

**Environmental
Assessment**

For:

**Proposed
Villalba Satellite Health Center
Villalba, Puerto Rico**

**HRSA-15-129
Grant# C8DCS29564**

**Prepared for:
Health Resources and Services Administration (HRSA)**

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Environmental Assessment
Proposed New
Villalba Satellite Health Center
HRSA-15-129, HIIP Grant # C8DCS29564

1. INTRODUCTION

1.1. Background and Overview

The Health Resources and Services Administration (HRSA), Bureau of Primary Health Care proposes to provide assistance for this project through the Health Infrastructure Investment Program (HIIP) under Funding Opportunity Number: HRSA-15-129. The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C 4321, including Public Disclosure, Section 102 of NEPA, and EO 11514, mandate Federal agencies to assess the environment impacts of major Federal actions, including construction projects supported in whole or in part through Federal grants. An Environmental Assessment is a broad study that evaluates the direct, indirect, and cumulative potential impacts on the human and natural environment that would result from the proposed action and alternatives. This document represents the Environmental Assessment (EA) for the proposed project and has been prepared to determine whether there is a Finding of No Significant Impact (FONSI) or whether additional review is required.

Consejo de Salud de Puerto Rico (CSPR), is a 501(c)(3) tax exempt non-profit corporation serving as a HRSA 330 grantee since its founding in 1971, providing comprehensive high quality primary and preventive health services in the south of Puerto Rico, specifically in the municipalities of Ponce, Peñuelas, Juana Diaz, and most recently in Villalba.

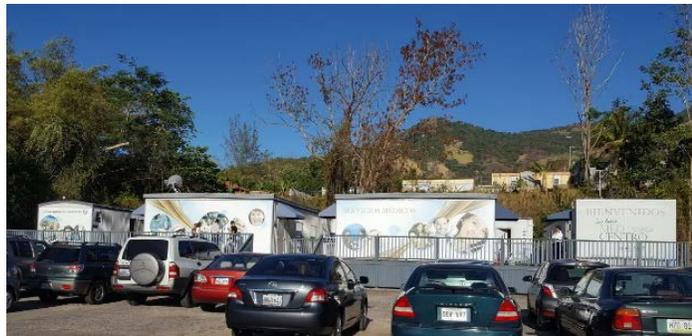


Figure 1 Current site with trailers

In 2011, CSPR established a New Access Point (NAP) satellite center in the rural municipality of Villalba, focusing on the general community, with migrant/seasonal Farm Workers and Public Housing (PH) residents as special populations to be served. Socio-demographic conditions of this municipality made imperative the establishment of a new health center. These conditions included: very high unemployment rate (18.6%, Sept 2010); 55% of general population and 78% of PH residents and agricultural workers living under poverty levels. Heart disease, cancer, pneumonia and pulmonary conditions (asthma and chronic bronchitis), diabetes, obesity/overweight, and cerebrovascular diseases, were the most prevalent health conditions found. Among agricultural workers, skin conditions and injuries from accidents are the most prevalent conditions. Mental illness, primarily depression, and substance abuse were indicated among PH residents. Poverty, low education rates, poor transportation, geographical and medical provider shortages were found to be barriers to care.

With full support of city and state government, CSPR inaugurated the Villalba Satellite

Health Center in 2011, installing the clinical and administrative operations in a facility consisting of six (6) connected trailers. Services in CSPR’s Villalba site include ambulatory primary care, dental services, immunization for children and adults, integrated behavior health services, and case management, all offered both in trailers and through the Medical Mobile Unit at agricultural work sites and in PHP’s. The operations of this satellite center provides services to 20% of the total population of Villalba and 24.5% of the low income, as per UDS Mapper information.

Due to space limitations, two lots (See Appendix 1) located ½ mile north from the current site (See Appendix 2) were purchased in 2014 for the development of the proposed project in order to relocate all primary care services to a fixed site.

1.2. Need for Action

There is an immediate need to relocate the Villalba Satellite Health Center from its current location. The current site and facilities has nearly reached maximum capacity and it is urgent that a fixed facility be built to accommodate the increasing number of patients. The current facilities represent a barrier to address the needs of the people of Villalba.

Currently, the Center is located in a facility consisting of 6 trailers. The space layout is cramped with two waiting areas: one in the registration, billing and collections trailer with 9 chairs, and another waiting room with 30 chairs for both pediatric and adult patients. There is no room for lab or radiology services; space is limited for case discussions, team meetings or staff training activities.

