

**ATTACHMENT 6**

**COPY OF HUD ENVIRONMENTAL EVALUATION ASSESSMENT FORM**

# HUD Environmental Evaluation Document for PR-10 Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

## Project Information

**Project Name:** Puerto Rico Highway 10 Segments II, III, IV, V

**Responsible Entity:** Puerto Rico Department of Housing

**Grant Recipient** (if different than Responsible Entity):

**State/Local Identifier:** Puerto Rico / Utuado, Adjuntas

**Preparer:** Michael J. Richardson, PE

**Certifying Officer Name and Title:**

Juan Carlos Pèrez-Bofill – Director of Disaster Recovery

Angel G. López Guzmán – Director Permits and Compliance Section

**Consultant** (if applicable): HORNE LLP

**Project Location:** In 1979, an Environmental Impact Statement was prepared by the Federal Highway Administration (FHWA) that addressed the entirety of the PR-10 route from Arecibo to Ponce. PR-10 was constructed in stages and all that remains is an approximately 7-kilometer portion in Utuado and Adjuntas that will connect the northern portion of the completed roadway from the junction of PR-2 in Arecibo southward to the terminus of the completed portion at Highway 123 in southern Utuado (approximately 18.236923° N and 66.719937° W). The southern portion of the completed roadway progresses northward from the junction of PR-52 in Ponce to the terminus at Highway 123 in central Adjuntas (approximately 18.181077° N and 66.736949° W). See **Attachments 2 and 3** (Location).

**Description of the Proposed Project** [24 CFR 58.32; 40 CFR 1508.25]: The overall road project has been built in Phases. As of now, there exists only four (4) sections left to be constructed, comprising a total of approximately 7.6 kilometers (with 19 bridges):

1. Section II (AC-100069) – This section of the highway consists of the construction of PR-10 between civil stations 39+78.73 and 55+50.36 with a total length of 1.57 kilometers including 3 bridges. It runs southeast alongside the Rio Grande de Arecibo in the Guaonico neighborhood of the municipality of Utuado. The highway's typical section consists of an undivided highway with one (1) traffic lane of 3.65 meters in each direction, with an additional climbing lane in the southbound direction towards Adjuntas. An exterior shoulder of 3.0 meters is

provided in the northbound lane, while a 1.80 meters shoulder is provided in the southbound lane.

2. Section III (AC-100071) – This section of PR-10 joins the previous section and runs southeast alongside Rio Grande de Arecibo for 1.84 kilometers including 5 bridges. The typical section of the highway consists of an undivided highway with one (1) traffic lane of 3.65 meters wide per direction and an additional climbing lane in the southbound direction (to Adjuntas). An exterior shoulder of 3.0 meters will be provided in the northbound section, while a 1.80 meters shoulder is being provided in the southbound lane.
3. Section IV (AC-100055) – This section of PR-10 continues its extension toward the Capaez Ward of the Municipality of Adjuntas. It runs for approximately 2.29 kilometers alongside the Rio Grande de Arecibo including 7 bridges. As with previous sections, the typical section of the highway consists of an undivided highway with one (1) traffic lane of 3.65 meters per direction, with an additional climbing lane in the southbound (toward Adjuntas lane). An exterior paved shoulder of 3.0 meters is provided in the northbound lane, and a 1.80 meters shoulder is also provided in the southbound lane.
4. Section V (AC-100076) – This section of highway will serve to complete the construction of PR-10 and will make a reality the terrestrial connection between the north and south regions of the Island as originally envisioned when the FEIS for the project was approved. It will have an approximate length of 1.83 kilometers (including 4 bridges) and will interconnect Section IV with the already constructed PR-10 in the Capaez Ward of the municipality of Adjuntas.

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

This construction is vital to the completion of the roadway and will provide access to the other portions of PR-10 that will provide an alternate route from the north portion of Puerto Rico to the southern portion. This will enhance local mobility, lessen the negative effects of traffic congestion, and provide an additional disaster route from the southern portion of Puerto Rico.

**Existing Conditions and Trends** [24 CFR 58.40(a)]:

These final four (4) sections of the PR-10 roadway winds through a wooded and hilly area of Utuado and Adjuntas. The roadway will (mostly) parallel the Rio Grande de Arecibo through a sparsely populated area. The roadway will connect the already completed northern and southern portions of PR-10.

# Appendices

Appendix A – Summary of Supplemental EIS

Attachments refers to the Attachments in the PRHTA Re-evaluation document.

## **Compliance with 24 CFR 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 or approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

<p><b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6</p>	<p>Are formal compliance steps or mitigation required?</p>	<p>Compliance determinations</p> <p><i>This information documents the HUD compliance requirements from the FEIS for the PR-10 Roadway or Supplemental Evaluations. Information is either from the FEIS, Supplements, or newly developed specifically for this Reevaluation. <b>Appendix A</b> includes the Supplemental Evaluation Status and the latest Supplemental Evaluations. <b>Attachments refer to the primary Reevaluation document.</b></i></p>
<p><b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6</b></p>		
<p><b>Airport Hazards</b> 24 CFR Part 51 Subpart D</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The closest Civil Airport (Mercedita, in Ponce) is approximately 25.2 km southeast of the project site (outside of the 2,500 feet for the Runway Protection Zone). The closest Military Airport is the Joint Civil-Military airport (Luis Muñoz Marin, in Carolina) is approximately 73.3 km northeast of the project site (outside of the 15,000 feet for the Accident Potential Zone). <b>See Attachment 5.</b></p> <p>Therefore, this project complies with this Compliance Factor.</p>
<p><b>Coastal Barrier Resources</b> Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The closest Coastal Barrier Resource System Unit is PR-58P, an Otherwise Protected Area, approximately 21.8 km south of the southern terminus of the project site – <b>See Attachment 6.</b></p> <p>Therefore, this project complies with this Compliance Factor.</p>
<p><b>Flood Insurance</b> Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project area (shown in <b>Attachment 7</b>) crosses the only Zone A/AE at one location, the site of the bridge crossing the Rio Grande de Arecibo near the northern terminus of Section II (shown with the northernmost red</p>

