

U.S. Department of Housing and Urban Development

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Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

Project Information

Project Name: PR- CRP-000892 Lajas Recreational Sports Complex

Responsible Entity: Puerto Rico Department of Housing

State/Local Identifier: Puerto Rico

Preparer: Keyla Pacheco ACE Environmental, Inc.

Certifying Officer Name and Title:

Aldo Rivera – Director, Permits and Environmental Compliance Ángel G. López Guzmán - Deputy Director, Permits and Environmental Compliance Sally Z. Acevedo-Cosme - Permits and Environmental Compliance Specialist Pedro de León Rodríguez - Permits and Environmental Compliance Specialist María T. Torres-Bregón - Permits and Environmental Compliance Manager Ivelisse Lorenzo Torres - Permits and Environmental Compliance Specialist Santa Ramírez Lebrón - Permits and Environmental Compliance Specialist Janette I. Cambrelen - Permits and Environmental Compliance Specialist Limary Vélez Marrero - Permits and Environmental Compliance Specialist Mónica Machuca Ríos - Permits and Environmental Compliance Specialist Abdul Feliciano Plaza - Permits and Environmental Compliance Specialist Javier Mercado Barrera - Permits and Environmental Compliance Specialist Priscilla Toro Rivera - Permits and Environmental Compliance Specialist

Consultant (if applicable): ACE Environmental, Inc.

PO Box 1005, Boquerón, PR 00622-1205

(787)688-4945/ (787)599-1750 kpacheco.ace@gmail.com

Direct Comments to: Puerto Rico Department of Housing (environmentcdbg@vivienda.pr.gov)

Project Location:

Coordinates: 18.0425, -67.0498 Carr. 117 Km. 0.2, Bo. Santa Rosa

Lajas, PR 00667

Parcel Catastral No.: 358-052-159-19

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

The Municipality of Lajas proposes the acquisition of a property that was used as a private school for the construction of a new sports and recreational facility. The proposed project is included within the projects of the City Revitalization Program with CDBG-DR funds. The proposed project includes the following works and/or activities: The facilities will have as their main component the running and/or walking track with a minimum length of 400 meters and 8 lanes and will include tennis, pickleball and beach tennis courts, as well as batting cages. In addition to the athletic facilities, the project proposes the rehabilitation, improvements and/or demolition of the existing infrastructure on the property that includes restrooms, administrative offices, classrooms, storage and parking area.

The proposed type of construction will be mostly concrete, cement blocks and asphalt, as well as steel, synthetic material, among others. Reforestation activities and the implementation of green initiatives are envisioned for this project. Demolition activities include the east-west wing of the main, L-shape building and a basketball court due to the dimensions required for the running track. As part of the supporting documents, a photograph or aerial image is attached where the area and/or polygon comprising the proposed project is delimited.

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

The project arises from a claim from the communities of the town that desperately need such facilities since there is nothing similar in the area, so the community is sometimes forced to go outside its immediate environment to meet those needs. Another benefit of this project is that part of a recently disused school will be used. The area of the existing buildings will house halls to teach sports clinics and expand sports offerings. This project will benefit the entire population and communities of Lajas as well as nearby towns due to its public and free nature. According to data obtained from the 2020 Census, the population is currently 23,334 of which 63.2% is below the poverty level. The Municipality of Lajas has a free collective transportation service that covers all the neighborhoods of Lajas and has scheduled a stop near these facilities. This facilitates access to all citizens regardless of their location within the Municipality. The population with the greatest impact will be the Santa Rosa neighborhood where the project is located. This neighborhood has 1,408 inhabitants. Although the project is located in the aforementioned neighborhood, it borders the urban area of Lajas that has 699 inhabitants and the Lajas neighborhood of 2,915 inhabitants. This project will benefit its inhabitants with the intention of meeting the need for this type of facilities in the sector and correcting an urban flooding problem in an appropriate and safe manner. Coherent with the general objectives of the City Revitalization Program, it will address unsatisfied needs as a result of Hurricanes Irma and María and execute strategic and high-impact activities to mitigate disaster risks and reduce future losses.

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

The existing condition of the property consists of a closed private school of religious character that housed an academic area (school), a recreational area (court) and a residential area (nuns' residence). If left in disuse this property will likely become abandoned and a public nuisance. The property is bordered by residential houses to the east along PR 117, uncleared undeveloped land to the north, cleared developed land to the west, and a residential neighborhood to the south across PR 117.

Funding Information

Grant Number	HUD Program	Funding Amount
B-17-DM-72-0001		
B-18-DP-72-0001	CDDC DD	¢11 028 162 220 00
B-19-DP-78-0002	CDBG-DR	\$11,938,162,230.00
B-18-DE-72-0001		

Estimated Total HUD Funded Amount: \$5,471,753.77

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$5,471,753.77

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

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

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE O	RDERS, AND R & 58	REGULATIONS LISTED AT 24 CFR 50.4
Atamana IIIII-	& 30:	T T T T T T T T T T T T T T T T T T T
Airport Hazards 24 CFR Part 51 Subpart D	Yes No □ ⊠	The closest airport to the Project site is the local civilian airport the Aeropuerto Eugenio María de Hostos, 85,641 ft to the northwest. The closest military airport is Rafael Hernández Airport, approximately 166,972 ft to the northwest. The Project is not located within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements as per 24 CFR Part 51 Subpart D.
		Refer to worksheet in Attachment A and Figure 3 in Attachment B.
Coastal Barrier Resources	Yes No	The project is not located in a coastal barrier
Coastal Barrier Resources Act, as amended by the Coastal Barrier		resource area. The nearest coastal barrier (PR-65P) is located approximately 4 miles (21,120 ft) south from site. This project has

Improvement Act of 1990 [16 USC 3501]		no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.
		Refer to worksheet in Attachment A and Figure 4 in Attachment B.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes No	The proposed project site is within FEMA designated as Zone X (Area of no or minimal flood hazard). Reference: Flood Insurance Rate Map Panel No. 72000C1570H Effective Date: April 19, 2005, FEMA Flood Map Service Center - https://msc.fema.gov/portal/home
		The project is in compliance with the Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a].
		Refer to worksheet in Attachment A, Figure 10a in Attachment B
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes No	The project's municipality or air quality management district is in attainment status for all criteria pollutants. Project does not include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities or five or more dwelling units. Municipalities in nonattainment or maintenance areas include Arecibo, Bayamón, Cataño, Guaynabo, Salinas, San Juan, and Toa Baja. This project is in compliance with the Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93.
		Refer to worksheet in Attachment A and Figure 5 in Attachment B.
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes No □ ⊠	The project site is not located in a Coastal Zone; it is 3.5 miles (19,008 ft) from the coastal zone boundary. The project is in compliance with the Coastal Zone Management Act.

		Refer to worksheet in Attachment A and Figure 6 in Attachment B.
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes No	The Lead Based Paint (LBP) survey found positive components with LBP only at 516 linear feet of yellow parking lines. LBP abatement will be performed by a DNRE certified contractor prior to any work at the project site. Removed paint will be disposed at an DNRE/EPA approved final disposal facility. See Attachment G. No Asbestos Containing Materials (ACM) was found in survey was conducted to the facility on June 14, 2023. Refer to Attachment H.
		The HUD standard for radon is 4 picoCuries per liter (pCI/L) for residential buildings. Indoor radon levels below this level are considered acceptable in homes.
		This project does not include a residence. The facility could involve mid- to long-term occupancy (greater than 4 hours a day). The PRDOH has determined that determining the property's radon levels is infeasible and impracticable. See Memorandum to File and correspondence in Attachment J.
		A review of U.S. Environmental Protection Agency (EPA) databases, including Resource Conservation and Recovery Act Information, air pollution data, National Pollutant Discharge Elimination System, Toxics Release Inventory, Superfund Enterprise Management System, Brownfields Assessment, Cleanup and Redevelopment Exchange System, and Toxic Substances Control Act was undertaken to determine if any sites of concern were located within an approximate 3,000-foot radius of the project site.
		A review of EPA's NEPAssist tool showed there are no records of toxic, hazardous, or radioactive substance on Project Site. Within

3,000 feet of the project site, one (1) RCRA site was identified, PRASA Reparto del Valle STP at 165 ft distance from project. This site has no reported or any EPA formal or informal action reported for the last five years.

PRASA WTP Lajas Filter Plant was identified for a wastewater NPDES permit at 1,960 ft distance. This site did not report or any EPA formal or informal action for the past five years, except a discharge violation reported on the second quarter of year 2024. ECHO Facility Reports are included in Attachment C.

The Phase I Environmental Site Assessment conducted revealed that no recognized environmental conditions (RECs) were identified in connection with the subject site. See report in Attachment E.

The project will not involve residents or increase in occupancy of any structure. There would be no increase in risk associated with the proposed project. Therefore, the project is in compliance with the Contamination and Toxic Substances requirements, 24 CFR Part 50.3(i) & 58.5(i)(2).

Refer to worksheet in Attachment A, Figure 7 in Attachment B, NEPA Assist Reports in Attachment C and Phase I ESA in Attachment E.

Endangered Species	Yes No	Per the Official Species List from the U.S.
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402		Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website, the Puerto Rican Boa can be found but there are no critical habitats at this location. Project will have no potential to affect species or habitats due to the nature of the activities involved in the project and qualifies under consistency letter provided by USFWS on March 10, 2024. The project is in compliance with the Endangered Species Act.
		The proposed activities are covered by the USFWS Blanket Clearance Letter for Federally sponsored projects, Housing and Urban Development of January 14 of 2013, Item 10. If a Puerto Rican Boa is encountered, work will cease until it moves off the site or, failing that, the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers will be notified for safe capture and relocation of the animal, in accordance with the USFW Puerto Rican Boa Conservation Measures guidelines.
		The project is in compliance with the Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402. Refer to worksheet in Attachment A, Figure 8 in Attachment B and IPaC report, Species List and USFWS Consistency Letter in Attachment D.
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes No □ ⊠	The project will not result in an increased number of people being exposed to hazardous operations by increasing residential densities, converting the type of use of a building to habitation, or making a vacant building habitable.
		The proposed project does not include a hazardous facility that mainly stores, handles, or processes flammable or combustible chemicals such as bulk fuel

		storage. Planned activities at the project area do not include installation of storage tanks. The project will not introduce new residents, employees or clients during the daytime hours who could be exposed to any explosive or flammable hazards. Examination of the aerial views and street views shows no above ground storage tanks within a one (1) mile radius. The project is compliance with the Explosive and Flammable Hazards regulations, 24 CFR Part 51 Subpart C. Refer to worksheet in Attachment A.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes No	The project site consists of completely developed urban land. The project will not require conversion of farmland to non-agricultural land uses. This project is in compliance with the Farmlands Protection Policy Act. The project is compliance with the Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658. Refer to worksheet in Attachment A and Figure 9 in Attachment B.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No □ ⊠	The proposed project is not located in the Federal Flood Risk Management Standard (FFRMS) floodplain. The extent of the FFRMS floodplain was determined using the 0.2 percent flood approach (0.2 PFA) using the 500-year floodplain as indicated on the ABFE Map. https://gis-r2-fema.hub.arcgis.com/pages/puertorico. The project site is located outside of the 0.2 percent floodzone. See worksheet in Attachment A and Figure 10b in Attachment B. The project does not require compliance with 8-step decision-making at 24 CFR Part 55.20 or the 5-step decision-making at 24 CFR 55.12 (a). Thus, the project is in compliance with Executive Order 11988, as amended by Executive Order 13690, Section 2: 24 CFR Part 55. No formal compliance steps or mitigation are required.

Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes No	The site was evaluated on December 25, 2023, April 22, 2024, and again on June 26, 2024, by an SOI Qualified Architect/Architectural Historian and by an SOI Qualified Archaeologist. (See Attachment Appendix F). SHPO concurred with a finding of No Historic Properties Affected within the project's Area of Potential on Effects on January 28, 2025. This project is in compliance with the Historic Preservation Act of 1966, particularly section 106 and 110; 36 CFR Part 800. Refer to worksheet at Attachment A and the Section 106 Consultation Package in Attachment F.
Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes No	This project does not involve new construction for residential use, nor does it involve rehabilitation of an existing residential property. This project consists of the rehabilitation of an existing non-residential facility. The noise that will be produced during construction is generated by the operation of construction equipment. All equipment and machinery will have noise dampers maintained in accordance with manufacturer's recommendations to control noise generation. Construction activities will be carried out during the day and have minimal impacts on the neighboring community. The noise levels attributable to construction activities will be temporary in nature and is not expected to exceed 65 dBA. The project does not require further evaluation under HUD's noise regulation. Therefore, the project complies with the regulation. This project is in compliance with the Noise Control Act. Refer to worksheet in Attachment A.
Sole Source Aquifers	Yes No □ ⊠	There are no EPA sole source aquifers in Puerto Rico. Furthermore, the project consists of activities that are unlikely to

Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149		have an adverse impact on groundwater resources. The project complies with Sole Source Aquifer regulations, Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149. Refer to worksheet in Attachment A and Figure 11 in Attachment B.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes No	The National Wetlands Inventory (NWI) mapping shows a riverine wetland that runs along the north and west of the project site. The riverine wetland runs approximately 1000 meters long and is located approximately 10 meters north of the project site. The proposed activities will not cause adverse temporary or permanent impact to the riverine wetlands. The wetlands are outside of the project footprint. Best management practices will be used to avoid the adjacent wetland. The project is in compliance with Wetland Protection requirements and Executive Order 11990.
Wild and Scenic Rivers		Refer to worksheet in Attachment A and Figure 12 in Attachment B.
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes No □ ⊠	Puerto Rico has three Wild and Scenic Rivers located in the east side of Puerto Rico. The proposed project locates approximately miles (443,520 ft) west of the scenic river. There would be no impact to Wild and Scenic Rivers. This project is in compliance with the Wild and Scenic Rivers Act.
		Refer to worksheet in Attachment A and Figure 13 in Attachment B.

Environmental Justice	Yes	No	The project would not result in
Executive Order 12898	Yes	No 🗵	disproportionately adverse environmental effects on minority or low- income populations. It does not have discriminatory elements excluding benefits from people due to ethnic origin or color, age, gender, religion, income, or disabilities. The project would not result in disproportionately adverse environmental effects on minority or low-income populations. The proposed project would not result in the displacement of minority or low-income populations. The project is in compliance with Executive
			Order 12898. Refer to worksheet in Attachment A.

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 1

Environmental	Impact	
Assessment Factor	Code	Impact Evaluation
LAND DEVELO	PMENT	
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	The proposed project includes the construction of a sports and community exercise facility with an athletic and walking field, roller skating and exercise areas, other recreation areas and meeting rooms for sports clinics, health, and related conferences. The proposed project site has been zoned D-P (Dotacional Parque) now D-A (Dotacional Area Abierta), endowment for open area, according to the "Reglamento Conjunto 2020" and "Mapa"

		Calificación Plan Territorial Municipio de Lajas" adopted by the Junta de Planificación de Puerto Rico on June 28, 2017. This district was created to promote open areas for recreation and public areas. The proposed project requires the acquisition of the property. Source Document: Refer to Figure 14 in Attachment B- Land Use Map (Mapa Calificación Plan Territorial Municipio de Lajas. Effective date: December 30, 2016. Adopted on June 28, 2017).
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	The proposed project consists of the construction of a sport and exercise facility at an already developed area. No adverse impact to soils is expected as part of the proposed project. The proposed project area is mostly flat, no impact on slopes is anticipated. Before the commencement of construction work, the contractor will obtain a Construction General Permit from OGPe and will establish the necessary control measures to prevent erosion and sedimentation at the project site. The project design will comply with current codes related to erosion control and stormwater runoff. The proposed development will incorporate landscaping improvements that do not interfere with local birds, and terrestrial fauna. During construction activities, and in compliance with the USEPA NPDES Construction General Permit and the local stormwater runoff control regulations, the applicant will implement a Stormwater Pollution Prevention Plan that will include structural and non-structural BMPs to keep sediment in place (erosion control) and to capture any sediment that is moved by stormwater before it leaves the site (sediment control). There would be no significant permanent changes to the site that would affect drainage, or stormwater runoff. Temporary impacts would be mitigated by erosion and sedimentation control BMPs implemented during construction.
Hazards and Nuisances including Site Safety and Noise	2	The contractor will prepare and implement a Health and Safety Plan. All construction activities would be performed in strict compliance with local and federal job safety laws and regulations to ensure that there are no risks to the workers and that they are not exposed to unnecessary accident hazards. All construction equipment will be fitted with mufflers in good working conditions to minimize noise. Construction activities schedules will be restricted to not disturb the nearby communities during normal resting periods. All the equipment and heavy machinery will travel through

		the roadway with less sensitive receptors, such as schools, hospitals, and residences. Construction-related noise will take place during permitted hours and avoiding work during sensitive times, like early mornings or late evenings. Additionally, quieter construction equipment, employing mufflers or noise-reducing attachments, and maintaining machinery in good condition will be required to the project contractor in order to lower noise levels in compliance with the PR Noise Pollution Control Regulation. The proposed project, once constructed, would not create any additional hazards or nuisances, or create any new site safety or noise issues. Standard BMPs, such as construction fencing, would be applied to protect the public from typical construction hazards. BMPs and signage would warn and protect the public during construction activities.
Energy Consumption	2	During construction the energy services connection for the project office will be coordinated with LUMA/PREPA. The project site already has the appropriate infrastructure for electric energy connection with LUMA. It is expected that the operation of the proposed project will help reduce energy consumption because of its ecological design, that includes reforestation of areas.

Environmental	Impact	
Assessment Factor	Code	Impact Evaluation
SOCIOECONOM	IIC	
Employment and Income Patterns	1	It is expected that the impacts of the proposed action on regional employment would be positive. The investment of approximately \$3,000,000.00 for the project construction would induce direct and indirect jobs because of the proposed project. Regional enterprises would participate in a significant part of this investment, which combined with other related factors, would promote an employment and income increase and consequently are expected to create positive economic growth for the region. This is of particular importance considering the high unemployment rate of many of the municipalities of the region.
Demographic Character Changes, Displacement	2	The proposed project would not impact the community negatively. There would be no community cohesion adverse impact since no residential structures would need to be acquired. The proposed project will not destroy or

business establishments.		relocate existing jobs, community facilities, or any business establishments.
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Environmental	Impact			
Assessment Factor	Code	Impact Evaluation		
COMMUNITY FACILITIES AND SERVICES				
Educational and Cultural Facilities	2	The proposed project consists of the construction of a sport and exercise facility at an already developed area. The nearest educational facilities are Santa Rosa Head Start (approximately 1,475 ft northeast from project site) and Escuela Elemental Urbana (approximately 2,060 ft southwest of project site). The project would not result in any change to regional or local area educational and cultural facilities or increase demand for them. The project would provide an overall benefit for residents of the community.		
Commercial Facilities	2	The proposed project consists of the construction of a sport and exercise facility. The proposed project will not destroy or relocate existing jobs, community facilities, or any business establishments. Minor beneficial impacts are anticipated due to the proposed activity, as it is expected that nearby retail and commercial services would be positively impacted by the proposed project by potentially bringing in new customers.		
Health Care and Social Services	2	The proposed project consists of the construction of a sport and exercise facility. No significant impact to Health care and Social Services is expected as part of the proposed project.		
Solid Waste Disposal / Recycling	2	The solid waste disposal during construction will be made in compliance with procedures and regulations established by the Department of Natural and Environmental Resources (DNER). The contractor shall obtain from OGPe a Unique Incidental Permit, before starting those activities. Based on the current land uses in the proposed project site and observations of the area, no hazardous material is expected to be found within the proposed project site. A permit will be procured and obtained from the OGPe to perform activities generating solid waste (DS-3 Permit), part of the Unique Incidental Permit. The regulatory requirements related to solid waste management would be strictly enforced.		

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		Solid waste generated during construction will be removed and taken to an DNER permitted sanitary landfill near the project area designated for this purpose. Burning of solid waste will not be permitted. Any material or solid waste will be transported carefully to and from the project site in order to prevent dispersion and release of materials along the roads through which the materials are being carried. All asphalt or concrete residues remaining in the trucks after unloading will be handled appropriately. Remnants will not be deposited in public or private land inappropriately or without authorization for disposal of these residues. The contractor will collect and dispose solid wastes at least once a week or at the frequency estimated (in terms of potential risks for public health, safety, or visual quality of the area) for this type of construction project. During operation the project will have available trash bins and recycling bins at different locations.
Waste Water /	2	
Sanitary Sewers Water Supply	2	The proposed project consists of the construction of a sport and exercise facility. No significant impacts are expected. Incremental wastewater generation patterns will not significantly exceed those currently observed at the facility. The proposed activity would not significantly affect the existing PRASA wastewater infrastructure and would not increase demand for service. Water supply infrastructure for this facility will be
		connected to the PR Aqueduct and Sewer Authority. Incremental drinking water demand patterns will not significantly exceed those currently observed at the recreational facility relative to the current demand for these services in the area. Temporary demand for water for construction and dust suppression will be attended by existing on-site and nearby public water connections.
Public Safety - Police, Fire and Emergency Medical	2	Police, Fire and Emergency Medical Services exist within a one (1) mile radius from the project site, including but not limited to Lajas Health Center, State and Municipal Police Headquarter, and Fire Station. The approximate response time is four to ten minutes. Although there might be some delay during the construction phase of the project, a maintenance of traffic plan will be developed for the project to assure that the traffic flow is acceptable.
Parks, Open Space and Recreation	1	The proposed project consists of the construction of a sport and exercise facility with an athletic and walking

		field, roller skating and exercise areas that will provide a wide-open space and recreational area.
Transportation and Accessibility	2	The proposed project can be accessed from state road PR-117. During construction phase transportation impacts generated by the project would be reduced with the implementation of a Traffic Control Plan. During the operation phase transportation impacts would be minimal. No adverse impact on the local transportation system and accessibility issues are expected as part of the proposed project.

Environmental	Impact	
Assessment Factor	Code	Impact Evaluation
NATURAL FEATU	RES	
Unique Natural Features, Water Resources	2	The proposed project consists of the construction of a sport and exercise facility. No unique or locally important natural features exists on or near the site (e.g., caves, cliffs, vistas/viewsheds, canyons, waterfalls, sand dunes, or tree stands), except for the adjacent Lajas irrigation channel adjoining north of the project site. Hence, no impact is expected to occur as part of the proposed project construction activities or future operation of the sport and exercise facility.
Vegetation, Wildlife	2	The proposed project consists of the construction of a sport and exercise facility. The project activities would be within an existing urban developed area. The project would not impact native vegetation, wildlife, or wildlife habitat. On March 10, 2024, the USFWS determined that the proposed action qualifies for the blanket clearance letter. Refer to Attachment D.
Climate Change Impacts	2	The proposed project consists of the construction of a sport and exercise facility. There would be no major changes to the site configuration or structure that would specifically impact rising sea levels or the possibility of increases in rainfall intensity. The project site is not located in a 100-year floodplain according to Advisory Flood Elevation Map Panel No. 72000C1570H Effective Date: December 11, 2018.
Energy Efficiency	2	The project would use energy efficient LED equipment. It would not require major energy demand, therefore regional energy use would not change.
Other Factors	None	None

Additional Studies Performed:

- Environmental Site Assessment (ESA) Phase I Study Former San Luis Academy (September 2023) See Attachment E.
- Lead Base Paint (LBP) Survey Report Lajas Sport Center/Academia San Luis (June 2023)
 - The LBP inspection found positive components with Lead Based Paint (LBP) only at yellow parking lines. See Attachment G.
- Asbestos Containing Materials (ACM) Survey Report Lajas Sport Center/Academia San Luis (June 2023)

The laboratory results did not identify asbestos in the samples taken during the ACM inspection conducted on June 14, 2023, for the existing facilities at the proposed project site. See Attachment H.

Field Inspection (Date and completed by):

Field inspections and data collection were completed by Keyla Pacheco and Luis A. Maldonado, ACEnvironmental, Inc. on August 14, 2023. In addition, the site was evaluated on December 25, 2023, April 22, 2024, and again on June 26, 2024, by a SOI Qualified Architect/ Architectural Historian and by a SOI Qualified Archaeologist. (See Attachment Appendix F.)

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

- 1. 7.5-Minute Quadrangle of Lajas, PR USGS 2018
- 2. Open Street Map recovered using QGIS
- 3. Flood Insurance Rate Map Panel No. 72000C1570H effective date April 19, 2005
- 4. EPA NEPAssist Tool Analysis https://nepassisttool.epa.gov/nepassist/nepamap.aspx https://nepassisttool.epa.gov/nepassist/analysis.aspx
- 5. US Fish & Life Service Information for Planning and Consultation IPAc Resource List
- 6. Web Soil Survey Map. United States Department of Agriculture, Natural Resources Conservation Services. Web Soil Survey. Internet Web Site: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.
- 7. National Register of Historic Places for "Lajas, PR" https://www.nps.gov/subjects/nationalregister/database-research.htm
- 8. Registro nacional de Lugares Históricos https://oech.pr.gov/ProgramaConservacionHistorica/Pages/Registro-nacional-de-Lugares-Historicos.aspx
- 9. United States Department of Housing and Urban Development: The Noise Guidebook Environmental Planning Division, Office of Environment and Energy. September 1990
- Map of Sole Source Aquifers https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877 155fe31356b
- 11. United States Environmental Protection Agency. Sole Source Aquifers subject to HUD EPA. Memorandum of Understanding dated September 30, 1990.
- 12. National Wild and Scenic Rivers System https://www.rivers.gov/puerto-rico.php.
- 13. Mapa Calificación Plan Territorial Municipio de Lajas. Effective date: December 30, 2016. Adopted on June 28, 2017

List of Permits Obtained:

Federal - None required. Local - PRASA, OPPE (DEC), Health Dept, Fire Dept, ICP, NET.

Public Outreach [24 CFR 50.23 & 58.43]:

A combined Notice of Finding of No Significant Impact (FONSI) and Notice of Intent to Request Release of Funds (NOI-RROF) will be published in a local newspaper. Copies of that public notice also will be sent to all known interested parties.

Cumulative Impact Analysis [24 CFR 58.32]:

Under the City Revitalization Program, the project area is part of larger, ongoing infrastructure improvements to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses. The proposed project includes the construction of a sports and community exercise facility with an athletic and walking field, roller skating and exercise areas, other recreation areas and meeting rooms for sports clinics, health, and related conferences. The proposed project would contribute to these beneficial impacts. Short-term impacts during construction would be mitigated and would not contribute to construction impacts surrounding the project area. The project will not contribute to adverse cumulative impacts. In accordance with 24 CFR 58.32 (Aggregation), there are no cumulative impacts associated with the proposed project. The proposed activity would not change the land use of the spaces or the adjoining parcels. A slight increase in use of the spaces would result from proposed project. The proposed project site has been zoned D.p. (Dotacional Parque) now D-A (Dotacional Area Abierta), endowment for open area, according to the "Reglamento Conjunto 2020" and "Mapa Calificación Plan Territorial Municipio de Lajas" adopted by the Junta de Planificación de Puerto Rico on June 28, 2017. This district was created to promote open areas for recreation and public areas. Therefore, the proposed project is consistent with the municipal land use plan. The project site environmental impacts identified in this document, including cumulative impacts, are mitigated through the mitigation measures, and would be adopted as a condition of approval of the project. No adverse cumulative impact is anticipated.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

The existing property consists of a closed private school and grounds with buildings that housed an academic area (school), a recreational area (court) and a residential area (nuns' residence) and a parking lot and sidewalks. The site is cleared except for landscaping trees. The need for the project arises from the community's need for sports and recreational facilities in the immediate area. There is nothing similar in the area, so the community is sometimes forced to go outside its immediate environment to meet those needs. The location needs to be within the immediate area serviced by the Municipality of Lajas free collective transportation service that covers all the neighborhoods of Lajas to facilitates access to all citizens regardless of their location within the Municipality. The proposed action is to acquire and repurpose and reconstruct the site and facilities to create recreational facilities to be used by the community. This site has existing utilities, buildings, and recreational facilities that

be used either wholly or partially for the new purpose. The site is already cleared except for landscaping. There are existing transportation stops near the proposed site. The proposed action and design are in accordance with zoning and is compatible with the proposed use. The proposed action will enhance the recreational facility. This site is consistent with city planning.