Since inauguration of the Center, the patient population has increased continuously. In years 2014 and 2015 the number of patients doubled the respective previous year. This continuous increase shows that additional primary and preventive health services are needed. Taking the average number of visits to be 3 visits per patient, in 2015 the number of visits to this center was 15,345 visits. Even more, UDS mapper also shows 15,745 low-income residents of Villalba are unserved, representing an enormous growth potential, but the current facilities impede such growth. This volume of patients, in the trailers’ limited physical space, results in overcrowding, uncomfortable conditions, and long patient waiting periods. These conditions also constitute a barrier the enrollment of new patients. HRSA officials are aware of these conditions and have urged CSPR to find and establish a more adequate fixed site to address the needs of local patients.

Table 1 Patients served in Villalba Satellite Center

Year	2012	2013	2014	2015
Population Served	920	1,114	2,470	5,115
Percentage Increase	-	21%	122%	107%

The proposed project for the new Villalba Satellite Health Center consists of a new 1.3 acre site to include the construction of a brick and mortar two-storey 10,182sf building facility and a parking lot with 87 spaces, as shown on the Site Plan in Appendix 3. The site has a C-1

commercial zoning –which allows for the proposed use and intensity – and is bounded to the north by PR Road #149, to the east by a ravine with intermittent water flow, to the west by a gas station, and to the south by PR Road #589. The site is appropriate to address the projected increase in number of patients. The project locates in the Villalba Arriba Ward of the municipality, southwest of Villalba’s urban area and only a quarter of a mile from the town’s center, specifically in Latitude 18.12384836, Longitude -66.50105804. It is located along the municipality’s main road: PR Road #149, Km #57.7, giving it great accessibility. The new site is literally across the street from three public housing complexes with 234 housing units in total. It is important to highlight the fact that public housing residents are a medically underserved population and is a special population to all FQHCs.

The two lots where the project is proposed are the remnants of the construction of PR Road 149. The northern lot has never been impacted with development. On the other hand, the southern lot contains an abandoned structure that operated as a bakery and is proposed to be demolished. Both lots are currently vacant and plagued with invasive vegetation. No evidence of historical resources were found in either properties.

The proposed project will not have a significant impact on the environment. For one it will not significantly impact the infrastructure of the area, since it does not require any intensive use. Also, the property is served with the necessary infrastructure (potable water, sanitary sewer, stormwater, electric power, access roads, and telecommunications) making it an easy point of connection. The topography of the property is flat with a slope running along the east boundary of the property. A ravine runs through the northern border of the property, which is why a buffer area of at least five (5) meters is established between the project and the ravine, required by Puerto Rico’s Department of Natural and Environmental Resources. The project will not affect natural or artificial systems, nor any threatened species or in danger of extinction. During the construction phase, measures will be implemented for the control of erosion and prevention of airborne sediments. The corresponding environmental permits have been processed and measures and requirements will be implemented. Also, the farm will be reforested by sowing grasses, trees and shrubs through a landscape design, control soil erosion and prevent sedimentation of stormwater runoff.

The new facility will have 10 medical offices: 2 of which are pediatric, 2 Ob-gyn, and 6 for General, Family, and Internal Medicine. Additionally, there will be: an x-ray room, 3 dental offices with a chair each, 2 offices for behavioral health, one 1 wellness program exercise room. There will be a reception area with 3 triage areas (1 pediatric) and 1 nurse station, 2 adult waiting rooms (85 chairs) and 1 pediatric waiting room (20 chairs). There will be a conference room for staff training and 1 for case discussion, a 2 data/computer rooms with EHR capacity. The floors are connected by stairs and an ADA-compliant elevator of hospital quality, and there are 8 bathrooms, also ADA-compliant and Energy Star, with solar water heating and the roof prepared for solar energy plates to reduce costs of electrical energy.

2. ALTERNATIVES CONSIDERED

2.1. Alternatives Evaluated

Re-development/Construction on the existing site

For the Villalba Satellite Health Center, the construction of a fixed facility was considered in the existing location, but presented several obstacles like for example: (1) unrealistic expectations on behalf of owner during acquisition negotiation; (2) maintaining uninterrupted operations during construction; and (3) mounting tensions with a neighboring bus line using the road side in front of the existing site for school bus parking thus blocking the view of the Center to passersby. Due to these obstacles it was determined that the construction of a fixed facility for the Villalba Satellite Health Center was best in a new/different site.