of 1994 [42 USC 4001-4128 and 42 USC 5154a]		<p>pin on the FIRM map). The FIRM panel is 72000C1080H dated 4/19/2005. The NFIP will not provide flood insurance for roads and bridges.</p> <p>Therefore, flood insurance is not required, and this project complies with this Compliance Factor.</p>
---	--	--

**STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.5**

<p><b>Clean Air</b> Clean Air Act, as amended, particularly section 176(c) &amp; (d); 40 CFR Parts 6, 51, 93</p>	<p>Yes No <input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>Currently, the EPA Green Book (<a href="http://epa.gov/airquality/greenbook/ancl.html">epa.gov/airquality/greenbook/ancl.html</a>) identifies the Municipalities of Arecibo, Bayamón, Cataño, Guaynabo, Salinas, San Juan, and Toa Baja as those with Non-attainment areas. Utuado and Adjuntas are currently Attainment areas. <b>For more information, see Attachments 8, 9, and 10.</b></p> <p><b>Mitigation – obtain Single Incidental Permit from the Permits Management Office prior to construction.</b></p>
<p><b>Coastal Zone Management</b> Coastal Zone Management Act, sections 307(c) &amp; (d)</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>As shown in <b>Attachment 11</b>, the project area is approximately 18.5 km from the nearest Coastal Zone boundary for Puerto Rico.</p> <p>Therefore, the project complies with this Compliance Factor.</p>
<p><b>Contamination and Toxic Substances</b> 24 CFR Part 58.5(i)(2)</p>	<p>Yes No <input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>There are no sites within 3,000 feet as shown on NEPAssist on the western side of the Rio Grande de Arecibo (which would likely act as a barrier for most hazardous material migration). There are 9 sites on the eastern side of the river within 3,000 feet of the project alignment (<b>Attachments 12 and 13</b>). These include:</p> <ul style="list-style-type: none"> <li>• Three (3) NPDES discharge points <ul style="list-style-type: none"> <li>○ Hot Asphalt Paving Company – No violations</li> <li>○ Wildco Construction – No violations</li> <li>○ PRASA Adjuntas Nueva WTP – Numerous violations, all resolved administratively</li> </ul> </li> <li>• Six (6) hazardous waste sites <ul style="list-style-type: none"> <li>○ Walgreens #185 – No violations reported</li> <li>○ Shell Company SS 0108 – No violations reported</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>o PRHTA Unit – No violations reported</li> <li>o PR Public Housing – Villa Valle Verde – No violations reported</li> <li>o Bristol Myers Barceloneta Inc – No violations reported</li> <li>o PRASA Adjuntas Garzas Filter Plant – No violations reported</li> </ul> <p>There are no impacts to the project corridor based upon the nine (9) sites identified within 3,000 feet.</p> <p>A Phase I and II ESA (<b>Attachment 13</b>) was prepared for a property within Section II for being contaminated as it was a heavy vehicle mechanical workshop for many years. There were no detectable concentrations of hazardous materials except for in the sediment sample from the septic tank. At the time of the initiation of the Section II construction, a permit shall be obtained from the DNER, and the septic tank removed.</p> <p><b>Mitigation – Obtain permit from DNER to remove the septic tank and any contaminated debris.</b></p>
<p><b>Endangered Species</b></p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes    No</p> <p><input checked="" type="checkbox"/>    <input type="checkbox"/></p>	<p>Based upon a consultation with the USFWS, the construction of the final segments of PR-10 would have no impact on Threatened or Endangered species.</p> <p>Initially, the Puerto Rican Boa and the American Peregrine Falcon were listed as federally protected species. Subsequently, the American Peregrine Falcon has been delisted. <b>Attachment 16</b> indicates that in 2021, four species of potential concern were identified: the Puerto Rican Boa, Puerto Rican broad-winged hawk, Puerto Rican Parrot, and Puerto Rican sharp-shinned hawk. <b>Attachment 14</b> includes a map showing the location of the roadway in relation to Critical Habitats. There are no Critical Habitats within or near the roadway.</p> <p>However, the Puerto Rican Boa can be encountered anywhere within the island. The</p>