Other locations were considered. The municipality does not have any municipality-owned parcel that would serve to build the proposed recreational facility. The acquisition of a different site of sufficient size would require clearing land, installation of new utilities, and all of the buildings would have to be new construction. These costs along with the cost of acquiring the land would be substantially higher than the proposed action. Use of a different location would allow the closed site to continue to be abandoned and deteriorate.

No Action Alternative [24 CFR 58.40(e)]:

Under the No Action Alternative, the applicant would not receive federal funding for the proposed activity and the proposed improvements will not be implemented, the site will continue to be unused and not be improved. The Lajas communities would continue to be deprived of any public sport and recreational facilities as proposed in this project within the Lajas municipality boundary. Therefore, the no action alternative does not meet the purpose and need of the Project.

Summary of Findings and Conclusions:

The proposed project includes the acquisition of the site, design, permits, and construction of a sports and community exercise facility with an athletic and walking field, roller skating and exercise areas, other recreation areas and meeting rooms for sports clinics, health, and related conferences.

The Municipality of Lajas proposes the construction of new sports/recreational facilities that include an athletic and walking track, various courts and halls for sports clinics to be included within the projects of the City Revitalization Program with CDBG-DR funds. The proposed project includes the following works and/or activities: The facilities will have as their main component the running and/or walking track with a minimum length of 400 meters and 8 lanes. In addition, it is proposed to set up tennis, pickleball and beach tennis courts, as well as batting cages. In addition to the athletic facilities, it includes the rehabilitation, improvements and/or demolition of the existing infrastructure on the property that includes restrooms, administrative offices, classrooms and storage.

The type of construction proposed will be mainly: concrete, cement blocks, and asphalt. In addition, steel, synthetic material, and other will be used. This project includes reforestation activities and the implementation of green initiatives. Demolition activities of a wing of the main structure and a basketball court are contemplated due to the dimensions required for the track.

- Hazards and Nuisances including Site Safety and Noise: As mentioned in previous sections, potential impacts relate to Storm Water Runoff, Construction-related Noise Implementation of mitigation measures mentioned above would reduce potential impacts.
- Transportation and Accessibility: Project construction-related transportation impacts generated by the project would be reduced with the implementation of a Traffic Control Plan.
- Lead Based Paint (LBP): LBP abatement at 516 linear feet (Lft) of yellow parking lines will be performed by a DNRE certified contractor prior to any work at the project site. Removed paint will be disposed at an DNRE/EPA approved final disposal facility.

The findings of this EA indicate that no significant effects would result from implementation of the proposed project assuming standards and recommended impact mitigation measures listed in Mitigation Measures and Conditions [40 CFR 1505.2(c)], below, are implemented. Based on this analysis, a Finding of No Significant Impact (FONSI) is warranted for the proposed project.

sport and recreational facilities as proposed in this project within the Lajas municipality boundary.

No Action Alternative [24 CFR 58.40(e)]:

Under the No Action Alternative, the applicant would not receive federal funding for the proposed activity and the proposed improvements will not be implemented, the facility will continue unused will not be improved, and the community would be deprived of a sport facility.

The No Action Alternative, the Lajas communities will not have any public sport and recreational facilities as proposed in this project within the Lajas municipality boundary. Therefore, the no action alternative does not meet the purpose and need of the Project and was dismissed for further consideration.

Summary of Findings and Conclusions:

The proposed project includes the acquisition of the site, design, permits, and construction of a sports and community exercise facility with an athletic and walking field, roller skating and exercise areas, other recreation areas and meeting rooms for sports clinics, health, and related conferences.

The Municipality of Lajas proposes the construction of new sports/recreational facilities that include an athletic and walking track, various courts and halls for sports clinics to be included within the projects of the City Revitalization Program with CDBG-DR funds. The proposed project includes the following works and/or activities: The facilities will have as their main component the running and/or walking track with a minimum length of 400 meters and 8 lanes. In addition, it is proposed to set up tennis, pickleball and beach tennis courts, as well as batting cages. In addition to the athletic facilities, it includes the rehabilitation, improvements and/or demolition of the existing infrastructure on the property that includes restrooms, administrative offices, classrooms and storage.

The type of construction proposed will be mainly: concrete, cement blocks, and asphalt. In addition, steel, synthetic material, and other will be used. This project includes reforestation activities and the implementation of green initiatives. Demolition activities of a wing of the main structure and a basketball court are contemplated due to the dimensions required for the track.

- Hazards and Nuisances including Site Safety and Noise: As mentioned in previous sections, potential impacts relate to Storm Water Runoff, Construction-related Noise Implementation of mitigation measures mentioned above would reduce potential impacts.
- Transportation and Accessibility: Project construction-related transportation impacts generated by the project would be reduced with the implementation of a Traffic Control Plan.
- Lead Based Paint (LBP): LBP abatement at 516 linear feet (Lft) of yellow parking lines will be performed by a DNRE certified contractor prior to any work at the project site. Removed paint will be disposed at an DNRE/EPA approved final disposal facility.

The findings of this EA indicate that no significant effects would result from implementation of the proposed project assuming standards and recommended impact mitigation measures listed in Mitigation Measures and Conditions [40 CFR 1505.2(c)], below, are implemented. Based on this analysis, a Finding of No Significant Impact (FONSI) is warranted for the proposed project.

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		
Endangered Species	If a Puerto Rican Boa is encountered, work will cease until it moves off the site or, failing that, the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers will be notified for safe capture and relocation of the animal, in accordance with the USFWS Puerto Rican Boa Conservation Measures guidelines.		
Contamination and Toxic Substances, 24 CFR Part 50.3(i) & 58.5(i)(2)	Asbestos and lead studies were conducted to the project site. Abatement will be performed to Lead- based paint at 516 linear feet of yellow parking lines by a DNRE certified contractor prior to any work at the project site. Removed paint will be disposed at an DNRE/EPA approved final disposal facility.		
Clean Air	Potential Air Quality impacts are primarily short-term construction related. Implementation of Construction Related Air Pollution Controls (Dust and Equipment Conditions) would reduce potential impacts.		
Noise Abatement and Controls	Short-term construction-related noise impacts have the potential to impact surrounding uses. Implementation of Construction Noise Controls for heavy equipment and work schedule during working hours would reduce construction noise levels.		
Hazards and Nuisances including Site Safety and Noise	Underground lines would be identified and marked. Any excavation near these lines would be conducted with appropriate BMPs. Traffic control signing and adequate fencing around construction areas while construction activities are undertaken would protect the public from hazards and nuisances. Signs will be posted informing of the construction of the project, and public access will be restricted by security fences. Noise impacts would be addressed by conducting		

Solid Waste Disposal / Recycling	construction and demolition activities in accordance with local noise regulations and proper construction equipment maintenance. Noise disturbance missions from the equipment used would be minimized by restricting the contractor's working hours to daytime hours, from 7:00 AM to 4:00 PM, Monday through Friday. In accordance with Puerto Rico Law No. 70 of September 18, 1992, as amended, known as "Law for the Reduction and Recycling of Solid Wastes in Puerto Rico", recycling recovered construction debris materials where possible would minimize generation of solid waste so that daily capacities of landfills and other solid waste facilities would not be exceeded.
Soil Suitability/Slope/Erosion/Drainage/S torm Water Runoff	Implementation of Best Management Practices During Construction would reduce and eliminate potential contamination of stormwater and non-stormwater discharges from the construction site.
Public Safety - Police, Fire and Emergency Medical	Traffic may have to be rerouted temporarily during construction. Emergency services would be notified of traffic control changes ahead of time, and access by emergency vehicles always would be allowed within the work zone
Transportation and Accessibility	A traffic and transportation management plan would be implemented to address those short-term traffic effects and to provide the safest routes during construction.
Hazards and Nuisances including Site Safety and Noise	Underground lines would be identified and marked. Any excavation near these lines would be conducted with appropriate BMPs. Traffic control signing and adequate fencing around construction areas while construction activities are undertaken would protect the public from hazards and nuisances. Signs will be posted informing of the construction of the project, and public access will be restricted by security fences. Noise impacts would be addressed by conducting construction and demolition activities in accordance with local noise regulations and proper construction equipment maintenance. Noise disturbance missions from the equipment used would be minimized by restricting the contractor's working hours to daytime hours, from 7:00 AM to 4:00 PM, Monday through Friday.

All local and state permits will be obtained prior to commencing any construction at the project site.

Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.27] The project will not result in a significant impact on the quality of the human environment.
Finding of Significant Impact [24 CFR 58.40(g)(2); 40 CFR 1508.27] The project may significantly affect the quality of the human environment.
Preparer Signature: Kyl E. Pah L Date: January 31, 2025
Name/Title/Organization: Keyla Pacheco, ACE Environmental
Certifying Officer Signature:Date:
Name/Title: Sally Z. Acevedo Cosme- Permits and Environmental Compliance Specialist
This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Determination:

ATTACHMENT A WORKSHEETS



WASHINGTON, DC 20410-1000

Airport Hazards (CEST and EA) - PARTNER

https://www.hudexchange.info/environmental-review/airport-hazards

1. To ensure compatible land use development, you must determine your site's proximity military airports. Is your project within 15,000 feet of a military airport or 2,500 feet airport?				
	⊠No →	If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.		
	□Yes →	Continue to Question 2.		
2.	Is your pro	ject located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential?		
	□Yes, proje	ect is in an APZ \rightarrow Continue to Question 3.		
	□Yes, proje	ect is an RPZ/CZ \rightarrow <i>Project cannot proceed at this location</i> .		
	No, proje	ect is not within an APZ or RPZ/CZ		
	-	e RE/HUD agrees with this recommendation, the review is in compliance with this section.		
		tinue to the Worksheet Summary below. Continue to the Worksheet Summary below. ide a map showing that the site is not within either zone.		
3.	Is the proje	ct in conformance with DOD guidelines for APZ?		
	□Yes, proje	ect is consistent with DOD guidelines without further action.		
	Cont	RE/HUD agrees with this recommendation, the review is in compliance with this section. Einue to the Worksheet Summary below. Provide any documentation supporting this rmination.		
	-	oroject cannot be brought into conformance with DOD guidelines and has not been d. → Project cannot proceed at this location.		
If n	nitigation m	easures have been or will be taken, explain in detail the proposed measures that must		

be implemented to mitigate for the impact or effect, including the timeline for implementation.

Click here to enter text.

→ Work with the RE/HUD to develop mitigation measures. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The closest airport to the Project site is the local civilian airport the Aeropuerto Eugenia Maria de Hostos, 3.5 miles (85,641 ft) to the north. The closest military airport/heliport is Fort Buchanan, approximately 65 miles (346,000 ft) to the northeast. The Project is not located within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements as per 24 CFR Part 51 Subpart D.

View Figure 3 in Attachement B



WASHINGTON, DC 20410-1000

Coastal Barrier Resources (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/coastal-barrier-resources

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

1. Is the project located in a CBRS Unit?

If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.

 \square Yes \rightarrow Continue to 2.

<u>Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project.</u> In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see <u>16 USC 3505</u> for exceptions to limitations on expenditures).

2. Indicate your recommended course of action for the RE/HUD

Consultation with the	FWS
Cancel the project	

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project is not located in a coastal barrier resource area. The nearest coastal barrier (PR-65P) is located approximately 4 miles south from site. This project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.

See Figure 4 in Attachement B.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT WASHINGTON, DC 20410-1000

Flood Insurance (CEST and EA) - PARTNER

https://www.hudexchange.info/environmental-review/flood-insurance

1.	Does this project involve mortgage insurance, refinance, acquisition, repairs, rehabilitation, or construction of a structure, mobile home, or insurable personal property? ⊠ No. This project does not require flood insurance or is excepted from flood insurance. → Continue to the Worksheet Summary.
	\square Yes \rightarrow Continue to Question 2.
2.	Provide a FEMA/FIRM map showing the site. The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).
	Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area? ☑ No → Continue to the Worksheet Summary.
	☐ Yes → Continue to Question 3.
3.	Is the community participating in the National Flood Insurance Program <i>or</i> has less than one year passed since FEMA notification of Special Flood Hazards?
	 Yes, the community is participating in the National Flood Insurance Program. Flood insurance is required. Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance. → Continue to the Worksheet Summary.
	 Yes, less than one year has passed since FEMA notification of Special Flood Hazards. If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required. → Continue to the Worksheet Summary.
	 □ No. The community is not participating, or its participation has been suspended. Federal assistance may not be used at this location. Cancel the project at this location.

Worksheet Summary

Include all documentation supporting your findings in your submission to HUD.

The proposed project site is within FEMA designated as Zone X (Area of no or minimal flood hazard). The project is in compliance with flood insurance requirements.

Reference: Flood Insurance Rate Map Panel No. 72000C1570H Effective Date: April 19, 2005 FEMA Flood Map Service Center - https://msc.fema.gov/portal/home

Refer to Figure 10 in Attachement B.



WASHINGTON, DC 20410-1000

Air Quality (CEST and EA) - PARTNER

https://www.hudexchange.info/environmental-review/air-quality

1.	Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?					
	\square Yes \rightarrow Continue to Question 2.					
	$oxtimes$ No $oldsymbol{ ightarrow}$ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide any documents used to make your determination.					
2.	Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants? Follow the link below to determine compliance status of project county or air quality management district: http://www.epa.gov/oaqps001/greenbk/					
	 No, project's county or air quality management district is in attainment status for all criteria pollutants → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. 					
	☐ Yes, project's management district or county is in non-attainment or maintenance status for one or more criteria pollutants. → Continue to Question 3.					
3.	Determine the <u>estimated emissions levels of your project for each of those criteria pollutants</u> that are in non-attainment or maintenance status on your project area. Will your project exceed any of the <i>de minimis or threshold</i> emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?					
	 No, the project will not exceed de minimis or threshold emissions levels or screening levels → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Explain how you determined that the project would not exceed de minimis or threshold emissions. 					
	☐ Yes, the project exceeds <i>de minimis</i> emissions levels or screening levels.					

- → Continue to Question 4. Explain how you determined that the project would not exceed de minimis or threshold emissions in the Worksheet Summary.
- 4. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Click here to enter text.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site is not located in an non- attainment or maintenance area for any criteria pollutants. Project does not include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities or five or more dwelling units. The project's municipality or air quality management district is in attainment status for all criteria pollutants. The project is in compliance with the Clean Air Act.

See Figure 5 in Attachement B. http://nepassisttool.epa.gov/nepassist/nepamap.aspx



WASHINGTON, DC 20410-1000

Coastal Zone Management Act (CEST and EA) - PARTNER

https://www.onecpd.info/environmental-review/coastal-zone-management

Projects located in the following states must complete this form.

r rojecto rocatea i	Tojects located in the following states mast complete this form.							
Alabama	oama Florida		Mississippi	Ohio	Texas			
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands			
American Samona	Guam	Maryland	New Jersey	Pennsylvania	Virginia			
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington			
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin			
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina				

1.	Is the project	located	in,	or does	it	affect,	а	Coastal	Zone	as	defined	in	your	state	Coasta
	Management P	lan?													

□Yes →	Continue 1	to Question 2	2.

2. Does this project include activities that are subject to state review?

⊔Yes →	Continue	to C	<i>(uestion</i>	3.
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3. Has this project been determined to be consistent with the State Coastal Management Program?

 \square Yes, with mitigation. \rightarrow The RE/HUD must work with the State Coastal Management Program to develop mitigation measures to mitigate the impact or effect of the project.

\square Yes, without mitigation. \rightarrow If the RE/HUD agrees with this recommendation, the review is
in compliance with this section. Continue to the Worksheet Summary below. Provide documentation
used to make your determination.

 \square No \rightarrow Project cannot proceed at this location.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

Map panel numbers and dates

- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The Project site is not located in a Coastal Zone, it is 3.5 miles from the coast. The project is in compliance with the Coastal Zone Management Act.

Refer to Figure 6 in Attachement B.

OMB No. 2506-0177 (exp. 9/30/2021)



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, DC 20410-1000

Contamination and Toxic Substances (Multifamily and Non-Residential Properties) – PARTNER

https://www.hudexchange.info/programs/environmental-review/site-contamination

1.	How was site contamination evaluated? Select all that apply.						
	☐ ASTM Phase I ESA						
	☐ ASTM Phase II ESA						
	☐ Remediation or clean-up plan						
	☐ ASTM Vapor Encroachment Screening						
	☑ None of the above						
	→ Provide documentation and reports and include an explanation of how site contamination						
	was evaluated in the Worksheet Summary.						
	Continue to Question 2.						
2.	Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect						
	the health and safety of project occupants or conflict with the intended use of the property?						
	(Were any recognized environmental conditions or RECs identified in a Phase I ESA and						
	confirmed in a Phase II ESA?)						
	\boxtimes No \rightarrow Explain below.						
	No toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property were identified in Phase I ESA conducted.						
	ightarrow If the RE/HUD agrees with this recommendation, the review is in compliance with						
	this section. Continue to the Worksheet Summary below.						
	\square Yes $ o$ Describe the findings, including any recognized environmental conditions						
	(RECs), in Worksheet Summary below. Continue to Question 3.						
	(RECS), III Worksheet Summary below. Continue to Question 3.						
3.	Can adverse environmental impacts be mitigated?						
	\Box Adverse environmental impacts cannot feasibly be mitigated \Rightarrow HUD assistance may not be						
	used for the project at this site. Project cannot proceed at this location.						
	☐ Yes, adverse environmental impacts can be eliminated through mitigation.						
JD r	egulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five						

¹ HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site. For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

 \rightarrow Provide all mitigation requirements² and documents. Continue to Question 4.

4. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls³, or use of institutional controls⁴.

Click here to enter text.

If a remediation plan or clean-up program was necessary, which standard does it follow?
☐ Complete removal
☐ Risk-based corrective action (RBCA)
→ Continue to the Worksheet Summary.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

There are no records of toxic, hazardous, or radioactive substances on the project site. Within 3,000 feet of the project site, one (1) RCRA site was identified, PRASA Reparto del Valle STP. This site has not had a release reported in the las five years ECHO Facility Reports for this site is included in Attachment C.

The project will not involve residents or increase in occupancy of any structure. There would be no increase in risk associated with the proposed project. The project is in compliance with Contamination and Toxic Substances requirements.

Refer to Figure 7 in Attachment B, and supporting documentation in Attachment C and Phase I ESA in Attachment E, Lead Base Paint Survey Report in Attachment F and Asbestos Containing Materials Survey Report in Attachment G.

https://nepassisttool.epa.gov/nepassist/nepamap.aspx

² Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

³ Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

⁴ Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.



WASHINGTON, DC 20410-1000

Endangered Species Act (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/endangered-species

1.	Does the project	t involve anv	activities that h	ave the potenti	al to affect s	species or habitats?

- □No, the project will have No Effect due to the nature of the activities involved in the project.
 - → If the RE/HUD agrees with this recommendation, the review is in compliance with this section.

 Continue to the Worksheet Summary below. Provide any documents used to make your determination.
- ⊠ No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.

Explain your determination:

USFWS determined the project proposed qualifies for the blanket clearance letter. Refer to Appendix E.

- → If the RE/HUD agrees with this recommendation, the review is in compliance with this section.

 Continue to the Worksheet Summary below. Provide any documents used to make your determination.
- \Box Yes, the activities involved in the project have the potential to affect species and/or habitats. \Rightarrow Continue to Question 2.
- 2. Are federally listed species or designated critical habitats present in the action area?

 Obtain a list of protected species from the Services. This information is available on the <u>FWS Website</u>.

 \boxtimes No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

- → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.
- \square Yes, there are federally listed species or designated critical habitats present in the action area. \rightarrow Continue to Question 3.
- 3. Recommend one of the following effects that the project will have on federally listed species or designated critical habitat:

- ☑ No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.
 - → If the RE/HUD agrees with this recommendation, the review is in compliance with this section.

 Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.
- ☐ May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.
 - → Partner entities should not contact the Services directly. If the RE/HUD agrees with this recommendation, they will have to complete Informal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.
- □Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.
 - → Partner entities should not contact the Services directly. If the RE/HUD agrees with this recommendation, they will have to complete Formal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

Per the Official Species List from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website, the Puerto Rican Boa can be found but there are no critical habitats at this location. Project will have no potential to affect species or habitats due to the nature of the activities involved in the project and qualifies under consistency letter provided by USFWS on March 10, 2023. The project is in compliance with the Endangered Species Act.

Refer to Figure 8 in Attachment B and Biological Assessment (IPaC), Species List and USFWS Consistency Letter in Attachment D.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT WASHINGTON, DC 20410-1000

Explosive and Flammable Hazards (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities

1.	Does the proposed HUD-assisted project include a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)? □ No → Continue to Question 2.
	☐ Yes Explain: Click here to enter text. → Continue to Question 5.
2.	Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion? □ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.
	☐ Yes → Continue to Question 3.
3.	 Within 1 mile of the project site, are there any current or planned stationary aboveground storage containers: Of more than 100-gallon capacity, containing common liquid industrial fuels OR Of any capacity, containing hazardous liquids or gases that are not common liquid industrial fuels?
	\square No \Rightarrow If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.
	\square Yes \rightarrow Continue to Question 4.
•	 4. Is the Separation Distance from the project acceptable based on standards in the Regulation? Please visit HUD's website for information on calculating Acceptable Separation Distance. □ Yes → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the "assessed tank."

□ No	
→ Continue to Qu	estion 6.
separation distanc	nowing the location of the project site relative to any tanks and you ce calculations. If the map identifies more than one tank, please identify chosen as the "assessed tank."
· ·	ocated at an acceptable separation distance from residences and an reproperties represents.
Please visit HUD's website	for information on calculating Acceptable Separation Distance.
☐ Yes	
•	agrees with this recommendation, the review is in compliance with thi to the Worksheet Summary below.
	owing the location of the project site relative to residences and any othe here people congregate or are present and your separation distance
□ No	
→ Continue to Que	estion 6.
Provide map(s) sho	wing the location of the project site relative to residences and any othe

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to make the Separation Distance acceptable, including the timeline for implementation. If negative effects cannot be mitigated, cancel the project at this location.

facility or area where people congregate or are present and your separation distance

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

Click here to enter text.

calculations.

Worksheet Summary

5. Is

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project will not result in an increased number of people being exposed to hazardous operations by increasing residential densities, converting the type of use of a building to habitation, or making a vacant building habitable. This project is in compliance with Explosive and Flammable Hazards.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, DC 20410-1000

Farmlands Protection (CEST and EA) - PARTNER

https://www.hudexchange.info/environmental-review/farmlands-protection

1.	land or conversion, that could convert agricultural land to a non-agricultural use? ☐ Yes → Continue to Question 2.
	 No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section.
	Continue to the Worksheet Summary below.
2.	Does "important farmland," including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site? You may use the links below to determine important farmland occurs on the project site:
	 Utilize USDA Natural Resources Conservation Service's (NRCS) Web Soil Survey http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm
	 Check with your city or county's planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
	 Contact NRCS at the local USDA service center http://offices.sc.egov.usda.gov/locator/app?agency=nrcs or your NRCS state soil scientist http://soils.usda.gov/contact/state_offices/ for assistance
	No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.
	☐ Yes → Continue to Question 3.
3.	Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.

Work with the RE/HUD to determine how the project will proceed. Document the conclusion:

scientist before sending it to the local NRCS District Conservationist.

Scientist or his/her designee informing them of your determination.

□ Project will proceed with mitigation.

Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Complete form AD-1006, "Farmland Conversion Impact Rating" and contact the state soil

Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 to the USDA-NRCS State Soil

Click here to enter text.

 \rightarrow If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.

□ Project will proceed without mitigation.

Explain why mitigation will not be made here:

Click here to enter text.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site consists of completely developed urban land. The project will not require conversion of farmland to non-agricultural land uses. This project is in compliance with the Farmlands Protection Policy Act.

Refer to Figure 9 Soil Map in Appendix B.

https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Floodplain Management (CEST and EA)

Reference

General Requirements	Legislation	Regulation
Executive Order 11988,	Executive Order 11988	24 CFR 55
Floodplain Management,	Executive Order 13690	
requires Federal activities to	42 USC <u>4001-4128</u>	
avoid impacts to floodplains and	42 USC 5154a	
to avoid direct and indirect		
support of floodplain		
development to the extent		
practicable.		

https://www.hudexchange.info/environmental-review/floodplain-management

1.	Does this project meet an exemption at 24 CFR 55.12 from compliance with HUD's floodplain management regulations in Part 55 or utilize the delayed compliance date for certain Office of Housing programs? ☐ Yes
	Select the applicable citation at <u>24 CFR 55.12</u> and provide supporting documentation for the determination if applicable.
	 a) HUD-assisted activities described in 24 CFR 58.34 and 58.35(b) b) HUD-assisted activities described in 24 CFR 50.19, except as otherwise indicated in § 50.19 c) The approval of financial assistance for restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property, where a permanent covenant or comparable restriction is place on the property's continued use for flood control, wetland projection, open space, or park land, but only if: (1) The property is cleared of all existing buildings and walled structures; and (2) The property is cleared of related improvements except those which: (i) Are directly related to flood control, wetland protection, open space, or park land (including playgrounds and recreation areas); (ii) Do not modify existing wetland areas or involve fill, paving, or other ground disturbance beyond minimal trails or paths; and (iii) Are designed to be compatible with the beneficial floodplain or wetland function of the property.
	 d) □ An action involving a repossession, receivership, foreclosure, or similar acquisition of property to protect or enforce HUD's financial interests under previously approved loans, grants, mortgage insurance, or other HUD assistance e) □ Policy-level actions described at 24 CFR 50.16 that do not involve site-based decisions
	f) A minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland;

	g) HUD's or the responsible entity's approval of a project site, an incidental portion of which is situated in the FFRMS floodplain (not including the floodway, LiMWA, or coastal high
	hazard area) but only if: (1) The proposed project site does not include any existing or proposed buildings or improvements that modify or occupy the FFRMS floodplain except de minimis improvements such as recreation areas and trails; and (2) the proposed project will not result in any new construction in or modifications of a wetland
	h) \square Issuance or use of Housing Vouchers or other forms of rental subsidy where HUD, the
	awarding community, or the public housing agency that administers the contract awards
	rental subsidies that are not project-based (i.e., do not involve site-specific subsidies)
	i) Special projects directed to the removal of material and architectural barriers that
	restrict the mobility of and accessibility to elderly and persons with disabilities.
	n the response, the review is in compliance with this section. Continue to the Worksheet by below.
	☐ Yes. Office of Housing programs utilizing the January 1, 2025 compliance date. These reviews must comply with the 2013 version of the Part 55 regulations. Continue to Worksheet Summary for 2013 version to upload supporting documentation.
	☑ No. Continue to Question 2.
2.	Does the project include a Critical Action?
	☐ Yes. Describe the Critical Action. Examples of Critical Actions include projects involving hospitals, fire and police stations, nursing homes, hazardous chemical storage, storage of valuable records, and utility plants. Continue to Question 4.
	☑ No. Continue to Question 3.
	Determine the extent of the FFRMS floodplain and provide mapping documentation in support of that determination.