2.2. Alternatives Considered for Further Review

Alternative 1: No Action Alternative

Under the No Action alternative, a fixed site for the Villalba Satellite Health Center would not be constructed and the existing trailer facilities would continue operating, remaining unchanged. This would further delay CSPR’s effort to provide primary and preventive health care to a growing number of patients from Villalba who are low-income, underserved, and in need of receiving quality services.

Alternative 2: Construction of new Satellite Health Center (Proposed)

CSPR proposes to permanently relocate its Villalba Satellite Health Center from its current site with a 6 trailer facility to a fixed site only a half mile away. The new 1.3 acre site to include the construction of a brick and mortar two-storey 10,182sf building facility and an 87 unit parking lot, as shown on the Site Plan in Appendix 3.

Affected Environment	Impacts	Mitigation
<p>Geology, Topography and Soils</p>	<p>No impacts to geology or topography. There may be short-term impacts to soils during the construction period.</p>	<p>Area soils would likely be disturbed during construction. Soil loss may occur directly from disturbance or indirectly via wind or water. Best management practices will be developed and implemented, such as erosion and sedimentation control (e.g. silt fences, hay bales, hydroseeding, re-vegetating disturbed soils, and maintaining site soil stockpiles, to prevent soils from eroding and dispersing off-site).</p>

Water Resources	No impacts to groundwater resources are anticipated.	None
Surface Water	Temporary short-term impacts to surface water are possible during construction activities.	Appropriate BMPs, such as installing silt fences, hidroseeding, and re-vegetating bare soils would minimize surface water runoff.
Floodplains	No impacts to floodplains are anticipated.	None
Groundwater	No impacts to groundwater resources are anticipated. The new facility will use the available public water system.	None
Biological Resources	No impacts to biological resources (e.g. threatened and endangered species) are anticipated.	None
Air Quality	Short-term impacts to air quality may occur during the construction period.	Construction contractors would be required to water down construction areas (e.g. exposed soil) as necessary and fuel-burning equipment running times would be kept to a minimum and engines would be properly maintained.
Transportation	<p>There may be a minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site.</p> <p>No additional impact to daily traffic is anticipated during normal intended usage insofar as the Satellite Health Center will be moving ¼ mile from the current site; therefore, the road servicing the new site will not have more traffic than the one experienced currently.</p>	<p>Construction vehicles and equipment would be stored on-site during project construction and appropriate signage would be posted on affected roadways.</p> <p>None</p>
Noise	Short-term impacts to noise may occur at the proposed project site during the construction period.	Construction would take place during normal business hours (e.g. daytime hours) and equipment and machinery installed will meet all local, state, and

		federal noise regulations.
Cultural Resources	No evidence of archeological or historic resources were found in the property. Therefore, no impacts to cultural resources are anticipated.	However, if during the removal of the earth's crust, excavations or any other similar activity is discovered or impacted some deposit, element, structure or trace of nature Historical and / or archaeological period, work shall be stopped and the Institute shall be immediately notified of the Puerto Rican Culture, in accordance with Act No. 112 of July 20, 1988, the Land Archaeological Puerto Rico.
Socioeconomic Resources	No impacts to socioeconomic resources are anticipated.	None
Environmental Justice	No disproportionately high or adverse effects on minority or low-income populations are anticipated.	None
Hazardous Materials	No impacts from hazardous materials or wastes are anticipated.	Construction activities could expose or otherwise affect unknown subsurface hazardous wastes or materials. Many elements of a Phase I Environmental Site Assessment (ESA) have been conducted for the site and no recognized environmental conditions were discovered, indicating a minimal risk. Any hazardous materials discovered, generated, or used during construction would be disposed of and handled in accordance with applicable local, state, and federal regulations.

3. AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS OF THE ALTERNATIVES CONSIDERED

3.1. Geology, Seismic Activity and Soils

Soils Existing Conditions

According to the hydrogeological map of Puerto Rico and adjacent islands, of the geological

service of the United States, the evaluated land is located in the geological formation identified as Kt. This formation is located in hills and mountains, composed mainly of sandstone tobacea, litholite, conglomerate of lava and tuff, and volcanic breccia ([Briggs and Akers, 1965](#)). (See Appendix 4).