		<p>mitigation actions are included in <b>Attachment 15, the USFWS Programmatic Biologic Opinion.</b></p> <p><b>More information can be found in Attachments 14, 15, 16, 17, and 28.</b></p> <p><b>Mitigation – Attachment 15 includes requirements for encountering a Puerto Rican Boa and mitigation factors. Mitigation factors for all species are included in the Mitigation section and in Attachments noted above.</b></p>
<p><b>Explosive and Flammable Hazards</b> 24 CFR Part 51 Subpart C</p>	<p>Yes No <input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>This citation is primarily for protection of residents in buildings that may be constructed in an area that may have explosive and/or flammable hazards. As this is a roadway, no additional information is required.</p> <p>However, it should be noted that any use of explosives required during the construction of PR-10 should be checked to determine that the use would have no impact on human health or other sensitive uses.</p> <p><b>Mitigation – Use of explosives for the construction of the roadway must be checked so that no adverse impact is identified to human health or the environment. Also, explosives are not to be used during the peak bird breeding seasons.</b></p>
<p><b>Farmlands Protection</b> Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes No <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>There are no farmlands of importance along the corridor of the roadway (<b>Attachment 18</b>). Additionally, information presented in the Appendices also identify that no prime farmlands exist along the corridor.</p> <p>Therefore, the project complies with this Compliance Factor.</p>
<p><b>Floodplain Management</b> Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes No <input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>The roadway corridor crosses a Special Flood Hazard Area (Zone AE) at approximately Latitude 18.234500 N and Longitude 66.719402 W (<b>Attachment 19</b>). This crossing will be by a bridge constructed over the Rio Grande de Arecibo as shown in <b>Attachment 20</b>. An 8-step Decision-Making Process document in accordance with 24 CFR 55.20 has been developed and is included in</p>



		<p><b>Attachment 20.</b> No adverse impacts to the flood plain are indicated by the 8-step document.</p> <p>Also, a Nationwide 14 permit has been applied for and granted by the US Army Corps of Engineers (<b>Attachment 21</b>). The 8-step document indicates that the Nationwide Permit had expired. However, the permit has been re-issued by the USACE and is valid until March 14, 2026. The 8-step document, however, has not been changed to reflect this as that shown indicated the correct version at the time of publication.</p> <p>Therefore, the project complies with this Compliance Factor in accordance with the mitigation requirement indicated below.</p> <p><b>Mitigation – all requirements of the 8-step Decision-Making Process and the Nationwide 14 permit must be followed during the construction of the roadway.</b></p>
<p><b>Historic Preservation</b> National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes    No  <input checked="" type="checkbox"/>    <input type="checkbox"/></p>	<p>A consultation was submitted to the SHPO on October 25, 2021. SHPO returned a finding of <b>No Historic Properties Affected</b> on November 2, 2021. <b>Attachments 23 and 24</b> shows locations of Traditional Urban Centers in the area around the project corridor and determinations by SHPO and ICP. There are no TUCs in the immediate vicinity.</p> <p><b>Mitigation – full time archaeological monitoring is required for Construction of Section III and IV.</b></p>
<p><b>Noise Abatement and Control</b> Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes    No  <input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>A noise study (<b>Attachment 25</b>) was performed in September 2012 for Section V of the project corridor, which was the closest to noise receivers. The study concluded that the project noise levels were below (and would be below) the FHWA Noise Abatement Criteria required for transportation projects. The highest recorded <math>L_{eq}</math> was 50.2 dB. This level is considered similar to a quiet residential neighborhood. A noise calculation (HUD Noise Calculator) was performed (<b>Attachment 25</b>). The DNL level was calculated at 64 dB. This is less than the</p>

		<p>action level for HUD, 65 dB; therefore, the noise level would be acceptable for HUD purposes.</p> <p>Therefore, this project complies with this Compliance Factor.</p> <p><b>Attachment 25, Noise Report.</b></p>
<p><b>Sole Source Aquifers</b> Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>There are no Sole Source Aquifers in Puerto Rico according to the USEPA. A figure is presented in <b>Attachment 26</b>.</p> <p>Therefore, the project complies with the Compliance Factor.</p>
<p><b>Wetlands Protection</b> Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes    No <input checked="" type="checkbox"/>   <input type="checkbox"/></p>	<p>There are five wetland crossings over the length of the project corridor (<b>Attachment 18</b>). With the exception of the first crossing (near 18.234500° N, 66.719402° W), all other crossings are over small tributaries. These crossings shall span the tributaries without disturbing the wetland beneath. The first crossing will have wetlands disturbance. Due to this, an 8-step Decision-Making Process document was prepared.</p> <p>The 8-step Process document (<b>Attachment 20</b>) indicated that although the wetland would be disturbed, it would be restored back to original condition after construction of the bridge spanning the Rio Grande de Arecibo. There would be no adverse impacts to the wetlands along the project corridor.</p> <p>Therefore, the project complies with this Compliance Factor in accordance with the mitigation requirement indicated below.</p> <p><b>Mitigation – all requirements of the 8-step Decision-Making Process must be followed during the construction of the roadway.</b></p>
<p><b>Wild and Scenic Rivers</b> Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The nearest Wild and Scenic Rivers are in the El Yunque National Forest, over 97 kilometers east of the project corridor (<b>Attachment 27</b>).</p> <p>Therefore, the project complies with this Compliance Factor.</p>

ENVIRONMENTAL JUSTICE		
<p><b>Environmental Justice</b> Executive Order 12898</p>	<p>Yes    No  <input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>A social study was performed during the original EIS. As part of that study the initial study found the following: <i>“Most of the affected people are willing to move. They recognize the necessity of the road and as long as they have similar facilities like the one they have now they have no objection to go. Some of them expressed fear that relocation may isolate them even more that (sic) they are now, but after they examined the alternative selected and have the confidence that proper access will be provided for their neighborhood they were tranquilized.”</i> Based upon the original reviews, most people affected were identified and were relocated as they desired.</p> <p>The latest Supplemental Reevaluation prepared for the project states that the acquisition process and relocations of families and/or businesses have been already completed under provisions of the Uniform Relocation Act (URA), except for various properties acquisitions on Section IV that are still pending. However, no families nor businesses would be relocated for the construction of the remaining Sections.</p> <p>There are no environmental conditions identified that would have an unduly adverse effect on low-income and/or minority populations.</p> <p>Therefore, the project complies with this Compliance Factor.</p>

