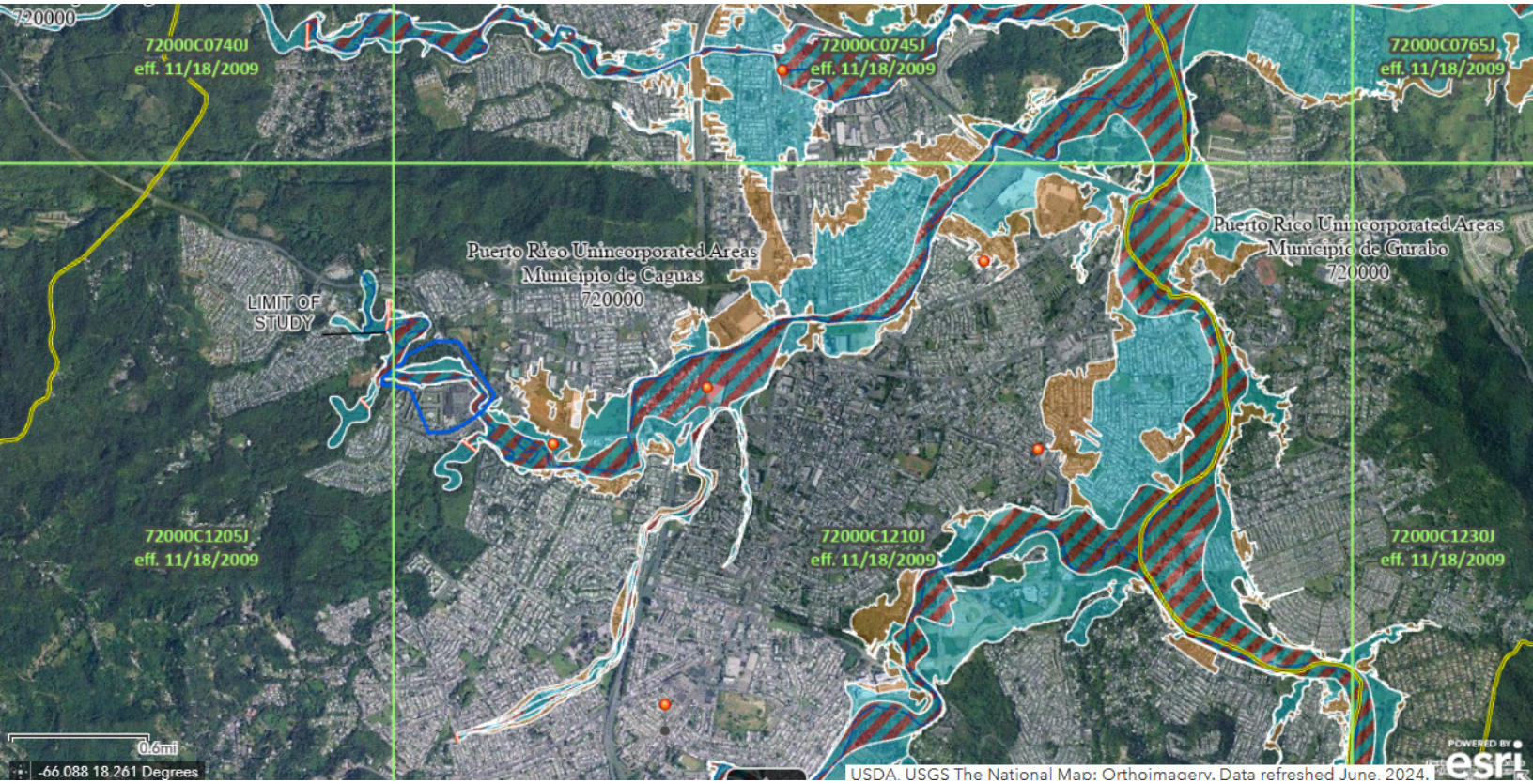
0 2 4 8 mi

0 3.25 6.5 13 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

Exhibit D.
Flood Insurance

Exhibit D
1. FEMA FIRM Map



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

N

FEMA
National Flood Insurance Program

Streets Improvements

Exhibit E.
Clean Air

Exhibit E
1. PR Air Quality Attainments - updated on July 25, 2025

This content is from the eCFR and is authoritative but unofficial.

Title 40 —Protection of Environment
Chapter I —Environmental Protection Agency
Subchapter C —Air Programs
Part 81 —Designation of Areas for Air Quality Planning Purposes
Subpart C —Section 107 Attainment Status Designations

Authority: 42 U.S.C. 7401, *et seq.*
Source: 43 FR 8964, Mar. 3, 1978, unless otherwise noted.
Authority: 42 U.S.C. 7401, *et seq.*
Source: 36 FR 22421, Nov. 25, 1971, unless otherwise noted.

§ 81.355 Puerto Rico.

Puerto Rico—1971 Sulfur Dioxide NAAQS
[Primary and Secondary]

Designated area	Does not meet primary standards	Does not meet secondary standards	Cannot be classified	Better than national standards
Puerto Rico AQCR				X

Puerto Rico—2010 Sulfur Dioxide NAAQS
[Primary]

Designated area [1]	Designation	
	Date [2]	Type
San Juan, PR:		
Cataño Municipality		Nonattainment.
Toa Baja Municipality (part)		Nonattainment.
Palo Seco Ward.		

[1] *Includes any Indian country in each county or area, unless otherwise specified. The EPA is not determining the boundaries of any area of Indian country in this table, including any area of Indian country located in the larger designation area. The inclusion of any Indian country in the designation area is not a determination that the state has regulatory authority under the Clean Air Act for such Indian country.*

[2] *This date is April 9, 2018, unless otherwise noted.*

Designated area [1]	Designation	
	Date [2]	Type
Sabana Seca Ward.		
San Juan Municipality (part)		Nonattainment.
San Juan Antiguo Ward.		
Santurce Ward.		
Hato Rey Norte Ward.		
Gobernador Pinero Ward.		
Guaynabo Municipality (part)		Nonattainment.
Pueblo Viejo Ward.		
Bayamón Municipality (part)		Nonattainment.
Juan Sánchez Ward.		
Guayama-Salinas, PR:		
Salinas Municipality (part)		Nonattainment.
Aguirre Ward.		
Lapa Ward.		
Rest of Territory		Attainment/Unclassifiable.

[1] Includes any Indian country in each county or area, unless otherwise specified. The EPA is not determining the boundaries of any area of Indian country in this table, including any area of Indian country located in the larger designation area. The inclusion of any Indian country in the designation area is not a determination that the state has regulatory authority under the Clean Air Act for such Indian country.

[2] This date is April 9, 2018, unless otherwise noted.

Puerto Rico—Carbon Monoxide

Designated Area	Designation		Classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable/Attainment		
Adjuntas Municipio				
Aguada Municipio				
Aguadilla Municipio				
Aguas Buenas Municipio				
Aibonito Municipio				
Anasco Municipio				
Arecibo Municipio				

[1] This date is November 15, 1990, unless otherwise noted.

Designated Area	Designation		Classification	
	Date [1]	Type	Date [1]	Type
Arroyo Municipio				
Barceloneta Municipio				
Barranquitas Munic.				
Bayamon County				
Caba Rojo Municipio				
Caguas Municipio				
Camuy Municipio				
Canovanas Municipio				
Carolina Municipio				
Catano County				
Cayey Municipio				
Ceiba Municipio				
Ciales Municipio				
Cidra Municipio				
Coama Municipio				
Comeria Municipio				
Corozal Municipio				
Culebra Municipio				
Dorado Municipio				
Fajardo Municipio				
Florida Municipio				
Guanica Municipio				
Guayama Municipio				
Guayanilla Municipio				
Guaynabo County				
Gurabo Municipio				
Hatillo Municipio				
Hormigueros Municipio				
Humacao Municipio				
Isabela Municipio				
Jayuya Municipio				
Juana Diaz Municipio				
Juncos Municipio				
Lajas Municipio				
Lares Municipio				
Las Marias Municipio				
Las Piedras Municipio				

[1] *This date is November 15, 1990, unless otherwise noted.*

Designated Area	Designation		Classification	
	Date [1]	Type	Date [1]	Type
Loiza Municipio				
Luquillo Municipio				
Manati Municipio				
Maricao Municipio				
Maunabo Municipio				
Mayaguez Municipio				
Moca Municipio				
Morovis Municipio				
Naguabo Municipio				
Naranjito Municipio				
Orocovis Municipio				
Patillas Minicipio				
Penuelas Municipio				
Ponce Municipio				
Quebradillas Municipio				
Rincon Municipio				
Rio Grande Municipio				
Sabana Grande Municipio				
Salinas Municipio				
San German Municipio				
San Juan Municipio				
San Lorenzo Municipio				
San Sebastian Municipio				
Santa Isabel Municipio				
Toa Alta Municipio				
Toa Baja County				
Trujilla Alto Municipio				
Utuado Municipio				
Vega Alta Municipio				
Vega Baja Municipio				
Vieques Municipio				
Villalba Municipio				
Yabucoa Municipio				

[1] *This date is November 15, 1990, unless otherwise noted.*

Designated Area	Designation		Classification	
	Date [1]	Type	Date [1]	Type
Yauco Municipio				

[1] *This date is November 15, 1990, unless otherwise noted.*

Puerto Rico—Ozone (1-Hour Standard)[2]

Designated area	Designation		Classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable/Attainment		
Adjuntas Municipio				
Aguada Municipio				
Aguadilla Municipio				
Aguas Buenas Municipio				
Aibonito Municipio				
Anasco Municipio				
Arecibo Municipio				
Arroyo Municipio				
Barceloneta Municipio				
Barranquitas Munic.				
Bayamon County				
Cabo Rojo Municipio				
Caguas Municipio				
Camuy Municipio				
Canovanas Municipio				
Carolina Municipio				
Catano County				
Cayey Municipio				
Ceiba Municipio				
Ciales Municipio				
Cidra Municipio				
Coamo Municipio				
Comerio Municipio				
Corozal Municipio				
Culebra Municipio				

[1] *This date is October 18, 2000, unless otherwise noted.*

[2] *The 1-hour ozone standard is revoked effective June 15, 2005 for all areas in Puerto Rico.*

Designated area	Designation		Classification	
	Date [1]	Type	Date [1]	Type
Dorado Municipio				
Fajardo Municipio				
Florida Municipio				
Guanica Municipio				
Guayama Municipio				
Guayanilla Municipio				
Guaynabo County				
Gurabo Municipio				
Hatillo Municipio				
Hormigueros Municipio				
Humacao Municipio				
Isabela Municipio				
Jayuya Municipio				
Juana Diaz Municipio				
Juncos Municipio				
Lajas Municipio				
Lares Municipio				
Las Marias Municipio				
Las Piedras Municipio				
Loiza Municipio				
Luquillo Municipio				
Manati Municipio				
Maricao Municipio				
Maunabo Municipio				
Mayaguez Municipio				
Moca Municipio				
Morovis Municipio				
Naguabo Municipio				
Naranjito Municipio				
Orocovis Municipio				
Patillas Minicipio				
Penuelas Municipio				
Ponce Municipio				
Quebradillas Municipio				
Rincon Municipio				
Rio Grande Municipio				

[1] This date is October 18, 2000, unless otherwise noted.

[2] The 1-hour ozone standard is revoked effective June 15, 2005 for all areas in Puerto Rico.

Designated area	Designation		Classification	
	Date [1]	Type	Date [1]	Type
Sabana Grande Municipio				
Salinas Municipio				
San German Municipio				
San Juan Municipio				
San Lorenzo Municipio				
San Sebastian Municipio				
Santa Isabel Municipio				
Toa Alta Municipio				
Toa Baja County				
Trujillo Alto Municipio				
Utuado Municipio				
Vega Alta Municipio				
Vega Baja Municipio				
Vieques Municipio				
Villalba Municipio				
Yabucoa Municipio				
Yauco Municipio				

[1] *This date is October 18, 2000, unless otherwise noted.*

[2] *The 1-hour ozone standard is revoked effective June 15, 2005 for all areas in Puerto Rico.*

PUERTO RICO—PM-10

Designated Area	Designation		Classification	
	Date	Type	Date	Type
Municipality of Guaynabo	1/12/2010	Attainment.		

Designated Area	Designation		Classification	
	Date	Type	Date	Type
Rest of Commonwealth	11/15/1990	Unclassifiable		

Puerto Rico—1997 Annual $PM_{2.5}$ NAAQS [Primary and Secondary]

Designated area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Statewide:				
Adjuntas Municipio		Unclassifiable/Attainment		
Aguada Municipio		Unclassifiable/Attainment.		
Aguadilla Municipio		Unclassifiable/Attainment.		
Aguas Buenas Municipio		Unclassifiable/Attainment.		
Aibonito Municipio		Unclassifiable/Attainment.		
Añasco Municipio		Unclassifiable/Attainment.		
Arecibo Municipio		Unclassifiable/Attainment.		
Arroyo Municipio		Unclassifiable/Attainment.		
Barceloneta Municipio		Unclassifiable/Attainment.		
Barranquitas Municipio		Unclassifiable/Attainment.		
Bayamón County		Unclassifiable/Attainment.		
Cabo Rojo Municipio		Unclassifiable/Attainment.		
Caguas Municipio		Unclassifiable/Attainment.		
Camuy Municipio		Unclassifiable/Attainment.		
Canóvanas Municipio		Unclassifiable/Attainment.		
Carolina Municipio		Unclassifiable/Attainment.		
Cataño County		Unclassifiable/Attainment.		
Cayey Municipio		Unclassifiable/Attainment.		
Ceiba Municipio		Unclassifiable/Attainment.		
Ciales Municipio		Unclassifiable/Attainment.		
Cidra Municipio		Unclassifiable/Attainment.		
Coamo Municipio		Unclassifiable/Attainment.		
Comerío Municipio		Unclassifiable/Attainment.		
Corozal Municipio		Unclassifiable/Attainment.		
Culebra Municipio		Unclassifiable/Attainment.		

[a] *Includes Indian Country located in each county or area, except as otherwise specified.*

[1] *This date is 90 days after January 5, 2005, unless otherwise noted.*

Designated area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Dorado Municipio		Unclassifiable/Attainment.		
Fajardo Municipio		Unclassifiable/Attainment.		
Florida Municipio		Unclassifiable/Attainment.		
Guánica Municipio		Unclassifiable/Attainment.		
Guayama Municipio		Unclassifiable/Attainment.		
Guayanilla Municipio		Unclassifiable/Attainment.		
Guaynabo County		Unclassifiable/Attainment.		
Gurabo Municipio		Unclassifiable/Attainment.		
Hatillo Municipio		Unclassifiable/Attainment.		
Hormigueros Municipio		Unclassifiable/Attainment.		
Humacao Municipio		Unclassifiable/Attainment.		
Isabela Municipio		Unclassifiable/Attainment.		
Jayuya Municipio		Unclassifiable/Attainment.		
Juana Díaz Municipio		Unclassifiable/Attainment.		
Juncos Municipio		Unclassifiable/Attainment.		
Lajas Municipio		Unclassifiable/Attainment.		
Lares Municipio		Unclassifiable/Attainment.		
Las Marías Municipio		Unclassifiable/Attainment.		
Las Piedras Municipio		Unclassifiable/Attainment.		
Loíza Municipio		Unclassifiable/Attainment.		
Luquillo Municipio		Unclassifiable/Attainment.		
Manatí Municipio		Unclassifiable/Attainment.		
Maricao Municipio		Unclassifiable/Attainment.		
Maunabo Municipio		Unclassifiable/Attainment.		
Mayagnez Municipio		Unclassifiable/Attainment.		
Moca Municipio		Unclassifiable/Attainment.		
Morovis Municipio		Unclassifiable/Attainment.		
Naguabo Municipio		Unclassifiable/Attainment.		
Naranjito Municipio		Unclassifiable/Attainment.		
Orocovis Municipio		Unclassifiable/Attainment.		
Patillas Municipio		Unclassifiable/Attainment.		
Peñuelas Municipio		Unclassifiable/Attainment.		
Ponce Municipio		Unclassifiable/Attainment.		
Quebradillas Municipio		Unclassifiable/Attainment.		
Rincón Municipio		Unclassifiable/Attainment.		
Río Grande Municipio		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after January 5, 2005, unless otherwise noted.

Designated area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Sabana Grande Municipio		Unclassifiable/Attainment.		
Salinas Municipio		Unclassifiable/Attainment.		
San Germán Municipio		Unclassifiable/Attainment.		
San Juan Municipio		Unclassifiable/Attainment.		
San Lorenzo Municipio		Unclassifiable/Attainment.		
San Sebastián Municipio		Unclassifiable/Attainment.		
Santa Isabel Municipio		Unclassifiable/Attainment.		
Toa Alta Municipio		Unclassifiable/Attainment.		
Toa Baja Municipio		Unclassifiable/Attainment.		
Trujillo Alto Municipio		Unclassifiable/Attainment		
Utuado Municipio		Unclassifiable/Attainment		
Vega Alta Municipio		Unclassifiable/Attainment		
Vega Baja Municipio		Unclassifiable/Attainment		
Vieques Municipio		Unclassifiable/Attainment		
Villalba Municipio		Unclassifiable/Attainment		
Yabucoa Municipio		Unclassifiable/Attainment		
Yauco Municipio		Unclassifiable/Attainment		

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after January 5, 2005, unless otherwise noted.

Puerto Rico—2012 Annual $PM_{2.5}$ NAAQS [Primary]

Designated area [1]	Designation		Classification	
	Date [2]	Type	Date [2]	Type
Territory wide:				
Adjuntas Municipio		Unclassifiable		
Aguada Municipio		Unclassifiable		
Aguadilla Municipio		Unclassifiable		
Aguas Buenas Municipio		Unclassifiable		
Aibonito Municipio		Unclassifiable		
Añasco Municipio		Unclassifiable		
Arecibo Municipio		Unclassifiable		

[1] Includes areas of Indian country located in each county or area, except as otherwise specified.

[2] This date is April 15, 2015, unless otherwise noted.

Designated area [1]	Designation		Classification	
	Date [2]	Type	Date [2]	Type
Arroyo Municipio		Unclassifiable		
Barceloneta Municipio		Unclassifiable		
Barranquitas Municipio		Unclassifiable		
Bayamón County		Unclassifiable		
Cabo Rojo Municipio		Unclassifiable		
Caguas Municipio		Unclassifiable		
Camuy Municipio		Unclassifiable		
Canóvanas Municipio		Unclassifiable		
Carolina Municipio		Unclassifiable		
Cataño County		Unclassifiable		
Cayey Municipio		Unclassifiable		
Ceiba Municipio		Unclassifiable		
Ciales Municipio		Unclassifiable		
Cidra Municipio		Unclassifiable		
Coamo Municipio		Unclassifiable		
Comerío Municipio		Unclassifiable		
Corozal Municipio		Unclassifiable		
Culebra Municipio		Unclassifiable		
Dorado Municipio		Unclassifiable		
Fajardo Municipio		Unclassifiable		
Florida Municipio		Unclassifiable		
Guánica Municipio		Unclassifiable		
Guayama Municipio		Unclassifiable		
Guayanilla Municipio		Unclassifiable		
Guaynabo County		Unclassifiable		
Gurabo Municipio		Unclassifiable		
Hatillo Municipio		Unclassifiable		
Hormigueros Municipio		Unclassifiable		
Humacao Municipio		Unclassifiable		
Isabela Municipio		Unclassifiable		
Jayuya Municipio		Unclassifiable		
Juana Díaz Municipio		Unclassifiable		
Juncos Municipio		Unclassifiable		
Lajas Municipio		Unclassifiable		
Lares Municipio		Unclassifiable		
Las Marías Municipio		Unclassifiable		

[1] *Includes areas of Indian country located in each county or area, except as otherwise specified.*

[2] *This date is April 15, 2015, unless otherwise noted.*

Designated area [1]	Designation		Classification	
	Date [2]	Type	Date [2]	Type
Las Piedras Municipio		Unclassifiable		
Loíza Municipio		Unclassifiable		
Luquillo Municipio		Unclassifiable		
Manatí Municipio		Unclassifiable		
Maricao Municipio		Unclassifiable		
Maunabo Municipio		Unclassifiable		
Mayagnez Municipio		Unclassifiable		
Moca Municipio		Unclassifiable		
Morovis Municipio		Unclassifiable		
Naguabo Municipio		Unclassifiable		
Naranjito Municipio		Unclassifiable		
Orocovis Municipio		Unclassifiable		
Patillas Municipio		Unclassifiable		
Peñuelas Municipio		Unclassifiable		
Ponce Municipio		Unclassifiable		
Quebradillas Municipio		Unclassifiable		
Rincón Municipio		Unclassifiable		
Río Grande Municipio		Unclassifiable		
Sabana Grande Municipio		Unclassifiable		
Salinas Municipio		Unclassifiable		
San Germán Municipio		Unclassifiable		
San Juan Municipio		Unclassifiable		
San Lorenzo Municipio		Unclassifiable		
San Sebastián Municipio		Unclassifiable		
Santa Isabel Municipio		Unclassifiable		
Toa Alta Municipio		Unclassifiable		
Toa Baja County		Unclassifiable		
Trujillo Alto Municipio		Unclassifiable		
Utuado Municipio		Unclassifiable		
Vega Alta Municipio		Unclassifiable		
Vega Baja Municipio		Unclassifiable		
Vieques Municipio		Unclassifiable		
Villalba Municipio		Unclassifiable		
Yabucoa Municipio		Unclassifiable		

[1] *Includes areas of Indian country located in each county or area, except as otherwise specified.*

[2] *This date is April 15, 2015, unless otherwise noted.*

Designated area [1]	Designation		Classification	
	Date [2]	Type	Date [2]	Type
Yauco Municipio		Unclassifiable		

[1] *Includes areas of Indian country located in each county or area, except as otherwise specified.*

[2] *This date is April 15, 2015, unless otherwise noted.*

Puerto Rico—1997 24-Hour $PM_{2.5}$ NAAQS [Primary and Secondary]

Designated area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Territory wide:				
Adjuntas Municipio		Unclassifiable/Attainment		
Aguada Municipio		Unclassifiable/Attainment		
Aguadilla Municipio		Unclassifiable/Attainment		
Aguas Buenas Municipio		Unclassifiable/Attainment		
Aibonito Municipio		Unclassifiable/Attainment		
Añasco Municipio		Unclassifiable/Attainment		
Arecibo Municipio		Unclassifiable/Attainment		
Arroyo Municipio		Unclassifiable/Attainment		
Barceloneta Municipio		Unclassifiable/Attainment		
Barranquitas Municipio		Unclassifiable/Attainment		
Bayamón County		Unclassifiable/Attainment		
Cabo Rojo Municipio		Unclassifiable/Attainment		
Caguas Municipio		Unclassifiable/Attainment		
Camuy Municipio		Unclassifiable/Attainment		
Canóvanas Municipio		Unclassifiable/Attainment		
Carolina Municipio		Unclassifiable/Attainment		
Cataño County		Unclassifiable/Attainment		
Cayey Municipio		Unclassifiable/Attainment		
Ceiba Municipio		Unclassifiable/Attainment		
Ciales Municipio		Unclassifiable/Attainment		
Cidra Municipio		Unclassifiable/Attainment		
Coamo Municipio		Unclassifiable/Attainment		
Comerío Municipio		Unclassifiable/Attainment		

[a] *Includes Indian Country located in each county or area, except as otherwise specified.*

[1] *This date is 90 days after January 5, 2005, unless otherwise noted.*

Designated area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Corozal Municipio		Unclassifiable/Attainment		
Culebra Municipio		Unclassifiable/Attainment		
Dorado Municipio		Unclassifiable/Attainment		
Fajardo Municipio		Unclassifiable/Attainment		
Florida Municipio		Unclassifiable/Attainment		
Guánica Municipio		Unclassifiable/Attainment		
Guayama Municipio		Unclassifiable/Attainment		
Guayanilla Municipio		Unclassifiable/Attainment		
Guaynabo County		Unclassifiable/Attainment		
Gurabo Municipio		Unclassifiable/Attainment		
Hatillo Municipio		Unclassifiable/Attainment		
Hormigueros Municipio		Unclassifiable/Attainment		
Humacao Municipio		Unclassifiable/Attainment		
Isabela Municipio		Unclassifiable/Attainment		
Jayuya Municipio		Unclassifiable/Attainment		
Juana Díaz Municipio		Unclassifiable/Attainment		
Juncos Municipio		Unclassifiable/Attainment		
Lajas Municipio		Unclassifiable/Attainment		
Lares Municipio		Unclassifiable/Attainment		
Las Marías Municipio		Unclassifiable/Attainment		
Las Piedras Municipio		Unclassifiable/Attainment		
Loíza Municipio		Unclassifiable/Attainment		
Luquillo Municipio		Unclassifiable/Attainment		
Manatí Municipio		Unclassifiable/Attainment		
Maricao Municipio		Unclassifiable/Attainment		
Maunabo Municipio		Unclassifiable/Attainment		
Mayagnez Municipio		Unclassifiable/Attainment		
Moca Municipio		Unclassifiable/Attainment		
Morovis Municipio		Unclassifiable/Attainment		
Naguabo Municipio		Unclassifiable/Attainment		
Naranjito Municipio		Unclassifiable/Attainment		
Orocovis Municipio		Unclassifiable/Attainment		
Patillas Municipio		Unclassifiable/Attainment		
Peñuelas Municipio		Unclassifiable/Attainment		
Ponce Municipio		Unclassifiable/Attainment		
Quebradillas Municipio		Unclassifiable/Attainment		

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after January 5, 2005, unless otherwise noted.

Designated area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Rincón Municipio		Unclassifiable/Attainment		
Río Grande Municipio		Unclassifiable/Attainment		
Sabana Grande Municipio		Unclassifiable/Attainment		
Salinas Municipio		Unclassifiable/Attainment		
San Germán Municipio		Unclassifiable/Attainment		
San Juan Municipio		Unclassifiable/Attainment		
San Lorenzo Municipio		Unclassifiable/Attainment		
San Sebastián Municipio		Unclassifiable/Attainment		
Santa Isabel Municipio		Unclassifiable/Attainment		
Toa Alta Municipio		Unclassifiable/Attainment		
Toa Baja County		Unclassifiable/Attainment		
Trujillo Alto Municipio		Unclassifiable/Attainment		
Utuado Municipio		Unclassifiable/Attainment		
Vega Alta Municipio		Unclassifiable/Attainment		
Vega Baja Municipio		Unclassifiable/Attainment		
Vieques Municipio		Unclassifiable/Attainment		
Villalba Municipio		Unclassifiable/Attainment		
Yabucoa Municipio		Unclassifiable/Attainment		
Yauco Municipio		Unclassifiable/Attainment		

[a] *Includes Indian Country located in each county or area, except as otherwise specified.*

[1] *This date is 90 days after January 5, 2005, unless otherwise noted.*

Puerto Rico—2006 24-Hour $PM_{2.5}$ NAAQS [Primary and Secondary]

Designated Area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Territory wide:				
Adjuntas Municipio		Unclassifiable/Attainment.		
Aguada Municipio		Unclassifiable/Attainment.		
Aguadilla Municipio		Unclassifiable/Attainment.		
Aguas Buenas Municipio		Unclassifiable/Attainment.		
Aibonito Municipio		Unclassifiable/Attainment.		

[a] *Includes Indian Country located in each county or area, except as otherwise specified.*

[1] *This date is 30 days after November 13, 2009, unless otherwise noted.*

Designated Area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Añasco Municipio		Unclassifiable/Attainment.		
Arecibo Municipio		Unclassifiable/Attainment.		
Arroyo Municipio		Unclassifiable/Attainment.		
Barceloneta Municipio		Unclassifiable/Attainment.		
Barranquitas Municipio		Unclassifiable/Attainment.		
Bayamón County		Unclassifiable/Attainment.		
Cabo Rojo Municipio		Unclassifiable/Attainment.		
Caguas Municipio		Unclassifiable/Attainment.		
Camuy Municipio		Unclassifiable/Attainment.		
Canóvanas Municipio		Unclassifiable/Attainment.		
Carolina Municipio		Unclassifiable/Attainment.		
Cataño County		Unclassifiable/Attainment.		
Cayey Municipio		Unclassifiable/Attainment.		
Ceiba Municipio		Unclassifiable/Attainment.		
Ciales Municipio		Unclassifiable/Attainment.		
Cidra Municipio		Unclassifiable/Attainment.		
Coamo Municipio		Unclassifiable/Attainment.		
Comerío Municipio		Unclassifiable/Attainment.		
Corozal Municipio		Unclassifiable/Attainment.		
Culebra Municipio		Unclassifiable/Attainment.		
Dorado Municipio		Unclassifiable/Attainment.		
Fajardo Municipio		Unclassifiable/Attainment.		
Florida Municipio		Unclassifiable/Attainment.		
Guánica Municipio		Unclassifiable/Attainment.		
Guayama Municipio		Unclassifiable/Attainment.		
Guayanilla Municipio		Unclassifiable/Attainment.		
Guaynabo County		Unclassifiable/Attainment.		
Gurabo Municipio		Unclassifiable/Attainment.		
Hatillo Municipio		Unclassifiable/Attainment.		
Hormigueros Municipio		Unclassifiable/Attainment.		
Humacao Municipio		Unclassifiable/Attainment.		
Isabela Municipio		Unclassifiable/Attainment.		
Jayuya Municipio		Unclassifiable/Attainment.		
Juana Díaz Municipio		Unclassifiable/Attainment.		
Juncos Municipio		Unclassifiable/Attainment.		
Lajas Municipio		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 30 days after November 13, 2009, unless otherwise noted.

Designated Area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Lares Municipio		Unclassifiable/Attainment.		
Las Marías Municipio		Unclassifiable/Attainment.		
Las Piedras Municipio		Unclassifiable/Attainment.		
Loíza Municipio		Unclassifiable/Attainment.		
Luquillo Municipio		Unclassifiable/Attainment.		
Manatí Municipio		Unclassifiable/Attainment.		
Maricao Municipio		Unclassifiable/Attainment.		
Maunabo Municipio		Unclassifiable/Attainment.		
Mayagnez Municipio		Unclassifiable/Attainment.		
Moca Municipio		Unclassifiable/Attainment.		
Morovis Municipio		Unclassifiable/Attainment.		
Naguabo Municipio		Unclassifiable/Attainment.		
Naranjito Municipio		Unclassifiable/Attainment.		
Orocovis Municipio		Unclassifiable/Attainment.		
Patillas Municipio		Unclassifiable/Attainment.		
Peñuelas Municipio		Unclassifiable/Attainment.		
Ponce Municipio		Unclassifiable/Attainment.		
Quebradillas Municipio		Unclassifiable/Attainment.		
Rincón Municipio		Unclassifiable/Attainment.		
Río Grande Municipio		Unclassifiable/Attainment.		
Sabana Grande Municipio		Unclassifiable/Attainment.		
Salinas Municipio		Unclassifiable/Attainment.		
San Germán Municipio		Unclassifiable/Attainment.		
San Juan Municipio		Unclassifiable/Attainment.		
San Lorenzo Municipio		Unclassifiable/Attainment.		
San Sebastián Municipio		Unclassifiable/Attainment.		
Santa Isabel Municipio		Unclassifiable/Attainment.		
Toa Alta Municipio		Unclassifiable/Attainment.		
Toa Baja County		Unclassifiable/Attainment.		
Trujillo Alto Municipio		Unclassifiable/Attainment.		
Utuado Municipio		Unclassifiable/Attainment.		
Vega Alta Municipio		Unclassifiable/Attainment.		
Vega Baja Municipio		Unclassifiable/Attainment.		
Vieques Municipio		Unclassifiable/Attainment.		
Villalba Municipio		Unclassifiable/Attainment.		
Yabucoa Municipio		Unclassifiable/Attainment.		

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 30 days after November 13, 2009, unless otherwise noted.

Designated Area	Designation [a]		Classification	
	Date [1]	Type	Date	Type
Yauco Municipio		Unclassifiable/Attainment.		

[a] *Includes Indian Country located in each county or area, except as otherwise specified.*

[1] *This date is 30 days after November 13, 2009, unless otherwise noted.*

Puerto Rico—NO_2 (1971 Annual Standard)

Designated area	Does not meet primary standards	Cannot be classified or better than national standards
Puerto Rico AQCR		X

Puerto Rico—NO_2 (2010 1-Hour Standard)

Designated area	Designation [a]	
	Date [1]	Type
Adjuntas Municipio		Unclassifiable/Attainment.
Aguada Municipio		Unclassifiable/Attainment.
Aguadilla Municipio		Unclassifiable/Attainment.
Aguas Buenas Municipio		Unclassifiable/Attainment.
Aibonito Municipio		Unclassifiable/Attainment.
Añasco Municipio		Unclassifiable/Attainment.
Arecibo Municipio		Unclassifiable/Attainment.
Arroyo Municipio		Unclassifiable/Attainment.
Barceloneta Municipio		Unclassifiable/Attainment.
Barranquitas Municipio		Unclassifiable/Attainment.
Bayamón County		Unclassifiable/Attainment.
Cabo Rojo Municipio		Unclassifiable/Attainment.
Caguas Municipio		Unclassifiable/Attainment.
Camuy Municipio		Unclassifiable/Attainment.
Canóvanas Municipio		Unclassifiable/Attainment.

[a] *Includes Indian Country located in each county or area, except as otherwise specified.*

[1] *This date is 90 days after October 31, 2011, unless otherwise noted.*

Designated area	Designation [a]	
	Date [1]	Type
Carolina Municipio		Unclassifiable/Attainment.
Cataño County		Unclassifiable/Attainment.
Cayey Municipio		Unclassifiable/Attainment.
Ceiba Municipio		Unclassifiable/Attainment.
Ciales Municipio		Unclassifiable/Attainment.
Cidra Municipio		Unclassifiable/Attainment.
Coamo Municipio		Unclassifiable/Attainment.
Comerío Municipio		Unclassifiable/Attainment.
Corozal Municipio		Unclassifiable/Attainment.
Culebra Municipio		Unclassifiable/Attainment.
Dorado Municipio		Unclassifiable/Attainment.
Fajardo Municipio		Unclassifiable/Attainment.
Florida Municipio		Unclassifiable/Attainment.
Guánica Municipio		Unclassifiable/Attainment.
Guayama Municipio		Unclassifiable/Attainment.
Guayanilla Municipio		Unclassifiable/Attainment.
Guaynabo County		Unclassifiable/Attainment.
Gurabo Municipio		Unclassifiable/Attainment.
Hatillo Municipio		Unclassifiable/Attainment.
Hormigueros Municipio		Unclassifiable/Attainment.
Humacao Municipio		Unclassifiable/Attainment.
Isabela Municipio		Unclassifiable/Attainment.
Jayuya Municipio		Unclassifiable/Attainment.
Juana Díaz Municipio		Unclassifiable/Attainment.
Juncos Municipio		Unclassifiable/Attainment.
Lajas Municipio		Unclassifiable/Attainment.
Lares Municipio		Unclassifiable/Attainment.
Las Marías Municipio		Unclassifiable/Attainment.
Las Piedras Municipio		Unclassifiable/Attainment.
Loíza Municipio		Unclassifiable/Attainment.
Luquillo Municipio		Unclassifiable/Attainment.
Manatí Municipio		Unclassifiable/Attainment.
Maricao Municipio		Unclassifiable/Attainment.
Maunabo Municipio		Unclassifiable/Attainment.
Mayagnez Municipio		Unclassifiable/Attainment.
Moca Municipio		Unclassifiable/Attainment.

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after October 31, 2011, unless otherwise noted.

Designated area	Designation [a]	
	Date [1]	Type
Morovis Municipio		Unclassifiable/Attainment.
Naguabo Municipio		Unclassifiable/Attainment.
Naranjito Municipio		Unclassifiable/Attainment.
Orocovis Municipio		Unclassifiable/Attainment.
Patillas Municipio		Unclassifiable/Attainment.
Peñuelas Municipio		Unclassifiable/Attainment.
Ponce Municipio		Unclassifiable/Attainment.
Quebradillas Municipio		Unclassifiable/Attainment.
Rincón Municipio		Unclassifiable/Attainment.
Río Grande Municipio		Unclassifiable/Attainment.
Sabana Grande Municipio		Unclassifiable/Attainment.
Salinas Municipio		Unclassifiable/Attainment.
San Germán Municipio		Unclassifiable/Attainment.
San Juan Municipio		Unclassifiable/Attainment.
San Lorenzo Municipio		Unclassifiable/Attainment.
San Sebastián Municipio		Unclassifiable/Attainment.
Santa Isabel Municipio		Unclassifiable/Attainment.
Toa Alta Municipio		Unclassifiable/Attainment.
Toa Baja County		Unclassifiable/Attainment.
Trujillo Alto Municipio		Unclassifiable/Attainment.
Utuado Municipio		Unclassifiable/Attainment.
Vega Alta Municipio		Unclassifiable/Attainment.
Vega Baja Municipio		Unclassifiable/Attainment.
Vieques Municipio		Unclassifiable/Attainment.
Villalba Municipio		Unclassifiable/Attainment.
Yabucoa Municipio		Unclassifiable/Attainment.

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after October 31, 2011, unless otherwise noted.

Designated area	Designation [a]	
	Date [1]	Type
Yauco Municipio		Unclassifiable/Attainment.

[a] *Includes Indian Country located in each county or area, except as otherwise specified.*

[1] *This date is 90 days after October 31, 2011, unless otherwise noted.*

Puerto Rico—1997 8-Hour Ozone NAAQS [Primary and Secondary]

Designated area	Designation		Category/classification	
	Date [1]	Type	Date [1]	Type
Statewide		Unclassifiable/Attainment		
Adjuntas Municipio				
Aguada Municipio				
Aguadilla Municipio				
Aguas Buenas Municipio				
Aibonito Municipio				
Añasco Municipio				
Arecibo Municipio				
Arroyo Municipio				
Barceloneta Municipio				
Barranquitas Municipio				
Bayamón County				
Cabo Rojo Municipio				
Caguas Municipio				
Camuy Municipio				
Canóvanas Municipio				
Carolina Municipio				
Cataño County				
Cayey Municipio				
Ceiba Municipio				
Ciales Municipio				
Cidra Municipio				
Coamo Municipio				
Comerío Municipio				
Corozal Municipio				

[1] *This date is June 15, 2004, unless otherwise noted.*

Designated area	Designation		Category/classification	
	Date [1]	Type	Date [1]	Type
Culebra Municipio				
Dorado Municipio				
Fajardo Municipio				
Florida Municipio				
Guánica Municipio				
Guayama Municipio				
Guayanilla Municipio				
Guaynabo County				
Gurabo Municipio				
Hatillo Municipio				
Hormigueros Municipio				
Humacao Municipio				
Isabela Municipio				
Jayuya Municipio				
Juana Díaz Municipio				
Juncos Municipio				
Lajas Municipio				
Lares Municipio				
Las Marías Municipio				
Las Piedras Municipio				
Loíza Municipio				
Luquillo Municipio				
Manatí Municipio				
Maricao Municipio				
Maunabo Municipio				
Mayagüez Municipio				
Moca Municipio				
Morovis Municipio				
Naguabo Municipio				
Naranjito Municipio				
Orocovis Municipio				
Patillas Municipio				
Peñuelas Municipio				
Ponce Municipio				
Quebradillas Municipio				
Rincón Municipio				
Río Grande Municipio				

[1] *This date is June 15, 2004, unless otherwise noted.*

Designated area	Designation		Category/classification	
	Date [1]	Type	Date [1]	Type
Sabana Grande Municipio				
Salinas Municipio				
San Germán Municipio				
San Juan Municipio				
San Lorenzo Municipio				
San Sebastián Municipio				
Santa Isabel Municipio				
Toa Alta Municipio				
Toa Baja County				
Trujillo Alto Municipio				
Utuado Municipio				
Vega Alta Municipio				
Vega Baja Municipio				
Vieques Municipio				
Villalba Municipio				
Yabucoa Municipio				

[1] *This date is June 15, 2004, unless otherwise noted.*

Designated area	Designation		Category/classification	
	Date [1]	Type	Date [1]	Type
Yauco Municipio				

[1] *This date is June 15, 2004, unless otherwise noted.*

Puerto Rico—2008 8-Hour Ozone NAAQS [Primary and Secondary]

Designated area [1]	Designation		Classification	
	Date [2]	Type	Date [2]	Type
All of Puerto Rico AQCR 244		Unclassifiable/Attainment		

[1] *Includes any Indian country in each county or area, unless otherwise specified.*

[2] *This date is July 20, 2012, unless otherwise noted.*

Puerto Rico—2015 8-Hour Ozone NAAQS [Primary and Secondary]

Designated area [1]	Designation		Classification	
	Date [2]	Type	Date	Type
All of Puerto Rico AQCR 244		Attainment/Unclassifiable		

[1] *Includes any Indian country in each county or area, unless otherwise specified. EPA is not determining the boundaries of any area of Indian country in this table, including any area of Indian country located in the larger designation area. The inclusion of any Indian country in the designation area is not a determination that the state has regulatory authority under the Clean Air Act for such Indian country.*

[2] *This date is January 16, 2018, unless otherwise noted.*

PUERTO RICO—$PM_{2.5}$ (ANNUAL NAAQS)

Designated area	Designation [a]	
	Date [1]	Type
Statewide:		
Adjuntas Municipio		Unclassifiable/Attainment.
Aguada Municipio		Unclassifiable/Attainment.
Aguadilla Municipio		Unclassifiable/Attainment.
Aguas Buenas Municipio		Unclassifiable/Attainment.
Aibonito Municipio		Unclassifiable/Attainment.
Añasco Municipio		Unclassifiable/Attainment.
Arecibo Municipio		Unclassifiable/Attainment.
Arroyo Municipio		Unclassifiable/Attainment.
Barceloneta Municipio		Unclassifiable/Attainment.
Barranquitas Municipio		Unclassifiable/Attainment.
Bayamón County		Unclassifiable/Attainment.
Cabo Rojo Municipio		Unclassifiable/Attainment.
Caguas Municipio		Unclassifiable/Attainment.
Camuy Municipio		Unclassifiable/Attainment.
Canóvanas Municipio		Unclassifiable/Attainment.
Carolina Municipio		Unclassifiable/Attainment.
Cataño County		Unclassifiable/Attainment.
Cayey Municipio		Unclassifiable/Attainment.
Ceiba Municipio		Unclassifiable/Attainment.
Ciales Municipio		Unclassifiable/Attainment.
Cidra Municipio		Unclassifiable/Attainment.
Coamo Municipio		Unclassifiable/Attainment.
Comerío Municipio		Unclassifiable/Attainment.
Corozal Municipio		Unclassifiable/Attainment.
Culebra Municipio		Unclassifiable/Attainment.
Dorado Municipio		Unclassifiable/Attainment.
Fajardo Municipio		Unclassifiable/Attainment.
Florida Municipio		Unclassifiable/Attainment.
Guánica Municipio		Unclassifiable/Attainment.
Guayama Municipio		Unclassifiable/Attainment.
Guayanilla Municipio		Unclassifiable/Attainment.
Guaynabo County		Unclassifiable/Attainment.
Gurabo Municipio		Unclassifiable/Attainment.

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after January 5, 2005, unless otherwise noted.

Designated area	Designation [a]	
	Date [1]	Type
Hatillo Municipio		Unclassifiable/Attainment.
Hormigueros Municipio		Unclassifiable/Attainment.
Humacao Municipio		Unclassifiable/Attainment.
Isabela Municipio		Unclassifiable/Attainment.
Jayuya Municipio		Unclassifiable/Attainment.
Juana Díaz Municipio		Unclassifiable/Attainment.
Juncos Municipio		Unclassifiable/Attainment.
Lajas Municipio		Unclassifiable/Attainment.
Lares Municipio		Unclassifiable/Attainment.
Las Marías Municipio		Unclassifiable/Attainment.
Las Piedras Municipio		Unclassifiable/Attainment.
Loíza Municipio		Unclassifiable/Attainment.
Luquillo Municipio		Unclassifiable/Attainment.
Manatí Municipio		Unclassifiable/Attainment.
Maricao Municipio		Unclassifiable/Attainment.
Maunabo Municipio		Unclassifiable/Attainment.
Mayagnez Municipio		Unclassifiable/Attainment.
Moca Municipio		Unclassifiable/Attainment.
Morovis Municipio		Unclassifiable/Attainment.
Naguabo Municipio		Unclassifiable/Attainment.
Naranjito Municipio		Unclassifiable/Attainment.
Orocovis Municipio		Unclassifiable/Attainment.
Patillas Municipio		Unclassifiable/Attainment.
Peñuelas Municipio		Unclassifiable/Attainment.
Ponce Municipio		Unclassifiable/Attainment.
Quebradillas Municipio		Unclassifiable/Attainment.
Rincón Municipio		Unclassifiable/Attainment.
Río Grande Municipio		Unclassifiable/Attainment.
Sabana Grande Municipio		Unclassifiable/Attainment.
Salinas Municipio		Unclassifiable/Attainment.
San Germán Municipio		Unclassifiable/Attainment.
San Juan Municipio		Unclassifiable/Attainment.
San Lorenzo Municipio		Unclassifiable/Attainment.
San Sebastián Municipio		Unclassifiable/Attainment.
Santa Isabel Municipio		Unclassifiable/Attainment.
Toa Alta Municipio		Unclassifiable/Attainment.

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after January 5, 2005, unless otherwise noted.

Designated area	Designation [a]	
	Date [1]	Type
Toa Baja County		Unclassifiable/Attainment.
Trujillo Alto Municipio		Unclassifiable/Attainment.
Utuado Municipio		Unclassifiable/Attainment.
Vega Alta Municipio		Unclassifiable/Attainment.
Vega Baja Municipio		Unclassifiable/Attainment.
Vieques Municipio		Unclassifiable/Attainment.
Villalba Municipio		Unclassifiable/Attainment.
Yabucoa Municipio		Unclassifiable/Attainment.
Yauco Municipio		Unclassifiable/Attainment.

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after January 5, 2005, unless otherwise noted.

PUERTO RICO—2008 LEAD NAAQS

Designated area	Designation for the 2008 NAAQS [a]	
	Date [1]	Type
Arecibo, PR:		
Arecibo Municipio (part)		Nonattainment.
Area bounded by 4 km from the boundaries of the Battery Recycling Company facility.		
Rest of State		Unclassifiable/ Attainment.

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] December 31, 2011 unless otherwise noted.

[44 FR 5131, Jan. 25, 1979]

Editorial Note: For FEDERAL REGISTER citations affecting § 81.355, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov*.

Exhibit F.
Coastal Zone Management

Exhibit F
1. Coastal Zone Land Boundary Map

Ámbito de aplicación del Programa de Manejo de la Zona Costanera de Puerto Rico

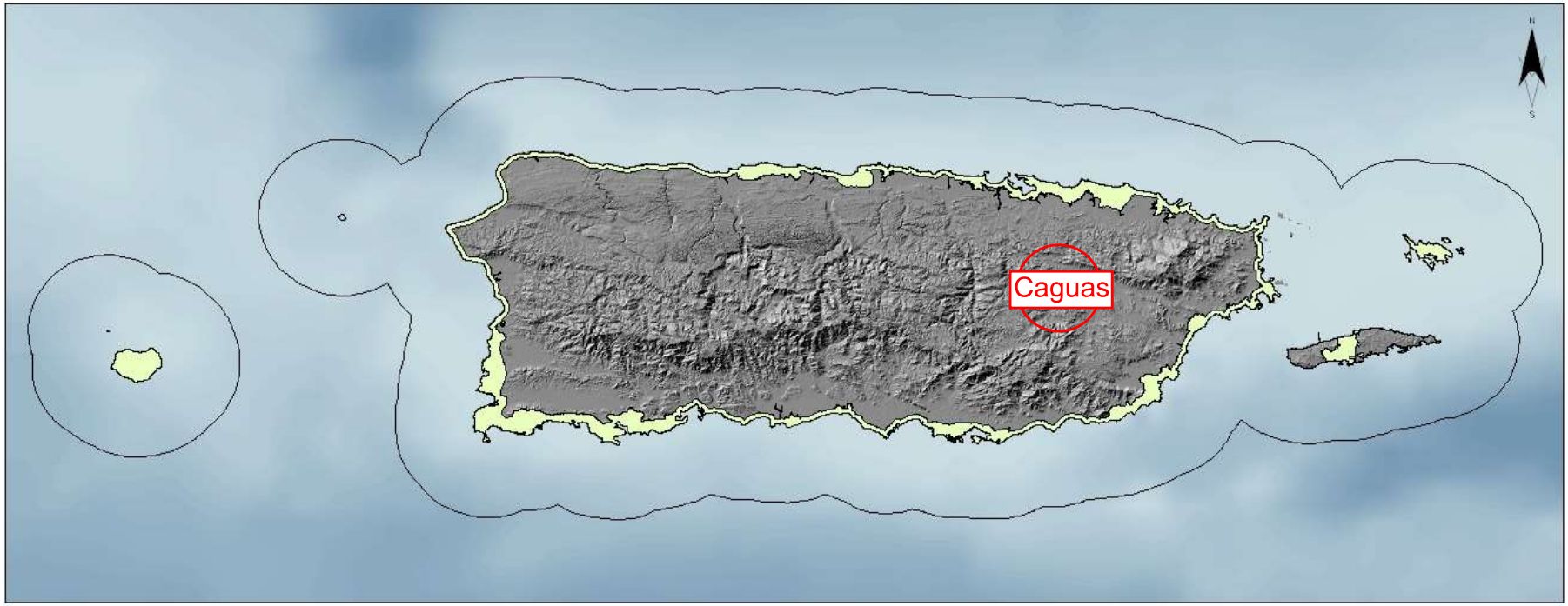


Exhibit G. Contamination and Toxic Substances

Exhibit G
1. Asbestos and Lead Base Paint Report at PR34, PR156, and Leoncio Blvd

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203/787-607-8965

Asbestos Containing Materials Inspection



SAMPLING CONDUCTED AT:

ROAD PR-34

Located at in Caguas, PR

GES Project # -2022-218

DECEMBER 2022

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

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TABLE OF CONTENT

REPORT COVER……1

TABLE OF CONTENT……....2

Introduction……3

Asbestos Containing Materials Inspection……3-4

APPENDIX I Certifications granted by the DNER of Puerto Rico……5-6

APPENDIX II Layout Area & Project Photos……7-9

APPENDIX III Asbestos Negative Certification……10-11

APPENDIX IV Conclusion……12

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DNER & EPA Permits and Certifications
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December 13, 2022

Eng. Juan M. Vazquez
Vice-President
Vazquez Associates Ingenieros PSC
PO Box 6089
Caguas, PR 00726

Affair: Asbestos Containing Materials Inspection in Road PR-34 located at Caguas, PR

Dear Eng. Vazquez:

Global Environmental Services LLC (GES) was contracted to perform a Asbestos Containing Materials Inspection at reference project. The inspection was contracted for the evaluation this Road areas.

Asbestos Containing Building Material (ACBM) is defined as any material which contains more that 1% percent Asbestos.

The ACM Inspection was conducted on December 3, 2022 by Mr. Elis J. Morales, Department of Natural and Environmental Resources of Puerto Rico (DNER) certified Asbestos Inspector # ASB-0123-0049-SI with enough experience.

During the inspection, inspector **NO suspected Asbestos Containing Materials**. The asbestos inspection work will be performed by Asbestos Hazards Emergency Response Act (AHERA) accredited asbestos inspectors under the PR Environmental Quality Board accreditation program. The inspection will be conducted in accordance with EPA's "Guidance for Controlling Asbestos Containing Materials in Buildings (EPA 560/5-85/024)". Asbestos Containing Materials Inspection and bulk sampling procedures to be implemented was based on the guidelines established by the ASTM E2356-14 Standard Practice for Comprehensive Building Asbestos Survey. Samples were analyzed by PLM using dispersion staining techniques in accordance with US EPA Method: 600/M4-82-020 of Dec. 1982 and 600/R-93/116 of July 93.

Global Environmental Services LLC **certifies this project asbestos free.**

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The Asbestos Containing Materials inspection was performed based on DNER/ NESHAP regulations and protocol according to the following scenario:

a. **The road is divided various functional spaces.**
b. **Physical and hazard assessment of suspected asbestos containing materials was performed.**
c. **Samples were collected according to homogenous areas.(Does not apply).**
d. **Samples sent to NVLAP Accredited Laboratory. (Does not apply).**
e. **Samples were analyzed by PLM method, in accordance to EPA recommended procedures. (Does not apply).**

Thank you for the opportunity, any questions, please call 787-994-2203 and 787-607-8965 or email globalespr@gmail.com.

Cordially;





Mr. Angel O. Ortega, JS — *Environmental Consultant President*

Mr. Elis J. Morales — *Asbestos Inspector-ASB-0123-0049-SI*

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APPENDIX I

CERTIFICATIONS GRANTED BY THE DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES OF PUERTO RICO

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications
RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 /787-607-8965

ASBESTOS INSPECTOR CERTIFICATION



TARJETA DE REGISTRO
PARA LA REMOCION DE ASBESTO

Esta tarjeta autoriza a:

Elis J. Morales Rivera

Inspector

A trabajar en la remoción de asbesto en Puerto Rico. Esta persona **NO** es un empleado del DRNA.

ASB-0123-0049-SI
Número de Registro

3-ene-2024
Fecha de vencimiento

Firma Autorizada - Departamento Recursos Naturales y Ambientales

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APPENDIX II

SITE AREAS

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SITE AREA



COORDINATES TO GET TO THE PROJECT:

18.2423241, -66.0407468

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 /787-607-8965

SITE AREA



GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications
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APPENDIX III

ASBESTOS NEGATIVE CERTIFICATION

GOBIERNO DE PUERTO RICO
OFICINA DEL GOBERNADOR
JUNTA DE CALIDAD AMBIENTAL

Área de Calidad de Agua

Forma PGC-009

CERTIFICACION DE NO PRESENCIA DE ASBESTO EN ESTRUCTURAS A DEMOLERSE

(Deberá completarse en letra de molde o impresa)

NUM. PERMISO: _____

Yo, Elis J. Morales (Nombre), mayor de edad, casado (Estado Civil), y vecino de Naranjito (Municipio)

Dirección Postal RR8 Box 1995 PMB 313 Bayamón, PR 00956 (Pueblo) (Zip Code)

Teléfonos: Residencial (787) 607 - 8965 Oficina (787) 994 - 2203 Ext._____

Fax (_____) _____ - _____

Certifico que:

1. La estructura localizada en la Carretera PR-34 en Caguas, PR, la cual será objeto de una demolición se encuentra libre de asbesto.
2. La información antes indicada es cierta y correcta.
3. Afirmo y reconozco las consecuencias de incluir y someter información falsa en este documento.
4. Para que así conste, firmo la presente certificación en Bayamón (Municipio) de Puerto Rico,

   hoy día 4 de diciembre de 2022

ASB-0123-0049-SI

Firma y Sello del Profesional o
Firma del Inspector de Asbesto registrado por la JCA (Original)

Nota: Ingenieros o Arquitectos deberán someter evidencia de que se encuentra al día en el pago de sus cuotas de colegiación e Inspectores de Asbesto deberán someter evidencia de la tarjeta de registro provista por la JCA.

Dirección Física: Ave. Ponce de León 1308, Carr. Estatal 8838, Sector el Cinco, Río Piedras, PR 00926
Dirección Postal: Apartado 11488, Santurce, PR 00910-1488
Tel. (787) 767-8181 • Fax (787) 767-1962

PUERTO RICO VERDE

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 /787-607-8965

APPENDIX IV

CONCLUSION

After evaluating the above mentioned project, our company Global Environmental Services LLC certifies Asbestos free for the Road PR-34 in Caguas, PR of December 3, 2022.

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
DNER Permits/ EPA Permits & Certifications

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 /787-607-8965

Lead Based Paint Inspection



SAMPLING CONDUCTED AT:

ROAD PR-34

Located at in Caguas, PR

GES Project # -2022-218

DECEMBER 2022

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

TABLE OF CONTENT

REPORT COVER……1

TABLE OF CONTENT……2

Introduction……3

Lead Based Paint SOP (Standard Operation Procedure)……3-4

Addendum I The Lead Paint Standard ……5-6

Addendum II Performance Characteristic Sheet (PCS)- XRF Niton Xlp 300A……7-10

Addendum III Site Area……11-13

Addendum IV Certifications granted by the DNER of Puerto Rico……14-16

Addendum V LBP Testing Combinations……17-22

Addendum VI Table Summary of components with Lead Based Paint……23-24

Addendum VII Photographs of the positive components with Lead Based Paint……25-27

Addendum VIII Where the positive components area found with Lead Based Paint……28-30

Addendum IX Conclusion……31

GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

December 13, 2022

Eng. Juan M. Vazquez
Vice-President
Vazquez Associates Ingenieros PSC
PO Box 6089
Caguas, PR 00726

Affair: Lead Based Paint Inspection in Road PR-34 located at Caguas, PR

Dear Eng. Vazquez:

Global Environmental Services LLC (GES) was contracted to perform a Lead Based Paint Inspection at reference project.

The Lead Paint Standard is in Addendum I of the Report. Project Photos in Addendum III of the report.

The Inspection performance with Thermo Fisher Scientific XRF Niton Model Xlp 300A Serial Number #100102 was conducted using H.U.D. Standard for Lead Based Paint as defined by Title X of Housing and Community Department Act of 1992 (unless HUD and EPA have lowered the standard) & Guidelines for the Evaluation and Control of Lead Based Paint in Housing of 1997, revised in 2012 and PREQB Lead Based Paint Abatement Controls Regulation.

The Lead Based Paint Inspection was conducted on December 3, 2022 by Mr. Elis J. Morales, Department of Natural and Environmental Resources of Puerto Rico (DNER) certified Lead Based Paint Inspector # LBPI-22422-224 with enough experience.

The project consisted of evaluation in all components in Road PR-34 located in Caguas, PR. During the evaluation **we found positive components with Lead Based Paint** in said project.

TABLE 1.0 – SUMMARY OF COMPONENTS WITH LEAD BASED PAINT				
FUNCTIONAL SPACE	**COMPONENT**	**SIDE**	**SUBSTRATE**	**SQ. FT. APPROX./ Units**
Road PR-34 Int. Road PR-7785	**Yellow Curb**	Left	Concrete	**42 ln. ft. approx.**
Road PR-34 Int. Degetau Avenue	**Light Pole Bases**	Left/ Right	Concrete	**68 sq. ft. approx. (4 units)**
Road PR-34 Int. Degetau Avenue	**Light Pole Bases**	Left/ Right	Metal	**56 sq. ft. approx. (4 units)**

Negative Definition= If the lead concentration measured by the XRF Spectrum Analyzer is less than 1.0 mg/cm2 it is considered negative.

Positive Definition= If the concentration measured by the XRF Spectrum Analyzer is equal or greater than 1.0 mg/cm2 it is considered **Positive**.

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality

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TABLE- LEAD REGULATORY LEVELS	
	EPA & DNER Levels
LEAD BASED PAINT	**1.0mg/cm2** **or** **0.5% by weight (or 5,000 ppm)**

Lead Based Paint Inspection Guidelines used during the inspection.

SOP: Stardand Operation Procedure:

LEFT SIDE	**B**	**RIGHT SIDE**
A		**C**
	D	
		ENTRANCE AREA OR DOOR AREA

Thank you for the opportunity, any questions, please call 787-994-2203 and 787-607-8965 or email globalespr@gmail.com.

Cordially;

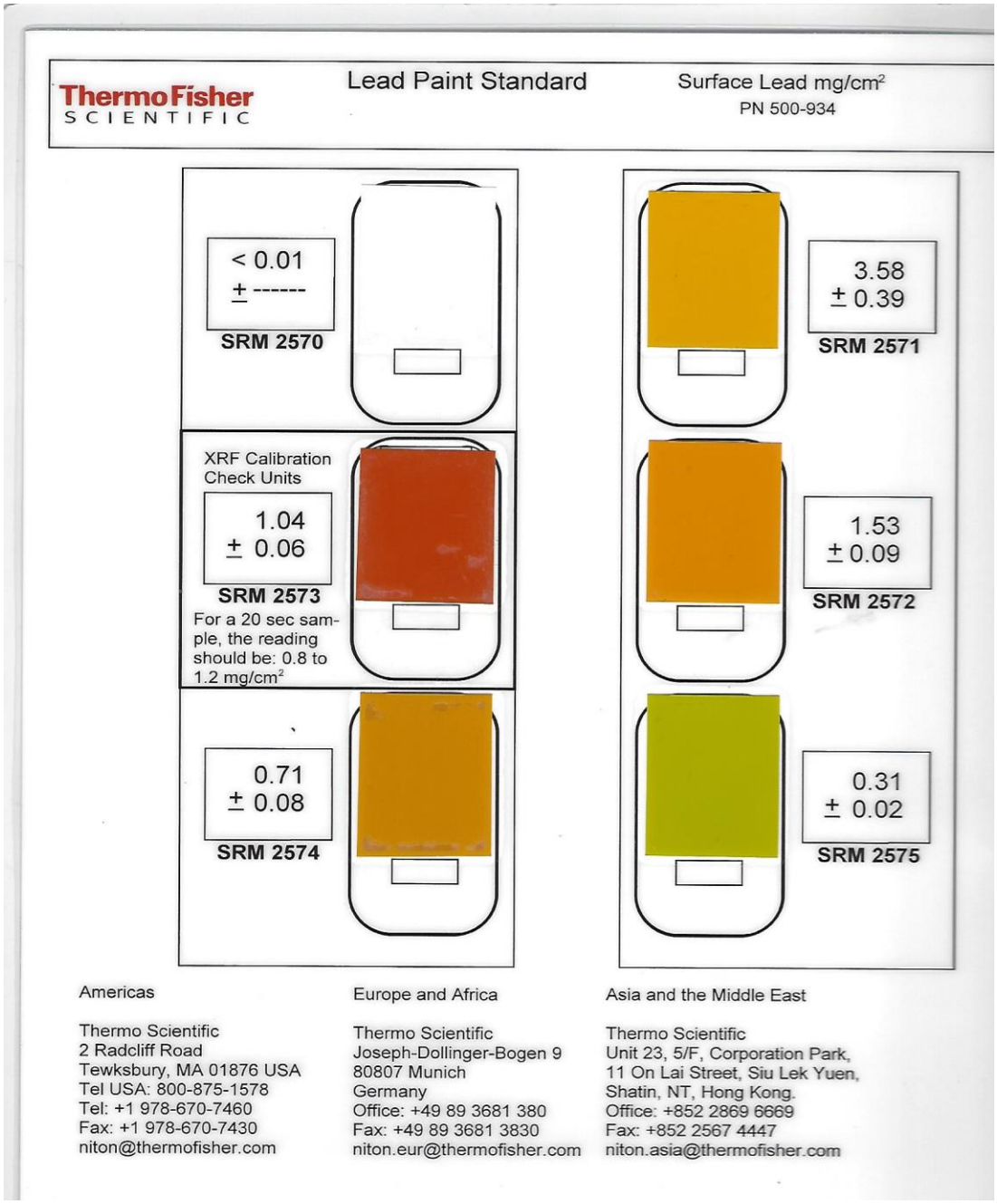
Mr. Angel O. Ortega, JS
Environmental Consultant
President

Mr. Elis J. Morales
Lead Based Paint Inspector LBPI-22422-224

GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
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ADDENDUM I

THE LEAD PAINT STANDARD



ThermoFisher SCIENTIFIC

Lead Paint Standard

Surface Lead mg/cm²

PN 500-934

< 0.01 ± ------
SRM 2570

XRF Calibration Check Units
1.04 ± 0.06
SRM 2573
For a 20 sec sample, the reading should be: 0.8 to 1.2 mg/cm²

0.71 ± 0.08
SRM 2574

3.58 ± 0.39
SRM 2571

1.53 ± 0.09
SRM 2572

0.31 ± 0.02
SRM 2575

Americas

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2 Radcliff Road
Tewksbury, MA 01876 USA
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Fax: +1 978-670-7430
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niton.eur@thermofisher.com

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Shatin, NT, Hong Kong.
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niton.asia@thermofisher.com

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ADDENDUM II

PERFORMANCE CHARACTERISTIC SHEET (PCS)-

XRF NITON XLP SERIE #300A

Performance Characteristic Sheet

EFFECTIVE DATE: **September 24, 2004** **EDITION NO.: 1**

MANUFACTURER AND MODEL:

Make: *Niton LLC*
Tested Model: *XLp 300*
Source: ^{109}Cd
Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.
XLp 300A, XLp 301A, XLp 302A and XLp 303A.
XLi 700A, XLi 701A, XLi 702A and XLi 703A.
XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)

	All Data			Median for laboratory-measured lead levels (mg/cm^2)		
Substrate	25^{th} Percentile	Median	75^{th} Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.*

GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

ADDENDUM III

SITE AREA

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SITE AREA



COORDINATES TO GET TO THE PROJECT:

18.2423241, -66.0407468

SITE AREA


Universidad
Oscar Super Cash & Carry
Hogar Pena Rios
Iglesia Ciudad de Refugio de Caguas, Inc
Iglesia de Dios de Mariolga
Walgreens
Colegio MDV
Rio Turabo
Tamboyanes
LIVMO
Av. Degetau
Hospital HIMA San Pablo Caguas
HIMA Plaza I
Atenas Perfume
Cuartel Municipal Caguas
Testigos de Jehova
Plaza El Trocha

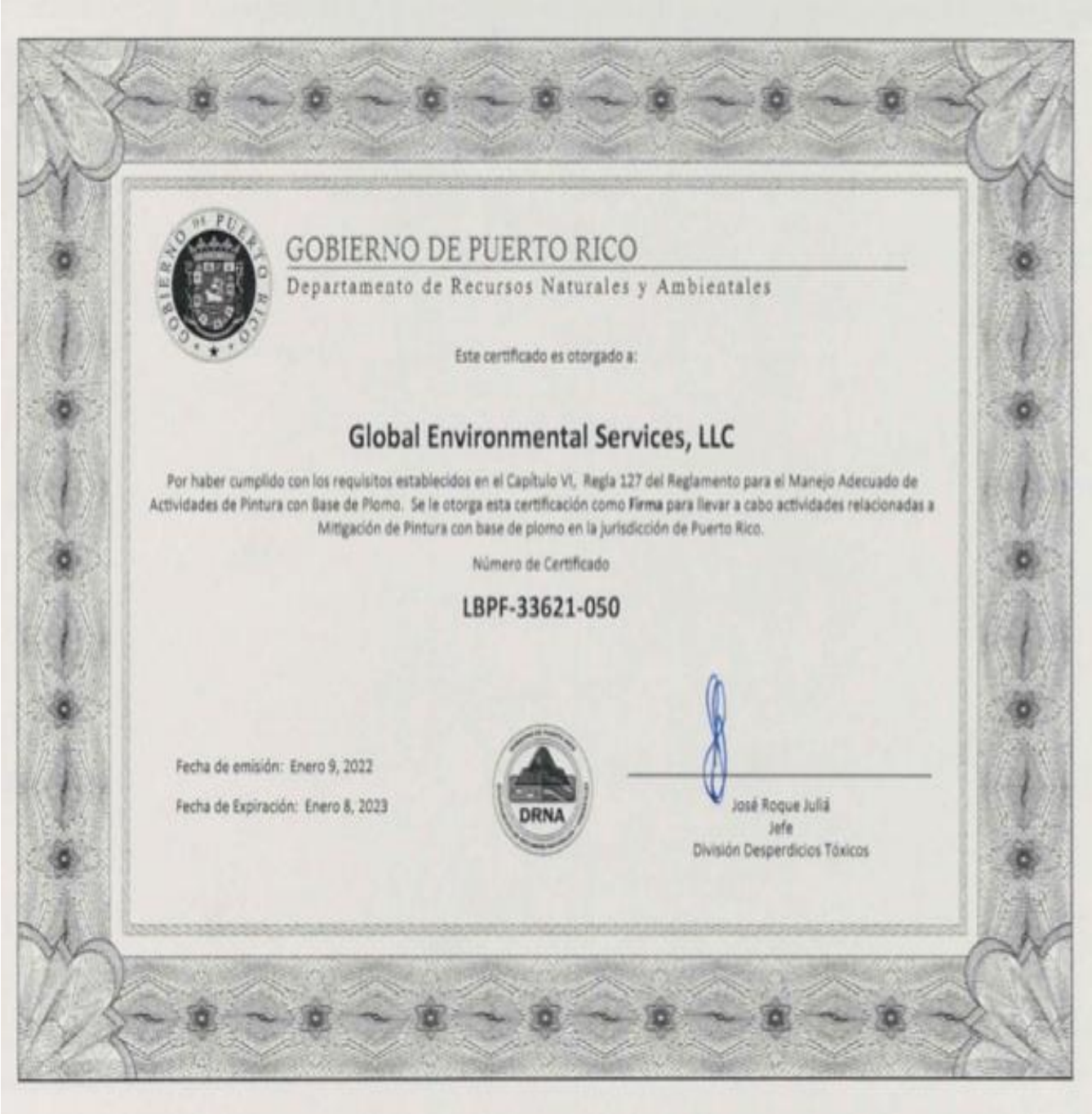
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ADDENDUM IV

CERTIFICATIONS GRANTED BY THE DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES OF PUERTO RICO

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

GLOBAL ENVIRONMENTAL SERVICES LLC
COMPANY LEAD CERTIFICATION



GOBIERNO DE PUERTO RICO
Departamento de Recursos Naturales y Ambientales

Este certificado es otorgado a:

Global Environmental Services, LLC

Por haber cumplido con los requisitos establecidos en el Capítulo VI, Regla 127 del Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo. Se le otorga esta certificación como Firma para llevar a cabo actividades relacionadas a Mitigación de Pintura con base de plomo en la jurisdicción de Puerto Rico.