A soils classification of the site according to the National Resources Conservation Service (NRCS) on-line data base indicates that the following soils are present on the subject property: Site soils consist of Montegrande clay (MsC). This series consists of very deep, somewhat poorly drained, moderately slowly permeable soils on alluvial fans, foot slopes, and toe slopes of hills in the Humid Mountains and Valleys MLRA. They formed in stratified fine textured sediments over gravelly colluvium of mixed origin from surrounding hills. Near the type location, the mean annual temperature is about 77 degrees F., and the mean annual precipitation is about 57 inches. Slopes range from 2 to 12 percent. (See Appendix 5).

Local topography indicates that drainage in this area is accomplished by infiltration and surface run-off towards the south to Road 589 and Jacagüas Creek, vertically located approximately 50 feet below the site elevation and 400 feet horizontally.

Executive Order 12699 directs Federal agencies to incorporate cost-effective seismic safety measures in all new buildings that are constructed, leased, assisted, or regulated by the Federal Government. The Villalba Municipality and Puerto Rico as a whole are not in an active seismic area and the concerns of seismic activity as related to this proposed project is relatively low.

Impacts to Soils

Alternative 1-No Action Alternative:

Normal occurrences of soil erosion would be expected to occur if the site is not developed.

Alternative 2: Construction of new Satellite Health Center (Proposed)

Area soils would likely be disturbed during construction. Soil loss would occur directly from disturbance or indirectly via wind or water. Best management practices will be developed and implemented, such as implementing an erosion and sedimentation control plan using silt fences or hay bales, hydroseeding and re-vegetating disturbed soils (e.g. part of proposed landscaping activities), and maintaining site soil stockpiles during construction, to prevent soils from eroding and dispersing off-site.

Implementation of appropriate Best Management Practices (BMPs) would be required at the construction location. BMPs include, but are not limited to; the installation of silt fences and re-vegetating bare soils to minimize erosion. The proposed project site does not contain soils classified as prime.

3.2. Land Use and Zoning

The proposed project location and surrounding area is listed zoned as C-1 (See Appendix 6). This type of zoning is defined as Commercial Local which allows for the proposed use of a health center.

Alternative 1-No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

No impact.

3.3. Floodplain Encroachment

Executive Order (EO) 11988 (Flood plain Management) requires that a Federal agency avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable alternative. FEMA uses Flood Insurance Rate Maps (FIRMs) to identify the regulatory 100-year floodplain for the National Flood Insurance Program (NFIP). The proposed project site for the new Satellite Health Center is located outside of Zone AE which is not within a 100-year floodplain per the FEMA

Flood Insurance Rate Map Number 72000C1660J dated November 18, 2009. The FIRM Map is included in Appendix 7.

3.3.1. Impacts to Floodplains

Alternative 1 – No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

No impact.

3.4. Traffic

The Puerto Rico Highway and Transportation Authority (PRHTA) is responsible for the design, construction, operation, and maintenance of Puerto Rico's state roads and highways. Arterials, connectors, rural roads, and local roads are constructed and maintained municipal governments.

The proposed project site is bounded on the north by PR Road #149, across which are located three high density public housing projects; on the south by local Road 589; on the west by a gas station; and to the east by a ravine.

3.4.1. Impacts to Traffic Patterns

Alternative 1 – No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

The construction of the new Satellite Health Center may impact traffic patterns during construction and during operation. The impact to traffic would be short term during the time of active site preparation and construction activities. During operation of the center, traffic patterns

in surrounding roads are expected to be unaffected. It is expected that State Road 149 will not experience added traffic insofar as the existing Health Center is only a quarter of a mile away along the same road. For this reason, the Puerto Rico Highway and Transportation Authority (PRHTA) authorized the construction of an access point from PR Road 149 and another access point to PR 589. As an additional effort to mitigate any possible impact that the operations may have on traffic patterns, the site trash collection point will be located within the project so that garage trucks do not interfere with vehicles flowing through public roads.

3.5. Hazardous Materials Current Conditions (Public Health & Safety)

Hazardous material means as any material that, because of its quantity, concentration, or physical and chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment.

It is the interest of the federal government that proposed properties be free of hazardous materials, contamination, toxic chemicals and gasses, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended utilization of the property. Environmental review of these properties shall include evaluation of previous uses of the site and other evidence of contamination on or near the site, to assure that occupants of proposed sites are not adversely affected by the hazards. Particular attention should be given to any proposed site on or in the general proximity of such areas as dumps, landfills, industrial sites, or other locations that contain, or may have contained, hazardous wastes. It is important that proponents become familiar with the potential environmental issues involving their property.