The extent of the FFRMS floodplain can be determined using a Climate Informed Science Approach (CISA), 0.2 percent flood approach (0.2 PFA), or freeboard value approach (FVA). For projects in areas without available CISA data or without FEMA Flood Insurance Rate Maps (FIRMs), Flood Insurance Studies (FISs) or Advisory Base Flood Elevations (ABFEs), use the best available information to determine flood elevation. Include documentation and an explanation of why this is the best available information for the site. Note that newly constructed and substantially improved structures must be elevated to the FFRMS floodplain regardless of the approach chosen to determine the floodplain.

Select one of the following three options:
\square CISA for non-critical actions. If using a local tool, data, or resources, ensure that the FFRMS elevation is higher than would have been determined using the 0.2 PFA or the FVA.
\boxtimes 0.2-PFA. Where FEMA has defined the 0.2-percent-annual-chance floodplain, the FFRMS floodplain is the area that FEMA has designated as within the 0.2-percent-annual-chance floodplain.
□ FVA. If neither CISA nor 0.2-PFA is available, for non-critical actions, the FFRMS floodplain is the area that results from adding two feet to the base flood elevation as established by the effective FIRM or FIS or—if available —a FEMA-provided preliminary or pending FIRM or FIS or advisory base flood elevations, whether regulatory or informational in nature. However, an interim or preliminary FEMA map cannot be used if it is lower than the current FIRM or FIS.
Does your project occur in the FFRMS floodplain?
☐ Yes, continue to part b.☒ No. Review for floodplain management is complete.
Is your project located in any of the floodplain categories below? Select all that apply. If none apply, continue to question 7.
☐ Floodway: Continue to Question 5. Floodways.
☐ Coastal High Hazard Area (V Zone) or Limit of Moderate Wave Action (LiMWA): Continue to Question 6. Coastal High Hazard Areas and LiMWAs.
Determine the extent of the FFRMS floodplain and provide mapping documentation in
support of that determination. The extent of the FFRMS floodplain can be determined using a Climate Informed Science Approach (CISA), or the higher of the 0.2 percent flood approach (0.2 PFA), or freeboard value approach (FVA). For projects in areas without available CISA data or without FEMA Flood Insurance Rate Maps (FIRMs), Flood Insurance Studies (FISs) or Advisory Base Flood Elevations (ABFEs), use the best available information to determine flood elevation. Note that newly constructed and substantially improved structures must be elevated to the FFRMS floodplain regardless of the approach chosen to determine the floodplain.
Utilize CISA to determine the FFRMS floodplain for critical actions
☐ CISA for Critical Actions. If using a local tool, ensure that the FFRMS elevation provided is higher than the 0.2 PFA or 3' above the base flood elevation.

a.

b.

4.

	OR;
	Choose the higher of 0.2 PFA or FVA elevations
	\square 0.2-PFA. Where FEMA has defined the 0.2-percent-annual-chance floodplain, the FFRMS floodplain is the area that FEMA has designated as within the 0.2-percent-annual-chance floodplain.
	☐ FVA. For critical actions, the FFRMS floodplain is the area that results from adding three feet to the base flood elevation as established by the effective FEMA FIRM or FIS or—if available —a FEMA-provided preliminary or pending FIRM or FIS or advisory base flood elevations, whether regulatory or informational in nature. However, an interim or preliminary FEMA map cannot be used if it is lower than the current FIRM or FIS.
a. I	Does your project occur in the FFRMS floodplain? ☐Yes, continue to part b.
	□No. Review for floodplain management is complete.
b.	Is your project located in any of the floodplain categories below? Select all that apply. If none apply, continue to question 7.
	☐ Floodway: Continue to Question 5. Floodways.
	☐ Coastal High Hazard Area (V Zone) or LiMWA: Continue to Question 6. Coastal High Hazard Areas and LiMWAs.
5.	•
	Do the floodway exemptions at <u>55.8</u> or <u>55.21</u> apply?
	☐ Yes <u>The 8-Step Process is required.</u> Document mitigation measures necessary to meet the requirements in 55.8 or 55.21. Provide a completed 8-Step Process, including the early public notice and the final notice. Continue to Question 7. 8-Step Process.
	□ No Federal assistance may not be used at this location. You must either choose an alternate site or cancel the project at this location.
6.	Coastal High Hazard Area (V Zone) and LiMWAs Do the exemptions at 55.8 or 55.21 apply?
	☐ Yes <u>The 8-Step Process is required.</u> Document mitigation measures necessary to mee the requirements in 55.8 or 55.21. Provide a completed 8-Step Process, including the early public notice and the final notice.

Continue to Question 7. 8-Step Process.
☐ No Federal assistance may not be used at this location. You must either choose an alternate site or cancel the project at this location.
7. 8-Step Process.
Does the 8-Step Process apply? Select one of the following options:
□ 8-Step Process is inapplicable per 55.13.
Select the applicable citation:
□ (a) HUD's mortgage insurance actions and other financial assistance for the purchasing, mortgaging, or refinancing of existing one- to four-family properties in communities that are in the Regular Program of the NFIP and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24), where the action is not a critical action and the property is not located in a floodway, coastal high hazard area, or LiMWA;
□ (b) Financial assistance for minor repairs or improvements on one- to four-family properties that do not meet the thresholds for "substantial improvement" under § 55.2(b)(12);
 □ (c) HUD or a recipient's actions involving the disposition of individual HUD or recipient held, one- to four-family properties;
☐ (d) HUD guarantees under the Loan Guarantee Recovery Fund Program (24 CFR part 573), where any new construction or rehabilitation financed by the existing loan or mortgage has been completed prior to the filing of an application under the program, and the refinancing will not allow further construction or rehabilitation, nor result in any physical impacts or changes except for routine maintenance;
\Box (e) The approval of financial assistance to lease units within an existing structure located within the floodplain, but only if;
(1) The structure is located outside the floodway or coastal high hazard area, and is in a community that is in the Regular Program of the NFIP and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24); and (2) The project is not a critical action; and
(3) The entire structure is or will be fully insured or insured to the maximum extent available under the NFIP for at least the term of the lease.
☐ (f) Special projects for the purpose of improving efficiency of utilities or installing renewable energy that involve the repair, rehabilitation, modernization, weatherization, or improvement of existing structures or infrastructure, do not meet the thresholds for "substantial improvement" under § 55.2(b)(12), and do not include the installation of equipment below the FFRMS floodplain elevation.
Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.
☐ 5-Step Process is applicable per 55.14. Provide documentation of 5-Step Process.

	Select the applicable citation:
	\square (a) HUD actions involving the disposition of HUD-acquired multifamily housing projects or
	"bulk sales" of HUD-acquired one- to four-family properties in communities that are in
	the Regular Program of the National Flood Insurance Program (NFIP) and in good
	standing (i.e., not suspended from program eligibility or placed on probation under 44
	CFR 59.24).
	(b)HUD's actions under the National Housing Act (12 U.S.C. 1701) for the purchase or refinancing of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, and intermediate care facilities, in communities that are in good standing under the NFIP.
	□ (c) HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, intermediate care facilities, and one- to four-family properties, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the number of units is not increased more than 20 percent, the action does not involve a conversion from nonresidential to residential land use, the action does not meet the thresholds for "substantial improvement" under § 55.2(b)(10), and the footprint of the structure and paved areas is not increased by more than 20 percent.
	 □ (d) HUD's (or the recipient's) actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing nonresidential buildings and structures, in communities that are in the Regular Program of the NFIP and are in good standing, provided that the action does not meet the thresholds for "substantial improvement" under § 55.2(b)(10) and that the footprint of the structure and paved areas is not increased by more than 20 percent □ (e) HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, or replacement of existing nonstructural improvements including streets, curbs and gutters, where any increase of the total impervious surface area of the facility is de minimis. This provision does not include critical actions, levee systems, chemical storage facilities (including any tanks), wastewater facilities, or sewer lagoons.
	Continue to Question 8. Mitigation.
	□ 8-Step Process applies.
	Provide a completed 8-Step Process, including the early public notice and the final notice.
	Continue to Question 8. Mitigation.
8.	Mitigation

For the project to comply with this section, all adverse impacts must be mitigated. Explain in detail the measures that must be implemented to mitigate the impact or effect, including the

timeline for implementation. Note: newly constructed and substantially improved structures within the FFRMS floodplain must be elevated to the FFRMS floodplain elevation or floodproofed, if applicable.

	of the following it any mitigation/minimization measures have been identified for this tin the 8-Step or 5-Step Process? Select all that apply.
	Buyout and demolition or other supported clearance of floodplain structures
-	otection Act of 1973
	Permeable surfaces
	Natural landscape enhancements that maintain or restore natural hydrology
<u></u>	•
	Planting or restoring native plant species
	Bioswales
	Stormwater capture and reuse
	3 1
	Natural Resources Conservation Service conservation easements or similar easements
	Floodproofing of structures as allowable (e.g. non-residential floors)
	Elevating structures (including freeboard above the required base flood elevations)
	Levee or structural protection from flooding
	Channelizing or redefining the floodway or floodplain through a Letter of Map Revision (LOMR)
Worksheet Sur Compliance De Provide a clear such as:	
	panel numbers
-	ata or maps
	nation on other data or tools used or accessed
	s of all consulted parties and relevant consultation dates
	s of plans or reports and relevant page numbers
	Iditional requirements specific to your region
, my dd	
Include all doc	umentation supporting your findings in your submission to HUD
Are formal cor	npliance steps or mitigation required?
	h
☐ Yes	p.ian.sc stelps or imagasion requires.

Worksheet Summary for 2013 Version

Compliance Determination

Attach 'Floodplain Management Partner Worksheet' (OMB No. 2506-0177), FIRM map indicating project location, and summary of 8-step or 5-step decision making process if applicable.

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Are for	rmal compliance steps o	or mitigation required	۱?
	☐ Yes		
	□ No		

OMB No. 2506-0177 (exp. 9/30/2021)



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, DC 20410-1000

Historic Preservation (CEST and EA) - PARTNER

https://www.hudexchange.info/environmental-review/historic-preservation

Threshold

Is	Section	106	review	required	forv	vour	nroi	ect?
13	Section	TOO	ICVICW	reguired	י וטו	voui	וטומ	CCL:

□ No, because a Programmatic Agreement states that all activities included in this project are exempt. (See the <u>PA Database</u> to find applicable PAs.)

Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:

It was determined that the project actions will not affect any historic properties within the undertaking's Area of Potential Effect. The proposed project cleared under the PA Allowance App B Tier I. B. 1 for Section 106 NHPA by GM on July 13, 2023. Section 106 NHPA Effect Determination is included in Appendix F.

→ Continue to the Worksheet Summary.

□ No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

Either provide the memo itself or a link to it here. Explain and justify the other determination here:

Click here to enter text.

→ Continue to the Worksheet Summary.

The Section 106 Process

After determining the need to do a Section 106 review, HUD or the RE will initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

Only RE or HUD staff may initiate the Section 106 consultation process. Partner entities may gather information, including from SHPO records, identify and evaluate historic properties, and make initial assessments of effects of the project on properties listed in or eligible for the National Register of Historic

Place. Partners should then provide their RE or HUD with all of their analysis and documentation so that they may initiate consultation.

Step 1 - Initiate Consultation

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the When To Consult With Tribes checklist within Notice CPD-12-006: Process for Tribal Consultation to determine if the RE or HUD should invite tribes to consult on a particular project. Use the <u>Tribal Directory Assessment Tool (TDAT)</u> to identify tribes that may have an interest in the area where the project is located. Note that only HUD or the RE may initiate consultation with Tribes. Partner entities may prepare a draft letter for the RE or HUD to use to initiate consultation with tribes, but may not send the letter themselves.

List all organizations and individuals that you believe may have an interest in the project here: Click here to enter text.

→ Continue to Step 2.

Step 2 - Identify and Evaluate Historic Properties

Provide a preliminary definition of the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE. Attach an additional page if necessary.

Click here to enter text.

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register. Refer to HUD's website for guidance on identifying and evaluating historic properties.

In the space below, list historic properties identified and evaluated in the APE.

Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

Click here to enter text.

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

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

If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, <u>Guidance on Archeological Investigations in HUD Projects</u>.

\boxtimes Yes \rightarrow Provide survey(s) and report(s) and continue to Step 3.	
Additional notes:	
Click here to enter text.	
\square No \rightarrow Continue to Step 3.	

Step 3 - Assess Effects of the Project on Historic Properties

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

Choose one of the findings below to recommend to the RE or HUD.

Please note: this is a recommendation only. It is **not** the official finding, which will be made by the RE or HUD, but only your suggestion as a Partner entity.

No Historic Properties Affected Document reason for finding: No historic properties present. Historic properties present, but project will have no effect upon them. No Adverse Effect Document reason for finding and provide any comments below. Comments may include recommendations for mitigation, monitoring, a plan for unanticipated discoveries, etc. Click here to enter text.

☐ Adverse Effect

Document reason for finding:

Copy and paste applicable Criteria into text box with summary and justification.

Criteria of Adverse Effect: 36 CFR 800.5

Click here to enter text.

Provide any comments below:

Comments may include recommendations for avoidance, minimization, and/or mitigation.

Click here to enter text.

OMB No. 2506-0177 (exp. 9/30/2021)



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, DC 20410-1000

Noise (EA Level Reviews) – PARTNER

https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control

1.	What activities does your project involve? Check all that apply: ☐ New construction for residential use NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details. → Continue to Question 2.
	□ Rehabilitation of an existing residential property NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details. → Continue to Question 2.
	 None of the above → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.
2.	Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport). Indicate the findings of the Preliminary Screening below: ☐ There are no noise generators found within the threshold distances above. → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.
	 □ Noise generators were found within the threshold distances. → Continue to Question 3.
3.	Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below: ☐ Acceptable (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a)) Indicate noise level here: Click here to enter text. → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.

	□ Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a)) Indicate noise level here: Click here to enter text.
	If project is rehabilitation: → Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.
	If project is new construction: Is the project in a largely undeveloped area¹? □ No □ Yes → The project requires completion of an Environmental Impact Statement
	(EIS) pursuant to 51.104(b)(1)(i).
	ightharpoonup Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.
	☐ Unacceptable: (Above 75 decibels) Indicate noise level here: Click here to enter text.
	If project is rehabilitation: HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels. Consider converting this property to a non-residential use compatible with high noise levels. → Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.
	If project is new construction: The project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). Work with HUD or the RE to either complete an EIS or obtain a waiver signed by the appropriate authority. → Continue to Question 4.
4.	HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Work with the RE/HUD on the development of the mitigation measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. ☐ Mitigation as follows will be implemented: Click here to enter text. → Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures.
	Continue to the Worksheet Summary.
	☐ No mitigation is necessary. Explain why mitigation will not be made here:

 $^{^{1}}$ A largely undeveloped area means the area within 2 miles of the project site is less than 50 percent developed with urban uses and does not have water and sewer capacity to serve the project.

Click here to enter text.

→ Continue to the Worksheet Summary.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

This project does not involve new construction for residential use nor does it involve rehabilitation of an existing residential property. This project consists of the rehabilitation of an existing non-residential buildings for non-residential use. This project is in compliance with the Noise Control Act.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, DC 20410-1000

Sole Source Aquifers (CEST and EA) - PARTNER

after this information is submitted for review.

https://www.hudexchange.info/environmental-review/sole-source-aquifers

1.	Is the project located on a sole source aquifer (SSA)¹? ⊠ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section Continue to the Worksheet Summary below. Provide documentation used to make you determination, such as a map of your project or jurisdiction in relation to the nearest SSA.
	□Yes → Continue to Question 2.
2.	Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)? Yes → The review is in compliance with this section. Continue to the Worksheet Summary below.
	\square No \rightarrow Continue to Question 3.
3.	Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer? Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area. □Yes → Continue to Question 4.
	\square No \rightarrow Continue to Question 5.
4.	Does your MOU or working agreement exclude your project from further review? □Yes → If the RE/HUD agrees with this recommendation, the review is in compliance with this section Continue to the Worksheet Summary below. Provide documentation used to make you determination and document where your project fits within the MOU or agreement.
	\square No \rightarrow Continue to Question 5.
5	Will the proposed project contaminate the aquifer and create a significant hazard to public health?

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area. EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable

¹ A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

- \square No \Rightarrow If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.
- ☐Yes → The RE/HUD will work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

There are no EPA sole source aquifers in Puerto Rico. Furthermore, the project consists of activities that are unlikely to have an adverse impact on groundwater resources. The project is in compliance with the Safe Drinking Water Act.

Refer to Figure 11 in Appendix B.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, DC 20410-1000

Wetlands (CEST and EA) - Partner

https://www.hudexchange.info/environmental-review/wetlands-protection

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance?

The term "new construction" includes draining, dredging, channelizing, filling, diking, impounding, and related activities and construction of any any structures or facilities.

No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

 \boxtimes Yes \rightarrow Continue to Question 2.

Click here to enter text.

2.	Will the new construction or other ground disturbance impact a wetland as defined in E.G	Э.
	11990?	

\boxtimes	No	\rightarrow	If the	RE/HUD	agrees	with this r	ecommenda	tion, the	e review	is i	in cor	npli	iance	with
	this	se	ction.	Continue	e to the	Workshe	et Summary	below.	Provide	а	тар	or	any	other
	rele	vai	nt doc	cumentati	on to ex	plain your	determinati	on.						

Does Section 55.12 state that the 8-Step Process is not re	equired?
--	----------

\square Yes \rightarrow Work with HUD or the RE to assist with the 8-Step Process. Continue to Question 3.
Does Section 55.12 state that the 8-Step Process is not required?
 □ No, the 8-Step Process applies. This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD's elevation requirements. → Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.
 □ 5-Step Process is applicable per 55.12(a). Provide the applicable citation at 24 CFR 55.12(a) here. Click here to enter text. → Work with the RE/HUD to assist with the 5-Step Process. This project may require mitigation or alternations. Continue to Worksheet Summary.
 □ 8-Step Process is inapplicable per 55.12(b). Provide the applicable citation at 24 CFR 55.12(b) here. Click here to enter text. → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.
☐ 8-Step Process is inapplicable per 55.12(c). Provide the applicable citation at 24 CFR 55.12(c) here.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The National Wetlands Inventory (NWI) mapping shows a riverine wetland that runs outside of the project site, to the north and east. However, there will be no permanent impact to the riverine wetlands because the project involves no new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance. No new construction will take place outside of the project footprint. The project is in compliance with Wetland Protection requirements and Executive Order 11990.

Refer to Figure 12 in Appendix B.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT WASHINGTON, DC 20410-1000

Wild and Scenic Rivers (CEST and EA) - PARTNER

https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers

1.	Is your project within proximity of a Wild and Scenic River, Study River, or Nationwide Rivers Inventory River?
	$\stackrel{\cdot}{\bowtie}$ No $\stackrel{\cdot}{\Rightarrow}$ If the RE/HUD agrees with this recommendation, the review is in compliance with this
	section. Provide documentation used to make your determination.
	☐ Yes → Continue to Question 2.
2.	Could the project do any of the following?
	 Have a direct and adverse effect within Wild and Scenic River Boundaries,
	 Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
	Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.
	Consult with the appropriate federal/state/local/tribal Managing Agency(s), pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.
	Select one:
	☐ The Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.
	→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.
	☐ The Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.
	→ The RE/HUD must work with the Managing Agency to identify mitigation measures to mitigate

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers

the impact or effect of the project on the river.

• Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

Puerto Rico has only two Wild and Scenic Rivers which locates in the east side of Puerto Rico. The proposed project locates approximately 90 miles west of the scenic river. There would be no impact to Wild and Scenic Rivers. This project is in compliance with the Wild and Scenic Rivers Act.

Refer to Figure 13 in Appendix B.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

WASHINGTON, DC 20410-1000

Environmental Justice (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/environmental-justice

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

- 1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?
 - \Box Yes \rightarrow Continue to Question 2.
 - No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.
- 2. Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?

□Yes

Explain:

Click here to enter text.

→ The RE/HUD must work with the affected low-income or minority community to decide what mitigation actions, if any, will be taken. Provide any supporting documentation.

□No

Explain:

Click here to enter text.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project would not result in disproportionately adverse environmental effects on minority or low- income populations. It does not have discriminatory elements excluding benefits from people due to ethnic origin or color, age, gender, religion, income, or disabilities. The project would not result in disproportionately adverse environmental effects on minority or low-

income populations. The proposed project would not result in the displacement of minority or low-income populations. The project is in compliance with Executive Order 12898.

NEPAssist Tool Analysis https://nepassisttool.epa.gov/nepassist/nepamap.aspx

ATTACHMENT B FIGURES

Figure 1- Topographic Location Map PR-CRP-000892 Lajas Recreational Sport Complex Carr. 117 Km. 0.2, Bo. Santa Rosa Lajas, PR 00667



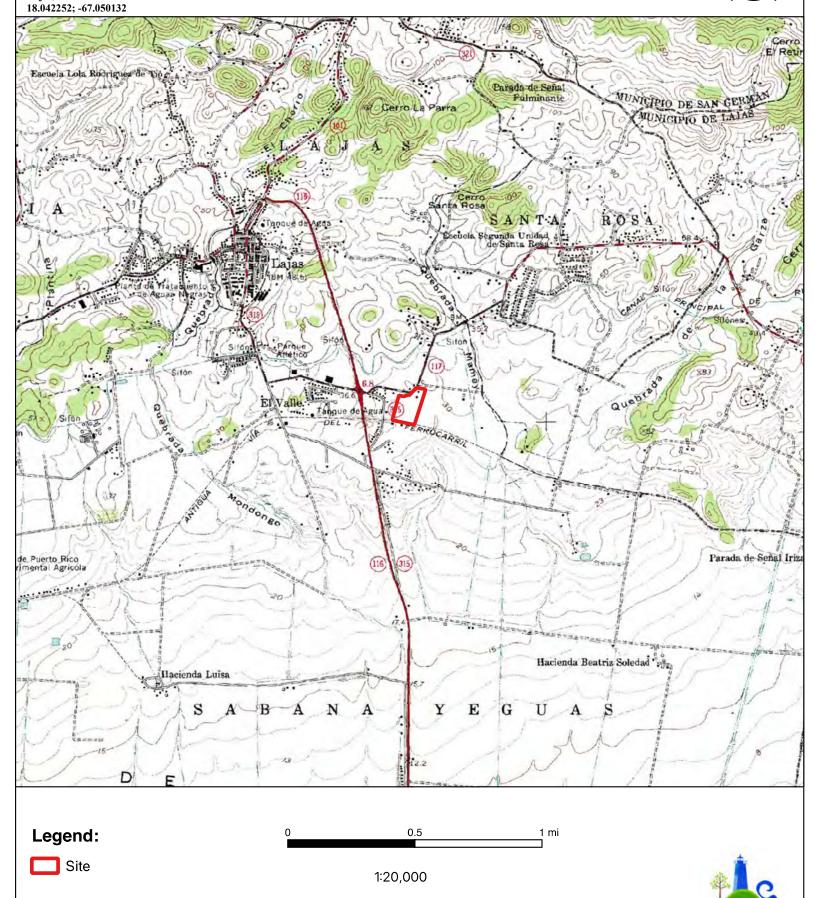


Figure 2- Aerial Photo Location Map PR-CRP-000892 Lajas Recreational Sport Complex Carr. 117 Km. 0.2, Bo. Santa Rosa Lajas, PR 00667 18.042252; -67.050132





Legend:

50 100 m





Source: Google Satellite ACE Environmental, Inc.

Figure 3- Airport Map PR-CRP-000892 Lajas Recreational Sport Complex Carr.117 Km.0.2,Bo.Santa Rosa Lajas, PR 00667 18.042252; -67.050132







source: https://adds-faa.opendata.arcgis.com/datasets/faa::airports-1/about Image: Google Satellite

2.5

5 km

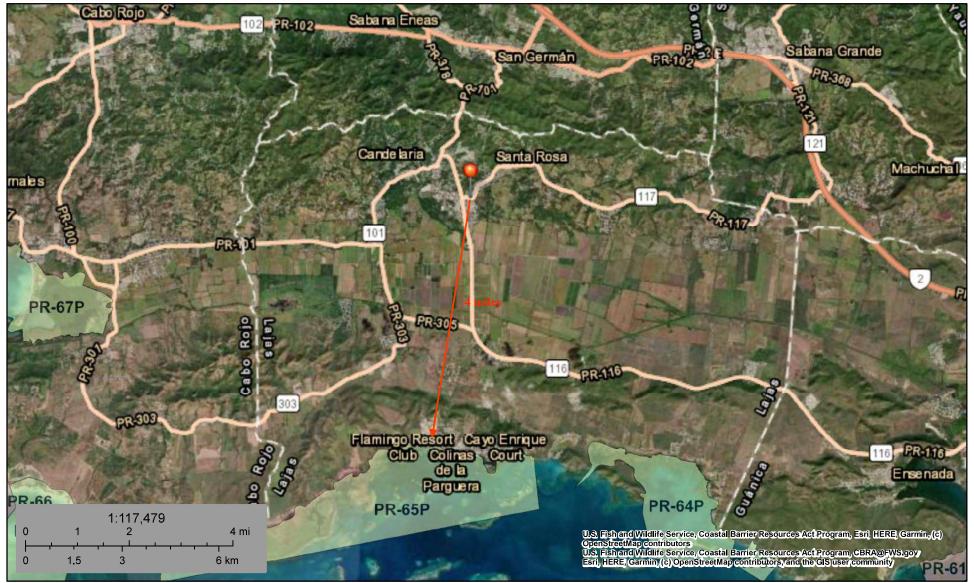




U.S. Fish and Wildlife Service

Coastal Barrier Resources System

Figure 4- Coastal Barrier Map PR-CRP-000892 Lajas Recreational Sport Complex Carr. 117 Km. 0.2, Bo. Santa Rosa Lajas, PR 00667 18.042252; -67.050132



October 11, 2023

CBRS Buffer Zone

System Unit

CBRS Units

Otherwise Protected Area

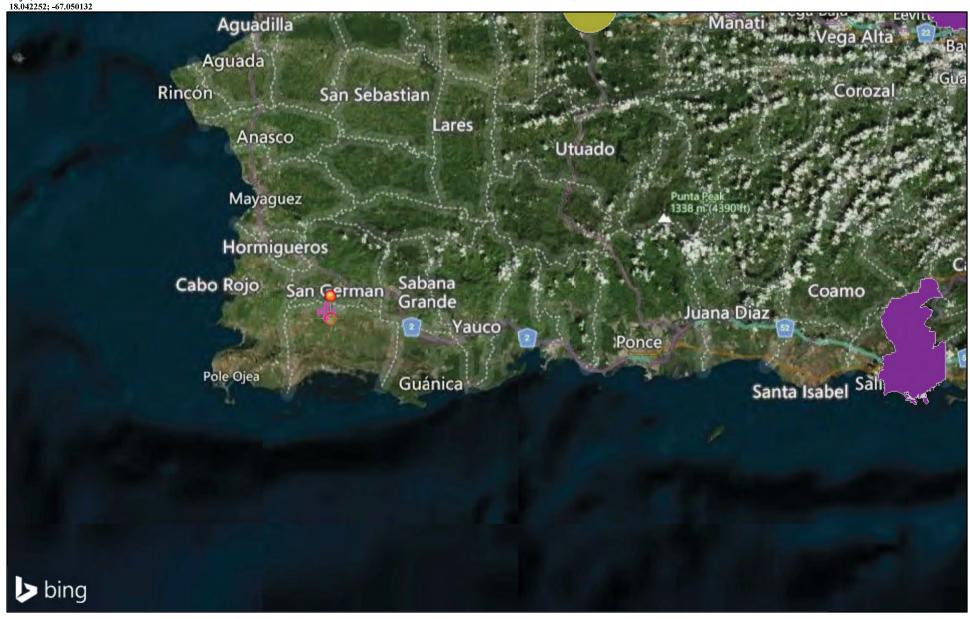


This map is for general reference only. The Coastal Barrier Resources System (CBRS) boundaries depicted on this map are representations of the controlling CBRS boundaries, which are shown on the official maps, accessible at https://www.fws.gov/library/collections/official-coastal-barrier-resources-system-maps. All CBRS related data should be used in accordance with the layer metadata found on the CBRS Mapper website.