Número de Certificado

LBPF-33621-050

Fecha de emisión: Enero 9, 2022

Fecha de Expiración: Enero 8, 2023

DRNA

José Roque Julia
Jefe
División Desperdicios Tóxicos

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

MR. ELIS J. MORALES- LEAD BASED PAINT INSPECTOR CERTIFICATION





GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

ADDENDUM V

LBP TESTING COMBINATIONS

GLOBAL ENVIRONMENTAL SERVICES LLC
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RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

GES 2022-218	XRF Serial Number: 100102	Project: Road PR-34 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 18/31	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm^2)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
1	***Calibrate***				***0.9***		
2	***Calibrate***				***0.8***		
3	***Calibrate***				***0.9***		
4	PR-34 Int. PR-156	Solid White Line	Right Side	Asphalt	0.01	Neg	
5	PR-34 Int. PR-156	Solid White Line	Right Side	Asphalt	0.01	Neg	
6	PR-34 Int. PR-156	Solid White Line	Right Side	Asphalt	0.01	Neg	
7	PR-34 Int. PR-156	Solid White Line	Right Side	Asphalt	0.01	Neg	
8	PR-34 Int. PR-156	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
9	PR-34 Int. PR-156	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
10	PR-34 Int. PR-156	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
11	PR-34 Int. PR-156	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
12	PR-34 Int. PR-156	Light Pole	Right Side	Metal	0.02	Neg	
13	PR-34 Int. PR-156	Light Pole	Right Side	Metal	0.02	Neg	
14	PR-34 Int. PR-156	Light Pole Base	Right Side	Concrete	0.02	Neg	
15	PR-34 Int. PR-156	Light Pole Base	Right Side	Concrete	0.02	Neg	
16	PR-34 Int. PR-156	Blue Street Ramp	Right	Concrete	0.01	Neg	
17	PR-34 Int. PR-156	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
18	PR-34 Int. PR-156	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
19	PR-34 Int. PR-156	Blue Street Ramp	Right Side	Concrete	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-34 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 19/31	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
20	PR-34 Int. PR-156	Solid White Line	Left Side	Asphalt	0.01	Neg	
21	PR-34 Int. PR-156	Solid White Line	Left	Asphalt	0.01	Neg	
22	PR-34 Int. PR-156	Solid White Line	Left Side	Asphalt	0.01	Neg	
23	PR-34 Int. PR-156	Solid White Line	Left Side	Asphalt	0.01	Neg	
24	PR-34 Int. PR-156	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
25	PR-34 Int. PR-156	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
26	PR-34 Int. PR-156	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
27	PR-34 Int. PR-156	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
28	PR-34 Int. PR-156	Light Pole	Left Side	Metal	0.02	Neg	
29	PR-34 Int. PR-156	Light Pole	Left Side	Metal	0.02	Neg	
30	PR-34 Int. PR-156	Light Pole Base	Left Side	Concrete	0.02	Neg	
31	PR-34 Int. PR-156	Light Pole Base	Left Side	Concrete	0.02	Neg	
32	PR-34 Int. PR-156	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
33	PR-34 Int. PR-156	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
34	PR-34 Int. PR-156	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
35	PR-34 Int. PR-156	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
36	PR-34 Int. PR-7785	Solid White Line	Right	Asphalt	0.01	Neg	
37	PR-34 Int. PR-7785	Solid White Line	Left Side	Asphalt	0.01	Neg	
38	PR-34 Int. PR-7785	Solid White Line	Left Side	Asphalt	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-34 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 20/31	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
39	*PR-34 Int. PR-7785*	*Yellow Curb*	*Left Side*	*Concrete*	*1.5*	*Pos.*	*42 Ln. Ft. Approx.*
40	*PR-34 Int. PR-7785*	*Yellow Curb*	*Left Side*	*Concrete*	*1.7*	*Pos.*	
41	PR-34 Int. PR-7785	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
42	PR-34 Int. PR-7785	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
43	PR-34 Int. PR-7785	Blue Street Ramp	Left	Concrete	0.01	Neg	
44	PR-34, 0.4 - 0.6	Solid White Line	Right Side	Asphalt	0.01	Neg	
45	PR-34, 0.4 - 0.6	Solid White Line	Right Side	Asphalt	0.01	Neg	
46	PR-34, 0.4 - 0.6	Solid White Line	Right Side	Asphalt	0.01	Neg	
47	PR-34, 0.4 - 0.6	Solid White Line	Right Side	Asphalt	0.01	Neg	
48	PR-34, 0.4 - 0.6	Solid White Line	Left Side	Asphalt	0.01	Neg	
49	PR-34, 0.4 - 0.6	Solid White Line	Left Side	Asphalt	0.01	Neg	
50	PR-34, 0.4 - 0.6	Solid White Line	Left Side	Asphalt	0.01	Neg	
51	PR-34, 0.4 - 0.6	Solid White Line	Left Side	Asphalt	0.01	Neg	
52	PR-34, 0.4 - 0.6	Street Ramp	Left Side	Concrete	0.00	Neg	
53	PR-34, 0.4 - 0.6	Street Ramp	Left Side	Concrete	0.00	Neg	
54	PR-34, 0.4 - 0.6	Street Ramp	Left	Concrete	0.00	Neg	
55	PR-34, 0.4 - 0.6	Street Ramp	Left Side	Concrete	0.00	Neg	
56	PR-34 Int. Ave. Degetau	Solid White Line	Right Side	Asphalt	0.01	Neg	
57	PR-34 Int. Ave. Degetau	Solid White Line	Right Side	Asphalt	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-34 Degetau Ave. in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022		
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
58	PR-34 Int. Ave. Degetau	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
59	PR-34 Int. Ave. Degetau	Yellow Curb Line	Right	Concrete	0.01	Neg	
60	PR-34 Int. Ave. Degetau	Solid White Line	Left Side	Asphalt	0.01	Neg	
61	PR-34 Int. Ave. Degetau	Solid White Line	Left	Asphalt	0.01	Neg	
62	PR-34 Int. Ave. Degetau	Yellow Curb Line	Left	Concrete	0.01	Neg	
63	PR-34 Int. Ave. Degetau	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
64	PR-34 Int. Ave. Degetau	Light Pole	Right Side	Metal	0.02	Neg	
65	PR-34 Int. Ave. Degetau	Light Pole	Right Side	Metal	0.02	Neg	
66	PR-34 Int. Ave. Degetau	Light Pole	Left Side	Metal	0.02	Neg	
67	PR-34 Int. Ave. Degetau	Light Pole	Left Side	Metal	0.02	Neg	
68	**PR-34 Int. Ave. Degetau**	**Light Pole Base**	**Right Side**	**Concrete**	**3.0**	**Pos.**	**68 Sq. Ft. Approx. (2 Units)**
69	**PR-34 Int. Ave. Degetau**	**Light Pole Base**	**Right Side**	**Concrete**	**3.1**	**Pos.**	
70	**PR-34 Int. Ave. Degetau**	**Light Pole Base**	**Left Side**	**Concrete**	**3.9**	**Pos.**	
71	**PR-34 Int. Ave. Degetau**	**Light Pole Base**	**Left Side**	**Concrete**	**3.3**	**Pos.**	
72	**PR-34 Int. Ave. Degetau**	**Light Pole Base**	**Right Side**	**Metal**	**2.9**	**Pos.**	**56 Sq. Ft. Approx. (2 Units)**
73	**PR-34 Int. Ave. Degetau**	**Light Pole Base**	**Right Side**	**Metal**	**3.4**	**Pos.**	
74	**PR-34 Int. Ave. Degetau**	**Light Pole Base**	**Left Side**	**Metal**	**3.3**	**Pos.**	
75	**PR-34 Int. Ave. Degetau**	**Light Pole Base**	**Left Side**	**Metal**	**3.2**	**Pos.**	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-34 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 22/31	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm^2)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
76	*Calibrate*				***1.0***		
77	*Calibrate*				***0.9***		
78	*Calibrate*				***0.9***		

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ADDENDUM VI

TABLE SUMMARY OF COMPONENTS WITH LEAD BASED PAINT

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TABLE SUMMARY OF COMPONENTS WITH LEAD BASED PAINT

FUNCTIONAL SPACE	COMPONENT	SIDE	SUBSTRATE	SQ. FT. APPROX./ Units
Road PR-34 Int. Road PR-7785	Yellow Curb	Left	Concrete	42 ln. ft. approx.
Road PR-34 Int. Degetau Ave.	Light Pole Base	Left/ Right	Concrete	68 sq. ft. approx. (2 units)
Road PR-34 Int. Degetau Ave.	Light Pole Base	Left/ Right	Metal	56 sq. ft. approx. (2 units)

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ADDENDUM VII

PHOTOGRAPHS OF POSITIVE COMPONENTS WITH LEAD BASED PAINT

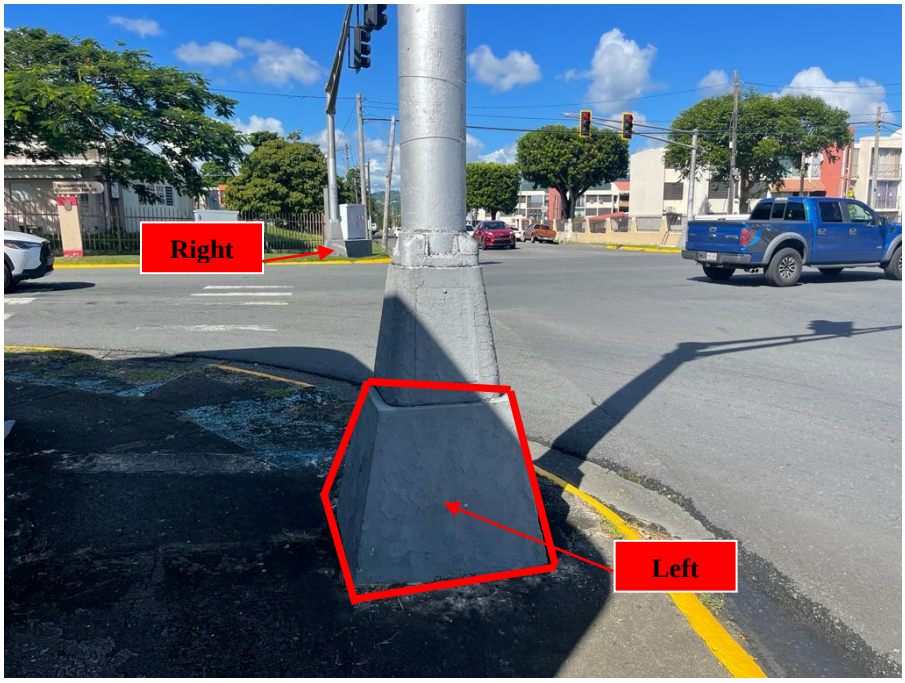


Road PR-34 Int. Road PR-7785- Concrete Yellow Curb with Lead Based Paint

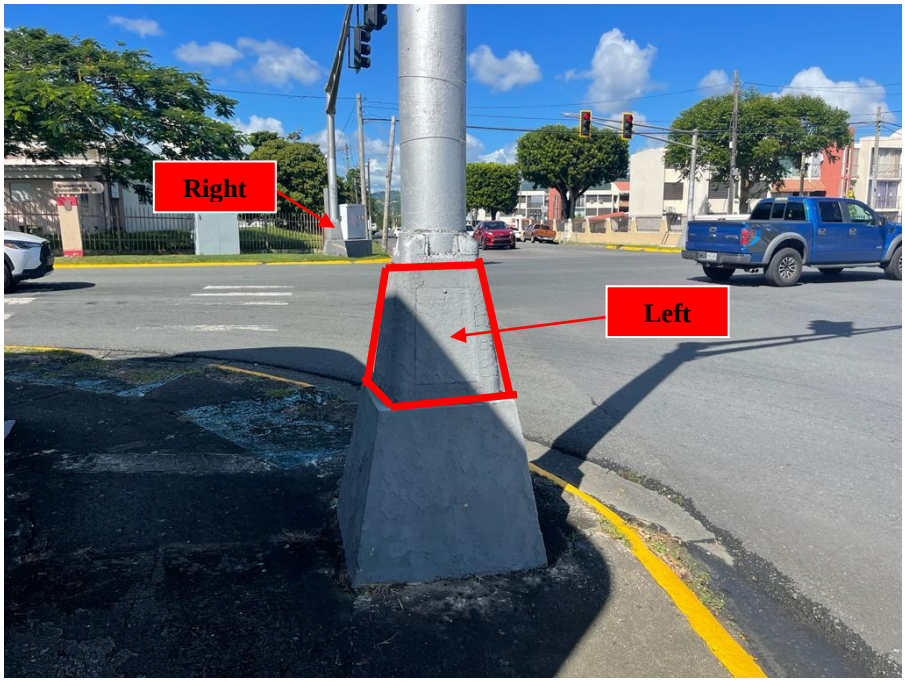




AREA



Road PR-34 Int. Degetau Ave.- Concrete Light Pole Bases (All Sides) with Lead Based Paint



Road PR-34 Int. Degetau Ave.- Metal Light Pole Bases (All Sides) with Lead Based Paint

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ADDENDUM VIII

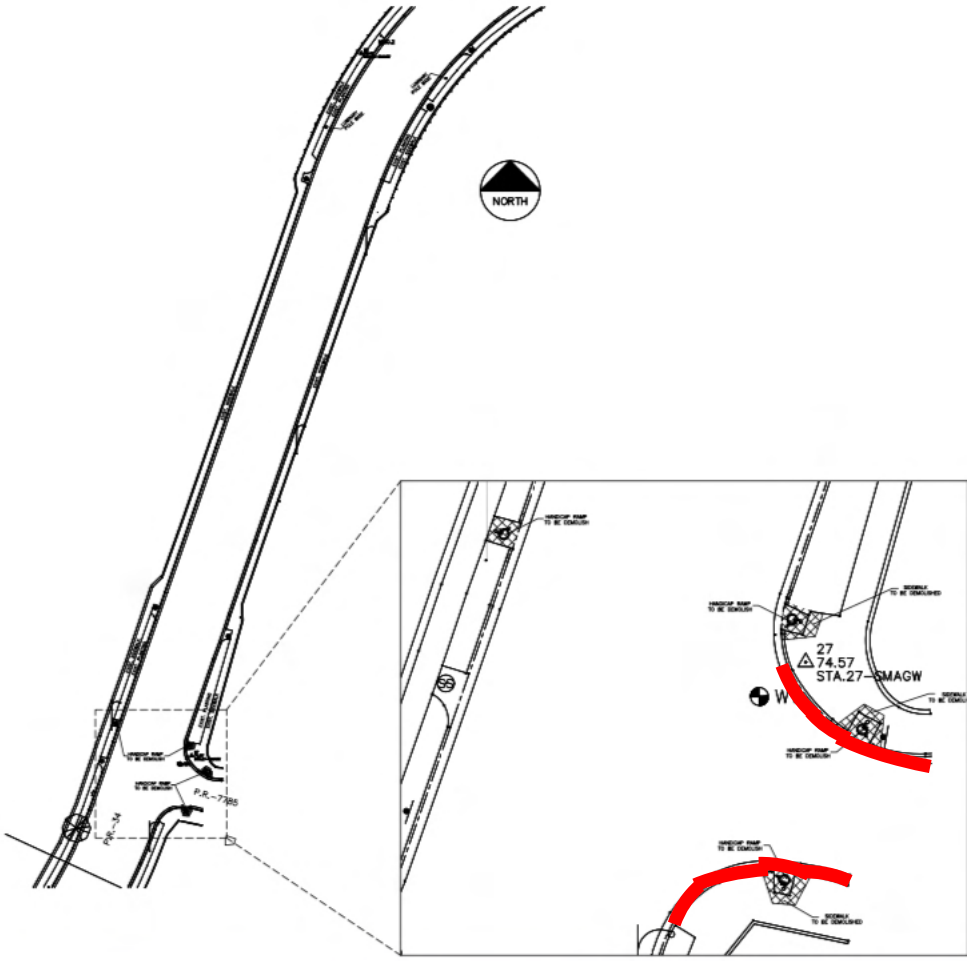
WHERE THE POSITIVE COMPONENTS AREA FOUND WITH LEAD BASED PAINT

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality

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LBP POSITIVE RESULTS LOCATIONS- PR-34 INT. PR-7785



NOT TO SCALE

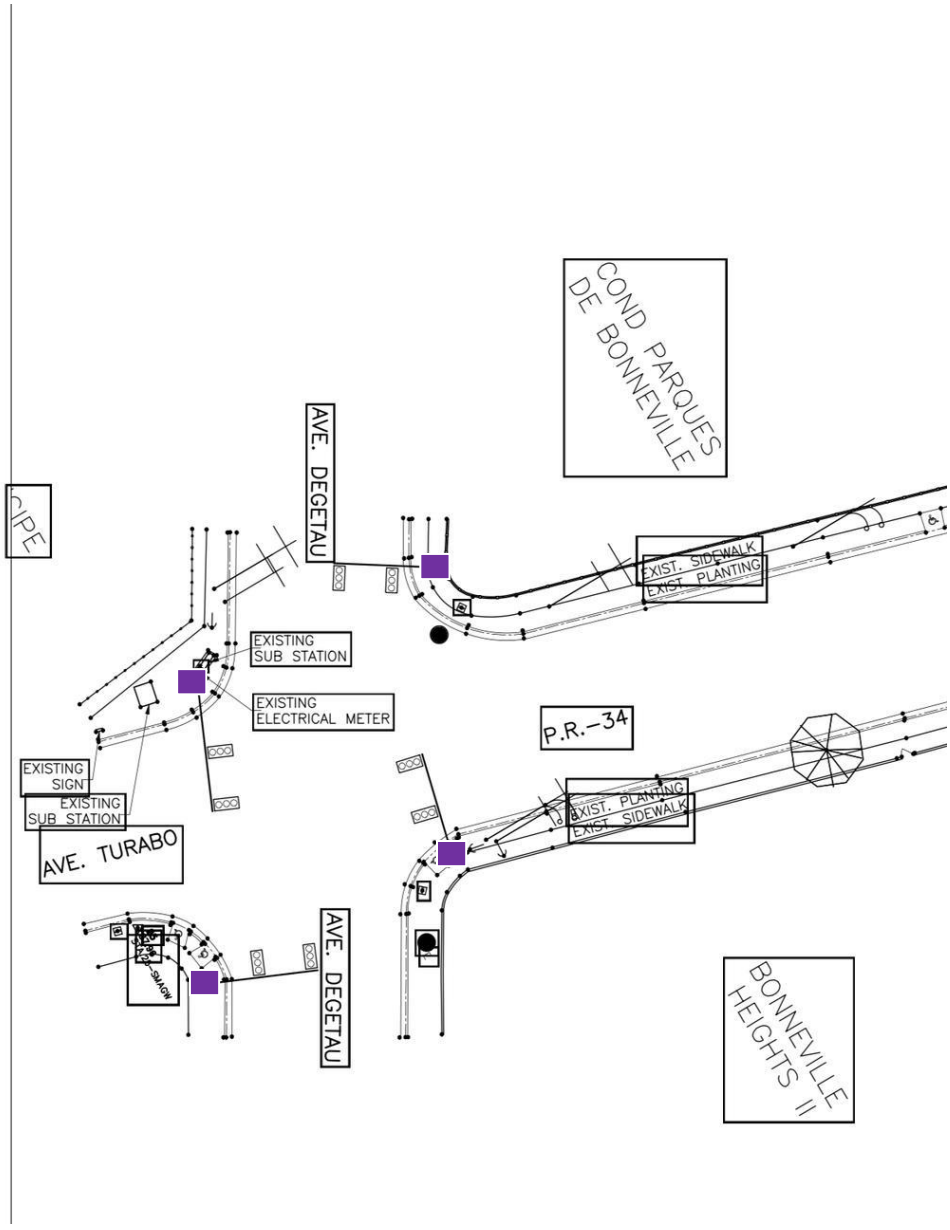
= *YELLOW CONCRETE CURBS WITH LBP*

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LBP POSITIVE RESULTS LOCATIONS- PR-34 INT. DEGETAU AVE.



NOT TO SCALE

= *CONCRETE/ METAL GRAY LIGHT POLE BASES WITH LBP*

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ADDENDUM VI

CONCLUSION

Global Environmental Services LLC recommends the owner or representative of owner to hire a Company Certified in the Department of Natural and Environmental Resources (DNER) of Puerto Rico to mitigate and dispose positive areas with Lead Based Paint if is going to touch or demolish the aforementioned areas.

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203/787-607-8965

Asbestos Containing Materials Inspection



SAMPLING CONDUCTED AT:

ROAD PR-156

Located at in Caguas, PR

GES Project # -2022-218

DECEMBER 2022

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

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TABLE OF CONTENT

REPORT COVER……1

TABLE OF CONTENT……2

Introduction……3

Asbestos Containing Materials Inspection……3-4

APPENDIX I Certifications granted by the DNER of Puerto Rico……5-6

APPENDIX II Layout Area & Project Photos……7-9

APPENDIX III Asbestos Negative Certification……10-11

APPENDIX IV Conclusion……12

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

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December 13, 2022

Eng. Juan M. Vazquez
Vice-President
Vazquez Associates Ingenieros PSC
PO Box 6089
Caguas, PR 00726

Affair: Asbestos Containing Materials Inspection in Road PR-156 located at Caguas, PR

Dear Eng. Vazquez:

Global Environmental Services LLC (GES) was contracted to perform a Asbestos Containing Materials Inspection at reference project. The inspection was contracted for the evaluation this Road areas.

Asbestos Containing Building Material (ACBM) is defined as any material which contains more that 1% percent Asbestos.

The ACM Inspection was conducted on December 3, 2022 by Mr. Elis J. Morales, Department of Natural and Environmental Resources of Puerto Rico (DNER) certified Asbestos Inspector # ASB-0123-0049-SI with enough experience.

During the inspection, inspector **NO suspected Asbestos Containing Materials**. The asbestos inspection work will be performed by Asbestos Hazards Emergency Response Act (AHERA) accredited asbestos inspectors under the PR Environmental Quality Board accreditation program. The inspection will be conducted in accordance with EPA's "Guidance for Controlling Asbestos Containing Materials in Buildings (EPA 560/5-85/024)". Asbestos Containing Materials Inspection and bulk sampling procedures to be implemented was based on the guidelines established by the ASTM E2356-14 Standard Practice for Comprehensive Building Asbestos Survey. Samples were analyzed by PLM using dispersion staining techniques in accordance with US EPA Method: 600/M4-82-020 of Dec. 1982 and 600/R-93/116 of July 93.

Global Environmental Services LLC **certifies this project asbestos free.**

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The Asbestos Containing Materials inspection was performed based on DNER/ NESHAP regulations and protocol according to the following scenario:

a. **The road is divided various functional spaces.**
b. **Physical and hazard assessment of suspected asbestos containing materials was performed.**
c. **Samples were collected according to homogenous areas.(Does not apply).**
d. **Samples sent to NVLAP Accredited Laboratory. (Does not apply).**
e. **Samples were analyzed by PLM method, in accordance to EPA recommended procedures. (Does not apply).**

Thank you for the opportunity, any questions, please call 787-994-2203 and 787-607-8965 or email globalespr@gmail.com.

Cordially;





Mr. Angel O. Ortega, JS
Environmental Consultant
President

Mr. Elis J. Morales
Asbestos Inspector-ASB-0123-0049-SI

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

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APPENDIX I

CERTIFICATIONS GRANTED BY THE DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES OF PUERTO RICO

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ASBESTOS INSPECTOR CERTIFICATION



TARJETA DE REGISTRO
PARA LA REMOCION DE ASBESTO

Esta tarjeta autoriza a:

Elis J. Morales Rivera

Inspector

A trabajar en la remoción de asbesto en Puerto Rico. Esta persona **NO** es un empleado del DRNA.

ASB-0123-0049-SI
Número de Registro

3-ene-2024
Fecha de vencimiento

Firma Autorizada - Departamento Recursos Naturales y Ambientales

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APPENDIX II

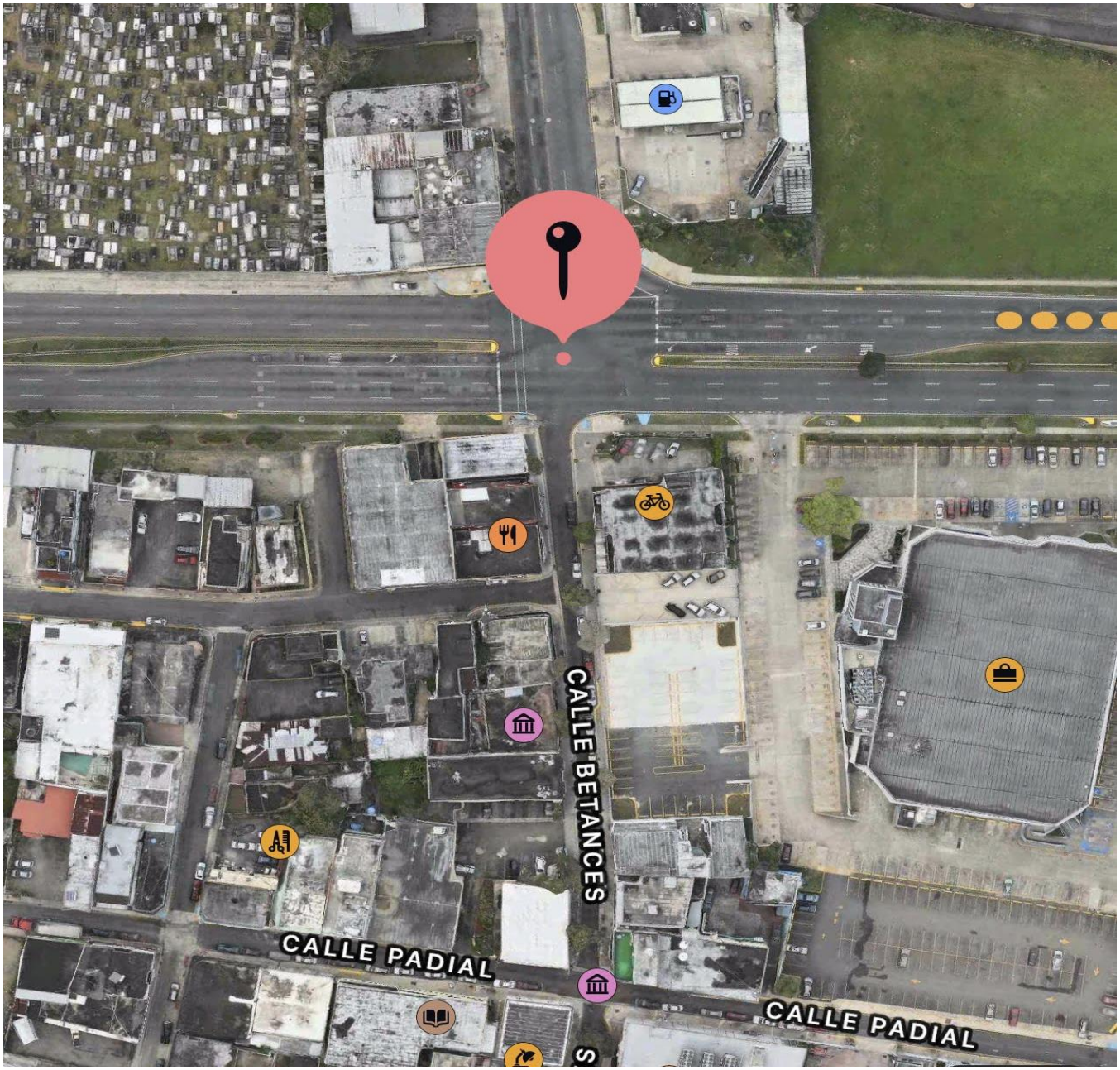
SITE AREAS

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
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SITE AREA



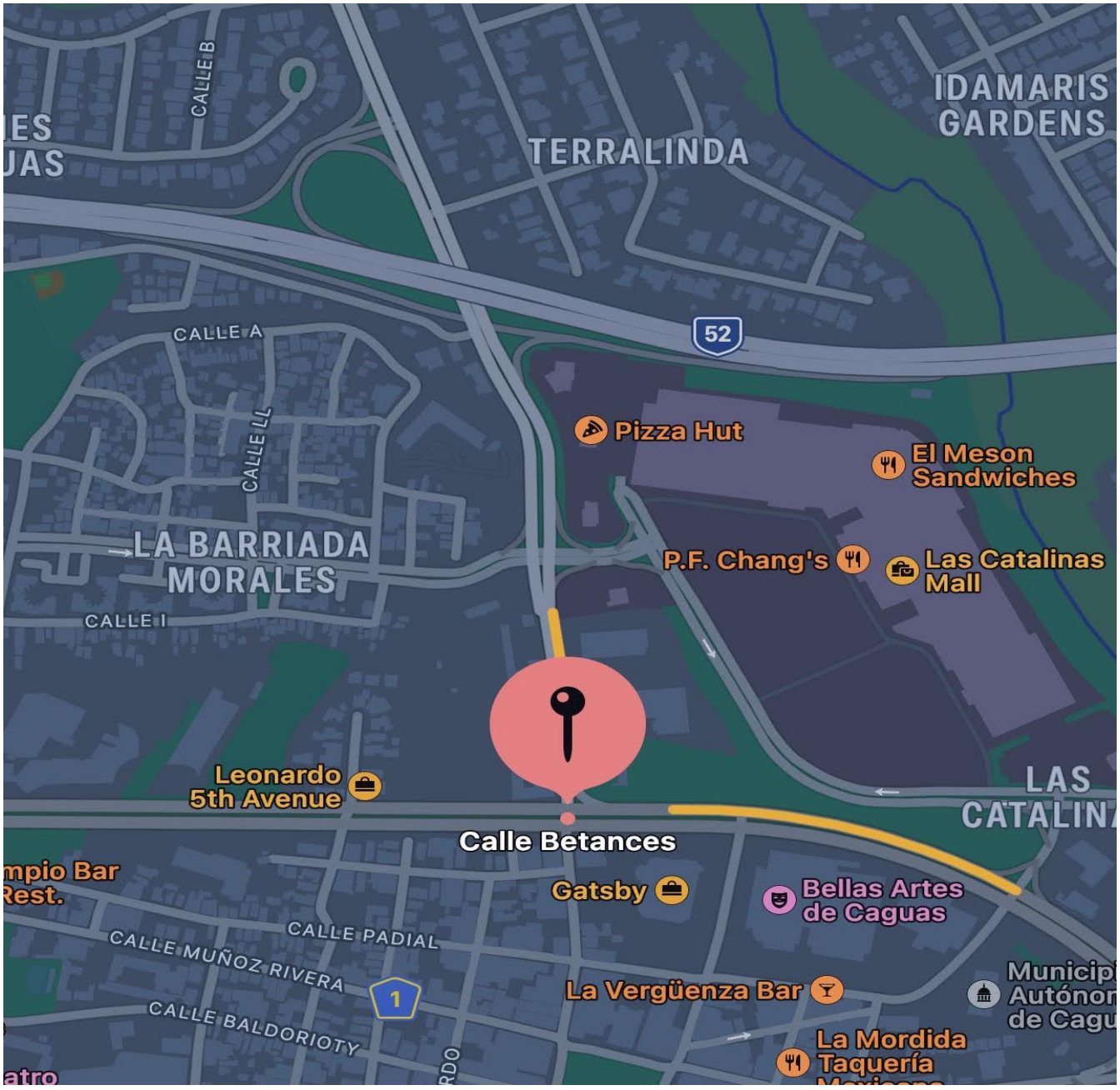
COORDINATES TO GET TO THE PROJECT:

18.23451, -66.03803

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SITE AREA



GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

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APPENDIX III

ASBESTOS NEGATIVE CERTIFICATION

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GOBIERNO DE PUERTO RICO
OFICINA DEL GOBERNADOR
JUNTA DE CALIDAD AMBIENTAL

Área de Calidad de Agua

Forma PGC-009

CERTIFICACION DE NO PRESENCIA DE ASBESTO EN ESTRUCTURAS A DEMOLERSE

(Deberá completarse en letra de molde o impresa)

NUM. PERMISO: _____

Yo, Elis J. Morales (Nombre), mayor de edad, casado (Estado Civil), y vecino de Naranjito (Municipio)

Dirección Postal RR8 Box 1995 PMB 313 Bayamón, PR 00956 (Pueblo) (Zip Code)

Teléfonos: Residencial (787) 607 - 8965 Oficina (787) 994 - 2203 Ext. _____
Fax ( ) - _____

Certifico que:

1. La estructura localizada en la Carretera PR-156 en Caguas, PR, la cual será objeto de una demolición se encuentra libre de asbesto.
2. La información antes indicada es cierta y correcta.
3. Afirmo y reconozco las consecuencias de incluir y someter información falsa en este documento.
4. Para que así conste, firmo la presente certificación en Bayamón (Municipio) de Puerto Rico,

hoy día 9 de diciembre de 2022

ASB-0123-0049-SI
Firma y Sello del Profesional o
Firma del Inspector de Asbesto registrado por la JCA (Original)

Nota: Ingenieros o Arquitectos deberán someter evidencia de que se encuentra al día en el pago de sus cuotas de colegiación e Inspectores de Asbesto deberán someter evidencia de la tarjeta de registro provista por la JCA.

Dirección Física: Ave. Ponce de León 1308, Carr. Estatal 8838, Sector el Cinco, Río Piedras, PR 00926
Dirección Postal: Apartado 11488, Santurce, PR 00910-1488
Tel. (787) 767-8181 • Fax (787) 767-1962

PUERTO RICO VERDE

GLOBAL ENVIRONMENTAL SERVICES LLC

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DNER & EPA Permits and Certifications

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APPENDIX IV

CONCLUSION

After evaluating the above mentioned project, our company Global Environmental Services LLC certifies Asbestos free for the Road PR-156 in Caguas, PR of December 3, 2022.

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
DNER Permits/ EPA Permits & Certifications

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 /787-607-8965

Lead Based Paint Inspection



SAMPLING CONDUCTED AT:

ROAD PR-156

Located at in Caguas, PR

GES Project # -2022-218

DECEMBER 2022

TABLE OF CONTENT

REPORT COVER……1

TABLE OF CONTENT……2

Introduction……3

Lead Based Paint SOP (Standard Operation Procedure)……3-4

Addendum I The Lead Paint Standard ……5-6

Addendum II Performance Characteristic Sheet (PCS)- XRF Niton Xlp 300A……7-10

Addendum III Site Area……11-13

Addendum IV Certifications granted by the DNER of Puerto Rico……14-16

Addendum V LBP Testing Combinations……17-26

Addendum VI Table Summary of components with Lead Based Paint……27-28

Addendum VII Photographs of the positive components with Lead Based Paint……29-33

Addendum VIII Where the positive components area found with Lead Based Paint……34-38

Addendum IX Conclusion……39

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December 13, 2022

Eng. Juan M. Vazquez
Vice-President
Vazquez Associates Ingenieros PSC
PO Box 6089
Caguas, PR 00726

Affair: Lead Based Paint Inspection in Road PR-156 located at Caguas, PR

Dear Eng. Vazquez:

Global Environmental Services LLC (GES) was contracted to perform a Lead Based Paint Inspection at reference project.

The Lead Paint Standard is in Addendum I of the Report. Project Photos in Addendum III of the report.

The Inspection performance with Thermo Fisher Scientific XRF Niton Model Xlp 300A Serial Number #100102 was conducted using H.U.D. Standard for Lead Based Paint as defined by Title X of Housing and Community Department Act of 1992 (unless HUD and EPA have lowered the standard) & Guidelines for the Evaluation and Control of Lead Based Paint in Housing of 1997, revised in 2012 and PREQB Lead Based Paint Abatement Controls Regulation.

The Lead Based Paint Inspection was conducted on December 3, 2022 by Mr. Elis J. Morales, Department of Natural and Environmental Resources of Puerto Rico (DNER) certified Lead Based Paint Inspector # LBPI-22422-224 with enough experience.

The project consisted of evaluation in all components in Road PR-156 located in Caguas, PR. During the evaluation **we found positive components with Lead Based Paint** in said project.

TABLE 1.0 – SUMMARY OF COMPONENTS WITH LEAD BASED PAINT				
FUNCTIONAL SPACE	**COMPONENT**	**SIDE**	**SUBSTRATE**	**SQ. FT. APPROX./ Units**
Road PR-156 Int. PR-33	**Light Pole Bases**	Left/Right	Metal	**28 sq. ft. approx. (2 units)**
Road PR-156 Int. PR-33	**Light Pole Bases**	Left/Right	Concrete	**38 sq. ft. approx. (2 units)**
Road PR-156 Int. Barcelona Street Km. 57.8	**Yellow Curb**	Left	Concrete	**90 ln. ft. approx.**
Road PR-156 Km. 57.7	**Yellow Curb**	Left	Concrete	**142 ln. ft. approx.**
Road PR-156 Int. A Street	**Yellow Curb**	Left	Concrete	**151 ln. ft. approx.**

Negative Definition= If the lead concentration measured by the XRF Spectrum Analyzer is less than 1.0 mg/cm2 it is considered negative.

Positive Definition= If the concentration measured by the XRF Spectrum Analyzer is equal or greater than 1.0 mg/cm2 it is considered **Positive**.

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TABLE- LEAD REGULATORY LEVELS	
	EPA & DNER Levels
LEAD BASED PAINT	**1.0mg/cm2** **or** **0.5% by weight (or 5,000 ppm)**

Lead Based Paint Inspection Guidelines used during the inspection.

SOP: Stardand Operation Procedure:

LEFT SIDE	**B**	**RIGHT SIDE**
A		**C**
	D	
		ENTRANCE AREA OR DOOR AREA

Thank you for the opportunity, any questions, please call 787-994-2203 and 787-607-8965 or email globalespr@gmail.com.

Cordially;

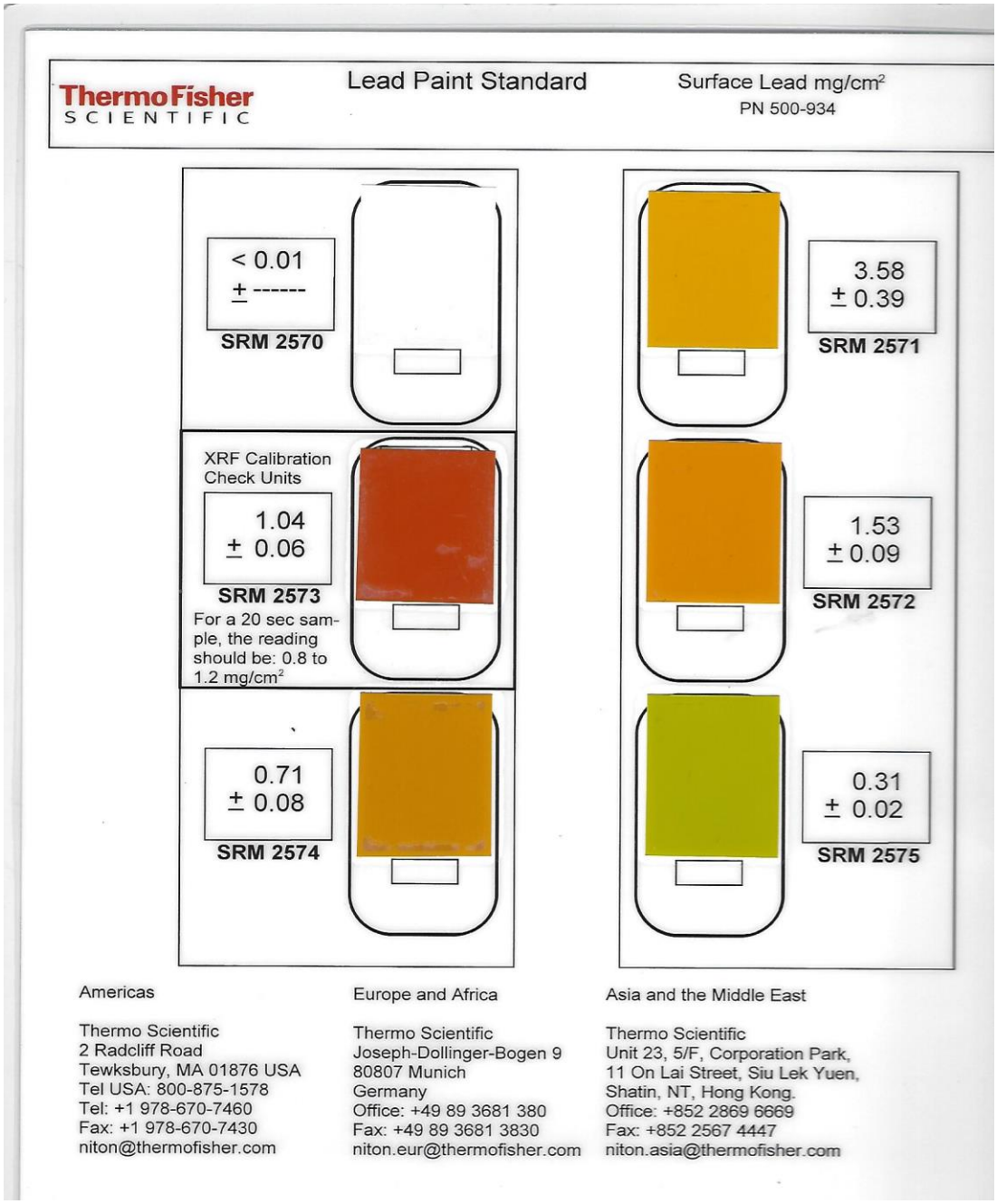
Mr. Angel O. Ortega, JS
Environmental Consultant
President

Mr. Elis J. Morales
Lead Based Paint Inspector LBPI-22422-224

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ADDENDUM I

THE LEAD PAINT STANDARD


ThermoFisher SCIENTIFIC
Lead Paint Standard
Surface Lead mg/cm²
PN 500-934
< 0.01 ± ------
SRM 2570
XRF Calibration Check Units
1.04 ± 0.06
SRM 2573
For a 20 sec sample, the reading should be: 0.8 to 1.2 mg/cm²
0.71 ± 0.08
SRM 2574
3.58 ± 0.39
SRM 2571
1.53 ± 0.09
SRM 2572
0.31 ± 0.02
SRM 2575
Americas
Thermo Scientific
2 Radcliff Road
Tewksbury, MA 01876 USA
Tel USA: 800-875-1578
Tel: +1 978-670-7460
Fax: +1 978-670-7430
niton@thermofisher.com
Europe and Africa
Thermo Scientific
Joseph-Dollinger-Bogen 9
80807 Munich
Germany
Office: +49 89 3681 380
Fax: +49 89 3681 3830
niton.eur@thermofisher.com
Asia and the Middle East
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11 On Lai Street, Siu Lek Yuen,
Shatin, NT, Hong Kong.
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Fax: +852 2567 4447
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ADDENDUM II

PERFORMANCE CHARACTERISTIC SHEET (PCS)-

XRF NITON XLP SERIE #300A

Performance Characteristic Sheet

EFFECTIVE DATE: **September 24, 2004** **EDITION NO.: 1**

MANUFACTURER AND MODEL:

Make: *Niton LLC*
Tested Model: *XLp 300*
Source: ^{109}Cd
Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.
XLp 300A, XLp 301A, XLp 302A and XLp 303A.
XLi 700A, XLi 701A, XLi 702A and XLi 703A.
XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)

	All Data			Median for laboratory-measured lead levels (mg/cm^2)		
Substrate	25^{th} Percentile	Median	75^{th} Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.*

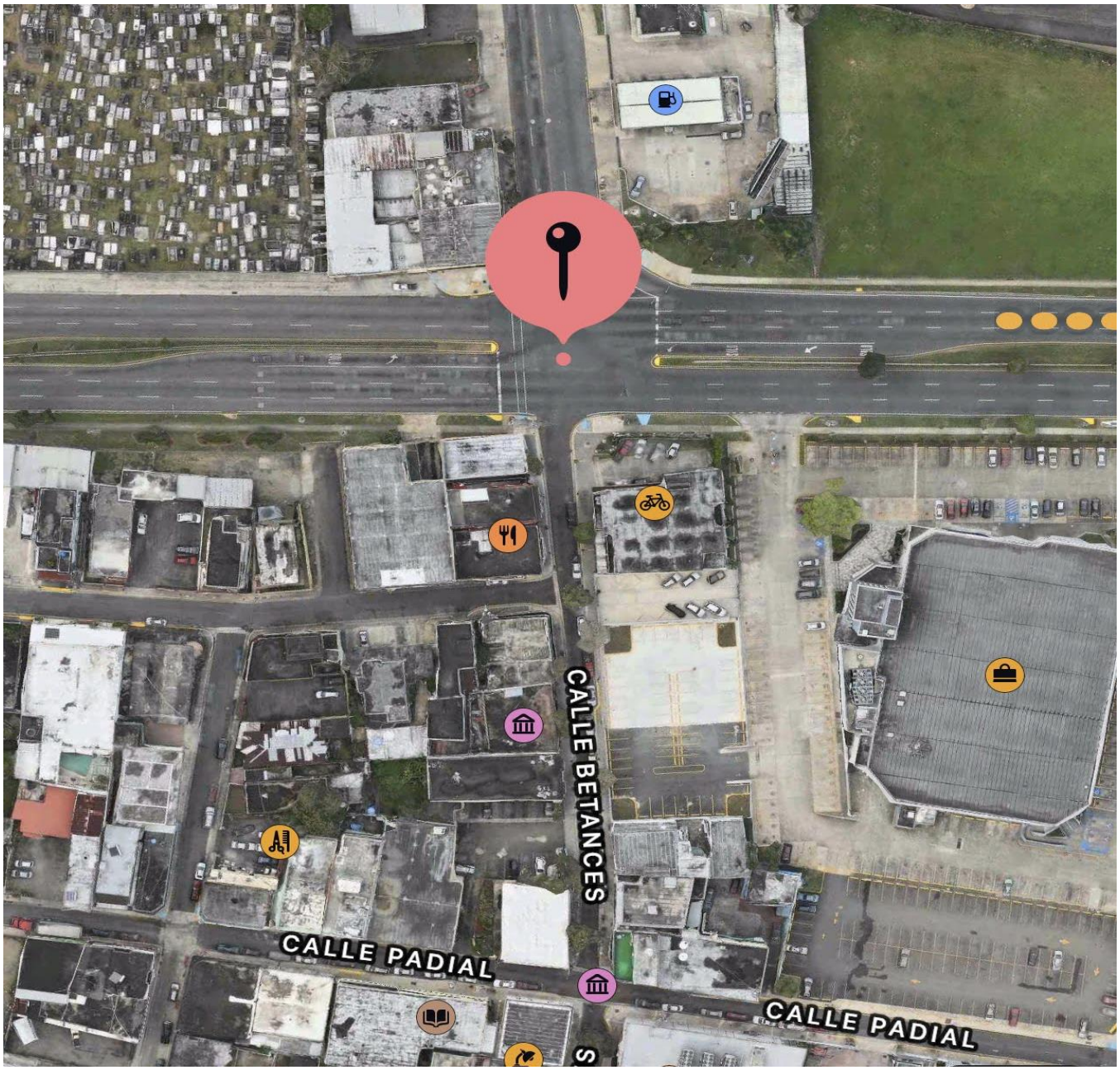
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Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
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ADDENDUM III

SITE AREA

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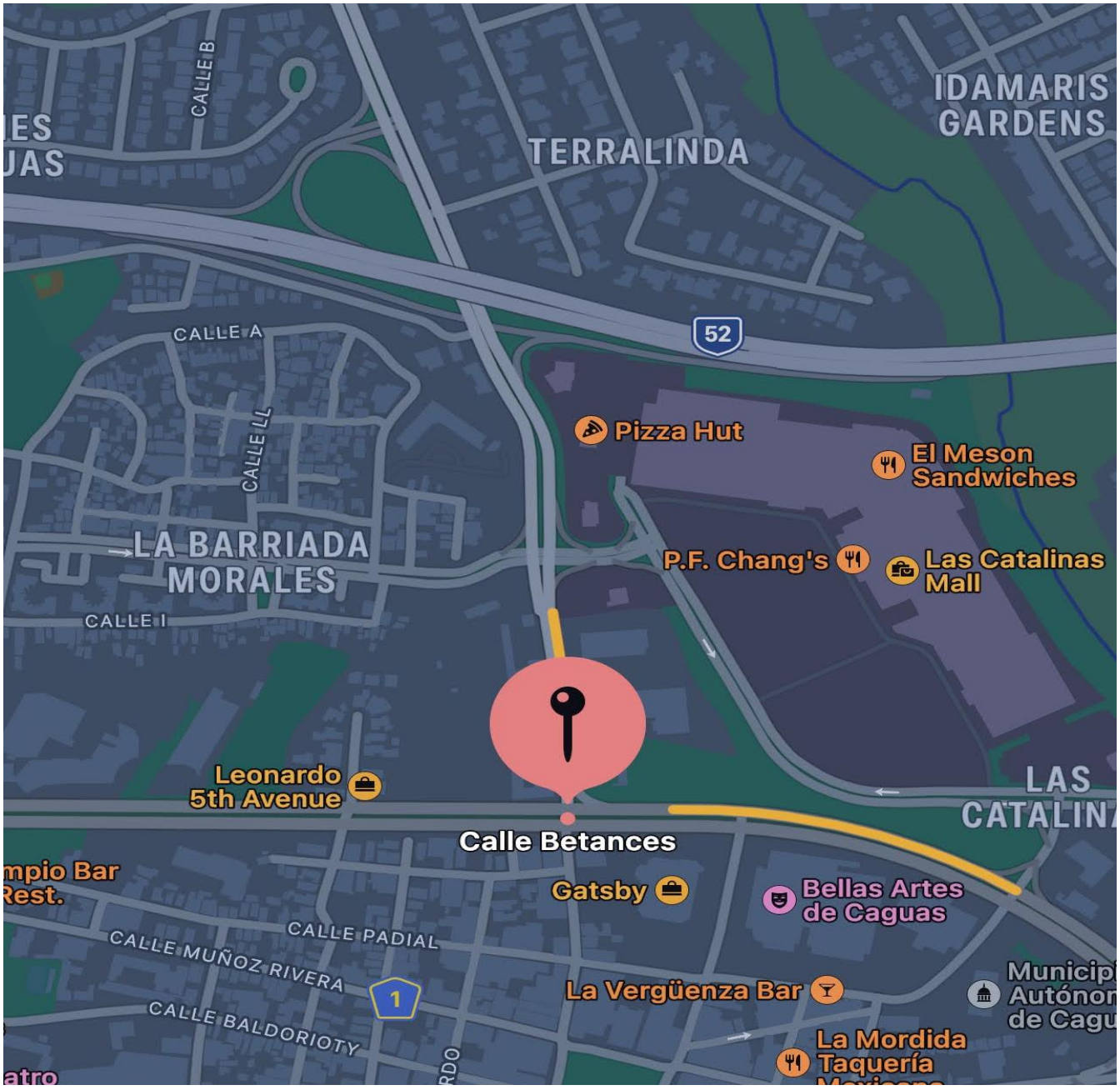
SITE AREA



COORDINATES TO GET TO THE PROJECT:

18.23451, -66.03803

SITE AREA


CALLE B
TERRALINDA
IDAMARIS GARDENS
CALLE A
52
CALLE LL
Pizza Hut
El Meson Sandwiches
LA BARRIADA MORALES
P.F. Chang's
Las Catalinas Mall
CALLE I
Leonardo 5th Avenue
Calle Betances
Gatsby
Bellas Artes de Caguas
CALLE PADIAL
CALLE MUÑOZ RIVERA
1
La Vergüenza Bar
CALLE BALDORIOTY
La Mordida Taquería

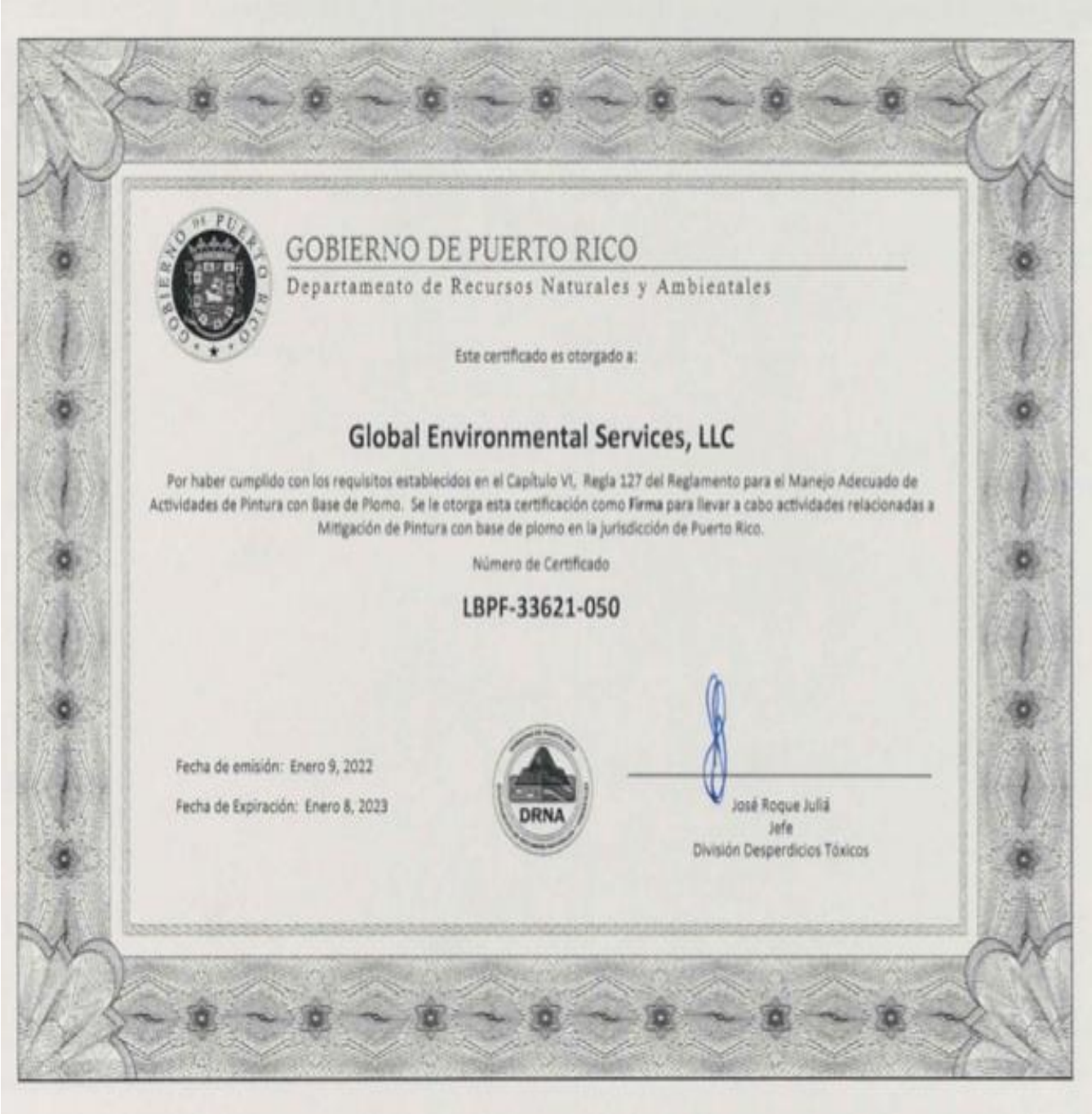
GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
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ADDENDUM IV

CERTIFICATIONS GRANTED BY THE DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES OF PUERTO RICO

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GLOBAL ENVIRONMENTAL SERVICES LLC
COMPANY LEAD CERTIFICATION



GOBIERNO DE PUERTO RICO
Departamento de Recursos Naturales y Ambientales

Este certificado es otorgado a:

Global Environmental Services, LLC

Por haber cumplido con los requisitos establecidos en el Capítulo VI, Regla 127 del Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo. Se le otorga esta certificación como Firma para llevar a cabo actividades relacionadas a Mitigación de Pintura con base de plomo en la jurisdicción de Puerto Rico.

Número de Certificado

LBPF-33621-050

Fecha de emisión: Enero 9, 2022

Fecha de Expiración: Enero 8, 2023

DRNA

José Roque Julià
Jefe
División Desperdicios Tóxicos

MR. ELIS J. MORALES- LEAD BASED PAINT INSPECTOR CERTIFICATION





GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

ADDENDUM V

LBP TESTING COMBINATIONS

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 18/39	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
1	**Calibrate**				**1.0**		
2	**Calibrate**				**0.9**		
3	**Calibrate**				**1.0**		
4	PR-156 Int. PR-33	Solid White Line	Right Side	Asphalt	0.01	Neg	
5	PR-156 Int. PR-33	Solid White Line	Right Side	Asphalt	0.01	Neg	
6	PR-156 Int. PR-33	Solid White Line	Right Side	Asphalt	0.01	Neg	
7	PR-156 Int. PR-33	Solid White Line	Right Side	Asphalt	0.01	Neg	
8	PR-156 Int. PR-33	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
9	PR-156 Int. PR-33	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
10	PR-156 Int. PR-33	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
11	PR-156 Int. PR-33	Yellow Curb Line	Right	Concrete	0.01	Neg	
12	PR-156 Int. PR-33	Light Pole	Right Side	Metal	0.02	Neg	
13	PR-156 Int. PR-33	Light Pole	Right Side	Metal	0.02	Neg	
14	PR-156 Int. PR-33	Light Pole	Right Side	Metal	0.02	Neg	
15	**PR-156 Int. PR-33**	**Light Pole Base**	**Right Side**	**Metal**	**1.3**	**Pos.**	**14 Sq. Ft. Approx.**
16	**PR-156 Int. PR-33**	**Light Pole Base**	**Right Side**	**Concrete**	**1.5**	**Pos.**	**19 Sq. Ft. Approx.**
17	PR-156 Int. PR-33	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
18	PR-156 Int. PR-33	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
19	PR-156 Int. PR-33	Blue Street Ramp	Right Side	Concrete	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 19/39	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
20	PR-156 Int. PR-33	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
21	PR-156 Int. PR-33	Sub-Station Box	Right Side	Metal	0.02	Neg	
22	PR-156 Int. PR-33	Solid White Line	Left Side	Asphalt	0.01	Neg	
23	PR-156 Int. PR-33	Solid White Line	Left Side	Asphalt	0.01	Neg	
24	PR-156 Int. PR-33	Solid White Line	Left Side	Asphalt	0.01	Neg	
25	PR-156 Int. PR-33	Solid White Line	Left Side	Asphalt	0.01	Neg	
26	PR-156 Int. PR-33	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
27	PR-156 Int. PR-33	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
28	PR-156 Int. PR-33	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
29	PR-156 Int. PR-33	Yellow Curb Line	Left	Concrete	0.01	Neg	
30	PR-156 Int. PR-33	Light Pole	Left	Metal	0.02	Neg	
31	PR-156 Int. PR-33	Light Pole	Left Side	Metal	0.02	Neg	
32	**PR-156 Int. PR-33**	**Light Pole Base**	**Left Side**	**Metal**	**1.6**	**Pos.**	**14 Sq. Ft. Approx.**
33	**PR-156 Int. PR-33**	**Light Pole Base**	**Left Side**	**Concrete**	**1.8**	**Pos.**	**19 Sq. Ft. Approx.**
34	PR-156 Int. PR-33	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
35	PR-156 Int. PR-33	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
36	PR-156 Int. Las Catalinas	Solid White Line	Right Side	Asphalt	0.01	Neg	
37	PR-156 Int. Las Catalinas	Solid White Line	Right Side	Asphalt	0.01	Neg	
38	PR-156 Int. Las Catalinas	Yellow Curb Line	Right Side	Concrete	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022		
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
39	PR-156 Int. Las Catalinas	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
40	PR-156 Int. Las Catalinas	Light Pole	Right Side	Metal	0.02	Neg	
41	PR-156 Int. Las Catalinas	Light Pole	Right Side	Metal	0.02	Neg	
42	PR-156 Int. Las Catalinas	Light Pole Base	Right Side	Concrete	0.01	Neg	
43	PR-156 Int. Las Catalinas	Light Pole Base	Right Side	Concrete	0.01	Neg	
44	PR-156 Int. Las Catalinas	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
45	PR-156 Int. Las Catalinas	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
46	PR-156 Int. Las Catalinas	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
47	PR-156 Int. Las Catalinas	Solid Yellow Line	Center Side	Asphalt	0.01	Neg	
48	PR-156 Int. Las Catalinas	Solid Yellow Line	Center Side	Asphalt	0.01	Neg	
49	PR-156 Int. Las Catalinas	Yellow Curb Line	Center Side	Concrete	0.01	Neg	
50	PR-156 Int. Las Catalinas	Yellow Curb Line	Center Side	Concrete	0.01	Neg	
51	PR-156 Int. Las Catalinas	Light Pole	Center	Metal	0.02	Neg	
52	PR-156 Int. Las Catalinas	Light Pole Base	Center	Concrete	0.01	Neg	
53	PR-156 Int. Las Catalinas	Solid White Line	Left	Asphalt	0.01	Neg	
54	PR-156 Int. Las Catalinas	Solid White Line	Left	Asphalt	0.01	Neg	
55	PR-156 Int. Las Catalinas	Solid White Line	Left	Asphalt	0.01	Neg	
56	PR-156 Int. Las Catalinas	Solid White Line	Left	Asphalt	0.01	Neg	
57	PR-156 Int. Las Catalinas	Yellow Curb Line	Left Side	Concrete	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022		
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
58	PR-156 Int. Las Catalinas	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
59	PR-156 Int. Las Catalinas	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
60	PR-156 Int. Las Catalinas	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
61	PR-156 Int. Las Catalinas	Light Pole	Left Side	Metal	0.02	Neg	
62	PR-156 Int. Las Catalinas	Light Pole	Left Side	Metal	0.02	Neg	
63	PR-156 Int. Las Catalinas	Light Pole	Left Side	Metal	0.02	Neg	
64	PR-156 Int. Las Catalinas	Light Pole	Left Side	Metal	0.02	Neg	
65	PR-156 Int. Las Catalinas	Light Pole Base	Left Side	Concrete	0.01	Neg	
66	PR-156 Int. Las Catalinas	Light Pole Base	Left Side	Concrete	0.01	Neg	
67	PR-156 Int. Las Catalinas	Light Pole Base	Left	Concrete	0.01	Neg	
68	PR-156 Int. Las Catalinas	Light Pole Base	Left	Concrete	0.01	Neg	
69	PR-156 Int. Las Catalinas	Blue Street Ramp	Left	Concrete	0.01	Neg	
70	PR-156 Int. Las Catalinas	Blue Street Ramp	Left	Concrete	0.01	Neg	
71	PR-156 Int. Las Catalinas	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
72	PR-156 Int. Las Catalinas	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
73	PR-156 Int. Las Catalinas	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
74	PR-156 Int. PR-52	Cross Walk	Right	Asphalt	0.01	Neg	
75	PR-156 Int. PR-52	Cross Walk	Right	Asphalt	0.01	Neg	
76	PR-156 Int. PR-52	Solid White Line	Right Side	Asphalt	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 22/39	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
77	PR-156 Int. PR-52	Solid White Line	Right Side	Asphalt	0.01	Neg	
78	PR-156 Int. PR-52	Solid White Line	Right Side	Asphalt	0.01	Neg	
79	PR-156 Int. PR-52	Solid White Line	Right Side	Asphalt	0.01	Neg	
80	PR-156 Int. PR-52	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
81	PR-156 Int. PR-52	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
82	PR-156 Int. PR-52	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
83	PR-156 Int. PR-52	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
84	PR-156 Int. PR-52	Light Pole	Right Side	Metal	0.02	Neg	
85	PR-156 Int. PR-52	Light Pole	Right Side	Metal	0.02	Neg	
86	PR-156 Int. PR-52	Light Pole Base	Right Side	Metal	0.02	Neg	
87	PR-156 Int. PR-52	Light Pole Base	Right Side	Metal	0.02	Neg	
88	PR-156 Int. PR-52	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
89	PR-156 Int. PR-52	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
90	PR-156 Int. PR-52	Blue Street Ramp	Right	Concrete	0.01	Neg	
91	PR-156 Int. PR-52	Blue Street Ramp	Right	Concrete	0.01	Neg	
92	PR-156 Int. PR-52	Solid Yellow Line	Center Side	Asphalt	0.01	Neg	
93	PR-156 Int. PR-52	Solid Yellow Line	Center Side	Asphalt	0.01	Neg	
94	PR-156 Int. PR-52	Yellow Curb Line	Center Side	Concrete	0.01	Neg	
95	PR-156 Int. PR-52	Yellow Curb Line	Center Side	Concrete	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 23/39	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
96	PR-156 Int. PR-52	Light Pole	Center Side	Metal	0.02	Neg	
97	PR-156 Int. PR-52	Light Pole Base	Center Side	Metal	0.01	Neg	
98	PR-156 Int. PR-52	Cross Walk	Left Side	Asphalt	0.01	Neg	
99	PR-156 Int. PR-52	Cross Walk	Left Side	Asphalt	0.01	Neg	
100	PR-156 Int. PR-52	Solid White Line	Left Side	Asphalt	0.01	Neg	
101	PR-156 Int. PR-52	Solid White Line	Left Side	Asphalt	0.01	Neg	
102	PR-156 Int. PR-52	Solid White Line	Left Side	Asphalt	0.01	Neg	
103	PR-156 Int. PR-52	Solid White Line	Left Side	Asphalt	0.01	Neg	
104	PR-156 Int. PR-52	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
105	PR-156 Int. PR-52	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
106	PR-156 Int. PR-52	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
107	PR-156 Int. PR-52	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
108	PR-156 Int. PR-52	Light Pole	Left Side	Metal	0.02	Neg	
109	PR-156 Int. PR-52	Light Pole	Left Side	Metal	0.02	Neg	
110	PR-156 Int. PR-52	Light Pole Base	Left	Metal	0.02	Neg	
111	PR-156 Int. PR-52	Light Pole Base	Left	Metal	0.02	Neg	
112	PR-156 Int. PR-52	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
113	PR-156 Int. PR-52	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
114	PR-156 Int. PR-52	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
115	PR-156 Int. PR-52	Blue Street Ramp	Left Side	Concrete	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 24/39	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
116	PR-156 Int. Barcelona Street	Solid White Line	Right Side	Asphalt	0.01	Neg	
117	PR-156 Int. Barcelona Street	Solid White Line	Right Side	Asphalt	0.01	Neg	
118	PR-156 Int. Barcelona Street	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
119	PR-156 Int. Barcelona Street	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
120	PR-156 Int. Barcelona Street	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
121	PR-156 Int. Barcelona Street	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
122	PR-156 Int. Barcelona Street	Solid White Line	Left Side	Asphalt	0.01	Neg	
123	PR-156 Int. Barcelona Street	Solid White Line	Left Side	Asphalt	0.01	Neg	
124	**PR-156 Int. Barcelona Street (Km 57.8)**	**Yellow Curb Line**	**Left Side**	**Concrete**	**2.4**	**Pos.**	**90 Ln. Ft. Approx.**
125	**PR-156 Int. Barcelona Street (Km 57.8)**	**Yellow Curb Line**	**Left Side**	**Concrete**	**2.1**	**Pos.**	
126	PR-156 Km 57.7	Solid White Line	Left Side	Asphalt	0.01	Neg	
127	PR-156 Km 57.7	Solid White Line	Left Side	Asphalt	0.01	Neg	
128	PR-156 Km 57.7	Solid White Line	Left Side	Asphalt	0.01	Neg	
129	**PR-156 Km 57.7**	**Yellow Curb Line**	**Left Side**	**Concrete**	**2.3**	**Pos.**	**142 Ln. Ft. Approx.**
130	**PR-156 Km 57.7**	**Yellow Curb Line**	**Left Side**	**Concrete**	**2.1**	**Pos.**	
131	**PR-156 Km 57.7**	**Yellow Curb Line**	**Left Side**	**Concrete**	**2.2**	**Pos.**	
132	**PR-156 Km 57.7**	**Yellow Curb Line**	**Left Side**	**Concrete**	**2.4**	**Pos.**	
133	**PR-156 Km 57.7**	**Yellow Curb Line**	**Left Side**	**Concrete**	**1.7**	**Pos.**	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 25/39	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
134	PR-156 Int. Street A	Solid White Line	Right Side	Asphalt	0.01	Neg	
135	PR-156 Int. Street A	Yellow Curb Line	Right Side	Concrete	0.01	Neg	
136	PR-156 Int. Street A	Solid White Line	Left Side	Asphalt	0.01	Neg	
137	PR-156 Int. Street A	Solid White Line	Left Side	Asphalt	0.01	Neg	
138	**PR-156 Int. Street A**	**Yellow Curb Line**	**Left Side**	**Concrete**	**1.5**	**Pos.**	**151 Ln. Ft. Approx.**
139	**PR-156 Int. Street A**	**Yellow Curb Line**	**Left Side**	**Concrete**	**1.7**	**Pos.**	
140	**PR-156 Int. Street A**	**Yellow Curb Line**	**Center Side**	**Concrete**	**2.0**	**Pos.**	
141	PR-156 Int. Street A	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
142	PR-156 Int. Street A	Blue Street Ramp	Left Side	Concrete	0.01	Neg	
143	PR-156, 57.4 to 57.2	Solid White Line	Right Side	Asphalt	0.01	Neg	
144	PR-156, 57.4 to 57.2	Solid White Line	Right Side	Asphalt	0.01	Neg	
145	PR-156, 57.4 to 57.2	Street Ramp	Right Side	Concrete	0.00	Neg	
146	PR-156, 57.4 to 57.2	Street Ramp	Right Side	Concrete	0.00	Neg	
147	PR-156, 57.4 to 57.2	Solid White Line	Left Side	Asphalt	0.01	Neg	
148	PR-156, 57.4 to 57.2	Solid White Line	Left Side	Asphalt	0.01	Neg	
149	PR-156, 57.4 to 57.2	Solid White Line	Left Side	Asphalt	0.01	Neg	
150	PR-156, 57.4 to 57.2	Solid White Line	Left	Asphalt	0.01	Neg	
151	PR-156, 57.4 to 57.2	Solid White Line	Left	Asphalt	0.01	Neg	
152	PR-156, 57.4 to 57.2	Solid White Line	Left Side	Asphalt	0.01	Neg	

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GES 2022-218	XRF Serial Number: 100102	Project: Road PR-156 in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	Page 26/39	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm^2)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
153	PR-156, 57.4 to 57.2	Yellow Curb Line	Left Side	Concrete	0.2	Neg	
154	PR-156, 57.4 to 57.2	Yellow Curb Line	Left Side	Concrete	0.2	Neg	
155	PR-156, 57.4 to 57.2	Yellow Curb Line	Left Side	Concrete	0.2	Neg	
156	PR-156, 57.4 to 57.2	Yellow Curb Line	Left Side	Concrete	0.2	Neg	
157	PR-156, 57.4 to 57.2	Yellow Curb Line	Left Side	Concrete	0.2	Neg	
158	PR-156, 57.4 to 57.2	Yellow Curb Line	Left Side	Concrete	0.2	Neg	
159	PR-156, 57.4 to 57.2	Yellow Curb Line	Left Side	Concrete	0.2	Neg	
160	PR-156, 57.4 to 57.2	Yellow Curb Line	Left Side	Concrete	0.2	Neg	
161	PR-156, 57.4 to 57.2	Street Ramp	Left Side	Concrete	0.00	Neg	
162	PR-156, 57.4 to 57.2	Street Ramp	Left Side	Concrete	0.00	Neg	
163	PR-156, 57.4 to 57.2	Street Ramp	Left Side	Concrete	0.00	Neg	
164	PR-156, 57.4 to 57.2	Street Ramp	Left Side	Concrete	0.00	Neg	
165	PR-156, 57.4 to 57.2	Street Ramp	Left Side	Concrete	0.00	Neg	
166	**Calibrate**				**0.8**		
167	**Calibrate**				**0.9**		
168	**Calibrate**				**0.9**		

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ADDENDUM VI

TABLE SUMMARY OF COMPONENTS WITH LEAD BASED PAINT

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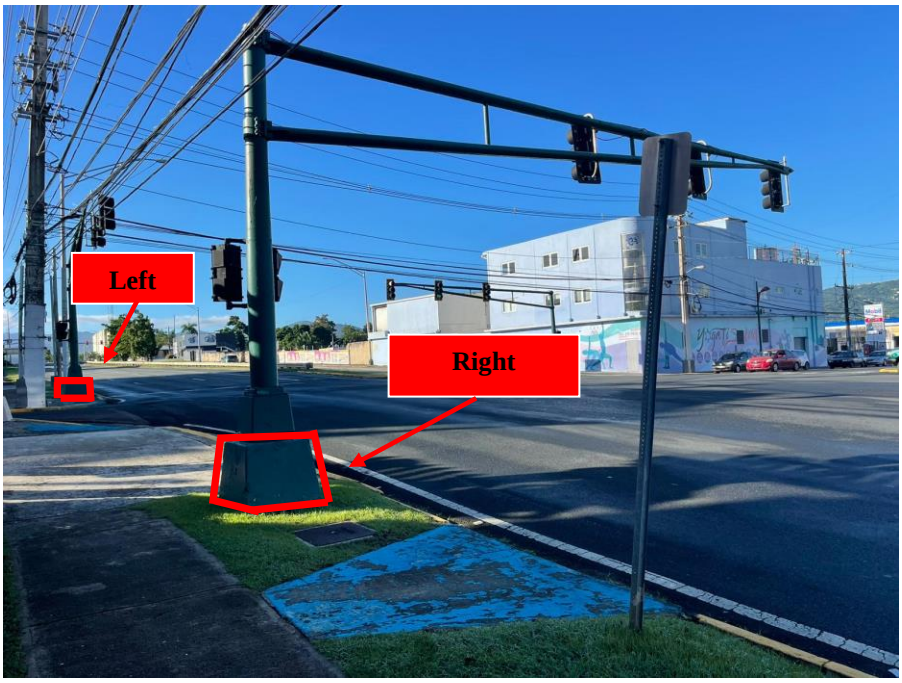
TABLE SUMMARY OF COMPONENTS WITH LEAD BASED PAINT

FUNCTIONAL SPACE	COMPONENT	SIDE	SUBSTRATE	SQ. FT. APPROX./ Units
Road PR-156 Int. Road PR-33	Light Pole Base	Right/ Left	Metal	28 sq. ft. approx. (2 Units)
Road PR-156 Int. Road PR-33	Light Pole Base	Right/ Left	Concrete	38 sq. ft. approx. (2 Units)
Road PR-156 Int. Barcelona Street Km. 57.8	Yellow Curb	Left	Concrete	90 ln. ft. approx.
Road PR-156 Km. 57.7	Yellow Curb	Left	Concrete	142 ln. ft. approx.
Road PR-156 Int. A Street	Yellow Curb	Left	Concrete	151 ln. ft. approx.