Sites known or suspected to be contaminated by toxic chemicals or radioactive materials include but are not limited to sites: (i) listed on an EPA Superfund National Priorities or CERCLA List, or equivalent State list; (ii) located within 3,000 feet of a toxic or solid waste landfill site; or (iii) with an underground storage tank.

CERCLA (commonly referred to as Superfund) is the Comprehensive Environmental Response, Compensation, and Liability Act. It requires community relations components during the assessment of hazardous substances at inactive waste sites. Key communication pieces include a community relations plan, public access to the complete administrative record, an information repository, and advertisement of public involvement opportunities. Health and ecological impact may be determined requiring worker and public notification. Emergency removal actions may be required.

RCRA is the Resource Conservation and Recovery Act, which establishes regulatory standards for the generation, transportation, storage, treatment, and disposal of hazardous wastes. In regulatory terms, a RCRA hazardous waste is a waste that appears on one of the four hazardous wastes lists (F-list, K-list, P-list, or U-list), or exhibits at least one of four characteristics—ignitability, corrosivity, reactivity, or toxicity. Hazardous waste is regulated under the Resource Conservation and Recovery Act (RCRA) Subtitle C.

In order to determine the potential presence of contaminants or hazardous materials several steps were taken. Following we delineate each step along with the finding:

Table 2 Performed Diligence to Identify Potential Contaminants in Proposed Site

	Task	Findings
1	Superfund Query (See Appendix 8);	There are no Superfund sites in Villalba
2	Brownfields Query (See Appendix 9);	One Brownfield was found. The name of the cleanup site is the FORMER FARMERS COOPERATIVE CAN PLANT located in address 17 LUCHETTI STREET, located in the core center of the municipality and one (1) mile away from the proposed site.
3	RCRA Query (Appendix 10)	Searched on EPA’s Envirofacts search engine to find EPA/RCRA Regulated Facilities. Six properties were found, but none are within 3,000 feet of the proposed project.
4	Telephone interview with former owner and occupant	Performed telephone interview with Mr. José Guzmán (tel. 787-209-2810) who is the former owner and occupant of the property. Mr. Guzmán informed that his family purchased the property in the 1940’s when property was farmland. The property included Road 149, the land that today includes the public housing projects across, and the two lots that were purchased by CSPR. These two lots are the remnants of the segregation resulting from the development of Road 149. In the southern lot the Guzman family built a bakery and the other lot remained undeveloped. His brothers and him inherited the estate and sold the two lots to CSPR. Mr. Guzman has no knowledge of any activity that might have produced hazardous substances that could have contaminated the site during the more than 75 years that his family owned the property.
5	Consulted historical aerial photographs (See Appendix 11)	Three historical aerials were consulted to verify past uses of property. The following years were identified: 1936, 1993, and 2016. The earliest aerial confirms the farmland state of the property when the Guzman family purchased the property. Later aerials show the existing structures found today.
6	Site reconnaissance	The site visit was conducted by Consejo de Salud de Puerto Rico and engineering consultants in charge of the design of the project. Visits revealed no likely presence of any containers or visual contamination of the ground indicating that there are no hazardous substances or petroleum products in, on, or at the property.

3.5.1. Impacts from Hazardous Materials

Alternative 1-No Action Alternative:

No Impact

Alternative 2: Construction of new Satellite Health Center (Proposed)

The impact of the proposed action would be negligible with respect to the presence of hazardous materials and potential exposure, because no hazardous or toxic materials or wastes have been identified for the proposed project site. No impact anticipated.

3.6. Socioeconomic Issues

Executive Order 12898 Environmental Justice in Minority Populations and Low-Income Populations requires federal agencies, departments, and their contractors to consider any potentially disproportionate human health or environmental risks their activities, policies, or programs may pose to minority or low-income populations.

EO 13045 (Protection of Children from Environmental Health Risks and Safety Risks) required federal agencies to identify and assess health risks and safety risks that may disproportionately affect children. As with EO 12898, most federal lead agencies determine impacts to children as part of the NEPA compliance process. Agencies must ensure that its policies, programs, activities, and standards address disproportionate risks to children that results from environmental health risks or safety risks.

Based on UDS Mapper, the population of Villalba in 2014 was of 25,549, of which 99.6% are Hispanic and 82% are low income.