The CBRS Buffer Zone represents the area immediately adjacent to the CBRS boundary where users are advised to contact the Service for an official determination (https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation) as to whether the property or project site is located "in" or "out" of the CBRS.

CBRS Units normally extend seaward out to the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward

This page was produced by the CBRS Mapper



October 11, 2023 1:577,791 4.75 SO2 1-hr (2010 standard) **Project Buffer** Search Result (point) 10 20 km Lead (2008 standard) Nonattainment © 2023 Microsoft Corporation Earthstar Geographics SIO © 2023 TomTom, Lajas Sport Complex U.S. EPA Office of Air and Radiation (OAR) - Office of Air Quality Planning

Nonattainment

19 mi

Figure 6- Coastal Zone Map PR-CRP-000892 Lajas Recreational Sport Complex Carr.117 Km.0.2,Bo.Santa Rosa Lajas, PR 00667 18.042252; -67.050132



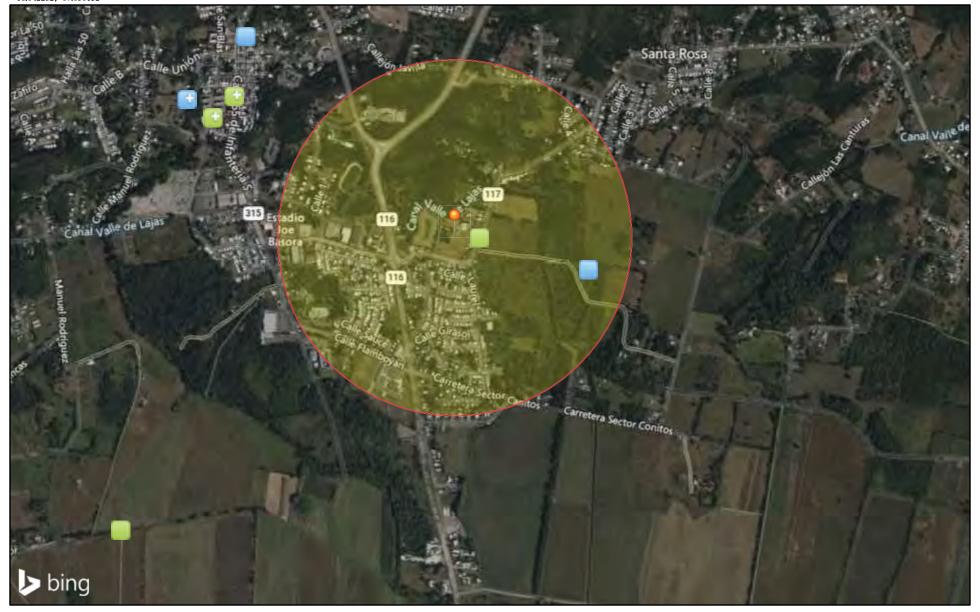


Legend:

0.25 0.5 mi

Project Location Coastal Zone Conservation

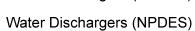




October 12, 2023



Water Dischargers (NPDES)



Hazardous Waste (RCRAInfo)

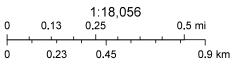
Hazardous Waste (RCRAInfo)



Project Buffer



Lajas Sport Complex



@ 2023 Microsoft Corporation @ 2023 Maxar @CNES (2023) Distribution Airbus DS @ 2023 TomTom

Legend:

Project Location

Critical Habitat







Site



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

Special Point Features

Blowout (0)



Borrow Pit Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Miscellaneous Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

Water Features

Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San German Area, Southwestern Puerto Rico Survey Area Data: Version 15, Sep 13, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 23, 2022—Mar 1. 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

		_	
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FrB	Fraternidad clay, 2 to 5 perecent slopes	0.1	1.1%
Ua	Urban land	8.0	98.9%
Totals for Area of Interest	'	8.0	100.0%

National Flood Hazard Layer FIRMette

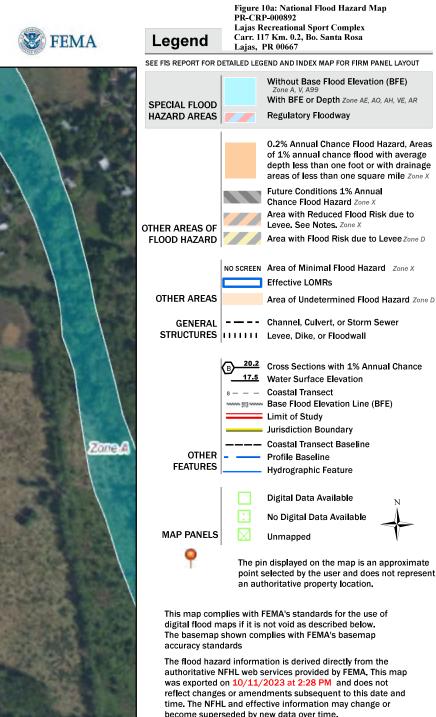


Figure 10a: National Flood Hazard Map PR-CRP-000892 Lajas Recreational Sport Complex Carr. 117 Km. 0.2, Bo. Santa Rosa

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

With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X Future Conditions 1% Annual Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X Area with Flood Risk due to Levee Zone D NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer STRUCTURES | LILLI Levee, Dike, or Floodwall B 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation Coastal Transect ---- Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transect Baseline Profile Baseline Hydrographic Feature Digital Data Available No Digital Data Available Unmapped The pin displayed on the map is an approximate

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/11/2023 at 2:28 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



Legend



Figure 10b: ABFE Map

Project Name: Lajas Recreational Sport Complex (PR-CRP-000892)

Location: Carr. 117 Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667. (18.042252, -67.050132)

Source: FEMA, ESRI

Website: https://www.arcgis.com/

Author: Tetra Tech Inc.





Sole_Source_Aquifers

ACE Environmental, Inc.

1:18,489,298

Figure 12-Wetlands Map PR-CRP-000892 Lajas Recreational Sport Complex Carr.117 Km.0.2,Bo.Santa Rosa Lajas, PR 00667 18.042252; -67.050132









Figure 13- Wild and Scenic Rivers Map PR-CRP-000892 Lajas Recreational Sport Complex Carr.117 Km.0.2,Bo.Santa Rosa Lajas, PR 00667 18.042252; -67.050132





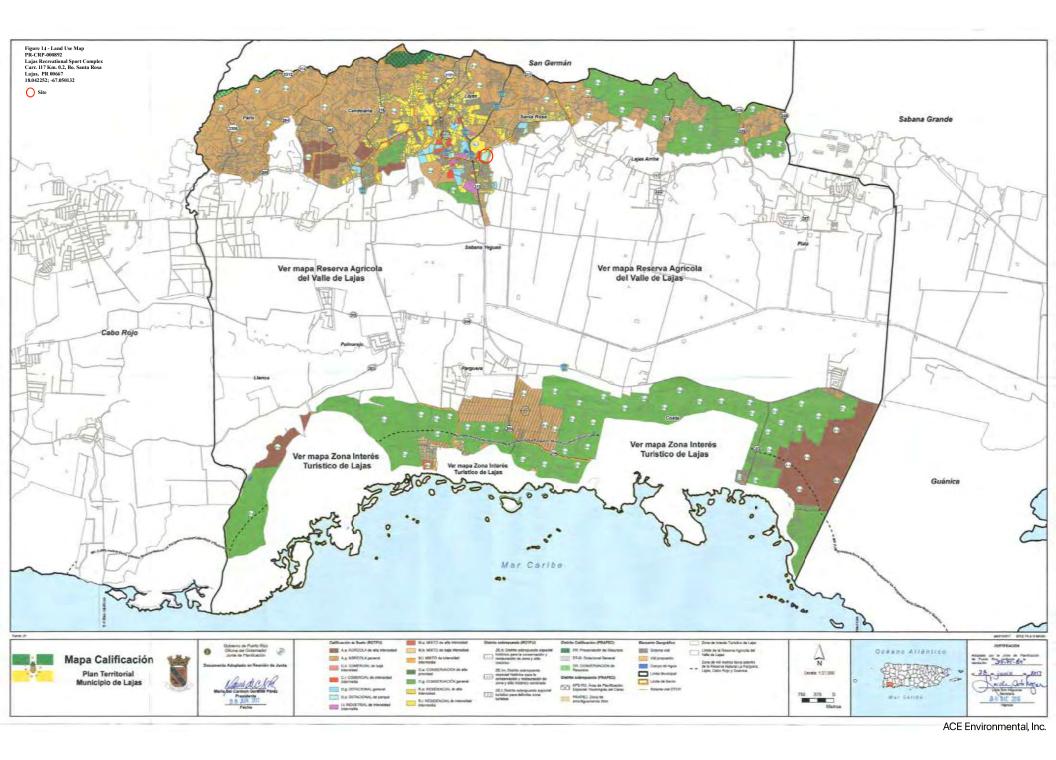
20 mi



Site

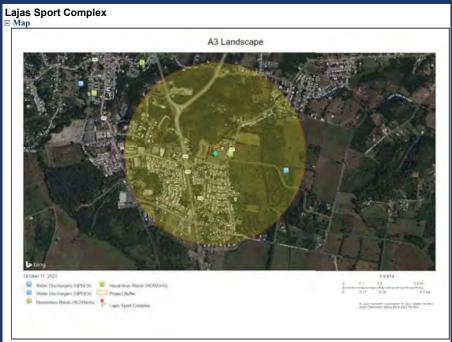
Wild Scenic Rivers





ATTACHMENT C NEPASSIST TOOL ANALYSIS





Geographic coordinates:

POINT (18.042426,-67.050023) with buffer 0.5 miles

Note: The information in the following reports is based on publicly available databases and web services. The National Report uses nationally available datasets and the State Reports use datasets available through the EPA Regions. Click on the hyperlinked question to view the data source and associated metadata.

Project Location	18.042426,-67.050023
Within 0.5 miles of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	no
Within 0.5 miles of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	no
Within 0.5 miles of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Mthin 0.5 miles of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Mithin 0.5 miles of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	no
Within 0.5 miles of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	no
Within 0.5 miles of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Mithin 0.5 miles of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Mthin 0.5 miles of a Federal Land?	no
Mthin 0.5 miles of an impaired stream?	no
Mithin 0.5 miles of an impaired waterbody?	yes
Mthin 0.5 miles of a waterbody?	no
Within 0.5 miles of a stream?	yes
Mithin 0.5 miles of an NWI wetland?	dick here May take several minute:
Mithin 0.5 miles of a Brownfields site?	no
Mthin 0.5 miles of a Superfund site?	no
Mithin 0.5 miles of a Toxic Release Inventory (TRI) site?	no
Mthin 0.5 miles of a water discharger (NPDES)?	yes
Mthin 0.5 miles of a hazardous waste (RCRA) facility?	yes
Mthin 0.5 miles of an air emission facility?	no
Mithin 0.5 miles of a school?	no
Mthin 0.5 miles of an airport?	no
Mthin 0.5 miles of a hospital?	no
Mthin 0,5 miles of a designated sole source aquifer?	no
Mthin 0.5 miles of a historic property on the National Register of Historic Places?	no
Mthin 0.5 miles of a Toxic Substances Control Act (TSCA) site?	no
Mthin 0.5 miles of a Land Cession Boundary?	no
Mthin 0.5 miles of a tribal area (lower 48 states)?	no
Mthin 0.5 miles of the service area of a mitigation or conservation bank?	no
Mthin 0.5 miles of the service area of an In-Lieu-Fee Program?	no
Mthin 0.5 miles of a Public Property Boundary of the Formerly Used Defense Sites?	no
Mthin 0.5 miles of a Munitions Response Site?	no
Mthin 0.5 miles of an Essential Fish Habitat (EFH)?	no
Mithin 0,5 miles of a Habitat Area of Particular Concern (HAPC)?	no
Mthin 0,5 miles of an EFH Area Protected from Fishing (EFHA)?	yes
Mithin 0.5 miles of a Bureau of Land Management Area of Critical Environmental Concern?	no
Afthin 0.5 miles of an ESA-designated Critical Habitat Area per U.S. Fish & Wildlife Service?	no

■ Puerto Rico Report ♥ **■** Demographic Reports ♥ **■** USFWS IPaC Report ♥



Detailed Facility Report

Facility Summary

PRASA WTP LAJAS FILTER PLANT

PR-116 & PR-117, LAJAS, PR 00667

FRS (Facility Registry Service) ID: 110009814763

EPA Region: 02 **Latitude:** 18.041074 **Longitude:** -67.044066

Locational Data Source: NPDES

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	06/02/2023
Compliance Status	No Violation I dentified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	
Formal Enforcement Actions (5 years)	1
Penalties from Formal Enforcement Actions (5 years)	\$0
EPA Cases (5 years)	-
Penalties from EPA Cases (5 years)	

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Major, Permit Expired (PR0022985)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110009814763					N	18.041074	-67.044066
ICIS		35818					N	18.041074	-67.044067
ICIS-NPDES	CWA	PR0022985	Major: NPDES Individual Permit	Expired		04/30/2024	N	18.043056	-67.044444

Facility Address

	System	Statute	Identifier	Facility Name	Facility Address	Facility County
	FRS		110009814763	PRASA WTP LAJAS FILTER PLANT	PR-116 & PR-117, LAJAS, PR 00667	Lajas Municipio
Г	ICIS		35818	PRASA WTP LAJAS FILTER PLANT	INT ROAD 116 & 117, LAJAS, PR 00667	Lajas Municipio
	ICIS-NPDES	CWA	PR0022985	PRASA LAJAS WTP	INT ROAD 116 & 117, LAJAS, PR 00667	Lajas Municipio

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	SIC Code	SIC Description	System	Identifier	NAICS Code	NAICS Description			
ICIS-NPDES	PR0022985	4941	Water Supply	No data records returned						
12.0					No	data records returne	ed			

Facility Industrial Effluent Guidelines

Facility Tribe Information

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description	Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
PR0022985	000	No Applicable Effluent Guidelines				
				No data	records returned	

Enforcement and Compliance

Compliance Monitoring History Last 5 Years

Statute	Source I D	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CWA	PR0022985	ICIS-NPDES	Inspection/Evaluation	Base Program - Evaluation	EPA	06/02/2023	
CWA	PR0022985	ICIS-NPDES	Offsite Record Review	Base Program - Desk Audit	EPA	03/17/2021	

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	PR0022985	No	09/30/2024	0	01/24/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Vio	lation 1	Гуре		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	Q.
	CWA (Source ID: PR0022	985)			10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01
	Facility-Level St	tatus			No Violation Identified	No V Ide								
	Quarterly Noncompliance	Report	History		Resolved - Pending	Res Pe								
	Pollutant	Disch Point		Freq										
CWA	Lead, total [as Pb] <effluent- charts#pr0022985/01051> </effluent- 	001 - Y	Effluent Gross	NMth										
CWA	Sulfide-hydrogen sulfide [undissociated] <effluent-charts#pr0022985 51202=""> https://epa.gov/effluent-charts#pr0022985/51202></effluent-charts#pr0022985>	001 - Q	Effluent Gross	NMth		110%				45%				
CWA	Turbidity <effluent-charts#pr0022985 00070=""> https://epa.gov/effluent-charts#pr0022985/00070></effluent-charts#pr0022985>	001 - A	Effluent Gross	NMth					LIMIT VIOLATION					

Informal Enforcement Actions

Lead Agency

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions | Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost
CWA	ICIS-	201	NDDEC/DD0022005	Judicial	02- 2011-	EPA	PRASA - Puerto Nuevo Regional	09/15/2015	2	05/23/2016	\$0	-	-	-	\$700,000,000
CWA	NPDES	301	NPDES/PR0022985	Judiciai	0007	EPA	WWTP et al.	09/13/2013	2	03/22/2024	\$0		-	-	\$530,000,000

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
210100030407	Rio Rosario	MONDONGO CREEK	No	No	Ammonia & ammonium- total Copper, total (as Cu) Lead, total (as Pb) Turbidity	Yes

Assessed Waters From Latest State Submission (ATTAINS)

s	State	Report Cycle	Assessment Unit I D	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use	
	PR	2022	PRWR77C	RIO ROSARIO	Impaired - 303(d) Listed - With Restoration Plan	METALS (OTHER THAN MERCURY) NUTRIENTS PATHOGENS PESTICIDES TURBIDITY	Not Supporting	Not Supporting	-	Not Supporting	-	

Air Quality Nonattainment Areas

No data was all subsected							
		No data records retu	No data records returned				

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in **Pounds per Year at Site**

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

CWA (Clean Water Act) Discharge Monitoring Report (DMR) **Pollutant Loadings**

DMR and TRI Multi-Year Loading Report

NPDES ID	Description	2019	2020	2021	2022	2023
PR0022985	DMR Pollutant Loadings (lb/year)	616,804	484,908	2,552,472	367,775	118,487
PR0022985	DMR Pollutant Loadings - Load Over Limit (lb/year)	0	0	16.96	0.9426	0.3856
PR0022985	DMR Conventional Loadings (lb/year)	-		-	-	-
PR0022985	PR0022985 DMR Conventional Loadings - Load Over Limit (lb/year)					-
PR0022985	DMR Toxic-Weighted Loadings (lb-eq/year)	18.66	5.55	18.74	19.92	8.12
PR0022985	DMR Toxic-Weighted Loadings - Load Over Limit (lb-eq/year)	0	0	8.48	0	0

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

Potential Environmental Justice Concerns

US Territory

Supplemental/EJ index percentiles >= 90 (Census block group)

Supplemental/EJ index percentiles >= 90 (1-mile average)

EJScreen Indexes Shown

Related Reports

Index Type	Supplemental (default)	

EJScreen Community Report

Download Data

Census Block Group ID: 720798501024	US (US (Percentile)			State (Percentile)			
Supplemental Indexes	Facility Census Block Group	1-mile Avg	1-mile Max	Facility Census Block Group	1-mile Avg	1-mile Max		
Count of Indexes At or Above 90th Percentile	3	2	3	1	0	1		
Particulate Matter 2.5	-	N/A		-	N/A			
Ozone	-	N/A		-	N/A			
Nitrogen Dioxide	7	13	17	26	29	38		
Diesel Particulate Matter	3	7	9	32	52	71		
Toxic Releases to Air	77	73	84	14	13	19		
Traffic Proximity	83	81	87	26	28	37		
Lead Paint	9 92	55	9 8	68	31	87		
Risk Management Plan (RMP) Facility Proximity	0	0		0	0			
Hazardous Waste Proximity	86	81	9 1	45	37	54		
Superfund Proximity	99	99	9 9	91	89	98		
Underground Storage Tanks (UST)	0	0		0	0			
Wastewater Discharge	98	9 97	9 9	27	28	34		
Drinking Water Noncompliance	_	N/A		_	N/A			

Map Display Based o	n: O US State	
Display Map Layer	Summary - Number of Indexes	



Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

	General Statistics (ACS (American Community Survey))					
Total Persons		3,821				
	Population Density	1,225/sq.mi.				
	Housing Units in Area	1,852				
	Percent People of Color	99%				
	Households in Area	1,331				
	Households on Public Assistance	59				
	Persons With Low Income	3,000				
	Percent With Low Income	79%				

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.041074
Center Longitude	-67.044066
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)					
Less than \$15,000	485 (36.44%)				
\$15,000 - \$25,000	290 (21.79%)				
\$25,000 - \$50,000	359 (26.97%)				
\$50,000 - \$75,000	126 (9.47%)				
Greater than \$75,000	71 (5.33%)				

Age Breakdown (ACS (American Community Survey)) - Persons (%)					
Children 5 years and younger	199 (5%)				
Minors 17 years and younger	456 (12%)				
Adults 18 years and older	3,365 (88%)				
Seniors 65 years and older	1,179 (31%)				

tace Breakdown (ACS (American Community Survey)) - Persons (%)					
White	1,521 (40%)				
African-American	0 (0%)				
Hispanic-Origin	3,775 (99%)				
Asian	0 (0%)				
Hawaiian/Pacific Islander	0 (0%)				
American Indian	0 (0%)				
Other/Multiracial	1,689 (44%)				

Education Level (Persons 25 & older) (ACS (American Community Surv	rey)) - Persons (%)
Less than 9th Grade	443 (14.77%)
9th through 12th Grade	272 (9.07%)
High School Diploma	782 (26.08%)
Some College/2-year	417 (13.9%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	617 (20.57%)



Detailed Facility Report

Facility Summary

PRASA REPARTO DEL VALLE STP

PR-117 KM 0.5 VALLE DE LAJA DEV., LAJAS, PR 00667

FRS (Facility Registry Service) ID: 110007804698

EPA Region: 02
Latitude: 18.042374
Longitude: -67.04874
Locational Data Source: ICIS

Industries: -Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	-
Date of Last Compliance Monitoring Activity	
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	**
Formal Enforcement Actions (5 years)	
Penalties from Formal Enforcement Actions (5 years)	**
EPA Cases (5 years)	
Penalties from EPA Cases (5 years)	

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Inactive Other,

(PRD000691394)

Safe Drinking Water Act (SDWA): No Information

Go To Enforcement/Compliance Details

Known Data Problems https://epa.gov/resources/echo-data/known-data-problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007804698					N	18.042374	- 67.04874
ICIS		40027					N	18.042374	-67.04874
ICIS		44256					N	18.042374	-67.04874
RCRAInfo	RCRA	PRD000691394	Other	Inactive ()			N	18.448979	-67.150074

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007804698	PRASA REPARTO DEL VALLE STP	PR-117 KM 0.5 VALLE DE LAJA DEV., LAJAS, PR 00667	Lajas Municipio
ICIS		40027	PRASA VALLE DE LAJAS WASTEWATER	PR RD 117 KM 0.5, LAJAS, PR 00667	Lajas Municipio
ICIS		44256	PRASA REPARTO DEL VALLE STP	STATE RD 117, KM. 0.5 VALLE DE LAJA DEV., LAJAS, PR 00667	Lajas Municipio
RCRA I nfo	RCRA	PRD000691394	REPARTO EL VALLE STP	STATE RD 117 KM 0.5, LAJAS, PR 00667	Lajas Municipio

Facility SIC (Standard Industrial Classification) Codes

Facility NAICS (North American Industry Classification System) Codes

System Identifier SIC Code SIC Description System Identifier NAICS Code NAICS Description

No data records returned

No data records returned

Facility Tribe Information

Reservation Name Tribe Name EPA Tribal ID Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

ast 5 Year

Statute Source ID System Activity Type Compliance Monitoring Type Lead Agency Date Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy

- <https://www.epa.gov/compliance/compliance-monitoring-programs> activities or because they are not counted as inspections within EPA's Annual Results
- https://www.epa.gov/enforcement/enforcement-data-and-results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed	
RCRA	PRD000691394	No	01/25/2025	0	01/24/2025	

Three-Year Compliance History by Quarter

Statute	Program/Polluta		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA	(Source ID: PRD0	00691394)	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24
	Facility-Leve	el Status	No Violation Identified										
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute System Source ID Type of Action Lead Agency Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute System Law/ Source Type of Case Lead Case Issued/Filed Settlements/ Settlem

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) WBD (Watershed Boundary Dataset)

Database))

State Water Body Name (ICIS (Integrated Compliance Database))

State Water Body Name (ICIS (Integrated Compliance Information System))

Information System))

State Water Body Name (ICIS (Integrated Compliance Information System))

Watershed Boundary Dataset)

Watershed with ESA (Endangered Within Last Two Years)

Species Act)-listed Aquatic Species?

Assessed Waters From Latest State Submission (ATTAINS)

State Report Cycle Assessment Unit ID Assessment Unit ID Assessment Unit Name Water Condition Cause Groups Impaired Drinking Water Use Ecological Use Fish Consumption Use Recreation Use Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant Within Nonattainment Status Area? Nonattainment Status Applicable Standard(s) Within Maintenance Status Area? Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID Year Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Underground Injections Disposal to Land Total On-Site Releases Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Nam

No data records returned

Community

Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

Potential Environmental Justice Concerns

US Territory

Supplemental/EJ index percentiles >= 90 (Census block group)

Supplemental/EJ index percentiles >= 90 (1-mile average)

EJScreen Indexes Shown

Related Reports

Index Type Supplemental (default)

EJScreen Community Report

Download Data

Dominous Duta						
Census Block Group ID: 720798502003	US (I	Percentile)		State	(Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Avg	1-mile Max	Facility Census Block Group	1-mile Avg	1-mile Max
Count of Indexes At or Above 90th Percentile	2	2	3	0	0	2
Particulate Matter 2.5	-	N/A		-	N/A	
Ozone	-	N/A		-	N/A	
Nitrogen Dioxide	17	13	17	31	28	38
Diesel Particulate Matter	7	7	9	45	53	71
Toxic Releases to Air	64	73	84	11	13	19
Traffic Proximity	77	81	87	27	28	37
Lead Paint	74	65	9 9	43	38	9 94
Risk Management Plan (RMP) Facility Proximity	0	0		0	0	
Hazardous Waste Proximity	71	81	9 91	29	36	54
Superfund Proximity	99	9 99	9 99	77	89	9 8
Underground Storage Tanks (UST)	0	0		0	0	
Wastewater Discharge	94	9 7	9 99	24	28	34
Drinking Water Noncompliance		N/A		-	N/A	

Map Display Based o	n: O US O State		
Display Map Layer	Summary - Number of Indexes		
		O Eacility 1 mile Padius	☐ Facility Census Block Group

2 km 1 mi

Earthstar Geographics

Powered by Esri https://www.esri.com/

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary https://epa.gov/help/reports/dfr-data-dictionary#demographic.