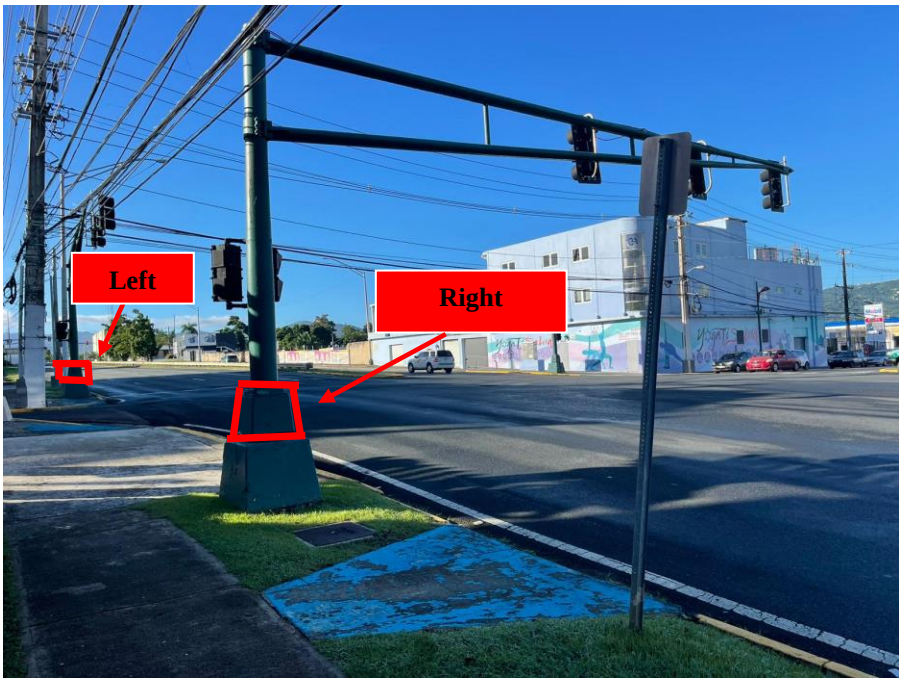
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ADDENDUM VII

PHOTOGRAPHS OF POSITIVE COMPONENTS WITH LEAD BASED PAINT



Road PR-156 Int. PR-33 - Concrete Light Pole Bases (All Sides) with Lead Based Paint



Road PR-156 Int. PR-33 - Metal Light Pole Bases (All Sides) with Lead Based Paint

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Road PR-156 Int. Barcelona Street Km. 57.8 – Yellow Concrete Curbs with Lead Based Paint



Road PR-156 Km. 57.7– Yellow Concrete Curbs with Lead Based Paint





Road PR-156 Int. A Street– Yellow Concrete Curbs with Lead Based Paint



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ADDENDUM VIII

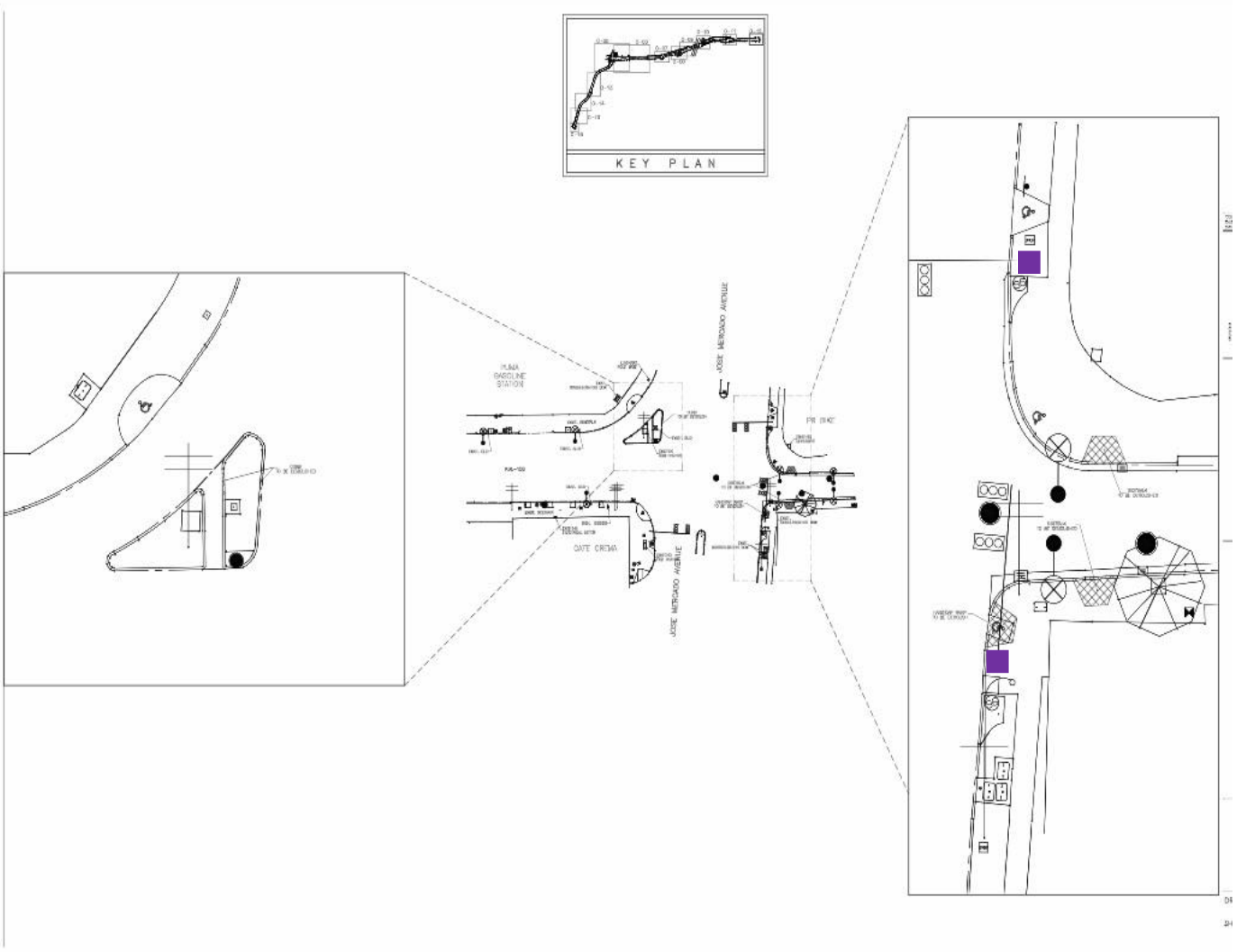
WHERE THE POSITIVE COMPONENTS AREA FOUND WITH LEAD BASED PAINT

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LBP POSITIVE RESULTS LOCATIONS- PR-156 INT. PR-33



NOT TO SCALE

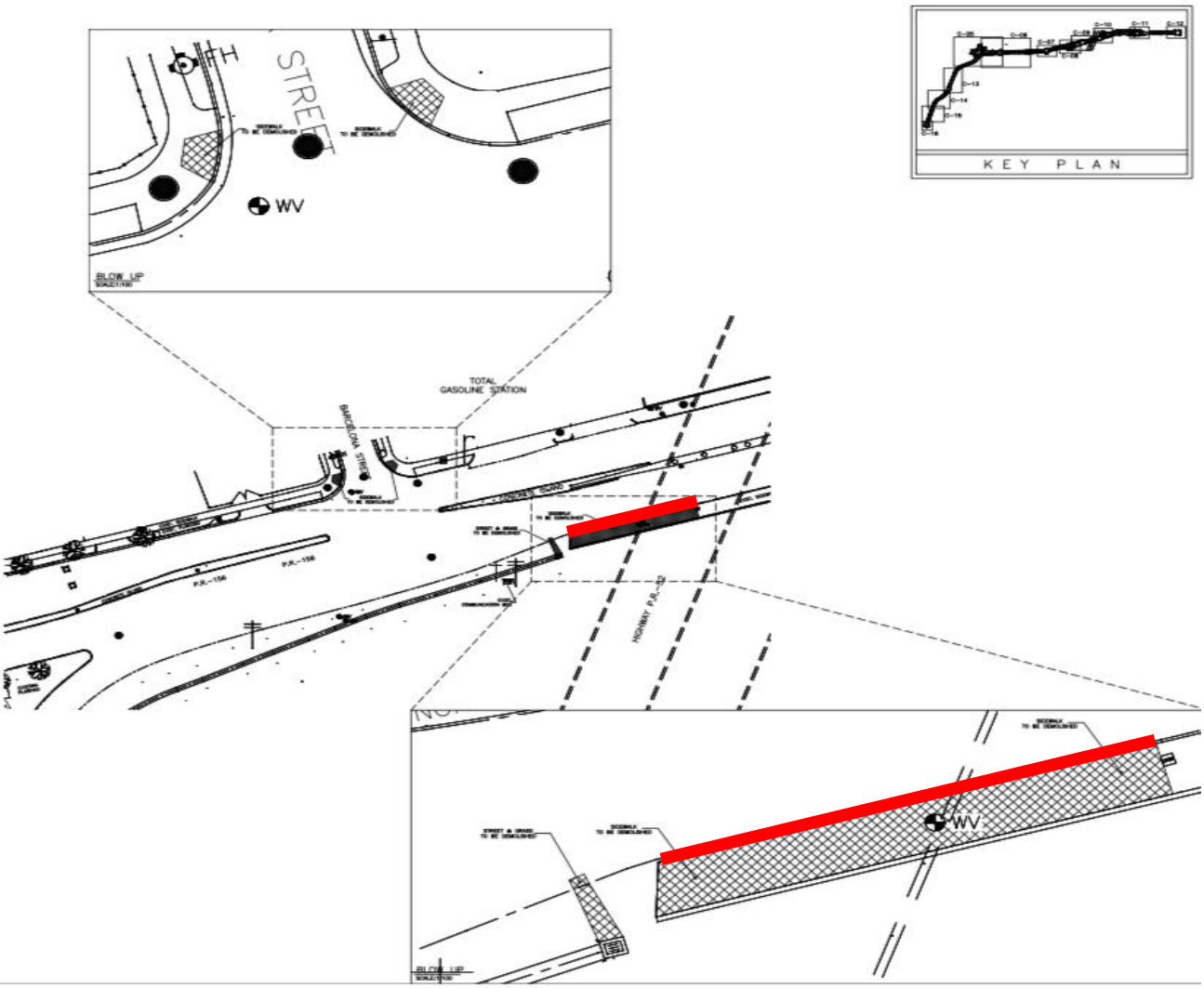
= CONCRETE/ METAL GRAY LIGHT POLE BASES LBP

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LBP POSITIVE RESULTS LOCATIONS-
PR-156 INT. BARCELONA STREET KM. 57.8



NOT TO SCALE

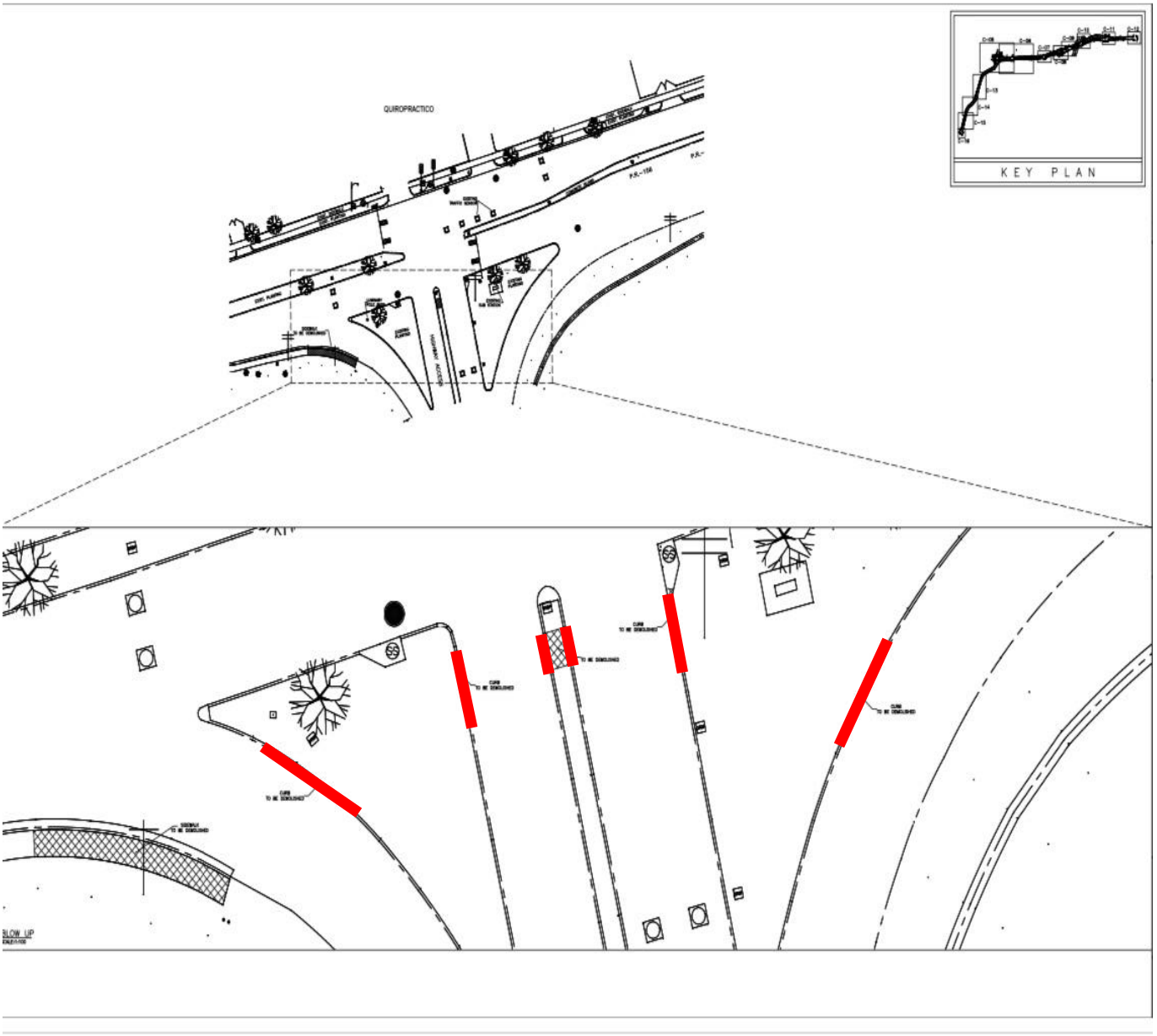
= YELLOW CONCRETE CURBS WITH LBP

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Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality

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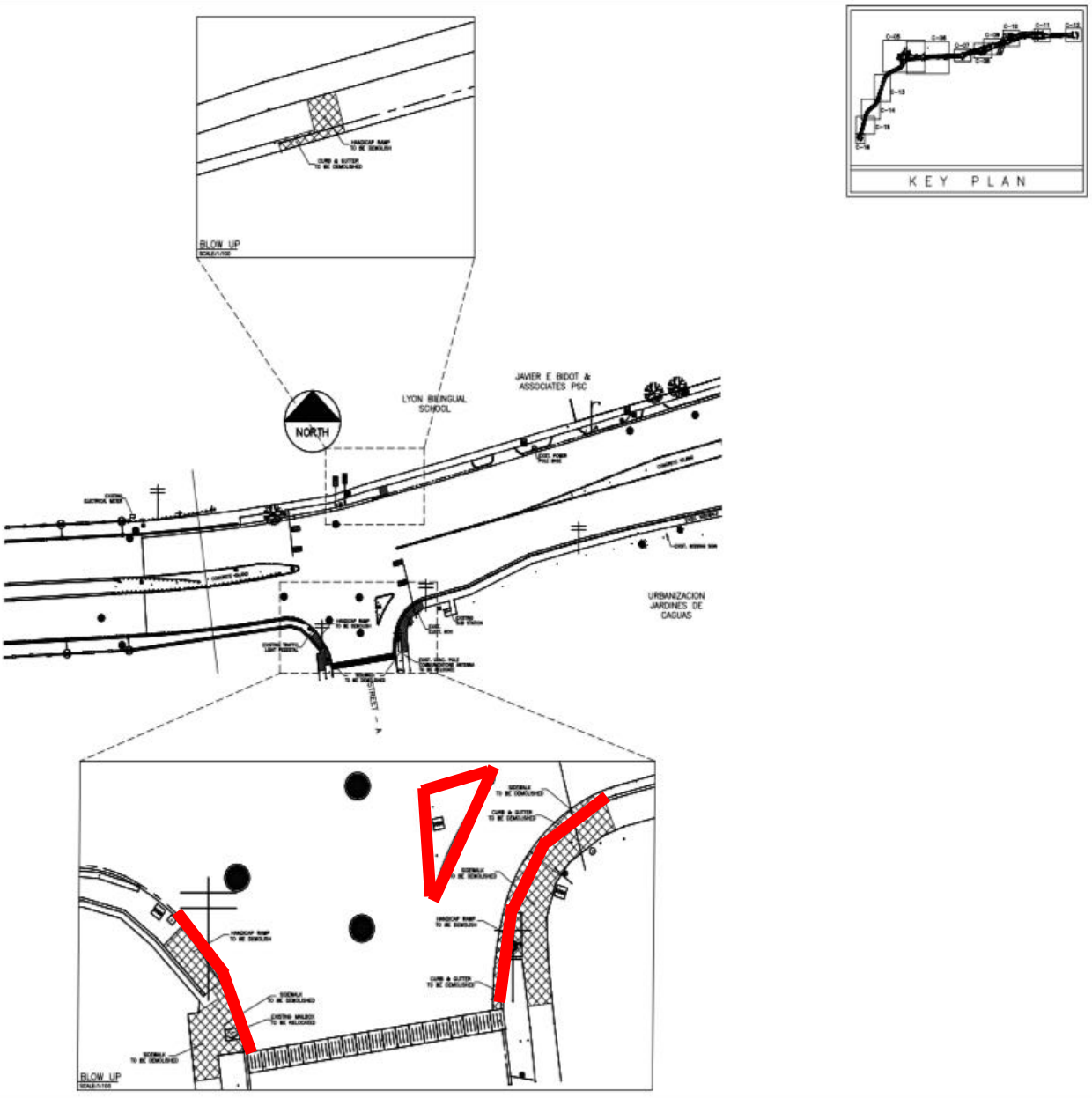
LBP POSITIVE RESULTS LOCATIONS- PR-156 KM. 57.7



NOT TO SCALE

= *YELLOW CONCRETE CURBS WITH LBP*

LBP POSITIVE RESULTS LOCATIONS- PR-156 INT. A STREET



= YELLOW CONCRETE CURBS WITH LBP

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ADDENDUM VI

CONCLUSION

Global Environmental Services LLC recommends the owner or representative of owner to hire a Company Certified in the Department of Natural and Environmental Resources (DNER) of Puerto Rico to mitigate and dispose positive areas with Lead Based Paint if is going to touch or demolish the aforementioned areas.

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Asbestos Containing Materials Inspection



SAMPLING CONDUCTED AT:

LEONCIO VELAZQUEZ AVENUE

Located at in Caguas, PR

GES Project # -2022-218

DECEMBER 2022

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TABLE OF CONTENT

REPORT COVER……1

TABLE OF CONTENT……....2

Introduction……3

Asbestos Containing Materials Inspection……3-4

APPENDIX I Certifications granted by the DNER of Puerto Rico……5-6

APPENDIX II Layout Area & Project Photos……7-11

APPENDIX III Asbestos Negative Certification……12-13

APPENDIX IV Conclusion……14

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December 13, 2022

Eng. Juan M. Vazquez
Vice-President
Vazquez Associates Ingenieros PSC
PO Box 6089
Caguas, PR 00726

Affair: Asbestos Containing Materials Inspection in Leoncio Velazquez Avenue located at Caguas, PR

Dear Eng. Vazquez:

Global Environmental Services LLC (GES) was contracted to perform a Asbestos Containing Materials Inspection at reference project. The inspection was contracted for the evaluation this Avenue.

Asbestos Containing Building Material (ACBM) is defined as any material which contains more that 1% percent Asbestos.

The ACM Inspection was conducted on December 3, 2022 by Mr. Elis J. Morales, Department of Natural and Environmental Resources of Puerto Rico (DNER) certified Asbestos Inspector # ASB-0123-0049-SI with enough experience.

During the inspection, inspector **NO suspected Asbestos Containing Materials**. The asbestos inspection work will be performed by Asbestos Hazards Emergency Response Act (AHERA) accredited asbestos inspectors under the PR Environmental Quality Board accreditation program. The inspection will be conducted in accordance with EPA's "Guidance for Controlling Asbestos Containing Materials in Buildings (EPA 560/5-85/024)". Asbestos Containing Materials Inspection and bulk sampling procedures to be implemented was based on the guidelines established by the ASTM E2356-14 Standard Practice for Comprehensive Building Asbestos Survey. Samples were analyzed by PLM using dispersion staining techniques in accordance with US EPA Method: 600/M4-82-020 of Dec. 1982 and 600/R-93/116 of July 93.

Global Environmental Services LLC **certifies this project asbestos free.**

GLOBAL ENVIRONMENTAL SERVICES LLC

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The Asbestos Containing Materials inspection was performed based on DNER/ NESHAP regulations and protocol according to the following scenario:

a. **The avenue is divided one functional spaces.**
b. **Physical and hazard assessment of suspected asbestos containing materials was performed.**
c. **Samples were collected according to homogenous areas.(Does not apply).**
d. **Samples sent to NVLAP Accredited Laboratory. (Does not apply).**
e. **Samples were analyzed by PLM method, in accordance to EPA recommended procedures. (Does not apply).**

Thank you for the opportunity, any questions, please call 787-994-2203 and 787-607-8965 or email globalespr@gmail.com.

Cordially;





Mr. Angel O. Ortega, JS — *Environmental Consultant President*

Mr. Elis J. Morales — *Asbestos Inspector-ASB-0123-0049-SI*

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APPENDIX I

CERTIFICATIONS GRANTED BY THE DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES OF PUERTO RICO

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ASBESTOS INSPECTOR CERTIFICATION



TARJETA DE REGISTRO
PARA LA REMOCION DE ASBESTO

Esta tarjeta autoriza a:

Elis J. Morales Rivera

Inspector

A trabajar en la remoción de asbesto en Puerto Rico. Esta persona **NO** es un empleado del DRNA.

ASB-0123-0049-SI
Número de Registro

3-ene-2024
Fecha de vencimiento

Firma Autorizada - Departamento Recursos Naturales y Ambientales

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APPENDIX II

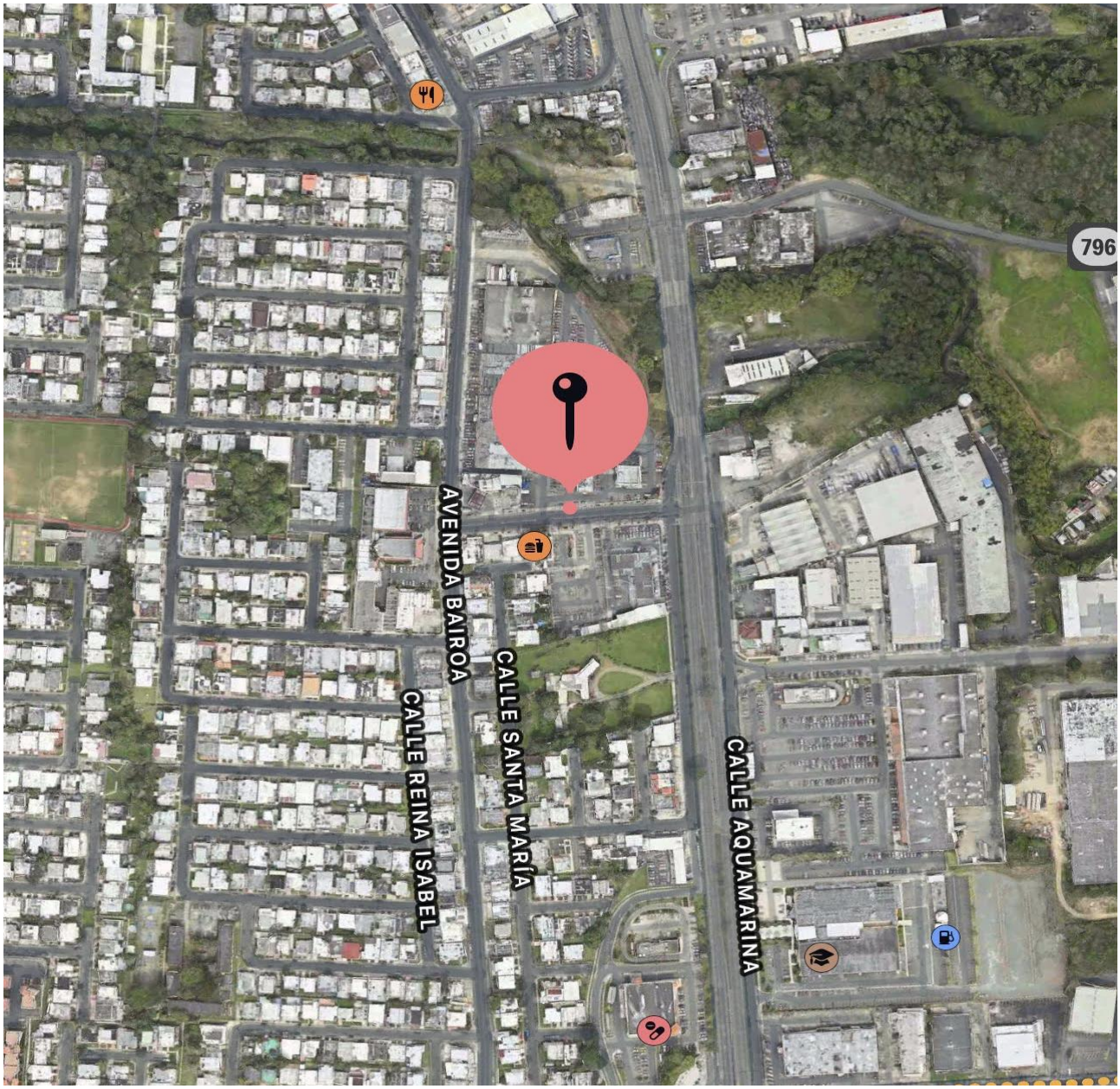
LAYOUT AREA & PROJECT PHOTOS

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
DNER & EPA Permits and Certifications

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SITE AREA

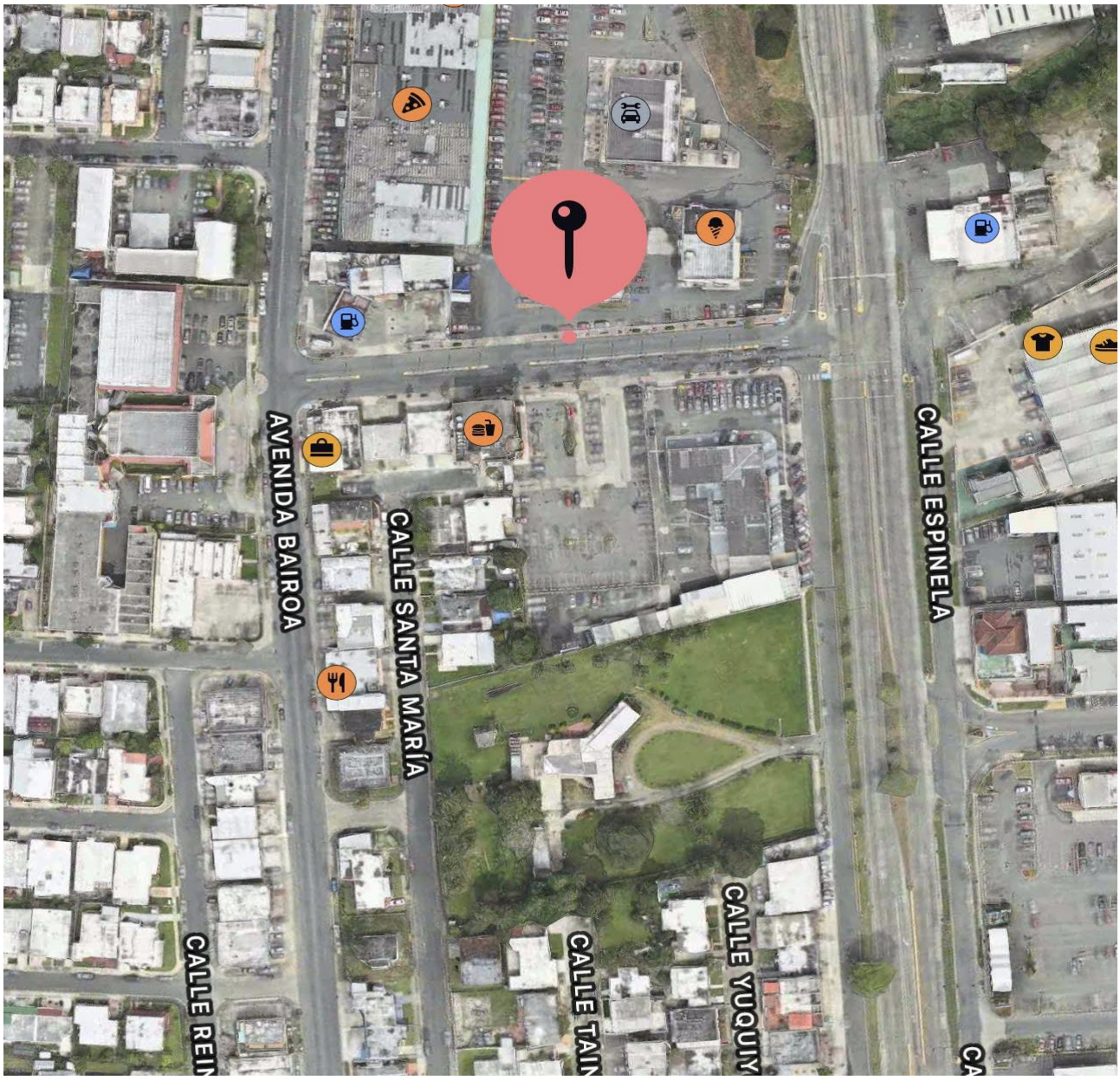


COORDINATES TO GET TO THE PROJECT:

18.25414, -66.03714

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SITE AREA

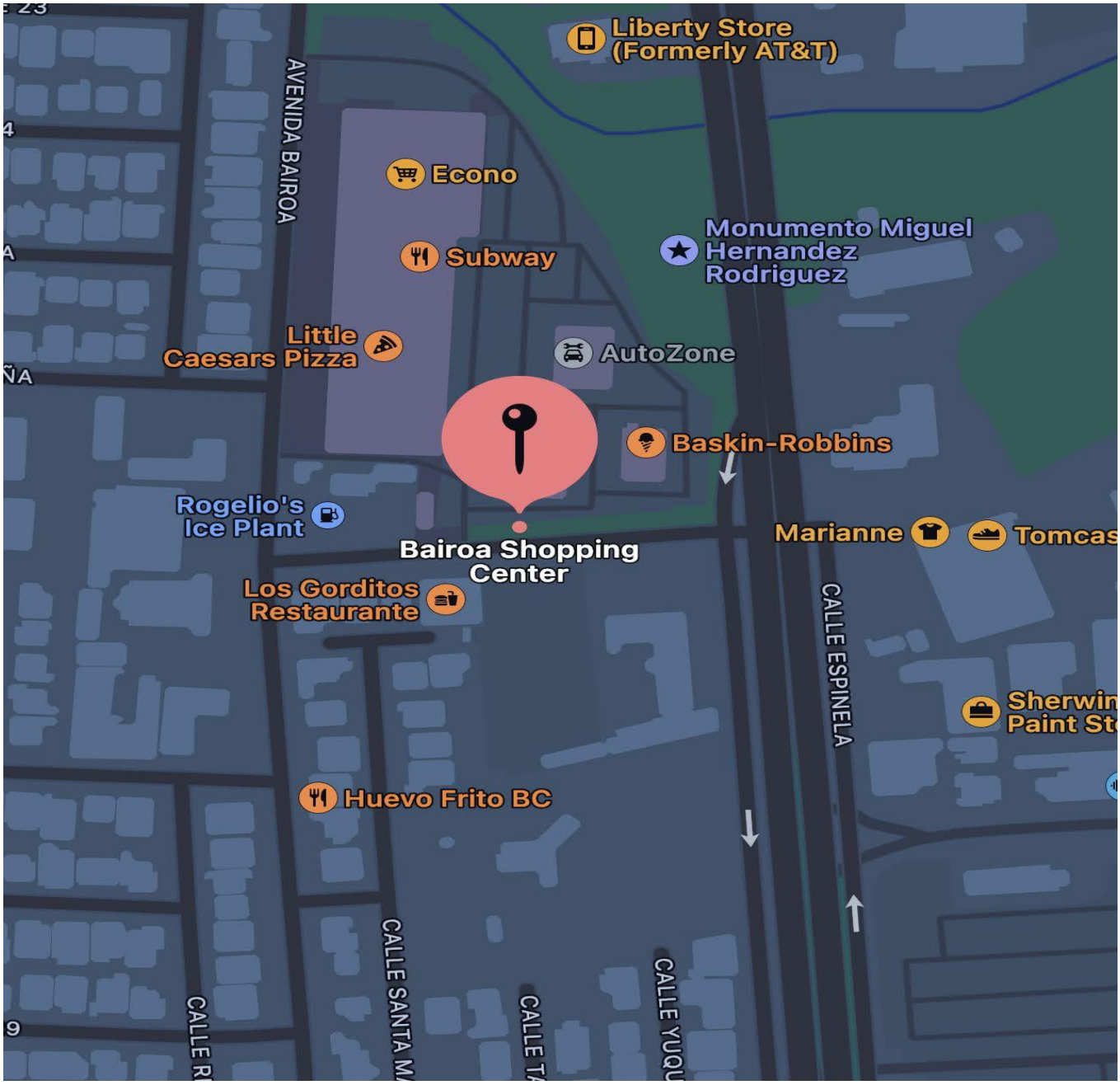


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DNER & EPA Permits and Certifications

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SITE AREA



GLOBAL ENVIRONMENTAL SERVICES LLC

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PROJECT START



PROJECT FINISH



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APPENDIX III

ASBESTOS NEGATIVE CERTIFICATION

GOBIERNO DE PUERTO RICO
OFICINA DEL GOBERNADOR
JUNTA DE CALIDAD AMBIENTAL

Área de Calidad de Agua

Forma PGC-009

CERTIFICACION DE NO PRESENCIA DE ASBESTO EN ESTRUCTURAS A DEMOLERSE

(Deberá completarse en letra de molde o impresa)

NUM. PERMISO: _____

Yo, Elis J. Morales (Nombre), mayor de edad, casado (Estado Civil), y vecino de Naranjito (Municipio)

Dirección Postal RR8 Box 1995 PMB 313 Bayamón, PR 00956 (Pueblo) (Zip Code)

Teléfonos: Residencial (787) 607 - 8965 Oficina (787) 994 - 2203 Ext. _____
Fax (_____) _____ - _____

Certifico que:

1. La estructura localizada en Ave. Leoncio Velazquez en Caguas, PR, la cual será objeto de una demolición se encuentra libre de asbesto.
2. La información antes indicada es cierta y correcta.
3. Afirmo y reconozco las consecuencias de incluir y someter información falsa en este documento.
4. Para que así conste, firmo la presente certificación en Bayamón (Municipio) de Puerto Rico,

   hoy día 7 de diciembre de 2022

ASB-0123-0049-SI

Firma y Sello del Profesional o
Firma del Inspector de Asbesto registrado por la JCA (Original)

Nota: Ingenieros o Arquitectos deberán someter evidencia de que se encuentra al día en el pago de sus cuotas de colegiación e Inspectores de Asbesto deberán someter evidencia de la tarjeta de registro provista por la JCA.

Dirección Física: Ave. Ponce de León 1308, Carr. Estatal 8838, Sector el Cinco, Río Piedras, PR 00926
Dirección Postal: Apartado 11488, Santurce, PR 00910-1488
Tel. (787) 767-8181 • Fax (787) 767-1962

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/ Indoor Air Quality
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APPENDIX IV

CONCLUSION

After evaluating the above mentioned project, our company Global Environmental Services LLC certifies Asbestos free for the Leoncio Velazquez Avenue in Caguas, PR of December 3, 2022.

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
DNER Permits/ EPA Permits & Certifications

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Lead Based Paint Inspection



SAMPLING CONDUCTED AT:

LEONCIO VELAZQUEZ AVENUE

Located at in Caguas, PR

GES Project # -2022-218

DECEMBER 2022

TABLE OF CONTENT

REPORT COVER……1

TABLE OF CONTENT……2

Introduction……3

Lead Based Paint SOP (Standard Operation Procedure)……3-4

Addendum I The Lead Paint Standard ……5-6

Addendum II Performance Characteristic Sheet (PCS)- XRF Niton Xlp 300A……7-10

Addendum III Site Area & Project Photos……11-15

Addendum IV Certifications granted by the DNER of Puerto Rico……26-18

Addendum V LBP Testing Combinations……19-24

Addendum VI Table Summary of components with Lead Based Paint……25-26

Addendum VII Photographs of the positive components with Lead Based Paint……27-28

Addendum VIII Where the positive components area found with Lead Based Paint……29-31

Addendum IX Conclusion……32

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Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
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December 13, 2022

Eng. Juan M. Vazquez
Vice-President
Vazquez Associates Ingenieros PSC
PO Box 6089
Caguas, PR 00726

Affair: Lead Based Paint Inspection in Leoncio Velazquez Avenue located at Caguas, PR

Dear Eng. Vazquez:

Global Environmental Services LLC (GES) was contracted to perform a Lead Based Paint Inspection at reference project.

The Lead Paint Standard is in Addendum I of the Report. Project Photos in Addendum III of the report.

The Inspection performance with Thermo Fisher Scientific XRF Niton Model Xlp 300A Serial Number #100102 was conducted using H.U.D. Standard for Lead Based Paint as defined by Title X of Housing and Community Department Act of 1992 (unless HUD and EPA have lowered the standard) & Guidelines for the Evaluation and Control of Lead Based Paint in Housing of 1997, revised in 2012 and PREQB Lead Based Paint Abatement Controls Regulation.

The Lead Based Paint Inspection was conducted on December 3, 2022 by Mr. Elis J. Morales, Department of Natural and Environmental Resources of Puerto Rico (DNER) certified Lead Based Paint Inspector # LBPI-22422-224 with enough experience.

The project consisted of evaluation in all components in Leoncio Velazquez Avenue located in Caguas, PR. During the evaluation **we found positive components with Lead Based Paint** in said project.

TABLE 1.0 – SUMMARY OF COMPONENTS WITH LEAD BASED PAINT				
FUNCTIONAL SPACE	**COMPONENT**	**SIDE**	**SUBSTRATE**	**SQ. FT. APPROX./ Units**
Leoncio Velazquez Avenue Sub-Station	**Yellow Curb**	Left	Concrete	**11 ln. ft. approx.**
Leoncio Velazquez Avenue Sub-Station	**Yellow Pipe Barriers**	Left	Metal	**8 ln. ft. approx. (2 units)**

Negative Definition= If the lead concentration measured by the XRF Spectrum Analyzer is less than 1.0 mg/cm2 it is considered negative.

Positive Definition= If the concentration measured by the XRF Spectrum Analyzer is equal or greater than 1.0 mg/cm2 it is considered **Positive**.

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TABLE- LEAD REGULATORY LEVELS	
	EPA & DNER Levels
LEAD BASED PAINT	**1.0mg/cm2** **or** **0.5% by weight (or 5,000 ppm)**

Lead Based Paint Inspection Guidelines used during the inspection.

SOP: Stardand Operation Procedure:

LEFT SIDE	**B**	**RIGHT SIDE**
A		**C**
	D	
		ENTRANCE AREA OR DOOR AREA

Thank you for the opportunity, any questions, please call 787-994-2203 and 787-607-8965 or email globalespr@gmail.com.

Cordially;

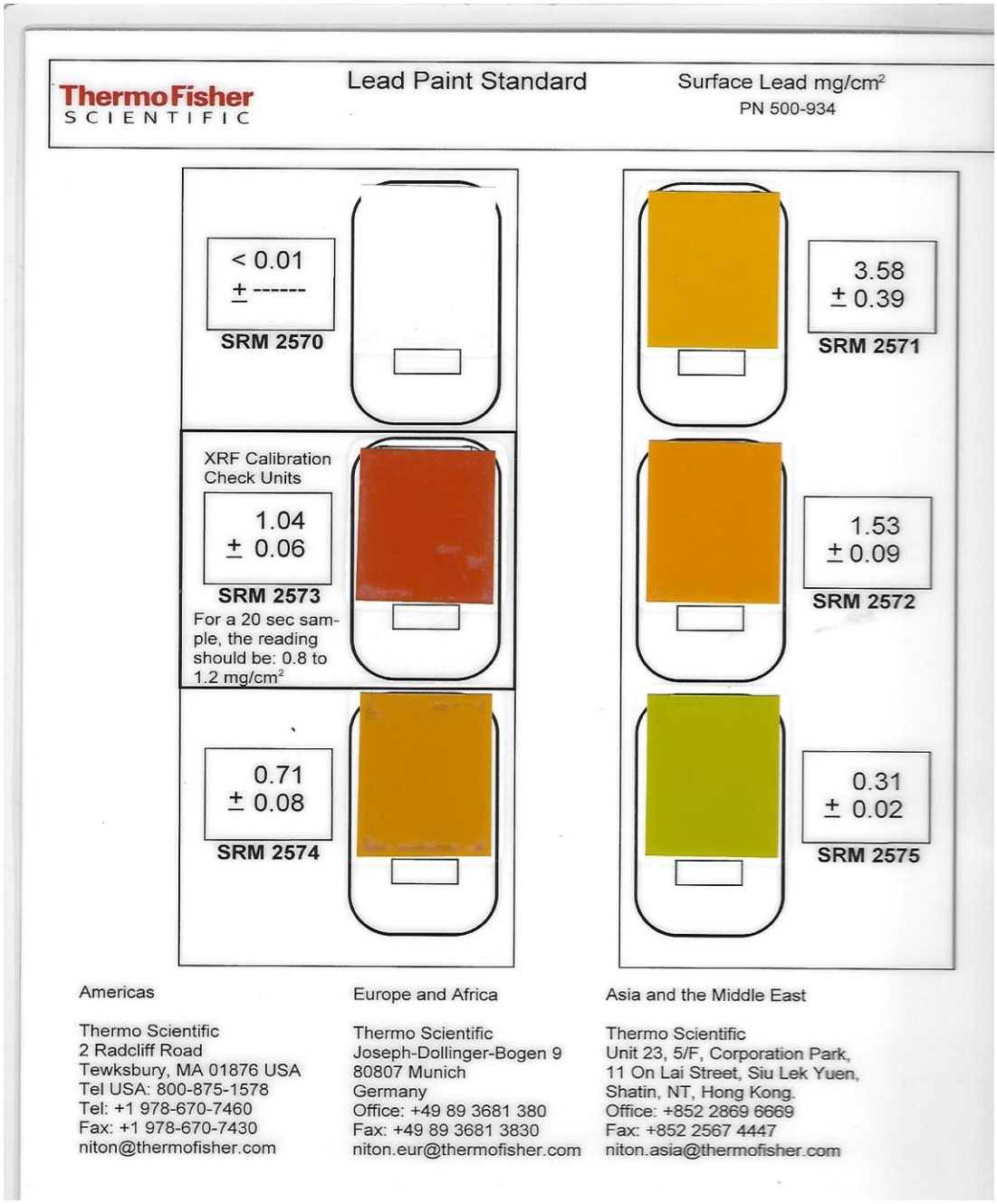
Mr. Angel O. Ortega, JS
Environmental Consultant
President

Mr. Elis J. Morales
Lead Based Paint Inspector LBPI-22422-224

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ADDENDUM I

THE LEAD PAINT STANDARD


ThermoFisher SCIENTIFIC
Lead Paint Standard
Surface Lead mg/cm²
PN 500-934
< 0.01 ± ------
SRM 2570
XRF Calibration Check Units
1.04 ± 0.06
SRM 2573
For a 20 sec sample, the reading should be: 0.8 to 1.2 mg/cm²
0.71 ± 0.08
SRM 2574
3.58 ± 0.39
SRM 2571
1.53 ± 0.09
SRM 2572
0.31 ± 0.02
SRM 2575
Americas
Thermo Scientific
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Tewksbury, MA 01876 USA
Tel USA: 800-875-1578
Tel: +1 978-670-7460
Fax: +1 978-670-7430
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Office: +49 89 3681 380
Fax: +49 89 3681 3830
niton.eur@thermofisher.com
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Shatin, NT, Hong Kong.
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ADDENDUM II

PERFORMANCE CHARACTERISTIC SHEET (PCS)-

XRF NITON XLP SERIE #300A

Performance Characteristic Sheet

EFFECTIVE DATE: **September 24, 2004** **EDITION NO.: 1**

MANUFACTURER AND MODEL:

Make: *Niton LLC*
Tested Model: *XLp 300*
Source: ^{109}Cd
Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.
XLp 300A, XLp 301A, XLp 302A and XLp 303A.
XLi 700A, XLi 701A, XLi 702A and XLi 703A.
XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
	All Data			Median for laboratory-measured lead levels (mg/cm^2)		
Substrate	25^{th} Percentile	Median	75^{th} Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.*

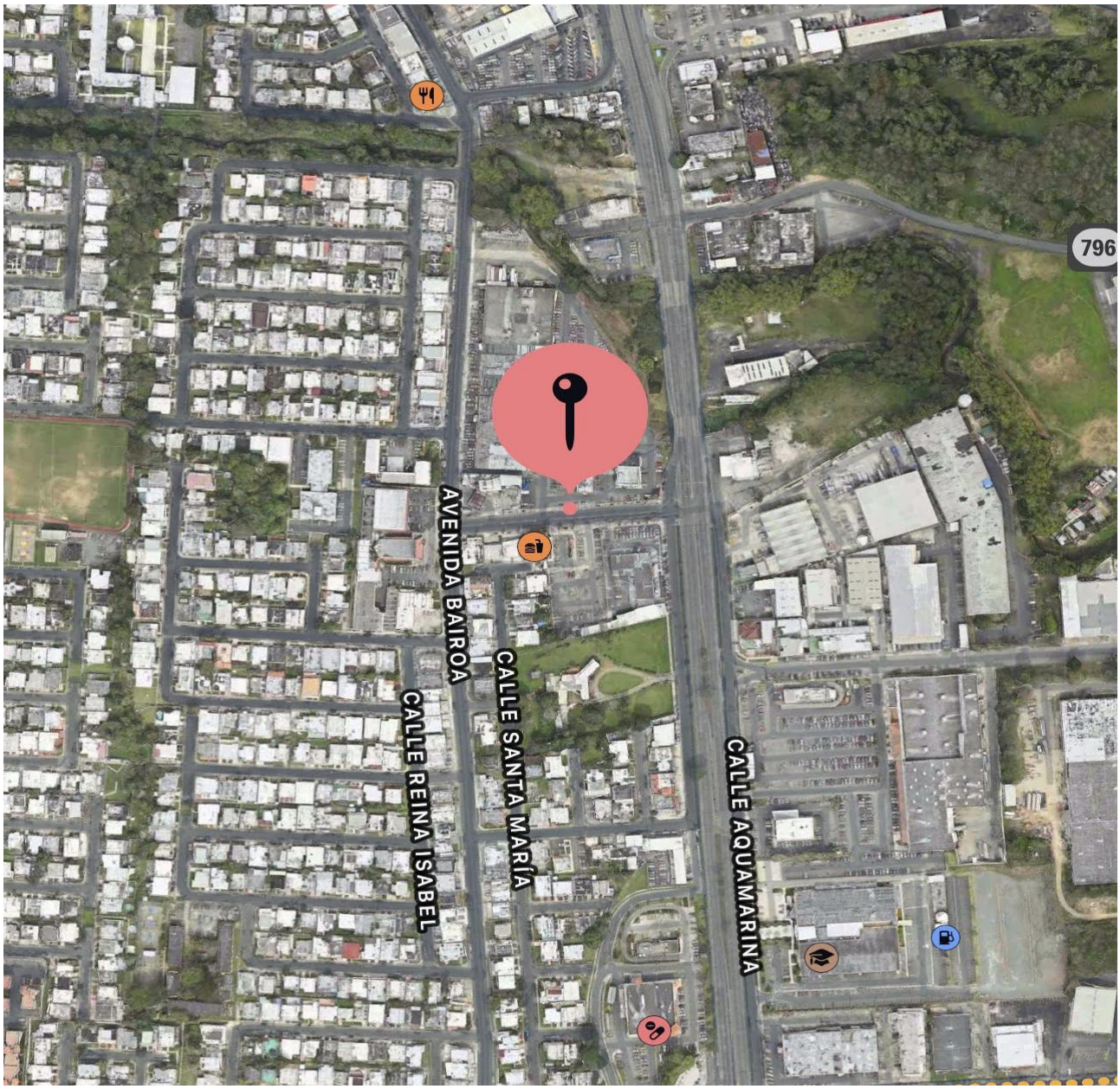
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ADDENDUM III

SITE AREA & PROJECT PHOTOS

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SITE AREA

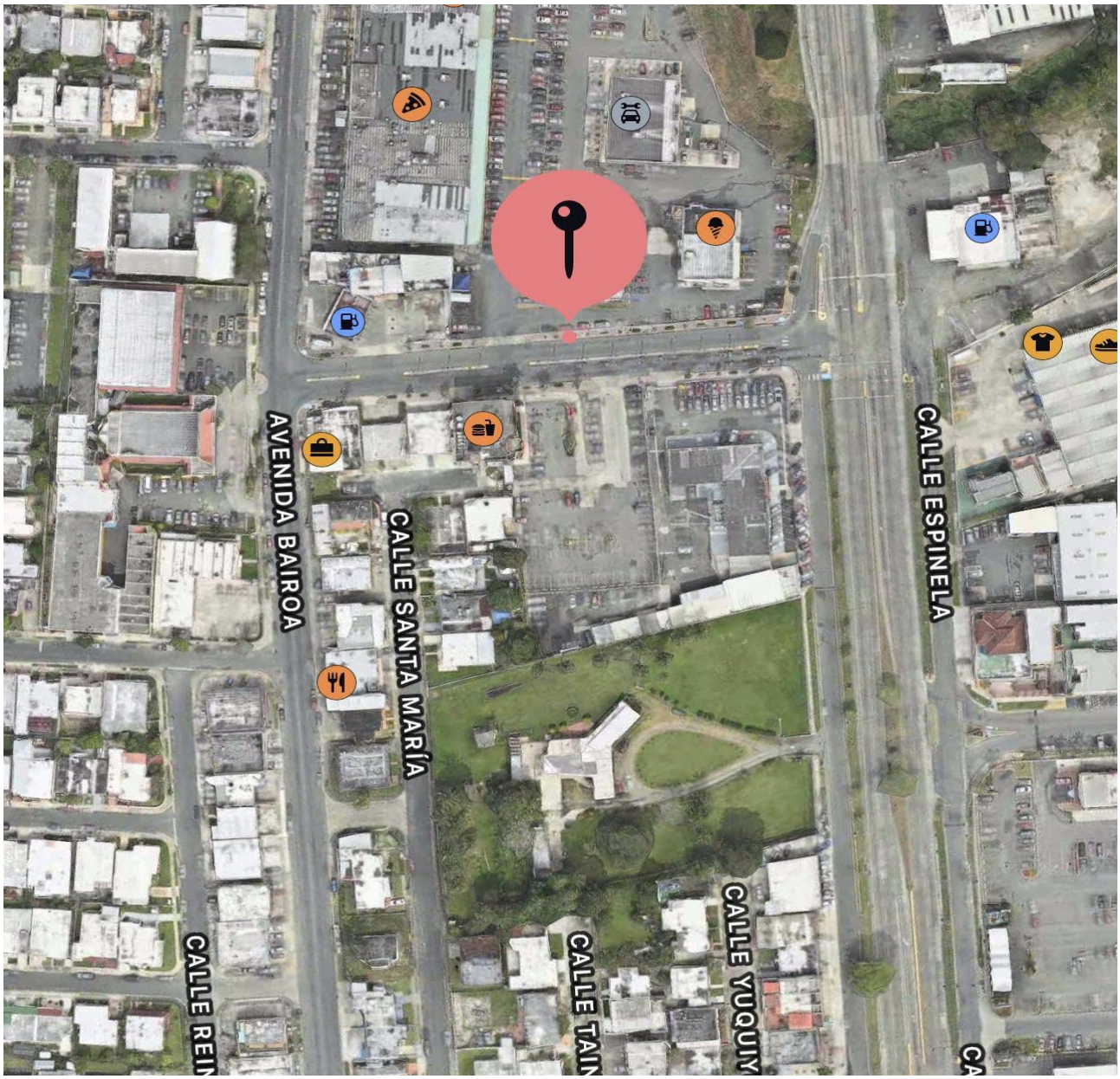


COORDINATES TO GET TO THE PROJECT:

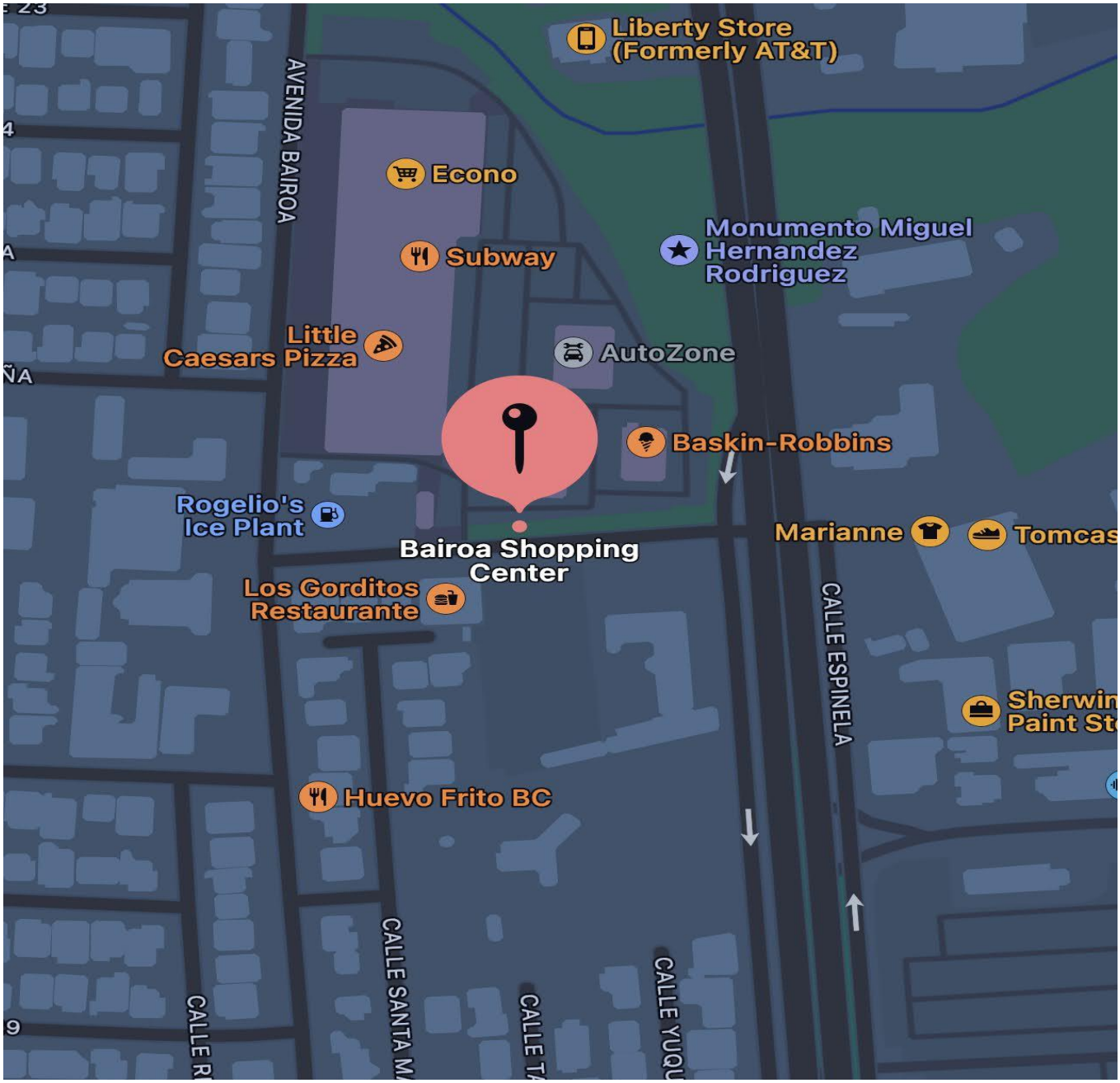
18.25414, -66.03714

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SITE AREA



SITE AREA


Liberty Store
(Formerly AT&T)
AVENIDA BAIROA
Econo
Subway
Monumento Miguel
Hernandez
Rodriguez
Little
Caesars Pizza
AutoZone
Baskin-Robbins
Rogelio's
Ice Plant
Bairoa Shopping
Center
Marianne
Tomcas
Los Gorditos
Restaurante
CALLE ESPINELA
Sherwin
Paint St
Huevo Frito BC
CALLE SANTA M
CALLE YUQU

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

PROJECT START



PROJECT FINISH

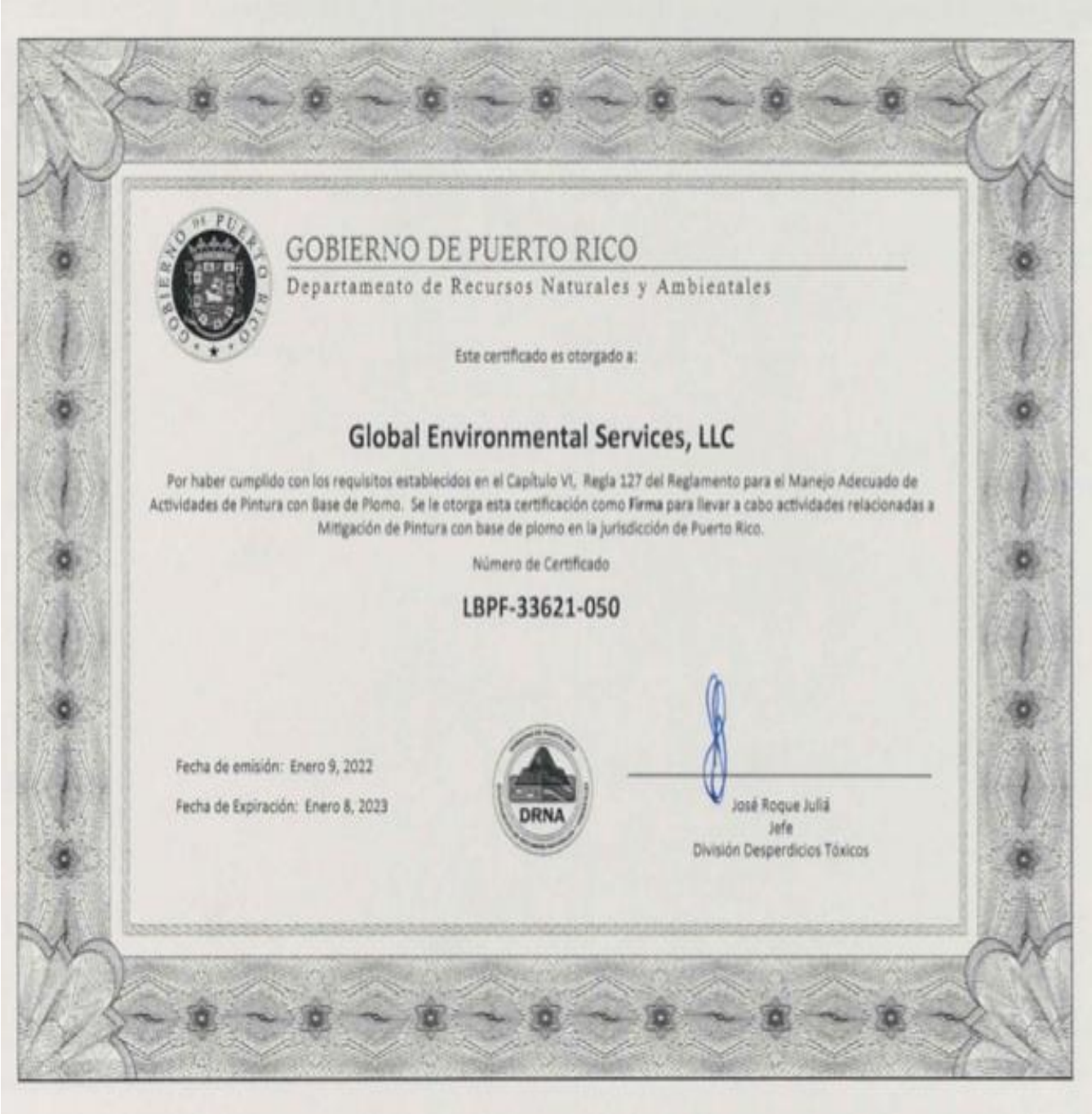


GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
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ADDENDUM IV

CERTIFICATIONS GRANTED BY THE DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES OF PUERTO RICO

GLOBAL ENVIRONMENTAL SERVICES LLC
COMPANY LEAD CERTIFICATION



GOBIERNO DE PUERTO RICO
Departamento de Recursos Naturales y Ambientales

Este certificado es otorgado a:

Global Environmental Services, LLC

Por haber cumplido con los requisitos establecidos en el Capítulo VI, Regla 127 del Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo. Se le otorga esta certificación como Firma para llevar a cabo actividades relacionadas a Mitigación de Pintura con base de plomo en la jurisdicción de Puerto Rico.

Número de Certificado

LBPF-33621-050

Fecha de emisión: Enero 9, 2022

Fecha de Expiración: Enero 8, 2023

DRNA

José Roque Julia
Jefe
División Desperdicios Tóxicos

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MR. ELIS J. MORALES- LEAD BASED PAINT INSPECTOR CERTIFICATION





GLOBAL ENVIRONMENTAL SERVICES LLC
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ADDENDUM V

LBP TESTING COMBINATIONS

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality

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GES 2022-218	XRF Serial Number: 100102	Project: Leoncio Velazquez Avenue in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022		
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
1	***Calibrate***				***1.0***		
2	***Calibrate***				***0.9***		
3	***Calibrate***				***0.9***		
4	*Leoncio Velazquez Ave.*	*Cross Walk*	*Across*	*Asphalt*	*0.01*	*Neg*	
5	*Leoncio Velazquez Ave.*	*Solid White Line*	*Right Side*	*Asphalt*	*0.00*	*Neg*	
6	*Leoncio Velazquez Ave.*	*Solid White Line*	*Right Side*	*Asphalt*	*0.02*	*Neg*	
7	*Leoncio Velazquez Ave.*	*Solid White Line*	*Right Side*	*Asphalt*	*0.01*	*Neg*	
8	*Leoncio Velazquez Ave.*	*Solid White Line*	*Right Side*	*Asphalt*	*0.01*	*Neg*	
9	*Leoncio Velazquez Ave.*	*Solid White Line*	*Right Side*	*Asphalt*	*0.01*	*Neg*	
10	*Leoncio Velazquez Ave.*	*Yellow Curb Line*	*Right Side*	*Concrete*	*0.01*	*Neg*	
11	*Leoncio Velazquez Ave.*	*Yellow Curb Line*	*Right Side*	*Concrete*	*0.01*	*Neg*	
12	*Leoncio Velazquez Ave.*	*Yellow Curb Line*	*Right*	*Concrete*	*0.01*	*Neg*	
13	*Leoncio Velazquez Ave.*	*Yellow Curb Line*	*Right*	*Concrete*	*0.01*	*Neg*	
14	*Leoncio Velazquez Ave.*	*Yellow Curb Line*	*Right Side*	*Concrete*	*0.01*	*Neg*	
15	*Leoncio Velazquez Ave.*	*Solid Yellow Line*	*Center Right*	*Asphalt*	*0.01*	*Neg*	
16	*Leoncio Velazquez Ave.*	*Solid Yellow Line*	*Center Right Side*	*Asphalt*	*0.00*	*Neg*	
17	*Leoncio Velazquez Ave.*	*Solid Yellow Line*	*Center Right*	*Asphalt*	*0.01*	*Neg*	

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality

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GES 2022-218	XRF Serial Number: 100102	Project: Leoncio Velazquez Avenue in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022		
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm^2)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
18	Leoncio Velazquez Ave.	Solid Yellow Line	Center Right	Asphalt	0.01	Neg	
19	Leoncio Velazquez Ave.	Solid Yellow Line	Center Right	Asphalt	0.01	Neg	
20	Leoncio Velazquez Ave.	Solid Yellow Line	Center Left	Asphalt	0.01	Neg	
21	Leoncio Velazquez Ave.	Solid Yellow Line	Center Left Side	Asphalt	0.02	Neg	
22	Leoncio Velazquez Ave.	Solid Yellow Line	Center Left Side	Asphalt	0.01	Neg	
23	Leoncio Velazquez Ave.	Solid Yellow Line	Center Left	Asphalt	0.00	Neg	
24	Leoncio Velazquez Ave.	Solid Yellow Line	Center Left Side	Asphalt	0.01	Neg	
25	Leoncio Velazquez Ave.	Yellow Curb Line	Center Right Side	Concrete	0.01	Neg	
26	Leoncio Velazquez Ave.	Yellow Curb Line	Center Right Side	Concrete	0.00	Neg	
27	Leoncio Velazquez Ave.	Yellow Curb Line	Center Left Side	Concrete	0.01	Neg	
28	Leoncio Velazquez Ave.	Yellow Curb Line	Center Left Side	Concrete	0.01	Neg	
29	Leoncio Velazquez Ave.	Wood Box	Center Side	Wood	0.02	Neg	
30	Leoncio Velazquez Ave.	Light Pole	Center Side	Metal	0.02	Neg	
31	Leoncio Velazquez Ave.	Light Pole	Center Side	Metal	0.02	Neg	

GLOBAL ENVIRONMENTAL SERVICES LLC
Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

GES 2022-218	XRF Serial Number: 100102	Project: Leoncio Velazquez Avenue in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022		
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
32	Leoncio Velazquez Ave.	Light Pole	Center Side	Metal	0.02	Neg	
33	Leoncio Velazquez Ave.	Light Pole	Center	Metal	0.02	Neg	
34	Leoncio Velazquez Ave.	Light Pole	Center	Metal	0.02	Neg	
35	Leoncio Velazquez Ave.	Light Pole	Center	Metal	0.00	Neg	
36	Leoncio Velazquez Ave.	Light Pole	Center	Metal	0.02	Neg	
37	Leoncio Velazquez Ave.	Light Pole	Center	Metal	0.02	Neg	
38	Leoncio Velazquez Ave.	Light Pole	Center	Metal	0.02	Neg	
39	Leoncio Velazquez Ave.	Light Pole	Center	Metal	0.02	Neg	
40	Leoncio Velazquez Ave.	Light Pole	Center Side	Metal	0.02	Neg	
41	Leoncio Velazquez Ave.	Light Pole	Center	Metal	0.02	Neg	
42	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.02	Neg	
43	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.02	Neg	
44	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
45	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
46	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.01	Neg	
47	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
48	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.02	Neg	
49	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.01	Neg	
50	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.02	Neg	

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

GES 2022-218	XRF Serial Number: 100102	Project: Leoncio Velazquez Avenue in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022		
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm²)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
51	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
52	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
53	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.01	Neg	
54	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.01	Neg	
55	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
56	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
57	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
58	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
59	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
60	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
61	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left Side	Metal	0.02	Neg	
62	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.00	Neg	
63	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.02	Neg	
64	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.02	Neg	
65	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.02	Neg	
66	Leoncio Velazquez Ave.	Light Pole Pipe Barrier	Left	Metal	0.02	Neg	
67	Leoncio Velazquez Ave.	Solid White Line	Left	Asphalt	0.01	Neg	
68	Leoncio Velazquez Ave.	Solid White Line	Left	Asphalt	0.01	Neg	
69	Leoncio Velazquez Ave.	Solid White Line	Left	Asphalt	0.00	Neg	

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RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

GES 2022-218	XRF Serial Number: 100102	Project: Leoncio Velazquez Avenue in Caguas, PR	Client: Vazquez Assoc.	LBP Inspector: Mr. Elis J. Morales	Date: December 3, 2022	**Page 24/32**	
Sample ID	*Functional Space*	*Component*	*Side*	*Substrate*	*XRF Reading (mg/cm^2)*	*Result Pos./ Neg.*	*Approx. Sq. ft./ Ln. Ft.*
70	Leoncio Velazquez Ave.	Solid White Line	Left Side	Asphalt	0.01	Neg	
71	Leoncio Velazquez Ave.	Solid White Line	Left Side	Asphalt	0.01	Neg	
72	Leoncio Velazquez Ave.	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
73	Leoncio Velazquez Ave.	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
74	Leoncio Velazquez Ave.	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
75	Leoncio Velazquez Ave.	Yellow Curb Line	Left Side	Concrete	0.01	Neg	
76	Leoncio Velazquez Ave.	Yellow Curb Line	Left Side	Concrete	0.00	Neg	
77	Leoncio Velazquez Ave.	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
78	Leoncio Velazquez Ave.	Blue Street Ramp	Right Side	Concrete	0.01	Neg	
79	Leoncio Velazquez Ave.	Blue Street Ramp	Left Side	Asphalt	0.01	Neg	
80	**Leoncio Velazquez Ave. Sub-Station**	**Yellow Curb**	**Left Side**	**Concrete**	**2.1**	**Pos.**	**11 Ln. Ft. Approx.**
81	**Leoncio Velazquez Ave. Sub-Station**	**Pipe Barrier**	**Left Side**	**Metal**	**1.9**	**Pos.**	**8 Ln. Ft. Approx.**
82	**Leoncio Velazquez Ave. Sub-Station**	**Pipe Barrier**	**Left Side**	**Metal**	**1.8**	**Pos.**	**(2 units)**
83	**Calibrate**				**1.0**		
84	**Calibrate**				**0.9**		
85	**Calibrate**				**0.9**		

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Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
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ADDENDUM VI

TABLE SUMMARY OF COMPONENTS WITH LEAD BASED PAINT

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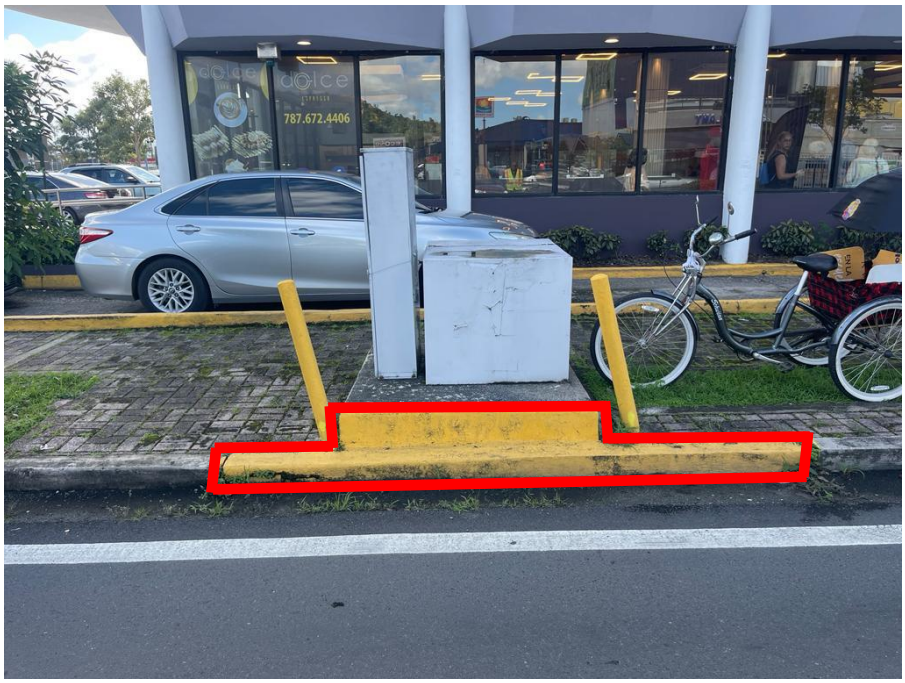
TABLE SUMMARY OF COMPONENTS WITH LEAD BASED PAINT

FUNCTIONAL SPACE	COMPONENT	SIDE	SUBSTRATE	SQ. FT. APPROX./ Units
Leoncio Velazquez Avenue Sub-Station	Yellow Curb	Left	Concrete	11 ln. ft. approx.
Leoncio Velazquez Avenue Sub-Station	Yellow Pipe Barrier	Left	Metal	8 ln. ft. approx. (2 units)
Leoncio Velazquez Avenue Sub-Station	Yellow Pipe Barrier	Left	Metal	

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ADDENDUM VII

PHOTOGRAPHS OF POSITIVE COMPONENTS WITH LEAD BASED PAINT



Leoncio Velazquez Avenue-Sub-Station- Concrete Yellow Curbs with Lead Based Paint



Leoncio Velazquez Avenue-Sub-Station- Concrete Yellow Pipes Barriers with Lead Based Paint

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Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality
RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

ADDENDUM VIII

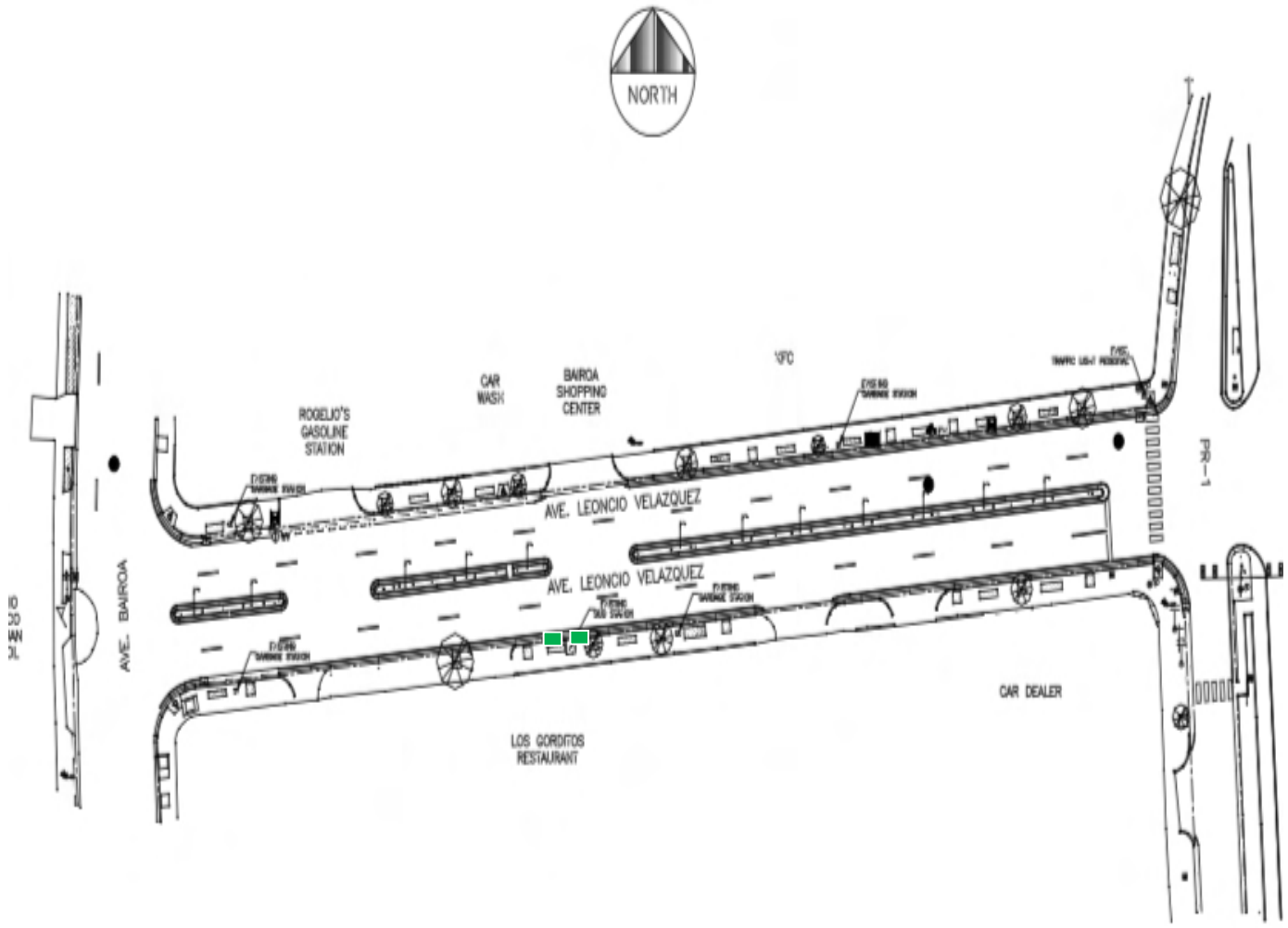
WHERE THE POSITIVE COMPONENTS AREA FOUND WITH LEAD BASED PAINT

GLOBAL ENVIRONMENTAL SERVICES LLC

Asbestos & Lead Based Paint Survey/Environmental Consultants Services/Industrial Hygiene/Indoor Air Quality

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LBP POSITIVE RESULTS LOCATIONS



NOT TO SCALE

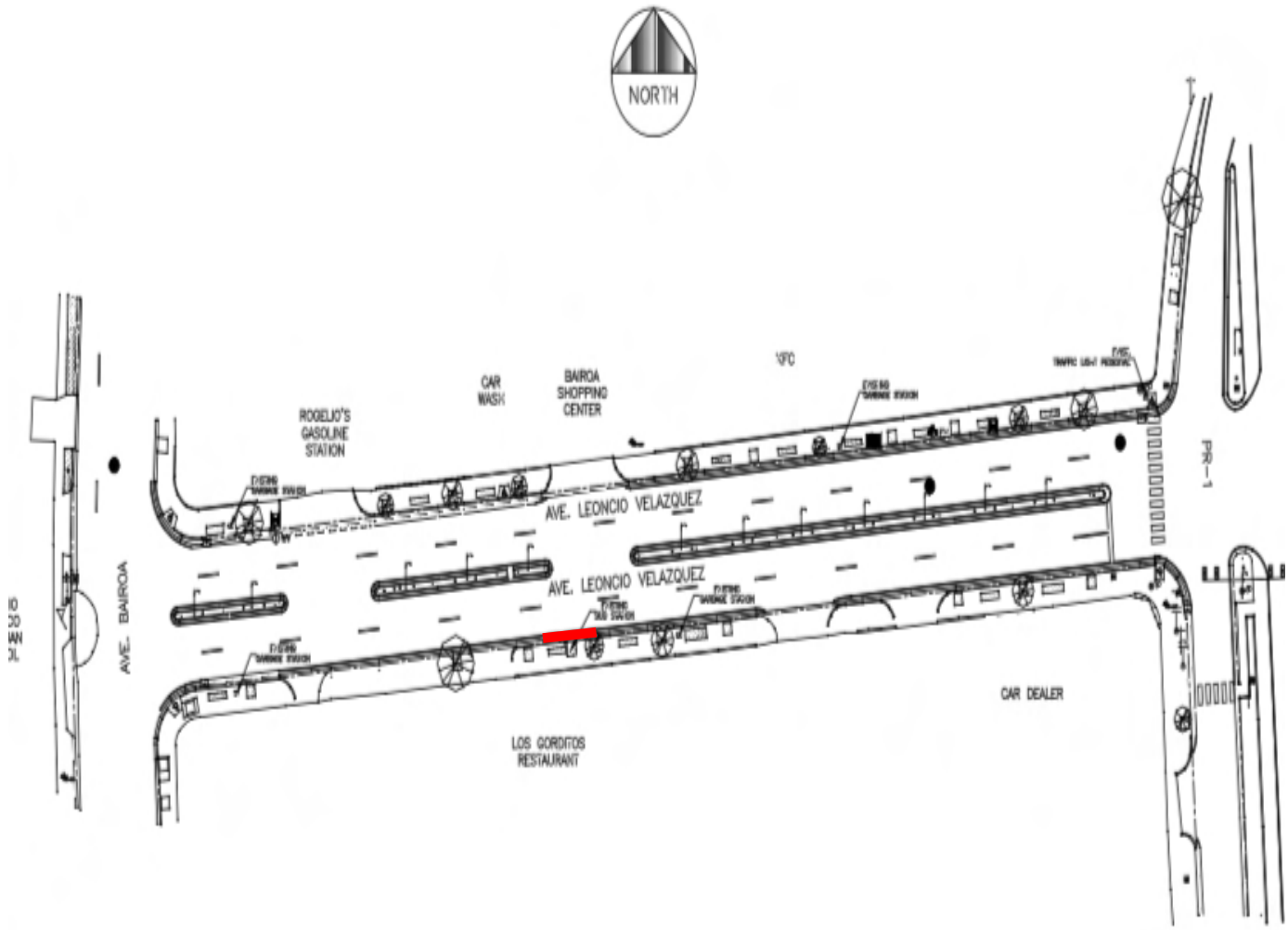
= METAL YELLOW PIPE BARRIERS WITH LBP

GLOBAL ENVIRONMENTAL SERVICES LLC

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LBP POSITIVE RESULTS LOCATIONS



NOT TO SCALE

= *CONCRETE YELLOW CURBS WITH LBP*

RR8 BOX 1995 PMB 313 BAYAMON, PR 00956 EM@IL: globalespr@gmail.com PHONES: 787-994-2203 / 787-607-8965

ADDENDUM VI

CONCLUSION

Global Environmental Services LLC recommends the owner or representative of owner to hire a Company Certified in the Department of Natural and Environmental Resources (DNER) of Puerto Rico to mitigate and dispose positive areas with Lead Based Paint if is going to touch or demolish the aforementioned areas.