3.6.1. Socio-Economics Impacts

Alternative 1 – No Action Alternative:

Although there is no requirement for compliance with EOs 12898 and 13045 when there are no federal actions, low-income and minority families and children would be adversely affected if the new proposed fixed site for the Villalba Satellite Health Center were not constructed, due to insufficient primary health providers in the municipality of Villalba to address the needs of the population.

Alternative 2: Construction of new Satellite Health Center (Proposed)

The proposed action will benefit the community by providing a fixed facility with the capacity to attend the growing number of patients and the large number of underserved low income population.

3.7. Air Quality

Under the Clean Air Act, the U.S. Environmental Protection Agency (EPA) establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of “sensitive populations, such as people with asthma, children, and

older adults.” Secondary air quality standards protect public welfare by promoting ecosystems health, preventing decreased visibility, and damage to crops and buildings. EPA has set national ambient air quality standards (NAAQS) for six of the following criteria pollutants; ozone (O₃), particulate matter (PM_{2.5} and 10), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), and lead (Pb). According to the Puerto Rico Environmental Quality Board (PREQB), only two municipalities, which do not include Villalba, have obtained Nonattainment ratings. Therefore, the criteria air pollutants do not exceed the NAAQS in Villalba.

3.7.1. Impacts to Air Quality

Alternative 1 – No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

Increase in vehicle exhaust emissions and dust is anticipated during construction. Federal and state air attainment levels would not be exceeded. Best management practices would be developed and implemented to cover and/or wet area soils during construction to minimize dust. This proposed project site is located in an attainment area.

3.8. Noise

Noise Current Conditions

Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses.

Noise, defined herein as undesirable sound, is federally regulated by the Noise Control Act of 1972 (NCA). Although the NCA gives the EPA authority to prepare guidelines for acceptable ambient noise levels, it only charges those federal agencies that operate noise-producing facilities or equipment to implement noise standards. EPA guidelines, and those of many other federal agencies, state that outdoor sound levels in excess of 55 dB DNL are “normally unacceptable” for noise-sensitive land uses such as residences, schools, and hospitals.

The Puerto Rico Environmental Quality Board regulates noise contamination locally. Its regulation (Regulation #8019) which dictates that “no person shall issue or permit the emission of any sound, which, when crossing the property boundary of the sound source, may exceed the levels set forth in ... this Regulation, as measured in respective receiving area in accordance with the definitions of this Regulation.” The regulation classifies zones as (1) residential; (2) Commercial; (3) Industrial; and (4) tranquility. Health clinics are considered tranquility zones and therefore cannot receive noise levels above 55 dB. In contrast, across the street from the proposed site are three public housing developments which are considered residential, with a maximum noise level of 60dB.

3.8.1. Impacts to Noise Conditions

Alternative 1-No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

Construction noise impacts would be short-term and limited to the duration of construction activities. Once operational, the Health Center – its building and components – will not produce any noise. During operating hours, the vehicles entering and exiting the health center may increase slightly the level of vehicular noise in the area, but will be overshadowed by the noise produced by the existing vehicular traffic that currently flows through Road 149.

Regarding the noise generated by Road 149 that could affect the human environment within the Health Center, two methods are proposed to dampen the noise below the regulated maximum for tranquility zones of 55dB: with the installation of sound proof windows in the building and with planting of a vegetation buffer along the front of the property, along Road 149,

3.9. Public Services and Utilities

The proposed project location and surrounding area has all the public services and utility services available. The water and sanitary sewer are provided by the Puerto Rico Water and Acueduct Authority; the electric power is provided by the Puerto Rico Electric Power Authority; police and fire are provided by the state government.

3.9.1. Impact Public Services and Utilities

Alternative 1 – No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

Any impact would be short term during active site preparation and construction activities. All normal construction permits and best management practices will be undertaken to minimize and/or eliminate any disruption to public utility services in the area.

3.10. Water Resources/Water Quality

3.10.1. Groundwater Existing Conditions

Aquifers and surface water are drinking water systems that may be impacted by development. The Safe Drinking Water Act of 1974 requires protection of drinking water systems that are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.

3.10.1.1. Impacts to Groundwater

Alternative 1 – No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

The water supply for the proposed Community Center will tie into the public utilities; therefore it will not impact existing groundwater conditions.