General Statistics (ACS (American Community Survey))	
Total Persons	4,425
Population Density	1,418/sq.mi.
Housing Units in Area	2,140
Percent People of Color	99%
Households in Area	1,574
Households on Public Assistance	78
Persons With Low Income	3,400
Percent With Low Income	77%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.042374
Center Longitude	-67.04874
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)				
Less than \$15,000	557 (35.41%)			
\$15,000 - \$25,000	317 (20.15%)			
\$25,000 - \$50,000	457 (29.05%)			
\$50,000 - \$75,000	157 (9.98%)			
Greater than \$75,000	85 (5.4%)			

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	190 (4%)
Minors 17 years and younger	495 (11%)
Adults 18 years and older	3,929 (89%)
Seniors 65 years and older	1,378 (31%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)				
White	1,910 (43%)			
African-American	0 (0%)			
Hispanic-Origin	4,373 (99%)			
Asian	0 (0%)			
Hawaiian/Pacific Islander	0 (0%)			
American Indian	0 (0%)			
Other/Multiracial	1,783 (40%)			

Education Level (Persons 25 & older) (ACS (American Community Survey)) -	Persons (%)
Less than 9th Grade	490 (13.95%)
9th through 12th Grade	305 (8.68%)
High School Diploma	882 (25.11%)
Some College/2-year	501 (14.27%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	773 (22.01%)

ATTACHMENT D ENDANGERED SPECIES ACT SELF- CERTIFICATION & USFWS IPAC RESOURCE LIST



HOUSING



Transmittal Letter

March 6, 2024

Caribbean Ecological Services Field Office U.S. Fish and Wildlife Service P.O. Box 491
Boquerón, Puerto Rico 00622
Email: caribbean_es@fws.gov



Based on the information provided, we determined the project proposed qualifies for the blanket clearance letter. Nevertheless, if the project is modified this office should be contacted concerning the need for the initiation of consultation under section 7 of Endangered Species Act of 1973.

DAMARIS ROMAN
Reviewer RUIZ

Digitally signed by DAMARIS ROMAN RUIZ Date: 2024.03.08 10:44:12 -04'00'

ROBERT TAWES Digitally signed by ROBERT TAWES Date: 2024.03,10 17:21:41 -04'00'

Acting Caribbean ES Field Supervisor

RE: USFWS Endangered Species Act Certifications City Revitalization Program February 2024

We are submitting the following Self-Certifications for projects under the CDBG-DR City Revitalization Program. Attached are included the Self-Certifications that certify that the projects are in compliance and are not likely to adversely affect federally-listed species.

The following table includes the projects that are in compliance with the Blanket Clearance Letter for the Endangered Species act of 1973, as amended, and the Fish and Wildlife Coordination Act.

Project Number	Project Name	
PR-CRP-000338	Mejoras a la Plaza de la Identidad	
PR-CRP-000341	Remodelación Plaza Angel Mislán	
PR-CRP-000521	Demolición y Construcción Plaza del Mercado	
PR-CRP-000670	Centro Multiuso Distrito Moca	
PR-CRP-000742	Plaza de Recreo	
PR-CRP-000744	Centro de Desarrollo Artístico y Cultural de	
FR-CRF-000/44	Sabana Grande	
PR-CRP-000807	Mejoras a Plaza Pública y Plaza del Mercado,	
& PR-CRP-001111	Vieques	
PR-CRP-000892	Lajas Activity Center	
PR-CRP-000902	Elderly Service Center	
PR-CRP-001011	Mejoras al Estacionamiento Público del Municipio	
FR-CRF-001011	de Naguabo	

For more	information,	please conto	ict the Perm	nits and E	nvironment	al Compliance	e Division
at <u>enviro</u>	<u>onmentcdbg</u>	<u>@vivienda.pr.</u>	gov or at (7	787)274.2	527 ext. 432	20.	

Sincerely,

Permits and Environmental Compliance Division Office of Disaster Recovery



Self-Certification

http://www.fws.gov/caribbean/ES/Index.html

Endangered Species Act Certification

The U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office developed a Blanket Clearance Letter in compliance with Endangered Species Act of 1973, as amended, and the Fish and Wildlife Coordination Act for federally funded projects.

The Service determined that projects in compliance with the following criteria are not likely to adversely affect federally listed species.

The Puerto Rico Department of Housing (PRDOH) certifies that the following project Lajas Activity Center (PR-CRP-000892) consisting of new construction of a sports and community exercise facility with an athletic and walking field, roller skating and exercise areas, other recreation areas and meeting rooms for sports clinics, health, and related conference, landscape, and parking; located by Road PR-117 Km. 0.2, Lajas, PR 00667, coordinates 18.042252, -67.050132, complies with:

Check	Project Criteria		
	1. Street resurfacing.		
	2. Construction of gutters and sidewalks along existing roads.		
	3. Reconstruction or emergency repairs of existing buildings, facilities and homes.		
	4. Rehabilitation of existing occupied single-family homes, and buildings; provided that equipment storage or staging areas are not located on vacant property harboring a wetland and/or forested vegetation and that the lighting associated to the new facilities is not visible directly or indirectly from a beach.		
	5. Demolition of dilapidated single-family homes or buildings; provided that the demolition debris is disposed in certified receiving facilities; equipment storage or staging areas are not located on vacant property harboring a wetland and/or forested vegetation.		

6. Rebuilding of demolished single-family homes or buildings, provided that the new construction is within the existing footprint of the previous structure and/or within pre- existing grassed or paved areas, and that the lighting associated to the new facilities are not visible directly or indirectly from a beach.
7. Activities within existing Right of Ways (ROWs) of roads, bridges and highways, when limited to actions that do not involve cutting native vegetation or mayor earth moving; and are not located within, or adjacent to, drainages, wetlands, or aquatic systems. These activities include the installation of potable water and sanitary pipelines.
 Improvements to existing recreational facilities, including the installation of roofs to existing basketball courts, provided that the lighting associated to the facilities are not visible directly or indirectly from the beach.
9. Construction of electric underground systems in existing towns and communities, provided that the property is not a wetland area and the lighting associated to the facilities are not visible directly or indirectly from the beach.
10. Construction of facilities on vacant properties covered with grasses in urban areas, provided that the lighting associated to the facilities are not visible directly or indirectly from the beach.
11. Construction of houses, buildings or acquiring lands in urban areas covered by grass for relocation of low-income families and/or facilities that have been affected by weather conditions.

Ángel G. López-Guzmán Deputy Director

Permits and Environmental Compliance Division

Office of Disaster Recovery

Address: P.O. Box 21365 San Juan, PR 00928 Telephone and Ext: 787-274-2527 ext. 4320 Email: environmentcdba@vivienda.pr.gov larch Grozy

Date

Attachment 1

Maps

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498





Dwg Name: INGENIUM GROUP

G-1.1

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

OWNER LAJAS MUNICIPALITY

REGISTER No. 3 5 8 - 0 5 2 - 1 5 9 - 1 9

REV. DATE DESCRIPTION BY CHILD





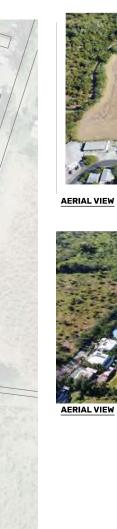


Drawn by: INGENIUM GROUP Revised by: ING, WILLIAM MELENDEZ Plot Scale: AS SHOWN

Progress Print:
TITLE
GENERAL SITE PLAN

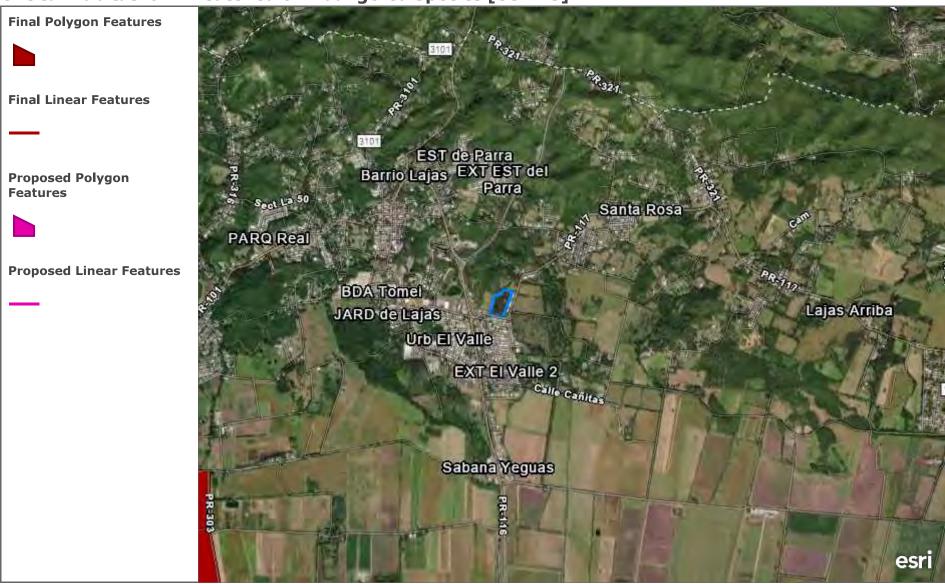
2/27







Critical Habitat for Threatened & Endangered Species [USFWS]



A specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

Maxar | Esri Community Maps Contributors, Kadaster Netherlands, Esri, HERE, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, NPS, US Census Bureau

0.6mi

PR-CRP-000892



November 21, 2023

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Riverine

Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment 2

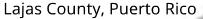
IPaC Report

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to astrust resources) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location





Local office

Caribbean Ecological Services Field Office

\((787) 834-1600

(787) 851-7440

CARIBBEAN_ES@FWS.GOV

MAILING ADDRESS

Post Office Box 491 Boqueron, PR 00622-0491

PHYSICAL ADDRESS

Office Park I State Road #2 Km 156.5, Suite 303} Mayaguez, PR 00680



Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can**only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact<u>NOAA Fisheries</u> for<u>species under their jurisdiction</u>.

1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>disting status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Reptiles

NAME STATUS

Puerto Rican Boa Chilabothrus inornatus

Endangered

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6628

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Managment<u>https://www.fws.gov/program/e</u>ag<u>le-man</u>ag<u>emen</u>t
- Measures for avoiding and minimizing impacts to birds
 https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds
 <u>https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</u>

Supplemental Information for Migratory Birds and Eagles in IPaC
 https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the vian Knowledge Network (AKN). The AKN data is based on a growing collection of urvey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFW<u>Birds of Conservation Concern</u> (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by thevian Knowledge Network (AKN). The AKN data is based on a growing collection of urvey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle tagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>Rapid Avian Information Locator</u> (RAIL) Tool

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the <u>Eagle Act</u> should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Aetand the Bald and Golden Eagle Protection Ac€.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Managementhttps://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds
 https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birdshttps://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC
 https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The <u>data</u> in this location indicates there are no migratory<u>birds of conservation concern</u> expected to occur in this area.

There may be migratory birds in your project area, but we don �� thave any survey data available to provide further direction. For additional information, please refer to the links above for recommendations to minimize impacts to migratory birds or contact your local FWS office.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFW<u>Sirds of Conservation Concern</u> (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by thevian Knowledge Network (AKN). The AKN data is based on a growing collection of urvey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle Lagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>Rapid Avian Information Locator</u> (<u>RAIL</u>) Tool

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u> This data is derived from a growing collection o<u>furvey</u>, <u>banding</u>, and <u>citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the All Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the occurrence Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need tobtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAO "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local.S. <u>Army Corps of Engineers District</u>.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Attachment 3

Supporting Documents



U.S. FISH AND WILDLIFE SERVICE CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE

Conservation Measures for the Puerto Rican boa (Chilabothrus inornatus)

Section 7 (a)(1) of the Endangered Species Act (ESA) charges Federal agencies to aid in the conservation of listed species, and section 7 (a)(2) requires the agencies, through consultation with the U.S. Fish and Wildlife Service (Service), to ensure their activities are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. Section 7 applies to the management of Federal lands as well as Federal actions that may affect listed species, such as Federal approval of private activities through the issuance of Federal funding, permits, licenses, or other actions. Any person that injures, captures, or kills a Puerto Rico boa is subject to penalties under the ESA. If Federal funds or permits are needed, the funding or permitting agency should initiate Section 7 consultation with the Service. To initiate a consultation under the Section 7 of the ESA, you must submit a project package with the established minimum requirements. These conservation measures should be incorporated into the project plans to minimize possible impacts to the species.

The endangered Puerto Rican (PR) boa (*Chilabothrus inornatus*, formerly *Epicrates inornatus*) is the largest endemic snake species that inhabits Puerto Rico. The PR boa is non-venomous and does not pose any life threatening danger to humans, but some individuals may try to bite if disturbed or during capture or handling. Its body color ranges from tan to dark brown with irregular diffuse marking on the dorsum, but some individuals lack marking and are uniformly dark. Juveniles may have a reddish color with more pronounced markings. In general, as they mature, their body color tends to darken.



The Puerto Rican boa was federally listed in 1970. Currently, the species has an island-wide distribution and occurs in a wide variety of habitat types ranging from wet montane to subtropical dry forest and can be found from mature forest to areas with different degrees of human disturbance like roadsides or houses, especially if near their habitat in rural areas. This boa is considered mostly nocturnal, remaining less active, concealed or basking under the sun during the day.

The Service has developed the following conservation measures with the purpose of assisting others to avoid or minimize adverse effects to the PR boa and its habitat. These recommendations may be incorporated into new project plans and under certain circumstances into existing projects. Depending on the project, additional conservation measures can be implemented besides the ones presented in this document.

Conservation Measures:

- 1. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site.
- 2. Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas.
- 3. Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or personnel with experience on this species should survey the areas to be cleared to verify the presence of any PR boa within the work area.
- 4. The PR boa is considered more active at night. Thus, in order to maximize its detection, the species should be searched at nights prior to habitat disturbance.
- 5. Once the area has been searched for PR boas, vegetation should first be cleared by hand to the maximum extent possible. Vegetation should be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow boas present on site to move away on their own to adjacent available habitat. Any stone walls or naturally occurring rock piles must be carefully dismantled by hand as these are refuges for the snake. This will allow any boas present to vacate the site without injury.
- 6. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior.

- 7. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #6). **Do not capture the boa.** If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: (787) 724-5700, (787) 230-5550, (787) 771-1124). If immediate relocation is not an option, project-related activities at this area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue.
- 8. If a PR boa is captured by the PRDNER, record the name of the PRDNER staff and information on where the PR boa will be taken. This information should be reported to the Service.
- 9. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #7). If not possible, the animal should be left alone until it leaves the vehicle on its own.
- 10. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.
- 11. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #6). If the PR boa was accidentally? killed as part of the project actions, please include information on what conservation measures had been implemented and what actions that will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.
- 12. Projects must comply with all state laws and regulations. Please contact the PRDNER for further guidance.

If you have any questions regarding the above conservation measures, please contact the Service:

- José Cruz-Burgos, Endangered Species Coordinator
 - o Email: jose cruz-burgos@fws.gov
 - o Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
 - o Email: jan zegarra@fws.gov
 - o Office phone (786) 933-1451

Last Revised: October 2023

ATTACHMENT E ENVIRONMENTAL SITE ASSESSMENT (ESA) PHASE I STUDY

ENVIRONMENTAL SITE ASSESSMENT PHASE I REPORT FORMER SAN LUIS ACADEMY STATE ROAD PR-117 Km. 0.2, SANTA ROSA WARD LAJAS, PUERTO RICO

Prepared for:



Prepared by:



September 2023

Project No. 182-01



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EXECUTIVE SUMMARY

Ingenium Professional Group PSC (Client) retained ACE Environmental, Inc. (ACE) to conduct a Phase I Environmental Site Assessment (ESA) at Former San Luis Academy located at State Road PR-117 Km. 0.2, Santa Rosa Ward, Lajas, Puerto Rico.

The Phase I - Environmental Site Assessment (ESA) was performed at the request of Ingenium Professional Group PSC for the purpose of identifying to the extent feasible and to which there is reason to believe that there may be *recognized environmental conditions*¹ in connection with the Former San Luis Academy at State Road PR-117 Km 0.2, Santa Rosa Ward, in the Municipality of Lajas, Puerto Rico (Subject Site). The Phase I ESA is intended to permit the user to satisfy one of the requirements to qualify for *innocent landowner defense, contiguous property owner or bona fide prospective purchaser* (collectively *Landowner Liability Protections (LLPs)*) for limitations on CERCLA liability as stated in the *Comprehensive Environmental Response, Compensation and Liability Act* [CERCLA, 42 USC § 9601(35), 9601 (40), 9607(b), 9607 (q) and 9607 (r)].

This report summarizes the findings of the Phase I ESA performed at Subject Site.

FINDINGS - RECORDS & HISTORICAL REVIEW

The historical records review revealed no evidence of Historical Recognized Environmental Conditions². Historical uses do not present potential environmental concerns for the subject site. No De Minimis Environmental Conditions³ were identified as a result of activities or conditions of the subject site.

FINDINGS - SITE RECONNAISSANCE

The site reconnaissance did not revealed evidence of Recognized Environmental Conditions in connection with the subject site.

Recognized Environmental Condition (REC). Recognized environmental conditions, as defined by ASTM E 1527-13, means, "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." Basically, evidence was discovered that there is a significant potential that a hazardous substance has been released from its operation onto (or into) the surface and may be subject to government enforcement.

² Historical Recognized Environmental Conditions (HREC) is defined as á past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls).

³ De Minimis Environmental Conditions indicate a release which generally would not represent a threat to human health and would generally not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.



DATA GAPS

In the opinion of the environmental professional, data gaps encountered on the preparation of this ESA Phase I are not considered significant and did not affect our ability to identify recognized environmental conditions in connection with the subject site.

CONCLUSIONS, OPINION & RECOMMENDATIONS

In the course of this investigation, no evidence of recognized environmental conditions was identified at the subject site. However, the presence of a sealed 55-gal. drum with an unknown content at the subject site shall be addressed by characterizing its contents and appropriate disposal.

ACE does not recommend further investigations at the subject site.



1.0 INTRODUCTION

Ingenium Professional Group PSC (Client) retained ACE Environmental, Inc. (ACE) to conduct a Phase I Environmental Site Assessment (ESA) at Former San Luis Academy located at State Road PR-117 Km. 0.2, Santa Rosa Ward, Lajas, Puerto Rico.

The Phase I - Environmental Site Assessment (ESA) was performed at the request of Ingenium Professional Group PSC for the purpose of identifying to the extent feasible and to which there is reason to believe that there may be *recognized environmental conditions*⁴ in connection with the Former San Luis Academy at State Road PR-117 Km 0.2, Santa Rosa Ward, in the Municipality of Lajas, Puerto Rico (Subject Site). The Phase I ESA is intended to permit the user to satisfy one of the requirements to qualify for *innocent landowner defense, contiguous property owner or bona fide prospective purchaser* (collectively *Landowner Liability Protections (LLPs)*) for limitations on CERCLA liability as stated in the *Comprehensive Environmental Response, Compensation and Liability Act* [CERCLA, 42 USC § 9601(35), 9601 (40), 9607(b), 9607 (q) and 9607 (r)].

The subject site is owned by Iglesia Católica Apostólica y Romana-Diócesis de Mayagüez, and it is comprised of a parcel (Cadaster Number 358-052-159-19) with an approximate area of 30,901.2715 square meters (7.86213 cuerdas), formerly used as a catholic private school with a chapel and a nun's residence. Within the parcel, there are the following structures:

- Two rectangular one-story concrete building forming an L-shaped structure with an area of approximately 10,196 square feet formerly used for school facilities.
- Two detached one-story concrete structures with an area of approximately 299 square feet each one, formerly used for administration office and a school cafeteria, respectively.
- One galvalume covered basketball court with an area of approximately 7,615 square feet.
 This area also includes 437 square feet of bleachers area, 92 square feet kiosk and 55 square feet storage room.
- One one-story small concrete building with an area of approximately 279 square feet formerly used as a chapel.
- One one-story structure formerly used as a nun's residence with an area of approximately 2,587 square feet constructed of a reinforced concrete floor slab, treated wood walls and wood ceiling and galvalume roof on top. The layout consists of a main living area with four bedrooms, two full bathroom, one half bathroom, living, dining, kitchen, chapel, office area, single carport, laundry area, front porch, balcony and rear terrace.
- One L-shaped asphalt paved parking lot with an area of approximately 16,000 square feet.

The agreed upon objective of the investigation was to ascertain to the extent feasible and to which there is reason to believe that there may be recognized environmental conditions at the subject site. In accordance with the US Environmental Protection Agency All Appropriate

Recognized Environmental Condition (REC). Recognized environmental conditions, as defined by ASTM E 1527-13, means, "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." Basically, evidence was discovered that there is a¹ significant potential that a hazardous substance has been released from its operation onto (or into) the surface and may be subject to government enforcement.



Inquiries (AAI) Rule⁵ and the American Society for Testing and Materials (ASTM) Standard E1527-13⁶, Mr. Luis A. Maldonado, Environmental Engineer, of ACE performed a physical examination of the subject property on August 14, 2023. All work for this Phase I ESA was performed by or under the supervision of Mr. William Sarriera, who meets the qualifications of an Environmental Professional, as set forth in the AAI Rule. Resumes of environmental professionals directly responsible for this assessment are enclosed within Appendix I.

This report summarizes the findings of the Phase I ESA performed at the subject site.

1.1 PURPOSE

The Client requested the preparation of this Phase I Environmental Site Assessment as part of the due diligence process prior of subject site's sale to the Municipality of Lajas. This Phase I Environmental Site Assessment (ESA) is the result of an inquiry into the previous ownership and uses of the subject property as described in Section 2.1; and is intended to meet some of the threshold requirements of a bona fide prospective purchaser, contiguous property owner, or innocent landowner to qualify for landowner liability protection under the Brownfields Amendments to CERCLA, and other liability projects that may be available to landowners under federal and commonwealth statutes. The purpose of this Phase I ESA is to identify, to the extent feasible, recognized environmental conditions (RECs), such as, ". . . the presence or likely presence of any hazardous substances or petroleum products on the property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property . . ." Conditions determined to be insignificant are not recognized environmental conditions.

1.2 SCOPE OF SERVICES

The scope of services included a Phase I Environmental Site Assessment performed in general accordance with ASTM Standard E 1527-13.

This Phase 1 Environmental Site Assessment report includes the following:

Section 1 - **Introduction**, includes a discussion of the purpose/reason for performing the Phase I ESA; additional services requested by the Client, if any; limitations, exceptions, and special terms and conditions; and user reliance parameters.

^{5 40} CFR Part 312 (Standards and Practices for All Appropriate Inquiries) [EPA-HQ-OLEM-2021-0946; FRL-9334.1-01-OLEM] Federal Register/Vol. 87, No. 240/Thursday, December 15, 2022

Standard, ASTM E1527-21, became active on February 13, 2023. The existing standard, ASTM E1527-13, may still be used but will be phased out on February 13, 2024, after which ASTM E1527-21 will be the only standard for conducting a Phase I ESA.

Recognized Environmental Condition (REC). Recognized environmental conditions, as defined by ASTM, means, "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on a property or into the ground, groundwater, or surface water of the property." Basically, evidence was discovered that there is a significant potential that a hazardous substance has been released from its operation onto (or into) the surface and may be subject to government enforcement.



Section 2 - **Site Setting**, is a compilation of information concerning the site location, physical setting (including topography, soil and groundwater conditions), and adjoining property use.

Section 3 - **Site History and Client Provided Information**, summarizes the history of the Site and adjoining properties based on various sources which may include a review of historical aerial photographs, historical maps, city directories, and Client provided information (i.e., title records, environmental liens, specialized knowledge, valuation reduction for environmental issues, and owner, property manager, and occupant information).

Section 4 - **Records Review**, is a compilation of ACE's review of several databases available from Federal, State, and local regulatory agencies regarding hazardous substance use, storage, or disposal at the Site; and for off-site facilities within the search distances specified in the ASTM Standard.

Section 5 - **Site Reconnaissance**, describes ACE's observations made during the site reconnaissance.

Section 6 - **Interviews**, is a summary of telephone and personal interviews conducted with the owner/manager of the facility, occupants/tenants, local government officials, and the Client. Additional interview sources may be contacted if any of these are not available prior to production of this report and may include adjacent landowners and people with historical knowledge of the area.

Section 7 - **Evaluation and Recommendations**, presents our conclusions regarding the presence of recognized environmental conditions connected with the Subject Site, and recommendations. Data failures (e.g., presence of data gaps), if encountered during the assessment, is addressed.

Section 8 - Information Sources, is a summary of the resources used to compile this report.

Section 9 - **Persons Performing the Phase I ESA**, references the environmental professionals performing the assessment and their qualifications.

Section 10 - **Environmental Professional's Declarations**, references the assessment declarations.

The **Appendices** contain the figures, maps and photographs of the Site; regulatory database reports, copies of regulatory agency file information, previous reports about the Site (if available), and copies of site history information (such as aerial photographs and historical topographic maps as appropriate).

1.3 SIGNIFICANT ASSUMPTIONS

This Phase I ESA was prepared using information obtained from and/or provided by the following sources:

- Visual inspection of the Site;
- Available published information;



- EDR database searches:
- Puerto Rico government officials; and
- Site/Owner representatives.

ACE Environmental, Inc. assumes that the information obtained through the above methods is valid and accurate as provided. ACE also assumes that:

- Property owner and/or Client provided all applicable and available environmental records and specialized knowledge regarding the Site.
- ➤ Third parties or other may have provided information contained in this report. Where provided, our personnel have made reasonable inquiry into the accuracy of such information. Unless such inquiry indicated otherwise, the information was considered to be accurate and complete.

This Phase I ESA was compiled assuming the following conditions:

- Radon Radon is naturally occurring and not of anthropologic origin.
- ➤ Facility Permits and Compliance History The review and assessment of permits and compliance history with permits was not included in ACE's Scope of Services.

ACE has not made other significant assumptions during the performance of this Phase I ESA.

The passage of time, manifestation of latent conditions, and occurrence of future events or changes to existing codes/regulations may alter the conclusions and recommendations of this report.

1.4 LIMITATIONS AND EXCEPTIONS

Phase I ESA's are non-comprehensive by nature and are unlikely to identify all environmental problems or eliminate all risks. This report is a qualitative assessment. ACE offers a range of investigative and environmental services to suit the needs of our clients, including more quantitative investigations. Although risk can never be eliminated, more detail and extensive investigations yield more information, which may help you understand and better manage your risk. Since such detailed services involve greater expense, we ask our clients to participate in identifying the level of service, which will provide them with an acceptable level of risk. Please contact the signatories of this report if you would like to discuss this issue of risk further.

ACE Environmental, Inc. performed this environmental assessment in general accordance with the guidelines set forth in the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (Designation E 1527-13), All Appropriate Inquiries Rule (the "AAI Rule") established by the United States Environmental Protection Agency and set forth at 40 CFR Part 312 and our proposal, which was subsequently approved by the Client. No warranties, either expressed or implied is made. Environmental issues not specifically addressed in this report were beyond the scope of our services and are not included in our evaluation.