**Environmental Assessment Factors** [24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable, and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

**Impact Codes:** Use an impact code from the following list to make the determination of impact for each factor.

**(1)** Minor beneficial impact

**(2)** No impact anticipated

**(3)** Minor Adverse Impact – May require mitigation

**(4)** Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>LAND DEVELOPMENT</b>		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	<p>This section has been determined as "Review Complete." EIS Re-evaluation states public information meetings were held for community input. At that time, PRHTA provided information to show that there was little to no growth or land use change in the area.</p> <p>This information has been included in the EIS and Supplemental reviews. Notification of this to the public was provided by:</p> <ol style="list-style-type: none"> <li>1- Publication of Information about the project in the agencies social/network media and web site.</li> <li>2- Development of a pre-recorded virtual presentation of the project that was uploaded to the PRDTPW/PRHTA web site and YouTube.</li> <li>3- Letters requesting comments from the mayors of Adjuntas, Arecibo, Ponce and Utuado were sent. Endorsements from the Municipalities of Adjuntas, Ponce and Utuado were received in support of the project.</li> </ol> <p>Any permits required will be obtained or renewed prior to initiation of construction.</p> <p>Additionally, endorsements were received from the municipalities of Adjuntas, Ponce, and Utuado (<b>See Attachment 28</b>).</p>
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	3	<p>There are identified geological hazards that were identified by the DNER in a letter dated September 30, 2021 and requirements to address those hazards. Also, the contractor will have to prepare a Stormwater Pollution</p>

		<p>Prevention Plan and submit a Notice of Intent to the EPA at least 14 days prior to construction.</p> <p><b>Mitigation – Meet requirements from DNER regarding geological hazards. Prepare and submit SWPPP.</b></p> <p><b>See Attachment 30 for more information.</b></p>
<p>Hazards and Nuisances including Site Safety and Noise</p>	<p>3</p>	<p>A Noise Study was performed indicating that the noise to identified receptors is, at most, an <math>L_{eq}</math> of 50.2 dB, which is considered "Quiet." This would be less than the HUD action level DNL of 65dB.</p> <p>There will be noise associated with construction, including the potential of blasting some rocky areas. However, that noise is associated with road construction and will cease upon completion of the project.</p> <p>Additionally, safety measures must be taken during times of blasting activities to prevent injury to workers and other non-workers that may be in the area.</p> <p>Other Considerations:</p> <p>The project is not anticipated to be impacted by any natural hazards with the possible exception of earthquakes and landslides. As the project is a roadway, there could be hazards from these types of natural occurrences; however, the hazard to the roadway would not be any different than those for other roadways in the area.</p> <p>The project does not impact any Air Pollution Generators.</p> <p>The project either does not impact, or impacts are mitigated by design features, and man-made site hazards.</p> <p>The project will not be impacted by nuisances as the roadway does not lend itself to those type of impacts.</p> <p><b>Mitigation – Equipment must be fitted with noise suppressing devices and work should be limited to the hours of daylight. Additionally, a plan for blasting activities to prevent injuries and inform residents should be developed prior to construction.</b></p>
<p>Energy Consumption</p>	<p>2</p>	<p>The finished roadway will require no energy consumption. Therefore, there is no impact associated with this project.</p>

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>SOCIOECONOMIC</b>		
Employment and Income Patterns	1	Construction will have a positive impact on Employment and Income Patterns. However, the finished roadway would not employ additional personnel or affect income patterns. Therefore, there is a minor positive impact associated with this project.
Demographic Character Changes, Displacement	2	All acquisitions have been completed in accordance with the Uniform Relocation Act previous to this project work, except for a portion of land in Section II. Any relocations for that acquisition will also be accomplished in accordance with the URA. The demographic character change in the area has not been altered as the majority of the individuals relocated have been or will be relocated to nearby areas in Utuado and Adjuntas. Therefore, there is little impact associated with this project.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>COMMUNITY FACILITIES AND SERVICES</b>		
Educational and Cultural Facilities	2	There are none of these types of facilities associated with this project. While there may be some improvement with accessibility for the local residents to these types of facilities outside of the immediate area, it would be minor. Therefore, there is no impact associated with this project.
Commercial Facilities	1	The project will have a beneficial impact on Commercial Facilities as a result of the availability of an improved terrestrial connection between the north and south parts of the Island. Raw materials and finished goods would be transported in a safer and fastest way. The completion of the project corridor could potentially open the growth of private commercial ventures or at least allow quicker travel between areas which could benefit commercial facilities. Therefore, the project will have a minor positive benefit.
Health Care and Social Services	1	The project will have a positive impact on Health Care and Social Services. The finished roadway would improve access to hospitals, emergency facilities, clinics, and physician services. This would be the result of being able to use a modern and safer route that will improve the accessibility to