3.10.2. Surface Water Existing Conditions

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharge of pollutants into the waters of the United States. Development activities may impact negatively the quality of streams, rivers, lakes, wetlands, etc. Construction can affect a surface water body's health through stormwater runoff that carries sedimentation and other pollutants. It can also impact the health of nearby surface water bodies through the settling of airborne particulate matter also originated by construction activities. These water bodies can also be negatively affected by thermal changes caused by temperature differences between highway runoff and surface water.

3.10.2.1. Impacts to Surface Waters

Alternative 1 – No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

Based on the local topography, stormwater run-off would drain from the proposed project location site to the east towards Road 589 and Jacaguas Creek. On site, a ravine with intermittent water flow is found on the northern end of the project. As a preservation measure mandated by the Puerto Rico Natural and Environmental Resources Department, a 5 meter buffer of no disturbance will be maintained surrounding the ravine as a measure to protect the native vegetation that provides stability to its side banks. There are no additional on-site surface water features (e.g. ponds, lakes or drainage ditches) present at the proposed project location. Nearby, Jacaguas Creek is found to the East, which will receive all of the stormwater runoff generated at the site. During construction sediment control measures will be installed to prevent water and air borne particles from reaching this waterway.

3.11. Biological Resources

3.11.1. Wetlands Existing Conditions

Executive Order 11990: Protection of Wetlands requires Federal activities to avoid adverse impacts to wetlands where practicable. Wetlands are defined by the U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) as areas that are

inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. See Appendix 12.

The topographical characteristics of the proposed site prevent the formation of wetlands, wetlands are not present.

3.11.1.1. Impacts to Wetlands

Alternative 1 – No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

No wetlands are present.

3.11.2. Threatened or Endangered Species

The Endangered Species Act (ESA) of 1973, as amended, and its implementing regulations were designed to protect and recover species in danger of extinction and the ecosystems that they depend upon. When passed, the ESA spoke specifically to the value - tangible and intangible - of conserving species for future generations. In passing the Act, Congress recognized another key fact that subsequent scientific understanding has only confirmed: the best way to protect species is to conserve their habitat.

3.11.2.1. Impacts to Threatened or Endangered Species

Alternative 1-No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

The U.S. Fish and Wildlife Service lists one federally protected species for Villalba, Puerto Rico: Puerto Rican boa ([Epicrates inornatus](#)). A Threatened and Endangered Species survey was conducted on the proposed project location on February 8, 2007. No threatened or endangered species were observed during the survey conducted. Essential habitats for critical species were not found as well. The Threatened and Endangered Species survey report is provided in Appendix 13.

The report identifies all the native species, which are all non-critical, found in the site location and concludes that the proposed location is an impacted area, and therefore no significant impact will be generated beyond the construction activities. It further concludes that any possible impact on the flora and fauna of the area will be successfully mitigated through a Vegetation Planting Plan whereby native plants will be planted.

3.12. Cultural Resources

Cultural resources include natural, architectural, and archeological resources. The National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of their undertakings on historic properties. Federal agencies must consult with parties who have an interest in the effects of the undertaking in order to identify the affected historic properties, assess the effect of the undertaking on historic properties, and seek ways to avoid, minimize, or treat any adverse effects on historic properties.

To comply with NHPA and its implementing regulations in 36 CFR Part 800, proponents have to follow the standard regulatory procedures, commonly referred to as the Section 106 Process. Historic properties include districts, buildings, structures, objects, landscapes, archaeological sites, and traditional cultural properties that are included in, or eligible for inclusion in, the National Register of Historic Places. These properties are not just old buildings or well-known historic sites, but places important in local, State, or national history. The National Register of Historic Places is a list of recognized historic properties. However, this list is not complete, and States may have additional properties with historic significance.

3.12.1. Existing Conditions

As part of the NHPA process, a Phase 1 Cultural Resources Survey was conducted on the proposed site. See Appendix 14. During the surface inspection no prehistoric or historic cultural resources were detected. The structures to be demolished were found to lack an architectural style that warrant preservation, nor are they located in a historical area. In the subsurface study of the site no cultural resources of archeological interest were found. This study concluded and recommended that no further studies were warranted. This study was submitted to Puerto Rico's State Historic Preservation Office (SHPO) as part of the Section 106 Process. On December 22, 2016 SHPO indicated that after review of the submitted documentation, they believed that an agency finding of **no historic properties affected** would be appropriate for this undertaking, should consultation by the appropriate Federal Agency be formally requested. See SHPO letter on Appendix 15.