Per the agreed upon Scope of Work, the data presented, and the opinions expressed in this report are qualified as follows:



- This study was restricted to observations made during the site visit to the Subject Site located at State Road PR-117 Km. 0.2, Santa Rosa Ward, Lajas, Puerto Rico.
- The sole purpose of the investigation and of this report is to assess the physical characteristics of the subject site with respect to the presence or absence in the environment of oil or hazardous materials and substances as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the subject site.
- ACE derived the data in this report primarily from visual inspections, examination of records in the public domain, and interviews with individuals with information about the facility site. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.
- In preparing this report, ACE has relied upon and presumed accurate certain information (or the absence thereof) about the subject site and adjacent properties provided by governmental officials and agencies, subject property actual owner/occupant and others identified herein. Except as otherwise stated in the report, ACE has not attempted to verify the accuracy or completeness of any such information.
- ➤ The Scope of Services limits the data reported and the findings, observations, and conclusions expressed in the report. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Subject Site.
- ➤ Because of the limitations stated above, the findings, observations, and conclusions expressed by ACE in this report are not, and should not be considered, an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or findings, observations, and conclusions expressed in this report. Further, such data, findings observations, and conclusions are based solely upon site conditions in existence at the time of investigation.
- > This report has been prepared on behalf of and for the exclusive use of Client and is subject to and issued in connection with the Contract and the provisions thereof.
- ➤ The Phase I ESA was performed using standard practices, with the understanding that environmental professionals can and should use their professional judgment in carrying out environmental site assessments.

ACE did not perform any exploratory probing or discovery, perform tests, operate any specific equipment, or take measurements or samples to perform the Phase I ESA scope. The Phase I ESA was not a building code, safety, regulatory or environmental compliance inspection. The Phase I ESA is not intended to reduce the risk of the presence of mold and physical deficiencies conducive to mold nor the risk that mold or physical deficiencies conducive to mold may pose to the buildings and building occupants.



The following issues are not within the scope of ASTM 1527 and are not addressed in this Phase I ESA:

- Controlled substances as defined in the Controlled Substances Act (21 U.S.C. §802). Persons conducting an ESA as part of an EPA Brownfields Assessment and Characterization Grant awarded under CERCLA 42 U.S. C. §9604(k)(2)(B) must include controlled substances to the extent directed in the terms and conditions of the specific grant or cooperative agreement.
- > Naturally occurring radon.
- Lead in drinking water.
- Mold, fungi, and microbial growth in building structures.
- ➤ Environmental liens or activity and use limitations (AULs). Our personnel have not reviewed judicial records for environmental liens or AULs.
- > No testing or sampling of materials was performed as part of this inquiry.
- Ecological Resources, endangered species, wetlands, and cultural and historical resources.

This report has been prepared for the exclusive use of the Client and their designees. No other person or organization is entitled to rely upon any part of it without written authorization from us. We represent that, within the limitations of the agreed-upon Scope of Work and the constraints imposed by the Client, this assessment has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using the degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, express or implied, is made.

1.5 STANDARDS OF CARE AND WARRANTIES

Our services were not intended to be technically exhaustive. There is a possibility that with the proper application of methodologies, conditions may exist on the subject property that could not be identified within the scope of the assessment(s) or that were not reasonably identifiable from the available information. No ESA can wholly eliminate uncertainty regarding the potential for RECs for and/or in connection with the subject site. The ESA was intended to reduce, but not eliminate uncertainty regarding the potential for RECs for and/or in connection with the subject site.

Our report is based on commonly known and reasonably ascertainable information, including limited, ground-level visual inspection of the property except where otherwise explicitly indicated, in conformance with ASTM E 1527-13 and the U.S. EPA AAI Rule. Findings and conclusions derived from the methodologies described in the Practice contain all of the inherent limitations in the methodologies that are referred to in the Practice.

The methodologies include reviewing information provided by other sources. ACE treats information obtained from the record reviews and interviews concerning the subject site as reliable and the ASTM protocol do not require ACE to independently verify the information. Therefore, ACE cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. No other warranties are implied or expressed. ACE warrants that the findings contained in this report have been prepared in general conformance with accepted professional practices at the time of report preparation as applied by similar professionals. Future



changes in standards, practices, or regulations cannot be anticipated and have not been addressed. The observations and recommendations presented in this report are time dependent, and conditions will change. This report speaks only as of its date.

The conclusions and recommendations herein are based solely on the information obtained in compiling the report. Because the facts forming the basis for the report are subject to professional interpretation, differing conclusions could be reached. ACE does not assume responsibility for the discovery and elimination of hazards that could cause accidents, injuries, or damage. Compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of client's obligations under commonwealth, municipal or federal laws or any modifications or changes to such laws.

None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature but shall be a representation of findings of fact from records examined. This report is valid as of the date shown and ACE shall not be held responsible for subsequent changes in physical, chemical, environmental conditions at the subject property and/or legislation over which ACE has no control.

1.6 USER RELIANCE

ACE considers the client to be the 'User' of our assessment, defined in the Practice as:

"The party seeking to use Practice E 1527 to complete an environmental site assessment of the subject property. A user may include, without limitation, a potential purchaser of a property, a potential tenant of property, an owner of property, a lender or a property manager. The user has specific obligations for completing a successful application of this practice...."

This report was prepared pursuant to a contract between ACE and Client. That contractual relationship included an exchange of information regarding the subject site that was unique and serves as the basis upon which this report was prepared. Because of the importance of these understandings, our assessment may not be sufficient for the intended purposes of another party.

1.7 Use by Other Parties

At the discretion of the Client, ACE consents to the release of this report to third parties. However, any use of or reliance of this report, including any of the information or conclusions contained herein, will be at the third party's risk and without legal recourse against ACE; its affiliates; employees; officers or directors; regardless of whether the action in which recovery of the damages is sought based upon contract; tort (including the sole, concurrent, or other negligence and strict liability of ACE), statue or otherwise. No warranties or representations expressed or implied in this report are made to any such third party. This report shall not be used or relied upon by a party, which does not agree to be bound by the above statement.

This report was compiled based partially on information supplied from outside sources and from other information that is in the public domain. ACE makes no warranty as to the accuracy of statements made by others that may be contained in the report; nor are any other warranties or guarantees, express or implied, included or intended by the report, except that it has been



prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services.

This report is valid as of the date shown and ACE shall not be held responsible for subsequent changes in physical, chemical, environmental conditions at the subject property and/or legislation over which ACE has no control.



2.0 SITE DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The subject site is comprised of a parcel (Cadaster Number 358-052-159-19) located at State Road PR-117 Km 0.2, Santa Rosa Ward, Lajas, Puerto Rico. (See Figure 1 and Figure 2 in Appendix A).

The legal description provided by the property's Title Report⁸ is as follows: "RUSTIC: Parcel at Santa Rosa Ward, within the Municipality of Lajas, Puerto Rico, with an area of 7.86213 cuerdas, equivalent to 30,901.2715 square meters. Adjoining North, in 135.22 meters with the irrigation canal of the Puerto Rico Energy Power Authority, and in 63.778 meters with land owned by Sucesión Salvador Lugo Lugo; on the South, in 146.31 meters with parcel for public use which separates from State Road PR-117; on the East, in 46.688 meters with tracts of lands owned by Sucesión Cancel Vargas, Santos Cancel and Manuel Pagán, and in 198.247 meters with the remnant of parcel from which the property of Laura M. Tió Nazario is segregated; and on the West, in 172.665 meters with remnant of the principal parcel from which the property of Laura M. Tió Nazario is segregated."

2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

2.2.1 Topography

The subject site is located at an elevation of approximately 124 feet above sea level. The topography of the subject site is mostly level with a rolling topography on the rear northern side of the parcel, and slightly sloping toward south. Adjacent properties have mostly level topography, except for the northeast adjacent property which is moderately sloping. (Appendix A - Figure 1)

2.2.2 Soils/Geology

The geology at the Subject Site is characterized mainly as Alluvium (Qal)⁹, which consists of clay, silt, sand, and gravel in major stream valleys. In the Lajas valley consists mainly of silt and clay with fine sand lenses which grade into sand and gravel fan deposits on the north and south sides of the valley. However, a small area at the northern side of the subject site, the geology is characterized as Sabana Grande Formation (Ks), which consists of gray, dark-greenish-gray, and purplish-gray andesitic crystal-lithic tuff, tuff-breccia, and conglomerate with minor basaltic lava and breccia.

According to the U.S. Department of Agriculture's (USDA) Soil Conservation Service¹⁰, the soils on the subject site area consist of Urban Land (Ua). Urban land consists mainly of sites for

⁸ Cintrón Henríquez, Lizandra. Investigadora de Título. Finca 10,901 inscrita al Folio 283 del Tomo 256 de Lajas. 6 de febrero de 2023.

Puerto Rico Planning Board, Geodata, http://gis.jp.pr.gov/mipr/ USGS, Geology of Puerto Rico, https://mrdata.usgs.gov/geology/pr/ Volckmann, Richard P. Geologic Map of the San Germán Quadrangle, Southwest Puerto Rico. U.S. Geological Survey. 1984

USDA National Resources Conservation Service, Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm



houses, industrial buildings, parking lots, streets and other structures. The landscape has been altered in places by cutting, filling or grading.

2.2.3 Water Resources

The Lajas Valley artificial irrigation channel system is the only surface water near the subject site. It borders the north side of the subject site. This irrigation system is owned by the Puerto Rico Electric Power Authority. According to the database of the EDR Radius Map Report¹¹, there is one public water supply (PWS) system named Lajas Filtration Plant located approximately 0.13 mile west of the subject site, which is supplied by the irrigation channel.

According to the U.S. Fish & Wildlife Service National Wetlands Inventory 12, there are no wetlands at the subject site. However, there is a "Fresh Water Emergent wetland" at approximately 0.27 mile southeast of the subject site.

The FEMA Flood Map¹³ Panel 72000C1570H indicates that the subject site is located within a Zone X (Area of Minimal Flood Hazard).

2.2.3.1 Groundwater

The general topographic gradient for groundwater is generally toward the south at the subject site¹⁴.

There are no groundwater wells for potable water within the subject property. However, there is one (1) PRASA groundwater well for water extraction at 0.54 mile northwest of the subject site.¹⁵

There are six (6) Federal USGS monitoring wells within a one-mile radius of the subject site as described in the following table:

EDR Map ID	Well ID#	Database ¹⁶	Distance and Direction from Subject Site	Relative Topography from Subject Site
1	USGS40001043556	NWIS	1⁄4 - 1⁄2 Mile ESE	Higher
2	USGS40001043596	NWIS	1⁄4 - 1⁄2 Mile NNE	Higher
3	USGS40001043507	NWIS	1/2 - 1/2 Mile West	Lower
5	USGS40001043535	NWIS	1/4 - 1/2 Mile West	Higher
6	USGS40001043576	NWIS	½ - 1 Mile ENE	Higher

¹¹ EDR Radius Map[™] Report with GeoCheck®; Inquire 7402389.2s, July 28, 2023.

¹² https://www.fws.gov/wetlands/data/mapper.html

¹³ FEMA Flood Map Service Center, Flood Map 72000C1570H, effective on 4/13/2018.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. USGS, Groundwater Atlas of the United States, Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands. Report HA-730-N

¹⁵ Puerto Rico Planning Board, Geodata, http://gis.jp.pr.gov/mipr/

USGS National Water Inventory System (NWIS). This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.



2.2.4 Climate

Climate¹⁷ in Lajas, Puerto Rico is hot, windy, and partly cloudy. There is a great deal of rainfall in Lajas even in the driest month. Over the course of the year, the temperature typically varies from 69°F to 89°F and is rarely below 66°F or above 91°F. Rain falls throughout the year in Lajas. The month with the most rain in Lajas is October, with an average rainfall of 3.1 inches. The month with the least rain in Lajas is February, with an average rainfall of 0.7 inches. The average annual rainfall in the Lajas Valley watershed is 45 inches.

2.3 DESCRIPTION OF IMPROVEMENTS

The table below provides a general description of property and improvements.

Table 2-1 Property Improvements		
	Rural parcel with an approximate area of 30,901.2715 square meters (7.86213 cuerdas), Within the parcel, there are the following structures:	
Property Description	 Two rectangular one-story concrete building forming an L-shaped structure with an area of approximately 10,196 square feet formerly used for school facilities. Two detached one-story concrete structures with an area of approximately 299 square feet each one, formerly used for administration office and a school cafeteria, respectively. One galvalume covered basketball court with an area of approximately 7,615 square feet. This area also includes 437 square feet of bleachers area, 92 square feet kiosk and 55 square feet storage room. One one-story small concrete building with an area of approximately 279 square feet formerly used as a chapel. One one-story structure formerly used as a nun's residence with an area of approximately 2,587 square feet constructed of a reinforced concrete floor slab, treated wood walls and wood ceiling and galvalume roof on top. The layout consists of a main living area with four bedrooms, two full bathroom, one half bathroom, living, dining, kitchen, chapel, office area, single carport, laundry area, front porch, balcony and rear terrace. One L-shaped asphalt paved parking lot with an area of approximately 16,000 square feet. 	
General Topography	The topography of the subject site is mostly level, slightly sloping south.	
Access Roads	North/South and West/East Roads: State Road PR-117	

NOAA, National Weather Service Forecast Office. https://w2.weather.gov/climate/local_data.php?wfo=sju



Table 2-1 Property Improvements		
Potable Water	Puerto Rico Aqueduct and Sewer Authority (PRASA)	
Sanitary Sewer	Puerto Rico Aqueduct and Sewer Authority (PRASA)	
Storm Water Sewer	Municipal Separate Storm Sewer System (MS4)	
Electrical Service	LUMA	

2.4 CURRENT USES OF THE SUBJECT PROPERTY

2.4.1 Current Uses of the Subject Property

Currently, the subject site is not in use since 2022.

2.4.2 Current Uses of the Adjoining Properties

The current uses of adjoining properties are identified below:

North: Lajas Irrigation Channel, vacant lot and one residential parcel

South: State Road PR-117

East: Fourteen (14) residential parcels
West: One vacant lot and one residential lot

2.5 SITE BACKGROUND

2.5.1 Past Uses of the Subject Property

According to the interviews with owner representatives, Mr. Carlos Ramos (Iglesia Católica Apostólica y Romana-Diócesis de Mayagüez employee) and Sister Teresita Alicea (former San Luis Academy Director during 1989-2022), the subject site was used as a catholic private school (San Luis Academy) and nun's residence from 1986 to 2022.

In 1986, Mrs. Laura M. Tió Nazario donated the subject site land to the Iglesia Católica Apostólica y Romana-Diócesis de Mayagüez for the placement of the San Luis Academy new facilities. The subject site was an undeveloped vacant land by the time of the donation. The school structure and the nun's residence construction were completed at the subject site by circa 1989. A school extension was constructed adjoining the original structure forming a L-shape building circa 1992. A basketball court was built in 1995 between the school building and the nun's residence. In 2000, a small chapel was constructed at the north side of the subject site. The San Luis Academy closed its operations in May 2022, and the nun's moved from the nun's residence at the same time. Hence, the subject site has not been in use since 2022.

According to Sister Teresita Alicea, the subject site was an undeveloped land with possible agricultural use due to the presence of a cane field prior to 1986.



A review of aerial photographs and historical topographic quadrangles for the subject site (see Table 2-2, Table 3-1 and Table 3-2), revealed that the subject site was an undeveloped vacant land from 1937 to 1985. The subject site structures are shown for the first time in 1989.

In summary, the historical records available to ACE indicate that the subject site uses in the past were institutional and undeveloped vacant land with possible agricultural use. This information is consistent with the information provided by the subject property owner representatives.

2.5.2 Past Uses of Adjoining Properties

The subject site has been bound to the North by undeveloped vacant land and the Lajas Irrigation Channel; to the South by State Road PR-117; to the West by undeveloped vacant land and residential use; and to the East by residential and undeveloped land.

In summary, the historical records available to ACE indicate that the adjoining properties were used in the past as undeveloped land and residential. This information is consistent with the information provided by the subject site owner representatives.

The Table 2-2 summarizes the findings pertaining to historical uses of the Subject Site and surrounding areas.



Table 2-2 Historical Use Summary				
Approximate Period	Property Use	Surrounding Area	Source(s)	Comments
2015 - 2022	Institutional	Residential, Agricultural & Vacant Land	2015, 2016, 2017, 2018, 2019, 2020, 2021 & 2022 Google Aerial Photos; 2017 & 2018 EDR Topographic Maps	No significant data gap
2004 - 2014	Institutional	Residential, Agricultural & Vacant Land	2004, 2006, 2009, 2010, 2011, 2013 & 2014 Google Aerial Photos; 2013 EDR Topographic Map	No significant data gap
1989 - 1993	Institutional	Residential Agricultural & Vacant Land	1989 & 1993 EDR Aerial Photographs; 1993 Google Aerial Photo	No significant data gap
1975 - 1985	Undeveloped Land & Possible Agricultural	Residential, Agricultural & Vacant land	1975 & 1977 EDR Aerial Photographs; 1985 Google Aerial Photo	No significant data gap
1957 - 1966	Undeveloped Land & Possible Agricultural	Residential, Agricultural & Vacant land	1957 & 1966 EDR Topographic Maps	No significant data gap
1937 - 1949	Undeveloped Land & Possible Agricultural	Residential, Agricultural & Vacant Land	1937, 1941 & 1949 EDR Topographic Maps	No significant data gap



3.0 SITE HISTORY AND USER PROVIDED INFORMATION

As part of this report, available historical records and user provided information of the site were reviewed. The emphasis of the review was to identify previous uses of the site that might indicate the presence of hazardous material and/or waste. This section summarizes the findings of the review.

3.1 OWNERSHIP RECORDS

The legal description was obtained from the Title Report¹⁸ and the Restricted Appraisal Report of San Luis Academy¹⁹ provided by the subject site owner. Other ownership verbal information was provided by owner representative, Mr. Carlos Ramos and Sister Teresita Alicea. Ownership information does not indicate past environmental concerns associated with the subject site.

3.2 SANBORN MAP

Environmental Data Resources, Inc. (EDR) did not identify Sanborn Fire Insurance Company maps for the site (*EDR Certified Sanborn Map Report*, Inquiry No. 7402389.3 dated July 28, 2023). The Sanborn Map Report is included in Appendix B.

3.3 CITY DIRECTORY IMAGE REPORT

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report. EDR subsequently provided ACE with *The EDR City Directory Image Report*, Inquiry No. 7402389.5 dated August 1, 2023. The City Directory Image Report is a screening tool design to assist in evaluating potential liability on the subject property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5-year intervals. The City Directory Report is included in Appendix C, and did not identify the subject site address in the research source.

3.4 HISTORICAL TOPOGRAPHIC MAPS

Historical topographical map covering the subject property were obtained from the *EDR Historical Topographic Map Report*, Inquiry Number 7402389.4 dated July 28, 2023. Historical topographical maps were available for 1937, 1941, 1949, 1957, 1966, 2013, 2017 and 2018. A description of the historical topographical map reviewed is as follows:

Cintrón Henríquez, Lizandra. Investigadora de Título. Finca 10,901 inscrita al Folio 283 del Tomo 256 de Lajas. 6 de febrero de 2023.

¹⁹ CAAR Group, PSC. Restricted Appraisal Report of Academia San Luis. April 5, 2022.



Table 3-1 Historical Topographic Maps Summary		
Year	Description	
1937	The 1937 USGS topographic map illustrates the subject site as vacant undeveloped land. Road PR-117 to the South of the subject site is depicted. Surrounding area is mostly undeveloped land; very few apparent residential structures are observed.	
1941	The 1941 USGS topographic map illustrates that subject site and surrounding area have not changed from previous topographic map.	
1949	The 1949 USGS topographic map illustrates that subject site and surrounding area have not changed from previous topographic map.	
1957	The 1957 USGS topographic map illustrates that subject site and surrounding area have not changed from previous topographic map. However, the Lajas Irrigation Channel is depicted to the North of the subject site.	
1966	The 1966 USGS topographic map still illustrates the subject site as vacant undeveloped land. Surrounding area is still mostly vacant land, but it is more developed; few more apparent residential structures are depicted. The Irrigation Channel is depicted to the North of the subject site. Road PR-116 is depicted with a northern extension.	
2013	The 2013 USGS topographic map does not show any structures. However, it shows additional roads and streets at surrounding area that indicate a slightly more developed area. The Lajas Irrigation Channel is still depicted as described previously.	
2017	The 2017 USGS topographic map does not show any structures or any roads. It shows the topographic contours only, which remain unchanged. The Lajas Irrigation Channel is still depicted as described previously.	
2018	The 2018 USGS topographic map does not show any structures. However, it shows a school symbol at the subject site. Also, it shows additional roads and streets at surrounding area that indicate a more developed area. The Lajas Irrigation Channel is still depicted as described previously.	

The review of historical topographic USGS Maps (see Appendix D) did not identify features indicative of *recognized environmental conditions* at the subject site and/or the immediate surrounding area.

3.5 HISTORICAL AERIAL PHOTOGRAPHS

Aerial photographs covering the subject site were obtained from the *EDR Aerial Photo Decade Package*, Inquiry Number 7402389.8 dated July 31, 2023. Aerial photographs were available for 1975, 1977, 1989 and 1993. The aerial photographs are included in Appendix E. A description of each of the aerial photographs reviewed is as follows:



Table 3-2 Historic Aerial Photographs Summary		
Year	Description	
1975	The subject site and adjacent area can be observed in the aerial photograph. Subject site is depicted as a vacant land. The Lajas Irrigation Channel is depicted to the North of the subject site. Road PR-117 to the South of the subject site is depicted. Surrounding area is mostly composed of undeveloped and agricultural land areas. Very few residential structures are observed at surrounding area. No areas of environmental concern are shown on or adjacent to the subject site.	
1977	The subject site and adjacent area can be observed in the aerial photograph. The Lajas Irrigation Channel is depicted to the North of the subject site. Surrounding area is mostly composed of undeveloped and agricultural land areas. A new residential area is depicted to the South of Road PR-117. No areas of environmental concern are shown on or adjacent to the subject site.	
1989	The subject site and adjacent area can be observed in the aerial photograph. School and nun's residence structures are depicted at the subject site. The Lajas Irrigation Channel is depicted to the North of the subject site. Road PR-117 to the South of the subject site is depicted. Surrounding area is more developed with more residential structures. Vacant and agricultural land areas remain at surrounding area. No areas of environmental concern are shown on or adjacent to the subject site.	
1993	The subject site and adjacent area can be observed in the aerial photograph. An additional school structure forming a L-shape is observed at the subject site, along with the nun's residence structure. The Lajas Irrigation Channel is depicted to the North of the subject site. Road PR-117 to the South of the subject site is depicted. Surrounding area is more developed with more residential structures. Vacant and agricultural land areas remain at surrounding area. No areas of environmental concern are shown on or adjacent to the subject site.	

Aerial photographs for 2004 to 2014 and 2015 to 2022, were obtained from the Internet application Google Earth. Descriptions of the aerial photographs reviewed are as follows:

Table 3-4 Recent Aerial Photographs Summary	
Year	Description
2004 - 2014	The subject site and adjacent areas are unchanged from previous aerial photo, except for the appearance of the small chapel structure depicted at the north side within the subject site, the basketball court facility between the L-shape school structure and the nun's residence, and a parking lot at the south side of the subject site. A residential structure is depicted adjoining the southwest corner out of the subject site. No areas of environmental concern are shown on or adjacent to the subject site.



2015 - 2022	The subject site and adjacent areas remain unchanged from previous aerial photos. No areas of environmental concern are shown on or adjacent to the subject site.
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The review of aerial photographs did not identify features indicative of *recognized environmental conditions* at the subject site and/or the immediate surrounding area (e.g., noticeable storage tanks, landfills, cleanup sites, etc.). Copies of historical aerial photographs for the subject site are included in Appendix E.

3.6 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

The subject site owners' representatives indicated that they do not know of any environmental liens or other activity and use restrictions associated with the subject site (see the Environmental Site Assessment Questionnaire provided by ACE in Appendix H). The available information indicates that the subject site has no environmental liens or activity or use limitations. Environmental cleanup liens and/or Activity and Use Limitations (AULs) that might be filed against the parcel(s) comprising the Subject Site was not made available.

3.7 LAND TITLE RECORDS

Land title record was obtained from the Title Report²⁰ provided by the subject site owner. Additional ownership information was revealed from the Restricted Appraisal Report of San Luis Academy ²¹. Other ownership verbal information was provided by owner representatives, Mr. Carlos Ramos and Sister Teresita Alicea. Ownership information does not indicate past environmental concerns associated with the subject site.

3.8 PRIOR REPORTS

No prior reports were found during the records review or provided by the owners of the subject site.

3.9 SPECIALIZED KNOWLEDGE

The subject site owners' representatives did not have specialized knowledge²² about the subject property.

3.10 Commonly Known or Reasonably Ascertainable Information

The subject site owners' representatives did not have any information on spills or chemical releases that had taken place on the subject property. They had no information on environmental cleanups that have taken place on the property.

²⁰ Cintrón Henríquez, Lizandra. Investigadora de Título. Finca 10,901 inscrita al Folio 283 del Tomo 256 de Lajas. 6 de febrero de 2023.

²¹ CAAR Group, PSC. Restricted Appraisal Report of Academia San Luis. April 5, 2022.

²² Specialized knowledge – If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional.



3.11 Other Historical Sources

No additional historical sources were reviewed.

4.0 RECORDS REVIEW

The Department of Natural Resources and Environment (DNRE) was contacted by ACE in order to review any pertinent records regarding the subject property. The records generally reviewed consist of maps, site plans, permits, and other documentation. Any public records acquired are described in the text.

4.1 ENVIRONMENTAL DATABASE INFORMATION SEARCH

ACE contacted Environmental Data Resources, Inc. (EDR), a commercial environmental database service, in order to supplement and cross reference information received from various government agencies. EDR conducted a search of available environmental databases for information on the subject property and on sites located within a search radius around the subject site specified by ASTM Standard E-1527-13. The complete database search (EDR Radius Map²³) is included in Appendix F and the results of its review are outlined below.

4.1.1 Federal facility

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities. A review of the database of May 30, 2023 indicated that there is not a facility listed within the 1.0-mile radius of the subject site.

4.1.2 SEMS

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL. A search of the most recent database of July 24, 2023 did not find any site listed as SEMS within 1.0-mile radius of the subject site.

4.1.3 SEMS-ARCHIVE

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015.

²³ EDR Radius Map™ Report with GeoCheck®; Inquire No. 7402389.2s, July 28, 2023



EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site. A review of the database of July 24, 2023 did not find any site listed as a SEMS-ARCHIVE within 1.0-mile radius of the subject property.

4.1.4 Resource Conservation and Recovery Act (RCRA) Facilities

4.1.4.1 <u>Treatment, Storage and Disposal Facilities (TSDFs)</u>

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). TSDFs treat, store, or dispose of the hazardous waste. A review of the database of March 20, 2023 did not identify the subject site or adjacent properties as TSDF.

4.1.4.2 <u>Large Quantity Generators</u>

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. A review of the most recent report of March 20, 2023 did not identify any site within the 1.0-mile radius of the subject site as large quantity generator.

4.1.4.3 <u>Small Quantity Generators</u>

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. A review of the most recent report of March 20, 2023 did not identify the subject site or adjacent properties as small quantity generators.



4.1.4.4 <u>Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)</u>

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. A review of the most recent report of March 20, 2023 did not identify the subject site or adjacent properties as VSQGs.

4.1.4.5 RCRA Administrative Action Tracking System (RAATS)

RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database. A review of the most recent database of August 7, 1995 did not identify any site within 1.0-mile radius of the subject site as RAATS.

4.1.4.6 RCRA NonGen / NLR

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. A search of the most recent database of March 20, 2023 did not identify RCRA NonGen sites within 1.0-mile radius of the subject site.