Exhibit G
2. Letters from the DNER properties near PR34, PR156, and Leoncio Blvd

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES

4 de mayo de 2023

VÍA CORREO ELECTRÓNICO: avaenvironmental@gmail.com

Ing. Annette M. Fernández Rosario, *PE*
AVA Environmental Consultants
PO Box 361300
San Juan, PR 00936-1300

Estimada ingeniera Fernández:

El 30 de abril de 2023 se recibió una carta Fase 1 por correo electrónico, en la cual usted solicita información sobre los incidentes ambientales que hubiesen ocurrido en o cerca del lugar que se menciona a continuación:

Facilidad: Propiedades ubicadas en la PR-156 y PR-34,
Caguas, Puerto Rico

En respuesta a su solicitud, el Área de Respuesta a Emergencias Ambientales y Programa Superfondo ha revisado los expedientes encontrados en nuestro archivo físico y en nuestro sistema mecanizado de datos. De la revisión realizada, tengo a bien informarle que el 19 de febrero de 2021 ocurrió un derrame diesel en *Viatris* (antes *Mylan*) en la PR-156, km 58.8, Caguas, PR. Sin embargo, no existe un Lugar Superfondo registrado o propuesto dentro del radio de una milla del lugar concerniente.

Esperamos que esta información le sea de utilidad. De tener alguna duda o pregunta se puede comunicar con Amarilis Rodríguez Méndez, Oficial de Inspección y Cumplimiento Ambiental, Área de Respuesta a Emergencias Ambientales y Superfondo, al (787) 999-2200 extensión 5930 o por vía de correo electrónico a: amarilisrodriguez@drna.pr.gov.

Cordialmente,

Edwin Malavet Santiago, Gerente
Área de Respuesta a Emergencias Ambientales
y Superfondo

ARM ARM

Gmail **Annette M. Fernandez <avaenvironmental@gmail.com>**

Solicitud información Fase 1 - PR 156 & PR 34, Caguas

1 message

Pedro Guevara Lopez <pedroguevara@drna.pr.gov> Tue, May 16, 2023 at 11:54 AM
To: "avaenvironmental@gmail.com" <avaenvironmental@gmail.com>
Cc: Maria V Rodriguez Munoz <mariavrodriguez@drna.pr.gov>, Luz E Nieves Rodriguez <luznieves@drna.pr.gov>

Ing. Annette M. Fernandez Rosario

AVA Environmental Consultants

Asunto: Mejoramiento de carreteras en la PR 156 & PR 34

Saludos,

El 30 de abril de 2023 nos cursó al Área de Contaminación de Terrenos del DRNA una consulta sobre si a un radio de .5 millas de distancia del lugar de referencia existe o había existido algún vertedero o algún Sistema de Relleno Sanitario (SRS) para el manejo de los desperdicios sólidos. Luego de revisar nuestros expedientes electrónicos sobre la ubicación de SRS en operación y en cierre no hemos encontrado algún registro sobre la ubicación de este tipo de instalaciones en el lugar indicado, ni tampoco en su periferia a 800 metros de distancia. Esperamos que esta información le sea útil para su investigación ambiental. De tener alguna inquietud sobre este asunto, no dude en comunicarse con nosotros.

Cordialmente,

Pedro F. Guevara López
Jefe Interino, División de Permisos Desperdicios No Peligrosos
Área Contaminación de Terrenos
T. (787) 999-2200 Ext. 6217 | **E.** pedroguevara@drna.pr.gov

GOBIERNO DE PUERTO RICO
DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES

4 de mayo de 2023

VÍA CORREO ELECTRÓNICO: avaenvironmental@gmail.com

Ing. Annette M. Fernández Rosario, *PE*
AVA Environmental Consultants
PO Box 361300
San Juan, PR 00936-1300

Estimada ingeniera Fernández:

El 30 de abril de 2023 se recibió una carta Fase 1 por correo electrónico, en la cual usted solicita información sobre los incidentes ambientales que hubiesen ocurrido en o cerca del lugar que se menciona a continuación:

Facilidad: Propiedades ubicadas en la Calle Leoncio Velázquez, Caguas, Puerto Rico

En respuesta a su solicitud, el Área de Respuesta a Emergencias Ambientales y Superfondo ha revisado los expedientes encontrados en nuestro archivo físico y en nuestro sistema mecanizado de datos tanto de emergencias ambientales como de Lugares Superfondo activos en la Lista Nacional de Prioridades de la Agencia Federal de Protección Ambiental (*USEPA*, por sus siglas en inglés). De la revisión realizada, tengo a bien informarle que no obra información de casos que hayan impactado adversamente al ambiente relacionados a una emergencia ambiental, escapes de sustancias peligrosas o derrames en las inmediaciones o cerca del lugar antes mencionado. Tampoco, existe un Lugar Superfondo registrado o propuesto dentro del radio de una milla del lugar concerniente.

Esperamos que esta información le sea de utilidad. De tener alguna duda o pregunta se puede comunicar con Amarilis Rodríguez Méndez, Oficial de Inspección y Cumplimiento Ambiental, Área de Respuesta a Emergencias Ambientales y Superfondo, al (787) 999-2200 extensión 5930 o por vía de correo electrónico a: amarilisrodriguez@drna.pr.gov.

Cordialmente,

Edwin Malavet Santiago, Gerente
Área de Respuesta a Emergencias Ambientales
y Superfondo

ARM

Gmail **Annette M. Fernandez <avaenvironmental@gmail.com>**

Solicitud de información Fase 1 - Ave. Leoncio Velázquez, Caguas

Pedro Guevara Lopez <pedroguevara@drna.pr.gov> Tue, May 16, 2023 at 10:30 AM
To: "avaenvironmental@gmail.com" <avaenvironmental@gmail.com>

Ing. Annette M. Fernandez Rosario

AVA Environmental Consultants

Asunto: Mejoramiento de carreteras en la Ave. Leoncio Velazquez en Caguas

Saludos,

El 30 de abril de 2023 nos cursó al Área de Contaminación de Terrenos del DRNA una consulta sobre si a un radio de .5 millas de distancia del lugar de referencia existe o había existido algún vertedero o algún Sistema de Relleno Sanitario (SRS) para el manejo de los desperdicios sólidos. Luego de revisar nuestros expedientes electrónicos sobre la ubicación de SRS en operación y en cierre no hemos encontrado algún registro sobre la ubicación de este tipo de instalaciones en el lugar indicado, ni tampoco en su periferia a ½ milla de distancia. Esperamos que esta información le sea útil para su investigación ambiental. De tener alguna inquietud sobre este asunto, no dude en comunicarse con nosotros.

Cordialmente,

Pedro F. Guevara López
Jefe Interino, División de Permisos Desperdicios No Peligrosos
Área Contaminación de Terrenos
T. (787) 999-2200 Ext. 6217 | **E.** pedroguevara@drna.pr.gov

Exhibit G
3. Certification of no presence of Asbestos at the Gautier Benitez Avenue

ShareTech
GROUP ENGINEERING, P.S.C.

Certificación de No Presencia de Asbesto

22 de febrero de 2023

Proyecto: Mun. Caguas-Ave Gautier Benitez Road Improvements
Asunto: Estudio de Asbesto
Dueño: Municipio de Caguas
Municipio: Caguas

Certificación No Presencia de Asbesto – Avenida Gautier Benítez & San Carlos Street

Yo Erick Pagán Ortiz, certifico que soy mayor de edad y vecino de Caguas, Puerto Rico, que soy inspector de Asbesto certificado con numero de registro ASB-0822-0345-SI, que he sido contratado por el Municipio de Caguas para inspeccionar la avenida Gautier Benítez y la carretera San Carlos localizadas en el km 36.0 hasta el km 38.0 de la avenida Gautier Benítez y la carretera San Carlos.

El día 21 y 22 de febrero de 2023, se realizó el estudio en la avenida Gautier Benítez y la carretera San Carlos y no se encontró ningún material sospechoso. Por ende, se hace entrega de la forma PGC-009 Certificación de No Presencia de Asbesto.

Cordialmente;

Erick Pagan Ortiz
EHS Field Technician

Physical Address:
Road #1 Km 34.4,
Plaza Bairoa Suite 215
Caguas, PR 00725

Contact Information:
Mail Address:
PO Box 1330, Caguas,
PR 00726-1330

Phone & Fax Numbers:
Phone: 787-720-5869
Fax. 787-720-2318

GOBIERNO DE PUERTO RICO
OFICINA DEL GOBERNADOR
JUNTA DE CALIDAD AMBIENTAL

Área de Calidad de Agua

Forma PGC-009

CERTIFICACION DE NO PRESENCIA DE ASBESTO EN ESTRUCTURAS A DEMOLERSE

(Deberá completarse en letra de molde o impresa)

NUM. PERMISO: _____

Yo, Erick Pagán Ortiz (Nombre), mayor de edad, soltero (Estado Civil), y vecino de caguas (Municipio)

Dirección Postal PO Box 1330, Caguas, PR 00726 (Pueblo) (Zip Code)

Teléfonos: Residencial (_____) _____- _____ Oficina (787) 720 - 5869 Ext._____
Fax (_____) _____- _____

Certifico que:

1. La estructura localizada en km 36.0 hasta el km 38.0 de la avenida Gautier Benítez y la carretera San Carlos, la cual será objeto de una demolición se encuentra libre de asbesto.
2. La información antes indicada es cierta y correcta.
3. Afirmo y reconozco las consecuencias de incluir y someter información falsa en este documento.
4. Para que así conste, firmo la presente certificación en caguas (Municipio) de Puerto Rico,

   hoy día 22 de febrero de 2023

Erick Pagán Ortiz
_____
Firma y Sello del Profesional o
Firma del Inspector de Asbesto registrado por la JCA (Original)

Nota: Ingenieros o Arquitectos deberán someter evidencia de que se encuentra al día en el pago de sus cuotas de colegiación e Inspectores de Asbesto deberán someter evidencia de la tarjeta de registro provista por la JCA.

Dirección Física: Ave. Ponce de León 1308, Carr. Estatal 8838, Sector el Cinco, Río Piedras, PR 00926
Dirección Postal: Apartado 11488, Santurce, PR 00910-1488
Tel. (787) 767-8181 • Fax (787) 767-1962

PUERTO RICO VERDE

Exhibit G
4. Lead Base Paint Report from Gautier Benitez

LEAD BASED PAINT INSPECTION REPORT

AT

José Gautier Benítez Avenue & San Carlos Street

Physical Address: Km 36.0 – 38.0, Gautier Benitez Avenue and San Carlos Street
Caguas, Puerto Rico



Prepared by:

ShareTech Group

PO Box 1330, Caguas, P.R.
00726-1330

Tel.: (787)720-5869 Fax: (787)
720-2318

Submitted to:

Municipio de Caguas

Caguas, PR

February 28, 2023

TABLE OF CONTENTS

TABLE OF CONTENTS 2

INTRODUCTION 3

METHODOLOGY AND EQUIPMENT 4

REPORT OF RESULT 6

INTERPRETATION OF RESULT 7

CONCLUSIONS AND RECOMMENDATIONS 7

DISCLOSURE 7

ENVIRONMENTAL ASSESSMENT REPORT CERTIFICATION 8

APPENDIX 9

- **APPENDIX A:** LEAD-BASED PAINT ASSESSMENT RESULTS 9
- **APPENDIX B:** LOCATIONS OF POSITIVE READINGS IN FLOOR PLANS 10
- **APPENDIX C:** ASSESSMENT PHOTOGRAPHS 16
- **APPENDIX D:** LEAD CERTIFICATIONS AND INSPECTOR LICENSES AND ACCREDITATIONS 55
- **APPENDIX E:** NITON XLP - PERFORMANCE CHARACTERISTIC SHEET 57

INTRODUCTION

The Municipality of Caguas retained the services of Sharetech Group Engineering PSC to provide professional environmental engineering consulting services consisting of performing a limited Lead Based Paint (LBP) inspection. The LBP inspection was conducted as part of Municipality of Caguas commitment to comply with local, state, and federal regulations and for identify paint that contains lead above allowable levels that could result in harm to workers, including construction personnel.

Lead Based Paint inspection was conducted on February 21, 2023 and February 22, 2023 at José Gautier Benítez Avenue & San Carlos Street located on Km 36.0 – 38.0, Jose Gautier Benitez Avenue and San Carlos Street in the municipality of Caguas, by Grace Berrios and Erick Pagán accredited lead inspectors. The inspection consisted of the evaluation of the sidewalk and asphalt of Jose Gautier Benitez Avenue and San Carlos Street.



Figure #1: Jose Gautier Benítez Avenue, Caguas, Puerto Rico.

LBP inspection conforming to HUD guidelines was performed to identify all lead-based paints on a surface-by-surface basis. A total of 273 readings were taken including 5 readings for calibration purposes using portable X-ray fluorescence (XRF) spectrum analyzer paint tests, Niton XLp 300 Series Analyzer. The results obtained are tabulated on Table #2: LBP

Assessment Results on Appendix A. The Interpretation of the results is presented on page 6, conclusions and recommendations are on page 8.

METHODOLOGY AND EQUIPMENT

The Lead Based Paint Sampling Procedure was designed to evaluate and document all the data obtained from the inspection in a sequential method that provided confidence of the results presentation.

The survey was performed following the methodology established in the HUD Guidelines for the Evaluation and Control of Lead Based Paint in Housing (2012 revision) and the Natural Resources and Environmental Department (DRNA by Spanish acronym) former PREQB Lead Based Paint Abatement Control Regulation.

An X-Ray Fluorescence (XRF) Lead Analyzer was used to test the paint for lead. This analyzer is a nondestructive method of testing paint and provides immediate results for each test conducted. If paint contains lead equal to or greater than 1.0 mg/cm^2, it is considered to be lead-based paint. The higher the reading on the XRF, the higher the lead content of the paint. The surfaces evaluation was performed as follows:

- If the lead concentration measured by the XRF Spectrum Analyzer is less than 1.0 mg/cm^2 it is considered negative.
- If the lead concentration measured by the XRF Spectrum Analyzer is equal or greater than 1.0 mg/cm^2 it is considered positive.



Figure #2: Image of Niton XLp 300 Series XRF Analyzer

The performance characteristics sheet for the instrument is attached at the end of this report. The spectrum analyzer automatically subtracts from a spectrum the fluorescence from the substrate of the paint, to give an accurate reading of lead contest without taking of samples or stripping of the paint. This performed via a computer program stored in the analyzer, which gives an instantaneous readout of the lead content of a site in milligrams of lead per square centimeter of surface area (mg/cm^2). The Niton Xlp 300A Series XRF Analyzers with serial number 114739, is calibrate before and during the survey.

The inspection was conducted following EPA's work practice standards for conducting lead-based paint activities (40 CFR 745.227), the U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (Guidelines) with the 1997, 2000 and 2012 revisions, and all State and local regulations.

Sharetech Group completed the lead-based paint inspection and investigation to identify all lead-based paint on a surface-by-surface basis. An average of 273 readings, including 4 readings for calibration, were collected at identified surfaces of the evaluated areas using portable X-ray fluorescence (XRF) spectrum analyzer paint testes, Niton XLp 300 Series Analyzer by state-certified lead inspector. Refer to Appendix D for inspector accreditations.

REPORT OF RESULT

Tables #1 summarize the components with lead-based paint. XRF Spectrum Analyzer is less than 1.0 mg/cm^2 it is considered negative. XRF Spectrum Analyzer is equal or greater than 1.0 mg/cm^2 it is considered positive.

Table #1: Positive Reading (at or above 1.0 mg/cm^2)

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
7	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Center curb	Yellow	con	2.00	Pos	35ft	Center of the road
21	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Center curb	Yellow	con	3.20	Pos	50ft	Lab. Clinico Turabo
25	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Bollard	Yellow	m	4.90	Pos	3.5ft	Shopping entrance
32	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	3.80	Pos	25ft	
43	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	4.50	Pos	600ft	Center Curb Island
45	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	4.50	Pos	650ft	Center Curb Island
48	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	5.80	Pos	650ft	Same marking line that #45
82	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	1.50	Pos	18ft	Corner Apt Los Flamboyanes
93	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb island	Yellow	con	1.50	Pos	130ft	Intersection
102	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	1.40	Pos	15ft	Front of House C-33
106	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	4.60	Pos	32ft	CMC
108	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	2.40	Pos	32ft	CMC
127	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	1.90	Pos	30ft	
139	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.40	Pos	25ft	CMC Entrance
154	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	2.10	Pos	90ft	
159	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	con	1.60	Pos	50ft	Resuelve Otro lado
170	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	1.40	Pos	45ft	Pep boys
172	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	2.00	Pos	20ft	Total Mariolga
173	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	2.60	Pos	9ft	USPS
174	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.10	Pos	40ft	USPS
177	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	8.60	Pos	12ft	USPS

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
178	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.50	Pos	30ft	Wendys
179	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	2.30	Pos	3ft	Wendys
193	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	1.90	Pos	30ft	BK
220	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.60	Pos	18ft	NUC
227	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.90	Pos	80ft	Banco popular
238	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	3.20	Pos	50ft	McDonalds entrance
239	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	2.40	Pos	90ft	Wendys entrance
240	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.40	Pos	20ft	Dennys and Wendys entrance
241	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	3.60	Pos	20ft	Dennys
242	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	2.20	Pos	3ft	Dennys
245	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	2.50	Pos	35ft	
247	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	2.00	Pos	66ft	Pep Boys
248	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Blue	con	4.10	Pos	3ft	Pep Boys
258	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	1.50	Pos	60ft	Texaco
262	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Post	Yellow	m	3.80	Pos	5ft	Corner of BK
263	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	4.40	Pos	3ft	Corner of BK

INTERPRETATION OF RESULT

The survey was performed following the methodology established in the HUD Guidelines for the Evaluation and Control of Lead Based Paint Housing and Natural Resources Environmental Department (DRNA by acronym in Spanish) Lead Based Paint Abatement Control Regulation. The surfaces evaluation was performed as follows:

- If the lead concentration measured by the XRF Spectrum Analyzer is less than 1.0 mg/cm^2 it is considered negative.
- If the lead concentration measured by the XRF Spectrum Analyzer is equal or greater than 1.0 mg/cm^2 it is considered positive.

Lead Based Paint was detected as stated USEPA/HUD definition of lead-based paint (at or above 1.0 mg/cm^2) at 37 of the 273 tested locations. The remaining tested component coatings were below the USEPA/HUD definition of lead-based paint or below the detection limit of the instrument.

CONCLUSIONS AND RECOMMENDATIONS

The lead-based inspection was performed to accessible components and surfaces. If suspected components that could contain lead are encountered underneath of construction materials, they shall be managed as containing lead until the appropriate sampling is performed.

According to the DRNA lead regulations, prior to the demolishing of a structure containing lead-based paint, the contaminated surfaces or substrates must be abated or removed. The waste generated must be characterized to determine if the waste generated is hazardous or non-hazardous waste. The general contractor providing the abatement must be trained and certified as abatement workers by a training provider accredited by the DRNA.

DISCLOSURE

According to the Federal Law (24 CFR part 35 and 40 CFR part 745) a copy of this summary must be provided to new tenants and purchasers of this facility/property, before they become obligated under a lease or sales contract. The entire report must also be provided to new purchasers and be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet, including standard warning language in their leases or sales contracts to ensure that parents have the information necessary to protect their children from lead-based paint hazards.

The Occupational Safety and Health Administration (OSHA) Lead in Construction Standard states that “negative” readings (i.e., those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm^2) does not relieve contractors from performing exposure assessments (personal air monitoring) on their employees per the OSHA Lead Standard and should not be interpreted as lead free. Although a reading may indicate “negative”, airborne lead concentrations still may exceed the OSHA Action Level or the OSHA Permissible exposure limit (PEL) depending on the work activity.

ENVIRONMENTAL ASSESSMENT REPORT CERTIFICATION

Sharetech Group Engineering has performed this lead- based paint inspection in a thorough and professional manner consistent with commonly accepted industry standards. The inspection was conducted on February 21, 2023 and February 22, 2023 by Grace Berrios state-certified inspector LBPI-36122-427 and Erick Pagán, state-certified inspector LBPI-23022-231, qualified by experience, education, and training in the recognition of lead-based paint and approved sampling techniques using the Niton XLp-300.



Erick Pagán Ortiz

EHS Technician

APPENDIX

APPENDIX A: LEAD-BASED PAINT ASSESSMENT RESULTS

Table #2: LBP Assessment Results

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
1	José Gautier Benítez & San Carlos Street	2/21/2023		Det. Calibration						
2	José Gautier Benítez & San Carlos Street	2/21/2023		Calibration			1.10			Range (0.8 to 1.2 mg/cm2)
3	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.18	Neg		Intersection with Plaza del Carmen
4	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	White	asphalt	0.00	Neg		
5	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
6	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
7	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Center curb	Yellow	con	2.00	Pos	35ft	Center of the road
8	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	White	asphalt	0.00	Neg		Center of the road
9	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Lamp post	Green	m	0.00	Neg		Center of the road
10	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
11	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Canopy	Green	m	0.14	Neg		Bus top
12	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Canopy	Red	m	0.00	Neg		Bus top
13	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Box	Yellow	w	0.00	Neg		Wooden box - center of curb
14	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Box	Yellow	w	0.00	Neg		Wooden box - center of curb
15	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Center curb	Yellow	con	0.01	Neg		
16	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Center curb	Yellow	con	0.26	Neg		Km 37.2
17	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	0.00	Neg		Center of the road
18	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Sewer
19	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Front of Advance Auto
20	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.07	Neg		Corner Advance Auto
21	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Center curb	Yellow	con	3.20	Pos	50ft	Lab. Clinico Turabo

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
22	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
23	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Center curb	Yellow	con	0.05	Neg		Lab. Clinico Turabo
24	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Lamp post	Green	m	0.00	Neg		
25	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Bollard	Yellow	m	4.90	Pos	3.5ft	Shopping entrance
26	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.16	Neg		
27	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Floor tile	White and gray	c.	0.60	Neg		Front of Dream Nutrition
28	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Contropiezas Plus
29	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	White	asphalt	0.00	Neg		center line
30	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.01	Neg		Corner of Arturo Meana
31	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
32	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	3.80	Pos	25ft	
33	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
34	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Column	Beige	con	0.00	Neg		Town sign
35	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Column	Wine	con	0.00	Neg		Town sign
36	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	0.00	Neg		
37	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Blue	con	0.40	Neg		Front of Maxi Body
38	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Front of Maxi Body
39	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	White	asphalt	0.00	Neg		Front of Maxi Body
40	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Wall	Red	con	0.00	Neg		Town sign - Bienvenidos a Turabo
41	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Wall	Beige	con	0.00	Neg		Town sign - Bienvenidos a Turabo
42	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Letter	Black	con	0.00	Neg		Town sign - Bienvenidos a Turabo

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
43	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	4.50	Pos	600ft	Center Curb Island
44	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	0.01	Neg		Front of Estancias del Rey
45	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	4.50	Pos	650ft	Center Curb Island
46	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Center curb	Yellow	con	0.00	Neg		
47	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
48	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	5.80	Pos	650ft	Same marking line that #45
49	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
50	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		Jardines de San Carlos
51	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Curb ramp	White	con	0.00	Neg		Jardines de San Carlos
52	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.02	Neg		Estancias del Rey
53	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	0.00	Neg		Sphere
54	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.00	Neg		
55	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Gray	con	0.00	Neg		
56	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Base sign	Yellow	con	0.00	Neg		Front of Tu Jardin BBQ
57	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Front of Tu Jardin BBQ
58	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		Front of Tu Jardin BBQ
59	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.25	Neg		
60	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
61	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Curb ramp	Yellow	con	0.00	Neg		
62	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Blue	con	0.00	Neg		El principe de los tornillos
63	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.01	Neg		EMA corp

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
64	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.02	Neg		Lab Clinico Turabo
65	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Perfect Hope Cleaner
66	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Canopy	Gray	m	0.00	Neg		Econo
67	José Gautier Benítez & San Carlos Street	2/21/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
68	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.50	Neg		
69	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		
70	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
71	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		
72	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Marking line	Yellow	asphalt	0.00	Neg		Center of the road
73	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
74	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Marking line	Blue	con	0.00	Neg		Apt. 1105
75	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Marking line	White	con	0.00	Neg		Apt. 5106
76	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		Sports Complex
77	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						
78	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.70	Neg		
79	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.02	Neg		Apt Los Flamboyanes
80	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						
81	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						
82	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	1.50	Pos	18ft	Corner Apt Los Flamboyanes
83	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	White	con	0.00	Neg		Corner Apt Los Flamboyanes
84	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Crosswalk	White	asphalt	0.00	Neg		Corner Apt Los Flamboyanes

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
85	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		Front of stairs
86	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.01	Neg		
87	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		Site 1 Edif C
88	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	White	con	0.00	Neg		Site 1 Edif C
89	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.01	Neg		Mobil Gas
90	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Lamp post	Green	m	0.00	Neg		
91	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		Intersection
92	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Marking line	White	con	0.00	Neg		Intersection
93	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb island	Yellow	con	1.50	Pos	130ft	Intersection
94	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		Intersection
95	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.03	Neg		Intersection
96	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.18	Neg		Centro Comunal Mariolga
97	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		Centro Comunal Mariolga
98	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	White	con	0.00	Neg		Centro Comunal Mariolga
99	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		
100	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		
101	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		
102	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	1.40	Pos	15ft	Front of House C-33
103	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	White	con	0.00	Neg		Front of House C-33
104	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		
105	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		Intersection

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
106	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	4.60	Pos	32ft	CMC
107	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
108	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	2.40	Pos	32ft	CMC
109	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
110	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						due to movement of equipment
111	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.20	Neg		Subestation 3015 G.B
112	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.01	Neg		
113	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		Entrance CMC
114	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.04	Neg		
115	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		Intersection
116	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
117	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		
118	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
119	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
120	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
121	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		
122	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
123	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
124	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						Due to movement of equipment
125	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		Shopping entrance
126	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Box	Yellow	w	0.00	Neg		

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
127	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	1.90	Pos	30ft	
128	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Lamp post	Green	m	0.00	Neg		
129	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		
130	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Sidewalk marking	Yellow	con	0.00	Neg		
131	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Marking line	Yellow	asphalt	0.00	Neg		
132	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Marking line	Yellow	asphalt	0.00	Neg		
133	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Crosswalk	White	asphalt	0.00	Neg		
134	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Null						
135	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb island	Yellow	con	0.00	Neg		
136	José Gautier Benítez & San Carlos Street	2/21/2023	San Carlos Street	Curb ramp	Blue	con	0.00	Neg		
137	José Gautier Benítez & San Carlos Street	2/22/2023		Det. Calibration						
138	José Gautier Benítez & San Carlos Street	2/22/2023		Calibration			0.80			Range (0.8 to 1.2 mg/cm2)
139	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.40	Pos	25ft	CMC Entrance
140	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.14	Neg		
141	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	White	asphalt	0.00	Neg		
142	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	0.00	Neg		Center road line
143	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Lamp post	Green	m	0.00	Neg		Center Curb Island
144	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Blue	con	0.00	Neg		Symbole on the floor of sidewalk
145	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Pink	con	0.00	Neg		Symbole on the floor of sidewalk
146	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Green	con	0.00	Neg		Symbole on the floor of sidewalk
147	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Metal Cage	Black	m	0.00	Neg		

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
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148	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Lamp	Brown	m	-0.54	Neg		
149	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
150	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.02	Neg		
151	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Crosswalk	White	asphalt	0.00	Neg		
152	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Trashcan	Red	m	0.00	Neg		
153	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
154	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	2.10	Pos	90ft	
155	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.40	Neg		Metro Pavia
156	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
157	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		Metro Pavia
158	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
159	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	con	1.60	Pos	50ft	Resuelve Otro lado
160	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	con	0.00	Neg		
161	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Blue	con	0.00	Neg		
162	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	0.00	Neg		
163	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Canopy	Green	m	0.05	Neg		Bus stop
164	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Canopy	Pink	w	0.00	Neg		Bus stop
165	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
166	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
167	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Green	con	0.00	Neg		
168	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.26	Neg		Total Mariolga

ShareTech GROUP ENGINEERING, P.S.C.

Lead Based Paint Inspection

José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.

Sample ID	Property ID	Date	Functional Space	Description*	Color	Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)	XRF Readings	Pos/Neg	Area	Comments - *Refer to photos for location
169	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sign	Brown	m	0.00	Neg		Center island
170	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	1.40	Pos	45ft	Pep boys
171	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.03	Neg		Mapfre
172	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	2.00	Pos	20ft	Total Mariolga
173	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	2.60	Pos	9ft	USPS
174	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.10	Pos	40ft	USPS
175	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		USPS
176	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	White	con	0.00	Neg		USPS
177	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	8.60	Pos	12ft	USPS
178	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.50	Pos	30ft	Wendys
179	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	2.30	Pos	3ft	Wendys
180	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Box	Yellow	w	0.00	Neg		McDonalds
181	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.00	Neg		
182	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Int. NUC
183	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
184	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Crosswalk	white	asphalt	0.00	Neg		
185	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
186	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
187	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
188	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.14	Neg		
189	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	0.00	Neg		

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
190	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	Yellow	asphalt	0.00	Neg		
191	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Marking line	White	asphalt	0.00	Neg		
192	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.08	Neg		Mup Toyota
193	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	1.90	Pos	30ft	BK
194	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.40	Neg		Furiel Auto
195	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
196	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
197	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.22	Neg		
198	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		Mobil Gas
199	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
200	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
201	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Lamp post	Green	m	0.01	Neg		
202	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Gray	con	0.00	Neg		PUMA
203	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.30	Neg		
204	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
205	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.40	Neg		Inter Americana
206	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Inter Americana
207	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.08	Neg		Inter Americana
208	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
209	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Crosswalk	White	asphalt	0.00	Neg		
210	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
211	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.50	Neg		
212	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
213	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Fritanga
214	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Red	con	0.00	Neg		Total Gautier
215	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Total Gautier
216	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.12	Neg		Furiel Auto
217	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.03	Neg		BK
218	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
219	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
220	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.60	Pos	18ft	NUC
221	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.02	Neg		
222	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
223	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.06	Neg		
224	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Canopy	Gray	m	0.00	Neg		Bus stop
225	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.01	Neg		
226	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
227	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.90	Pos	80ft	Banco popular
228	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.01	Neg		
229	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
230	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
231	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
232	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	white	con	0.00	Neg		
233	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.06	Neg		McDonalds
234	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
235	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
236	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Crosswalk	White	asphalt	0.00	Neg		
237	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.50	Neg		
238	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	3.20	Pos	50ft	McDonalds entrance
239	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	2.40	Pos	90ft	Wendys entrance
240	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	1.40	Pos	20ft	Dennys and Wendys entrance
241	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	3.60	Pos	20ft	Dennys
242	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	2.20	Pos	3ft	Dennys
243	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.60	Neg		Caguas Coop
244	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Front of Caguas Coop
245	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	2.50	Pos	35ft	
246	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Mapfre
247	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	2.00	Pos	66ft	Pep Boys
248	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Blue	con	4.10	Pos	3ft	Pep Boys
249	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Canopy	Green	m	0.09	Neg		
250	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
251	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
252	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.15	Neg		

ShareTech GROUP ENGINEERING, P.S.C.	Lead Based Paint Inspection José Gautier Benítez Avenue & San Carlos Street, Caguas, PR.									
Sample ID	**Property ID**	**Date**	**Functional Space**	**Description***	**Color**	**Subst. (wood (w), ceramic(c.), metal (m), concrete (con), Gypsum board (GB)**	**XRF Readings**	**Pos/Neg**	**Area**	**Comments - *Refer to photos for location**
253	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Real Madrid
254	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.08	Neg		Real Madrid
255	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
256	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	0.18	Neg		
257	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb ramp	Blue	con	0.00	Neg		
258	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Curb island	Yellow	con	1.50	Pos	60ft	Texaco
259	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.07	Neg		Texaco
260	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.23	Neg		Texaco
261	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.08	Neg		
262	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Post	Yellow	m	3.80	Pos	5ft	Corner of BK
263	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Bollard	Yellow	con	4.40	Pos	3ft	Corner of BK
264	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
265	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
266	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
267	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		Front of BK
268	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.00	Neg		
269	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
270	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.05	Neg		Km 37
271	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Sidewalk marking	Yellow	con	0.10	Neg		
272	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Null						Due to movement of equipment
273	José Gautier Benítez & San Carlos Street	2/22/2023	José Gautier Benítez Avenue	Calibration			0.80			Range (0.8 to 1.2 mg/cm2)

APPENDIX B: LOCATIONS OF POSITIVE READINGS IN FLOOR PLANS

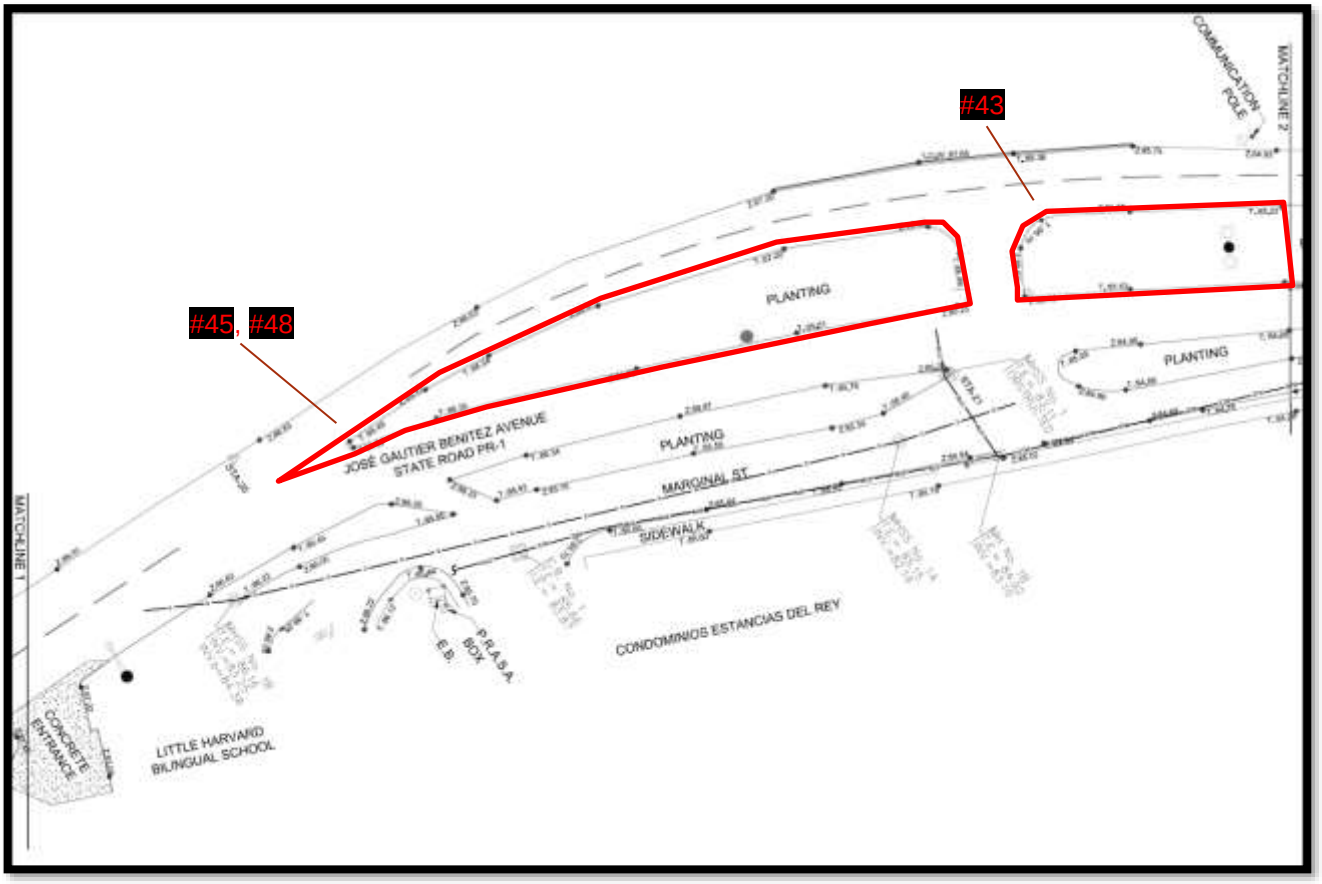


Figure #3: Positive lead reading location Plan



Figure #4: Positive lead reading location Plan

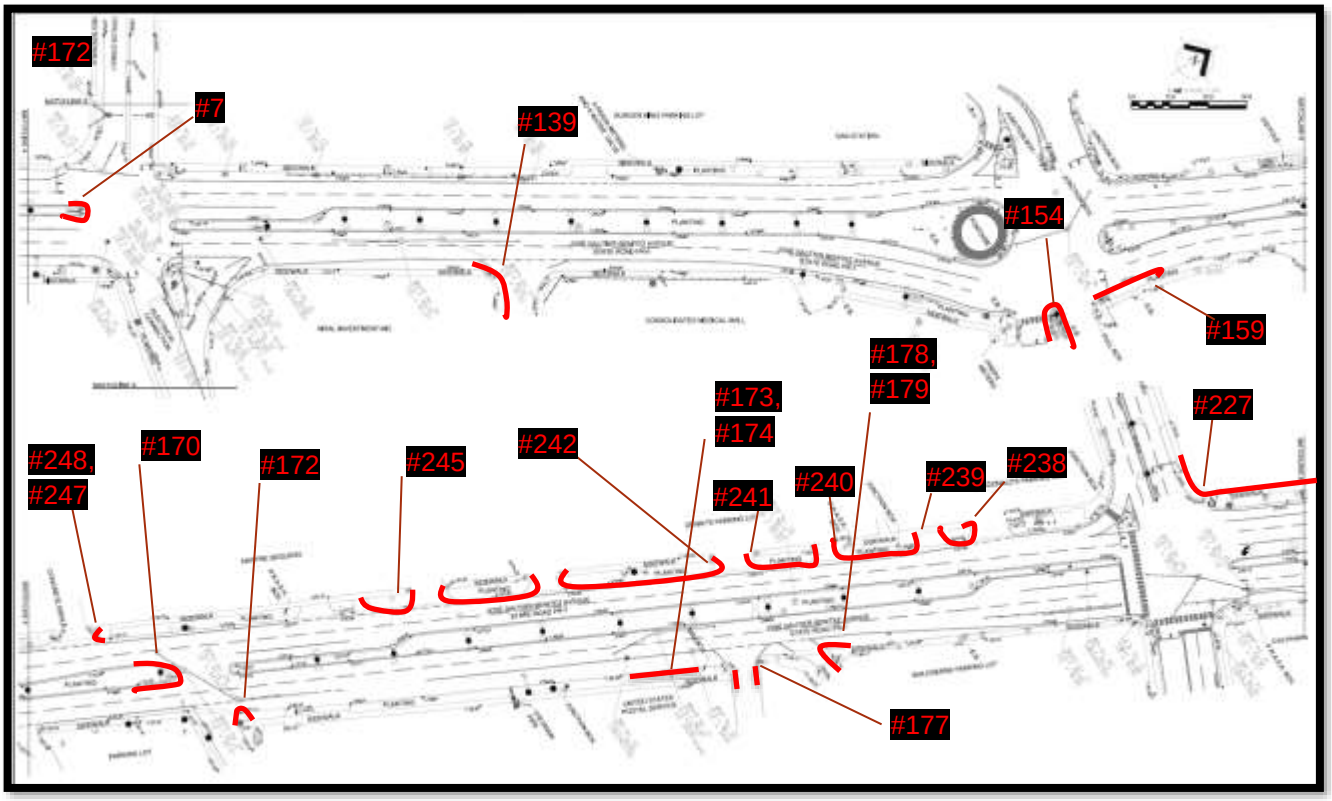


Figure #5: Positive lead reading location Plan

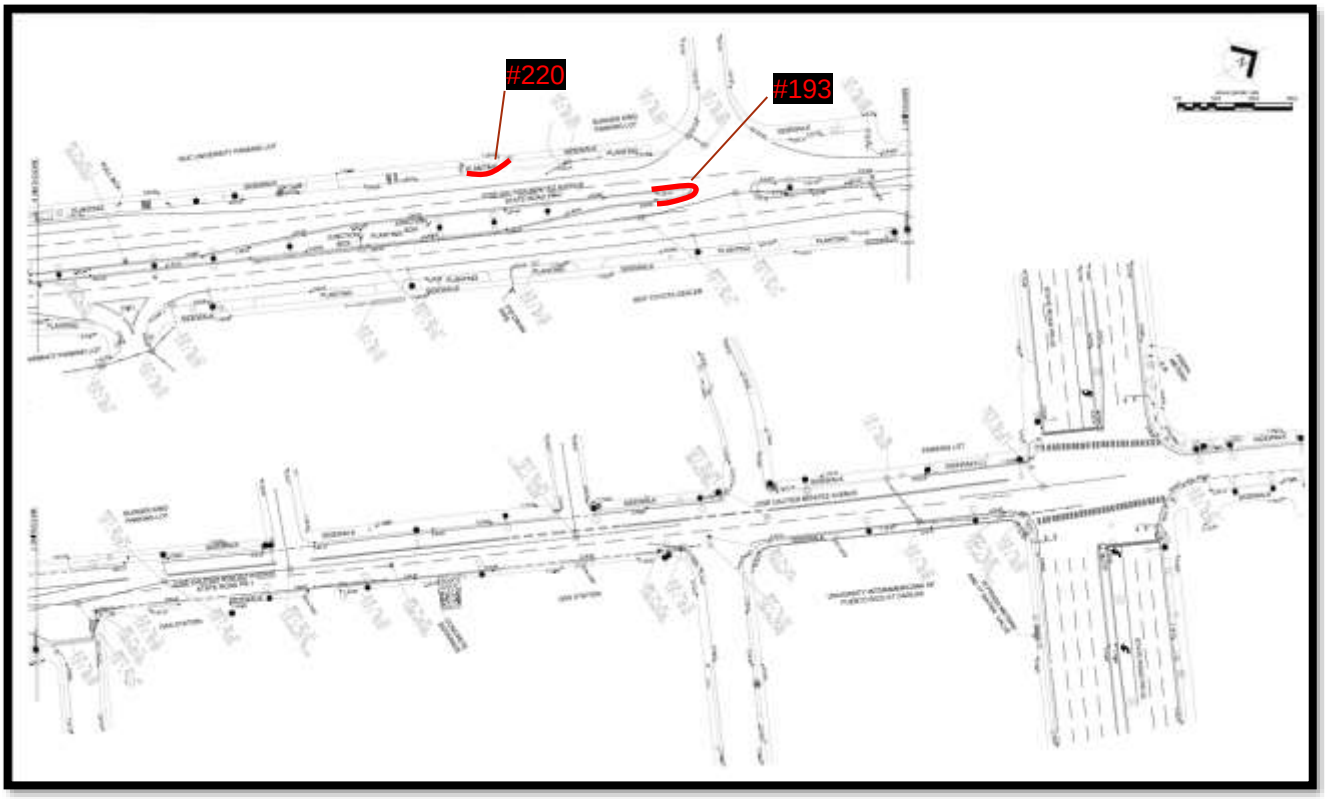


Figure #6: Positive lead reading location Plan



Figure #7: Positive lead reading location Plan



Figure #8: Positive lead reading location Plan

APPENDIX C: ASSESSMENT PHOTOGRAPHS

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #3



ID #4



ID #7



ID #8



ID #9



ID #10

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #11



ID #12



ID #13



ID #14



ID #15



ID #16

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #17



ID #18



ID #19



ID #20



ID #21



ID #23

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #24



ID #25



ID #26



ID #27



ID #28



ID #29

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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Lead Reading Photographs



ID #30



ID #31



ID #32



ID #33



ID #34



ID #35

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #36



ID #37



ID #38



ID #39



ID #40



ID #41

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #42



ID #43



ID #44



ID #45



ID #46



ID #48

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #49



ID #50



ID #51



ID #52



ID #53



ID #54

José Gautier Benitez Avenue & San Carlos Street
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ID #55



ID #56



ID #57



ID #58



ID #59



ID #61

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #62



ID #63



ID #64



ID #65



ID #66



ID #67

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #68



ID #69



ID #71



ID #72



ID #74



ID #75

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #76



ID #78



ID #79



ID #82



ID #83



ID #84

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #85



ID #86



ID #87



ID #88



ID #89



ID #90

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ID #91



ID #92



ID #93



ID #94



ID #95



ID #96

José Gautier Benitez Avenue & San Carlos Street
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ID #97



ID #98



ID #99



ID #100



ID #101



ID #102

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Caguas, Puerto Rico

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ID #103



ID #104



ID #105



ID #106



ID #108



ID #111

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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Lead Reading Photographs



ID #112



ID #113



ID #114



ID #115



ID #117



ID #121

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #125



ID #126



ID #127



ID #128



ID #129



ID #130

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #131



ID #132



ID #133



ID #135



ID #136



ID #139

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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ID #140



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ID #143



ID #144



ID #145

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ID #146



ID #147



ID #148



ID #149



ID #150



ID #151

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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Lead Reading Photographs



ID #152



ID #154



ID #155



ID #157



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ID #159

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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Lead Reading Photographs



ID #160



ID #161



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ID #163



ID #164



ID #165

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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Lead Reading Photographs



ID #166



ID #167



ID #168



ID #169



ID #170



ID #171

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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Lead Reading Photographs



ID #172



ID #173



ID #174



ID #175



ID #176



ID #177

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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Lead Reading Photographs



ID #178



ID #179



ID #180



ID #181



ID #182



ID #183

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #184



ID #185



ID #187



ID #188



ID #189



ID #190

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

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Lead Reading Photographs



ID #191



ID #192



ID #193



ID #194



ID #195



ID #196

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #197



ID #198



ID #199



ID #200



ID #201



ID #202

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #203



ID #204



ID #205



ID #206



ID #207



ID #208

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #209



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ID #214

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #215



ID #216



ID #217



ID #218



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ID #221

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #222



ID #223



ID #224



ID #225



ID #227



ID #228

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #229



ID #231



ID #232



ID #233



ID #234



ID #236

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #237



ID #238



ID #239



ID #240



ID #241



ID #242

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #243



ID #234



ID #245



ID #246



ID #247



ID #248

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #249



ID #252



ID #253



ID #254



ID #256



ID #257

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #258



ID #259



ID #260



ID #261



ID #262



ID #263

José Gautier Benitez Avenue & San Carlos Street
Caguas, Puerto Rico

ShareTech GROUP

Lead Reading Photographs



ID #267



ID #268



ID #270



ID #271

APPENDIX D: LEAD CERTIFICATIONS AND INSPECTOR LICENSES AND ACCREDITATIONS



GOBIERNO DE PUERTO RICO

Departamento de Recursos Naturales y Ambientales

Este certificado es otorgado a:

Sharetech Group Engineering, PSC

Por haber cumplido con los requisitos establecidos en el Capítulo VI, Regla 127 del Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo. Se le otorga esta certificación como **Firma** para llevar a cabo actividades relacionadas a Mitigación de Pintura con base de plomo en la jurisdicción de Puerto Rico.

Número de Certificado

LBPF-36122-056

Fecha de emisión: Diciembre 27, 2022

Fecha de Expiración: Diciembre 26, 2023

DRNA

José Roque Juliá
Jefe
División Desperdicios Tóxicos


CERTIFICACIÓN PLOMO PUERTO RICO
Esta tarjeta autoriza a:
Eric Pagán Ortiz
Para realizar actividades relacionadas a Mitigación de Pintura con Base de Plomo
Disciplina: Inspector
Fecha de Expiración: Agosto 21, 2023
Certificación #:
LBPI-23022-231
Firma Autorizada
Departamento de Recursos Naturales y Ambientales


CERTIFICACIÓN PLOMO PUERTO RICO
Esta tarjeta autoriza a:
Grace Berrios López
Para realizar actividades relacionadas a Mitigación de Pintura con Base de Plomo
Disciplina: Inspector
Fecha de Expiración: Diciembre 18, 2023
Certificación #:
LBPI-36122-427
Firma Autorizada
Departamento de Recursos Naturales y Ambientales

APPENDIX E: NITON XLP - PERFORMANCE CHARACTERISTIC SHEET

Niton XLp 300, 9/24/2004, ed. 1

Performance Characteristic Sheet

EFFECTIVE DATE: **September 24, 2004** **EDITION NO.: 1**

MANUFACTURER AND MODEL:

Make: *Niton LLC*

Tested Model: *XLp 300*

Source: ^{109}Cd

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.
XLp 300A, XLp 301A, XLp 302A and XLp 303A.
XLi 700A, XLi 701A, XLi 702A and XLi 703A.
XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

1 of 3

Niton XLp 300, 9/24/2004, ed. 1

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
	All Data			Median for laboratory-measured lead levels (mg/cm^2)		
Substrate	25th Percentile	Median	75th Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

Exhibit G
5. RCRA list near the project area

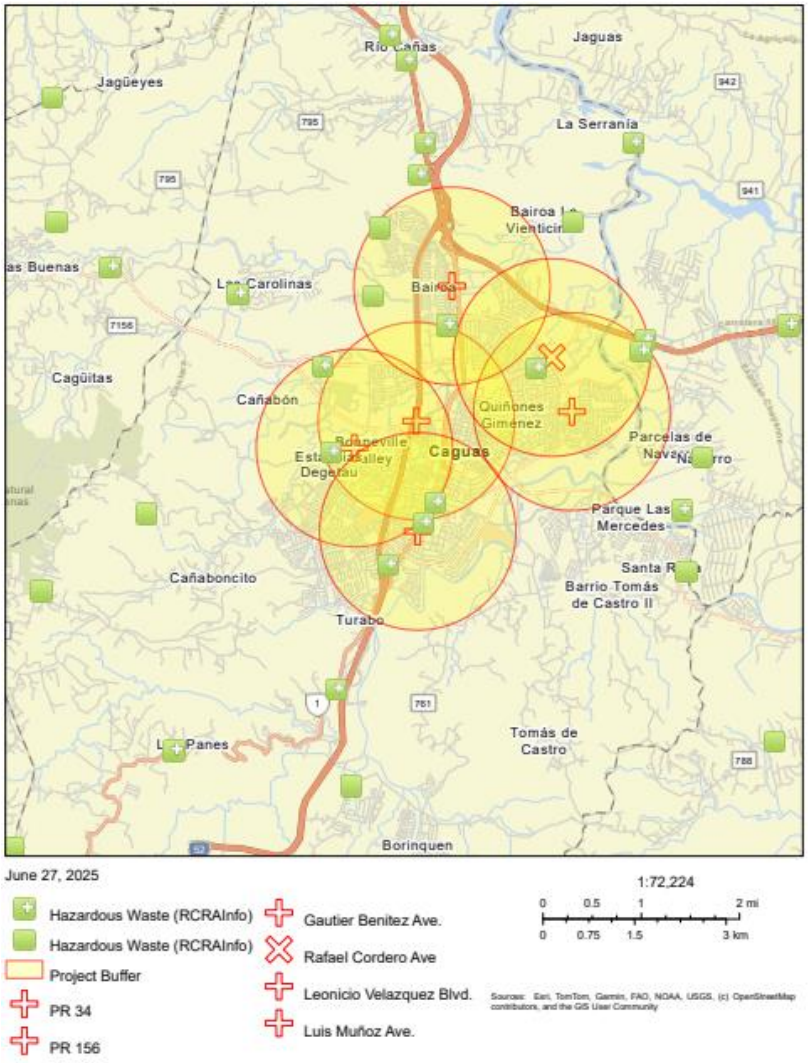
Contamination and Toxic Substances: Hazardous Waste Site List

Using the NEPAssist Tool, we established a midpoint on each avenue:

- Luis Muñoz Avenue: 18.235605, -66.018577
- Gautier Benitez Avenue: 18.217993, -66.042476
- Rafael Cordero Avenue: 18.243567, -66.021692
- Leonicio Velazquez Boulevard: 18.254106, -66.037167
- PR 156 Road: 18.234232, -66.042690
- PR 34 Road: 18.230256, -66.052290

From there, one (1) mile of buffer was added for each one to analyze the compliance at sites under the RCRA permit.

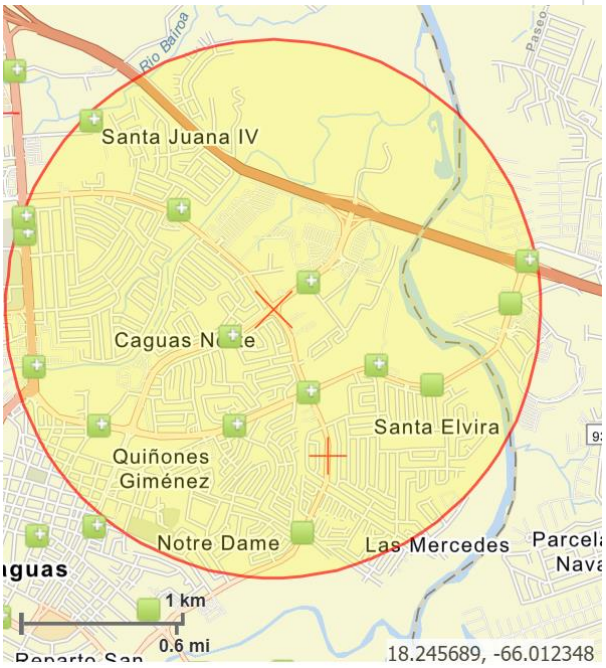
Aerial map



Rafael Cordero Avenue

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Report question: ***Within 1 undefined of a Hazardous waste site? yes***

Modify question by entering a new buffer distance and unit for the selected study area:

1 | miles | Submit

Name	Distance
ULTRALUMBER CORP (CAGUAS,PR)	0.99 mile
DEPARTAMENTO DE SANEAMENTO (CAGUAS,PR)	0.51 mile
SHELL CO PR LTD VILLA BLANCA SS 0701 (CAGUAS,PR)	0.99 mile
VILAR TRUCKING INC (CAGUAS,PR)	0.96 mile
LUIMA TRANSPORT INC (CAGUAS,PR)	0.96 mile
TEXACO PR INC WILLIAM ALVERIO (CAGUAS,PR)	0.34 mile
U M I DE PR INC (CAGUAS,PR)	0.97 mile
PATHEON PUERTO RICO INC (CAGUAS,PR)	0.93 mile
B H MICROFILM COMPONENTS INC (CAGUAS,PR)	0.95 mile
NEWBRIDGE NETWORKS INTL CORP (CAGUAS,PR)	0.97 mile
SACHS PLASTICS DIVISION (CAGUAS,PR)	0.92 mile
VEOLIA ES TECHNICAL SOLUTIONS LLC (GURABO,PR)	0.91 mile
PR ARMY NATIONAL GUARD (CAGUAS,PR)	0.65 mile
PEP BOYS MANNY MOE JACK THE 912 (CAGUAS,PR)	0.19 mile
ESSO STANDARD OIL CO PR CO 237 (CAGUAS,PR)	0.53 mile
WALGREENS 338 (CAGUAS,PR)	0.19 mile
SHELL CO PR LTD SS 804827 PARADIS (CAGUAS,PR)	0.78 mile
EUROTHORITY (CAGUAS,PR)	0.66 mile
CAGUAS EQUIPMENT RENTAL INC (CAGUAS,PR)	0.94 mile
COSTCO WHOLESALE 365 (CAGUAS,PR)	0.16 mile
PREMIER CLEANERS LAUNDRY DRY CLEANING (CAGUAS,PR)	0.48 mile
PREMIER CLEANERS (CAGUAS,PR)	0.48 mile
GARAJE JUANO (CAGUAS,PR)	0.51 mile
CHARNECO EUROPEAN HAUS (CAGUAS,PR)	0.51 mile
MEADWESTVACO HEALTHCARE PACKAGING PR LLC (CAGUAS,PR)	0.99 mile
DIESEL ENGINE TECHNICIAN (CAGUAS,PR)	0.51 mile
BENITEZ PAINT BODY SHOP (CAGUAS,PR)	0.51 mile
GREKORY EQUIP CORP (CAGUAS,PR)	0.51 mile
UNIVERSIDAD ANA G MENDEZ UAGM GURABO CAMPUS (GURABO,PR)	0.91 mile
FARMACIA EL AMAL 12 (CAGUAS,PR)	0.81 mile
ONE HOUR PROFESSIONAL CLEANER (CAGUAS,PR)	0.46 mile
LABEL MASTERS (CAGUAS,PR)	0.42 mile
ROJAS GEORGE (CAGUAS,PR)	0.51 mile
GREENWAY (GURABO,PR)	0.91 mile
IMPRESSION ASSOCIATES INC (CAGUAS,PR)	0.51 mile
JANSSEN ORTHO LLC EXTERNAL WHSE (CAGUAS,PR)	0.94 mile
OIL RECYCLERS INC (CAGUAS,PR)	0.19 mile
CARIBBEAN CV JOINTS AXLE CO (CAGUAS,PR)	0.94 mile
WALMART SUPERCENTER 2449 (CAGUAS,PR)	0.19 mile
HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.84 mile
BERRIOS AUTO GALLERY (CAGUAS,PR)	0.80 mile
CAGUAS BLOOD CANCER CENTER (CAGUAS,PR)	0.51 mile
NEOLPHARMA INC (CAGUAS,PR)	0.32 mile
TOTAL PETROLEUM PUERTOR ICO CORP SERVICE STATION 304130 (CAGUAS,PR)	0.51 mile
CENTRO AMBULATORIO HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.97 mile
CARIBBEAN PETROLEUM LP SS GULF 469 (CAGUAS,PR)	0.44 mile
APR UNLIMITED GENERAL CONTRACTORS (CAGUAS,PR)	0.34 mile
MULTI PAK POSTAL SERVICE (GURABO,PR)	0.89 mile
UNITED PARCEL SERVICE (CAGUAS,PR)	0.97 mile
UPS (CAGUAS,PR)	0.97 mile
BANFIELD PET HOSPITAL 2188 (CAGUAS,PR)	0.16 mile

Name *Hazardous waste site* at Rafael Cordero Avenue	Distance	Status
ULTRALUMBER CORP (CAGUAS,PR)	0.99 mile	In compliance
DEPARTAMENTO DE SANEAMENTO (CAGUAS,PR)	0.51 mile	In compliance
SHELL CO PR LTD VILLA BLANCA SS 0701 (CAGUAS,PR)	0.99 mile	In compliance
VILAR TRUCKING INC (CAGUAS,PR)	0.96 mile	In compliance
LUIMA TRANSPORT INC (CAGUAS,PR)	0.96 mile	In compliance
TEXACO PR INC WILLIAM ALVERIO (CAGUAS,PR)	0.34 mile	In compliance
U M I DE PR INC (CAGUAS,PR)	0.97 mile	In compliance
PATHEON PUERTO RICO INC (CAGUAS,PR)	0.93 mile	Inoperant
B H MICROFILM COMPONENTS INC (CAGUAS,PR)	0.95 mile	Inoperant
NEWBRIDGE NETWORKS INTL CORP (CAGUAS,PR)	0.97 mile	Inoperant
SACHS PLASTICS DIVISION (CAGUAS,PR)	0.92 mile	In compliance
VEOLIA ES TECHNICAL SOLUTIONS LLC (GURABO,PR)	0.91 mile	In compliance
PR ARMY NATIONAL GUARD (CAGUAS,PR)	0.65 mile	In compliance
PEP BOYS MANNY MOE JACK THE 912 (CAGUAS,PR)	0.19 mile	In compliance
ESSO STANDARD OIL CO PR CO 237 (CAGUAS,PR)	0.53 mile	In compliance
WALGREENS 338 (CAGUAS,PR)	0.19 mile	In compliance
SHELL CO PR LTD SS 804827 PARADIS (CAGUAS,PR)	0.78 mile	In compliance
EUROTHORITY (CAGUAS,PR)	0.66 mile	In compliance
CAGUAS EQUIPMENT RENTAL INC (CAGUAS,PR)	0.94 mile	In compliance
COSTCO WHOLESALE 365 (CAGUAS,PR)	0.16 mile	In compliance

Name *Hazardous waste site* at Rafael Cordero Avenue	Distance	Status
PREMIER CLEANERS LAUNDRY DRY CLEANING (CAGUAS,PR)	0.48 mile	In compliance
PREMIER CLEANERS (CAGUAS,PR)	0.48 mile	In compliance
GARAJE JUANO (CAGUAS,PR)	0.51 mile	In compliance
CHARNECO EUROPEAN HAUS (CAGUAS,PR)	0.51 mile	In compliance
MEADWESTVACO HEALTHCARE PACKAGING PR LLC (CAGUAS,PR)	0.99 mile	Inoperant
DIESEL ENGINE TECHNICIAN (CAGUAS,PR)	0.51 mile	In compliance
BENITEZ PAINT BODY SHOP (CAGUAS,PR)	0.51 mile	In compliance
GREKORY EQUIP CORP (CAGUAS,PR)	0.51 mile	Exceeds one (1) mile radius
UNIVERSIDAD ANA G MENDEZ UAGM GURABO CAMPUS (GURABO,PR)	0.91 mile	In compliance
FARMACIA EL AMAL 12 (CAGUAS,PR)	0.81 mile	Inoperant
ONE HOUR PROFESSIONAL CLEANER (CAGUAS,PR)	0.46 mile	In compliance
LABEL MASTERS (CAGUAS,PR)	0.42 mile	Exceeds one (1) mile radius
ROJAS GEORGE (CAGUAS,PR)	0.51 mile	Unknown
GREENWAY (GURABO,PR)	0.91 mile	In compliance
IMPRESSION ASSOCIATES INC (CAGUAS,PR)	0.51 mile	In compliance
JANSSEN ORTHO LLC EXTERNAL WHSE (CAGUAS,PR)	0.94 mile	Exceeds one (1) mile radius
OIL RECYCLERS INC (CAGUAS,PR)	0.19 mile	Inoperant
CARIBBEAN CV JOINTS AXLE CO (CAGUAS,PR)	0.94 mile	In compliance
WALMART SUPERCENTER 2449 (CAGUAS,PR)	0.19 mile	In compliance

Name *Hazardous waste site* at Rafael Cordero Avenue	Distance	Status
HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.84 mile	In compliance
BERRIOS AUTO GALLERY (CAGUAS,PR)	0.80 mile	Inoperant
CAGUAS BLOOD CANCER CENTER (CAGUAS,PR)	0.51 mile	In compliance
NEOLPHARMA INC (CAGUAS,PR)	0.32 mile	In compliance
TOTAL PETROLEUM PUERTOR ICO CORP SERVICE STATION 304130 (CAGUAS,PR)	0.51 mile	In compliance
CENTRO AMBULATORIO HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.97 mile	In compliance
CARIBBEAN PETROLEUM LP SS GULF 469 (CAGUAS,PR)	0.44 mile	In compliance
APR UNLIMITED GENERAL CONTRACTORS (CAGUAS,PR)	0.34 mile	In compliance
MULTI PAK POSTAL SERVICE (GURABO,PR)	0.89 mile	In compliance
UNITED PARCEL SERVICE (CAGUAS,PR)	0.97 mile	In compliance
UPS (CAGUAS,PR)	0.97 mile	In compliance
BANFIELD PET HOSPITAL 2188 (CAGUAS,PR)	0.16	In compliance

Luis Muñoz Marin Avenue

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Report question: ***Within 1 undefined of a Hazardous waste site?*** **yes**

Modify question by entering a new buffer distance and unit for the selected study area:

1 | miles | Submit

Name	Distance
TRANSPORTE SANCHEZ INC (CAGUAS,PR)	0.93 mile
TEXACO PR INC WILLIAM ALVERIO (CAGUAS,PR)	0.25 mile
MATSUSHITA ELECTRIC OF PR INC (CAGUAS,PR)	0.88 mile
VEOLIA ES TECHNICAL SOLUTIONS LLC (GURABO,PR)	0.93 mile
PR ARMY NATIONAL GUARD (CAGUAS,PR)	0.67 mile
PEP BOYS MANNY MOE JACK THE 912 (CAGUAS,PR)	0.57 mile
ESSO STANDARD OIL CO PR CO 237 (CAGUAS,PR)	0.48 mile
WALGREENS 338 (CAGUAS,PR)	0.57 mile
SHELL CO PR LTD SS 2976 TOMAS DE CASTRO (CAGUAS,PR)	0.94 mile
SHELL CO PR LTD SS 804827 PARADIS (CAGUAS,PR)	0.86 mile
EUROTHORITY (CAGUAS,PR)	0.47 mile
COSTCO WHOLESALE 365 (CAGUAS,PR)	0.65 mile
PREMIER CLEANERS LAUNDRY DRY CLEANING (CAGUAS,PR)	0.37 mile
PREMIER CLEANERS (CAGUAS,PR)	0.37 mile
UNIVERSIDAD ANA G MENDEZ UAGM GURABO CAMPUS (GURABO,PR)	0.93 mile
ELECTRICAL CONTROL EQUIPMENT MFG CORP (CAGUAS,PR)	0.99 mile
ONE HOUR PROFESSIONAL CLEANER (CAGUAS,PR)	0.37 mile
LABEL MASTERS (CAGUAS,PR)	0.36 mile
GREENWAY (GURABO,PR)	0.93 mile
COOPERHEAT MQS INC (CAGUAS,PR)	0.90 mile
SIKA MBCC PUERTO RICO CORPORATION (CAGUAS,PR)	0.82 mile
OIL RECYCLERS INC (CAGUAS,PR)	0.57 mile
WALMART SUPERCENTER 2449 (CAGUAS,PR)	0.57 mile
HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.30 mile
NEOLPHARMA INC (CAGUAS,PR)	0.35 mile
CARIBBEAN PETROLEUM LP SS GULF 469 (CAGUAS,PR)	0.38 mile
WALGREENS 0038 (CAGUAS,PR)	0.91 mile
APR UNLIMITED GENERAL CONTRACTORS (CAGUAS,PR)	0.25 mile
PRPHA BRISAS DEL TURABO I (CAGUAS,PR)	0.99 mile
MULTI PAK POSTAL SERVICE (GURABO,PR)	0.89 mile
BANFIELD PET HOSPITAL 2188 (CAGUAS,PR)	0.65 mile

Name *Hazardous waste site* at **Luis Muñoz Marin Avenue**	Distance	Status
TRANSPORTE SANCHEZ INC (CAGUAS,PR)	0.93 mile	In compliance
TEXACO PR INC WILLIAM ALVERIO (CAGUAS,PR)	0.25 mile	In compliance
MATSUSHITA ELECTRIC OF PR INC (CAGUAS,PR)	0.88 mile	In compliance
VEOLIA ES TECHNICAL SOLUTIONS LLC (GURABO,PR)	0.93 mile	In compliance
PR ARMY NATIONAL GUARD (CAGUAS,PR)	0.67 mile	In compliance
PEP BOYS MANNY MOE JACK THE 912 (CAGUAS,PR)	0.57 mile	In compliance
ESSO STANDARD OIL CO PR CO 237 (CAGUAS,PR)	0.48 mile	In compliance
WALGREENS 338 (CAGUAS,PR)	0.57 mile	In compliance
SHELL CO PR LTD SS 2976 TOMAS DE CASTRO (CAGUAS,PR)	0.94 mile	In compliance
SHELL CO PR LTD SS 804827 PARADIS (CAGUAS,PR)	0.86 mile	In compliance
EUROTHORITY (CAGUAS,PR)	0.47 mile	In compliance
COSTCO WHOLESALE 365 (CAGUAS,PR)	0.65 mile	In compliance
PREMIER CLEANERS LAUNDRY DRY CLEANING (CAGUAS,PR)	0.37 mile	In compliance
PREMIER CLEANERS (CAGUAS,PR)	0.37 mile	In compliance
UNIVERSIDAD ANA G MENDEZ UAGM GURABO CAMPUS (GURABO,PR)	0.93 mile	In compliance
ELECTRICAL CONTROL EQUIPMENT MFG CORP (CAGUAS,PR)	0.99 mile	In compliance
ONE HOUR PROFESSIONAL CLEANER (CAGUAS,PR)	0.37 mile	In compliance
LABEL MASTERS (CAGUAS,PR)	0.36 mile	Exceeds one (1) mile radius

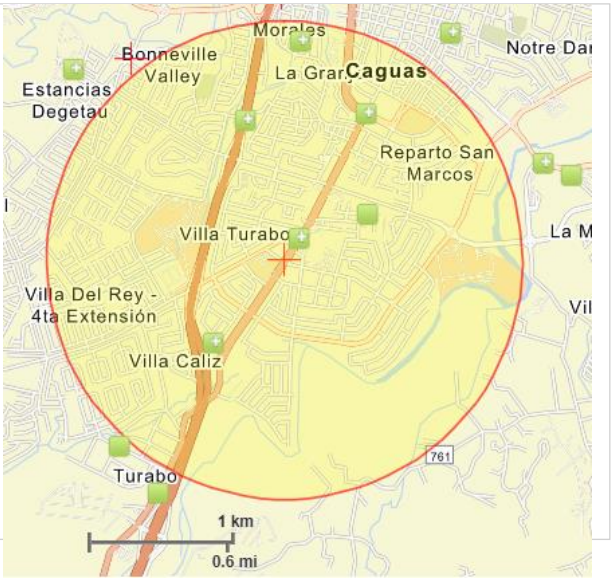
Name *Hazardous waste site* at **Luis Muñoz Marin Avenue**	Distance	Status
GREENWAY (GURABO,PR)	0.93 mile	In compliance
COOPERHEAT MQS INC (CAGUAS,PR)	0.90 mile	In compliance
SIKA MBCC PUERTO RICO CORPORATION (CAGUAS,PR)	0.82 mile	Inoperant
OIL RECYCLERS INC (CAGUAS,PR)	0.57 mile	Inoperant
WALMART SUPERCENTER 2449 (CAGUAS,PR)	0.57 mile	In compliance
HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.30 mile	In compliance
NEOLPHARMA INC (CAGUAS,PR)	0.35 mile	In compliance
CARIBBEAN PETROLEUM LP SS GULF 469 (CAGUAS,PR)	0.38 mile	In compliance
WALGREENS 0038 (CAGUAS,PR)	0.91 mile	In compliance
APR UNLIMITED GENERAL CONTRACTORS (CAGUAS,PR)	0.25 mile	In compliance
PRPHA BRISAS DEL TURABO I (CAGUAS,PR)	0.99 mile	In compliance
MULTI PAK POSTAL SERVICE (GURABO,PR)	0.89 mile	In compliance
BANFIELD PET HOSPITAL 2188 (CAGUAS,PR)	0.65 mile	In compliance

Gautier Benitez Avenue

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Report question: ***Within 1 undefined of a Hazardous waste site?*** **yes**

Modify question by entering a new buffer distance and unit for the selected study area:

1 | miles | Submit

Name	Distance
LUMA CAGUAS MECHANICAL SHOP (CAGUAS,PR)	0.98 mile
TEXACO PR INC JOSE TORRES SS (CAGUAS,PR)	0.14 mile
USARC MSG DIONISIO M CLAUDIO (CAGUAS,PR)	0.03 mile
DEPT OF ED LUIS RAMOS GONZALEZ (CAGUAS,PR)	0.70 mile
RHEEM PUERTO RICO INC (CAGUAS,PR)	0.25 mile
SURGIKOS (CAGUAS,PR)	0.64 mile
ARBROOK MANUFACTURING CORP (CAGUAS,PR)	0.64 mile
SHELL CO PR LTD SS 2941 BONNEVILLE (CAGUAS,PR)	0.76 mile
TROPICOLOR (CAGUAS,PR)	0.70 mile
SHELL CO PR LTD SHELL RATTAN IND (CAGUAS,PR)	0.92 mile
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.92 mile
SAM S CLUB 6689 (CAGUAS,PR)	0.40 mile
CARIBBEAN PETROLEUM LP SS GULF 196 (CAGUAS,PR)	0.91 mile
PR PUBLIC HOUSING VILLAS DEL REY (CAGUAS,PR)	0.46 mile
PERIODICO LA SEMANA (CAGUAS,PR)	0.83 mile
LEI SEMONA (CAGUAS,PR)	0.83 mile
ESSO STANDARD OIL CO PR CO 236 (CAGUAS,PR)	0.58 mile
ESCUELA MEDICINA SAN JUAN BAUTISTA (CAGUAS,PR)	0.09 mile
NIWAY AUTO (CAGUAS,PR)	0.61 mile
AMIGO SUPERMARKET 3678 (CAGUAS,PR)	0.43 mile
WATER TECHNOLOGIES CORP (CAGUAS,PR)	0.11 mile
MVP TOYOTA CAGUAS (CAGUAS,PR)	0.93 mile
ESSO STAND OIL CO PR SS CO 235 (CAYEY,PR)	0.61 mile
ESSO STANDARD OIL CO PR CO 235 (CAGUAS,PR)	0.61 mile
MUNICIPIO AUTONOMO DE CAGUAS SECRETARI (CAGUAS,PR)	0.98 mile
BECKMAN COULTER PR INC (CAGUAS,PR)	0.58 mile
LUMA CAGUAS DISTRICT OFFICE LINES OPERATIONS (CAGUAS,PR)	0.71 mile
CVS PHARMACY 7969 (CAGUAS,PR)	0.39 mile
PRPHA BRISAS DEL TURABO I (CAGUAS,PR)	1.00 mile
WALGREENS 403 (CAGUAS,PR)	0.34 mile
CONSOLIDATED PHARMACY (CAGUAS,PR)	0.57 mile

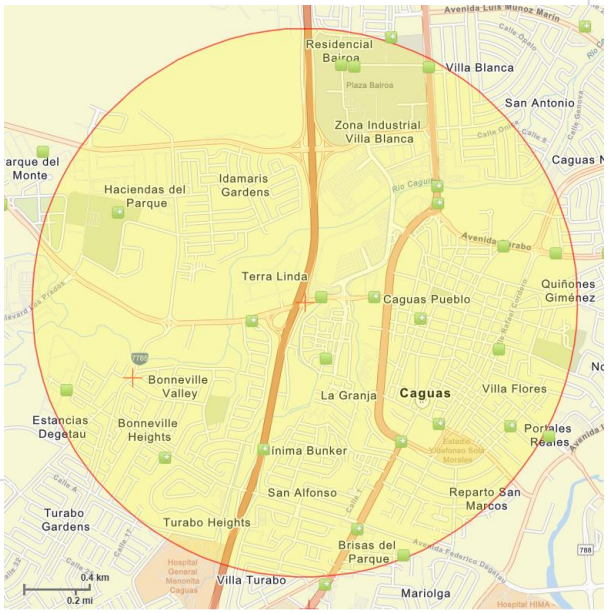
Name *Hazardous waste site at Gautier Benitez Avenue*	Distance	Status
LUMA CAGUAS MECHANICAL SHOP (CAGUAS,PR)	0.98 mile	In compliance
TEXACO PR INC JOSE TORRES SS (CAGUAS,PR)	0.14 mile	In compliance
USARC MSG DIONISIO M CLAUDIO (CAGUAS,PR)	0.03 mile	In compliance
DEPT OF ED LUIS RAMOS GONZALEZ (CAGUAS,PR)	0.70 mile	In compliance
RHEEM PUERTO RICO INC (CAGUAS,PR)	0.25 mile	In compliance
SURGIKOS (CAGUAS,PR)	0.64 mile	In compliance
ARBROOK MANUFACTURING CORP (CAGUAS,PR)	0.64 mile	In compliance
SHELL CO PR LTD SS 2941 BONNEVILLE (CAGUAS,PR)	0.76 mile	In compliance
TROPICOLOR (CAGUAS,PR)	0.70 mile	Inoperant
SHELL CO PR LTD SHELL RATTAN IND (CAGUAS,PR)	0.92 mile	Inoperant
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.92 mile	Inoperant
SAM S CLUB 6689 (CAGUAS,PR)	0.40 mile	In compliance
CARIBBEAN PETROLEUM LP SS GULF 196 (CAGUAS,PR)	0.91 mile	In compliance
PR PUBLIC HOUSING VILLAS DEL REY (CAGUAS,PR)	0.46 mile	In compliance
PERIODICO LA SEMANA (CAGUAS,PR)	0.83 mile	In compliance
LEI SEMONA (CAGUAS,PR)	0.83 mile	In compliance
ESSO STANDARD OIL CO PR CO 236 (CAGUAS,PR)	0.58 mile	In compliance
ESCUELA MEDICINA SAN JUAN BAUTISTA (CAGUAS,PR)	0.09 mile	Exceeds one (1) mile radius

Name *Hazardous waste site at Gautier Benitez Avenue*	Distance	Status
NIWAY AUTO (CAGUAS,PR)	0.61 mile	Inoperant
AMIGO SUPERMARKET 3678 (CAGUAS,PR)	0.43 mile	Incompliance
WATER TECHNOLOGIES CORP (CAGUAS,PR)	0.11 mile	In compliance
MVP TOYOTA CAGUAS (CAGUAS,PR)	0.93 mile	In compliance
ESSO STAND OIL CO PR SS CO 235 (CAYEY,PR)	0.61 mile	In compliance
ESSO STANDARD OIL CO PR CO 235 (CAGUAS,PR)	0.61 mile	In compliance
MUNICIPIO AUTONOMO DE CAGUAS SECRETARI (CAGUAS,PR)	0.98 mile	In compliance
BECKMAN COULTER PR INC (CAGUAS,PR)	0.58 mile	Exceeds one (1) mile radius
LUMA CAGUAS DISTRICT OFFICE LINES OPERATIONS (CAGUAS,PR)	0.71 mile	In compliance
CVS PHARMACY 7969 (CAGUAS,PR)	0.39 mile	Inoperant (change of administration)
PRPHA BRISAS DEL TURABO I (CAGUAS,PR)	1.00 mile	In compliance
WALGREENS 403 (CAGUAS,PR)	0.34 mile	In compliance
CONSOLIDATED PHARMACY (CAGUAS,PR)	0.57 mile	In compliance

PR-156

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Report question: ***Within 1 undefined of a Hazardous waste site? yes***

Modify question by entering a new buffer distance and unit for the selected study area:

1 | meters | Submit

Name	Distance
AUTOMECA TECHNICAL COLLEGE (CAGUAS,PR)	0.51 mile
SUPERSTATION BONNEVILLE SHELL (CAGUAS,PR)	0.93 mile
SEARS 2915 (CAGUAS,PR)	0.53 mile
CARIBBEAN PETROLEUM LP SS GULF 011 (CAGUAS,PR)	0.35 mile
LUMA CAGUAS MECHANICAL SHOP (CAGUAS,PR)	0.54 mile
CARIBBEAN PHOTO IMAGING (CAGUAS,PR)	0.54 mile
FARMACIA EL AMAL 26 (CAGUAS,PR)	0.59 mile
DEPT OF ED LUIS RAMOS GONZALEZ (CAGUAS,PR)	0.62 mile
UNITED PARCEL SERVICE (CAGUAS,PR)	0.43 mile
RHEEM PUERTO RICO INC (CAGUAS,PR)	0.88 mile
PATHEON PUERTO RICO INC (CAGUAS,PR)	0.61 mile
B H MICROFILM COMPONENTS INC (CAGUAS,PR)	0.97 mile
SURGIKOS (CAGUAS,PR)	0.76 mile
ARBROOK MANUFACTURING CORP (CAGUAS,PR)	0.76 mile
KODAK RAHOLA INC (CAGUAS,PR)	0.49 mile
SACHS PLASTICS DIVISION (CAGUAS,PR)	0.64 mile
PR ARMY NATIONAL GUARD (CAGUAS,PR)	0.94 mile
ESSO STANDARD OIL CO PR CO 160 (CAGUAS,PR)	0.29 mile
PEP BOYS 916 (CAGUAS,PR)	0.54 mile
SHELL CO PR LTD SS 2941 BONNEVILLE (CAGUAS,PR)	0.76 mile
SHELL CO PR LTD SS 804827 PARADIS (CAGUAS,PR)	0.76 mile
TROPICOLOR (CAGUAS,PR)	0.62 mile
SHELL CO PR LTD SHELL RATTAN IND (CAGUAS,PR)	0.22 mile
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.22 mile
SAM S CLUB 6689 (CAGUAS,PR)	0.99 mile
PRASA CAGUAS CENTRAL LAB (CAGUAS,PR)	0.25 mile
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.88 mile
ELECTRICAL CONTROL EQUIPMENT MFG CORP (CAGUAS,PR)	0.81 mile
CARTAGENA PRINTING (CAGUAS,PR)	0.20 mile
PERIODICO LA SEMANA (CAGUAS,PR)	0.66 mile
LEI SEMONA (CAGUAS,PR)	0.66 mile
ESSO STANDARD OIL CO PR CO 236 (CAGUAS,PR)	0.69 mile
AMIGO SUPERMARKET 3681 (CAGUAS,PR)	0.45 mile
NIWAY AUTO (CAGUAS,PR)	0.56 mile
MVP TOYOTA CAGUAS (CAGUAS,PR)	0.55 mile
ESSO STAND OIL CO PR SS CO 235 (CAYEY,PR)	0.66 mile
ESSO STANDARD OIL CO PR CO 235 (CAGUAS,PR)	0.66 mile
BERRIOS AUTO GALLERY (CAGUAS,PR)	0.86 mile
ST JUDE MEDICAL PUERTO RICO LLC (CAGUAS,PR)	0.76 mile
MUNICIPIO AUTONOMO DE CAGUAS SECRETARI (CAGUAS,PR)	0.54 mile
BECKMAN COULTER PR INC (CAGUAS,PR)	0.69 mile
LUMA CAGUAS DISTRICT OFFICE LINES OPERATIONS (CAGUAS,PR)	0.61 mile
CAMERA MUNDI INC (CAGUAS,PR)	0.88 mile
CENTRO AMBULATORIO HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.55 mile
CVS PHARMACY 7969 (CAGUAS,PR)	0.81 mile
WALGREENS 0038 (CAGUAS,PR)	0.73 mile
PRPHA BRISAS DEL TURABO I (CAGUAS,PR)	0.88 mile
WALGREENS 403 (CAGUAS,PR)	0.85 mile
HALCON BAKER INC (CAGUAS,PR)	0.20 mile
CONSOLIDATED PHARMACY (CAGUAS,PR)	0.68 mile
CARIBE WATER TECHNOLOGY INC (CAGUAS,PR)	0.06 mile
OREILLY AUTO ENTERPRISES LLC 6490 (CAGUAS,PR)	0.28 mile
ESCUELA OSCAR BUNKER (CAGUAS,PR)	0.84 mile

Name *Hazardous waste site at PR-156*	Distance	Status
AUTOMECA TECHNICAL COLLEGE (CAGUAS,PR)	0.51 mile	In compliance
SUPERSTATION BONNEVILLE SHELL (CAGUAS,PR)	0.93 mile	In compliance
SEARS 2915 (CAGUAS,PR)	0.53 mile	Inoperant
CARIBBEAN PETROLEUM LP SS GULF 011 (CAGUAS,PR)	0.35 mile	In compliance
LUMA CAGUAS MECHANICAL SHOP (CAGUAS,PR)	0.54 mile	In compliance
CARIBBEAN PHOTO IMAGING (CAGUAS,PR)	0.54 mile	In compliance
FARMACIA EL AMAL 26 (CAGUAS,PR)	0.59 mile	Inoperant
DEPT OF ED LUIS RAMOS GONZALEZ (CAGUAS,PR)	0.62 mile	In compliance
UNITED PARCEL SERVICE (CAGUAS,PR)	0.43 mile	In compliance
RHEEM PUERTO RICO INC (CAGUAS,PR)	0.88 mile	In compliance
PATHEON PUERTO RICO INC (CAGUAS,PR)	0.61 mile	Inoperant
B H MICROFILM COMPONENTS INC (CAGUAS,PR)	0.97 mile	Inoperant
SURGIKOS (CAGUAS,PR)	0.76 mile	In compliance
ARBROOK MANUFACTURING CORP (CAGUAS,PR)	0.76 mile	In compliance
KODAK RAHOLA INC (CAGUAS,PR)	0.49 mile	Inoperant

Name *Hazardous waste site at PR-156*	Distance	Status
SACHS PLASTICS DIVISION (CAGUAS,PR)	0.64 mile	In compliance
PR ARMY NATIONAL GUARD (CAGUAS,PR)	0.94 mile	In compliance
ESSO STANDARD OIL CO PR CO 160 (CAGUAS,PR)	0.29 mile	In compliance
PEP BOYS 916 (CAGUAS,PR)	0.54 mile	Inoperant
SHELL CO PR LTD SS 2941 BONNEVILLE (CAGUAS,PR)	0.76 mile	In compliance
SHELL CO PR LTD SS 804827 PARADIS (CAGUAS,PR)	0.76 mile	In compliance
TROPICOLOR (CAGUAS,PR)	0.62 mile	Inoperant
SHELL CO PR LTD SHELL RATTAN IND (CAGUAS,PR)	0.22 mile	Inoperant
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.22 mile	Inoperant
SAM S CLUB 6689 (CAGUAS,PR)	0.99 mile	In compliance
PRASA CAGUAS CENTRAL LAB (CAGUAS,PR)	0.25 mile	In compliance
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.88 mile	In compliance
ELECTRICAL CONTROL EQUIPMENT MFG CORP (CAGUAS,PR)	0.81 mile	In compliance
CARTAGENA PRINTING (CAGUAS,PR)	0.20 mile	Exceeds one (1) mile radius
PERIODICO LA SEMANA (CAGUAS,PR)	0.66 mile	In compliance

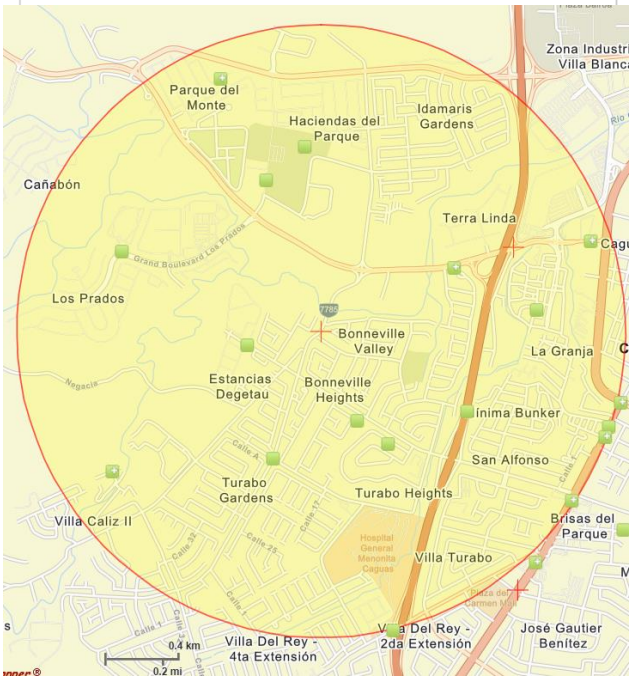
Name *Hazardous waste site at PR-156*	Distance	Status
LEI SEMONA (CAGUAS,PR)	0.66 mile	In compliance
ESSO STANDARD OIL CO PR CO 236 (CAGUAS,PR)	0.69 mile	In compliance
AMIGO SUPERMARKET 3681 (CAGUAS,PR)	0.45 mile	In compliance
NIWAY AUTO (CAGUAS,PR)	0.56 mile	Inoperant
MVP TOYOTA CAGUAS (CAGUAS,PR)	0.55 mile	In compliance
ESSO STAND OIL CO PR SS CO 235 (CAYEY,PR)	0.66 mile	In compliance
ESSO STANDARD OIL CO PR CO 235 (CAGUAS,PR)	0.66 mile	In compliance
BERRIOS AUTO GALLERY (CAGUAS,PR)	0.86 mile	Inoperant
ST JUDE MEDICAL PUERTO RICO LLC (CAGUAS,PR)	0.76 mile	Exceeds one (1) mile radius
MUNICIPIO AUTONOMO DE CAGUAS SECRETARI (CAGUAS,PR)	0.54 mile	In compliance
BECKMAN COULTER PR INC (CAGUAS,PR)	0.69 mile	Exceeds one (1) mile radius
LUMA CAGUAS DISTRICT OFFICE LINES OPERATIONS (CAGUAS,PR)	0.61 mile	In compliance
CAMERA MUNDI INC (CAGUAS,PR)	0.88 mile	In compliance
CENTRO AMBULATORIO HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.55 mile	In compliance
CVS PHARMACY 7969 (CAGUAS,PR)	0.81 mile	Inoperant (change of administration)

Name *Hazardous waste site at PR-156*	Distance	Status
WALGREENS 0038 (CAGUAS,PR)	0.73 mile	In compliance
PRPHA BRISAS DEL TURABO I (CAGUAS,PR)	0.88 mile	In compliance
WALGREENS 403 (CAGUAS,PR)	0.85 mile	In compliance
HALCON BAKER INC (CAGUAS,PR)	0.20 mile	In compliance
CONSOLIDATED PHARMACY (CAGUAS,PR)	0.68 mile	In compliance
CARIBE WATER TECHNOLOGY INC (CAGUAS,PR)	0.06 mile	In compliance
OREILLY AUTO ENTERPRISES LLC 6490 (CAGUAS,PR)	0.28 mile	In compliance
ESCUELA OSCAR BUNKER (CAGUAS,PR)	0.84 mile	In compliance

PR-34

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Report question: ***Within 1 undefined of a Hazardous waste site? yes***

Modify question by entering a new buffer distance and unit for the selected study area:

1 | meters | Submit

Name	Distance
AUTOMECA TECHNICAL COLLEGE (CAGUAS,PR)	0.51 mile
SUPERSTATION BONNEVILLE SHELL (CAGUAS,PR)	0.93 mile
SEARS 2915 (CAGUAS,PR)	0.53 mile
CARIBBEAN PETROLEUM LP SS GULF 011 (CAGUAS,PR)	0.35 mile
LUMA CAGUAS MECHANICAL SHOP (CAGUAS,PR)	0.54 mile
CARIBBEAN PHOTO IMAGING (CAGUAS,PR)	0.54 mile
FARMACIA EL AMAL 26 (CAGUAS,PR)	0.59 mile
DEPT OF ED LUIS RAMOS GONZALEZ (CAGUAS,PR)	0.62 mile
UNITED PARCEL SERVICE (CAGUAS,PR)	0.43 mile
RHEEM PUERTO RICO INC (CAGUAS,PR)	0.88 mile
PATHEON PUERTO RICO INC (CAGUAS,PR)	0.61 mile
B H MICROFILM COMPONENTS INC (CAGUAS,PR)	0.97 mile
SURGIKOS (CAGUAS,PR)	0.76 mile
ARBROOK MANUFACTURING CORP (CAGUAS,PR)	0.76 mile
KODAK RAHOLA INC (CAGUAS,PR)	0.49 mile
SACHS PLASTICS DIVISION (CAGUAS,PR)	0.64 mile
PR ARMY NATIONAL GUARD (CAGUAS,PR)	0.94 mile
ESSO STANDARD OIL CO PR CO 160 (CAGUAS,PR)	0.29 mile
PEP BOYS 916 (CAGUAS,PR)	0.54 mile
SHELL CO PR LTD SS 2941 BONNEVILLE (CAGUAS,PR)	0.76 mile
SHELL CO PR LTD SS 804827 PARADIS (CAGUAS,PR)	0.76 mile
TROPICOLOR (CAGUAS,PR)	0.62 mile
SHELL CO PR LTD SHELL RATTAN IND (CAGUAS,PR)	0.22 mile
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.22 mile
SAM S CLUB 6689 (CAGUAS,PR)	0.99 mile
PRASA CAGUAS CENTRAL LAB (CAGUAS,PR)	0.25 mile
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.88 mile
ELECTRICAL CONTROL EQUIPMENT MFG CORP (CAGUAS,PR)	0.81 mile
CARTAGENA PRINTING (CAGUAS,PR)	0.20 mile
PERIODICO LA SEMANA (CAGUAS,PR)	0.66 mile
LEI SEMONA (CAGUAS,PR)	0.66 mile
ESSO STANDARD OIL CO PR CO 236 (CAGUAS,PR)	0.69 mile
AMIGO SUPERMARKET 3681 (CAGUAS,PR)	0.45 mile
NIWAY AUTO (CAGUAS,PR)	0.56 mile
MVP TOYOTA CAGUAS (CAGUAS,PR)	0.55 mile
ESSO STAND OIL CO PR SS CO 235 (CAYEY,PR)	0.66 mile
ESSO STANDARD OIL CO PR CO 235 (CAGUAS,PR)	0.66 mile
BERRIOS AUTO GALLERY (CAGUAS,PR)	0.86 mile
ST JUDE MEDICAL PUERTO RICO LLC (CAGUAS,PR)	0.76 mile
MUNICIPIO AUTONOMO DE CAGUAS SECRETARI (CAGUAS,PR)	0.54 mile
BECKMAN COULTER PR INC (CAGUAS,PR)	0.69 mile
LUMA CAGUAS DISTRICT OFFICE LINES OPERATIONS (CAGUAS,PR)	0.61 mile
CAMERA MUNDI INC (CAGUAS,PR)	0.88 mile
CENTRO AMBULATORIO HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.55 mile
CVS PHARMACY 7969 (CAGUAS,PR)	0.81 mile
WALGREENS 0038 (CAGUAS,PR)	0.73 mile
PRPHA BRISAS DEL TURABO I (CAGUAS,PR)	0.88 mile
WALGREENS 403 (CAGUAS,PR)	0.85 mile
HALCON BAKER INC (CAGUAS,PR)	0.20 mile
CONSOLIDATED PHARMACY (CAGUAS,PR)	0.68 mile
CARIBE WATER TECHNOLOGY INC (CAGUAS,PR)	0.06 mile
OREILLY AUTO ENTERPRISES LLC 6490 (CAGUAS,PR)	0.28 mile
ESCUELA OSCAR BUNKER (CAGUAS,PR)	0.84 mile

Name *Hazardous waste site at PR-34*	Distance	Status
AUTOMECA TECHNICAL COLLEGE (CAGUAS,PR)	0.51 mile	In compliance
SUPERSTATION BONNEVILLE SHELL (CAGUAS,PR)	0.93 mile	In compliance
SEARS 2915 (CAGUAS,PR)	0.53 mile	Inoperant
CARIBBEAN PETROLEUM LP SS GULF 011 (CAGUAS,PR)	0.35 mile	In compliance
LUMA CAGUAS MECHANICAL SHOP (CAGUAS,PR)	0.54 mile	In compliance
CARIBBEAN PHOTO IMAGING (CAGUAS,PR)	0.54 mile	In compliance
FARMACIA EL AMAL 26 (CAGUAS,PR)	0.59 mile	Inoperant
DEPT OF ED LUIS RAMOS GONZALEZ (CAGUAS,PR)	0.62 mile	In compliance
UNITED PARCEL SERVICE (CAGUAS,PR)	0.43 mile	In compliance
RHEEM PUERTO RICO INC (CAGUAS,PR)	0.88 mile	In compliance
PATHEON PUERTO RICO INC (CAGUAS,PR)	0.61 mile	Inoperant
B H MICROFILM COMPONENTS INC (CAGUAS,PR)	0.97 mile	Inoperant
SURGIKOS (CAGUAS,PR)	0.76 mile	In compliance
ARBROOK MANUFACTURING CORP (CAGUAS,PR)	0.76 mile	In compliance
KODAK RAHOLA INC (CAGUAS,PR)	0.49 mile	Inoperant
SACHS PLASTICS DIVISION (CAGUAS,PR)	0.64 mile	In compliance
PR ARMY NATIONAL GUARD (CAGUAS,PR)	0.94 mile	In compliance

Name *Hazardous waste site at PR-34*	Distance	Status
ESSO STANDARD OIL CO PR CO 160 (CAGUAS,PR)	0.29 mile	In compliance
PEP BOYS 916 (CAGUAS,PR)	0.54 mile	Inoperant
SHELL CO PR LTD SS 2941 BONNEVILLE (CAGUAS,PR)	0.76 mile	In compliance
SHELL CO PR LTD SS 804827 PARADIS (CAGUAS,PR)	0.76 mile	In compliance
TROPICOLOR (CAGUAS,PR)	0.62 mile	Inoperant
SHELL CO PR LTD SHELL RATTAN IND (CAGUAS,PR)	0.22 mile	Inoperant
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.22 mile	Inoperant
SAM S CLUB 6689 (CAGUAS,PR)	0.99 mile	In compliance
PRASA CAGUAS CENTRAL LAB (CAGUAS,PR)	0.25 mile	In compliance
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.88 mile	In compliance
ELECTRICAL CONTROL EQUIPMENT MFG CORP (CAGUAS,PR)	0.81 mile	In compliance
CARTAGENA PRINTING (CAGUAS,PR)	0.20 mile	Exceeds one (1) mile radius
PERIODICO LA SEMANA (CAGUAS,PR)	0.66 mile	In compliance
LEI SEMONA (CAGUAS,PR)	0.66 mile	In compliance
ESSO STANDARD OIL CO PR CO 236 (CAGUAS,PR)	0.69 mile	In compliance
AMIGO SUPERMARKET 3681 (CAGUAS,PR)	0.45 mile	In compliance
NIWAY AUTO (CAGUAS,PR)	0.56 mile	Inoperant

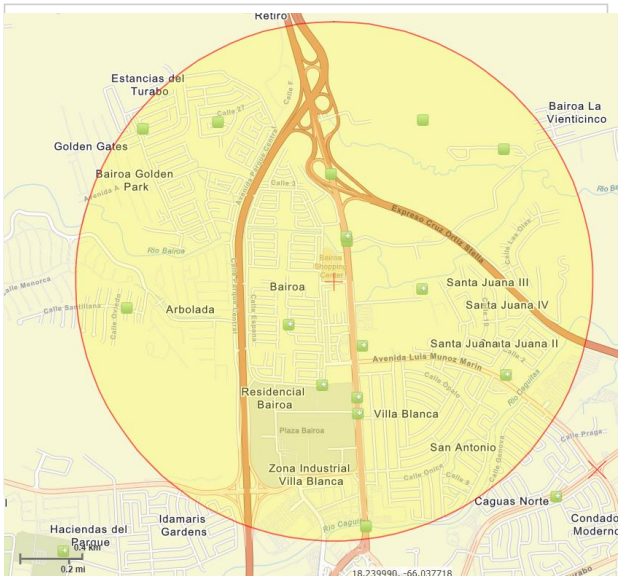
Name *Hazardous waste site at PR-34*	Distance	Status
MVP TOYOTA CAGUAS (CAGUAS,PR)	0.55 mile	In compliance
ESSO STAND OIL CO PR SS CO 235 (CAYEY,PR)	0.66 mile	In compliance
ESSO STANDARD OIL CO PR CO 235 (CAGUAS,PR)	0.66 mile	In compliance
BERRIOS AUTO GALLERY (CAGUAS,PR)	0.86 mile	Inoperant
ST JUDE MEDICAL PUERTO RICO LLC (CAGUAS,PR)	0.76 mile	Exceeds one (1) mile radius
MUNICIPIO AUTONOMO DE CAGUAS SECRETARI (CAGUAS,PR)	0.54 mile	In compliance
BECKMAN COULTER PR INC (CAGUAS,PR)	0.69 mile	Exceeds one (1) mile radius
LUMA CAGUAS DISTRICT OFFICE LINES OPERATIONS (CAGUAS,PR)	0.61 mile	In compliance
CAMERA MUNDI INC (CAGUAS,PR)	0.88 mile	In compliance
CENTRO AMBULATORIO HIMA SAN PABLO CAGUAS (CAGUAS,PR)	0.55 mile	In compliance
CVS PHARMACY 7969 (CAGUAS,PR)	0.81 mile	Inoperant (change of administration)
WALGREENS 0038 (CAGUAS,PR)	0.73 mile	In compliance
PRPHA BRISAS DEL TURABO I (CAGUAS,PR)	0.88 mile	In compliance
WALGREENS 403 (CAGUAS,PR)	0.85 mile	In compliance
HALCON BAKER INC (CAGUAS,PR)	0.20 mile	In compliance
CONSOLIDATED PHARMACY (CAGUAS,PR)	0.68 mile	In compliance

Name *Hazardous waste site at PR-34*	Distance	Status
CARIBE WATER TECHNOLOGY INC (CAGUAS,PR)	0.06 mile	In compliance
OREILLY AUTO ENTERPRISES LLC 6490 (CAGUAS,PR)	0.28 mile	In compliance
ESCUELA OSCAR BUNKER (CAGUAS,PR)	0.84 mile	In compliance

Leoncio Velazquez Boulevard

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Report question: *Within 1 undefined of a Hazardous waste site?* **yes**

Modify question by entering a new buffer distance and unit for the selected study area:

1 | meters | Submit

Name	Distance
GENERAL ELECTRIC CAGUAS OPERATION (CAGUAS,PR)	0.27 mile
ULTRALUMBER CORP (CAGUAS,PR)	0.39 mile
DEPARTAMENTO DE SANEAMENTO (CAGUAS,PR)	0.76 mile
SHELL CO PR LTD VILLA BLANCA SS 0701 (CAGUAS,PR)	0.36 mile
SHELL CO PR LTD MARI OLGA SS 2879 (CAGUAS,PR)	0.95 mile
BENITEZ AUTO CAGUAS (CAGUAS,PR)	0.15 mile
BENITEZ AUTO (CAGUAS,PR)	0.15 mile
DEPT OF ED CHARLES E MINER SCHOOL (CAGUAS,PR)	0.76 mile
BANNER PUERTO RICO PAINTS INC (CAGUAS,PR)	0.41 mile
BANNER PAINTS (CAGUAS,PR)	0.41 mile
U M I DE PR INC (CAGUAS,PR)	0.46 mile
LAZARE KAPLAN PR INC (CAGUAS,PR)	0.32 mile
B H MICROFILM COMPONENTS INC (CAGUAS,PR)	0.52 mile
NEWBRIDGE NETWORKS INTL CORP (CAGUAS,PR)	0.46 mile
SACHS PLASTICS DIVISION (CAGUAS,PR)	0.95 mile
ESSO STANDARD OIL CO PR 2P 252 (CAGUAS,PR)	0.21 mile
CAGUAS EQUIPMENT RENTAL INC (CAGUAS,PR)	0.35 mile
GOV OF PR DEPT AGRICULTURE ASDA (CAGUAS,PR)	0.18 mile
CENTENNIAL OF PUERTO RICO (CAGUAS,PR)	0.28 mile
PRASA CAGUAS WASTEWATER TRTMT (CAGUAS,PR)	0.83 mile
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.54 mile
CIP SUPERFUND SITE (CAGUAS,PR)	0.24 mile
GARAJE JUANO (CAGUAS,PR)	0.76 mile
CHARNECO EUROPEAN HAUS (CAGUAS,PR)	0.76 mile
MEADWESTVACO HEALTHCARE PACKAGING PR LLC (CAGUAS,PR)	0.39 mile
DIESEL ENGINE TECHNICIAN (CAGUAS,PR)	0.76 mile
BENITEZ PAINT BODY SHOP (CAGUAS,PR)	0.76 mile
GREKORY EQUIP CORP (CAGUAS,PR)	0.76 mile
HOSPITAL HIMA SAN PABLO (CAGUAS,PR)	0.31 mile
FARMACIA EL AMAL 12 (CAGUAS,PR)	0.44 mile
X PRESS RY CLEANERS (CAGUAS,PR)	0.40 mile
XPRESS DRY CLEANER (CAGUAS,PR)	0.40 mile
MFG TECHNOLOGY SERVICES INC (CAGUAS,PR)	0.81 mile
ROJAS GEORGE (CAGUAS,PR)	0.76 mile
IMPRESSION ASSOCIATES INC (CAGUAS,PR)	0.76 mile
JANSSEN ORTHO LLC EXTERNAL WHSE (CAGUAS,PR)	0.35 mile
IFCO RECYCLING INC (CAGUAS,PR)	0.71 mile
WESTERN AUTO CORP (CAGUAS,PR)	0.32 mile
CARIBBEAN CV JOINTS AXLE CO (CAGUAS,PR)	0.35 mile
DAEWOOD CAGUAS (CAGUAS,PR)	0.07 mile
BERRIOS AUTO GALLERY (CAGUAS,PR)	0.76 mile
CAGUAS BLOOD CANCER CENTER (CAGUAS,PR)	0.76 mile
TOTAL PETROLEUM PUERTOR ICO CORP SERVICE STATION 304130 (CAGUAS,PR)	0.76 mile
CAMERA MUNDI INC (CAGUAS,PR)	0.55 mile
INDUSTRIAS AUTOMOTRICES FIGUEROA USA TRANS (CAGUAS,PR)	0.16 mile
UNITED PARCEL SERVICE (CAGUAS,PR)	0.34 mile
UPS (CAGUAS,PR)	0.34 mile
OMEGA MARKET RESEARCH (CAGUAS,PR)	0.08 mile

Name *Hazardous waste site at Leoncio Velazquez Boulevard*	Distance	Status
GENERAL ELECTRIC CAGUAS OPERATION (CAGUAS,PR)	0.27 mile	In compliance
ULTRALUMBER CORP (CAGUAS,PR)	0.39 mile	In compliance
DEPARTAMENTO DE SANEAMENTO (CAGUAS,PR)	0.76 mile	In compliance
SHELL CO PR LTD VILLA BLANCA SS 0701 (CAGUAS,PR)	0.36 mile	In compliance
SHELL CO PR LTD MARI OLGA SS 2879 (CAGUAS,PR)	0.95 mile	In compliance
BENITEZ AUTO CAGUAS (CAGUAS,PR)	0.15 mile	In compliance
BENITEZ AUTO (CAGUAS,PR)	0.15 mile	In compliance
DEPT OF ED CHARLES E MINER SCHOOL (CAGUAS,PR)	0.76 mile	In compliance
BANNER PUERTO RICO PAINTS INC (CAGUAS,PR)	0.41 mile	In compliance
BANNER PAINTS (CAGUAS,PR)	0.41 mile	In compliance
U M I DE PR INC (CAGUAS,PR)	0.46 mile	In compliance
LAZARE KAPLAN PR INC (CAGUAS,PR)	0.32 mile	In compliance
B H MICROFILM COMPONENTS INC (CAGUAS,PR)	0.52 mile	Inoperant
NEWBRIDGE NETWORKS INTL CORP (CAGUAS,PR)	0.46 mile	Inoperant
SACHS PLASTICS DIVISION (CAGUAS,PR)	0.95 mile	In compliance
ESSO STANDARD OIL CO PR 2P 252 (CAGUAS,PR)	0.21 mile	In compliance
CAGUAS EQUIPMENT RENTAL INC (CAGUAS,PR)	0.35 mile	In compliance
GOV OF PR DEPT AGRICULTURE ASDA (CAGUAS,PR)	0.18 mile	In compliance
CENTENNIAL OF PUERTO RICO (CAGUAS,PR)	0.28 mile	In compliance

Name *Hazardous waste site at Leoncio Velazquez Boulevard*	Distance	Status
PRASA CAGUAS WASTEWATER TRTMT (CAGUAS,PR)	0.83 mile	In compliance
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.54 mile	In compliance
CIP SUPERFUND SITE (CAGUAS,PR)	0.24 mile	
GARAJE JUANO (CAGUAS,PR)	0.76 mile	In compliance
CHARNECO EUROPEAN HAUS (CAGUAS,PR)	0.76 mile	In compliance
MEADWESTVACO HEALTHCARE PACKAGING PR LLC (CAGUAS,PR)	0.39 mile	Inoperant
DIESEL ENGINE TECHNICIAN (CAGUAS,PR)	0.76 mile	In compliance
BENITEZ PAINT BODY SHOP (CAGUAS,PR)	0.76 mile	In compliance
GREKORY EQUIP CORP (CAGUAS,PR)	0.76 mile	Exceeds one (1) mile radius
HOSPITAL HIMA SAN PABLO (CAGUAS,PR)	0.31 mile	In compliance
FARMACIA EL AMAL 12 (CAGUAS,PR)	0.44 mile	Inoperant
X PRESS RY CLEANERS (CAGUAS,PR)	0.40 mile	In compliance
XPRESS DRY CLEANER (CAGUAS,PR)	0.40 mile	In compliance
MFG TECHNOLOGY SERVICES INC (CAGUAS,PR)	0.81 mile	In compliance
ROJAS GEORGE (CAGUAS,PR)	0.76 mile	Unknown
IMPRESSION ASSOCIATES INC (CAGUAS,PR)	0.76 mile	In compliance
JANSSEN ORTHO LLC EXTERNAL WHSE (CAGUAS,PR)	0.35 mile	Exceeds one (1) mile radius
IFCO RECYCLING INC (CAGUAS,PR)	0.71 mile	In compliance
WESTERN AUTO CORP (CAGUAS,PR)	0.32 mile	In compliance

Name *Hazardous waste site at Leoncio Velazquez Boulevard*	Distance	Status
CARIBBEAN CV JOINTS AXLE CO (CAGUAS,PR)	0.35 mile	In compliance
DAEWOOD CAGUAS (CAGUAS,PR)	0.07 mile	In compliance
BERRIOS AUTO GALLERY (CAGUAS,PR)	0.76 mile	Inoperant
CAGUAS BLOOD CANCER CENTER (CAGUAS,PR)	0.76 mile	In compliance
TOTAL PETROLEUM PUERTOR ICO CORP SERVICE STATION 304130 (CAGUAS,PR)	0.76 mile	In compliance
CAMERA MUNDI INC (CAGUAS,PR)	0.55 mile	In compliance
INDUSTRIAS AUTOMOTRICES FIGUEROA USA TRANS (CAGUAS,PR)	0.16 mile	In compliance
UNITED PARCEL SERVICE (CAGUAS,PR)	0.34 mile	In compliance
UPS (CAGUAS,PR)	0.34 mile	In compliance
OMEGA MARKET RESEARCH (CAGUAS,PR)	0.08 mile	In compliance

Exhibit G
6. TRI list near the project area

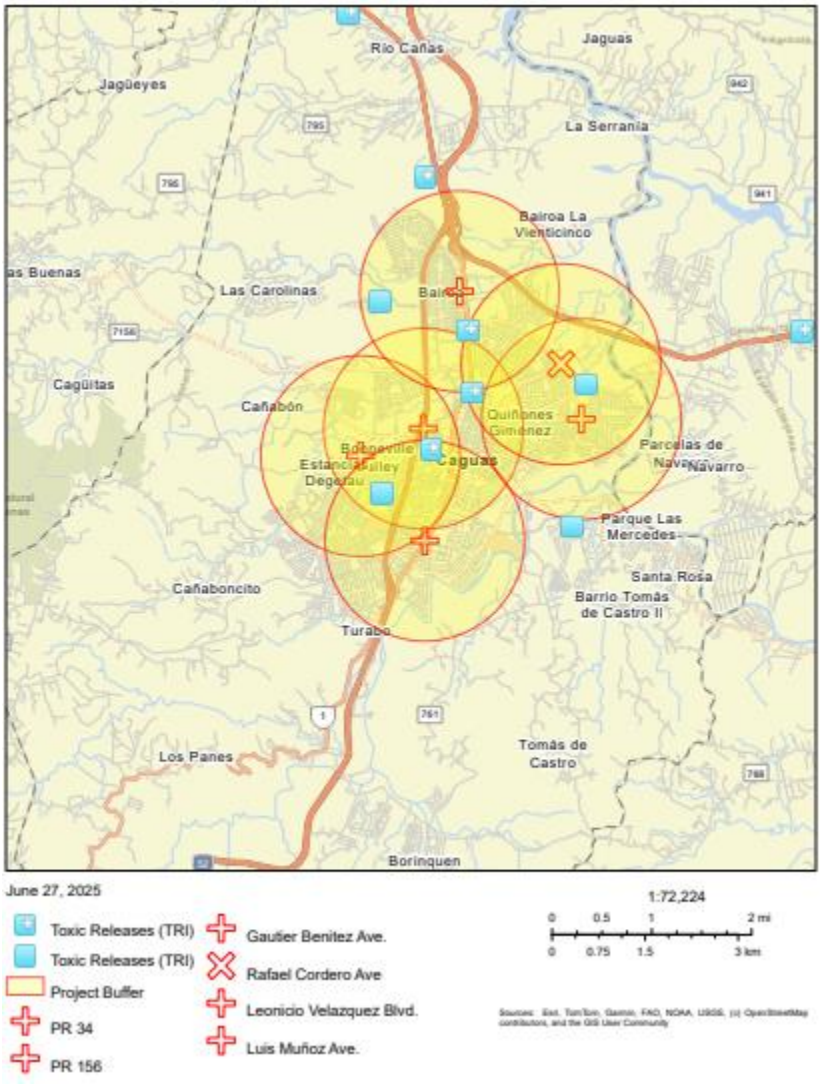
Contamination and Toxic Substances: Toxic Release Inventory (TRI) site List

Using the NEPAssist Tool, we established a midpoint on each avenue:

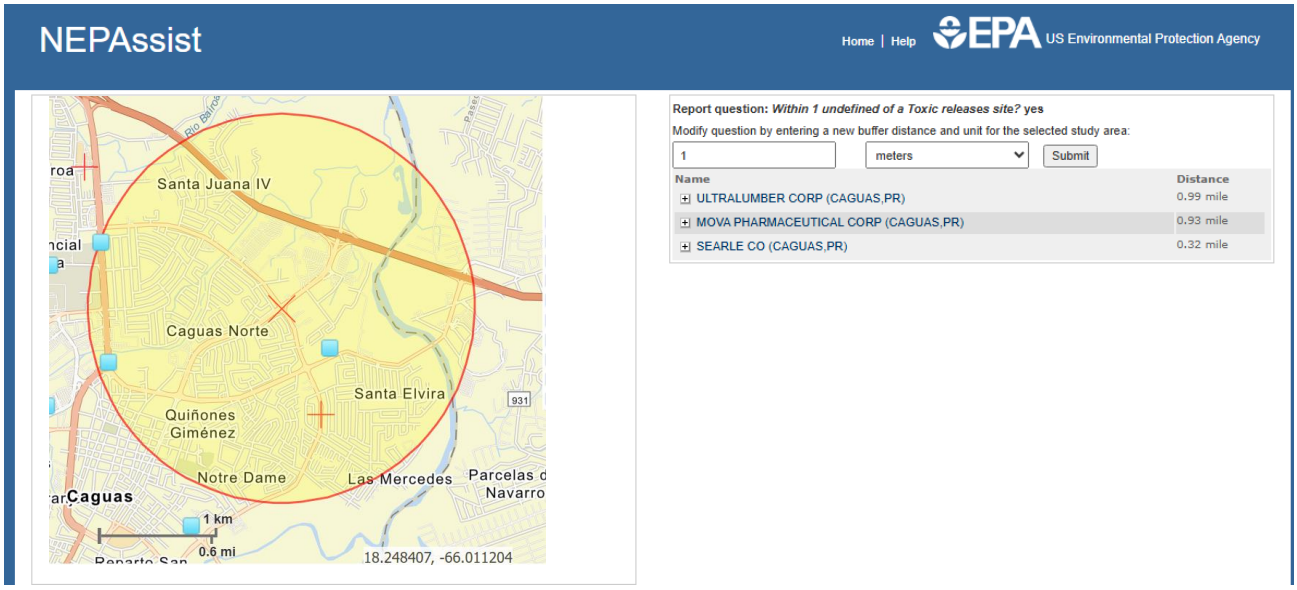
- Luis Muñoz Avenue: 18.235605, -66.018577
- Gautier Benitez Avenue: 18.217993, -66.042476
- Rafael Cordero Avenue: 18.243567, -66.021692
- Leonicio Velazquez Boulevard: 18.254106, -66.037167
- PR 156 Road: 18.234232, -66.042690
- PR 34 Road: 18.230256, -66.052290

From there, one (1) mile of buffer was added for each one to analyze the compliance at sites under the TRI program.

Aerial map



Rafael Cordero Avenue



Name Toxic Release Inventory site at Rafael Cordero Avenue	Distance	Status
ULTRALUMBER CORP (CAGUAS,PR)	0.99 mile	In compliance
MOVA PHARMACEUTICAL CORP (CAGUAS,PR)	0.93 mile	In compliance
SEARLE CO (CAGUAS,PR)	0.32 mile	Inoperant (change of administration)

Luis Muñoz Marin Avenue

NEPAssist

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EPA US Environmental Protection Agency



Report question: ***Within 1 undefined of a Toxic releases site?***

yes

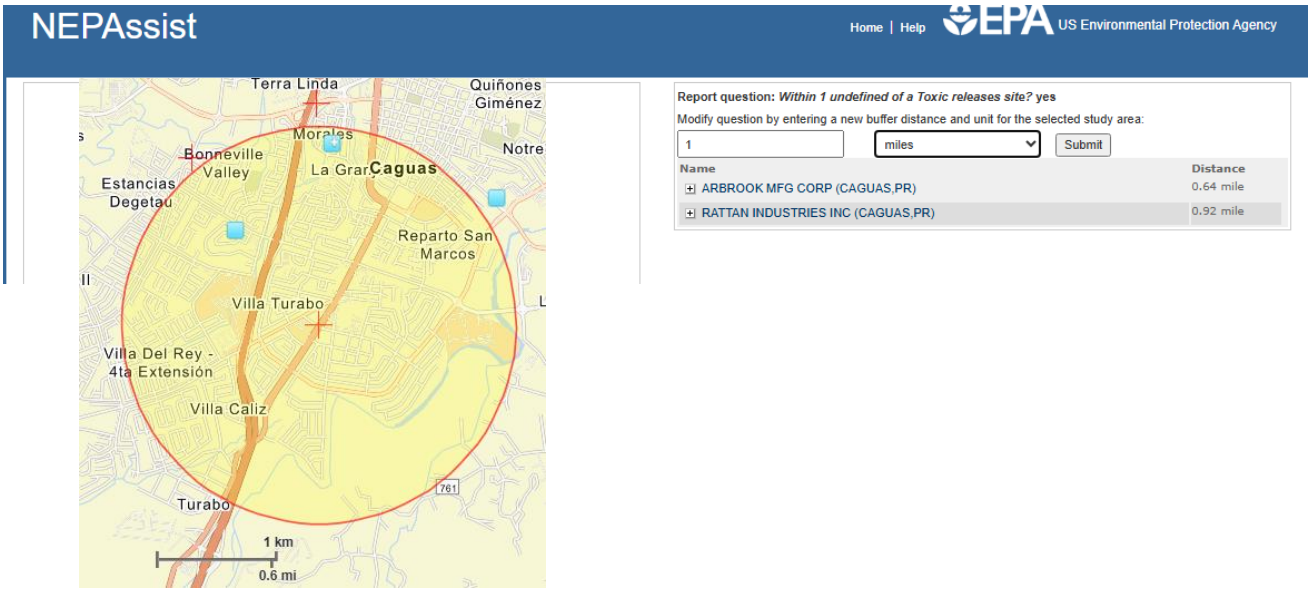
Modify question by entering a new buffer distance and unit for the selected study area:

1 | meters | Submit

Name	Distance
MATSUSHITA ELECTRIC OF PR INC (CAGUAS,PR)	0.88 mile
SEARLE CO (CAGUAS,PR)	0.35 mile

Name Toxic Release Inventory *site* at Luis Muñoz Marin Avenue	**Distance**	**Status**
MATSUSHITA ELECTRIC OF PR INC (CAGUAS,PR)	0.88 mile	In compliance
SEARLE CO (CAGUAS,PR)	0.35 mile	Inoperant (change of administration)

Gautier Benitez Avenue



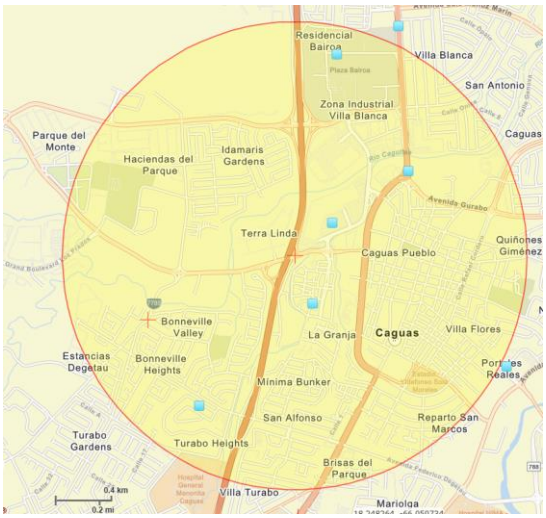
Name Toxic Release Inventory site *at Gautier Benitez Avenue*	Distance	Status
ARBROOK MFG CORP (CAGUAS,PR)	0.64 mile	In compliance
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.92 mile	Inoperant

PR-156

NEPAssist

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Report question: ***Within 1 undefined of a Toxic releases site?*** **yes**

Modify question by entering a new buffer distance and unit for the selected study area:

1 | meters | Submit

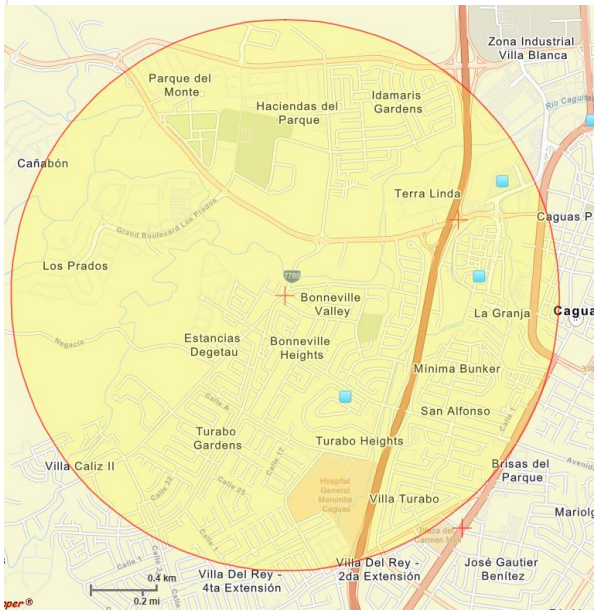
Name	Distance
MOVA PHARMACEUTICAL CORP (CAGUAS,PR)	0.61 mile
ARBROOK MFG CORP (CAGUAS,PR)	0.76 mile
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.22 mile
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.88 mile
BULL BOND MFG (CAGUAS,PR)	0.22 mile

Name of Toxic Release Inventory site *at PR-156*	Distance	Status
MOVA PHARMACEUTICAL CORP (CAGUAS,PR)	0.61 mile	In compliance
ARBROOK MFG CORP (CAGUAS,PR)	0.76 mile	In compliance
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.22 mile	Inoperant
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.88 mile	In compliance
BULL BOND MFG (CAGUAS,PR)	0.22 mile	Unknow

PR-34

NEPAssist

Home | Help EPA US Environmental Protection Agency



Report question: ***Within 1 undefined of a Toxic releases site?*** **yes**

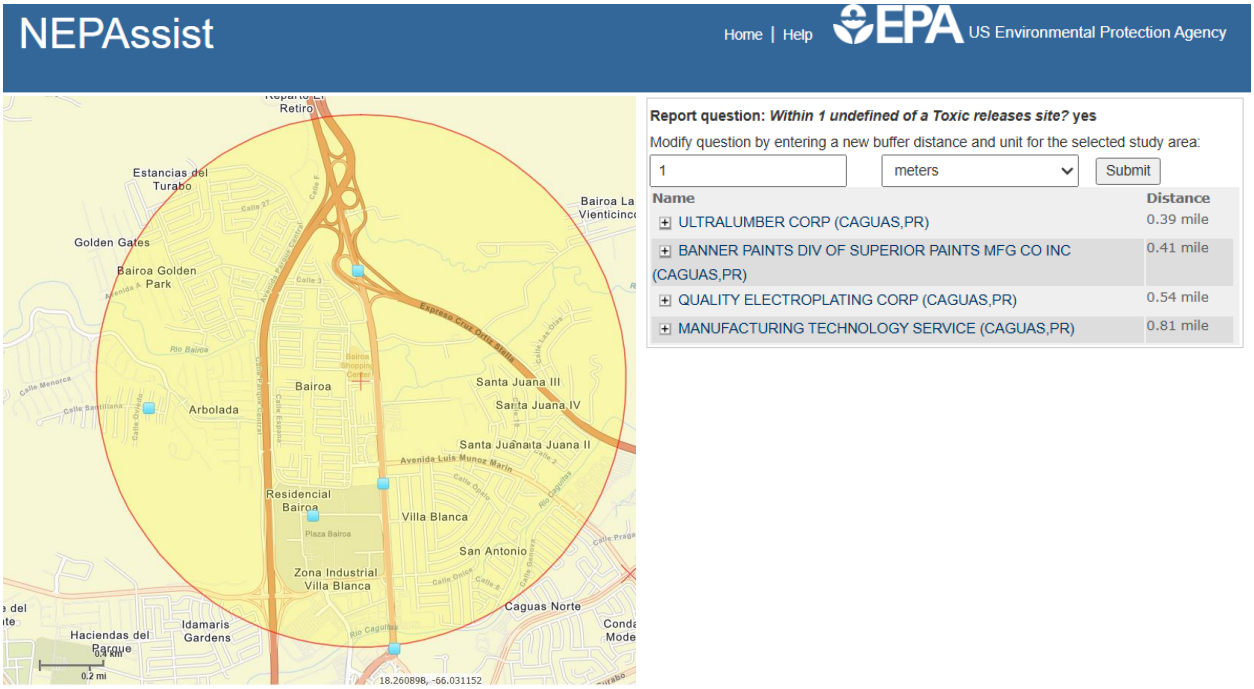
Modify question by entering a new buffer distance and unit for the selected study area:

1 | meters | Submit

Name	Distance
ARBROOK MFG CORP (CAGUAS,PR)	0.43 mile
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.71 mile
BULL BOND MFG (CAGUAS,PR)	0.89 mile

Name Toxic Release Inventory site *at PR-34*	Distance	Status
ARBROOK MFG CORP (CAGUAS,PR)	0.43 mile	In compliance
RATTAN INDUSTRIES INC (CAGUAS,PR)	0.71 mile	Inoperant
BULL BOND MFG (CAGUAS,PR)	0.89 mile	Unknown

Leoncio Velazquez Boulevard



Name Toxic Release Inventory site *at Leoncio Velazquez Boulevard*	**Distance**	**Status**
ULTRALUMBER CORP (CAGUAS,PR)	0.39 mile	In compliance
BANNER PAINTS DIV OF SUPERIOR PAINTS MFG CO INC (CAGUAS,PR)	0.41 mile	In compliance
QUALITY ELECTROPLATING CORP (CAGUAS,PR)	0.54 mile	In compliance
MANUFACTURING TECHNOLOGY SERVICE (CAGUAS,PR)	0.81 mile	In compliance

Exhibit G
7. ECHO report from TEXACO PR INC WILLIAM ALVERIO

Detailed Facility Report

Facility Summary

TEXACO PR INC - WILLIAM ALVERIO

PR-189 KM 1.7, CAGUAS, PR 00647

FRS (Facility Registry Service) ID: 110007803966

EPA Region: 02

Latitude: 18.239054

Longitude: -66.019711

Locational Data Source: RCRAINFO

Industries: Utilities

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRD000689364)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007803966					N	18.239054	-66.019711
ICIS		38729					N	18.239054	-66.019711
RCRAInfo	RCRA	PRD000689364	Other	Inactive ( )			N	18.239054	-66.019711

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007803966	TEXACO PR INC - WILLIAM ALVERIO	PR-189 KM 1.7, CAGUAS, PR 00647	Caguas Municipio
ICIS		38729	TEXACO PR INC - WILLIAM ALVERIO	RD 189 KM 1.7, CAGUAS, PR 00647	Caguas Municipio
RCRAInfo	RCRA	PRD000689364	TEXACO PR INC - WILLIAM ALVERIO	RD 189 KM 1.7, CAGUAS, PR 00647	Caguas Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCRAInfo	PRD000689364	22132	Sewage Treatment Facilities

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRD000689364	No	06/07/2025	0	06/06/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PRD000689364)			07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	18,791
Population Density	6,174/sq.mi.
Housing Units in Area	9,314
Percent People of Color	99%
Households in Area	8,016
Households on Public Assistance	287
Persons With Low Income	13,768
Percent With Low Income	73%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.239054
Center Longitude	-66.019711
Total Area	--
Land Area	98%
Water Area	2%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	2,895 (36.1%)
$15,000 - $25,000	1,492 (18.61%)
$25,000 - $50,000	2,109 (26.3%)
$50,000 - $75,000	815 (10.16%)
Greater than $75,000	708 (8.83%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	723 (4%)
Minors 17 years and younger	3,239 (17%)
Adults 18 years and older	15,549 (83%)
Seniors 65 years and older	4,480 (24%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	9,281 (49%)
African-American	1,643 (9%)
Hispanic-Origin	18,230 (97%)
Asian	57 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	68 (0%)
Other/Multiracial	4,201 (22%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	1,132 (8.2%)
9th through 12th Grade	825 (5.98%)
High School Diploma	3,920 (28.4%)
Some College/2-year	1,944 (14.08%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	4,311 (31.23%)

Exhibit G
8. ECHO report from MSG

Detailed Facility Report

Facility Summary

USARC - MSG DIONISIO M CLAUDIO

PINO ST - VILA TURABO, CAGUAS, PR 00725

FRS (Facility Registry Service) ID: 110006868862

EPA Region: 02

Latitude: 18.218364

Longitude: -66.042794

Locational Data Source: FRS

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PR2210420004)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110006868862					N	18.218364	-66.042794
RCRAInfo	RCRA	PR2210420004	Other	Inactive ( )			N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110006868862	USARC - MSG DIONISIO M CLAUDIO	PINO ST - VILA TURABO, CAGUAS, PR 00725	Caguas Municipio
RCRAInfo	RCRA	PR2210420004	USARC - MSG DIONISIO M CLAUDIO	PINO ST - VILA TURABO, CAGUAS, PR 00725-6145	Caguas Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PR2210420004	No	06/07/2025	0	06/06/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PR2210420004)			07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	24,387
Population Density	7,862/sq.mi.
Housing Units in Area	12,193
Percent People of Color	98%
Households in Area	10,104
Households on Public Assistance	562
Persons With Low Income	17,694
Percent With Low Income	73%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.218364
Center Longitude	-66.042794
Total Area	--
Land Area	99%
Water Area	1%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	3,653 (36.16%)
$15,000 - $25,000	1,816 (17.97%)
$25,000 - $50,000	2,520 (24.94%)
$50,000 - $75,000	1,269 (12.56%)
Greater than $75,000	845 (8.36%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	891 (4%)
Minors 17 years and younger	4,289 (18%)
Adults 18 years and older	20,100 (82%)
Seniors 65 years and older	5,973 (24%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	13,382 (55%)
African-American	2,516 (10%)
Hispanic-Origin	23,891 (98%)
Asian	47 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	123 (1%)
Other/Multiracial	4,588 (19%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	1,660 (9.33%)
9th through 12th Grade	1,169 (6.57%)
High School Diploma	5,618 (31.58%)
Some College/2-year	2,759 (15.51%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	4,572 (25.7%)

Exhibit G
9. ECHO report from DAEWOOS CAGUAS

Detailed Facility Report

Facility Summary

DAEWOOD CAGUAS

CARR #1 KM 33.1 BO BAIROA, CAGUAS, PR 00725

FRS (Facility Registry Service) ID: 110032966538

EPA Region: 02

Latitude: 18.25408

Longitude: -66.036161

Locational Data Source: RCRAINFO

Industries: Wholesale Trade, Durable Goods

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000021063)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110032966538					N	18.25408	-66.036161
RCRAInfo	RCRA	PRR000021063	VSQG	Active (H)			N	18.25408	-66.036161

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110032966538	DAEWOOD CAGUAS	CARR #1 KM 33.1 BO BAIROA, CAGUAS, PR 00725	Caguas Municipio
RCRAInfo	RCRA	PRR000021063	DAEWOOD CAGUAS	CARR #1 KM 33.1 BO BAIROA, CAGUAS, PR 00725	Caguas Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCRAInfo	PRR000021063	42111	Automobile and Other Motor Vehicle Wholesalers

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000021063	No	06/28/2025	0	06/27/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PRR000021063)			07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	13,034
Population Density	4,206/sq.mi.
Housing Units in Area	5,706
Percent People of Color	98%
Households in Area	5,058
Households on Public Assistance	108
Persons With Low Income	7,533
Percent With Low Income	58%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.25408
Center Longitude	-66.036161
Total Area	3.121 sq.mi.
Land Area	99%
Water Area	1%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	1,294 (25.56%)
$15,000 - $25,000	726 (14.34%)
$25,000 - $50,000	1,473 (29.1%)
$50,000 - $75,000	631 (12.47%)
Greater than $75,000	938 (18.53%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	306 (2%)
Minors 17 years and younger	2,103 (16%)
Adults 18 years and older	10,932 (84%)
Seniors 65 years and older	2,872 (22%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	6,738 (52%)
African-American	908 (7%)
Hispanic-Origin	12,614 (97%)
Asian	92 (1%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	38 (0%)
Other/Multiracial	3,275 (25%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	583 (5.85%)
9th through 12th Grade	485 (4.87%)
High School Diploma	2,518 (25.28%)
Some College/2-year	1,282 (12.87%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	4,290 (43.06%)

Exhibit G
10. ECHO report from COTSCO WHOLESALE

Detailed Facility Report

Facility Summary

COSTCO WHOLESALE #365

200 AVENIDA RAFAEL, CAGUAS, PR 00725

FRS (Facility Registry Service) ID: 110007904599

EPA Region: 02

Latitude: 18.24499

Longitude: -66.01969

Locational Data Source: FRS

Industries: General Merchandise Retailers

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	09/11/2015
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000013953)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007904599					N	18.24499	-66.01969
RCRAInfo	RCRA	PRR000013953	VSQG	Active (H)			N	18.247765	-66.019931

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007904599	COSTCO WHOLESALE #365	200 AVENIDA RAFAEL, CAGUAS, PR 00725	Caguas Municipio
RCRAInfo	RCRA	PRR000013953	COSTCO WHOLESALE #365	200 AVENIDA RAFAEL, CAGUAS, PR 00725	Caguas Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCRAInfo	PRR000013953	45521	Warehouse Clubs, Supercenters, and Other General Merchandise Retailers

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

RCRA (Hazardous Waste (Resource Conservation and Recovery Act) Compliance Pipeline (Compliance Monitoring → Violations → Enforcement Actions) (10 Years)

This table shows how violations relate to compliance monitoring (CM) activities and enforcement. Currently available for CAA and RCRA only. Full CM history available below.

No data records returned

There are no relationships to display in the RCRA Compliance Pipeline table for this facility. Scroll down to view compliance monitoring history.

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000013953	No	06/07/2025	0	06/06/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PRR000013953)			07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

e-Manifest Hazardous Waste History (Public)

Hazardous Waste Shipped in Kilograms by Year (Through 3/8/2025)

Source ID	Waste Description	2022	2023	2024	2025
PRR000013953	Hazardous Waste	138	237	292	--
PRR000013953	Acute Hazardous Waste	0	0	0	--
PRR000013953	Pharmaceutical Hazardous Waste	0	0	0	--

“Pharmaceutical Hazardous Waste” refers to quantities managed under 40 CFR part 266 subpart P and thus excluded from the Hazardous and Acute Hazardous Waste quantities shown above.