Additionally, as part of the state permits process, on March 31, 2016 the Puerto Rican Institute of Culture also confirmed that, according to their records and submitted information, the proposed property is not located in a historic zone nor on any other district protected by law or regulation. Additionally, it was found that the building proposed to be demolished is not worthy of being considered historic. It was further concluded that the proposed development will not affect negatively any other adjacent or nearby location that could be considered historical, or part of a historical zone or district.

3.12.1.1. Impacts to Cultural Resources

Alternative 1 – No Action Alternative:

No impact.

Alternative 2: Construction of new Satellite Health Center (Proposed)

No impacts anticipated. However, if during the removal of the earth's crust, excavations or any other similar activity some deposit, element, structure or trace of nature Historical and / or archaeological period is discovered or impacted, work shall be stopped and the Institute shall be immediately notified of the Puerto Rican Culture, in accordance with Act No. 112 of July 20, 1988, the Land Archaeological Puerto Rico.

3.13. Coordination and Permits

All necessary permits and coordination with governing agencies is the responsibility of the civil engineer in charge of the design of the project. All construction and required regulatory permits will be maintained and posted at the construction site. Building permits are obtained from the Puerto Rico Permits Management Office. In accordance with applicable local, state, and federal regulations, the applicant will be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site. CSPR has been proactive in seeking input from pertinent government agencies. Thus far, the following agency recommendations have been obtained, all necessary for the eventual issuance of the final building permit:

Table 3 State Agencies Consulted during Pre-development Phase

Recommendation	Agency	Date Obtained
Environmental Recommendations	Puerto Rico Permits Management Office Natural and Environmental Resources Department Solid Waste Authority Puerto Rican Institute of Culture	May 16, 2016
Environmental Compliance Determination	Puerto Rico Permits Management Office	June 24, 2016
Infrastructure Recommendations		
Telecommunications	Telecommunications Regulatory Board	May 19, 2016
Water and Sewer	Puerto Rico Aqueduct and Sewer Authority	June 30, 2016
Electric	Puerto Rico Electric Power Authority	June 21, 2016
Road	Puerto Rico Highway and Transportation Authority	March 8, 2016

Recommendation	Agency	Date Obtained
Health and Safety Recommendations		
Fire	Puerto Rico Firefighters Corps	January 23, 2016
Health	Puerto Rico Health Department	January 27, 2016
Recommendation: Cultural Resources	Puerto Rican Institute of Culture	April 8, 2016

4. PUBLIC INVOLVEMENT, AGENCIES CONSULTED

The proposed action was publicized in *El Nuevo Día*, the most widely read newspaper in Puerto Rico, on June 8, 2016 and established a fifteen-day public comment period. See Appendix 16. As mentioned in the public notice, information was made available to all interested parties in the specified address and telephone. Copy of the notice was sent to the regional office of Federal Emergency Management Agency (FEMA) and the Puerto Rico Planning Board for their comments.

5. REFERENCES

- Hydrologic Atlas 197, Briggs, Reginald Peter Akers, J.P., Hydrogeologic map of Puerto Rico and adjacent islands, 1965, USGS Publications Warehouse <http://pubs.er.usgs.gov/publication/ha197>
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <https://websoilsurvey.sc.egov.usda.gov/>. Accessed 03/10/2017
- Interactive Catalogue of Puerto Rico Classifications , Villalba Municipality, Map #5. Available online at: <https://msc.fema.gov/portal/viewProduct?filepath=/72/P/Firm/72000C1660J.png&productID=72000C1660J>
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- Puerto Rico Department of Environmental Quality (PRDEQ), Puerto Rico Noise Regulation # 8019. Available online at: http://www2.pr.gov/agencias/jca/Documents/Leyes%20y%20Reglamentos/Reglamentos/Reglamentos/Reglamento%20Contaminacio%CC%81n%20Ruidos_8019_2011.pdf
- UDS Mapper. Available online at <https://www.udsmapper.org/>

- Threatened & Endangered Species Assessment, conducted by Ana L. León -Torres, MS, PSF on March 24, 2015.
- Phase 1 Cultural Resources Survey, conducted by Aramis Font Negrón on December 2016.
- Solid Waste Disposal Query in Villalba. <http://www.ads.pr.gov/programas/planificacion/>

6. LIST OF PREPARERS

The list of preparers who were involved in the preparation of the environmental document and technical studies:

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APPENDICES