4.1.5 National Priorities List (NPL)

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices. A review of the most recent database of July 24, 2023 indicated no NPL sites within 1.0-mile radius of the subject site.

4.1.6 Proposed NPL

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing. A review of the most recent database of July 24, 2023 indicated no proposed NPL sites within 1.0-mile radius of the subject site.



4.1.7 NPL Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens. A search of the most recent database of March 30, 1994 did not identify the subject site or adjacent properties as an NPL Lien site.

4.1.8 Delisted NPL Sites

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. A review of the most recent database of July 24, 2023 indicated that there are no sites listed as a delisted NPL site within 1.0-mile radius of the subject site.

4.1.9 Emergency Response Notification System (ERNS)

ERNS is a national computer database system that is used to store information on the release of hazardous substances into the environment. The ERNS reporting system contains preliminary information on specific releases, including the spill location, the substance released and the responsible party. A review of the most recent ERNS database of May 30, 2023 did not identify the subject site or adjacent properties as an ERNS site.

4.1.10 Commonwealth Hazardous Waste Sites

Puerto Rico maintains a listing of known contaminated sites, which have contamination present at levels greater than the applicable cleanup criteria for soil and/or groundwater standards. The listing is of sites that are active or pending. Sites with no further action designation are not listed. The listing includes contaminated sites being remediated under both commonwealth and federal regulatory programs. However, the PR Department of Natural Resources and Environment (DNRE) has not responded to the request for the aforementioned information.

4.1.11 Underground Storage Tank Inventory Report

The Underground Storage Tank (UST) Report provides a list of all the registered petroleum USTs. A review of the most recent database of April 23, 2008 indicated that there are no USTs listed for the facility or within the 1.0-mile radius of the subject property. However, there are four (4) gas stations within the 1.0-mile radius. The PR Department of Natural Resources and Environment (DNRE) has not responded to the request for the aforementioned information.

4.1.12 Leaking UST Report

The Leaking UST (LUST) summary report is maintained by the DNRE and contains information pertaining to all reported LUST sites in Puerto Rico. A review of the most recent listing of "Active Sites LUST List" from 2020²⁴, identifies two (2) LUST sites in the Lajas municipality (see

²⁴ Departamento de Recursos Naturales y Ambientales. Web site: https://www.drna.pr.gov/lust/



Appendix H). The EDR Radius Map Report²⁵ indicates that both LUST sites are within a one-mile radius of the subject site. However, after a field verification performed by Mr. Luis A. Maldonado, it was revealed that one of these UST sites (Gulf #152) is not within the one-mile radius of the subject site. The other LUST site was confirmed that it is within the one-mile radius from the subject site, but it is at a lower elevation relative to the subject site, as described below:

Facility Name and Address	Facility ID	Distance and Direction from Subject Site	Relative Topography from Subject Site	Date Known
Gulf #152 Carr 65 Infantería, Lajas, PR	86-0172	1.18 miles Northeast	Higher	17-Aug-99
Ex-Esso (D. Irizarry) PR-116 Km 2.9, Lajas, PR	86-1346	0.93 mile South	Lower	12-Apr-00

The PR Department of Natural Resources and Environment (DNRE) has not responded to the request for the actual status of the LUST list.

4.1.13 Above Ground Storage Tank Inventory Report

Puerto Rico does not produce an Above Ground Storage Tank (AST) Report, which list of all the registered petroleum ASTs in Puerto Rico. During the site reconnaissance, ACE did not observe any AST at the subject site or adjacent properties.

4.1.14 Commonwealth Spill Sites

Puerto Rico maintains a listing of spills reported to the DNRE. However, the PR Department of Natural Resources and Environment (DNRE) has not responded to the request for the aforementioned information.

4.1.15 PCB Activity Database System (PADS)

PADS is a computer database system generated by the USEPA that identifies generators, transporters, commercial stores, brokers and disposers of polychlorinated biphenyl's (PCBs). A review of the most recent database of June 9, 2023 did not identify the subject site as a PADS facility.

4.1.16 Toxic Chemical Release Inventory System (TRIS)

TRIS is a computer database system developed by the USEPA that identifies facilities that release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313. A search of the most recent database of May 2, 2023 identified no sites listed on the TRIS within 1.0-mile radius of the subject site.

²⁵ EDR Radius Map™ Report with GeoCheck®; Inquire No. 7402389.2s, July 28, 2023



4.1.17 Hazardous Materials Information Reporting System (HMIRS)

HMIRS is a computer database report developed by the US Department of Transportation (DOT) that identifies locations of hazardous material spills reported to the DOT. A review of the most recent database of May 30, 2023 did not identify any sites within the 1.0-mile radius of the subject site.

4.1.18 Toxic Substances Control Act (TSCA)

TSCA is a computer database system developed by the USEPA that identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substances Inventory List. It includes data on the production volume of these substances by the plant site. A search of the most recent database of March 24, 2023 did not identify any sites as TSCA within one-mile radius of the subject site.

4.1.19 Facility Index System (FINDS)

FINDS is a computer database system developed by the USEPA that compiles names of facilities listed on other databases and systems. FINDS contains information from RCRIS, CERCLIS, TRIS, PADS, TSCA and other environmental-related information systems. A search of the most recent database of July 24, 2023 did not identified any sites as FINDS within 1.0-mile radius of the subject site.

4.1.20 Integrated Compliance Information System (ICIS)

ICIS is a computer database system developed by the USEPA that compiles names of facilities listed on other databases and systems. The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program. A search of the most recent database of February 10, 2017 did not identify any ICIS site within a one-mile radius of the subject site.

4.1.21 Material License Tracking System (MLTS)

MLTS is a listing maintained by the Nuclear Regulatory Commission (NRC) that contains sites that possesses or uses radioactive materials, which are subject to NRC licensing requirements. A search of the most recent database of May 30, 2023 did not identify any sites within a one-mile radius of the subject site.

4.1.22 Corrective Action Report (CORRACTS)

CORRACTS is a USEPA report that identifies hazardous waste handlers with RCRA corrective action activity. A search of the most recent database of March 20, 2023 did not identify any CORRACTS site within a one-mile radius of the subject site.

4.1.23 Superfund Consent Decrees (CONSENT)

The USEPA periodically provides information released from the U.S. District Courts after major settlements by parties to litigation matters. These major legal settlements often establish



responsibility and standards for cleanup actions of NPL (Superfund) sites. A review of the most recent database of July 10, 2023 indicated CONSENT sites were not identified within a one-mile radius of the subject site.

4.1.24 Record of Decision (ROD)

The National Technical Information System (NTIS) maintains a list of ROD documents that mandate a permanent remedy at NPL sites containing technical and health information to aid the cleanup. A review of the most recent database of July 24, 2023 indicated that no ROD sites were identified within a one-mile radius of the subject site.

4.1.25 Commonwealth Landfill Sites

The DNRE maintains a listing of solid waste landfill sites. The list indicated that there is no landfill identified within a 0.5-mile radius of the subject site.

4.1.26 Hazardous Materials Database

The DNRE lists all hazardous material release information. However, the DNRE did not list any hazardous materials site or release in their response letter to our request for information, dated October 21, 2022. (See Appendix H)

4.1.27 US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The source of this database is the Dept. of Labor, Mine Safety and Health Administration. A review of the most recent US MINES list of July 24, 2023, as provided by EDR, has revealed that there are no US MINES sites within a one-mile radius of the subject site.

4.1.28 EDR Hist Auto™: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns but may not show up in current government records searches. The database did not identify the subject site or adjacent properties within the HRHR.

4.1.29 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have



not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations. A search of the most recent database of July 20, 2018 did not identify any site within a one-mile radius of the subject site.

4.1.30 DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands. A review of the most recent DOD list of March 9, 2022 did not identify any DOD site within a one-mile radius of the subject site.

4.1.31 Formerly Used Defense Sites (FUDS)

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions. A review of the most recent ECHO database of July 10, 2023 did not identify any FUDS site within a one-mile radius of the subject site.

4.1.32 Potentially Responsible Parties (PRP)

A review of a listing of verified Potentially Responsible Parties of July 24, 2023 did not identify any PRP site within a one-mile radius of the subject site.

4.1.33 Unexploded Ordnance Sites (UXO)

A review of the most recent listing of unexploded ordnance site locations of January 10, 2023 did not identify any UXO site within a one-mile radius of the subject site.

4.1.34 US Brownfields

A review of the most recent listing of Brownfield sites of April 19, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.35 Enforcement & Compliance History Information (ECHO)

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide. A search of the most recent database of June 9, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.36 Superfund Sites with PFAS Detections Information (PFAS NPL)

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment. A search of the most recent database of June 9, 2023 did not identify any site within a one-mile radius of the subject site.



4.1.37 PFAS Federal Sites

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities. A search of the most recent database of April 7, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.38 PFAS Manufacture and Imports Information (PFAS TSCA)

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information. A search of the most recent database of June 9, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.39 PFAS Transfers Identified in the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). A search of the most recent database of May 2, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.40 PFAS Contamination Site Location Listing (PFAS ATSDR)

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used. A search of the most recent database of November 8, 2022 did not identify any site within a one-mile radius of the subject site.

4.1.41 Ambient Environmental Sampling for PFAS (PFAS WQP)

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality. A search of the most recent database of May 2, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.42 PFAS NPDES

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and



the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future. A search of the most recent database of April 7, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.43 PFAS ECHO

Facilities in industries that may be handling PFAS listing. EPA has developed a dataset from various sources that show which industries may be handling PFAS. A search of the most recent database of April 3, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.44 PFAS ECHO Fire Training

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facility's name to identify sites where fire-fighting foam may have been used in training exercises. A search of the most recent database of April 3, 2023 did not identify any site within a one-mile radius of the subject site.

4.1.45 List of PFAS Added to the TRI (PFAS TRIS)

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis. A search of the most recent database of June 9, 2023 did not identify any site within a one-mile radius of the subject site.

5.0 SITE RECONNAISSANCE

5.1 METHODOLOGY AND LIMITING CONDITIONS

ASTM guidelines require that a site inspection of the subject site be conducted as part of a Phase I ESA effort. Site reconnaissance methodology involved a walking inspection of the subject site and vicinity on August 14, 2023. Mr. Luis A. Maldonado of ACE conducted the site reconnaissance.

5.1.1 General Site Setting

The subject site consists of a rural parcel with an area of 30,901.2715 square meters approximately, formerly used as a catholic private school and nun's residence. Within the parcel, there are the following structures: school classrooms buildings, administrative facilities, covered basketball court, chapel and a detached mixed construction dwelling housing the nun's home on the rear of the parcel. Detailed description of the subject site improvements is shown in Section 2.3.



A walk through the subject site was conducted to identify unnatural surface features, stained soil, stressed vegetation or exposed soil, stormwater drainage patterns, signs of excavation or burial, and any unusual odors that could indicate potential environmental contamination. The site reconnaissance consisted of a visual inspection of the subject site. Photographic documentation is included in Appendix G.

5.2 SITE RECONNAISSANCE OBSERVATIONS

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the Subject Site. The observations made during the site reconnaissance are summarized in the table below and described in detail in the ensuing subsections. Photographic documentation of the site reconnaissance is included in Appendix G and Site Inspection Form is included in Appendix H.

Table 5-1 Site Reconnaissance Observations Summary			
Interior and Exterior Observations	Observed or Suspected	Not Observed	
Hazardous Substances and Petroleum Products		X	
Storage Tanks (Above Ground & Underground)		Х	
Odors		Х	
Pools of Liquids		X	
Drums or Pails	Х		
Unidentified Substance Containers	Х		
PCBs		Х	
Stains or Corrosion		Х	
Waste Pits, Ponds, or Lagoons		Х	
Stained Soils or Pavement		X	
Stressed Vegetation		Х	
Solid Waste		Х	
Wastewater		Х	
Wells		Х	
Septic System		Х	
Universal Waste		Х	

5.2.1 Interior Observations

5.2.1.1 <u>Hazardous Substances or Petroleum Products in Connection with</u> Identified Uses

No hazardous substances or petroleum products were observed in the interior of the buildings at the subject site.



5.2.1.2 Hazardous Substances or Petroleum Products Containers

No hazardous substances or petroleum products containers were observed in the interior of the buildings.

5.2.1.3 Stain or Corrosion

There were no stains observed on floors, walls, or ceilings of the buildings at the subject site.

5.2.1.4 <u>Drains, Sumps, or Water/Oil Separators</u>

There were no sumps or water/oil separators observed at any of the buildings of the subject site during the site reconnaissance.

5.2.1.5 Drums

No drums were observed in the interior of any building of the subject site.

5.2.1.6 Indications of PCBs

No electrical equipment suspected of containing PCBs was observed within the subject site.

5.2.1.7 <u>Indications of Solid Waste Disposal</u>

No evidence of current or past solid waste disposal was observed in the interior of the buildings at the subject site.

5.2.1.8 **Groundwater Wells**

No monitoring or groundwater wells were observed in the interior of the buildings at the subject site.

5.2.1.9 Other Conditions of Concern

No other conditions of concern were identified within the interior of any building during the site reconnaissance.

5.2.2 Exterior Observations

5.2.2.1 <u>Hazardous Substances and Petroleum Products in Connection with Identified Stain or Corrosion</u>

No stain or corrosion identified in connection with hazardous substances and/or petroleum products at the subject site.



5.2.2.2 <u>Underground and Above Ground Storage Tanks</u>

No underground or above ground storage tanks were observed during the reconnaissance at the subject site.

5.2.2.3 Odors

No strong, pungent, or noxious odors were detected during the reconnaissance at the subject site.

5.2.2.4 Pools of Liquids

No evidence of pools of liquids was identified from previous spills at the subject site.

5.2.2.5 Drums

One (1) non-labeled closed metal drum was observed adjacent to the bleachers area of the basketball court. There was no associated stains or evidence of any spill. No drums were observed elsewhere at the subject site.

5.2.2.6 Hazardous Substances and Petroleum Products in Connection with Identified Uses

No hazardous substances or petroleum products containers were observed at the subject site.

5.2.2.7 <u>Hazardous Substance and Petroleum Product Containers (Not Necessarily in Connection with Identified Uses)</u>

No hazardous substance or petroleum products containers were observed at the subject site.

5.2.2.8 Unidentified Substance Containers

One (1) non-labeled closed metal drum was observed adjacent to the bleachers area of the basketball court. There was no associated stains or evidence of any spill.

5.2.2.10 <u>Indications of PCBs</u>

No transformers or other electrical equipment containing PCBs were observed at the subject site. However, fluorescent lamps lighting at the subject site may contain PCB.

5.2.2.11 <u>Pits, Ponds, or Lagoons</u>

No pits, ponds or lagoons were observed at the subject site.

5.2.2.12 <u>Environmental Stress Indicators</u>

No evidence of environmental stress on the flora was observed at the subject site or adjacent properties of the subject site.



5.2.2.13 <u>Indications of Solid Waste Disposal</u>

No evidence of current or past solid waste disposal was observed at the subject site.

5.2.2.14 Wastewater

No wastewater was observed in the premises of the subject site.

5.2.2.15 Wells

No groundwater or monitoring wells were observed at the subject site.

5.2.2.16 Septic Systems

No septic system was observed at the subject site.

5.2.2.17 Other Conditions of Concern

No other conditions of concern were observed at the subject site during the reconnaissance.

6.0 INTERVIEWS

Subject site owner representatives were interviewed for additional information on legal description and title tract of the subject property, historical practices, and past uses of hazardous substances at the subject site or adjacent properties. Past owner of the subject site is dead. These representatives' names and interviews dates are presented in the next section 6.1.

Adjoining properties owners were not available for interview.

6.1 INTERVIEW WITH OWNERS

The following subject site owners' representatives from Iglesia Católica Apostólica y Romana-Diócesis de Mayagüez were interviewed on the dates described below for additional information on legal description and title tract of the subject property, historical practices, and past uses of hazardous substances at the subject site or adjacent properties:

Owner Representative Name	Title	Date of Interview
Carlos Ramos	Diócesis de Mayagüez Employee	August 14, 2023
Sister Teresita Alicea	San Luis Academy former Director 1989-2022	August 31, 2023

Concurrently, Sister Teresita Alicea supplied information about the subject site through the Environmental Site Assessment Questionnaire provided by ACE (see Appendix H).

The information obtained by ACE during the interviews does not indicate current or past environmental concerns associated with the subject site, and it is consistent with the information obtained from the records review and the subject site reconnaissance. (See Appendix H)



6.2 Interview with Government Officials

ACE contacted the Department of Natural Resources and Environment (DNRE) requesting information related to past spills, USTs, LUSTs, and Superfund at the subject site. However, the DNRE has not responded to our request for information. (See Appendix H)

7.0 EVALUATION AND RECOMMENDATIONS

7.1 FINDINGS

ACE performed this Phase I ESA in conformance with the agreed upon scope of work, scope and limitations of the American Society for Testing and Materials (ASTM) Standard E1527-13 and U.S. EPA AAI Rule at the Subject Site described herein, subject to the limitations and exceptions described in Section 1.4 of this report.

7.1.1 Historical Summary

According to Sister Teresita Alicea, former San Luis Academy Director from 1989 to 2022, the subject site was undeveloped vacant land owned by Laura M. Tió Nazario prior to 1986. In 1986, Laura M. Tió Nazario donated the subject site land to the Iglesia Católica Apostólica y Romana-Diócesis de Mayagüez for the placement of the San Luis Academy and a nun's residence. The school structure and the nun's residence construction were completed at the subject site circa 1989. A school extension was constructed adjoining the original structure forming a L-shape building circa 1992. A basketball court was built in 1995 between the school building and the nun's residence. In 2000, a small chapel was constructed at the north side of the subject site.

The San Luis Academy closed its operations in May 2022, and the nun's moved from the nun's residence at the same time. Hence, the subject site has not been in use since 2022.

Historical uses did not indicate any recognized environmental conditions for the subject site.

7.1.2 Records Review

The records review did not reveal *recognized environmental conditions* for the subject site.

7.1.3 Site Reconnaissance

As described in Section 5.0, the subject site and surrounding areas were examined. Observations were made concerning the use and condition of the subject site and adjacent properties. The site reconnaissance performed on August 14, 2023 revealed and confirmed that no *recognized environmental conditions* in connection with the subject site exist. However, the presence of a drum with unknown contents shall be addressed.

7.2 ADDITIONS

There is no addition to this Phase I ESA Report.



7.3 DISCUSSION OF DATA GAPS

A data gap is a lack of or an inability to obtain information by the environmental professional that could affect the ability of the environmental professional to identify conditions indicative of releases or threatened releases. The ASTM standard specifies that all obvious uses of the Property shall be identified back to first developed use or 1940, whichever is earlier; and that review of standard historical sources at intervals of less than five years is not required. Further, if the use of the Property appears unchanged over a period longer than five years, then it is not required to research the use during that period. The history of the subject property has been researched to its first developed use. Data gaps spanning more than five years do not exist and the use of the subject site appears primarily unchanged during these data gaps. Therefore, in the opinion of the environmental professionals, these data gaps are not considered significant and do not affect our ability to identify *recognized environmental conditions* in connection with the Subject Site. The data gaps encountered on the preparation of this ESA Phase I for the subject site are the following:

- 1. Past subject site owners' and adjacent properties owners' interviews.
- 2. Regulatory and environmental database information from the Department of Natural and Environmental Resources (DNER)

7.4 DELETIONS / DEVIATIONS

There are deletions/deviations from this assessment. As provided in ASTM, records that are "practically reviewable" are requested. Further, "information that is obtainable within a reasonable time and cost constrain means that information will be provided by the source within 20 calendar days of receiving a written, telephoned, or in-person request..."

7.5 OPINION

In the course of this investigation, *no evidence of recognized environmental conditions* was identified for the subject site.

7.6 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of the former San Luis Academy located at State Road PR-117 Km 0.2, Santa Rosa Ward, Lajas, Puerto Rico. Any exceptions to, or deletions from, this practice is described on Section 1.4 of this report. This assessment has revealed that no recognized environmental conditions (RECs) were identified in connection with the subject site.

7.7 RECOMMENDATIONS FOR ADDITIONAL INVESTIGATIONS

Based on the findings and conclusions of this Phase I ESA, ACE does not recommend any additional investigations or studies on the subject property. However, the encountered drum at the subject site shall be characterized for its contents for its appropriate disposal.



8.0 INFORMATION SOURCES

- a.) ASTM (American Society for Testing and Materials). 2013. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-13).
- b.) CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act of 1980). 1984.
- c.) Cintrón Henríquez, Lizandra. Investigadora de Título. Finca 10,901 inscrita al Folio 283 del Tomo 256 de Lajas. 6 de febrero de 2023.
- d.) CAAR Group, PSC. Restricted Appraisal Report of Academia San Luis. April 5, 2022.
- e.) Environmental Data Resources (EDR). Radius Map™ Report with GeoCheck®; Inquiry Number 7402389.2s, July 28, 2023.
- f.) Environmental Data Resources (EDR). Inquiry Number 7402389.3 Certified Sanborn Map Report®. July 28, 2023.
- g.) Environmental Data Resources (EDR). Inquiry Number 7140289.8 EDR Aerial Photo Decade Package. July 31, 2023.
- h.) Environmental Data Resources (EDR). Inquiry Number 7402389.4 EDR Historical Topographic Map Report. July 28, 2023.
- i.) Environmental Data Resources (EDR). Inquiry Number 7402389.5 EDR-City Directory Image Report. August 1, 2023.
- j.) Department of Natural Resources and Environment (DNRE) Active LUST Sites List 2020. https://www.drna.pr.gov/lust/
- k.) Federal Emergency Management Agency (FEMA) Flood Map Service Center. FEMA Flood Map Service Center, Flood Map 72000C1570H, effective on 4/13/2018.
- I.) U.S. Fish & Wildlife Service National Wetlands Inventory https://www.fws.gov/wetlands/data/mapper.html
- m.) NOAA, National Weather Service Forecast Office. https://w2.weather.gov/climate/local_data.php?wfo=sju
- n.) U.S. Geological Survey (USGS). https://mrdata.usgs.gov/geology/pr/
- o.) US Department of Agriculture (USDA) Soil Conservation Service STATSGO data. https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/
- p.) 40 CFR Part 312 Innocent Landowners, Standards for Conducting All Appropriate Inquiries.
- q.) US Environmental Protection Agency, EnviroMapper for Envirofacts Database System.
- r.) Puerto Rico Planning Board, Geodata, http://gis.jp.pr.gov/mipr/
- s.) USGS, Groundwater Atlas of the United States, Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands.



9.0 PERSONS PERFORMING THE PHASE I ENVIRONMENTAL SITE ASSESSMENT

Auditor: Luis A. Maldonado, EIT

Mr. Luis A. Maldonado, Environmental Engineer, gathered and compiled information contained in this report and performed the subject property and area reconnaissance. Also, Mr. Maldonado conducted the site reconnaissance and interviews, reviewed the information and interpreted the information.

Reviewer: William Sarriera

Mr. William Sarriera, Environmental Professional, reviewed the information. This document was prepared under the supervision of Mr. Sarriera.

Researchers: William Sarriera and Luis A. Maldonado

9.1 QUALIFICATIONS OF PERSONNEL

William Sarriera, Environmental Professional - Mr. Sarriera is an environmental professional with over 25 years of experience. He holds a Bachelor's of Science in Biology and Mathematics from Baker University. He is a Registered Environmental Manager and a Certified Environmental Auditor with a broad professional experience in the field of environmental management and planning, including federal and Puerto Rico permitting and compliance. Mr. Sarriera was included in the Kipling's and Global Directory of Who is Who and was named Environmental Management and Planning Professional of the Year in 2009. Prior to entering the environmental professional practice Mr. Sarriera was a Commissioned Officer in the United State Army. Mr. Sarriera professional experience includes Environmental Site Assessments, Closure/Clean-up Plans, Oil and Hazardous Material Emergency Spill Response, among other disciplines. Specifically, he has conducted environmental site assessments for the US Postal Service, US Environmental Protection Agency, the Puerto Rico Highway Authority, Navieras de Puerto Rico and numerous banks and private clients in Puerto Rico.

Luis A. Maldonado, EIT, Senior Environmental Scientist - Mr. Maldonado has more than 19 years of experience in the environmental field. He holds a Bachelor Degree in Environmental Engineering. EIT Certification. 40-Hours OSHA HAZWOPER Course and 8-Hours Refresher. Active member of the Institute of Environmental Engineers of Puerto Rico (Board of Directors member 2011-2016). Mr. Maldonado has experience in conducting Phase I Environmental Site Assessments in Puerto Rico and US Virgin Islands facilities. Also, Mr. Maldonado has experience in the environmental emergency and post-hurricane response operations working as a contractor for the US Environmental Protection Agency's (EPA) Technical Assessment & Response Team providing advisory and technical support, such as site assessments, remedial activities and hazard mitigations measures.



10.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental professional as defined in §312.10 of 40 CFR 312.

I have the specific qualifications based on education, training, and experience to assess a property or the nature, history, and setting of the subject site. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



William Sarriera
Environmental Professional

ATTACHMENT F SECTION 106 NHPA EFFECT DETERMINATION



GOVERNMENT OF PUERTO RICO

STATE HISTORIC PRESERVATION OFFICE

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

Tuesday, January 28, 2025

Lauren B Poche

269 Avenida Ponce de León, San Juan, PR, 00917

SHPO-CF-01-16-25-07 PR-CRP-000892 (Lajas), Lajas Recreational Sports Complex

Dear Ms. Poche,

We acknowledge the receipt of the letter dated January 16, 2025 summiting the Phase I archeological site investigation prepared by SOI-Qualified archaeologist Harry E. Aleman Crespo, regarding the above referenced project. The report is deemed acceptable. Our Office has reviewed the summited documentation and we concur with your finding of no historic properties affected within the project's area of potential effects.

Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. If you have any questions concerning our comments, do not hesitate to contact our Office.

Sincerely,

Carlos A. Rubio Cancela

State Historic Preservation Officer

CARC/GMO/ OJR







Arch. Carlos A. Rubio Cancela

Executive Director Puerto Rico State Historic Preservation Office Cuartel de Ballajá, Third Floor San Juan, Puerto Rico 00901

Re: Authorization to Submit Documents for Consultation

Dear Arch. Rubio Cancela,

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

To expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

Aldo A. Rivera Vázquez, PE

Director

Division of Environmental Permitting and Compliance

Office of Disaster Recovery



January 16, 2025

Carlos A. Rubio Cancela State Historic Preservation Officer Puerto Rico State Historic Preservation Office Cuartel de Ballajá (Tercer Piso) San Juan, PR 00902-3935

Puerto Rico Disaster Recovery, CDBG-DR City Revitalization (City-Rev) Program

Re: SHPO-CF-07-11-24-01 PR-CRP-000892, Lajas Recreational Sports Complex Project, Lajas, Puerto Rico – Phase IA-IB Archaeological Evaluation Report, No Historic Properties Affected

Dear Architect Rubio Cancela,

On behalf of the Puerto Rico Department of Housing (PRDOH), we thank you for your letter dated August 9, 2024, in response to the submission of documentation for PR-CRP-000892, Lajas Recreational Sports Complex Project. The letter stated that the records of the Puerto Rico State Historic Preservation Office supported PRDOH's finding of no adverse effect on the proposed undertaking, based on the conditions proposed: pursuant that the condition of a Phase IA – IB Archaeological site investigation and the preparation and submittal of said plan to the PRSHPO for review and approval.