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA’s spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	16,033
Population Density	5,255/sq.mi.
Housing Units in Area	7,773
Percent People of Color	98%
Households in Area	6,711
Households on Public Assistance	240
Persons With Low Income	11,408
Percent With Low Income	71%

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	668 (4%)
Minors 17 years and younger	2,797 (17%)
Adults 18 years and older	13,237 (83%)
Seniors 65 years and older	3,899 (24%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	8,302 (52%)
African-American	1,156 (7%)
Hispanic-Origin	15,556 (97%)
Asian	50 (0%)

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.24499
Center Longitude	-66.01969
Total Area	--
Land Area	98%
Water Area	2%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	2,208 (32.91%)
$15,000 - $25,000	1,273 (18.97%)
$25,000 - $50,000	1,919 (28.6%)
$50,000 - $75,000	651 (9.7%)
Greater than $75,000	659 (9.82%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
Hawaiian/Pacific Islander	0 (0%)
American Indian	48 (0%)
Other/Multiracial	3,367 (21%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	918 (7.73%)
9th through 12th Grade	663 (5.58%)
High School Diploma	3,254 (27.4%)
Some College/2-year	1,717 (14.46%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	3,983 (33.53%)

Exhibit G
11. ECHO report from CARTAGENA PRINTING

Detailed Facility Report

Facility Summary

CARTAGENA PRINTING

PR-156 KM 57.1, CAGUAS, PR 00726

FRS (Facility Registry Service) ID: 110014361706

EPA Region: 02

Latitude: 18.233489

Longitude: -66.045574

Locational Data Source: RCRAINFO

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other, (PRN008009839)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110014361706					N	18.233489	-66.045574
RCRAInfo	RCRA	PRN008009839	Other	Inactive ( )			N	18.233489	-66.045574

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110014361706	CARTAGENA PRINTING	PR-156 KM 57.1, CAGUAS, PR 00726	Caguas Municipio
RCRAInfo	RCRA	PRN008009839	CARTAGENA PRINTING	CARR 156 KM 57.1, CAGUAS, PR 00726	Caguas Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRN008009839	No	06/28/2025	0	06/27/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PRN008009839)			07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	23,318
Population Density	7,472/sq.mi.
Housing Units in Area	12,021
Percent People of Color	99%
Households in Area	9,991
Households on Public Assistance	448
Persons With Low Income	16,382
Percent With Low Income	71%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.233489
Center Longitude	-66.045574
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	3,593 (35.97%)
$15,000 - $25,000	1,583 (15.85%)
$25,000 - $50,000	2,581 (25.84%)
$50,000 - $75,000	1,268 (12.69%)
Greater than $75,000	964 (9.65%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	981 (4%)
Minors 17 years and younger	3,992 (17%)
Adults 18 years and older	19,324 (83%)
Seniors 65 years and older	5,075 (22%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	12,591 (54%)
African-American	2,328 (10%)
Hispanic-Origin	22,830 (98%)
Asian	93 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	43 (0%)
Other/Multiracial	4,785 (21%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	1,716 (10.11%)
9th through 12th Grade	1,123 (6.62%)
High School Diploma	4,738 (27.92%)
Some College/2-year	2,409 (14.2%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	5,228 (30.81%)

Exhibit G
12. ECHO report from CARIBE WATER TECHNOLOGY INC

Detailed Facility Report

Facility Summary

CARIBE WATER TECHNOLOGY INC

WEST INDUSTRIAL PARK ST B KM 58.2 RD 156, CAGUAS, PR 00726

FRS (Facility Registry Service) ID: 110071292365

EPA Region: 02

Latitude: 18.234509

Longitude: -66.041782

Locational Data Source: RCRAINFO

Industries: Utilities

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000027904)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110071292365					N	18.234509	-66.041782
RCRAInfo	RCRA	PRR000027904	VSQG	Active (H)			N	18.234509	-66.041782

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110071292365	CARIBE WATER TECHNOLOGY INC	WEST INDUSTRIAL PARK ST B KM 58.2 RD 156, CAGUAS, PR 00726	Caguas Municipio
RCRAInfo	RCRA	PRR000027904	CARIBE WATER TECHNOLOGY INC	WEST INDUSTRIAL PARK ST B KM 58.2 RD 156, CAGUAS, PR 00726	Caguas Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCRAInfo	PRR000027904	221310	Water Supply and Irrigation Systems

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000027904	No	06/28/2025	0	06/27/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PRR000027904)			07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	24,021
Population Density	7,698/sq.mi.
Housing Units in Area	12,578
Percent People of Color	98%
Households in Area	10,399
Households on Public Assistance	500
Persons With Low Income	17,499
Percent With Low Income	73%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.234509
Center Longitude	-66.041782
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	3,949 (37.96%)
$15,000 - $25,000	1,713 (16.46%)
$25,000 - $50,000	2,688 (25.84%)
$50,000 - $75,000	1,196 (11.5%)
Greater than $75,000	858 (8.25%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	1,119 (5%)
Minors 17 years and younger	4,171 (17%)
Adults 18 years and older	19,855 (83%)
Seniors 65 years and older	5,303 (22%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	12,523 (52%)
African-American	2,310 (10%)
Hispanic-Origin	23,436 (98%)
Asian	103 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	39 (0%)
Other/Multiracial	5,210 (22%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	1,669 (9.58%)
9th through 12th Grade	1,191 (6.83%)
High School Diploma	4,984 (28.6%)
Some College/2-year	2,550 (14.63%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	5,149 (29.55%)

Exhibit G
13. ECHO report from BANFIELD PET HOSPITAL NUM 2188

Detailed Facility Report

Facility Summary

BANFIELD PET HOSPITAL #2188

200 RAFAEL CORDERO AVE SUITE 100, CAGUAS, PR 00961

FRS (Facility Registry Service) ID: 110069288032

EPA Region: 02

Latitude: 18.24499

Longitude: -66.01969

Locational Data Source: FRS

Industries: Professional, Scientific, and Technical Services

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000025700)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110069288032					N	18.24499	-66.01969
RCRAInfo	RCRA	PRR000025700	VSQG	Active (H)			N	18.229998	-66.032624

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110069288032	BANFIELD PET HOSPITAL #2188	200 RAFAEL CORDERO AVE SUITE 100, CAGUAS, PR 00961	Caguas Municipio
RCRAInfo	RCRA	PRR000025700	BANFIELD PET HOSPITAL #2188	200 RAFAEL CORDERO AVE SUITE 100, CAGUAS, PR 00961	Caguas Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCRAInfo	PRR000025700	541940	Veterinary Services

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000025700	No	06/07/2025	0	06/06/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PRR000025700)			07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

e-Manifest Hazardous Waste History (Public)

Hazardous Waste Shipped in Kilograms by Year (Through 3/8/2025)

Source ID	Waste Description	2022	2023	2024	2025
PRR000025700	Hazardous Waste	181	245	132	--
PRR000025700	Acute Hazardous Waste	0	0	0	--
PRR000025700	Pharmaceutical Hazardous Waste	0	0	0	--

“Pharmaceutical Hazardous Waste” refers to quantities managed under 40 CFR part 266 subpart P and thus excluded from the Hazardous and Acute Hazardous Waste quantities shown above.

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA’s spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	16,033
Population Density	5,255/sq.mi.
Housing Units in Area	7,773
Percent People of Color	98%
Households in Area	6,711
Households on Public Assistance	240
Persons With Low Income	11,408
Percent With Low Income	71%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.24499
Center Longitude	-66.01969
Total Area	--
Land Area	98%
Water Area	2%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	2,208 (32.91%)
$15,000 - $25,000	1,273 (18.97%)
$25,000 - $50,000	1,919 (28.6%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	668 (4%)
Minors 17 years and younger	2,797 (17%)
Adults 18 years and older	13,237 (83%)
Seniors 65 years and older	3,899 (24%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	8,302 (52%)
African-American	1,156 (7%)
Hispanic-Origin	15,556 (97%)
Asian	50 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	48 (0%)
Other/Multiracial	3,367 (21%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	918 (7.73%)
9th through 12th Grade	663 (5.58%)
High School Diploma	3,254 (27.4%)
Some College/2-year	1,717 (14.46%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	3,983 (33.53%)

Income Breakdown (ACS (American Community Survey)) - Households (%)	
$50,000 - $75,000	651 (9.7%)
Greater than $75,000	659 (9.82%)

Exhibit G
14. ECHO report from APR UNLIMITED GENERAL CONTRACTORS

Detailed Facility Report

Facility Summary

APR UNLIMITED GENERAL CONTRACTORS

19 JOSE VILLARES AVE, CAGUAS, PR 00726

FRS (Facility Registry Service) ID: 110062917170

EPA Region: 02

Latitude: 18.2389

Longitude: -66.02023

Locational Data Source: FRS

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRN008027005)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110062917170					N	18.2389	-66.02023
RCRAInfo	RCRA	PRN008027005	VSQG	Active (H)			N	18.237349	-66.023948

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110062917170	APR UNLIMITED GENERAL CONTRACTORS	19 JOSE VILLARES AVE, CAGUAS, PR 00726	Caguas Municipio
RCRAInfo	RCRA	PRN008027005	APR UNLIMITED GENERAL CONTRACTORS	19 JOSE VILLARES AVE, CAGUAS, PR 00726	Caguas Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRN008027005	No	06/07/2025	0	06/06/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PRN008027005)			07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	19,021
Population Density	6,245/sq.mi.
Housing Units in Area	9,486
Percent People of Color	99%
Households in Area	8,145
Households on Public Assistance	292
Persons With Low Income	13,944
Percent With Low Income	73%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.2389
Center Longitude	-66.02023
Total Area	--
Land Area	98%
Water Area	2%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	2,949 (36.19%)
$15,000 - $25,000	1,522 (18.68%)
$25,000 - $50,000	2,148 (26.36%)
$50,000 - $75,000	823 (10.1%)
Greater than $75,000	706 (8.66%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	733 (4%)
Minors 17 years and younger	3,275 (17%)
Adults 18 years and older	15,746 (83%)
Seniors 65 years and older	4,541 (24%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	9,405 (49%)
African-American	1,658 (9%)
Hispanic-Origin	18,459 (97%)
Asian	60 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	71 (0%)
Other/Multiracial	4,249 (22%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	1,156 (8.26%)
9th through 12th Grade	837 (5.98%)
High School Diploma	3,977 (28.42%)
Some College/2-year	1,955 (13.97%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	4,360 (31.16%)

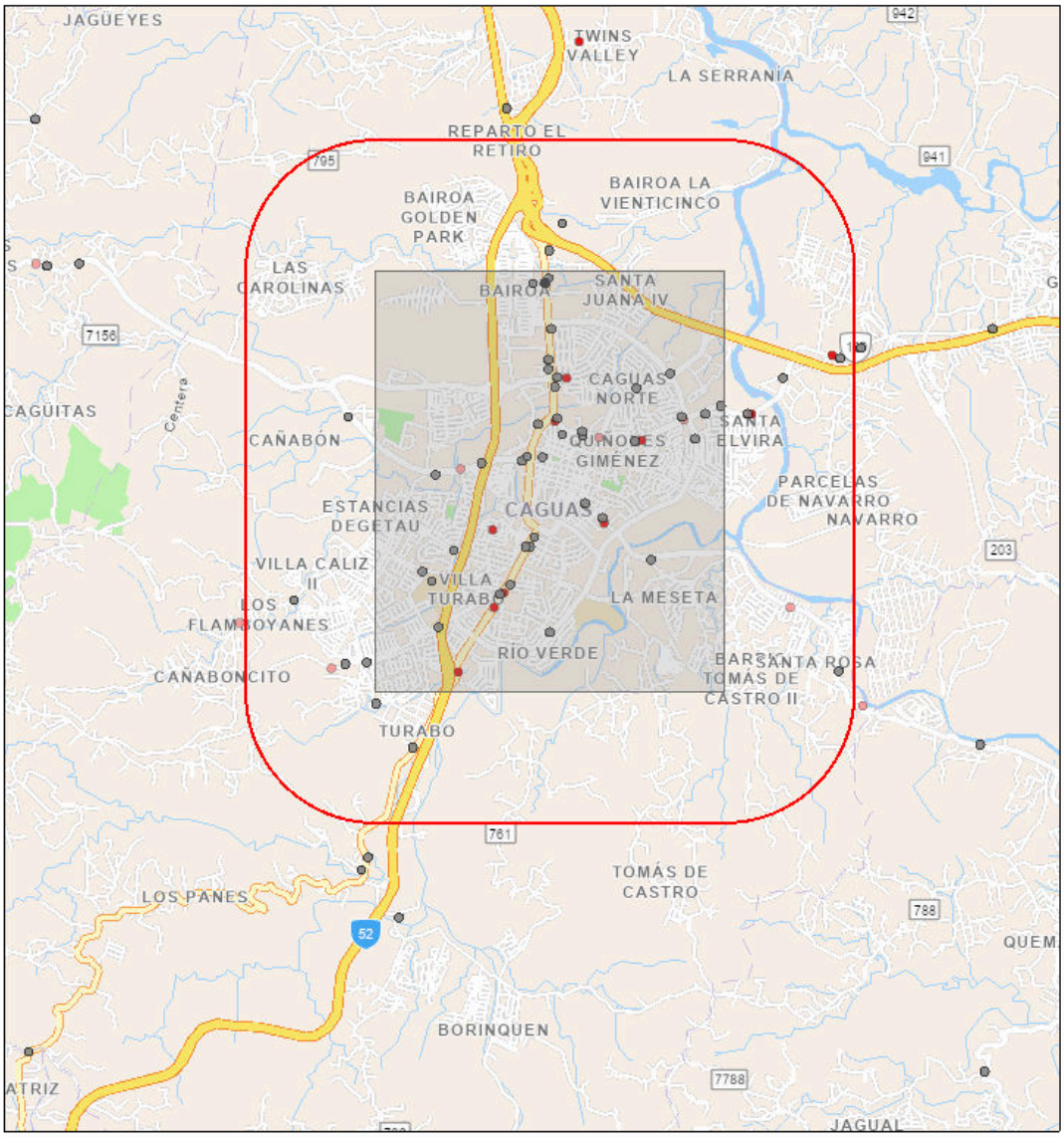
Exhibit G
15. UST list near the project

Screening Report

Area of Interest (AOI) Information

Area : 658,289,014.14 ft²

Jun 17 2025 11:58:10 Bolivia Time



Facilities

- Unknown

Releases

- No Further Action
- Open

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

Summary

Name	Count	Area(ft²)	Length(ft)
Releases	15	N/A	N/A
Facilities	49	N/A	N/A

Releases

#	Facility_ID	LUST_ID	Name	Address	City
1	*No Data*	93-0064	Juan Delgado Betancourt	Carr 189 km 4.1	Gurabo
2	*No Data*	94-0171	Maaco (S-265-0-55)	Carr. 1 km. 34.2 Bo. Bairoa	Caguas
3	*No Data*	98-0116	Defensa Civil Caguas	Brasil #1 Urb. Bunker	Caguas
4	*No Data*	98-0115	Municipio de Carolina	Carr. 1 km. 37.0	Caguas
5	*No Data*	86-0168	Gulf #147	Carr. 156 Km. 57.7	Caguas
6	*No Data*	86-0204	Gulf # 602 (Antes #186)	Carr 189 km 0.6	Caguas
7	*No Data*	86-0405	Sr. Jose Sánchez/Coqui	Carr 189 km 1.7	Caguas
8	*No Data*	86-1098	Jose Mendoza	Carr. 172 km 0.5, Urb. Villanueva	Caguas
9	*No Data*	91-0136	GPR #5225	Carr 183 km 2.6	San Lorenzo
10	*No Data*	86-0256	Gulf #025	Carr 1 & 172	Caguas
11	*No Data*	86-0266	Gulf s/s 038	Calle Georgetti 3	Caguas
12	*No Data*	86-1088	Esso # CO-235	Gautier Benitez # 360	Caguas
13	*No Data*	86-1090	Antonio del Valle Co-237	Carr 189 Int. 768	Caguas
14	*No Data*	86-1094	Esso CO-241	Carr 189 Km 2.6	Caguas
15	*No Data*	86-1089	Esso Hungry Tiger	Carr 1 Esq. Carr. 189 Urb. Paradis	Caguas

#	County	Zip_Code	State	Latitude	Longitude
1	*No Data*	*No Data*	Puerto Rico	18.2460	-66.0028
2	*No Data*	*No Data*	Puerto Rico	18.2435	-66.0338
3	*No Data*	*No Data*	Puerto Rico	18.2267	-66.0425
4	*No Data*	*No Data*	Puerto Rico	18.2181	-66.0424
5	*No Data*	*No Data*	Puerto Rico	18.2334	-66.0463
6	*No Data*	*No Data*	Puerto Rico	18.2370	-66.0301
7	*No Data*	*No Data*	Puerto Rico	18.2389	-66.0201
8	*No Data*	*No Data*	Puerto Rico	18.2112	-66.0614
9	*No Data*	*No Data*	Puerto Rico	18.2181	-66.0076
10	*No Data*	*No Data*	Puerto Rico	18.2197	-66.0413
11	*No Data*	*No Data*	Puerto Rico	18.2274	-66.0295
12	*No Data*	*No Data*	Puerto Rico	18.2108	-66.0466
13	*No Data*	*No Data*	Puerto Rico	18.2366	-66.0251
14	*No Data*	*No Data*	Puerto Rico	18.2395	-66.0122
15	*No Data*	*No Data*	Puerto Rico	18.2387	-66.0352

#	Coordinate_Source	Address_Match_Type	Reported_Date	Status	Substance
1	Geocode	DistanceMarker	*No Data*	Open	*No Data*
2	Geocode	PointAddress	*No Data*	Open	*No Data*
3	Geocode	StreetAddressExt	*No Data*	Open	*No Data*
4	Geocode	DistanceMarker	*No Data*	Open	*No Data*
5	Geocode	DistanceMarker	*No Data*	No Further Action	*No Data*
6	Geocode	DistanceMarker	*No Data*	No Further Action	*No Data*
7	Geocode	DistanceMarker	*No Data*	No Further Action	*No Data*
8	Geocode	DistanceMarker	*No Data*	No Further Action	*No Data*
9	Geocode	DistanceMarker	*No Data*	No Further Action	*No Data*
10	Geocode	StreetInt	*No Data*	Open	*No Data*
11	Geocode	PointAddress	*No Data*	Open	*No Data*
12	Geocode	StreetAddress	*No Data*	Open	*No Data*
13	Geocode	StreetAddressExt	*No Data*	Open	*No Data*
14	Geocode	DistanceMarker	*No Data*	Open	*No Data*
15	Geocode	StreetInt	*No Data*	Open	*No Data*

#	Population_within_1500ft	DomesticWells_within_1500ft	LandUse	Within_SPA	SPA_PWS_FacilityID
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
2	*No Data*	*No Data*	*No Data*	No	*No Data*
3	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
4	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
5	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
6	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
7	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
8	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
9	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
10	*No Data*	*No Data*	*No Data*	No	*No Data*
11	*No Data*	*No Data*	*No Data*	No	*No Data*
12	*No Data*	*No Data*	*No Data*	No	*No Data*
13	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
14	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
15	*No Data*	*No Data*	*No Data*	No	*No Data*

#	SPA_Water_Type	SPA_Facility_Type	SPA_HUC12	Within_WHPA	WHPA_PWS_FacilityID
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
2	*No Data*	*No Data*	*No Data*	No	*No Data*
3	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
4	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
5	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
6	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
7	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
8	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
9	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
10	*No Data*	*No Data*	*No Data*	No	*No Data*
11	*No Data*	*No Data*	*No Data*	No	*No Data*
12	*No Data*	*No Data*	*No Data*	Yes	PR0613046_1808
13	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
14	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
15	*No Data*	*No Data*	*No Data*	No	*No Data*

#	WHPA_Water_Type	WHPA_Facility_Type	WHPA_HUC12	Within_100yr_Floodplain	Closed_With_Residual_Contaminat
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
2	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
3	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
4	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
5	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
6	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
7	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
8	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
9	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
10	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
11	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
12	GW	WL	210100050403	*No Data*	*No Data*
13	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
14	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
15	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*

#	EPA_Region	NFA_Letter	Tribe	Count
1	2		*No Data*	1
2	2		*No Data*	1
3	2		*No Data*	1
4	2		*No Data*	1
5	2		*No Data*	1
6	2		*No Data*	1
7	2		*No Data*	1
8	2		*No Data*	1
9	2		*No Data*	1
10	2		*No Data*	1
11	2		*No Data*	1
12	2		*No Data*	1
13	2		*No Data*	1
14	2		*No Data*	1
15	2		*No Data*	1

Facilities

#	Facility_ID	Name	Address	City	County
1	PR_24563-24570	TORAL SS 930064	CARR 189 KM 4.1 BO NAVARRO	GURABO	*No Data*
2	PR_24183-24660	ROGELIO GAS STATION	AVE BAIROA ESQ BONSO VELAZQUEZ	CAGUAS	*No Data*
3	PR_24202-24555	GULF SS#017	CARR 1 KM 34.5	CAGUAS	*No Data*
4	PR_24189-24487	AEE GAS+DIESEL	CARR 1 ESQ JOSE MERCADO	CAGUAS	*No Data*
5	PR_24213-24495	TOTAL SS #115932	CARR 1 ESQ CARR 189	CAGUAS	*No Data*
6	PR_24210-24533	TEXACO VILLA BLANCA SS #315	CENTRO COMERCIAL VILLA BLANCA	CAGUAS	*No Data*
7	PR_24213-24546	GULF #155	CALLE PEDRO J COLLAZO DEL VALLE	CAGUAS	*No Data*
8	PR_24219-24735	OPM CAGUAS	INDUSTRIAL BAIROA CARR 1 KM 32.5	CAGUAS	*No Data*
9	PR_24205-24605	SHELL #000701	URB VILLA BLANCA 86 CALLE ACUAMARINA	CAGUAS	*No Data*
10	PR_24201-24667	NATIONAL PETROLEUM CORP	CARR 1 KM 33.3 BO BAIROA	CAGUAS	*No Data*
11	PR_24203-24701	PRTC CENTRO OPERACIONES	CARR 1 KM 32.7 BO BAIROA	CAGUAS	*No Data*
12	PR_24143-24278	GULF SS # 025	CARR 1 INT CARR 172	CAGUAS	*No Data*
13	PR_24155-24290	TOTAL SS #304130	CARR 1 KM 37.5	CAGUAS	*No Data*
14	PR_24179-24336	SHELL #00248	AVE GAUTIER BENITEZ	CAGUAS	*No Data*
15	PR_24174-24337	TOTAL #115977	AVE GAUTIER BENITEZ #160	CAGUAS	*No Data*
16	PR_24185-24349	TEXACO	AVE GAUTIER BENITEZ #136	CAGUAS	*No Data*
17	PR_24247-24390	TEXACO SS GEORGETTI	CALLE GEORGETTI #46	CAGUAS	*No Data*
18	PR_24270-24372	GULF #038	CALLE GEORGETTI #3	CAGUAS	*No Data*
19	PR_24219-24475	SANTA PAULA OIL	URB PARADISE CALLE BALDORIOTY #3 FINAL	CAGUAS	*No Data*
20	PR_24245-24473	SHELL SS #804827	DESVIO GURABO ESQ ACOSTA	CAGUAS	*No Data*
21	PR_24244-24479	GULF	CARR 189 KM 0.5 AVE JOSE VILLARES ESQ ACOSTA	CAGUAS	*No Data*
22	PR_24309-24467	TOTAL SS #115880	AVE JOSE VILLARES #124	CAGUAS	*No Data*
23	PR_24367-24497	TEXACO #302	CARR 189 KM 1.7	CAGUAS	*No Data*
24	PR_24396-24501	TEXACO #229	CARR 189 KM 2.0	CAGUAS	*No Data*
25	PR_24415-24511	GULF #469	CARR 189 KM 2.3	CAGUAS	*No Data*
26	PR_24449-24500	TOTAL #115727	CARR 189 KM 2.6	CAGUAS	*No Data*
27	PR_24492-24545	GULF #177	CARR 189 KM 3.3	GURABO	*No Data*
28	PR_24066-24237	SHELL SS #003042	CARR 487 VILLA DEL REY	CAGUAS	*No Data*
29	PR_23977-24194	TOTAL SS #115040	CARR 172 KM 0.5 BO TURABO	CAGUAS	*No Data*
30	PR_23951-24192	CORREA SS	CARR 172 KM 0.3	CAGUAS	*No Data*
31	PR_24035-24089	SHELL SS #804916	CARR 1 KM 39.8 BO TURABO	CAGUAS	*No Data*

32	PR_24119-24440	TOTAL SS #115664	CARR 156 SALIDA CAGUAS-AGUAS BUENAS	CAGUAS	*No Data*
33	PR_23954-24496	GULF SS #147	CARR 156 KM 57.7 BO CAÑABON	CAGUAS	*No Data*
34	PR_24063-24425	TOTAL SS #115690	CARR 156 KM 59.0 BO CAÑABONCITO	CAGUAS	*No Data*
35	PR_24170-24442	SHELL SS #804835	CALLE BETANCES #113	CAGUAS	*No Data*
36	PR_24176-24448	GULF SS #011	CALLE BETANCES #90	CAGUAS	*No Data*
37	PR_24195-24447	PRTC CAGUAS PUEBLO	CALLE PADIAL #19	CAGUAS	*No Data*
38	PR_24353-24550	TOTAL SS #115689	URB JARDINES CONDADO AVE RAFAEL CORDERO ESQ LUIS MUÑOZ MARIN	CAGUAS	*No Data*
39	PR_24384-24470	GULF SS #162	URB CAGUAX CALLE 1 INT AVE CAGUAX	CAGUAS	*No Data*
40	PR_24204-24231	SHELL SS	AVE LUIS MUÑOZ MARIN 32 CALLE SAN CARLOS BO TURABO	CAGUAS	*No Data*
41	PR_24085-24332	SHELL SS #002941	URB BONEVILLE HEIGHTS CARR 1 KM 27.5	CAGUAS	*No Data*
42	PR_24329-24321	SHELL SS #002976	CARR 183 KM 1.5 BO TOMAS DE CASTRO	CAGUAS	*No Data*
43	PR_24562-24185	GULF BELTRAN SS	CARR 183 KM 4.6 BO TOMAS DE CASTRO	CAGUAS	*No Data*
44	PR_24311-24532	GULF SS #097	URB CAGUAS NORTE CALLE LA PAZ	CAGUAS	*No Data*
45	PR_24058-24294	HOSPITAL REGIONAL CAGUAS	CARR 172 KM 0.2 VILLA DEL REY	CAGUAS	*No Data*
46	PR_24046-24306	SHELL SS #002909	CENTRO COMERCIAL TURABO GARDENS	CAGUAS	*No Data*
47	PR_23887-24270	BLUE POINT	CARR 784 KM 2.4 BO CAÑABONCITO	CAGUAS	*No Data*
48	PR_23989-24144	GULF SS #463	URB VILLA NUEVA CALLE 4 ESQ 5	CAGUAS	*No Data*
49	PR_24202-24567	GARAJE JUANO	CARR 1 KM 34.0	CAGUAS	*No Data*

#	State	Zip_Code	Latitude	Longitude	Coordinate_Source
1	Puerto Rico	*No Data*	18.2458	-66.0018	State
2	Puerto Rico	*No Data*	18.2540	-66.0378	State
3	Puerto Rico	*No Data*	18.2445	-66.0360	State
4	Puerto Rico	*No Data*	18.2384	-66.0372	State
5	Puerto Rico	*No Data*	18.2391	-66.0350	State
6	Puerto Rico	*No Data*	18.2425	-66.0352	State
7	Puerto Rico	*No Data*	18.2437	-66.0349	State
8	Puerto Rico	*No Data*	18.2607	-66.0343	State
9	Puerto Rico	*No Data*	18.2490	-66.0357	State
10	Puerto Rico	*No Data*	18.2546	-66.0360	State
11	Puerto Rico	*No Data*	18.2577	-66.0359	State
12	Puerto Rico	*No Data*	18.2195	-66.0416	State
13	Puerto Rico	*No Data*	18.2206	-66.0405	State
14	Puerto Rico	*No Data*	18.2248	-66.0382	State
15	Puerto Rico	*No Data*	18.2248	-66.0386	State
16	Puerto Rico	*No Data*	18.2259	-66.0376	State
17	Puerto Rico	*No Data*	18.2296	-66.0317	State
18	Puerto Rico	*No Data*	18.2279	-66.0296	State
19	Puerto Rico	*No Data*	18.2373	-66.0344	State
20	Puerto Rico	*No Data*	18.2371	-66.0319	State
21	Puerto Rico	*No Data*	18.2376	-66.0320	State
22	Puerto Rico	*No Data*	18.2365	-66.0258	State
23	Puerto Rico	*No Data*	18.2392	-66.0203	State
24	Puerto Rico	*No Data*	18.2396	-66.0176	State
25	Puerto Rico	*No Data*	18.2405	-66.0158	State
26	Puerto Rico	*No Data*	18.2395	-66.0127	State
27	Puerto Rico	*No Data*	18.2436	-66.0086	State
28	Puerto Rico	*No Data*	18.2158	-66.0489	State
29	Puerto Rico	*No Data*	18.2119	-66.0573	State
30	Puerto Rico	*No Data*	18.2118	-66.0598	State
31	Puerto Rico	*No Data*	18.2025	-66.0518	State
32	Puerto Rico	*No Data*	18.2341	-66.0438	State
33	Puerto Rico	*No Data*	18.2392	-66.0594	State
34	Puerto Rico	*No Data*	18.2328	-66.0492	State
35	Puerto Rico	*No Data*	18.2343	-66.0390	State
36	Puerto Rico	*No Data*	18.2348	-66.0384	State
37	Puerto Rico	*No Data*	18.2347	-66.0367	State
38	Puerto Rico	*No Data*	18.2440	-66.0217	State
39	Puerto Rico	*No Data*	18.2368	-66.0188	State
40	Puerto Rico	*No Data*	18.2152	-66.0358	State
41	Puerto Rico	*No Data*	18.2244	-66.0471	State
42	Puerto Rico	*No Data*	18.2234	-66.0240	State

43	Puerto Rico	*No Data*	18.2110	-66.0020	State
44	Puerto Rico	*No Data*	18.2424	-66.0257	State
45	Puerto Rico	*No Data*	18.2210	-66.0497	State
46	Puerto Rico	*No Data*	18.2220	-66.0507	State
47	Puerto Rico	*No Data*	18.2188	-66.0658	State
48	Puerto Rico	*No Data*	18.2074	-66.0562	State
49	Puerto Rico	*No Data*	18.2456	-66.0360	State

#	Address_Match_Type	Open_USTs	Closed_USTs	TOS_USTs	Facility_Status
1	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
2	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
3	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
4	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
5	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
6	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
7	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
8	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
9	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
10	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
11	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
12	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
13	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
14	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
15	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
16	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
17	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
18	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
19	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
20	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
21	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
22	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
23	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
24	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
25	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
26	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
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28	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
29	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
30	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
31	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
32	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
33	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
34	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
35	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
36	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
37	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
38	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
39	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
40	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
41	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
42	*No Data*	*No Data*	*No Data*	*No Data*	Unknown

43	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
44	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
45	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
46	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
47	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
48	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
49	*No Data*	*No Data*	*No Data*	*No Data*	Unknown

#	LandUse	Population_1500ft	Private_Wells_1500ft	Within_SPA	SPA_PWS_FacilityID
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
2	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
3	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
4	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
5	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
6	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
7	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
8	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
9	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
10	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
11	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
12	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
13	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
14	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
15	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
16	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
17	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
18	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
19	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
20	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
21	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
22	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
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#	SPA_Water_Type	SPA_Facility_Type	SPA_HUC12	Within_WHPA	WHPA_PWS_FacilityID
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#	WHPA_Water_Type	WHPA_Facility_Type	WHPA_HUC12	Within_100yr_Floodplain	Date_of_Last_Inspection
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49	2	*No Data*	1

Exhibit H. Endangered Species

Exhibit H
1. Respond from the USFW for CDBG-DR 252 262

Based on the information provided, we determined the project proposed qualifies for the blanket clearance letter. Nevertheless, if the project is modified this office should be contacted concerning the need for the initiation of consultation under section 7 of Endangered Species Act of 1973.

Reviewer DAMARIS ROMAN RUIZ Digitally signed by DAMARIS ROMAN RUIZ Date: 2025.05.12 13:10:49 -04'00'

LOURDES MENA Digitally signed by LOURDES MENA Date: 2025.05.13 08:39:57 -04'00'

Caribbean ES Field Supervisor

MUNICIPIO AUTÓNOMO DE CAGUAS
Apartado 907 Caguas, PR 00726
Tel. 787.653.8833
caguas.gov.pr

MEMORIAL EXPLICATIVO PARA LA REHABILITACION DE LAS AVENIDAS PRINCIPALES DE LA CIUDAD (252 Y 262)

El proyecto propuesto impacta las principales avenidas de la Ciudad. Estas avenidas proveen acceso al tránsito desde las áreas urbanas hacia diferentes comunidades en áreas urbanas y rurales de la Ciudad.

Con el paso del huracán María y otros eventos atmosféricos, estas avenidas han sufrido serios daños en cuanto a su infraestructura, especialmente el alumbrado público. De igual forma, muchos de los árboles que estaban en las áreas de siembra, fueron derribados por los fuertes vientos de estos eventos.

El rodaje sufrió varias reparaciones de infraestructura eléctrica y de comunicaciones. Este factor, junto a la pérdida de vida útil del asfalto por las áreas inundadas a causa de las lluvias asociadas a los eventos, tienen estas avenidas en malas condiciones y susceptibles a un daño mayor con el paso de otro evento atmosférico.

El objetivo de estos proyectos es atender todas estas problemáticas y poner la Ciudad en mejor posición para afrontar eventos y la vida diaria de nuestros ciudadanos y quienes nos visitan. De igual manera se implantarán medidas que fomentarán la movilidad peatonal. En esta fase preliminar del proyecto, consideramos que todos los trabajos y excavaciones se realizarán dentro del derecho de vía de la carretera sin la necesidad de adquisiciones.

Para la realización de los trabajos se requerirá lo siguiente:

- Renovación de la superficie asfáltica mediante escarificación de las áreas y depósito de asfalto a 2" de espesor, marcado de líneas de carril, reconstrucción de rampas que cumplan con códigos y reglamentaciones vigentes con su respectivo marcado de pasos peatonales, reforestación con árboles autóctonos y limpieza general de estructura gris. Esto se implementará en las siguientes áreas:
    - Ave. Luis Muñoz Marín y las siguientes calles interiores:
        - Estacionamiento Monumento Luis Muñoz Marín
        - Calle Coral, desde la Ave. Muñoz Marín hasta la Calle Ópalo
        - Calle Garrido, desde la Ave. Muñoz Marín hasta la Calle 4 de la Urb. San Antonio
        - Calle Aramaná Urb. Caguax
        - Calle 1 Urb. Villa Victoria

- Ave. Georgetti, desde la Ave. Muñoz Marín hasta después del residencial Brisas del Turabo
- Calle 6 de Mariolga, desde la Ave. Muñoz Marín hasta la calle 25
- Calle 2 de Mariolga, desde la Ave. Muñoz Marín hasta la calle 23
- Calle Edimburgo, desde la Ave. Muñoz Marín hasta la calle Luxemburgo
- Estacionamientos instalaciones recreativas Villa del Rey I
- Calle Windsor Villa del Rey I, desde la Ave. Muñoz Marín hasta el final

o Ave. Gautier Benítez y las siguientes calles interiores:
- Calle San Carlos, desde Ave. Luis Muñoz Marín hasta la Ave. Pino
- Calle que dirige hacia el Salvation Army

o Ave. Rafael Cordero y las siguientes calles interiores:
- Calle Nuñez
- Estacionamiento Plaza del Mercado
- Calle San Andrés, desde la Ave. Rafael Cordero hasta la Pista Millán Clara

o Bulevar Leoncio Velázquez

o PR-156

o PR-34

- Creación de carriles para ciclistas. La bicicleta es un medio de transporte alternativo y eco-amigable, el cual reduce las emisiones de gases por efecto invernadero para proteger el medio ambiente. El carril ciclista se implantará en las siguientes áreas:
  - Carril ciclista en la avenida Rafael Cordero, en dirección del tránsito con una longitud aproximada de 600 metros comenzando en la Estación de Bomberos en intersección con la calle Dr. Pedro Goyco y la calle El Troche y finalizando en la plazoleta de recreación pasiva localizada en la intersección con la calle Manuel Elzuburu y Vizcarrondo y la calle San Andrés.

  - Carril ciclista en la avenida Rafael Cordero, en ambas direcciones del tránsito con una longitud aproximada de 2000 metros comenzando en la

Estación de Bomberos en intersección con la calle Dr. Pedro Goyco y la calle El Troche y finalizando en la entrada vehicular del Centro Comercial Plaza Centro localizada en el cuadrante Este de Complejo.

- Carril ciclista en la avenida Luis Muñoz Marín, en una sola dirección del tránsito, con una longitud aproximada de 540 metros comenzando en la avenida Rafael Cordero y finalizando en la PR-189.

- Carril ciclista en la PR-189, en una sola dirección del tránsito, con una longitud aproximada de 1,100 metros comenzando en la avenida Luis Muñoz Marín y finalizando en la avenida Rafael Cordero.

- Reemplazo de asfalto y pasos peatonales en adoquines, por rodaje y pasos peatonales en concreto con su debido marcado. Esto se implementará en las siguientes áreas:
  - Intersección con la Ave. Garrido, en Santa Juana
  - Entrada de Plaza Centro II, solo lo que está en adoquines
  - Intersección con Calle Aramaná, Urb. Caguax (cerca de Atento)
  - Intersección con el Bulevar Cristóbal
  - Intersección con la Ave. San Carlos en Mariolga

- Áreas Por Considerarse con Alumbrado Público bajo el Mantenimiento del Municipio:
  - Bulevar Leoncio Velázquez
  - Ave. Muñoz Marín, desde la Ave. Los Trovadores en Bairoa, hasta la Ave. Pino (PR-172)
  - Estacionamiento Monumento Luis Muñoz Marín
  - Ave. Georgetti, desde la Ave. Muñoz Marín hasta después del residencial Brisas del Turabo
  - Estacionamientos instalaciones recreativas Villa del Rey I
  - Calle Windsor Villa del Rey I, desde la Ave. Muñoz Marín hasta el final
  - Ave. Gautier Benítez, entre la Ave. José Mercado (PR-33) y el puente de la PR-52
  - Ave. Degetau, entre la Ave. Muñoz Marín y la Urb. San Alfonso
  - Ave. Pino
  - Calle San Carlos, frente a Plaza del Carmen Mall
  - Ave. Rafael Cordero, entre la entrada de Plaza Centro a la Calle Vizcarrondo
  - PR-156, entre Ave. José Mercado (PR-33) y Puente Sara

- PR-1, entre Puente Las Damas y la intersección con la Mujer Indígena
- Centro Urbano

- Trabajos de Arquitectura e Ingeniería:
  - Revisión de las condiciones del alumbrado actual.
  - Propuesta de poste y luminaria que cumpla con los nuevos códigos de viento y que reduzca consumo energético.
  - Diseño y especificaciones del alumbrado propuesto.
  - Permisología y documentos para proceso de subasta

- Trabajos de Construcción
  - Remoción de postes y bases existentes.
  - Reparación de alambrado y cualquier otro componente eléctrico necesario para el funcionamiento adecuado del alumbrado.
  - Instalación de nuevos postes, con sus respectivas bases y luminaria led.

Para este proyecto se propone una asignación de fondos bajo el programa CDBG-DR del Departamento de la Vivienda de aproximadamente 15 millones de dólares.

De necesitar información adicional, puede comunicarse con nosotros al (787) 653 8833 extensión 2500 o a nuestro correo electrónico planificacion@caguas.gov.pr

Zaid Díaz Isaac, PPL
Director Oficina de Planificación

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Bayamón | Mayagüez | Maricao | Río Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622

In Reply Refer To:
FWS/R4/CESFO/BKT/HUD

Mr. Efrain Maldonado
Field Office Director
U.S. Department of Housing and Urban Development
235 Federico Costa Street, Suite 200
San Juan, Puerto Rico 00918

Re: Blanket Clearance Letter for Federally sponsored projects, Housing and Urban Development

Dear Mr. Maldonado:

On January 14, 2013, the U.S. Fish and Wildlife Service (USFWS) in coordination with the U.S. Department of Housing and Urban Development (HUD), signed the Blanket Clearance Letter (BCL) to expedite the consultation process, for federally sponsored projects. On March 20, 2025, the USFWS and the Puerto Rico Department of Housing (PRDOH) acting as the responsible entity designated by HUD decided to review and update the BCL to ensure that new available information regarding the consultation process is included. This letter replaces the January 14, 2013, Blanket Clearance Letter for HUD sponsored projects.

The U.S. Fish and Wildlife Service (USFWS) is one of two lead Federal Agencies responsible for the protection and conservation of Federal Trust Resources, including threatened or endangered species listed under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (ESA). In the U.S. Caribbean, the USFWS has jurisdiction over terrestrial plants and animals, the Antillean manatee and sea turtles when nesting. The National Marine Fisheries Service has jurisdiction over marine species, except for the manatee. The ESA directs all Federal agencies to participate in conserving these species. Section 7 of the ESA requires Federal agencies to consult with the USFWS to ensure that actions they fund authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species or adversely modify designated critical habitat.

The USFWS issued regulations in 1986 detailing the consultation process. As part of this consultation process, the USFWS reviews development projects to assist Federal agencies on the compliance of the ESA. Since HUD typically allocate grant funds for rural and urban development projects, obligations under the ESA, as well as the National Environmental Policy Act (NEPA), require HUD to perform consultation and an environmental impact review prior to the project's

authorization. Primarily, these projects involve repair or reconstruction of existing facilities associated with developed land.

In order to expedite the consultation process, the Caribbean Ecological Services Field Office (CESFO) has developed this BCL to cover for activities and projects that typically result in no adverse effects to federally-listed species under our jurisdiction. The proposed project criteria discussed below are subject to the following conditions:

1. The project is located within an urban or developed area.

    - An urban or developed area is defined as an area that has one or more of the following characteristics:

        - Presence of existing buildings, residential areas, and commercial establishments.
        - Well-established infrastructure including roads, utilities, and urban facilities.
        - High population density.
        - Established neighborhood and urban amenities ("urbanizaciones").
        - Developed landscape with paved surfaces, parking lots, and industrial areas.
        - Signs of human activity and urbanization, such as shopping centers and recreational facilities.
        - Location within the boundaries of a city or town ("casco urbano").
        - High concentration of built-up structures and limited open spaces.
        - Aerial imagery might be requested to the applicant[1].

2. If the project is located in a rural area, and the project is located within a disturbed area that does not require additional clearing of forested (trees) areas.

3. The project is not located within (or adjacent to) drainages, rivers, streams, wetlands, aquatic systems, or coastal areas.

4. If the project is located in a rural area, and the project is not located immediately adjacent to forested areas (e.g., rock walls and haystack hills ("mogotes"); wet montane forest; lowland wet forest; remnant coastal; mangrove forest; damp and dry limestone karst forests; pastureland with patches of exotic trees[2]).

5. The lighting associated to the facilities is not visible directly or indirectly from the shoreline or beach area.

Proposed projects that **do not** meet the above conditions **Do Not Qualify** for review under the Blanket Clearance Letter developed for compliance with Section 7 of the Endangered Species Act.

[1] This is the definition used by the USFWS in IPaC.
[1] *Ibid.*

Project Criteria:

1. Activities related to the resurfacing existing streets or roads; maintenance of existing upland gabion or reinforced concrete retention walls; construction, reconstruction or repair of gutters and sidewalks along existing roads.

2. Repair, replace, improve, reconstruct and/or rehabilitate facilities in already established public transportation systems (Signs, sidewalks and ramps, bus stops and existing routes).

3. Repair, replace, improve, reconstruct, rehabilitate and/or expanding existing public transportation facilities located in urban or developed areas.

4. Construction of new facilities for public transportation systems (e.g. School bus stops, city buses, trolleybuses, public car stops, Public car terminal) in urban or developed areas.

5. Repair, replace, improve, reconstruct, or rehabilitate existing bridges or rip-rap. (follow FWS rip-rap guidance for design).

6. Reconstruction, or emergency repairs, of existing structures, including but not limited to buildings, facilities and homes.

7. Demolition of dilapidated single-family homes or buildings.

8. Rebuilding of demolished single-family homes or buildings.

9. Retrofitting existing buildings.

10. Construction of residential and/or commercial facilities.

11. Construction, repair, replace, improve, reconstruct, and/or rehabilitate recreational facilities.

12. Addition of concrete pads to the existing footprint of a residential and/or commercial structure, provided that the resulting addition is less than 20% of the size of the existing structure.

13. Improvement or renovations to existing structures (exterior and interior) renovations resulting in an exterior increase greater than 20%.

14. Improvements or renovations to existing structures (exterior and interior renovations) resulting in an exterior increase of less than 20%.

15. Acquisition of residential and/or commercial properties in urban or developed areas for the relocation of families and/or activities.

16. Construction, reconstruction, rehabilitation and/or expansion of cemeteries.

17. Installation/drilling of new water well and associated utility infrastructure, either above ground or underground.

18. Establishment of power facilities, including but not limited to associated aboveground and/or underground infrastructure.

19. Construction of electrical system infrastructure and associated components, including but not limited to associated aboveground and/or underground infrastructure.

20. Construction of land based small electric generating facilities, including those fueled with wind, sun, or biomass, capable of producing no more than 10 MW. *

21. Activities within existing Right of Ways (ROWs) related to water and sanitary infrastructure; communication infrastructure; roads, bridges and highways without the removal of native vegetation and/or major earth movement.

22. Construction of rooftop or urban telecommunications systems and associated components, including but not limited to associated aboveground and/or underground infrastructure.

23. Establishment of temporary debris storage (TDS) facilities.

24. Establishment and/or closure of solid waste management facilities. But not new landfills.

25. Installation of water storage systems (cisterns) and associated infrastructure, either above ground or underground, including but not limited to installations on existing or new concrete pads, or existing or new roofs.

26. Installation of solar panels, battery storage systems and/or associated utility infrastructure, either above ground or underground, on existing or new concrete pads, existing or new roofs, ground or pole mounted.

27. Installation of generators on existing or new concrete slabs, and associated utility infrastructure, either above ground or underground.

28. Repair of existing agricultural structures including but not limited to greenhouses, warehouses, canopies, fences, corrals, and shade structures with less than 20% expansion of footprint.

29. New construction of agricultural structures in established farms including but not limited to greenhouses, warehouses, canopies, fences, corrals, and shade structures with or without underground and/or aboveground infrastructure utility connections.

30. Construction of fences, cattle corrals, concrete slabs.

31. Installation of storage containers on new concrete slab.

32. New construction or work which expands the footprint of an existing structure and occurs entirely on disturbed, regularly maintained, upland property, including the staging of equipment.

*Comply with USFWS wind energy guidelines if more than one wind turbine, consider painting one blade black to help birds see the blades. https://www.fws.gov/media/land-based-wind-energy-guidelines

Determination:

Based on the nature of the projects described above and habitat characteristics described on project criteria, we have determined that the actions and type of projects described above may be conducted within this BCL without adversely affecting federally-listed species under our jurisdiction. Thus, consultation under Section 7 of the Endangered Species Act is not required.

For all projects, HUD and its funded partners (municipalities) are expected to implement Best Management Practices to enhance the conservation of our trust resources (i.e.; listed species, wetlands, aquatic habitats, migratory birds and marine mammals) and avoid impacts from project development to aquatic habitat such as erosion and stream sedimentation. The Service provides the following recommendations that have proven to help achieve this effort.

Water Crossing Structures:

1. Use of bottomless culverts or single span bridges instead of traditional box or RCP culverts or any other water crossing structure that impacts the stream bottom, particularly in streams which support native fish. The use of bottomless culverts or a short span bridge would provide a more stable crossing and would not alter the stream habitat. However, if bottomless structures or bridges are not feasible due to cost or engineering constraints, we recommend the following criteria be used to maintain good habitat in the streams:

    a. The stream should not be widened to fit the bridge since this can lead to sedimentation during low flows and possible bank erosion during high flows. Rather, the bridge should be designed to fit the stream channel at the point of crossing. Culverts should be sized to carry natural bank full flow. Additional flow can be capture by culverts placed at a higher elevation so as not to impact bank full flows.

    b. Bridge abutments, wing walls or any other structures should not intrude into the active stream channel.

    c. All culvert footings must be countersunk into the stream channel at both the invert and outlet ends at a minimum of 10% of the culvert height. This will align the water crossing structure with the slope of the stream.

    d. Waterways must not be blocked as to impede the free movement of water and fish. Materials moved during construction, such as grubbing, earth fills, and earth cut

materials must not be piled where they can fall back into the stream and block the drainage courses.

e. Appropriate erosion and/or sedimentation controls measures are to be undertaken to protect water quality until riverbanks are re-vegetated. It has been our experience that appropriate erosion and/or sedimentation control measures are not implemented properly by project contractors. In order to function properly, silt fences need to be buried 6" (proper depth is marked by a line on the silt fence) and suppo1ted at regular intervals by wood stakes. For that reason we are recommending that the enclosed drawing of proper silt fence installation is included in all final project construction plans.

f. Upon completion of a water crossing construction, any temporary fill, must be removed from the construction area and disposed in a landfill.

For a detailed guide to water crossing structures, the Service developed a detailed guide to water crossing structures for regulatory review by permitting agencies, protect damaged structures, reduce future damages, and prevent or minimize damage to natural resources. The document is titled "Guidance for Repair, Replacement, and Clean-up Projects in Streams and Waterways of Puerto Rico and U.S. Virgin Islands" and is available at:

https://www.fws.gov/media/guidance-repair-replacement-and-clean-structures-streams-and-waterways-puerto-rico-and-us

Limitations:

Actions that do not meet the above project criteria, such as actions requiring placement of fill, disturbance, or modification to land outside of an existing access road or ROW; actions that occur on vacant property harboring a wetland and/or forest vegetation; actions requiring excavation, clearing of native vegetation, or alteration of storm water drainage patterns; or actions that require lighting which can be directly or indirectly seen from a beach, must be individually coordinated through the Caribbean Ecological Services Field Office and will be evaluated on a case by case basis.

The Service reserves the right to revoke or modify this BCL if:

1. New information reveals that the categories of work covered in this BCL may affect listed or designated critical habitat in a manner, or to an extent, not previously considered.
2. The categories of work included in this BCL are subsequently modified to include activities not considered in this review.
3. New species are listed, or designated critical habitat may be affected.
4. Lack of compliance with criteria in this BCL.

To obtain additional information on threatened and endangered species, you may visit our website https://www.fws.gov/office/caribbean-ecological-services where you will also find the Map of the Species by Municipality and the Map of Critical Habitat. These maps provide information on the species/habitat relations within a municipality and could provide the applicants an insight if the proposed action is covered under this BCL or may affect a species, thus requiring individual review

The USFWS has also developed a web based tool called the Information for Planning and Consultation (IPaC). Please visit https://ipac. ecosphere.fws.gov/ and familiarize yourself with the features we offer. We encourage you to begin your project planning process by requesting an Official Species List for your individual project that will include all species that may occur in the vicinity of the action area and includes a map of the action area. The site will also identify designated critical habitat, or other natural resources of concern that may be affected by your proposed project. Best management practices or conservation measures are available at the site for some species, but we expect the site to continue growing in its offering.

We appreciate your interest in protecting endangered species and their habitats. It is the Service's mission to work with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of our people. It is our mission to work with others, to conserve, protect and enhance fish wildlife and plants and their habitats for the continuing benefit of our people. If you have any additional questions regarding this BCL, please do not hesitate to contact us at (786) 244-0081 or via email at caribbean_es@fws.gov.

Sincerely,

LOURDES MENA

Digitally signed by LOURDES MENA
Date: 2025.04.24 09:11:24 -04'00'

Lourdes Mena
Field Supervisor

MUNICIPIO AUTÓNOMO DE CAGUAS
Apartado 907 Caguas, PR 00726
Tel. 787.653.8833
caguas.gov.pr

Self-Certification

Endangered Species Act Certification

The U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office developed a Blanket Clearance Letter in compliance with Endangered Species Act of 1973, as amended, and the Fish and Wildlife Coordination Act for federally funded projects.

The Service determined that projects in compliance with the following criteria are not likely to adversely affect federally listed species.

The Municipality of Caguas, Puerto Rico certifies that the following project **Rehabilitation of the City's Main Avenues** funded by the **United States Housing and Development Department** and located at **Pueblo Ward** complies with:

(Check one or more below)

Check	Project Criteria
X	1. Activities related to the resurfacing existing streets or roads; maintenance of existing upland gabion or reinforced concrete retention walls; construction; reconstruction or repair of gutters and sidewalks along existing roads.
X	2. Repair, replace, reconstruct and/or rehabilitate facilities in already established public transportation systems (Signs, sidewalks and ramps, bus stops and existing routes).
	3. Repair, replace, improve, reconstruct, rehabilitate and/or expand existing public transportation facilities located in urban or developed areas.
	4. Construction of new facilities for the public transportation system (e.g School bus stops, city buses, trolleybuses, public car stops, public car terminals) in urban or developed areas.
	5. Repair, replace, improve, reconstruct or rehabilitate existing bridges or rip-rap. We recommend following FWS rip-rap guidance for design: https://www.fws.gov/media/guidance-repair-replacement-and-clean-structures-streams-and-waterways-puerto-rico-and-us
	6. Reconstruction, or emergency repairs of existing structures, including but not limited to buildings, facilities and homes.

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	7. Demolition of dilapidated single-family homes or buildings.
	8. Rebuilding of demolished single-family homes or buildings.
	9. Retrofitting existing buildings.
	10. Construction of residential and/or commercial facilities.
	11. Construction, repair, replace, improve, reconstruction, and/or rehabilitate recreational facilities.
	12. Addition of concrete pads to the existing footprint of a residential and/or commercial structure, provided that the resulting addition is less than 20% of the size of the existing structure.
	13. Improvement or renovations to existing structures (exterior and interior) renovations resulting in an exterior increase greater than 20%.
	14. Improvements or renovations to existing structures (exterior and interior) renovations resulting in an exterior increase of less than 20%.
	15. Acquisition pf residential and/or commercial properties in urban or developed areas for the relocation of families and/or activities.
	16. Construction, reconstruction, rehabilitation, and/or expansion of cemeteries.
	17. Installation/drilling of new water well and associated utility infrastructure, either above ground or underground.
	18. Establishment of power facilities, including but not limited to associated above ground and/or underground infrastructure.
	19. Construction of electrical system infrastructure and associated components, including but not limited to associated above ground and/or underground infrastructure.
	20. Construction of land based small electric generation facilities, including those fueled with wind, sun, or biomass, capable of producing no more than 10 MV. *
	21. Activities within existing Right of Ways (ROWs) related to water and sanitary infrastructure; communication infrastructure; roads, bridges and highways without the removal of native vegetation and/or major earth movement.
	22. Construction of rooftop or unban telecommunications systems and associated components, including but not limited to associated aboveground and/or underground infrastructure.
	23. Establishment of temporary debris storage (TDS) facilities.

	24. Establishment and/or closure of solid waste management facilities. **But not new landfills.**
	25. Installation of water storage systems (cisterns) and associated infrastructure, either above ground or underground, including but not limited to installations on existing or new concrete pads, or existing or new roofs.
	26. Installation of solar panels, battery storage systems and/or associated utility infrastructure, either above ground or underground on existing or new concrete pads, existing or new roofs, ground or pole mounted.
	27. Installation of generators on existing or new concrete slabs, and associated utility infrastructure, either above ground or underground.
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	30. Construction of fences, cattle corrals, concrete slabs.
	31. Installation of storage containers on new concrete slabs.
	32. New construction or work which expands the footprint of an existing structure and occurs entirely on disturbed, regularly maintained, upland property, including the staging of equipment.

April 29th, 2025
Date

Zaid Díaz Isaac, PPL
Director
Planning Office
Municipality of Caguas
Phone: 787-224-5287
Email: zdiaz@caguas.gov.pr

CELEBRANDO 250 AÑOS DE FUNDACIÓN CAGUAS (1775-2025)

WILLIAM E. MIRANDA TORRES
ALCALDE

MUNICIPIO AUTÓNOMO DE CAGUAS
Apartado 907 Caguas, PR 00726
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caguas.gov.pr

April 29, 2025

Mrs. Lourdes Mena
Director
Fish & Wildlife Service
Boquerón Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622

Dear Mrs. Mena:

CERTIFICATION OF COMPLIANCE ENDANGERED SPECIES ACT
Project Name: REHABILITATION OF THE CITY'S MAIN AVENUES (252 AND 262), PUEBLO WARD
CDBG Program

The Code of Federal Regulations, Title 24 from Housing and Urban Development (HUD), in its Part 58 (Environmental Review Procedures for entities assuming HUD Environmental Responsibilities) requires that we present a certification of compliance with the Endangered Species Act of 1973 for the project of concern.

We are enclosing a signed certification for the project above included under the CDBG Program. Also, we are including a copy of the blanket letter of your Agency updated on March 20, 2025. A copy of this certification will be filed as evidence of our consulting action with your office in compliance with Federal Agency Regulations.

If you need any further information, please contact Mrs. Lisette Díaz Vázquez, Planning and Community Development Unit at (787) 653-8833 extension 2500 or 2501 or her e-mail ldiaz@caguas.gov.pr.

Cordially,

Zaid Díaz Isaac, PPL
Director
Planning Office

RHA
Annex


FUELS
078
091
Colegio










CAGUAS AMBULATORY SURGI

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DETERMINACION PARA SER INCLUIDA EN LA COMUNICACIÓN A SHPO

Nombre del Proyecto:
REHABILITACION Y MEJORAS DE LAS AVENIDAS PRINCIPALES DE LA CIUDAD
Caguas, Puerto Rico 00725

Se han evaluado los sectores donde se realizarán las mejoras propuestas y de acuerdo con la información sometida entendemos que:

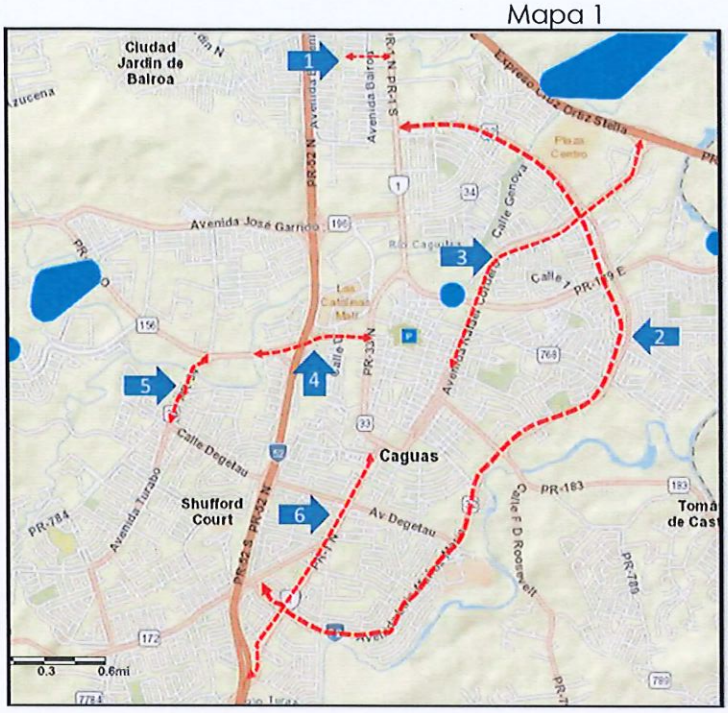
1. El proyecto en su totalidad se encuentra **dentro** del límite definido como zona URBANA del Municipio Autónomo de Caguas, en parte de los Barrios Pueblo, Bairoa, Turabo y Tomás de Castro.

2. El Proyecto no es una intervención en propiedad y/o zona histórica. Para esto, se ha consultado la página Oficial del Portal de Datos Geográficos Gubernamentales. Aunque hay sitios históricos cercanos, ninguna se encuentra a una distancia significativa. A su vez, las obras a realizarse se harán sobre las vías ya construidas y las que se encuentran en uso por más de cuatro (4) décadas. (Ver Mapa 1)

   Según la información provista en el Resumen arqueológico del Municipio Caguas por la Oficina Estatal de Conservación Histórica (Ver Imagen 1) los sitios más cercanos son los siguientes:

   - CS0100041 - Armory at Caguas.
   - CS0100007 – Yacimiento Cauce Medio Río Caguitas
   - CS0100026 – Escuela Superior Gautier Benítez
   - CS0100035 – Central Santa Juana

Mapa 1



MAPA DE RECURSOS CULTURALES Y VIAS PRINCIPALES PROPUESTAS PARA REHABILITACION (MEJORAS PAVIMENTO, ACERAS ENCINTADO Y LUMINARIAS)

MUNICIPIO AUTONOMO DE CAGUAS

Leyenda

Vías objeto de Petición:

1) Boulevard Leoncio Vázquez
2) Ave. Luis Muñoz Marín
3) Ave. Rafael Cordero
4) PR-156
5) PR-34
6) Ave. José Gautier Benítez

Zona Histórica

Recursos Arqueológicos

Fuentes:

Portal MiPR de la Junta de Planificación de PR
Departamento de Obras Públicas Municipal
Oficina de Planificación

Imagen 1

Sitios Arqueológicos de Caguas

Listado de Sitios Arqueológicos en el Municipio de Caguas

TAG*	Nombre del Sitio
CS0100001	Complejo Petroglifos Navarro (k-l) Mano manca
CS0100002	Cagüitas
CS0100003	CS-3
CS0100004	CS-4
CS0100005	CS-5
CS0100006	CS-6
CS0100007	CS-7
CS0100008	Petroglifos Las Canoas
CS0100009	Confluencia Cagüitas y Quebrada Aguacate
CS0100010	Petroglifos Quebrada Algarrobos
CS0100011	CS-11
CS0100012	Petroglifos del Charco Melilla
CS0100013	CS-13
CS0100014	CS-14
CS0100015	CS-15
CS0100016	CS-16
CS0100017	Turabo Clusters
CS0100018	Hacienda Santa Catalina
CS0100019	Los Reyes
CS0100020	CS-20
CS0100021	(Sitio Historico II): H-11

Sitios Arqueológicos de Caguas

CS0100022	CS-22
CS0100023	CS-23
CS0100024	Alcaldía de Caguas
CS0100025	Escuela Vocacional Aguayo Aldea/ La Vocacional
CS0100026	Gautier Benitez High School/ La Gautier
CS0100027	Logia Union y Amparo #44
CS0100028	Primera Iglesia Bautista de Caguas/ Centro Musical Criollo Jose Ignacio Quintón
CS0100029	Puente #6/ Puente La Concepcion
CS0100030	BA Site 1
CS0100031	BA Site 3
CS0100032	BA Site 4
CS0100033	BA Site 5
CS0100034	BA Site 6
CS0100035	Central Santa Juana
CS0100037	Edificio de la General Cigar Tobacco, Co.
CS0100038	Ruinas Central San José/ Hacienda San José
CS0100039	Central Defensa
CS0100040	Manrique House
CS0100041	Armory at Caguas
CS0100042	CS-42

* TAG es el código de recurso utilizado por la Oficina Estatal de Conservación Histórica.

Oficina Estatal de Conservación Histórica

3. Los estudios sobre propiedades históricas existen solo para el Centro Urbano Tradicional y se han documentado con la información levantada por el Arq. Otto Reyes, para las fichas históricas por el Historiador Juan David Hernández y por el listado de lugares ya designados por la Junta de Planificación.

4. Las fichas de las estructuras seleccionadas con potencial histórico se encuentran radicadas en la Junta de Planificación en espera de la evaluación pertinente. La vías principales en las cuales se estarán llevando a cabo los proyectos **no son** parte de alguna selección para ser incluidas como sitio o lugar histórico.

5. El listado del proceso para la construcción a ser realizada es la siguiente:

    - Renovación de la superficie asfáltica mediante escarificación de las áreas y depósito de asfalto a 2" de espesor, marcado de líneas de carril, reconstrucción de rampas que cumplan con códigos y

reglamentaciones vigentes con su respectivo marcado de pasos peatonales, reforestación con árboles autóctonos y limpieza general de estructura gris. Esto se implementará en las siguientes áreas:

- Ave. Luis Muñoz Marín y las siguientes calles interiores:
  - Estacionamiento Monumento Luis Muñoz Marín
  - Calle Coral, desde la Ave. Muñoz Marín hasta la Calle Ópalo
  - Calle Garrido, desde la Ave. Muñoz Marín hasta la Calle 4 de la Urb. San Antonio
  - Calle Aramaná Urb. Caguax
  - Calle 1 Urb. Villa Victoria
  - Ave. Georgetti, desde la Ave. Muñoz Marín hasta después del residencial Brisas del Turabo
  - Calle 6 de Mariolga, desde la Ave. Muñoz Marín hasta la calle 25
  - Calle 2 de Mariolga, desde la Ave. Muñoz Marín hasta la calle 23
  - Calle Edimburgo, desde la Ave. Muñoz Marín hasta la calle Luxemburgo
  - Estacionamiento instalaciones recreativas Villa del Rey I
  - Calle Windsor Villa del Rey I, desde la Ave. Muñoz Marín hasta el final

- Ave. Gautier Benítez y las siguientes calles interiores:
  - Calle San Carlos, desde Ave. Luis Muñoz Marín hasta la Ave. Pino
  - Calle que dirige hacia el Salvation Army
- Ave. Rafael Cordero y las siguientes calles interiores:
  - Calle Nuñez
  - Estacionamiento Plaza del Mercado
  - Calle San Andrés, desde la Ave. Rafael Cordero hasta la Pista Millán Clara
- Bulevar Leoncio Velázquez
- PR-156
- PR-34

- Creación de carriles para ciclistas. La bicicleta es un medio de transporte alternativo y eco-amigable, el cual reduce las emisiones de gases por efecto invernadero para proteger el medio ambiente. El carril ciclista se implantará en las siguientes áreas:

  - Carril ciclista en la avenida Rafael Cordero, en dirección del tránsito con una longitud aproximada de 600 metros

comenzando en la Estación de Bomberos en intersección con la calle Dr. Pedro Goyco y la calle El Troche y finalizando en la plazoleta de recreación pasiva localizada en la intersección con la calle Manuel Elzuburu y Vizcarrondo y la calle San Andrés.

- Carril ciclista en la avenida Rafael Cordero, en ambas direcciones del tránsito con una longitud aproximada de 2000 metros comenzando en la Estación de Bomberos en intersección con la calle Dr. Pedro Goyco y la calle El Troche y finalizando en la entrada vehicular del Centro Comercial Plaza Centro localizada en el cuadrante Este de Complejo.
- Carril ciclista en la avenida Luis Muñoz Marín, en una sola dirección del tránsito, con una longitud aproximada de 540 metros comenzando en la avenida Rafael Cordero y finalizando en la PR-189.
- Carril ciclista en la PR-189, en una sola dirección del tránsito, con una longitud aproximada de 1,100 metros comenzando en la avenida Luis Muñoz Marín y finalizando en la avenida Rafael Cordero.

- Reemplazo de asfalto y pasos peatonales en adoquines, por rodaje y pasos peatonales en concreto con su debido marcado. Esto se implementará en las siguientes áreas:
  - Intersección con la Ave. Garrido, en Santa Juana
  - Entrada de Plaza Centro II, solo lo que está en adoquines
  - Intersección con Calle Aramaná, Urb. Caguax (cerca de Atento)
  - Intersección con el Bulevar Cristóbal
  - Intersección con la Ave. San Carlos en Mariolga
- Áreas Por Considerarse con Alumbrado Público bajo el Mantenimiento del Municipio:
  - Bulevar Leoncio Velázquez
  - Ave. Muñoz Marín, desde la Ave. Los Trovadores en Bairoa, hasta la Ave. Pino (PR-172)
  - Estacionamiento Monumento Luis Muñoz Marín
  - Ave. Georgetti, desde la Ave. Muñoz Marín hasta después del residencial Brisas del Turabo o Estacionamientos instalaciones recreativas Villa del Rey I o Calle Windsor Villa del Rey I, desde la Ave. Muñoz Marín hasta el final
  - Ave. Gautier Benítez, entre la Ave. José Mercado (PR-33) y el puente de la PR-52
  - Ave. Degetau, entre la Ave. Muñoz Marín y la Urb. San Alfonso
  - Ave. Pino

- Calle San Carlos, frente a Plaza del Carmen Mall
- Ave. Rafael Cordero, entre la entrada de Plaza Centro a la Calle Vizcarrondo
- PR-156, entre Ave. José Mercado (PR-33) y Puente Sara
- PR-1, entre Puente Las Damas y la intersección con la Mujer Indígena
- Centro Urbano

- Trabajos de Arquitectura e Ingeniería:
  - Revisión de las condiciones del alumbrado actual.
  - Propuesta de poste y luminaria que cumpla con los nuevos códigos de viento y que reduzca consumo energético.
  - Diseño y especificaciones del alumbrado propuesto.
  - Permisología y documentos para proceso de subasta

- Trabajos de Construcción
  - Remoción de postes y bases existentes.
  - Reparación de alambrado y cualquier otro componente eléctrico necesario para el funcionamiento adecuado del alumbrado.
  - Instalación de nuevos postes, con sus respectivas bases y luminaria led.

Basado en la información disponible y en el análisis realizado entendemos que **no habrá ninguna propiedad histórica afectada**.