		these services currently available in the municipalities of Arecibo and/or Ponce.
Solid Waste Disposal / Recycling	3	<p>The finished roadway will not be associated with solid waste generation and will have no impact on these services. However, during construction, a significant amount of construction debris is anticipated to be generated. Mitigation will be required to address this situation.</p> <p><b>Mitigation – a plan must be developed to address the generation of solid waste handling and disposal for the construction of the project. This plan must be approved by the DNER.</b></p>
Wastewater / Sanitary Sewers	2	<p>The finished roadway will not be associated with wastewater generation and will have no impact on these services. However, during construction, a small amount of wastewater is anticipated to be generated. Mitigation will be required to address this situation.</p> <p><b>Mitigation – a plan must be developed to address the generation of wastewater handling and disposal for the construction of the project. This plan must be approved by the DNER.</b></p>
Water Supply	2	<p>The project will have no impact on the Water Supply. Only limited amounts of water for dust control would be required and may be from non-potable sources. Supply of water for construction purposes would be performed using tank trucks.</p>
Public Safety - Police, Fire and Emergency Medical	1	<p>The completion of PR-10 will provide an easier means of access for these services. Currently, access to areas that will be served by this project is through PR-123 which is a winding road with older construction techniques. This project would allow easier access for Public Safety vehicles. There is a potential for a minor benefit associated with this project.</p>
Parks, Open Space and Recreation	2	<p>A review of the National Park Service database was conducted to identify the presence of parks, open spaces, and recreation areas. In addition, a review of Google Maps aerial photographs was conducted. There are no parks or recreation complexes in the immediate area of the roadway. A map illustrating the location of open spaces, parks and recreational facilities has been included in <b>Attachment 31</b>.</p>
Transportation and Accessibility	1	<p>The proposed project construction would result in significant travel time savings for both passenger and freight vehicles that must currently use PR-123 between Adjuntas and Utuado. Based on the findings of the traffic analysis and demand modeling performed for the project, the estimated</p>

	<p>average time savings for “on peak” drivers are 11.96 minutes per vehicle. The average time savings for “off peak” drivers is 10.76 minutes per vehicle. Using the modeled on-peak and off-peak traffic counts and vehicle classifications, the estimated reduction in total Vehicle Hours Traveled (VHT) in the first year of benefits is 1,305,946 and 19,127,181 in total hours saved over the analysis period.</p> <p>In addition to travel time savings, the project will result in substantial decreases in Vehicle Miles Traveled (VMT) for passenger and commercial freight vehicles. The difference in roadway segment length between the new PR-10 connector and the existing comparable portion of PR-123 and the modeled daily traffic counts were used to estimate an annual decrease of 3,503,467 total VMT through the analysis period. This VMT reduction translates into additional benefits such as vehicle operating cost savings, emissions reductions, and crash reductions.</p> <p>The conditions of the existing segment of PR-123 represent a deterrent to the users to travel north-south along the existing route. Those conditions are a limitation for an effective use for food and medicine supplies, transportation of goods and services and utilities. Once PR-10 (Adjuntas - Utuado) is complete, the highway will become an important route that connects the industrial centers located in the south (Ponce, Coamo, Juana Diaz) with the industrial zone of Aguadilla-Moca and the agricultural district of Camuy-Hatillo-Quebradillas-Isabela. In general, it can be stated that the proposed project completion would improve the accessibility between the north-south regions of the Island.</p>
--	--

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>NATURAL FEATURES</b>		
Unique Natural Features, Water Resources	2	The project will have no impact on Unique Natural Features and Water Resources. The latest letter from DNER dated September 30, 2021 indicates (see <b>Attachment 30</b> ) no impact from the project to the surrounding areas. <b>Attachment 32</b> includes the Hydraulic/Hydrologic (H/H) studies performed on the four (4) segments.
Vegetation, Wildlife	3	Vegetation and trees would be removed within the right of way for the new roadway construction, and therefore, forested areas would be impacted. Once the construction is completed, revegetation of exposed areas with no impervious materials is expected. This would constitute a commitment of resources which cannot be avoided but is required to complete the construction of PR-10. To mitigate the impacts resulting from the cutting of trees for the



		<p>project construction, and as required by the Planning Regulation #25, an inventory of the affected trees was conducted for the proposed project by qualified persons and submitted for the review and approval of the DNER. The regulations also require the proponent to develop a mitigation plan that addresses the impacts of the proposed action. After the document's submittal and initiating a consultation process with the DNER for acceptable mitigation actions, the PRHTA formalized an agreement with the DNER. Said agreement required the PRHTA to acquire and transfer a property of 370.23 cuerdas (1 cuerda is equivalent to 0.971 acres) as mitigation for the construction impacts of the proposed project. The property (known as Hacienda Verde), which has already been acquired and transferred to the DNER. The agreement also required the PRHTA to contract a biologist that will be responsible for assessing the areas before construction activities are conducted to look for the presence of protected threatened and/or endangered species. If detected, individuals would be relocated to designated areas in accordance with approved protocols.</p> <p>With respect to wildlife, it would be disrupted along the path of the new highway, but this wildlife will relocate in nearby areas. Therefore, although a permanent impact would result from the construction of the proposed project with the loss of land currently used by wildlife, they will adapt to new conditions, similarly to what has happened in sections of PR-10 already constructed.</p> <p><b>Mitigation – Perform monitoring of the areas prior to construction detect and manage any species in accordance with DNER. Additionally, planting of new trees is required in accordance with Planning Regulation #25.</b></p>
Other Factors	2	<p><i>Climate Change:</i> There are no activities associated with the construction and operation of PR-10 that would significantly contribute to climate change.</p> <p><i>Greenhouse Gases:</i> A prime contributor to climate change would be Greenhouse Gases (GHG) associated with the operation of the roadway. A review of the project scope and existing area conditions allows to observe that:</p> <ul style="list-style-type: none"> <li>• The proposed project has a limited extension</li> <li>• Rural conditions prevail the area of the area with scattered residential uses</li> <li>• No significant industrial uses have been established in the area</li> <li>• Current vehicular traffic between Adjuntas and Utuado use PR-123, which is located close and parallel to the proposed project alignment. As a result of this</li> </ul>

		<p>observations, it is reasonable conclude that most of the current vehicular traffic using PR-123 would be diverted to PR-10. This implies that no significant net change would result from the construction of the proposed project with respect to emission of GHGs in the air basin of the area.</p> <ul style="list-style-type: none"> <li>• Small potential of GHG impacts of transportation projects with respect to other sources</li> </ul> <p>Upon consideration of the previously described conditions, a more detailed information on GHGs emissions is not essential to deciding in the best overall public interest, based on a balanced consideration of transportation, economic, social, and environmental needs, and the impacts (23 CFR Part 771.105 (b)). For this reason, no project level GHG analysis has been performed for this project.</p> <p>With respect to climate change, the project will have no impact on Climate Change. There are no activities associated with the construction and operation of PR-10 that would significantly contribute to climate change.</p>
--	--	--

### **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
<i>Clean Air Act - 40 CFR Parts 6, 51, 93</i>	Obtain permit for the Permits Management Office for a Single Incidental Permit for construction.
<i>Contamination and Toxic Substances - 24 CFR Part 58.5(i)(2)</i>	Obtain permit from DNER to remove the septic tank and any contaminated debris.
<i>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</i>	<p>Requirements for encountering a Puerto Rican Boa during any clearing or construction activities.</p> <p>Development of protocols to minimize impacts and adequately manage the potential of finding threatened and/or endangered species that even though were not detected along the path of the proposed project alignment may be present in the vicinity of the ROW. The specific species are: <i>Chilobotrus inornatus</i>, <i>Amazona</i></p>

	<p><i>vitatta</i>, <i>Accipiter striatus venator</i>, <i>Buteo platypterus</i>, <i>Atlantea tulita</i>, <i>Oplonia spinosa</i>, <i>Cornuvia obovata</i>, <i>Pleodendron macranthum</i>, <i>Solanum ensifolium</i>, <i>Myrcia paganii</i>, and <i>Varronia bellonis</i>. (See <b>Attachment 17</b>).</p> <p>The protocols must include a restriction indicating that the construction phase (or any use of explosives) of the Project shall not coincide with the peak breeding season (January to July) of the previously mentioned bird species.</p> <p>A qualified biologist capable of conducting monitoring activities and implementing conservation measures for the protection of protected species shall be contracted and be present at the project site, before, during and after the construction of the project. The biologist shall be capable of identifying both acoustically and visually individuals, nests, and newborns, leaves, flowers, or fruits of the species identified with the potential to be found within the project.</p> <p>All incidents which may result in the death or injury of any of the listed flora and fauna species shall be documented through the preparation of monthly and a final report. The report shall include information about the observed species, place and time of the sighting, number of individuals, type of incident, and type response action. Technical personnel from the DNER/USFWS may assist in the identification of the species through photographs and/or videos. Copies of the reports shall be delivered to the Protected Endangered Species Coordinators of the DNER and the USFWS.</p>
<p><i>Explosive and Flammable Hazards - 24 CFR Part 51 Subpart C</i></p>	<p>Use of explosives for the construction of the roadway must be checked so that no adverse impact is identified to human health or the environment. Advance notification is required to be provided to nearby residents and the use of seismographic equipment used to document that vibrations do not affect nearby structures. Additionally, the explosives shall not be used during the peak bird breeding seasons.</p>
<p><i>Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55</i></p>	<p>All requirements of the 8-step Decision-Making Process and the Nationwide 14 permit must be followed during the construction of the roadway.</p>
<p><i>Historic Preservation</i></p>	<p>Archaeological monitoring required during construction for Sections III and IV.</p>
<p><i>Wetlands Protection Executive Order 11990, particularly sections 2 and 5</i></p>	<p>All requirements of the 8-step Decision-Making Process must be followed during the construction of the roadway. Additionally, requirements for wetlands from the Nationwide 14 Permit must be followed during construction of the roadway.</p>

<i>Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff</i>	Meet requirements from DNER regarding geological hazards. Prepare and submit SWPPP.
<i>Hazards and Nuisances including Site Safety and Noise</i>	Equipment must be fitted with noise suppressing devices and work should be limited to the hours of daylight. Additionally, a plan for blasting activities to prevent injuries and information residents should be developed prior to construction.
<i>Solid Waste Disposal / Recycling</i>	A plan must be developed to address the generation of solid waste handling and disposal for the construction of the project. This plan must be approved by the DNER.
<i>Wastewater / Sanitary Sewers</i>	A plan must be developed to address the generation of wastewater handling and disposal for the construction of the project. This plan must be approved by the DNER.
<i>Vegetation, Wildlife</i>	Perform monitoring of the areas prior to construction detect and manage any species in accordance with DNER. Planting of new trees is required under Planning Regulation #25.
<i>Other</i>	All permits required for construction activity shall be reviewed and re-obtained, if required.

## **Appendices**

**Appendix A**  
**Supplemental EIS Summary**

## **Evaluation Status for the Adoption of the Environmental Impact Statement for Route PR-10**

This memo details the status of the adoption of the review based upon the environmental compliance for the Route PR-10. The Puerto Rico Department of Housing (PRDOH) desires to adopt the Environmental Impact Statement (EIS) and all reevaluation amendments to fund the completion of the final segments of the highway. All environmental items must be compliant with the US Housing and Urban Development (HUD) and National Environmental Policy Act (NEPA) regulations in order for adoption. The PRDOH is considered a contributing authority and, as such, the adoption can be made without further publication.