Fin de la Evaluación

Evaluado por: Zaid Díaz Isaac, PPL
Fecha: 15 de abril del 2025

Exhibit I. Farmland Protection

Exhibit I
1. Soil Report

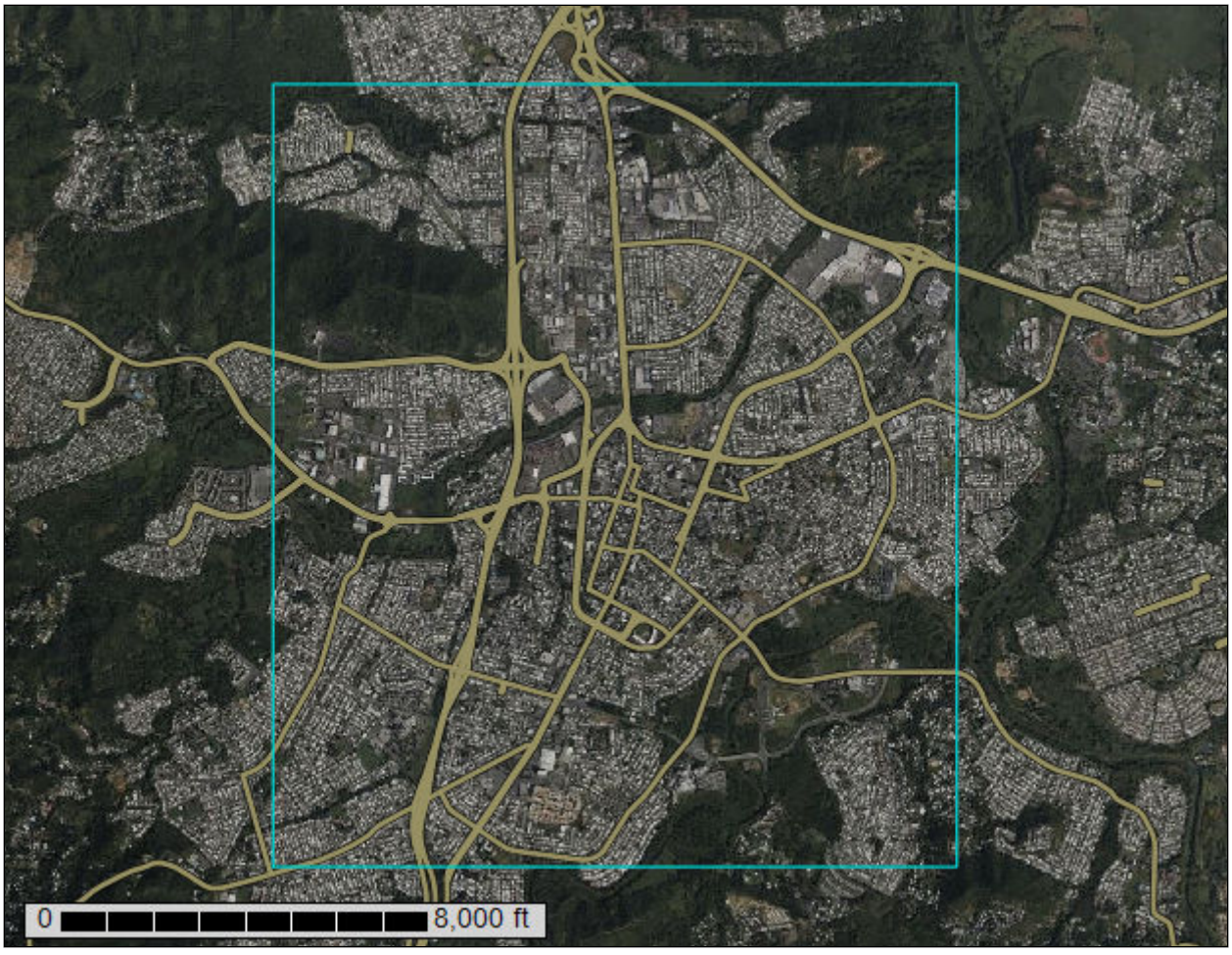
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for San Juan Area, Puerto Rico



June 2, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....12
San Juan Area, Puerto Rico.....14
AaC—Aceitunas clay, 5 to 12 percent slopes.....14
CaF—Caguabo clay loam, 40 to 60 percent slopes.....15
CbF—Caguabo-Rock outcrop complex, 20 to 60 percent slopes.....17
Ce—Candelero loam.....18
Es—Estacion silty clay loam.....20
JuC—Juncos clay, 5 to 12 percent slopes.....21
JuD—Juncos clay, 12 to 20 percent slopes.....22
MaB—Mabi clay, 2 to 5 percent slopes.....23
MaC—Mabi clay, 5 to 12 percent slopes.....24
MtB—Montegrande clay, 2 to 5 percent slopes.....25
MxD—Mucara clay, 12 to 20 percent slopes.....26
MxE—Mucara clay, 20 to 40 percent slopes.....28
MxF—Mucara clay, 40 to 60 percent slopes.....30
Re—Reilly sandy loam.....31
RoB—Rio Arriba clay, 2 to 5 percent slopes.....33
RoC2—Rio Arriba clay, 5 to 12 percent slopes, eroded.....34
To—Toa silty clay loam, 0 to 2 percent slopes, occasionally flooded.....35
Uv—Urban land-Vega Alta complex, 2 to 12 percent slopes.....36
VkC2—Via clay loam, 5 to 12 percent slopes, eroded.....38
W—Water.....39
Soil Information for All Uses.....40
Suitabilities and Limitations for Use.....40
Land Classifications.....40
Farmland Classification.....40
References.....47

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

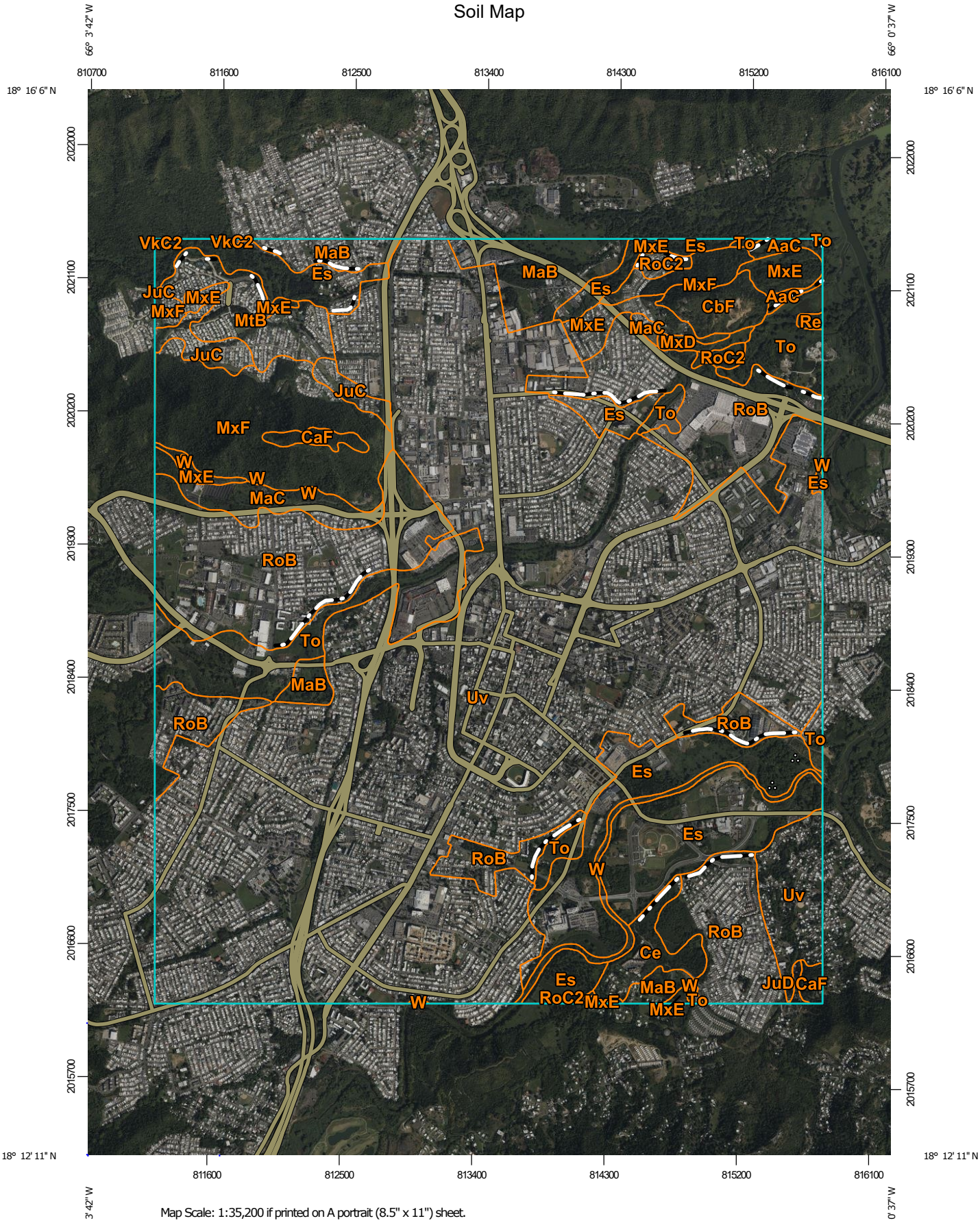
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:35,200 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 500 1000 2000 3000

Feet: 0 1500 3000 6000 9000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Juan Area, Puerto Rico
Survey Area Data: Version 18, Sep 10, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 23, 2022—Mar 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AaC	Aceitunas clay, 5 to 12 percent slopes	17.7	0.3%
CaF	Caguabo clay loam, 40 to 60 percent slopes	26.2	0.5%
CbF	Caguabo-Rock outcrop complex, 20 to 60 percent slopes	50.4	0.9%
Ce	Candelero loam	54.7	0.9%
Es	Estacion silty clay loam	559.5	9.6%
JuC	Juncos clay, 5 to 12 percent slopes	51.6	0.9%
JuD	Juncos clay, 12 to 20 percent slopes	3.8	0.1%
MaB	Mabi clay, 2 to 5 percent slopes	184.8	3.2%
MaC	Mabi clay, 5 to 12 percent slopes	72.0	1.2%
MtB	Montegrande clay, 2 to 5 percent slopes	107.8	1.9%
MxD	Mucara clay, 12 to 20 percent slopes	13.0	0.2%
MxE	Mucara clay, 20 to 40 percent slopes	101.0	1.7%
MxF	Mucara clay, 40 to 60 percent slopes	319.7	5.5%
Re	Reilly sandy loam	4.2	0.1%
RoB	Rio Arriba clay, 2 to 5 percent slopes	860.5	14.8%
RoC2	Rio Arriba clay, 5 to 12 percent slopes, eroded	23.2	0.4%
To	Toa silty clay loam, 0 to 2 percent slopes, occasionally flooded	286.6	4.9%
Uv	Urban land-Vega Alta complex, 2 to 12 percent slopes	3,037.9	52.3%
VkC2	Via clay loam, 5 to 12 percent slopes, eroded	2.0	0.0%
W	Water	33.8	0.6%
Totals for Area of Interest		**5,810.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas

shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

San Juan Area, Puerto Rico

AaC—Aceitunas clay, 5 to 12 percent slopes

Map Unit Setting

National map unit symbol: bywp
Elevation: 20 to 400 feet
Mean annual precipitation: 55 to 66 inches
Mean annual air temperature: 75 to 79 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Aceitunas and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Aceitunas

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine texture alluvium

Typical profile

H1 - 0 to 8 inches: clay
H2 - 8 to 60 inches: clay

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: F272XY430PR - Humid blanket deposit forest, inland, seasonal excess moisture possible
Hydric soil rating: No

CaF—Caguabo clay loam, 40 to 60 percent slopes

Map Unit Setting

National map unit symbol: 2wx4p
Elevation: 100 to 1,970 feet
Mean annual precipitation: 31 to 86 inches
Mean annual air temperature: 69 to 89 degrees F
Frost-free period: 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Caguabo and similar soils: 74 percent
Minor components: 26 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Caguabo

Setting

Landform: Hillslopes, mountain slopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, interfluve, head slope, side slope, crest
Down-slope shape: Concave, convex, linear
Across-slope shape: Linear, convex
Parent material: Residuum weathered from volcanic rock

Typical profile

Ap - 0 to 4 inches: clay loam
Bw - 4 to 10 inches: very paragravelly clay loam
Cr - 10 to 16 inches: bedrock
R - 16 to 80 inches: bedrock

Properties and qualities

Slope: 40 to 60 percent
Depth to restrictive feature: 10 to 19 inches to paralithic bedrock; 16 to 20 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Minor Components

Consumo

Percent of map unit: 5 percent
Landform: Hillslopes on mountains, hills on mountains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, interfluve, side slope
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Ecological site: F270XY520PR - Wet extrusive volcaniclastic mountain and valley forest, summits and mountain slopes
Hydric soil rating: No

Naranjito

Percent of map unit: 5 percent
Landform: Mountain slopes, ridges
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Mucara

Percent of map unit: 5 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Morado

Percent of map unit: 5 percent
Landform: Hillslopes, mountain slopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, interfluve, head slope, nose slope, side slope
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Sabana

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave, convex
Across-slope shape: Linear

Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Rock outcrop
Percent of map unit: 1 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, head slope, nose slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Concave, convex
Hydric soil rating: No

CbF—Caguabo-Rock outcrop complex, 20 to 60 percent slopes

Map Unit Setting
National map unit symbol: 2wx4r
Elevation: 100 to 1,970 feet
Mean annual precipitation: 31 to 86 inches
Mean annual air temperature: 69 to 89 degrees F
Frost-free period: 365 days
Farmland classification: Not prime farmland

Map Unit Composition
Caguabo and similar soils: 55 percent
Rock outcrop: 35 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Caguabo

Setting
Landform: Hillslopes, mountain slopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, interfluve, head slope, side slope, crest
Down-slope shape: Concave, convex, linear
Across-slope shape: Linear, convex
Parent material: Residuum weathered from volcanic rock

Typical profile
Ap - 0 to 4 inches: clay loam
Bw - 4 to 10 inches: gravelly clay loam
Cr - 10 to 16 inches: bedrock
R - 16 to 80 inches: bedrock

Properties and qualities
Slope: 20 to 60 percent
Depth to restrictive feature: 10 to 19 inches to paralithic bedrock; 16 to 20 inches to lithic bedrock

Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainflank, head slope, nose slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Concave, convex
Parent material: Volcanic rock

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Mucara

Percent of map unit: 10 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Ce—Candelero loam

Map Unit Setting

National map unit symbol: byx0

Elevation: 10 to 20 feet
Mean annual precipitation: 85 to 90 inches
Mean annual air temperature: 75 to 81 degrees F
Frost-free period: 365 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Candelero and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Candelero

Setting

Landform: Terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sediments

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 35 inches: sandy clay loam
H3 - 35 to 60 inches: sandy clay

Properties and qualities

Slope: 2 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F272XY460PR - Humid fluvial and alluvial forest, seasonal excess moisture possible
Hydric soil rating: No

Minor Components

Cayagua

Percent of map unit: 15 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope, base slope
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F270XY510PR - Wet intrusive volcanic mountain and valley forest, foot slopes and drainages
Hydric soil rating: Yes

Es—Estacion silty clay loam

Map Unit Setting

National map unit symbol: byxk
Elevation: 10 to 100 feet
Mean annual precipitation: 60 to 80 inches
Mean annual air temperature: 75 to 79 degrees F
Frost-free period: 365 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Estacion and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Estacion

Setting

Landform: Flood plains, terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Rise, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Moderately fine textured sediments over gravel of mixed origin

Typical profile

H1 - 0 to 8 inches: silty clay loam
H2 - 8 to 20 inches: gravelly clay loam
H3 - 20 to 50 inches: very gravelly sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: B
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Hydric soil rating: No

JuC—Juncos clay, 5 to 12 percent slopes

Map Unit Setting

National map unit symbol: byxv
Elevation: 400 to 1,200 feet
Mean annual precipitation: 65 to 70 inches
Mean annual air temperature: 75 to 79 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Juncos and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Juncos

Setting

Landform: Hillslopes
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sediments

Typical profile

H1 - 0 to 31 inches: clay
H2 - 31 to 40 inches: clay
H3 - 40 to 44 inches: unweathered bedrock

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: 36 to 60 inches to lithic bedrock
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F270XY440PR - Humid extrusive volcaniclastic mountain and valley forest, foot slopes and drainages
Hydric soil rating: No

JuD—Juncos clay, 12 to 20 percent slopes

Map Unit Setting

National map unit symbol: byxw
Elevation: 400 to 1,200 feet
Mean annual precipitation: 65 to 70 inches
Mean annual air temperature: 75 to 79 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Juncos and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Juncos

Setting

Landform: Hillslopes
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sediments

Typical profile

H1 - 0 to 31 inches: clay
H2 - 31 to 40 inches: clay
H3 - 40 to 44 inches: unweathered bedrock

Properties and qualities

Slope: 12 to 20 percent
Depth to restrictive feature: 36 to 60 inches to lithic bedrock
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F270XY440PR - Humid extrusive volcaniclastic mountain and valley forest, foot slopes and drainages
Hydric soil rating: No

MaB—Mabi clay, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: byy5
Elevation: 0 to 400 feet
Mean annual precipitation: 43 to 73 inches
Mean annual air temperature: 65 to 89 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Mabi and similar soils: 97 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mabi

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sediments

Typical profile

H1 - 0 to 24 inches: clay
H2 - 24 to 99 inches: clay

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Ecological site: F272XY460PR - Humid fluvial and alluvial forest, seasonal excess moisture possible
Hydric soil rating: No

Minor Components

Bajura

Percent of map unit: 3 percent

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Ecological site: F272XY470PR - Humid Palustrine Seasonally Flooded Wetlands
Hydric soil rating: Yes

MaC—Mabi clay, 5 to 12 percent slopes

Map Unit Setting

National map unit symbol: byy6
Elevation: 0 to 400 feet
Mean annual precipitation: 43 to 73 inches
Mean annual air temperature: 65 to 89 degrees F
Frost-free period: 365 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Mabi and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mabi

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sediments

Typical profile

H1 - 0 to 24 inches: clay
H2 - 24 to 99 inches: clay

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: D
Ecological site: F272XY460PR - Humid fluvial and alluvial forest, seasonal excess moisture possible
Hydric soil rating: No

Minor Components

Bajura
Percent of map unit: 2 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Ecological site: F272XY470PR - Humid Palustrine Seasonally Flooded Wetlands
Hydric soil rating: Yes

MtB—Montegrande clay, 2 to 5 percent slopes

Map Unit Setting
National map unit symbol: byyd
Elevation: 0 to 2,000 feet
Mean annual precipitation: 43 to 73 inches
Mean annual air temperature: 65 to 89 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Montegrande and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Montegrande

Setting
Landform: Low hills, alluvial fans
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Fine textured sediments over gravelly colluvium

Typical profile
H1 - 0 to 7 inches: clay
H2 - 7 to 29 inches: clay
H3 - 29 to 48 inches: very gravelly clay

Properties and qualities
Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 30 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Hydric soil rating: No

Minor Components

Bajura

Percent of map unit: 2 percent
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Ecological site: F272XY470PR - Humid Palustrine Seasonally Flooded Wetlands
Hydric soil rating: Yes

MxD—Mucara clay, 12 to 20 percent slopes

Map Unit Setting

National map unit symbol: 2thqw
Elevation: 160 to 2,000 feet
Mean annual precipitation: 49 to 95 inches
Mean annual air temperature: 71 to 77 degrees F
Frost-free period: 365 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Mucara and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mucara

Setting

Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear

Across-slope shape: Linear, concave
Parent material: Residuum weathered from volcanic rock

Typical profile

Ap - 0 to 6 inches: clay
Bw - 6 to 13 inches: clay loam
BC - 13 to 19 inches: clay loam
C - 19 to 27 inches: clay loam
Cr - 27 to 80 inches: bedrock

Properties and qualities

Slope: 12 to 20 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Minor Components

Juncos

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F270XY440PR - Humid extrusive volcaniclastic mountain and valley forest, foot slopes and drainages
Hydric soil rating: No

Naranjito

Percent of map unit: 10 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

MxE—Mucara clay, 20 to 40 percent slopes

Map Unit Setting

National map unit symbol: 2thqv
Elevation: 160 to 2,000 feet
Mean annual precipitation: 49 to 95 inches
Mean annual air temperature: 71 to 77 degrees F
Frost-free period: 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Mucara and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mucara

Setting

Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Parent material: Residuum weathered from volcanic rock

Typical profile

Ap - 0 to 6 inches: clay
Bw - 6 to 13 inches: clay loam
BC - 13 to 19 inches: clay loam
C - 19 to 27 inches: clay loam
Cr - 27 to 80 inches: bedrock

Properties and qualities

Slope: 20 to 40 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes

Hydric soil rating: No

Minor Components

Humatas

Percent of map unit: 5 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Ecological site: F270XY520PR - Wet extrusive volcaniclastic mountain and valley forest, summits and mountain slopes
Hydric soil rating: No

Caguabo

Percent of map unit: 5 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Morado

Percent of map unit: 5 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Naranjito

Percent of map unit: 5 percent
Landform: Ridges, mountain slopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

MxF—Mucara clay, 40 to 60 percent slopes

Map Unit Setting

National map unit symbol: 2thqt
Elevation: 100 to 2,460 feet
Mean annual precipitation: 49 to 95 inches
Mean annual air temperature: 71 to 77 degrees F
Frost-free period: 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Mucara and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mucara

Setting

Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Parent material: Residuum weathered from volcanic rock

Typical profile

Ap - 0 to 6 inches: clay
Bw - 6 to 13 inches: clay loam
BC - 13 to 19 inches: clay loam
C - 19 to 27 inches: clay loam
Cr - 27 to 80 inches: bedrock

Properties and qualities

Slope: 40 to 60 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes

Hydric soil rating: No

Minor Components

Caguabo

Percent of map unit: 10 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Naranjito

Percent of map unit: 5 percent
Landform: Ridges, mountain slopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: No

Morado

Percent of map unit: 5 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank, head slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, concave
Ecological site: F270XY430PR - Humid extrusive volcaniclastic mountain and valley forest, ridges and side slopes
Hydric soil rating: No

Re—Reilly sandy loam

Map Unit Setting

National map unit symbol: byyt
Elevation: 0 to 300 feet
Mean annual precipitation: 43 to 73 inches
Mean annual air temperature: 65 to 89 degrees F
Frost-free period: 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Reilly and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reilly

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Stratified alluvial deposits

Typical profile

H1 - 0 to 7 inches: sandy loam
H2 - 7 to 18 inches: gravelly sand
H3 - 18 to 55 inches: very gravelly sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 14.17 in/hr)
Depth to water table: About 30 to 60 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Hydric soil rating: No

Minor Components

Bajura

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Ecological site: F272XY470PR - Humid Palustrine Seasonally Flooded Wetlands
Hydric soil rating: Yes

RoB—Rio Arriba clay, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: byyv
Elevation: 100 to 300 feet
Mean annual precipitation: 60 to 70 inches
Mean annual air temperature: 75 to 81 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Rio arriba and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rio Arriba

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine textured sediments

Typical profile

H1 - 0 to 8 inches: clay
H2 - 8 to 60 inches: clay

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: C
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Hydric soil rating: No

RoC2—Rio Arriba clay, 5 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: byyw
Elevation: 100 to 300 feet
Mean annual precipitation: 60 to 70 inches
Mean annual air temperature: 75 to 81 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Rio arriba and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rio Arriba

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine textured sediments

Typical profile

H1 - 0 to 8 inches: clay
H2 - 8 to 60 inches: clay

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Hydric soil rating: No

To—Toa silty clay loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: 2tgwz
Elevation: 0 to 200 feet
Mean annual precipitation: 43 to 73 inches
Mean annual air temperature: 65 to 89 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Toa, occasionally flooded, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Toa, Occasionally Flooded

Setting

Landform: Flood plains
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Stratified alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 8 inches: silty clay loam
AB - 8 to 18 inches: silty clay loam
Bw - 18 to 33 inches: silty clay loam
C1 - 33 to 47 inches: silty clay loam
C2 - 47 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: About 39 to 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Forage suitability group: Unnamed (G272XZ000PR)
Other vegetative classification: Unnamed (G272XZ000PR)

Hydric soil rating: No

Minor Components

Coloso, occasionally flooded

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F272XY460PR - Humid fluvial and alluvial forest, seasonal excess moisture possible
Other vegetative classification: Unnamed (G272XZ000PR)
Hydric soil rating: No

Dique, frequently flooded

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Hydric soil rating: No

Reilly, frequently flooded

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Riser, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Hydric soil rating: No

Bajura, frequently flooded

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F272XY470PR - Humid Palustrine Seasonally Flooded Wetlands
Other vegetative classification: Unnamed (G272XZ000PR)
Hydric soil rating: Yes

Uv—Urban land-Vega Alta complex, 2 to 12 percent slopes

Map Unit Setting

National map unit symbol: 2yg2x
Elevation: 200 to 700 feet
Mean annual precipitation: 60 to 70 inches

Mean annual air temperature: 75 to 81 degrees F
Frost-free period: 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 60 percent
Vega alta and similar soils: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Description of Vega Alta

Setting

Landform: Karstic marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine textured, iron rich alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 8 inches: clay loam
Bt1 - 8 to 14 inches: clay
Bt2 - 14 to 25 inches: clay
Bt3 - 25 to 36 inches: clay
Bt4 - 36 to 60 inches: clay
C - 60 to 80 inches: clay

Properties and qualities

Slope: 2 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Almirante

Percent of map unit: 5 percent
Landform: Karstic marine terraces

Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Humatas

Percent of map unit: 5 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil rating: No

VkC2—Via clay loam, 5 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: byzk
Elevation: 600 to 900 feet
Mean annual precipitation: 70 to 80 inches
Mean annual air temperature: 75 to 81 degrees F
Frost-free period: 365 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Via and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Via

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave, convex, linear
Across-slope shape: Linear
Parent material: Moderately fine textured sediments underlaid by coarse textured gravelly or cobbly sediments

Typical profile

H1 - 0 to 9 inches: clay loam
H2 - 9 to 36 inches: clay loam
H3 - 36 to 52 inches: very gravelly clay loam

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: F272XY450PR - Humid fluvial and alluvial forest, seasonal drought stress possible
Hydric soil rating: No

W—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Soil Information for All Uses

Suitabilities and Limitations for Use

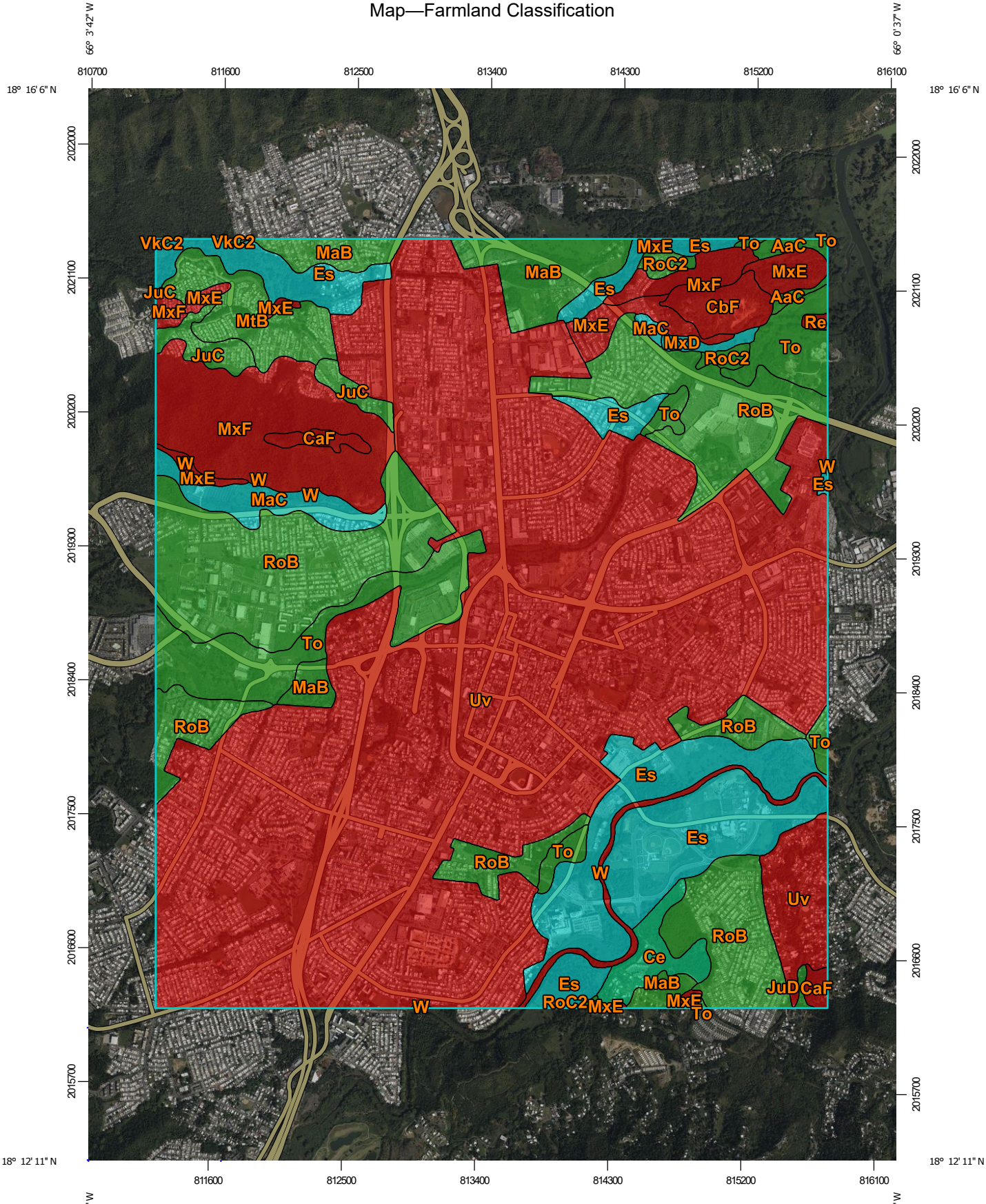
The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

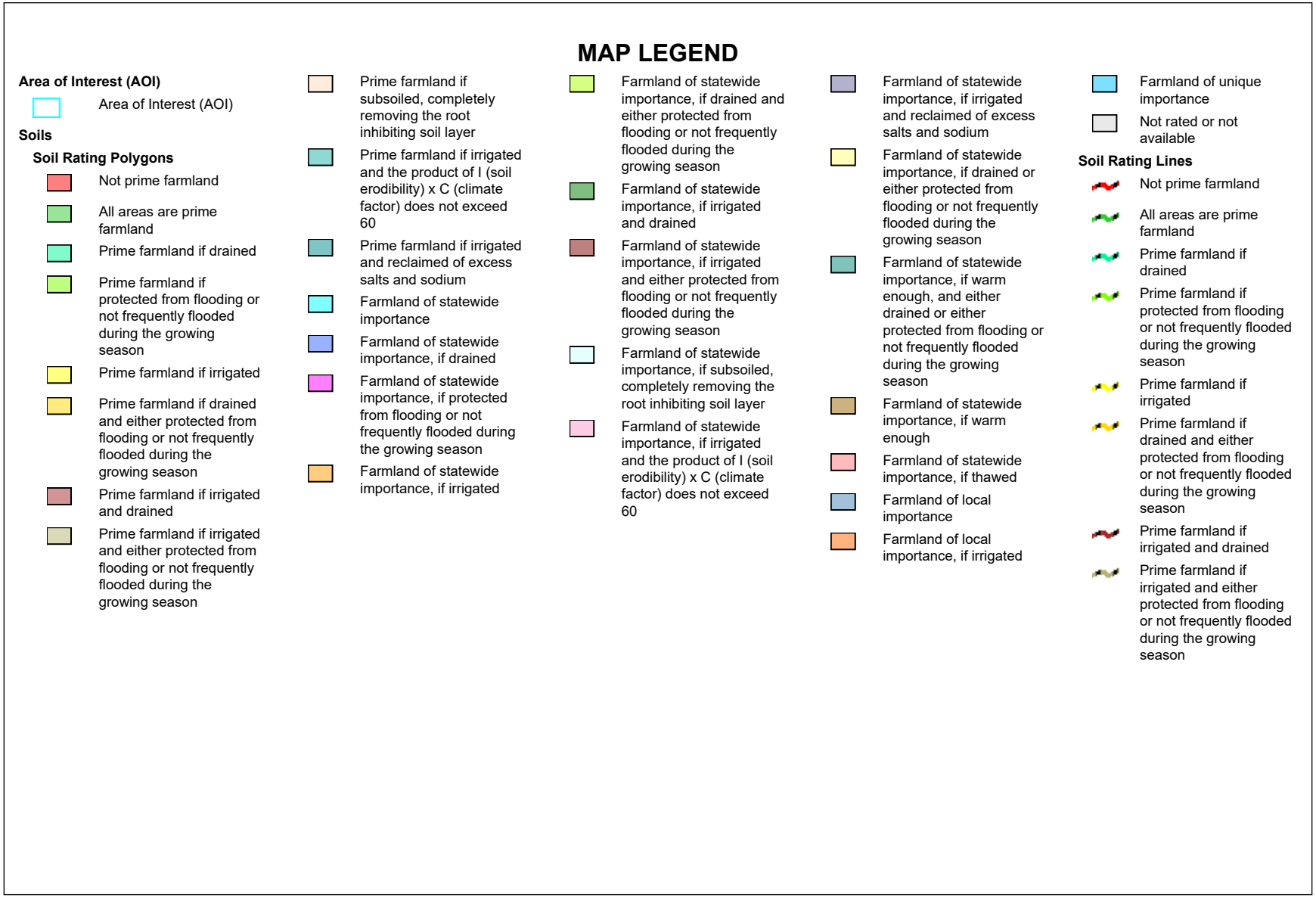
Land Classifications

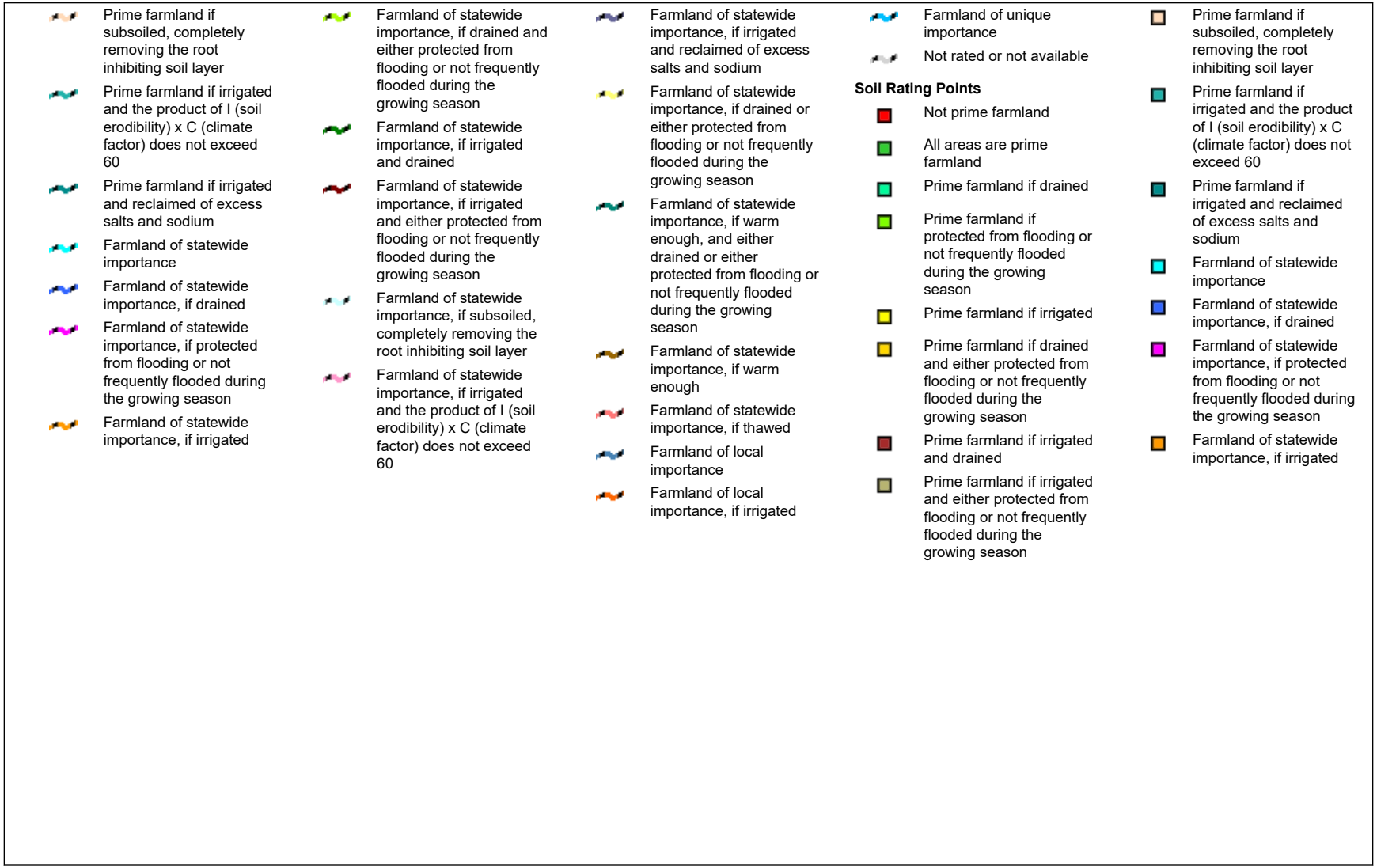
Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.


66° 3' 42" W
66° 0' 37" W
18° 16' 6" N
18° 12' 11" N
810700
811600
812500
813400
814300
815200
816100
2022000
2021100
2020200
2019300
2018400
2017500
2016600
2015700
VkC2
MaB
Es
JuC
MxE
MxF
MtB
CaF
W
MaC
RoB
To
Uv
CbF
MxD
RoC2
Re
AaC
JuD
Ce
Map Scale: 1:35,200 if printed on A portrait (8.5" x 11") sheet.
Meters
0
500
1000
2000
3000
Feet
0
1500
3000
6000
9000
N
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84


MAP LEGEND
Area of Interest (AOI)
Area of Interest (AOI)
Soils
Soil Rating Polygons
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated
Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated and drained
Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough
Farmland of statewide importance, if thawed
Farmland of local importance
Farmland of local importance, if irrigated
Farmland of unique importance
Not rated or not available
Soil Rating Lines
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season


Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated
Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated and drained
Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough
Farmland of statewide importance, if thawed
Farmland of local importance
Farmland of local importance, if irrigated
Farmland of unique importance
Not rated or not available
Soil Rating Points
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Juan Area, Puerto Rico
Survey Area Data: Version 18, Sep 10, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 23, 2022—Mar 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AaC	Aceitunas clay, 5 to 12 percent slopes	All areas are prime farmland	17.7	0.3%
CaF	Caguabo clay loam, 40 to 60 percent slopes	Not prime farmland	26.2	0.5%
CbF	Caguabo-Rock outcrop complex, 20 to 60 percent slopes	Not prime farmland	50.4	0.9%
Ce	Candelero loam	Prime farmland if drained	54.7	0.9%
Es	Estacion silty clay loam	Farmland of statewide importance	559.5	9.6%
JuC	Juncos clay, 5 to 12 percent slopes	All areas are prime farmland	51.6	0.9%
JuD	Juncos clay, 12 to 20 percent slopes	All areas are prime farmland	3.8	0.1%
MaB	Mabi clay, 2 to 5 percent slopes	All areas are prime farmland	184.8	3.2%
MaC	Mabi clay, 5 to 12 percent slopes	Farmland of statewide importance	72.0	1.2%
MtB	Montegrande clay, 2 to 5 percent slopes	All areas are prime farmland	107.8	1.9%
MxD	Mucara clay, 12 to 20 percent slopes	Farmland of statewide importance	13.0	0.2%
MxE	Mucara clay, 20 to 40 percent slopes	Not prime farmland	101.0	1.7%
MxF	Mucara clay, 40 to 60 percent slopes	Not prime farmland	319.7	5.5%
Re	Reilly sandy loam	Not prime farmland	4.2	0.1%
RoB	Rio Arriba clay, 2 to 5 percent slopes	All areas are prime farmland	860.5	14.8%
RoC2	Rio Arriba clay, 5 to 12 percent slopes, eroded	All areas are prime farmland	23.2	0.4%
To	Toa silty clay loam, 0 to 2 percent slopes, occasionally flooded	All areas are prime farmland	286.6	4.9%
Uv	Urban land-Vega Alta complex, 2 to 12 percent slopes	Not prime farmland	3,037.9	52.3%
VkC2	Via clay loam, 5 to 12 percent slopes, eroded	All areas are prime farmland	2.0	0.0%
W	Water	Not prime farmland	33.8	0.6%
Totals for Area of Interest			**5,810.4**	**100.0%**

Rating Options—Farmland Classification

Aggregation Method: No Aggregation Necessary

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The majority of soil attributes are associated with a component of a map unit, and such an attribute has to be aggregated to the map unit level before a thematic map can be rendered. Map units, however, also have their own attributes. An attribute of a map unit does not have to be aggregated in order to render a corresponding thematic map. Therefore, the "aggregation method" for any attribute of a map unit is referred to as "No Aggregation Necessary".

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

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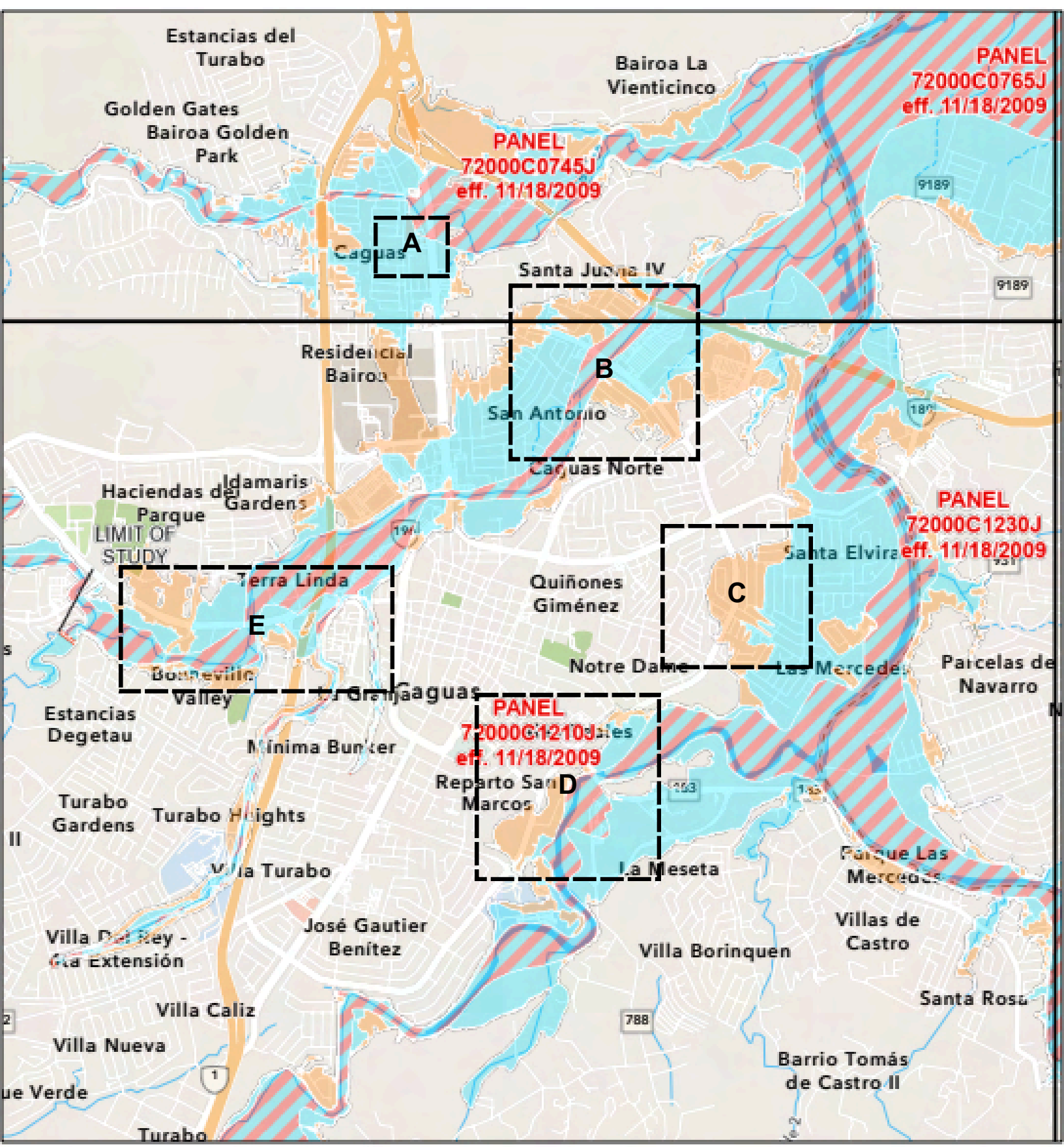
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Exhibit J.
Flood Management

Exhibit J
1. ABFEs Map



2/7/2025, 9:55:11

1:36,112

0 0.28 0.55 1.1 mi

0 0.45 0.9 1.8 km

Water Areas

Base Index

Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

0.2% Annual Chance Flood Hazard

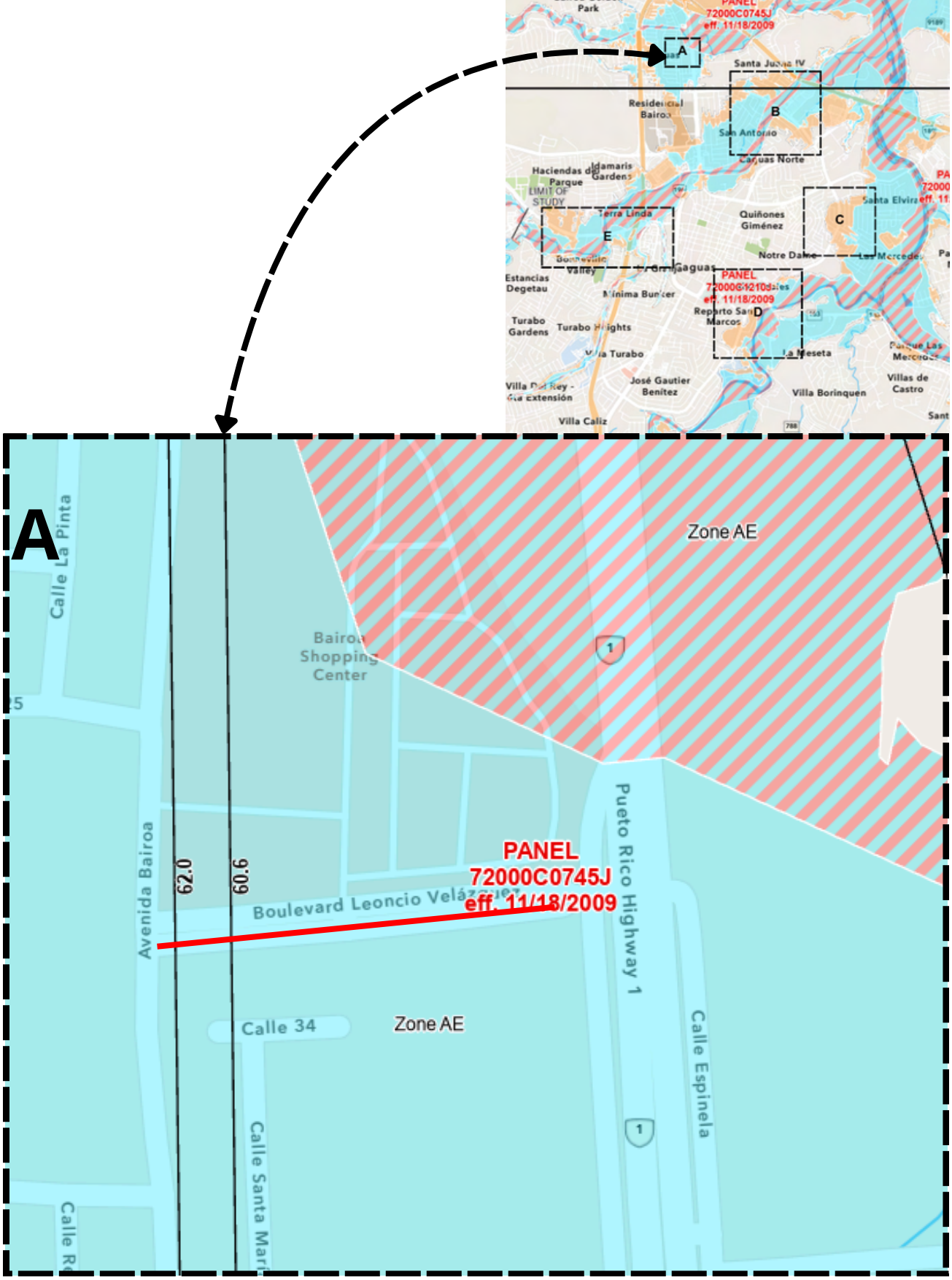
Flood Hazard Boundaries

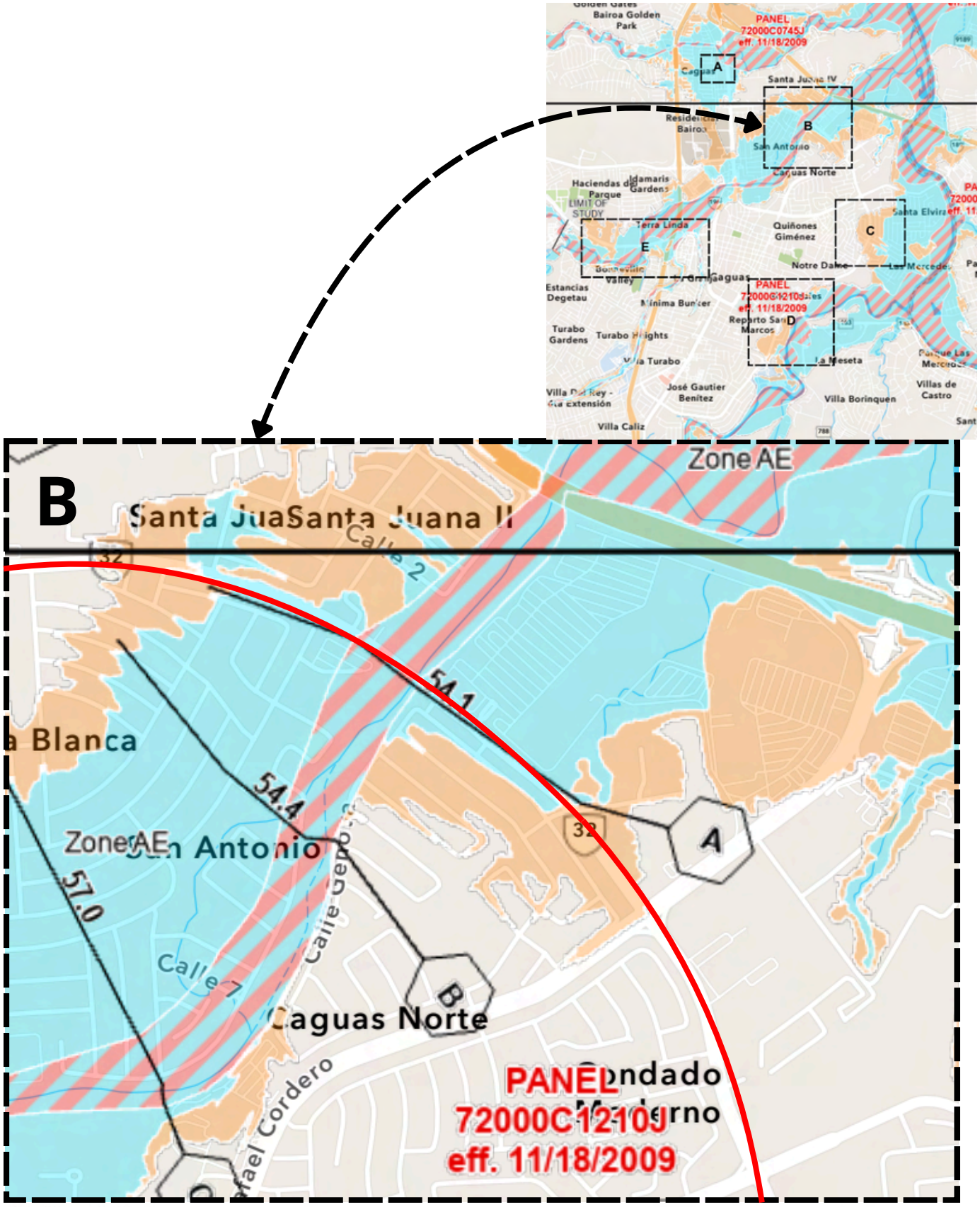
Limit Lines

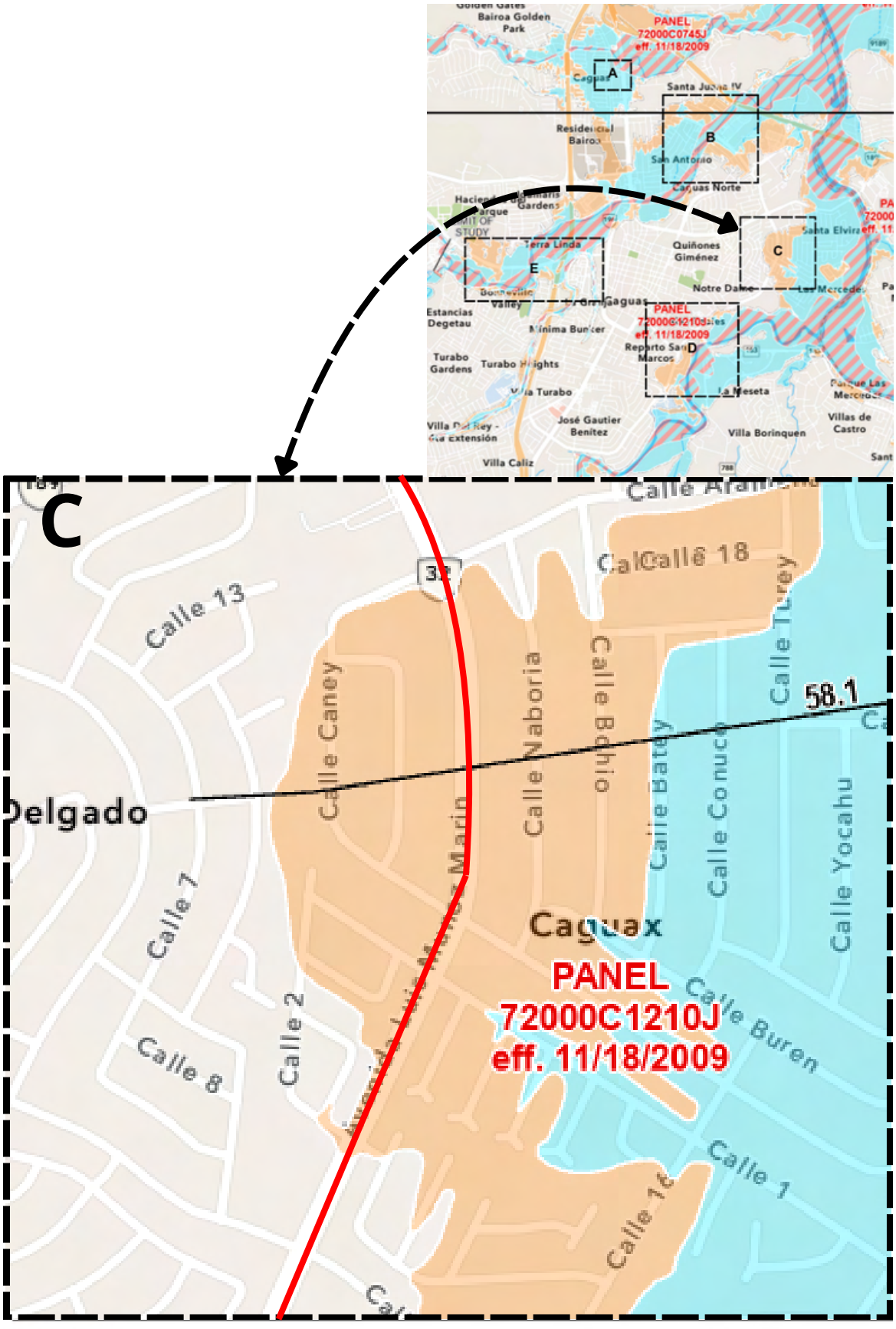
SFHA / Flood Zone Boundary

FIRM Panels

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community


A
B
C
D
E
LIMIT OF STUDY
PANEL
72000C0745J
eff. 11/18/2009
Zone AE
Calle La Pinta
Avenida Bairoa
Boulevard Leoncio Velázquez
Pueto Rico Highway 1
Calle Espinela
Calle 34
Calle Santa Mar
62.0
60.6
Bairoa Shopping Center
2/7/2025, 10:00:34
1:2,257
0 0.02 0.04 0.07 mi
0 0.03 0.06 0.11 km
Water Areas
Base Index
Flood Hazard Zones
1% Annual Chance Flood Hazard
Regulatory Floodway
0.2% Annual Chance Flood Hazard
Flood Hazard Boundaries
SFHA / Flood Zone Boundary
Cross-Sections
FIRM Panels
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
Street improvement
ArcGIS Web AppBuilder
Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, NPS, US Census Bureau, USFWS |


B
Zone AE
Santa Juana II
Calle 2
54.1
54.4
57.0
Zone AE
San Antonio
Calle 7
Caguas Norte
A
B
32
PANEL
72000C12103
eff. 11/18/2009
2/7/2025, 10:03:51
1:18,056
Water Areas
Base Index
Flood Hazard Zones
1% Annual Chance Flood Hazard
Regulatory Floodway
0.2% Annual Chance Flood Hazard
Flood Hazard Boundaries
SFHA / Flood Zone Boundary
Cross-Sections
FIRM Panels
0 0.13 0.25 0.5 mi
0 0.23 0.45 0.9 km
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
Street improvement
ArcGIS Web AppBuilder
Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, NPS, US Census Bureau, USFWS |



2/7/2025, 10:13:20

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Water Areas

Base Index

Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

0.2% Annual Chance Flood Hazard

Flood Hazard Boundaries

SFHA / Flood Zone Boundary

Cross-Sections

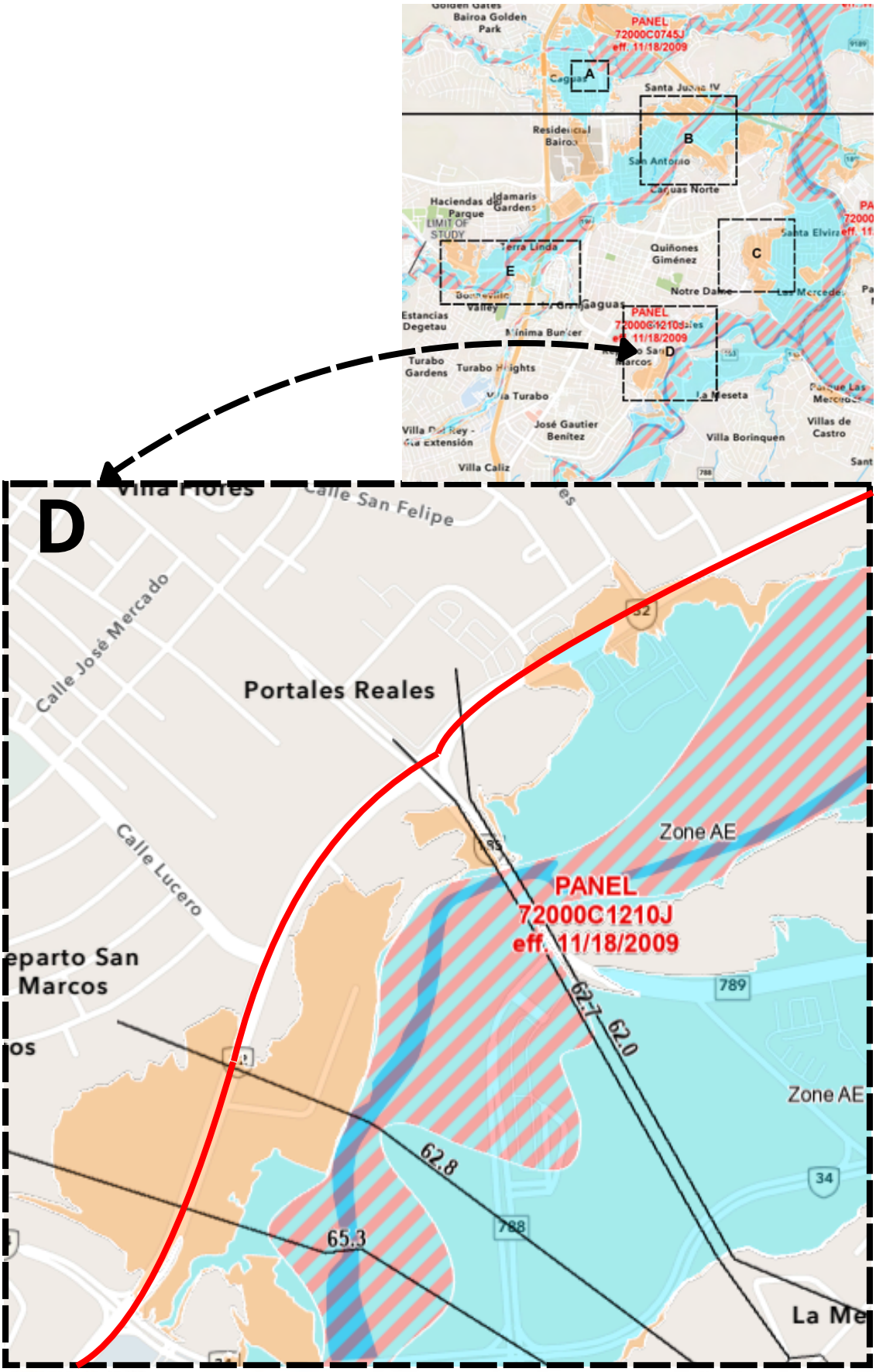
FIRM Panels

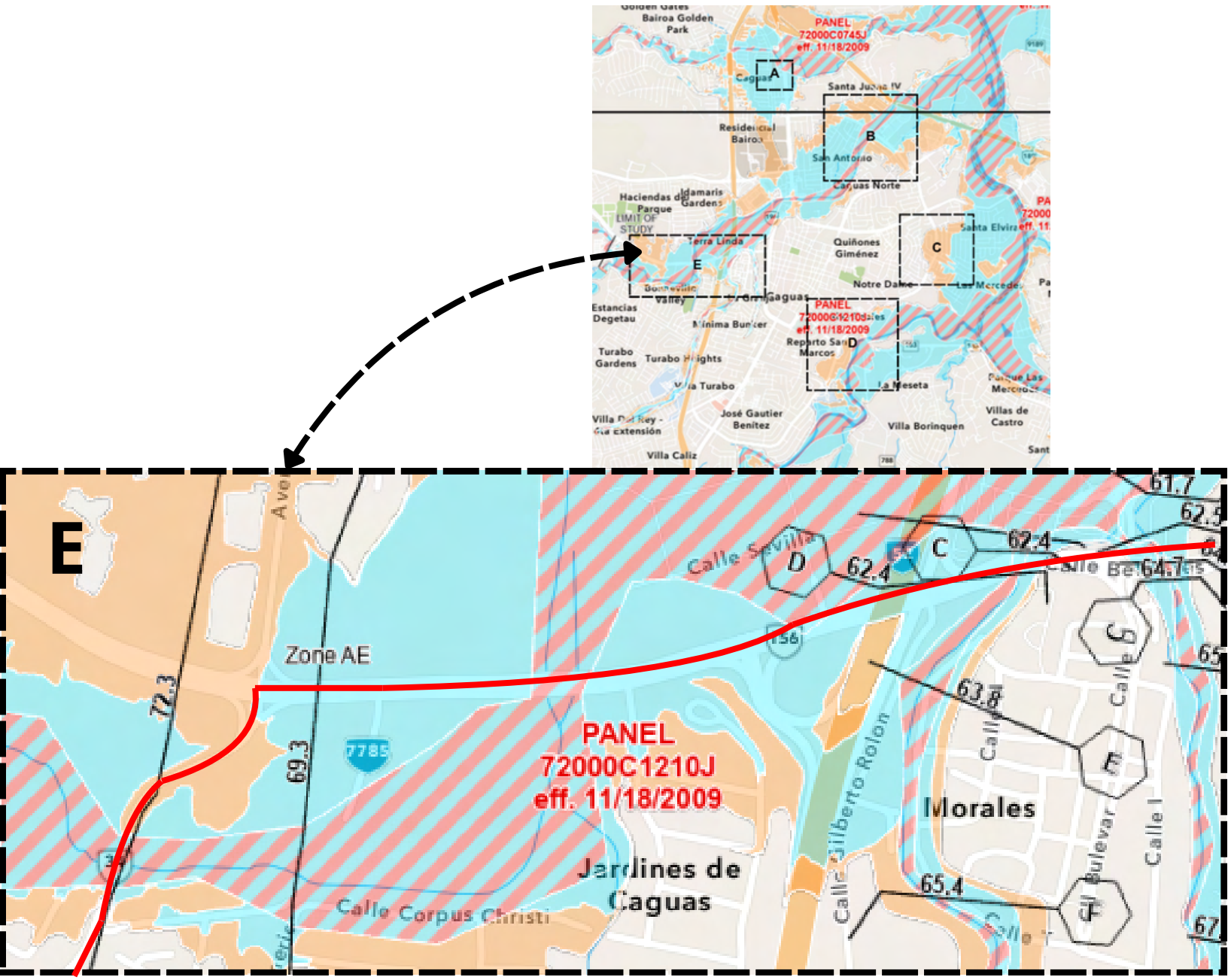
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Street improvement

ArcGIS Web AppBuilder

Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, NPS, US Census Bureau, USFWS |


PANEL
72000C0745J
eff. 11/18/2009
A
B
C
D
E
Bairoa Golden Park
Caguas
Santa Juana IV
Residencial Bairoa
San Antonio
Caguas Norte
Haciendas de Parque
Idamaris Gardens
LIMIT OF STUDY
Terra Linda
Quiñones Giménez
Santa Elvira
Notre Dame
Las Mercedes
Estancias Degetau
Turabo Gardens
Turabo Heights
Villa Turabo
La Meseta
Villas de Castro
José Gautier Benítez
Villa Borinquen
Villa Caliz
D
Villa Flores
Calle San Felipe
Calle José Mercado
Calle Lucero
Portales Reales
Zone AE
PANEL
72000C1210J
eff. 11/18/2009
62.7
62.0
62.8
65.3
789
788
34
32
eparto San Marcos
os
La Me
2/7/2025, 10:13:41
1:9,028
0 0.05 0.1 0.2 mi
0 0.1 0.2 0.4 km
Water Areas
Base Index
Flood Hazard Zones
1% Annual Chance Flood Hazard
Regulatory Floodway
0.2% Annual Chance Flood Hazard
Flood Hazard Boundaries
SFHA / Flood Zone Boundary
Cross-Sections
FIRM Panels
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
Street improvement
ArcGIS Web AppBuilder
Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, NPS, US Census Bureau, USFWS |



2/7/2025, 10:15:33

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Water Areas

Base Index

Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

0.2% Annual Chance Flood Hazard

Flood Hazard Boundaries

Limit Lines

SFHA / Flood Zone Boundary

Cross-Sections

FIRM Panels

Street improvement

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

ArcGIS Web AppBuilder

Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, NPS, US Census Bureau, USFWS |

Exhibit J

2. 24 CFR 55 8(a)(1)(ii)(A)

§ 55.8 Limitations on HUD assistance in floodplains.

(a) HUD financial assistance (including mortgage insurance) may not be approved with respect to:

(1) Any action located in a floodway unless one of the following applies:

(i) An exception listed in § 55.12 applies; or

(ii) A permanent covenant or comparable restriction will preserve all onsite FFRMS floodplain and/or wetland areas from future development or expansion of existing uses in the floodplain and/or wetland areas. Any rehabilitation, including reconstruction in the case of properties affected by Presidentially declared disasters, that does not expand the footprint of the buildings or the number of units on the site would be allowed within the FFRMS floodplain outside of the floodway. No buildings or improvements may modify or occupy the floodway, with the exception of:

(A) Functionally dependent uses (as defined in § 55.2(b)(7)) and utility lines;

(B) De minimis improvements, including minimal ground disturbance or placement of impervious surface area to ensure accessibility where this is permitted by local ordinances and does not increase flood risk to the property; or

(C) Buildings and improvements that will be removed as part of the proposed action.

(2) Any critical action located in a floodway, other than a functionally dependent use where any existing or new structure has been or will be elevated or floodproofed to the FFRMS elevation for critical actions; or any critical action in a coastal high hazard area or LiMWA, other than a functionally dependent use where any existing or new structure has been or will be elevated and constructed in accordance with current FEMA V-zone construction standards at 44 CFR 60.3(e); provided that, for a critical action that is insurance of a mortgage on a property containing a floodway with no structures or improvements in the floodway, paragraph (a)(1) of this section applies; or

(3) Any noncritical action located in a coastal high hazard area, or LiMWA, unless the action is a functionally dependent use, is limited to existing structures or improvements, or is reconstruction following destruction caused by a Presidentially declared disaster. If the action is not a functionally dependent use, the action must be designed for location in a coastal high hazard area. An action will be considered designed for a coastal high hazard area if:

(i) In the case of reconstruction following destruction caused by a disaster, or substantial improvement, the work meets the current standards for V zones in FEMA regulations (44 CFR 60.3(e)) and, if applicable, the Minimum Property Standards for such construction in 24 CFR 200.926d(c)(4)(iii); or

Exhibit J

3. 24 CFR 55 12(i)

§ 55.12 Inapplicability of 24 CFR part 55 to certain categories of proposed actions.

With the exception of the flood insurance requirements in § 55.5, this part shall not apply to the following categories of proposed HUD actions:

(a) HUD-assisted activities described in 24 CFR 58.34 and 58.35(b);

(b) HUD-assisted activities described in 24 CFR 50.19, except as otherwise indicated in § 50.19;

(c) The approval of financial assistance for restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property, where a permanent covenant or comparable restriction is placed on the property's continued use for flood control, wetland protection, open space, or park land, but only if:

(1) The property is cleared of all existing buildings and walled structures; and

(2) The property is cleared of related improvements except those which:

(i) Are directly related to flood control, wetland protection, open space, or park land (including playgrounds and recreation areas);

(ii) Do not modify existing wetland areas or involve fill, paving, or other ground disturbance beyond minimal trails or paths; and

(iii) Are designed to be compatible with the beneficial floodplain or wetland function of the property.

(d) An action involving a repossession, receivership, foreclosure, or similar acquisition of property to protect or enforce HUD's financial interests under previously approved loans, grants, mortgage insurance, or other HUD assistance;

(e) Policy-level actions described at 24 CFR 50.16 that do not involve site-based decisions;

(f) A minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland;

(g) HUD's or the responsible entity's approval of a project site, an incidental portion of which is situated in the FFRMS floodplain (not including the floodway, LiMWA, or coastal high hazard area), but only if:

(1) The proposed project site does not include any existing or proposed buildings or improvements that modify or occupy the FFRMS floodplain except de minimis improvements such as recreation areas and trails; and

(2) The proposed project will not result in any new construction in or modifications of a wetland.

(h) Issuance or use of Housing Vouchers or other forms of rental subsidy where HUD, the awarding community, or the public housing agency that administers the contract awards rental subsidies that are not project-based (*i.e.*, do not involve site-specific subsidies);

(i) Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and persons with disabilities.

Exhibit J
4. 24 CFR 55 2(b)(7)

(5) ***0.2-percent-annual-chance (500-year) floodplain*** means the area, including the base flood elevation, subject to inundation from a flood having a 0.2 percent chance or greater of being equaled or exceeded in any given year. (See § 55.8(b) for appropriate data sources).

(6) ***Floodway*** means that portion of the floodplain which is effective in carrying flow, where the flood hazard is generally the greatest, and where water depths and velocities are the highest. The term "floodway" as used here is consistent with "regulatory floodways" as identified by FEMA. (See § 55.8(b) for appropriate data sources.)

(7) ***Functionally dependent use*** means a land use that must necessarily be conducted in close proximity to water (*e.g.,* a dam, marina, port facility, water-front park, and many types of bridges).

(8) ***High hazard area*** means a floodway or a coastal high hazard area.

(9) ***Impervious surface area*** means an improved surface that measurably reduces the rate of water infiltration below the rate that would otherwise be provided by the soil present in a location prior to improvement, based on the soil type identified either by the Natural Resource Conservation Service Soil Survey or geotechnical study. Impervious surfaces include, but are not limited to, unperforated concrete or asphalt ground cover, unvegetated roofing materials, and other similar treatments that impede infiltration.

(10) ***Limit of Moderate Wave Action (LiMWA)*** means the inland limit of the portion of Coastal A Zone where wave heights can be between 1.5 and 3 feet during a base flood event, subjecting properties to damage from waves and storm surge. (See § 55.8(b) for appropriate data sources.)

Exhibit K. Historic Preservation

Exhibit K
1. SHPO CONSULTATION

MUNICIPIO AUTÓNOMO DE CAGUAS
Apartado 907 Caguas, PR 00726
Tel. 787.653.8833
caguas.gov.pr

DETERMINACION PARA SER INCLUIDA EN LA COMUNICACIÓN A SHPO

Nombre del Proyecto:
REHABILITACION Y MEJORAS DE LAS AVENIDAS PRINCIPALES DE LA CIUDAD
Caguas, Puerto Rico 00725

Se han evaluado los sectores donde se realizarán las mejoras propuestas y de acuerdo con la información sometida entendemos que:

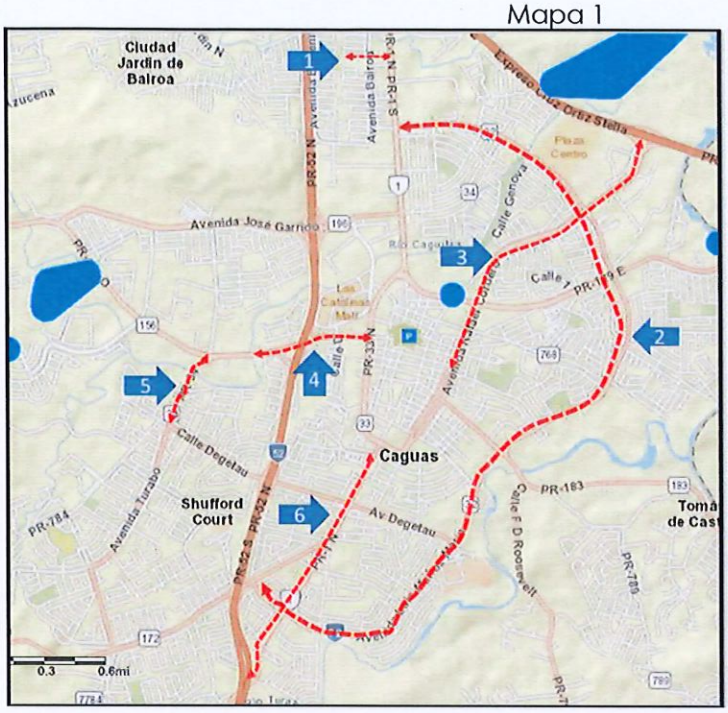
1. El proyecto en su totalidad se encuentra **dentro** del límite definido como zona URBANA del Municipio Autónomo de Caguas, en parte de los Barrios Pueblo, Bairoa, Turabo y Tomás de Castro.

2. El Proyecto no es una intervención en propiedad y/o zona histórica. Para esto, se ha consultado la página Oficial del Portal de Datos Geográficos Gubernamentales. Aunque hay sitios históricos cercanos, ninguna se encuentra a una distancia significativa. A su vez, las obras a realizarse se harán sobre las vías ya construidas y las que se encuentran en uso por más de cuatro (4) décadas. (Ver Mapa 1)

   Según la información provista en el Resumen arqueológico del Municipio Caguas por la Oficina Estatal de Conservación Histórica (Ver Imagen 1) los sitios más cercanos son los siguientes:

   - CS0100041 - Armory at Caguas.
   - CS0100007 – Yacimiento Cauce Medio Río Caguitas
   - CS0100026 – Escuela Superior Gautier Benítez
   - CS0100035 – Central Santa Juana

Mapa 1



MAPA DE RECURSOS CULTURALES Y VIAS PRINCIPALES PROPUESTAS PARA REHABILITACION (MEJORAS PAVIMENTO, ACERAS ENCINTADO Y LUMINARIAS)

MUNICIPIO AUTONOMO DE CAGUAS

Leyenda

Vías objeto de Petición:

1) Boulevard Leoncio Vázquez
2) Ave. Luis Muñoz Marín
3) Ave. Rafael Cordero
4) PR-156
5) PR-34
6) Ave. José Gautier Benítez

Zona Histórica

Recursos Arqueológicos

Fuentes:

Portal MiPR de la Junta de Planificación de PR
Departamento de Obras Públicas Municipal
Oficina de Planificación

Imagen 1

Sitios Arqueológicos de Caguas

Listado de Sitios Arqueológicos en el Municipio de Caguas

TAG*	Nombre del Sitio
CS0100001	Complejo Petroglifos Navarro (k-l) Mano manca
CS0100002	Cagüitas
CS0100003	CS-3
CS0100004	CS-4
CS0100005	CS-5
CS0100006	CS-6
CS0100007	CS-7
CS0100008	Petroglifos Las Canoas
CS0100009	Confluencia Cagüitas y Quebrada Aguacate
CS0100010	Petroglifos Quebrada Algarrobos
CS0100011	CS-11
CS0100012	Petroglifos del Charco Melilla
CS0100013	CS-13
CS0100014	CS-14
CS0100015	CS-15
CS0100016	CS-16
CS0100017	Turabo Clusters
CS0100018	Hacienda Santa Catalina
CS0100019	Los Reyes
CS0100020	CS-20
CS0100021	(Sitio Historico II): H-11

Sitios Arqueológicos de Caguas

CS0100022	CS-22
CS0100023	CS-23
CS0100024	Alcaldía de Caguas
CS0100025	Escuela Vocacional Aguayo Aldea/ La Vocacional
CS0100026	Gautier Benitez High School/ La Gautier
CS0100027	Logia Union y Amparo #44
CS0100028	Primera Iglesia Bautista de Caguas/ Centro Musical Criollo Jose Ignacio Quintón
CS0100029	Puente #6/ Puente La Concepcion
CS0100030	BA Site 1
CS0100031	BA Site 3
CS0100032	BA Site 4
CS0100033	BA Site 5
CS0100034	BA Site 6
CS0100035	Central Santa Juana
CS0100037	Edificio de la General Cigar Tobacco, Co.
CS0100038	Ruinas Central San José/ Hacienda San José
CS0100039	Central Defensa
CS0100040	Manrique House
CS0100041	Armory at Caguas
CS0100042	CS-42

* TAG es el código de recurso utilizado por la Oficina Estatal de Conservación Histórica.

Oficina Estatal de Conservación Histórica

3. Los estudios sobre propiedades históricas existen solo para el Centro Urbano Tradicional y se han documentado con la información levantada por el Arq. Otto Reyes, para las fichas históricas por el Historiador Juan David Hernández y por el listado de lugares ya designados por la Junta de Planificación.

4. Las fichas de las estructuras seleccionadas con potencial histórico se encuentran radicadas en la Junta de Planificación en espera de la evaluación pertinente. La vías principales en las cuales se estarán llevando a cabo los proyectos **no son** parte de alguna selección para ser incluidas como sitio o lugar histórico.

5. El listado del proceso para la construcción a ser realizada es la siguiente:

    - Renovación de la superficie asfáltica mediante escarificación de las áreas y depósito de asfalto a 2" de espesor, marcado de líneas de carril, reconstrucción de rampas que cumplan con códigos y

reglamentaciones vigentes con su respectivo marcado de pasos peatonales, reforestación con árboles autóctonos y limpieza general de estructura gris. Esto se implementará en las siguientes áreas:

- Ave. Luis Muñoz Marín y las siguientes calles interiores:
  - Estacionamiento Monumento Luis Muñoz Marín
  - Calle Coral, desde la Ave. Muñoz Marín hasta la Calle Ópalo
  - Calle Garrido, desde la Ave. Muñoz Marín hasta la Calle 4 de la Urb. San Antonio
  - Calle Aramaná Urb. Caguax
  - Calle 1 Urb. Villa Victoria
  - Ave. Georgetti, desde la Ave. Muñoz Marín hasta después del residencial Brisas del Turabo
  - Calle 6 de Mariolga, desde la Ave. Muñoz Marín hasta la calle 25
  - Calle 2 de Mariolga, desde la Ave. Muñoz Marín hasta la calle 23
  - Calle Edimburgo, desde la Ave. Muñoz Marín hasta la calle Luxemburgo
  - Estacionamiento instalaciones recreativas Villa del Rey I
  - Calle Windsor Villa del Rey I, desde la Ave. Muñoz Marín hasta el final

- Ave. Gautier Benítez y las siguientes calles interiores:
  - Calle San Carlos, desde Ave. Luis Muñoz Marín hasta la Ave. Pino
  - Calle que dirige hacia el Salvation Army
- Ave. Rafael Cordero y las siguientes calles interiores:
  - Calle Nuñez
  - Estacionamiento Plaza del Mercado
  - Calle San Andrés, desde la Ave. Rafael Cordero hasta la Pista Millán Clara
- Bulevar Leoncio Velázquez
- PR-156
- PR-34

- Creación de carriles para ciclistas. La bicicleta es un medio de transporte alternativo y eco-amigable, el cual reduce las emisiones de gases por efecto invernadero para proteger el medio ambiente. El carril ciclista se implantará en las siguientes áreas:

  - Carril ciclista en la avenida Rafael Cordero, en dirección del tránsito con una longitud aproximada de 600 metros

comenzando en la Estación de Bomberos en intersección con la calle Dr. Pedro Goyco y la calle El Troche y finalizando en la plazoleta de recreación pasiva localizada en la intersección con la calle Manuel Elzuburu y Vizcarrondo y la calle San Andrés.

- Carril ciclista en la avenida Rafael Cordero, en ambas direcciones del tránsito con una longitud aproximada de 2000 metros comenzando en la Estación de Bomberos en intersección con la calle Dr. Pedro Goyco y la calle El Troche y finalizando en la entrada vehicular del Centro Comercial Plaza Centro localizada en el cuadrante Este de Complejo.
- Carril ciclista en la avenida Luis Muñoz Marín, en una sola dirección del tránsito, con una longitud aproximada de 540 metros comenzando en la avenida Rafael Cordero y finalizando en la PR-189.
- Carril ciclista en la PR-189, en una sola dirección del tránsito, con una longitud aproximada de 1,100 metros comenzando en la avenida Luis Muñoz Marín y finalizando en la avenida Rafael Cordero.

- Reemplazo de asfalto y pasos peatonales en adoquines, por rodaje y pasos peatonales en concreto con su debido marcado. Esto se implementará en las siguientes áreas:
  - Intersección con la Ave. Garrido, en Santa Juana
  - Entrada de Plaza Centro II, solo lo que está en adoquines
  - Intersección con Calle Aramaná, Urb. Caguax (cerca de Atento)
  - Intersección con el Bulevar Cristóbal
  - Intersección con la Ave. San Carlos en Mariolga
- Áreas Por Considerarse con Alumbrado Público bajo el Mantenimiento del Municipio:
  - Bulevar Leoncio Velázquez
  - Ave. Muñoz Marín, desde la Ave. Los Trovadores en Bairoa, hasta la Ave. Pino (PR-172)
  - Estacionamiento Monumento Luis Muñoz Marín
  - Ave. Georgetti, desde la Ave. Muñoz Marín hasta después del residencial Brisas del Turabo o Estacionamientos instalaciones recreativas Villa del Rey I o Calle Windsor Villa del Rey I, desde la Ave. Muñoz Marín hasta el final
  - Ave. Gautier Benítez, entre la Ave. José Mercado (PR-33) y el puente de la PR-52
  - Ave. Degetau, entre la Ave. Muñoz Marín y la Urb. San Alfonso
  - Ave. Pino

- Calle San Carlos, frente a Plaza del Carmen Mall
- Ave. Rafael Cordero, entre la entrada de Plaza Centro a la Calle Vizcarrondo
- PR-156, entre Ave. José Mercado (PR-33) y Puente Sara
- PR-1, entre Puente Las Damas y la intersección con la Mujer Indígena
- Centro Urbano

- Trabajos de Arquitectura e Ingeniería:
  - Revisión de las condiciones del alumbrado actual.
  - Propuesta de poste y luminaria que cumpla con los nuevos códigos de viento y que reduzca consumo energético.
  - Diseño y especificaciones del alumbrado propuesto.
  - Permisología y documentos para proceso de subasta

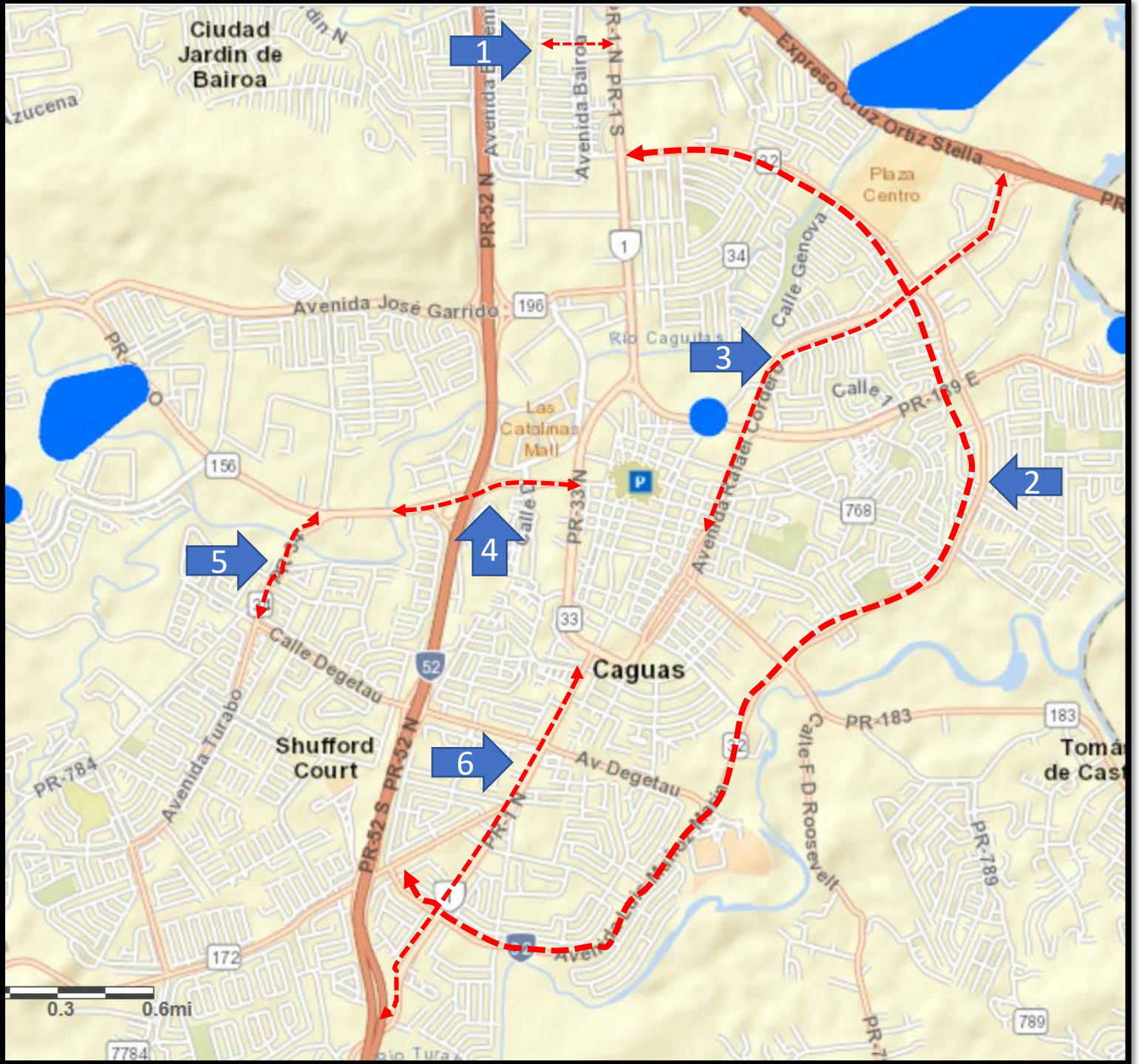
- Trabajos de Construcción
  - Remoción de postes y bases existentes.
  - Reparación de alambrado y cualquier otro componente eléctrico necesario para el funcionamiento adecuado del alumbrado.
  - Instalación de nuevos postes, con sus respectivas bases y luminaria led.

Basado en la información disponible y en el análisis realizado entendemos que **no habrá ninguna propiedad histórica afectada**.

Fin de la Evaluación

Evaluado por: Zaid Díaz Isaac, PPL
Fecha: 15 de abril del 2025

Exhibit K
2. Map of historical areas



MAPA DE RECURSOS CULTURALES Y VIAS PRINCIPALES PROPUESTAS PARA REHABILITACION (MEJORAS PAVIMENTO, ACERAS ENCINTADO Y LUMINARIAS) PROYECTOS 252 Y 262 MUNICIPIO AUTONOMO DE CAGUAS

Leyenda

Vías objeto de Petición:

1) **Boulevard Leoncio Vázquez**
2) **Ave. Luis Muñoz Marín**
3) **Ave. Rafael Cordero**
4) **PR-156**
5) **PR-34**
6) **Ave. José Gautier Benítez**

Zona Histórica

Recursos Arqueológicos

Fuentes:

Portal MiPR de la Junta de Planificación de PR

Departamento de Obras Públicas Municipal

Oficina de Planificación

Exhibit K
3. SHPO-CF-05-13-25-08-Carta

OFICINA ESTATAL DE
CONSERVACIÓN HISTÓRICA
GOBIERNO DE PUERTO RICO
Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

Friday, May 23, 2025

Zaid Díaz Isaac

PO BOX 907, Caguas, PR, 00726

SHPO-CF-05-13-25-08 REHABILITACIÓN DE LAS AVENIDAS PRINCIPALES

Dear Mr. Díaz Isaac,

Our Office has received and reviewed the above referenced project in accordance with 54 U.S.C. 306108 (commonly known as Section 106 of the National Historic Preservation Act) and 36 CFR Part 800: Protection of Historic Properties.

We believe that an Agency finding of no historic properties affected would be appropriate for this undertaking.

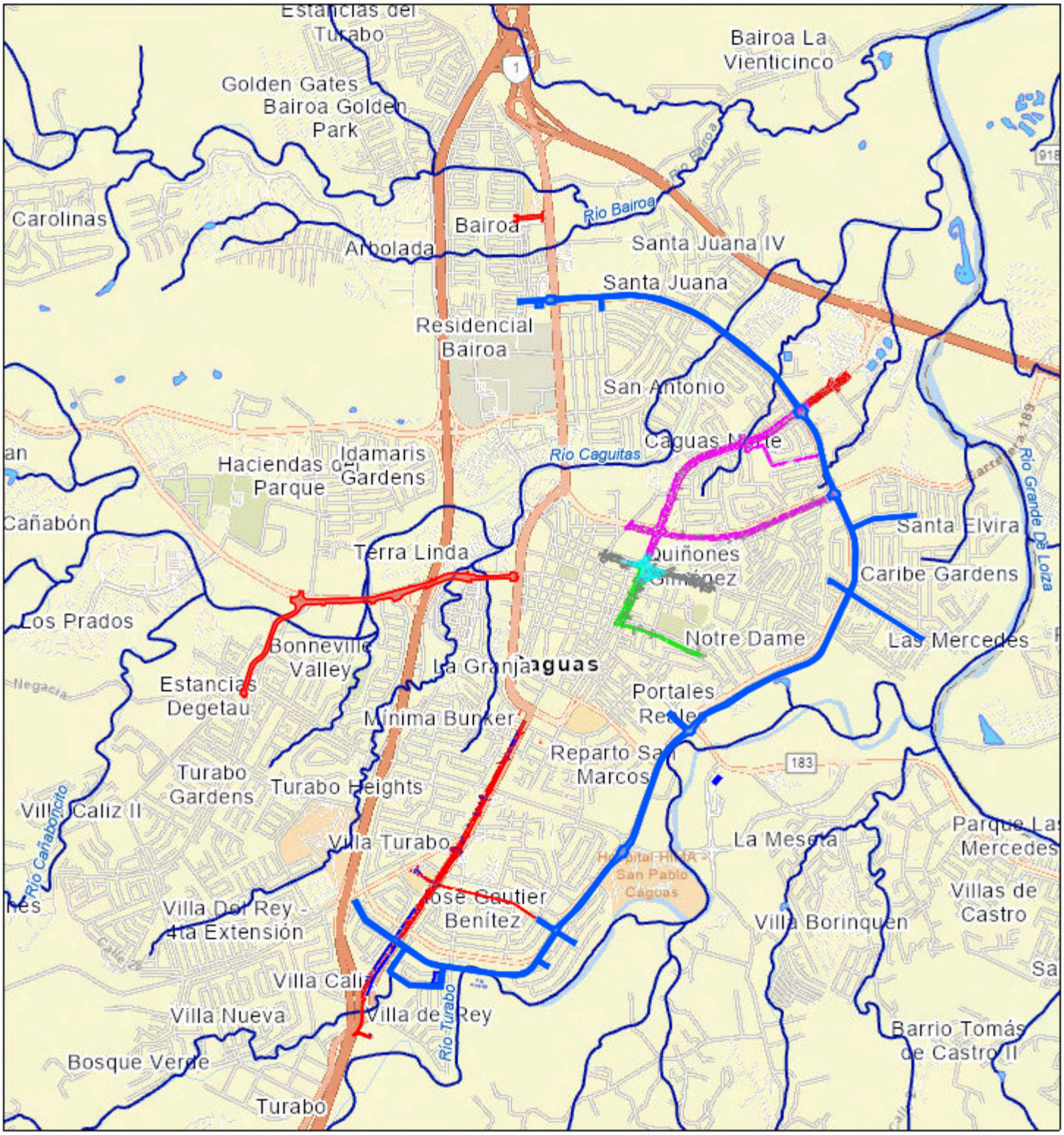
Please note that should you discover other historic properties at any point during project implementation, you should notify the SHPO immediately. If you have any questions regarding our comments, please do not hesitate to contact our Office.

Sincerely,

Carlos A. Rubio Cancela
State Historic Preservation Officer
CARC/GMO/ MB

Exhibit L.
Sole Source Aquifers

Exhibit L
1. SSA Map



29/5/2025, 15:43:52

1:36,112

0 0.28 0.55 1.1 mi

0 0.45 0.9 1.8 km

Flowlines

Other

Waterbodies

Other

Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, NPS, US Census Bureau, USFWS, US EPA Office of Water

Exhibit L
2. SSA Regio II

Region 2 Home
A to Z Index
Recursos en Español
中文：繁體版
中文：简体版
Media Center
News
Wastewater Treatment
Watershed Protection
Water Bodies
No Discharge Areas

Sole Source Aquifers

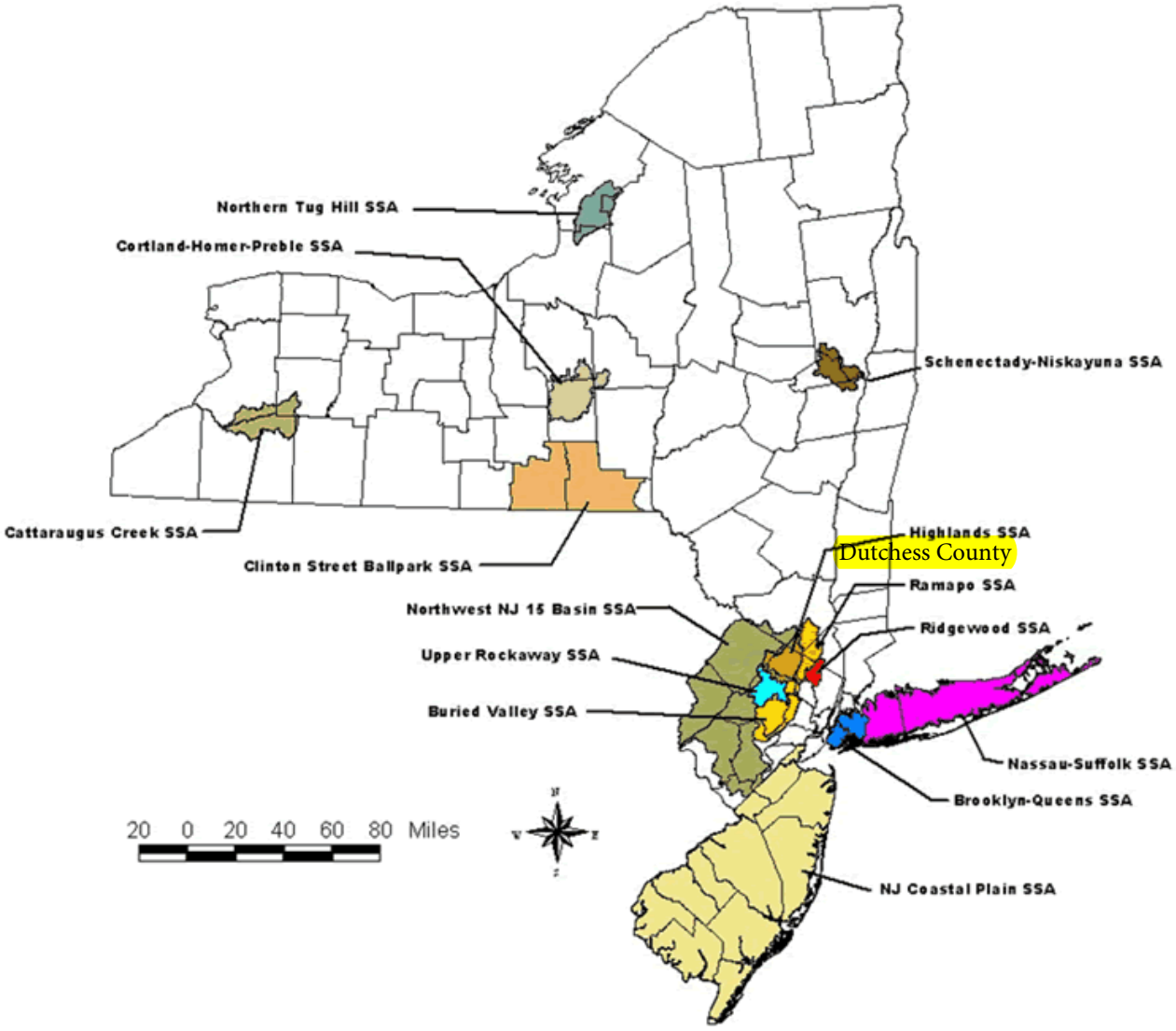
Sole Source Aquifer designation is one tool to protect drinking water supplies in areas with few or no alternative sources to the ground water resource, and where if contamination occurred, using an alternative source would be extremely expensive. The designation protects an area's ground water resource by requiring EPA to review all proposed projects within the designated area that will receive federal financial assistance. All proposed projects receiving federal funds are subject to review to ensure they do not endanger the ground water source.

Related Information

- Sole Source Aquifer Program
- Petitioner Guidance
- FAQs [PDF 14 KB, 2 pp]
- 40 CFR 149

EPA defines a sole or principal source aquifer as one which supplies at least fifty percent (50%) of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water source(s) which could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. For convenience, all designated sole or principal source aquifers are referred to as "sole source aquifers" (SSA).

If you are interested in petitioning the EPA to make a designation, please consult the Sole Source Aquifer Program Petitioner's Guidance or contact EPA for assistance.



DESIGNATED SOLE SOURCE AQUIFERS

State	Name	Federal Register	Date	GIS Map	Information

NJ	Buried Valley Aquifers, Central Basin, Essex and Morris Counties	45 FR 30537	05/08/80	Yes	Yes
NJ	Upper Rockaway River Basin	49 FR 2946	01/24/84	Yes	Yes
NJ	Ridgewood Area Aquifers	49 FR 2943	01/24/84	Yes	Yes
NJ/NY	Highlands Aquifer System Passaic,Morris & Essex Co's NJ; Orange Co. NY	52 FR 37213	10/05/87	Yes	Yes
NJ/DE/PA	New Jersey Coastal Plain Aquifer System	53 FR 23791	06/24/88	Yes	Yes
NJ/NY	New Jersey Fifteen Basin Aquifers	53 FR 23685	06/23/88	Yes	Yes
NJ/NY	Ramapo River Basin Aquifer Systems	57 FR 39201	O8/28/92	Yes	Yes
NY	Nassau/Suffolk Co., Long Island	43 FR 26611	06/21/78	Yes	Yes
NY	Kings/Queens Counties	49 FR 2950	01/24/84	Yes	Yes
NY	Schenectady/Niskayuna	50 FR 2022	01/14/85	Yes	Yes
NY	Clinton Street-Ballpark Valley Aquifer System, Broome and Tioga Co's	50 FR 2025	01/14/85	Yes	Yes
NY	Cattaraugus Creek Basin Aquifer, WY & Allegany Cos.	52 FR 36100	09/25/87	Yes	Yes
NY	Cortland-Homer-Preble Aquifer System	53 FR 22045	06/13/88	Yes	Yes
NY	Northern Tug Hill Glacial Aquifer	71 FR 64524	11/02/06	Yes	Yes

Exhibit L
3. SSA Puerto Rico

ArcGIS Web Map



December 5, 2016

1:1,155,581

0 10 20 40 mi

0 15 30 60 km

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Web AppBuilder for ArcGIS

e of Water | Map Service and data: US EPA Office of Environmental Information (OEI). Data: US Census Bureau | US Census Bureau, EPA American Indian Environmental Office (AIEO), EPA Office of Environmental Information (OEI) | Esri, HERE | Esri, HERE, DeLorme, NGA, USGS |

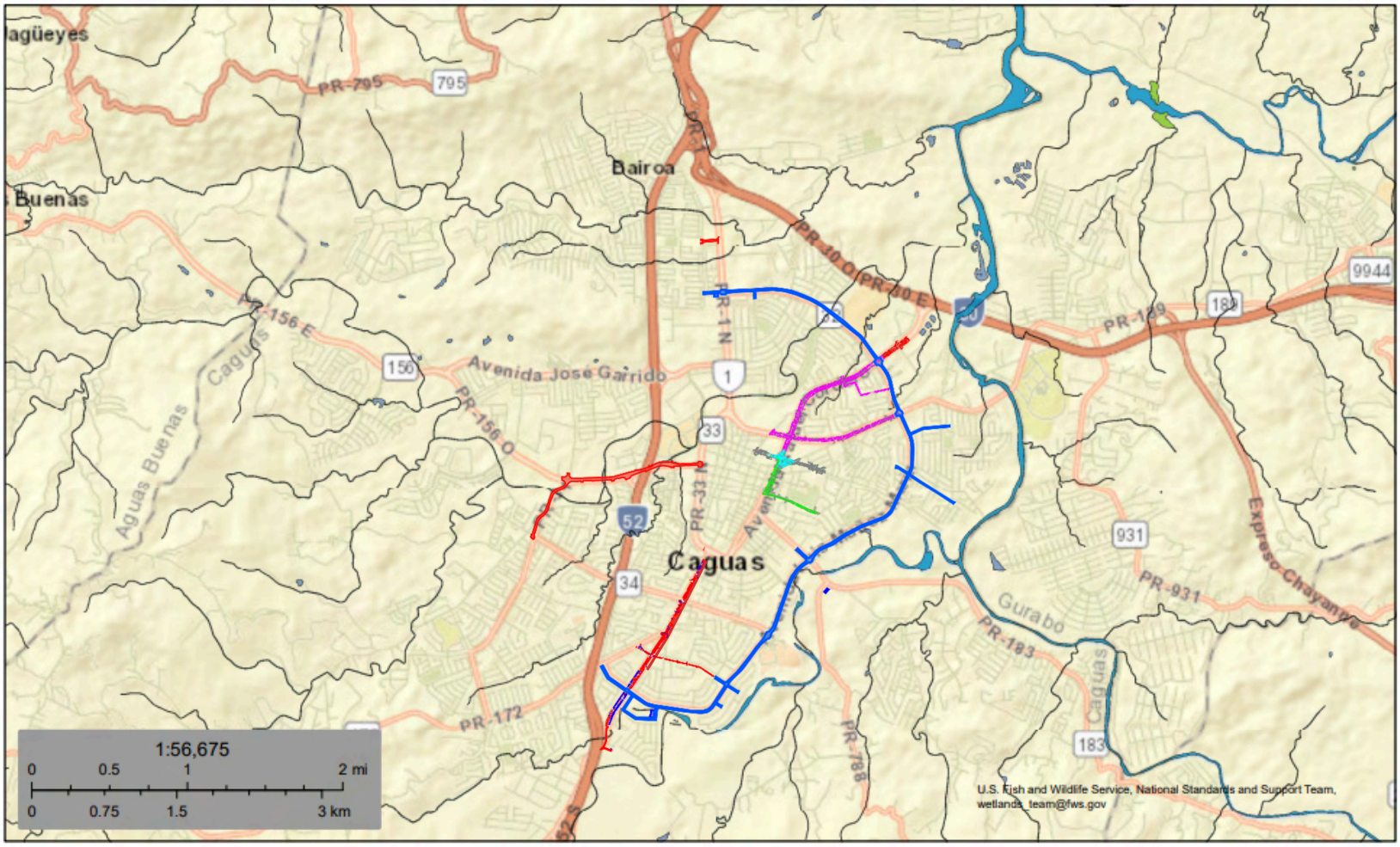
Exhibit M. Wetland Protection

Exhibit M
1. Wetland Map

U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



May 30, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Exhibit N.
Wild and Scenic Rivers

Exhibit N
1. WSR Inventory

RIVER MILEAGE CLASSIFICATIONS FOR COMPONENTS OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM [1]

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
1. Clearwater (Middle Fork), Idaho (P.L. 90-542—October 2, 1968)	Forest Service	54.0	–	131.0	185.0
2. Eleven Point, Missouri (P.L. 90-542—October 2, 1968)	Forest Service	–	44.4	–	44.4
3. Feather, California (P.L. 90-542—October 2, 1968)	Forest Service	32.9	9.7	35.0	77.6
4. Rio Grande, New Mexico (P.L. 90-542—October 2, 1968)	Forest Service Bureau of Land Management	3.9 51.0	– –	0.4 0.4	4.3 51.4
Rio Grande, Texas (P.L. 95-625—November 10, 1978)	National Park Service	95.2	96.0	–	191.2
Rio Grande, New Mexico (P.L. 103-242—May 4, 1994)	Bureau of Land Management	–	12.5	–	12.5
	Rio Grande Total	*150.1*	*108.5*	*0.8*	*259.4*

[1] Mileages in this table are derived from legislative language and/or the most recent figures reported in river plans (or "Comprehensive River Management Plans"). They may differ from mileages obtained by digitizing maps or aerial photographs depicting the river's location on a fixed date. Rivers are dynamic, with frequent flow-related changes in wetted area and longer-term changes in course. Both these physical changes and variations in the technique used to digitize the river will result in variability between a river's reported and actual length at any give time.

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
5. Rogue, Oregon (P.L. 90-542—October 2, 1968)	Forest Service Bureau of Land Management	13.0 20.6	7.5 –	17.0 26.4	37.5 47.0
Rogue, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	91.4	25.7	1.9	119.0
	Rogue River Total	*125.0*	*33.2*	*45.3*	*203.5*
6. Salmon (Middle Fork), Idaho (P.L. 90-542—October 2, 1968)	Forest Service	103.0	1.0	–	104.0
7. St. Croix, Minnesota & Wisconsin (P.L. 90-542—October 2, 1968)	National Park Service	–	181.0	19.0	200.0
St. Croix (Lower) Minnesota & Wisconsin (P.L. 92-560—October 25, 1972)	National Park Service	–	12.0	15.0	27.0
St. Croix (Lower), Minnesota & Wisconsin (Secretarial Designation—June 17, 1976) (*Federal Register* Volume 41, Number 124)	States of Minnesota and Wisconsin	–	–	25.0	25.0
	St. Croix River Total	–	*193.0*	*59.0*	*252.0*
8. Wolf, Wisconsin (P.L. 90-542—October 2, 1968)	National Park Service	–	24.0	–	24.0
9. Allagash Wilderness Waterway, Maine (Secretarial Designation—July 19, 1970) (*Federal Register* Volume 35, Number 138)	State of Maine	92.5	–	–	92.5

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
10. Little Miami, Ohio (Secretarial Designation—August 20, 1973) (*Federal Register* Volume 39, Number 22)	State of Ohio	–	18.0	48.0	66.0
Little Miami, Ohio (Secretarial Designation—January 11, 1981) (*Federal Register* Volume 46, Number 7)	State of Ohio	–	–	28.0	28.0
	Little Miami River Total	–	*18.0*	*76.0*	*94.0*
11. Chattooga, Georgia, North and South Carolina (P.L. 93-279—May 10, 1974)	Forest Service	41.6	2.5	14.6	58.7
12. Little Beaver, Ohio (Secretarial Designation—October 23, 1975) (*Federal Register* Volume 41, Number 40)	State of Ohio	–	33.0	–	33.0
13. Snake, Idaho & Oregon (P.L. 94-199—December 31, 1975)	Forest Service	31.5	36.0	–	67.5
14. Rapid, Idaho (P.L. 94-199—December 31, 1975)	Forest Service	26.8	–	–	26.8
15. New, North Carolina (Secretarial Designation—April 13, 1976) (*Federal Register* Volume 41, Number 76)	State of North Carolina	–	26.5	–	26.5

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
16. Flathead, Montana (P.L. 94-486—October 12, 1976)	Forest Service	97.9	–	17.8	115.7
	Forest Service and National Park Service	–	40.7	62.6	103.3
	Flathead River Total	*97.9*	*40.7*	*80.4*	*219.0*
17. Missouri, Montana (P.L. 94-486—October 12, 1976)	Bureau of Land Management	64.0	26.0	59.0	149.0
	Bureau of Land Management/ Fish and Wildlife Service	–	–		
Missouri, Nebraska & South Dakota (P.L. 95-625—November 10, 1978)	National Park Service	–	–	59.0	59.0
Missouri, Nebraska & South Dakota (P.L. 102-50—May 24, 1991)	National Park Service	–	–	39.0	39.0
	Missouri River Total	*64.0*	*26.0*	*157.0*	*247.0*
18. Obed, Tennessee (P.L. 94-486—October 12, 1976)	National Park Service	43.3	2.0	–	45.3
19. American (North Fork), California (P.L. 95-625—November 10, 1978)	Forest Service	26.3	–	–	26.3
	Bureau of Land Management	12.0	–	–	12.0
	American River (North Fork) Total	*38.3*	–	–	*38.3*

RIVER MILEAGE CLASSIFICATIONS FOR COMPONENTS OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM [1]

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
20. Delaware (Upper), New York & Pennsylvania (P.L. 95-625—November 10, 1978)	National Park Service	–	23.1	50.3	73.4
Delaware (Middle), New Jersey & Pennsylvania (P.L. 95-625—November 10, 1978)	National Park Service	–	35.0	5.0	40.0
Delaware (Lower), New Jersey & Pennsylvania (P.L. 106-418—November 1, 2000)	National Park Service and Local Government	–	25.4	41.9	67.3
	Delaware River Total	–	*83.5*	*97.2*	*180.7*
21. Pere Marquette, Michigan (P.L. 95-625—November 10, 1978)	Forest Service	–	66.4	–	66.4
22. Saint Joe, Idaho (P.L. 95-625—November 10, 1978)	Forest Service	26.6	–	39.7	66.3
23. Skagit, Washington (P.L. 95-625—November 10, 1978)	Forest Service	–	100.0	58.5	158.5
24. Salmon, Idaho (P.L. 96-312—July 23, 1980)	Forest Service	79.0	–	46.0	125.0
25. Alagnak, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	67.0	–	–	67.0
26. Alatna, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	83.0	–	–	83.0
27. Andreafsky, Alaska (P.L. 96-487—December 2, 1980)	Fish and Wildlife Service	265.0	–	–	265.0

River **Present Units in the National System**	**Administering** **Agency**	**Miles by Classification** *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
28. Aniakchak, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	63.0	–	–	63.0
29. Beaver Creek, Alaska (P.L. 96-487—December 2, 1980)	Fish and Wildlife Service Bureau of Land Management	16.0 111.0	– –	– –	16.0 111.0
	Beaver Creek Total	*127.0*	–	–	*127.0*
30. Birch Creek, Alaska (P.L. 96-487—December 2, 1980)	Bureau of Land Management	126.0	–	–	126.0
31. Charley, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	208.0	–	–	208.0
32. Chilikadrotna, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	11.0	–	–	11.0
33. Delta, Alaska (P.L. 96-487—December 2, 1980)	Bureau of Land Management	20.0	24.0	18.0	62.0
34. Fortymile, Alaska (P.L. 96-487—December 2, 1980)	Bureau of Land Management	179.0	203.0	10.0	392.0
35. Gulkana, Alaska (P.L. 96-487—December 2, 1980)	Bureau of Land Management	181.0	–	–	181.0
36. Ivishak, Alaska (P.L. 96-487—December 2, 1980)	Fish and Wildlife Service	61.0	–	–	61.0
37. John, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	52.0	–	–	52.0

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
38. Kobuk, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	110.0	–	–	110.0
39. Koyukuk (North Fork), Alaska (P.L. 96-487—December 2, 1980)	National Park Service	102.0	–	–	102.0
40. Mulchatna, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	24.0	–	–	24.0
41. Noatak, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	330.0	–	–	330.0
42. Nowitna, Alaska (P.L. 96-487—December 2, 1980)	Fish and Wildlife Service	223.0	–	–	223.0
43. Salmon, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	70.0	–	–	70.0
44. Selawik, Alaska (P.L. 96-487—December 2, 1980)	Fish and Wildlife Service	168.0	–	–	168.0
45. Sheenjek, Alaska (P.L. 96-487—December 2, 1980)	Fish and Wildlife Service	191.0	–	–	191.0
46. Tinayguk, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	44.0	–	–	44.0
47. Tlikakila, Alaska (P.L. 96-487—December 2, 1980)	National Park Service	51.0	–	–	51.0
48. Unalakleet, Alaska (P.L. 96-487—December 2, 1980)	Bureau of Land Management	80.0	–	–	80.0

River **Present Units in the National System**	**Administering Agency**	**Miles by Classification** *Wild*	*Scenic*	*Rec'l*	***Total Miles***
49. Wind, Alaska (P.L. 96-487—December 2, 1980)	Fish and Wildlife Service	102.0	–	–	102.0
50. American (Lower), California (Secretarial Designation—January 19, 1981) (*Federal Register* Volume 46, Number 15)	State of California	–	–	23.0	23.0
51. Eel, California (Secretarial Designation—January 19, 1981) (*Federal Register* Volume 46, Number 15)	State of California Forest Service Bureau of Land Management Round Valley Indian Reservation	36.0 35.0 21.0 5.0	22.5 – 4.5 1.0	250.5 – 6.5 16.0	309.0 35.0 32.0 22.0
	Eel River Total	*97.0*	*28.0*	*273.0*	*398.0*
52. Klamath, California (Secretarial Designation—January 19, 1981) (*Federal Register* Volume 46, Number 15)	State of California Forest Service Bureau of Land Management Hoopa Valley Indian Reservation National Park Service	– 11.7 – – –	3.0 20.5 – – –	12.2 190.1 1.5 46.0 1.0	15.2 222.3 1.5 46.0 1.0
Klamath, Oregon (Secretarial Designation—September 22, 1994) (*Federal Register* Volume 59, Number 201)	State of Oregon and Bureau of Land Management	–	11.0	–	11.0
	Klamath River Total	*11.7*	*34.5*	*250.8*	*297.0*

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
53. Smith, California (Secretarial Designation—January 19, 1981) (*Federal Register* Volume 46, Number 15)	State of California	–	0.5	28.5	29.0
Smith, California (P.L. 101-612—November 16, 1990)	Forest Service	78.0	30.5	187.9	296.4
	Smith River Total	*78.0*	*31.0*	*216.4*	*325.4*
54. Trinity, California (Secretarial Designation—January 19, 1981) (*Federal Register* Volume 46, Number 15)	State of California Forest Service Bureau of Land Management Hoopa Valley Indian Reservation	2.0 42.0 – –	11.0 22.0 – 6.0	24.0 71.0 17.0 8.0	37.0 135.0 17.0 14.0
	Trinity River Total	*44.0*	*39.0*	*120.0*	*203.0*
55. Verde, Arizona (P.L. 98-406—August 28, 1984)	Forest Service	22.2	18.3	–	40.5
56. Tuolumne, California (P.L. 98-425—September 28, 1984)	Forest Service National Park Service Bureau of Land Management	7.0 37.0 3.0	6.0 17.0 –	13.0 – –	26.0 54.0 3.0
	Tuolumne River Total	*47.0*	*23.0*	*13.0*	*83.0*
57. Au Sable, Michigan (P.L. 98-444—October 4, 1984)	Forest Service	–	23.0	–	23.0
58. Illinois, Oregon (P.L. 98-494—October 19, 1984)	Forest Service	28.7	17.9	3.8	50.4

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
59. Owyhee, Oregon (P.L. 98-494—October 19, 1984)	Bureau of Land Management	120.0	–	–	120.0
60. Loxahatchee, Florida (Secretarial Designation—May 17, 1985) (*Federal Register* Volume 50, Number 100)	State of Florida	1.3	5.8	0.5	7.6
61. Horsepasture, North Carolina (P.L. 99-530—October 26, 1986)	Forest Service	–	3.6	0.6	4.2
62. Black Creek, Mississippi (P.L. 99-590—October 30, 1986)	Forest Service	–	21.0	–	21.0
63. Cache la Poudre, Colorado (P.L. 99-590—October 30, 1986)	Forest Service National Park Service	18.0 12.0	– –	46.0 –	64.0 12.0
	Cache la Poudre River Total	*30.0*	–	*46.0*	*76.0*
64. Saline Bayou, Louisiana (P.L. 99-590—October 30, 1986)	Forest Service	–	19.0	–	19.0
65. Klickitat, Washington (P.L. 99-663—November 17, 1986)	Forest Service	–	–	10.8	10.8
66. White Salmon, Washington (P.L. 99-663—November 17, 1986)	Forest Service	–	7.7	–	7.7
White Salmon, Washington (P.L. 109-44—August 2, 2005)	Forest Service	6.7	13.3	–	20.0
	White Salmon River Total	*6.7*	*21.0*	–	*27.7*

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
67. Merced, California (P.L. 100-149—November 2, 1987)	Forest Service National Park Service Bureau of Land Management	15.0 53.0 3.0	2.0 14.0 –	12.5 14.0 1.0	29.5 81.0 4.0
Merced, California (P.L. 102-432—October 23, 1992)	Bureau of Land Management	–	–	8.0	8.0
	Merced River Total	*71.0*	*16.0*	*35.5*	*122.5*
68. Kings, California (P.L. 100-150—November 3, 1987)	Forest Service National Park Service	16.5 49.0	– –	9.0 6.5	25.5 55.5
	Kings River Total	*65.5*	–	*15.5*	*81.0*
69. Kern, California (P.L. 100-174—November 24, 1987)	Forest Service National Park Service	96.1 27.0	7.0 –	20.9 –	124.0 27.0
	Kern River Total	*123.1*	*7.0*	*20.9*	*151.0*
70. Bluestone, West Virginia (P.L. 100-534—October 26, 1988)	National Park Service	–	10.0	–	10.0
71. Big Marsh Creek, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	–	15.0	15.0
72. Chetco, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	27.5	7.5	9.5	44.5
73. Clackamas, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	20.0	27.0	47.0
74. Crescent Creek, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	–	10.0	10.0

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
75. Crooked, Oregon (P.L. 100-557—October 28, 1988)	Bureau of Land Management	–	–	14.8	14.8
76. Crooked (North Fork), Oregon (P.L. 100-557—October 28, 1988)	Forest Service Bureau of Land Management	– 12.2	7.6 0.6	8.9 4.4	16.5 17.2
	Crooked River (North Fork) Total	*12.2*	*8.2*	*13.3*	*33.7*
77. Deschutes, Oregon (P.L. 100-557—October 28, 1988)	Forest Service Bureau of Land Management	– –	11.0 20.0	43.4 100.0	54.4 120.0
	Deschutes River Total	–	*31.0*	*143.4*	*174.4*
78. Donner und Blitzen, Oregon (P.L. 100-557—October 28, 1988)	Bureau of Land Management	72.7	–	–	72.7
Donner und Blitzen, Oregon (P.L. 106-399—October 30, 2000)	Bureau of Land Management	14.8	–	–	14.8
	Donner und Blitzen River Total	*87.5*	–	–	*87.5*
79. Eagle Creek, Oregon (Wallowa-Whitman National Forest) (P.L. 100-557—October 28, 1988)	Forest Service	4.5	6.0	18.4	28.9

RIVER MILEAGE CLASSIFICATIONS FOR COMPONENTS OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM [1]

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
80. Elk, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	2.0	–	17.0	19.0
Elk, Oregon (P.L. 111-11—March 30, 2009)	Forest Service	7.7	1.5	–	9.2
Elk, Oregon (P.L. 116-9—March 12, 2019)	Forest Service	29.6	6.9	9.5	46.0
	Elk River Total	*39.3*	*8.4*	*26.5*	*74.2*
81. Grande Ronde, Oregon (P.L. 100-557—October 28, 1988)	Forest Service Bureau of Land Management	17.4 9.0	– –	1.5 15.9	18.9 24.9
	Grande Ronde River Total	*26.4*	–	*17.4*	*43.8*
82. Imnaha, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	15.0	4.0	58.0	77.0
83. John Day, Oregon (P.L. 100-557—October 28, 1988)	Bureau of Land Management	–	–	147.5	147.5
84. John Day (North Fork), Oregon (P.L. 100-557—October 28, 1988)	Forest Service	27.8	10.5	15.8	54.1
85. John Day (South Fork), Oregon (P.L. 100-557—October 28, 1988)	Bureau of Land Management	–	–	47.0	47.0
86. Joseph Creek, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	8.6	–	–	8.6

RIVER MILEAGE CLASSIFICATIONS FOR COMPONENTS OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM [1]

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
87. Little Deschutes, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	–	12.0	12.0
88. Lostine, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	5.0	–	11.0	16.0
89. Malheur, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	6.7	7.0	–	13.7
90. Malheur (North Fork), Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	25.5	–	25.5
91. McKenzie, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	–	12.7	12.7
92. Metolius, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	17.1	11.5	28.6
93. Minam, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	41.9	–	–	41.9
94. North Powder, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	6.4	–	6.4
95. North Umpqua, Oregon (P.L. 100-557—October 28, 1988)	Forest Service Bureau of Land Management	– –	– –	25.4 8.4	25.4 8.4
	North Umpqua River Total	–	–	*33.8*	*33.8*
96. Owyhee (North Fork), Oregon (P.L. 100-557—October 28, 1988)	Bureau of Land Management	9.6	–	–	9.6

RIVER MILEAGE CLASSIFICATIONS FOR COMPONENTS OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM [1]

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
97. Powder, Oregon (P.L. 100-557—October 28, 1988)	Bureau of Land Management	–	11.7	–	11.7
98. Quartzville Creek, Oregon (P.L. 100-557—October 28, 1988)	Bureau of Land Management	–	–	12.0	12.0
99. Roaring, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	13.5	–	0.2	13.7
100. Rogue (Upper), Oregon (P.L. 100-557—October 28, 1988)	Forest Service	6.1	34.2	–	40.3
101. Salmon, Oregon (P.L. 100-557—October 28, 1988)	Forest Service Bureau of Land Management	15.0 –	– 4.8	10.5 3.2	25.5 8.0
	Salmon River Total	*15.0*	*4.8*	*13.7*	*33.5*
102. Sandy, Oregon (P.L. 100-557—October 28, 1988)	Forest Service Bureau of Land Management	4.5 –	– 3.8	7.9 8.7	12.4 12.5
	Sandy River Total	*4.5*	*3.8*	*16.6*	*24.9*
103. Smith (North Fork), Oregon (P.L. 100-557—October 28, 1988)	Forest Service	8.5	4.5	–	13.0
104. Sprague (North Fork), Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	15.0	–	15.0
105. Sycan, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	–	50.4	8.6	59.0
106. Wenaha, Oregon (P.L. 100-557—October 28, 1988)	Forest Service	18.7	2.7	0.2	21.6

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
107. West Little Owyhee, Oregon (P.L. 100-557—October 28, 1988)	Bureau of Land Management	57.6	–	–	57.6
108. Whychus Creek (P.L. 100-557—October 28, 1988)	Forest Service	45.2	8.8	–	54.0
109. Sipsey Fork West Fork, Alabama (*aka* Sipsey Fork of the Black Warrior River) (P.L. 100-547—October 28, 1988)	Forest Service	36.4	25.0	–	61.4
110. White, Oregon (P.L. 100-557—October 28, 1988)	Forest Service Bureau of Land Management	– –	6.5 17.8	15.6 6.9	22.1 24.7
	White River Total	–	*24.3*	*22.5*	*46.8*
111. Wildcat, New Hampshire (P.L. 100-554—October 28, 1988)	Forest Service	–	13.7	0.8	14.5
112. Willamette (North Fork Middle Fork), Oregon (P.L. 100-557—October 28, 1988)	Forest Service	8.8	6.5	27.0	42.3
113. Rio Chama, New Mexico (P.L. 100-633—November 7, 1988)	Forest Service Bureau of Land Management	10.4 11.2	3.0 –	– –	13.4 11.2
	Rio Chama Total	*21.6*	*3.0*	–	*24.6*
114. Vermilion (Middle Fork), Illinois (Secretarial Designation—May 11, 1989)	State of Illinois	–	17.1	–	17.1
115. Jemez (East Fork), New Mexico (P.L. 101-306—June 6, 1990)	Forest Service	4.0	5.0	2.0	11.0

River **Present Units in the National System**	**Administering** **Agency**	**Miles by Classification** *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
116. Pecos, New Mexico (P.L. 101-306—June 6, 1990)	Forest Service	13.5	–	7.0	20.5
117. Yellowstone (Clarks Fork), Wyoming (P.L. 101-628—November 28, 1990)	Forest Service	20.5	–	–	20.5
118. Niobrara, Nebraska (P.L. 102-50—May 24, 1991)	National Park Service Fish and Wildlife Service	– 	68.0 8.0	28.0 –	96.0 8.0
	Niobrara River Total	–	*76.0*	*28.0*	*104.0*
119. Bear Creek, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	–	6.5	–	6.5
120. Black, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	–	14.0	–	14.0
121. Carp, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	12.4	9.3	6.1	27.8
122. Indian, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	–	12.0	39.0	51.0
123. Manistee, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	–	–	26.0	26.0
124. Ontonagon, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	43.0	35.0	92.0	170.0
125. Paint, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	–	–	52.0	52.0

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
126. Pine, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	–	25.0	–	25.0
127. Presque Isle, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	–	24.0	48.0	72.0
128. Sturgeon, Michigan (Hiawatha National Forest) (P.L. 102-249—March 3, 1992)	Forest Service	–	21.7	22.2	43.9
129. Sturgeon, Michigan (Ottawa National Forest) (P.L. 102-249—March 3, 1992)	Forest Service	20.0	8.0	–	28.0
130. Tahquamenon (East Branch), Michigan (P.L. 102-249—March 3, 1992)	Forest Service	3.2	–	10.0	13.2
131. Whitefish, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	–	31.5	2.1	33.6
132. Yellow Dog, Michigan (P.L. 102-249—March 3, 1992)	Forest Service	4.0	–	–	4.0
133. Allegheny, Pennsylvania (P.L. 102-271—April 20, 1992)	Forest Service	–	–	86.6	86.6
134. Big Piney Creek, Arkansas (P.L. 102-275—April 22, 1992)	Forest Service	–	45.2	–	45.2
135. Buffalo, Arkansas (P.L. 102-275—April 22, 1992)	Forest Service	9.4	6.4	–	15.8

RIVER MILEAGE CLASSIFICATIONS FOR COMPONENTS OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM [1]

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
136. Cossatot, Arkansas (P.L. 102-275—April 22, 1992)	Forest Service Army Corps of Engineers	– –	11.3 4.6	4.2 –	15.5 4.6
Cossatot, Arkansas (Secretarial Designation—January 14, 1994) (*Federal Register* Volume 59, Number 22)	State of Arkansas	–	10.7	–	10.7
	Cossatot River Total	–	*26.6*	*4.2*	*30.8*
137. Hurricane Creek, Arkansas (P.L. 102-275—April 22, 1992)	Forest Service	2.4	13.1	–	15.5
138. Little Missouri, Arkansas (P.L. 102-275—April 22, 1992)	Forest Service	4.4	11.3	–	15.7
139. Mulberry, Arkansas (P.L. 102-275—April 22, 1992)	Forest Service	–	19.4	36.6	56.0
140. North Sylamore Creek, Arkansas (P.L. 102-275—April 22, 1992)	Forest Service	–	14.5	–	14.5
141. Richland Creek, Arkansas (P.L. 102-275—April 22, 1992)	Forest Service	5.3	11.2	–	16.5
142. Big Sur, California (P.L. 102-301—June 19, 1992)	Forest Service	19.5	–	–	19.5
143. Sespe Creek, California (P.L. 102-301—June 19, 1992)	Forest Service	27.5	4.0	–	31.5
144. Sisquoc, California (P.L. 102-301—June 19, 1992)	Forest Service	33.0	–	–	33.0

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
145. Great Egg Harbor, New Jersey (P.L. 102-536—October 27, 1992)	National Park Service	–	30.6	98.4	129.0
146. Westfield, Massachusetts (Secretarial Designation—November 2, 1993) (*Federal Register* Volume 58, Number 219)	State of Massachusetts	–	18.9	24.4	43.3
Westfield, Massachusetts (Secretarial Designation—September 28, 2004) (*Federal Register* Volume 69, Number 209)	State of Massachusetts	2.6	24.0	8.2	34.8
	Westfield River Total	*2.6*	*42.9*	*32.6*	*78.1*
147. Maurice, New Jersey (P.L. 103-162—December 1, 1993)	National Park Service	–	28.9	6.5	35.4
148. Red, Kentucky (P.L. 103-170—December 2, 1993)	Forest Service	9.1	–	10.3	19.4
149. Big and Little Darby Creeks, Ohio (Secretarial Designation—March 10, 1994) (*Federal Register* Volume 59, Number 66)	State of Ohio	–	85.9	–	85.9

River **Present Units in the National System**	**Administering Agency**	**Miles by Classification** *Wild*	*Scenic*	*Rec'l*	***Total Miles***
150. Farmington (West Branch), Connecticut (P.L. 103-313—August 26, 1994)	National Park Service and State of Connecticut and Local Government	–	–	14.0	14.0
Farmington (West Branch), Connecticut (P.L. 116-9—March 12, 2019)	National Park Service and State of Connecticut and Local Government	–	–	1.1	1.1
Farmington (West Branch) River Total		–	–	*15.1*	*15.1*
151. Wallowa, Oregon (Secretarial Designation—July 23, 1996) (*Federal Register* Volume 61, Number 157)	State of Oregon and Bureau of Land Management	–	–	10.0	10.0
152. Elkhorn Creek, Oregon (P.L. 104-208—September 30, 1996)	Forest Service Bureau of Land Management	5.8 –	– 0.6	– –	5.8 0.6
Elkhorn Creek Total		*5.8*	*0.6*	–	*6.4*
153. Clarion, Pennsylvania (P.L. 104-314—October 19, 1996)	Forest Service	–	17.1	34.6	51.7
154. Lamprey, New Hampshire (P.L. 104-333—November 12, 1996)	National Park Service and Local Government	–	–	11.5	11.5
Lamprey, New Hampshire (P.L. 106-192—May 2, 2000)	National Park Service and Local Government	–	–	12.0	12.0
Lamprey River Total		–	–	*23.5*	*23.5*

River **Present Units in the National System**	**Administering Agency**	**Miles by Classification** *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
155. Lumber, North Carolina (Secretarial Designation—September 25, 1998) (*Federal Register* Volume 63, Number 193)	State of North Carolina	–	60.0	21.0	81.0
156. Sudbury, Assabet, Concord, Massachusetts (P.L. 106-20—April 9, 1999)	National Park Service and State of Massachusetts and Local Government	–	14.9	14.1	29.0
157. Wilson Creek, North Carolina (P.L. 106-261—August 18, 2000)	Forest Service	4.6	2.9	15.8	23.3
158. Wekiva, Florida (P.L. 106-299—October 13, 2000)	National Park Service and State of Florida	31.4	2.1	8.1	41.6
159. White Clay Creek, Delaware & Pennsylvania (P.L. 106-357—October 24, 2000)	National Park Service and Local Government	–	24.0	166.0	190.0
White Clay Creek, Delaware & Pennsylvania (P.L. 113-291—December 19, 2014)	National Park Service and Local Government	–	1.6	7.4	9.0
	White Clay Creek Total	–	*25.6*	*173.4*	*199.0*
160. Wildhorse and Kiger Creeks, Oregon (P.L. 106-399—October 30, 2000)	Bureau of Land Management	13.9	–	–	13.9
161. Rio de la Mina, Puerto Rico (P.L. 107-365—December 19, 2002)	Forest Service	–	1.2	0.9	2.1
162. Rio Icacos, Puerto Rico (P.L. 107-365—December 19, 2002)	Forest Service	–	2.3	–	2.3

River **Present Units in the National System**	**Administering Agency**	**Miles by Classification** *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
163. Rio Mameyes, Puerto Rico (P.L. 107-365—December 19, 2002)	Forest Service	2.1	1.4	1.0	4.5
164. Black Butte, California (P.L. 109-362—October 17, 2006)	Forest Service	17.5	3.5	–	21.0
165. Musconetcong, New Jersey (P.L. 109-452—December 22, 2006)	National Park Service	–	3.5	20.7	24.2
Musconetcong, New Jersey (June 3, 2022—*Federal Register* Volume 46, Number 15)	National Park Service	–	–	4.3	4.3
	Musconetcong Total	–	*3.5*	*25.0*	*28.5*
166. Eightmile, Connecticut (P.L. 110-229—May 8, 2008)	National Park Service and Local Government	–	25.3	–	25.3
167. Amargosa, California (P.L. 111-11—March 30, 2009)	Bureau of Land Management	7.9	12.1	6.3	26.3
Amargosa, California (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	3.4	–	3.4
	Amargosa River Total	*7.9*	*15.5*	*6.3*	*29.7*
168. Battle Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	23.4	–	–	23.4
169. Bautista Creek, California (P.L. 111-11—March 30, 2009)	Forest Service	–	–	9.8	9.8

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
170. Big Jacks Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	35.0	–	–	35.0
171. Bruneau, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	38.7	–	0.6	39.3
172. Bruneau (West Fork), Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	0.4	–	–	0.4
173. Clackamas (South Fork), Oregon (P.L. 111-11—March 30, 2009)	Forest Service	4.2	–	–	4.2
174. Collawash, Oregon (P.L. 111-11—March 30, 2009)	Forest Service	–	11.0	6.8	17.8
175. Cottonwood Creek, California (P.L. 111-11—March 30, 2009)	Forest Service Bureau of Land Management	17.4 –	– –	– 4.1	17.4 4.1
	Cottonwood Creek Total	*17.4*	–	*4.1*	*21.5*
176. Cottonwood Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	2.6	–	–	2.6
177. Deep Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	13.1	–	–	13.1
178. Dickshooter Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	9.3	–	–	9.3
179. Duncan Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	0.9	–	–	0.9

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
180. Eagle Creek, Oregon (Mt. Hood National Forest) (P.L. 111-11—March 30, 2009)	Forest Service	8.3	–	–	8.3
181. Fifteenmile Creek, Oregon (P.L. 111-11—March 30, 2009)	Forest Service	10.5	0.6	–	11.1
182. Fish Creek, Oregon (P.L. 111-11—March 30, 2009)	Forest Service	–	–	13.5	13.5
183. Fossil Creek, Arizona (P.L. 111-11—March 30, 2009)	Forest Service	9.3	–	7.5	16.8
184. Fuller Mill Creek, California (P.L. 111-11—March 30, 2009)	Forest Service	–	2.6	0.9	3.5
185. Hood (East Fork), Oregon (P.L. 111-11—March 30, 2009)	Forest Service	–	–	13.5	13.5
186. Hood (Middle Fork), Oregon (P.L. 111-11—March 30, 2009)	Forest Service	–	3.7	–	3.7
187. Jarbidge, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	28.8	–	–	28.8
188. Little Jacks Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	12.4	–	–	12.4
189. Owens River Headwaters, California (P.L. 111-11—March 30, 2009)	Forest Service	6.3	6.6	6.2	19.1
190. Owyhee, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	67.3	–	–	67.3

River **Present Units in the National System**	**Administering** **Agency**	**Miles by Classification** *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
191. Owyhee (North Fork), Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	15.1	–	5.7	20.8
192. Owyhee (South Fork), Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	30.2	–	1.2	31.4
193. Palm Canyon Creek, California (P.L. 111-11—March 30, 2009)	Forest Service	8.1	–	–	8.1
194. Piru Creek, California (P.L. 111-11—March 30, 2009)	Forest Service	4.3	–	3.0	7.3
195. Red Canyon, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	4.6	–	–	4.6
196. Roaring (South Fork), Oregon (P.L. 111-11—March 30, 2009)	Forest Service	4.6	–	–	4.6
197. San Jacinto (North Fork), California (P.L. 111-11—March 30, 2009)	Forest Service	7.2	2.3	0.7	10.2
198. Sheep Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	25.6	–	–	25.6
199. Snake River Headwaters, Wyoming (P.L. 111-11—March 30, 2009)	Forest Service National Park Service	184.0 45.3	97.1 53.3	33.8 –	314.9 98.6
	Snake River Headwaters Total	*229.3*	*150.4*	*33.8*	*413.5*
200. Taunton, Massachusetts (P.L. 111-11—March 30, 2009)	National Park Service	–	26.0	14.0	40.0

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
201. Virgin, Utah (P.L. 111-11—March 30, 2009)	National Park Service Bureau of Land Management	123.6 21.8	11.3 –	12.6 –	147.5 21.8
	Virgin River Total	*145.4*	*11.3*	*12.6*	*169.3*
202. Wickahoney Creek, Idaho (P.L. 111-11—March 30, 2009)	Bureau of Land Management	1.5	–	–	1.5
203. Zigzag, Oregon (P.L. 111-11—March 30, 2009)	Forest Service	4.3	–	–	4.3
204. Illabot Creek, Washington (P.L. 113-291—December 19, 2014)	Forest Service	4.3	–	10.0	14.3
205. Missisquoi & Trout, Vermont (P.L. 113-291—December 19, 2014)	National Park Service and Local Government	–	–	46.1	46.1
206. Pratt, Washington (P.L. 113-291—December 19, 2014)	Forest Service	9.5	–	–	9.5
207. River Styx (Cave Creek), Oregon (P.L. 113-291—December 19, 2014)	National Park Service	–	0.4	–	0.4
208. Snoqualmie (Middle Fork), Washington (P.L. 113-291—December 19, 2014)	Forest Service	6.4	21.0	–	27.4
209. East Rosebud Creek, Montana (P.L. 115-229—August 2, 2018)	Forest Service	13.0	–	7.0	20.0
210. Franklin Creek, Oregon (P.L. 116-9—March 12, 2019)	Forest Service	4.5	–	–	4.5

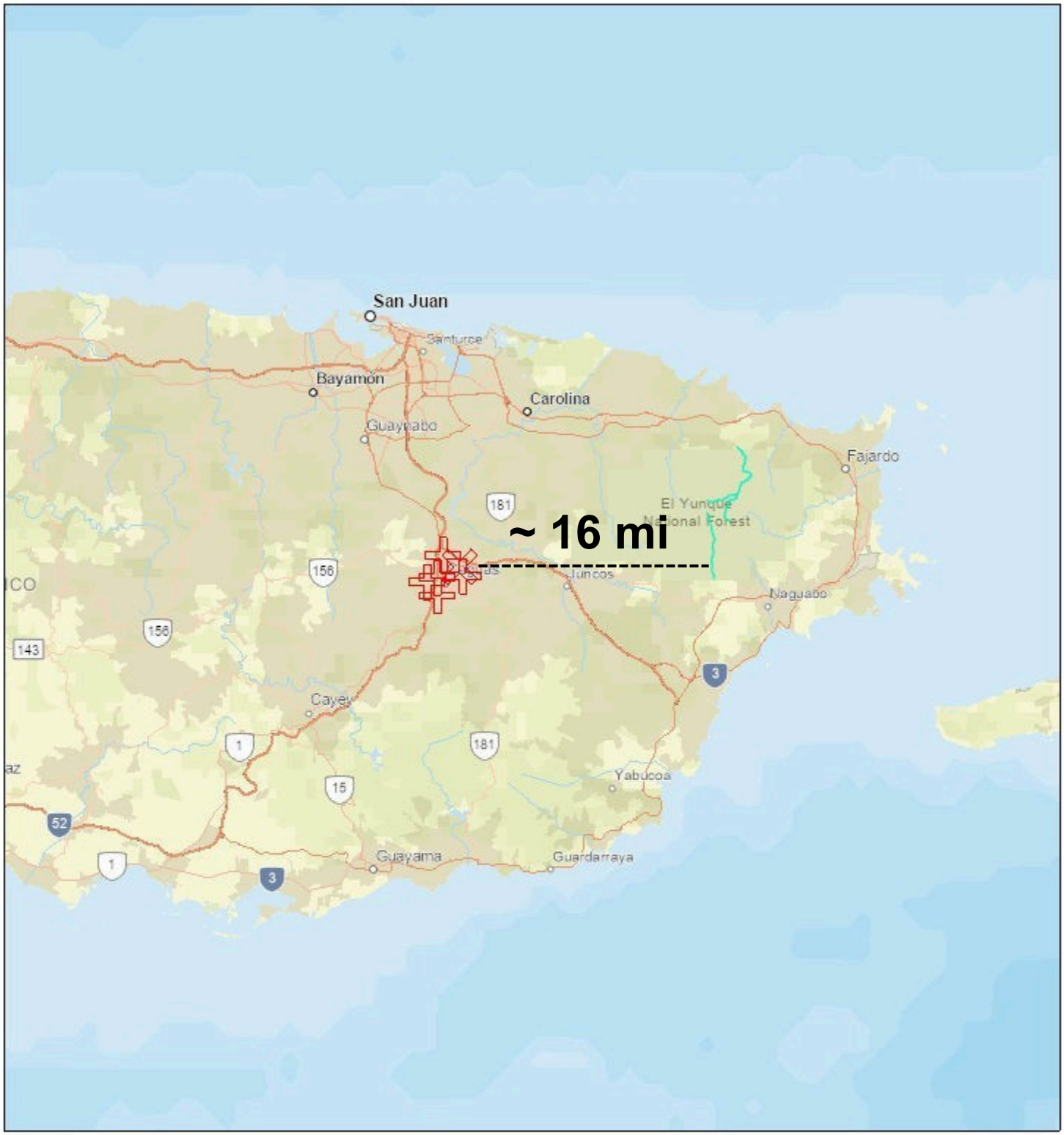
River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
211. Wasson Creek, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management Forest Service	4.2 5.9	– –	– –	4.2 5.9
	Wasson Creek Total	*10.1*	–	–	*10.1*
212. Molalla, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	–	21.3	21.3
213. Nestucca, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	–	15.5	15.5
214. Walker Creek, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	–	2.9	2.9
215. North Fork Silver Creek, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	–	6.0	6.0
216. Jenny Creek, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	17.6	–	17.6
217. Spring Creek, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	1.1	–	1.1
218. Lobster Creek, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	–	5.0	5.0
219. Elk Creek, Oregon (P.L. 116-9—March 12, 2019)	Bureau of Land Management	–	7.3	–	7.3
220. Green, Utah (P.L. 116-9—March 12, 2019)	Bureau of Land Management	5.3	49.2	8.5	63.0

RIVER MILEAGE CLASSIFICATIONS FOR COMPONENTS OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM [1]

River Present Units in the National System	Administering Agency	Miles by Classification *Wild*	 *Scenic*	 *Rec'l*	 ***Total Miles***
221. Farmington & Salmon Brook, Connecticut (P.L. 116-9—March 12, 2019)	National Park Service and State of Connecticut and Local Government	–	–	61.7	61.7
222. Wood-Pawcatuck Watershed, Connecticut/RI (P.L. 116-9—March 12, 2019)	National Park Service and Local Government	24.0	52.0	34.0	110.0
223. Nashua, Massachusetts & New Hampshire (P.L. 116-9—March 12, 2019)	National Park Service and Local Government	–	52.8	–	52.8
224. Surprise Canyon Creek, California (P.L. 116-9—March 12, 2019)	Bureau of Land Management National Park Service	1.6 3.7	– –	1.8 –	3.4 3.7
	Surprise Canyon Creek Total	*5.3*	–	*1.8*	*7.1*
225. Deep Creek, California (P.L. 116-9—March 12, 2019)	Forest Service	22.5	1.0	11.0	34.5
226. Whitewater River, California (P.L. 116-9—March 12, 2019)	Bureau of Land Management Forest Service	6.3 17.2	– –	1.7 2.9	8.0 20.1
	Whitewater River Total	*23.5*	–	*4.6*	*28.1*
TOTALS		**6,452.1**	**2,971.4**	**3,972.2**	**13,395.7**

Exhibit N
2. Wild and Scenic Rivers Map

Wild and Scenic Rivers Map



June 11, 2025

1:577,791

PR 34

PR 156

Gautier Benitez Ave.

Rafael Cordero Ave

Leonicio Velazquez Blvd.

Luis Muñoz Ave.

Wild and Scenic Rivers

----- Distance between the Projects to a Wild and Scenic Rivers

0 4.75 9.5 19 mi

0 5 10 20 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

Exhibit N
3. National Park Service Puerto Rico

National Park Service

Rivers

Puerto Rico

River	County	Reach	Length (miles)	Description	Potential Classification	ORVs	Watershed (HUC Code 8)	Year Listed/ Updated	Othe State
Río Espíritu Santo	Rio Grande	Headwaters to water supply intake immediately upstream from FDR 12 road crossing.	3	Through jumbles of gigantic rocks and massive rock outcrops which create innumerable waterfalls, rapids, and pools. Dense tropical ìvegetation on steep, canyon-like banks. Excellent habitat for ìgoby, unique fish species, and	Wild	Fish, Scenic, Wildlife	Eastern Puerto Rico	1993	

				endangered species.				
Río Espíritu Santo	Rio Grande	Water supply intake on Rio Espiritu Santo near FDR 12 to 100 yards south of Route 186	0	Through jumbles of gigantic rocks and massive rock outcrops which create innumerable waterfalls, rapids, and pools. Dense tropical ìvegetation on steep, canyon-like banks. Excellent habitat for ìgoby, unique fish species, and endangered species.	Scenic	Fish, Scenic, Wildlife	Eastern Puerto Rico	1993
Río Espíritu Santo	Rio Grande	100 yards south of Route 186 north to Forest boundary.	3	Through jumbles of gigantic rocks and massive rock outcrops which create innumerable	Recreational	Fish, Scenic, Wildlife	Eastern Puerto Rico	1993

				waterfalls, rapids, and pools. Dense tropical ìvegetation on steep, canyon-like banks. Excellent habitat for ìgoby, unique fish species, and endangered species.				
Río Espíritu Santo (tributary)	Rio Grande	Headwaters of both Quebradas Sonadora tributaries to 100 yards south of Route 186	3	Through jumbles of gigantic rocks and massive rock outcrops which create innumerable waterfalls, rapids, and pools. Dense tropical ìvegetation on steep, canyon-like banks. Excellent habitat for ìgoby,	Wild	Fish, Scenic, Wildlife	Eastern Puerto Rico	1993

				unique fish species, and endangered species.				
Río Espíritu Santo (tributary)	Rio Grande	Quebrada Sonadora tributaries from 100 yards south of Route 186 north to Rio Espiritu Santo	1	Through jumbles of gigantic rocks and massive rock outcrops which create innumerable waterfalls, rapids, and pools. Dense tropical ìvegetation on steep, canyon-like banks. Excellent habitat for ìgoby, unique fish species, and endangered species.	Recreational	Fish, Scenic, Wildlife	Eastern Puerto Rico	1993
Río Fajardo	Fajardo	Headwaters approx. 1/2 mile north of West Peak to Forest boundary	5	One of most remote and isolated rivers on Forest. Huge boulders	Wild	Scenic	Eastern Puerto Rico	1993

		approx. 1/2 mile east of East Peak		ìwith high volume of water flow create remarkably scenic landscape ìof waterfalls, water chutes, and pools.				
Río Sabana	Naguabo	Headwaters approx. 3/4 mile east of El Cacique Peak to 1/4 mile north of Road 191 crossing near southern Forest boundary	2	Remote and isolated river with rapids and pools among rocks. Large beds of spagnum moss. Excellent quality aquatic habitat.	Wild	Recreational, Scenic, Other	Eastern Puerto Rico	1993
Río Sabana	Naguabo	Approx. 1/4 mile north of Road 191 crossing to Forest Boundary	0	Remote and isolated river with rapids and pools among rocks. Large beds of spagnum moss. Excellent quality	Recreational	Recreational, Scenic, Other	Eastern Puerto Rico	1993

aquatic habitat.

Last updated: November 30, 2016

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