### **1.0 Project Background** <sup>(1)</sup>

The Final Environmental Impact Statement (FEIS) for PR-10 was signed in 1979. No Record of Decision (ROD) for the project exists, which is likely because there was no requirement at that time for a ROD. There were several alternatives for the new 36-mile roadway analyzed in the EIS, all of which serve to provide a more direct connection between the Ponce with Arecibo. As money has become available, the Puerto Rico Highway Transit Authority (PRHTA) has implemented the construction of PR-10, segment-by-segment, beginning at the most northern and southern ends of the project first. The initiation for project implementation for each segment has begun with an environmental reevaluation to verify the findings of the original FEIS, and environmental commitments as necessary. A summary of these reevaluations is provided in Table 1.

*Table 1: PR-10 Completion Summary*

<b>Approval Date</b>	<b>Segments</b>	<b>Status</b>
12/21/1993	AC-001069-70 Location: PR-143 south of Adjuntas to the Rio Portuges Dam	Complete
6/25/2002	AC-100052, 100062	Complete
9/19/2003	0.78-mile Adjuntas Segment AC-100054	Complete
7/6/2005	Section V AC-100065 Location: 1 mile segment from Adjuntas Lake to the western side of the Grande de Arecibo River	Complete
11/10/2005	Sections II, III and IV AC-100069, 100071, AC-100055	Designed
5/27/2009	AC-100065 near Adjuntas Location: Bridge over Rio Grande de Arecibo	Complete
9/11/2011	AC-100074 Location: Ramp connector south of Utuado from PR-10 bridge to PR-123	Complete
09/17/2012	AC-100055, AC-100069 AC-100071, AC-100074 AC-100076	Designed
07/15/2013	AC-100076 AC-100069 AC-100071	Designed
09/15/2016	AC-100071	Designed

All segments of PR-10 except for approximately 7.6 kilometers of the central portion between Adjuntas and Utuado have been constructed (AC-100055, AC-100069, AC-100071, and AC-100076). During fall 2011 and early 2012, PRHTA initiated the reevaluation process with FHWA for these last segments between Adjuntas and Utuado. In reviewing the draft reevaluations submitted this past year, the Federal Highway Administration (FHWA)

determined that the purpose for the reevaluations or the approval status of various segments of the project was not clearly identified in the draft reevaluation submitted by PRHTA for FHWA approval. Since September 2011, FHWA has worked with PRHTA to clarify what has already been approved on the project, what has been constructed or is under constructed, and what remains to be approved for the project.

## **2.0 Reevaluation History of Concurrence with FEIS**

The following summary will show that through incremental reevaluations approvals since 1993, the alignment for PR-10 has shifted from what was approved in the FEIS to its current construction stage.

### **1993 –Environmental Reevaluation Relocation of PR-10, Adjuntas – Ponce AC-001069-70**

The 1993 Reevaluation was approved by FHWA for the southern section of the project between Ponce and Adjuntas. The reevaluation included a realignment for this southern section, which is clearly indicated in the text of the reevaluation, as well as the reevaluation checklist. The segments addressed in the 1993 reevaluation have already been constructed.

### **2002 –Environmental Reevaluation Relocation PR-10 Arecibo-Ponce Utuado-Adjuntas Segment AC-100052, 100062**

This right-of-way reevaluation was for the central portion of the overall project south of the Utuado area. The text of the reevaluation describes an area that is consistent with the new alignment by describing the new bridges and how the bridge construction will significantly reduce the volume of soil to be removed and the amount of soil exposed to erosion in comparison to the cut and fill method. The description of this benefit was recommended by FHWA staff for inclusion in the final reevaluation. Prior to submitting this reevaluation, PRHTA held a public information workshop on the project. Review of the transcript clearly demonstrates that the public was presented a different more eastern alignment, which was discussed in comparison to the more westerly alignment approved in the FEIS.

The 2002 Reevaluation includes a paragraph that states that the proposed project is entirely within the boundaries of the corridor analyzed and approved as the selected alternative in the FEIS. Also, the checklist indicates that there has been no change in scope for the project. This paragraph and the checklist appear to be inconsistent with the project location description, the attached map, and the public workshop transcript, all which clearly indicate that the reevaluation includes a change in the project alignment. The segments addressed in the 2002 reevaluation have already been constructed.



### **2003 –Environmental Reevaluation Relocation PR-10 Arecibo-Ponce Adjuntas Segment AC-10054**

The 2003 approved reevaluation appears to be for proceeding to right-of-way, a short (4 kilometer) section just north of Adjuntas. On this segment, there is no apparent difference in the red or pink (approved FEIS) alignments. The attached map for this segment is consistent with the approved FEIS alignment, and the text does not indicate any change in alignment for this short segment, probably because there is no difference in the red or pink alignments at this particular location. An August 5, 2005, letter from FHWA states that FHWA was fully involved in the design of this segment. The segment of PR-10 addressed in the reevaluation has been already constructed.

### **June 22, 2005 -Environmental Reevaluation Relocation PR-10, Arecibo-Ponce Adjuntas Segment Section V AC-100065**

This is a construction reevaluation for a 1-mile segment from Lake Adjuntas south toward Adjuntas to the intersection of PR-123 and PR-135. The map included with the reevaluation, which was approved by FHWA on July 6, 2005, varies only slightly from the FEIS alignment. The 2005 reevaluation included again the standard statement that, "The proposed project is entirely within the boundaries of the analyzed corridor for the selected alternative in the FEIS," and the check list indicates that there has been no change in project scope, furthering the confusion to the reader of these documents many years later as to what was approved. Nonetheless, the FHWA July 6, 2005, approval letter states "The document has clearly explained the segments that are considered under this reevaluation." An August 5, 2005, FHWA letter concerning design consultant states that FHWA was fully involved in the design. It is therefore evident that FHWA was aware of the specifics of the reevaluation that was being approved.

Only the portion of this segment that was reevaluated in 2009 (the bridge section) is identified on the maps recently provided by PRHTA. The remainder of this segment is on those maps but is now identified as AC-100076. The southern portion of this segment that includes the bridge has already been constructed. However, its northern portions constitute the current AC-100076 which has not been built yet.

### **August 17, 2005 – Environmental Reevaluation Relocation PR-10 Arecibo-Ponce Utuado-Adjuntas Segment Sections II, III and IV AC-100069, 100071, AC-100055**

The purpose of this reevaluation appears to be to approve these project segments for construction. Once again, the reevaluation includes a project description and maps that indicate the more eastern (red) alignment (different from what was approved in the FEIS) and has a standard statement that "the proposed project is entirely within the boundaries of the analyzed corridor for the selected alternative in the FEIS." Nonetheless, there are emails from the staff at FHWA (8/26/05 email from Felix Rodriguez) after submittal of the reevaluation in which FHWA discusses the proposed alignment configuration and requests PRHTA to adjust it based on their previous discussions. There appeared to be ongoing discussions of this for several months, and on November 10, 2005, FHWA sent a letter affirming the reevaluation submitted on

August 17, 2005, that concur that the FEIS is still valid for the proposed action. The FEIS alignment depicted corresponds with the pink alignment on our recent maps, and Alternative E Section 5 Preliminary Design alignment corresponds with the red alignment on our recent maps from PRHTA. Additionally, an August 5, 2005, FHWA letter concerning design consultants acknowledges that the alignment changed for all three of these segments in the reevaluation that had just been completed. It is therefore evident that FHWA was considering the alignment as part of their review of the reevaluation when it was determined that the FEIS prepared for this project was still applicable and appropriate for the proposed action.

It is also important to point out that although this reevaluation includes "Utado-Adjuntas" in the title, the reevaluation does not include all the segments from this entire area, because it ends in the general location of Lake Adjuntas. This reevaluation does not include Segment V, which begins at Lake Adjuntas and goes south to just above the next river crossing. Segment V is also labeled AC-100076 on the map developed by FHWA but was part of the June 2005 reevaluation for AC 100065. The segments covered by this reevaluation are in design and have not been constructed.

### **2009 – Environmental Reevaluation Construction of Bridge in PR-10, Over Rio Grande De Arecibo Adjuntas, Puerto Rico AC-100065**

Reevaluation signed for the construction of a bridge section in Adjuntas (AC 100065) using ARRA funding. This bridge section appears to be common to both the 1979 FEIS selected alignment, as well as the shifted alignment that has been proposed and approved through these reevaluations over the last decade. The document references the following supporting materials:

- 3/19/02 Public Information Workshop
- 404 Corps Permit Application
- Flora and Fauna Study (Quinero)
- Endangered Species Survey (Vilella)
- Endangered Plant Survey (Axelrod)
- 1/8/04 SHPO Concurrence on Section 106 resources

The segment of PR-10 addressed in this reevaluation has been already constructed.

### **2011-Environmental Reevaluation Connector from PR-10 to PR-123, KM 49.0 Municipality of Utado, AC-100074**

This reevaluation was submitted for the ramp section at the horseshoe/oxbow portion of the Rio Grande de Arecibo River to connect the new PR-10 project to PR-123, which runs below the new PR-10 bridge. This reevaluation was approved by FHWA and was constructed.

### **September 14, 2012 – Environmental Reevaluation for AC-100076**

This reevaluation was submitted on September 14, 2012 and concurred by FHWA on September 17, 2012. It was for submitted for the design of this segment and included updated archaeological and biological reviews conducted along the project corridor.

### **July 17, 2013 – Reevaluation for AC-100069**

This reevaluation was submitted on July 17, 2013 and concurred by FHWA on August 15, 2013. Its purpose was to proceed with Right of Way (ROW) acquisition and construction of this segment. Updated biological data was included in this document which was concurred by the USFWS.

### **June 3, 2016 – Reevaluation of AC-100071**

This reevaluation was submitted on June 3, 2016 and concurred by the FHWA on September 15, 2016. Its purpose was to proceed with the completion of the acquisition of the required ROW, design, and construction of this segment.

### **September 3, 2021 - Reevaluation of AC-100069, AC-100071, AC-100055 and AC-100076**

A reevaluation for all the design and construction of the remaining segments of PR-10 was submitted for the review and concurrence of the FHWA. This document, like previous ones included updated biological information along the corridor of the project. Updated the State Historic Preservation Office (SHPO) and the US Fish and Wildlife Service (USFWS) endorsements were included. The document assessment has not been completed pending the resolution of the project funding sources.

### **Conclusion from this Report**

Based on a re-review of all previous reevaluations and available correspondence on the project, the FHWA has concurred with the determinations that the FEIS conclusions are still valid.