We are submitting the requested Phase IA-IB Archaeological Evaluation Report for the Lajas Recreational Sports Complex Project (PR-CRP-000892/SHPO 07-11-24-01), prepared by Archaeologist Henry E. Alemán Crespo. The evaluation methodology included background research, pedestrian survey, subsurface shovel testing, auger testing, and informant interviews.

Both pedestrian and subsurface testing yielded negative results for the presence of cultural materials. The background research and informant interviews indicated that there are no historic properties eligible for listing in the National Register of Historic Places within the project Area of Potential Effect (APE), with the exception of the Canal of Lajas Valley, which is located approximately 0.05 miles north of the project area. The author noted that a buffer



area was created at the time of the canal's construction, and will help minimize the effects of the project construction.

Mr. Crespo concluded that **no historic properties affected** are anticipated for proposed Lajas Recreational Sports Complex Project.

If you have any questions or concerns, please contact me by email at lauren.poche@horne.com or phone at 225-405-7676. As always, thank you for your assistance and we look forward to your response.

Kindest regards,

Lauren Bair Poche. M.A.

Architectural Historian, EHP Senior Manager Attachments

LBP/JCO

PR-CRP-000892 Lajas Recreational Sports Complex Project Lajas, Puerto Rico

Archaeological Phase IA and Phase IB Evaluation

INFORME DE EVALUACIÓN ARQUEOLÓGICA FASE 1 (FASES 1A – 1B)

PROYECTO:

S.H.P.O. #CF – 07-11-24-01-PR-CRP-000892 (LAJAS) LAJAS RECREATIONAL SPORTS COMPLEX CARRETERA PR-117 KILÓMETRO 0-2. BARRIO SANTA ROSA – LAJAS, PUERTO RICO (7.8621 – CUERDAS) (ANTES ACADEMIA SAN LUIS - DIÓCESIS DE MAYAGÜEZ)





PREPARADO PARA EL MUNICIPIO DE LAJAS

POR ARQL. PRINCIPAL DEL PROYECTO

Harry E. Alemán Crespo

Urb. Valle Alto, 1211 Calle Pradera Ponce, Puerto Rico 00730-4122 787-448-3368

harryaleman@yahoo.com

FECHA DE ENTREGA: 31 OCTUBRE 2024 FECHA DE REVISIÓN SEGÚN SOLICITADO: 20 DICIEMBRE 2024 FECHA DE REVISION DE PM (TETRATECH): 10 ENERO 2025 POR VICTOR OPPENHEIMER RODRIGUEZ, ARQUEOLOGO SOI.

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Introducción:

Proyecto: S.H.P.O. # CF-07-11-24-01-PR-CRP-000892 (Lajas)

"Lajas Recreational Sports Complex"

En el siguiente informe incluiremos los datos, información, fotos y documentos obtenidos y los resultados de la Evaluación de Recursos Culturales - Fase I (Fases 1A-1B) de acuerdo a los requerimientos de la Oficina Estatal de Conservación Histórica -O.E.C.H. (SHPO por sus siglas en inglés), en San Juan el día Viernes, 9 de agosto de 2024.

En esta comunicación vía correo electrónico el "SHPO" determinó y requiere —"a recognizance (Phase 1) Survey", o una Evaluación de Recursos Culturales-Fase 1 (Fases 1A – 1B), al Proyecto de referencia — SHPO #CF-07-11-24-01, "Lajas Recreational Sport Complex, en Carr. PR-117, KM 0-2. Bo. Santa Rosa, Lajas, Puerto Rico.

Este requerimiento nos compromete a cumplir con la Sección 106 del Acta Nacional de Preservación Histórica y la Sección 36 CFR Part-800: Protection of Historic Properties y de acuerdo – con la Sección 800.4 se requiere esta Fase 1 y siguiendo los estatutos del "Standards and Guidelines for Archeology and Historic Preservation" (48CFR44716).

El referido Proyecto (SHPO-CF-07-11-24-01) se desarrollará en un predio de terreno de unas 7.8621 cuerdas (ver Figura 1). Colinda al Norte con terrenos del Canal de Riego Valle de Lajas de la Autoridad de Energía Eléctrica, con terrenos de la Sucn. Salvador Lugo-Lugo, al Sur con parcela de uso público que a su vez la separa de la Carr. PR-117; al Este con la Sucn. Cancel Vargas, Manuel Pagán y remanente de la Finca Principal y al lado Oeste con remanente de la Finca Principal... (ver 1ra Inscripción Finca #10,901, página 15).

De acuerdo al Memorial Explicativo el Municipio de Lajas, dentro de su Programa Revitalización de la Ciudad, propone el desarrollo y construcción de un Complejo Deportivo-Recreacional en un predio de 7.8621 cuerdas. Finca #10,901 Bo. Santa Rosa de Lajas (Ver Apéndice B). El predio a adquirir a la Diócesis de Mayagüez ocupaba las facilidades de la llamada Escuela o Academia San Luis de construcción de ca. 1986-1993. En el terreno en proyecto aún existen los edificios que componían la Academia San Luis como: el edificio en "L", escuela, Edificio 1 y 2, el núm.1 se proyecta preservar, el núm. 2 se demolerá. Los edificios de oficinas y aulas frente al # 1 se preservarán. Ver Plano de Localización (Figura 1) que contiene fotos áreas del lugar. Ver Plano "as built" en Figura 2 para la visualización de las estructuras existentes y ver Figura 3 donde se identifica las estructuras a demoler.



Figura 1: Plano de localización general con vistas áreas incluido en planos de diseño creados por Ingenium Professional Group, diseñadores del proyecto.

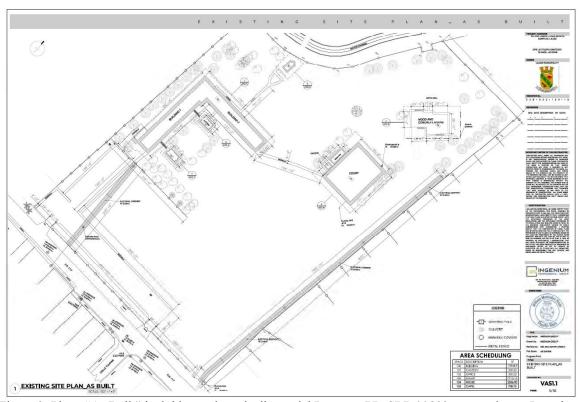


Figura 2: Plano "As Built" incluido en plano de diseño del Proyecto PR-CRP-00892 preparado por Ingenium Professional Group, diseñadores del proyecto.

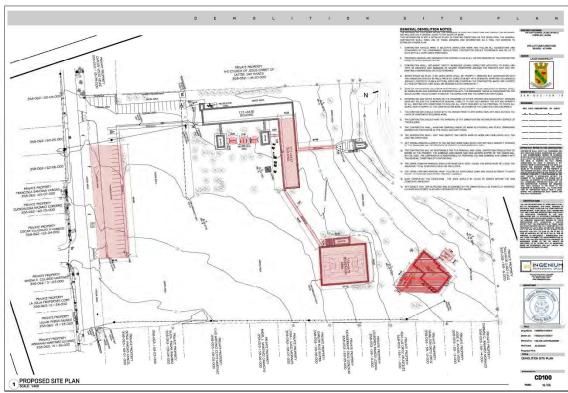


Figura 3: Plano de áreas a demoler en el terreno para el desarrollo del Proyecto PR-CRP-00892 según planos de diseño creados por Ingenium Professional Group, diseñadores del proyecto.

Localización del Proyecto

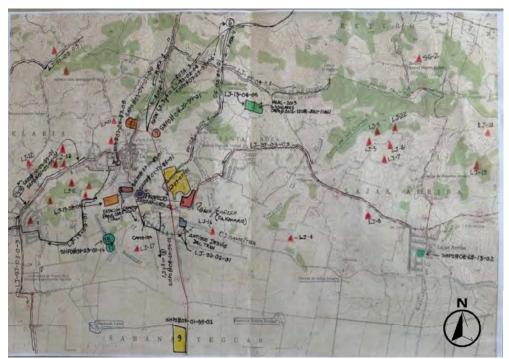


Figura 4: Mapa de localización del proyecto en relación a las áreas de interés arqueológico, estudios previos, entre otros. Creado por Arql. Harry Alemán Crespo.



Figura 5: Mapa de localización del proyecto en el APE. Mapa recuperado del "Section 106 NHPA Effect Determination" preparado para este proyecto por Arqla. Maritza Torres Martínez y Arq. Noel F. Román Díaz. El proyecto se representa bajo el polígono amarillo y el APE en el polígono azul.

Detrás del Edificio 2 o a su Norte por un camino o acera de hormigón se encuentra el edificio o Capilla [católica bajo la advocación de la Virgen de la Monserrate- comunicación con Sor Luz-Leyda que la mandó a construir en 2000 y la construyó el Arq. José Efraín Irizarry Avilés]; ver figura 2 para referencia de ubicación. La misma será preservada. La Cancha de Baloncesto, detrás del edificio 2 será demolida, al igual que un techo, gradas, el quiosco y al Norte de la Cancha la Residencia o antigua Casa de Las Monjas, se programa demoler (ver figura 3).

En su lugar se construirá una pista atlética y de caminar, diversas canchas y salones para clínicas deportivas. La Pista de un recorrido de 400 mts. y 8 carriles, la cancha de Tenis y otra de "Pickleball y jaulas de bateo. Además, se contempla la reforestación del área y construcción o habilitación de áreas verdes.

Las demoliciones proyectadas se hacen necesarias para la construcción de la Pista. (Ver Apéndice B, C y Figura 3 Plano de áreas a demoler).

Este proyecto nos ofrece la oportunidad de aportar al conocimiento y divulgación de la historia pre y post colombina y la idiosincrasia de la etnohistoria de Lajas y sus barrios y así incentivar en la preservación de la misma y los lugares con valor arqueológico e histórico.

Marco Ambiental

A. Topografía, Geología e Hidrología

La clasificación específica del área del proyecto corresponde a la de "Rolling Lowland with some flatland y "Rolling Hills Land" (Jones y Picó, 1955, págs. 33-35; 37-40). En lo que corresponde a la topografía en el terreno en estudio, este posee una relativamente llana con un área de elevación suave hacia el Norte haciéndose mayor hacia el Noroeste (ver Figura 6).

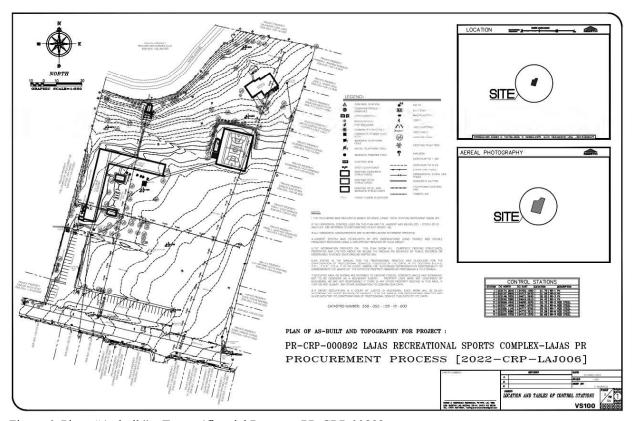


Figura 6: Plano "As built" y Topográfico del Proyecto PR-CRP-00892

Con respecto a la geología, podemos señalar la formación, "Undiferentiated lower tertiary and cretaceaus formations", compuesta de una capa fina y compacta de caliza, arena tifácea y roca de composición limosa; tufa breccia; lava; granodiorita y diorita cuarzosa, perteneciente al terciario y cretáceo como formación geológica.

En relación a la hidrología regional y periférica, tenemos primeramente colindando Norte, en parte el Canal de Riego del Valle De Lajas. Al Este a unos 300 mts., la Quebrada Mamey que nace al N-E del terreno a unos 1,800 mts. Entre unas colinas de unos 100 mts. de elevación sobre el nivel del mar a unos aprox. 120 mts. al Sur de la Carr. PR-321 (límite de Lajas-San Germán y donde se localiza el LJ-16. Al Sur-Oeste a unos 1,050 mts. la Quebrada El Chorro o Mondongo donde en ese sitio se ubica el LJ-17. Volviendo más al Este existe un área muy interesante asociada a la "Quebrada La Garza". Esta quebrada a nuestro parecer es un cuerpo de agua regional, o sea, limitado hoy al Bo. Lajas Arriba. Esta quebrada pudiera estar asociada al punto SG-2 de la Figura

4, página 3 por ser el cuerpo de agua más cercano a este sitio (SG-2). El Cerro de las Cuevas se encuentra localizado a un radio aproximadamente de 3 km, (ver Figura 4). Cercano a este cerro se ubican los Sitios LJ-4; LJ-3; LJ-5; LJ-6 y LJ-7; LJ-22 y el LJ-8; más al Este el LJ-10 y el LJ-19 demarcados en la Figura 4 y Figura 11.

En otros trabajos hemos mencionado alguna referencia similar en la ocurrencia de la hidrología regional ocurrente en el entorno a proyectos similares. En este caso es interesante su asociación con los otros sitios pre-colombinos mencionados con la hidrología y a su vez la ocurrencia del Cerro las Cuevas y la posible asociación a patrones de asentamiento... quebradas (cuerpos de agua) y las cuevas. Además, la transición de terrenos semi-llanos a montañosos, los terrenos fértiles y la fuente de alimentación secundaria en el área presente a unos 7,000 metros al Sur en las grandes e importantes ecosistemas marinos en ese tiempo de la hoy Parguera que junto a las áreas señaladas son dignas de resaltar junto a esa hidrología.

De acuerdo a los sitios señalados en un área específica como esa y tomando como evidencia arqueológica las conchas y caracoles marinos, podemos trazar unas vías de comunicación y de transportación de comestibles de alimentación secundaria como pescados y variaciones de moluscos, etc., a los diversos sectores habitacionales pre-colombinos durante la habitación amerindia tomando como ruta vial las quebradas donde su desembocadura en este caso lo hacen hacia al Mar Caribe. Por tal razón nos detuvimos aquí en los señalamientos de los cuerpos de agua periféricos al terreno en estudio.

B. Clima y Suelos:

El clima de los limites municipales de Lajas es húmedo-tropical-agradable, cuya temperatura media anual fluctúa entre 74° a 85° Fahrenheit dentro de este renglón (Picó: 1975, p.173). Debemos señalar que el cambio climático y la entrada de las arenas del Sahara han traído variaciones significativas a estos comentarios de Picó.

En el Plan de Mitigación de Peligros Naturales 2021 del Municipio de Lajas el clima fue descrito de la siguiente manera y cito: "El Clima del Valle de Lajas es uno subtropical seco con condiciones semidesérticas. Por tal motivo, en la región se suscitan periodos de sequías intensas, las cuales se extienden desde enero hasta agosto. Consecuentemente, se denomina la cuenca del Valle de Lajas como el área de menor precipitación de Puerto Rico, con un promedio de precipitación anual de 45 pulgadas. De igual forma, las altas temperaturas y los vientos secos, que predominan en el área, provocan tasas de evapotranspiración (ET) altas. La ET promedio anual de la región de Lajas, ronda entre las 42 pulgadas en las áreas montañosas hasta 30 pulgadas en las áreas costeras, representando un promedio de 37 pulgadas anuales. Los índices de humedad en Lajas varían desde 67% en horas del día y 82% en horas nocturnas. Los mayores por cientos de humedad ocurren, principalmente, entre los meses de mayo a septiembre. Los meses de enero hasta abril son relativamente secos."

En lo referente a los suelos en el área del proyecto que nos atañe se han identificado unas tres (3) clases de suelos, utilizando como fuente el Soil Survey-Área del Valle de Lajas, Puerto Rico; Serie 1961, No. 23 Issued-April 1961-United State Department of Agriculture — Soil Conservation Service and UPR. — págs. 93-95; 101-103 y 116-117. (Ver Figura 7).

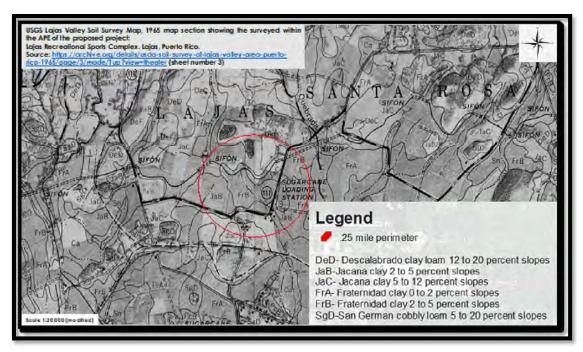


Figura 7: Mapa del Valle de Lajas según USGS Soil Survey, recuperado del "Section 106 NHPA Effect Determination" preparado para este proyecto por Arqla. Maritza Torres Martínez y Arq. Noel F. Román Díaz. Mapa impreso de este se encuentra bajo mi poder.

Destaca las Series de Suelos en el terreno: Sn. – Sta. Isabel; FrB – Fraternidad y la JaC – Jácana.

Se puede observar la localización de la Grúa Cañera de la Fa. Nazario (dueños anteriores de terreno en estudio, ver figura 30) y un camino que termina hacia unas estructuras. Posiblemente estas eran Establecimientos de la Finca de Caña de la Fa. Nazario, antes Estancia de Juan Cancio Ortíz de la Renta Lugo).

Las mismas se describen como:

1. Clase de Suelo Santa Isabel Arcilloso (SrL).

Este suelo negro y ácido se contrae y agrieta cuando se seca y se expande si está húmeda. Ocupa laderas cóncavas con declive de 0 a 2 por ciento.

Descripción del Perfil:

De 0 a 3 pulgadas: arcilloso, granulado, friable y negro, recurso macizo cuando está húmedo, pero cuando está seco es de estructura gruesa prismática, que se quiebra en bloque. De 20 a 51 pulgadas: arcilloso, negro, firme y macizo.

Sobre el subtrato, este suelo es negro o gris muy obscuro a pardo-grisáceo obscuro. El subtrato es pardo-grisáceo muy obscuro en algunos lugares. Se encuentran algunas concreciones negras más debajo de una profundidad de 30 pulgadas en algunas áreas. En las áreas cartografiadas se incluyen pequeñas áreas limosas arcillosas. También se incluyen áreas que son calcáreas más abajo a una profundidad de 36 pulgadas y algunas áreas que hay delgadas películas arenoso-lómicos, arenoso-arcilloso-lómicos, o de cascajo, más debajo de una profundidad de 36 pulgadas.

Este suelo árido es de fertilidad natural alta, pero difícil de trabajar y el agua filtra lentamente. Las poblaciones de cosecha jóvenes pueden reducirse a causa de la contracción y expansión del suelo.

Los rendimientos son altos, si se maneja bien el terreno. Para eliminar el exceso de agua de riego es necesario hacer zanjas de drenaje poco profundas y abrir surcos en hilera. (Unidad de Capacidad111SC-1; zona pastizal de pradera).

2. Clase de Suelo: Arcilloso con declive de 5 a 12 por ciento (JaC)

Este suelo se encuentra en conos aluviales ondulados o inclinados y en laderas al pie de colinas y montañas volcánicas. Tiene generalmente de 18 a 20 pulgadas hasta la roca meteorizada y es un poco menos profundo que el Jacana Arcillano, con declive de 2 a 5 por ciento. Se incluyen en las áreas cartografiadas pequeños espacios muy gastados por la erosión que varían en profundidad de 7 a 18 pulgadas.

Lo difícil es cultivar esta arcilla pesada y la falta de agua limitan su adaptabilidad para las cosechas comerciales. (Unidad de Capacidad IVS-7; zona de pastizar arcillosa savannah).

3. Clase de Suelo: Fraternidad arcillosa, con declive de 2 a 5 por ciento (FrB)

Este suelo se encuentra en laderas convexas ligeramente inclinadas, cruzadas por conductas de drenaje en la mayor parte de los sitios. Tiene un drenaje superficial mejor que el de la arcilla Fraternidad, con declive de 0 a 2 por ciento. En las áreas cartografiadas se incluyen pequeñas áreas con declive de 5 a 12 por ciento, las cuales representan alrededor de 2 por ciento del área cartografiada. Es muy limitado el uso de este suelo para cosechas comerciales, debido a que el cultivo es difícil y cuando se contrae y expande pueden destruirse las plantas jóvenes. Si se riega es uno de los más productivos en el Área. Para evitar la pérdida del suelo, el riego debe hacerse mediante el sistema de surcos siguiendo la línea del contorno. Las áreas sin riego producen el pasto bastante bueno, pero el pastoreo debe hacerse cuidadosamente, durante las épocas de lluvia evitar el pastoreo. (Unidad de Capacidad 111 SC-1; zona de pastizal de pradera).

Los suelos arriba descritos son cónsonos con los datos obtenidos en el Mapa Interactivo de Puerto Rico de la Junta de Planificación (ver Figura 8).



Figura 8: Datos del predio del proyecto en el Mapa interactivo de Puerto Rico de la Junta de Planificación, resaltando la clasificación del suelo en NRCS.



Figura 9: Clasificación de suelos del proyecto según el Web Soil Survey.

Sin embargo, en el WEB SOIL SURVEY se ha identificado solo dos (2) clases de suelos. Los mismos son: Fraternidad arcillosa (FrB), antes descrita y Suelo urbano (Ua) (ver Figura 9). Este dato se repite en la clasificación de suelos según el Plan de Uso de Terrenos, PUT (ver figura 10).

Según la "Encyclopedia of Soils in the Environment", los suelos urbanos son suelos ampliamente influenciados por las actividades humanas y se encuentran principalmente, pero no solo, en áreas urbanas. Incluyen: (1) suelos que están compuestos por una mezcla de materiales diferentes a los de áreas agrícolas o forestales adyacentes, y que pueden presentar una capa superficial mayor a 50 cm, altamente transformada por la actividad humana mediante la mezcla, importación y exportación de materiales. , y por contaminación; (2) suelos en parques y jardines que están más cerca de los suelos agrícolas pero que ofrecen una composición, uso y manejo diferentes a los suelos agrícolas; y (3) suelos que resultan de diversas actividades de construcción en áreas urbanas y que a menudo están sellados. Fuente: URBAN SOILS, J.L. Morel, ... C. de Kimpe, in Encyclopedia of Soils in the Environment, 2005.



Figura 10: Clasificación uso de suelos según el PUT en el Mapa Interactivo de la Junta de Planificación.

Trasfondo Cultural (Síntesis cronológica y cultural) Fase 1A

A. Notas a la historia colonial, neo, proto e indígena de Lajas e investigación de archivo (Introducción y Marco Geográfico, Estudios Arqueológicos Previos en la Región y Marco Geográfico)

La sección más occidental de la zona suroeste, desde periodos precolombinos, ha sido un área bien poblada o de gran interés, producto a nuestro parecer de la explotación del medio ambiente costero y en especial los ecosistemas del manglar, tanto o mayormente en la parte sur y oeste que comprende Lajas y Cabo Rojo. Para los períodos acerámicos ofrecía un recurso insuperable, razón de la gran cantidad de evidencia de estos periodos habitacionales. A grandes rasgos, también podemos decir que lo fue para los periodos cerámicos, tomando en consideración su dieta suplementaria de la fauna marina, la casi ausencia de grandes reservas de agua y tierras fértiles afectó, quizás, el desarrollo de aquel estado incipiente donde abundaron las estructuras de piedra, como en el centro de la Isla y las zonas periféricas de esta.

Trabajos que nos arrojan luz de la razón habitacional tan marcada en esa porción de terreno en la esquina suroeste de la Isla (que cubre parte de Guánica, Lajas, Cabo Rojo y parte sur de San Germán), abrirá el horizonte de patrones de asentamientos para diferentes periodos en la isla, ya que la mayoría de esta zona es semi seca y árida por la falta de lluvia y terrenos fértiles. Quizás la riqueza de fauna Marina en el área costera de los ecosistemas del manglar, las lagunas, los caños, y ecosistemas similares, lo hacían una zona de interés, lo que aún se observa en parte por el turismo interno que acude a esta área de Guánica, Ensenada, Lajas y Cabo Rojo (desde el límite con Lajas a Mayagüez y Joyudas).

A pesar de la gran cantidad de sitios arqueológicos, la información de trabajos científicos y de conocimiento arqueológico es muy escasa, las investigaciones efectuadas por estudiosos o interesados en la arqueología e investigadores profesionales como arqueólogos, antropólogos, etnohistoriadores e historiadores interesados, se remonta más o menos a principios del siglo XX. Las investigaciones efectuadas en los años 1915 y 1916 por el arqueólogo Samuel K. Lothrop dieron como resultado humano escrito no publicado sobre los sitios arqueológicos de Puerto Rico. Varios sitios se dedican en ese manuscrito dentro de los límites municipales de Lajas: estos son los barrios Lajas Arriba, Llanos Arriba, La Cueva (isla), Magueyes (isla), Montalva, Montalva (isla), Palmarejo, París, Piña Lejos y Sabana Yeguas.

Otro sitio visitado en Lajas fue el de Las Cucharas por Adolfo de Hostos en el año 1916. El investigador realizó una excavación no controlada en el conchero. Consultamos también en la literatura, trabajos arqueológicos y de investigación referente como los de Alfonso Pinart (1879), Jesse W. Fewkes (1903-1904 y 1912-1913). Froelich G. Rainey (1934-1935), y Ricardo Alegría (1966, 1983), sin encontrar en ellos referencia respecto a los límites municipales de Lajas.

Se revisaron los archivos de la Oficina del Consejo para la Protección del Patrimonio Arqueológico Terrestre de Puerto Rico y los de la Oficina Estatal de Conservación Histórica. En estas fuentes se registraron 44 sitios arqueológicos para el Municipio de Lajas, de los cuales señalaremos los que más cercanos se encuentran del proyecto ante nos (ver Figura 11).

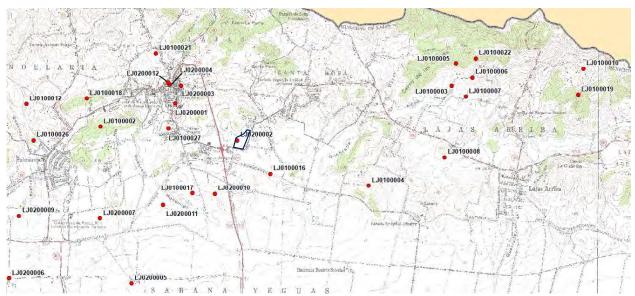


Figura 11: Ubicación de los sitios arqueológicos cercanos al Proyecto. Escala Ampliada.

Tabla 1 - Sitios arqueológicos en el Municipio de Lajas más cercanos al Proyecto. (Ver Figura 11 para localización de los mismos)

Sitio	Descripción	Distancia del Proyecto*	Arqueólogo responsable y año
LJ-0100016 – Cañitas II, barrio Sabana Yeguas	Yacimiento pequeño con dos áreas separadas, donde se encuentran caracoles, fragmentos de cerámica, lítica moderada, huesos escasos y ruinas coloniales. Asociado al periodo pretaíno (ostionoide) y al histórico. El arado continuo y el uso de maquinaria en el área presentan peligro de destrucción para el yacimiento.	0.72 km	Juan González, 1979
LJ-0100017 – Estación Campo, barrio Sabana Yeguas	Yacimiento de campamento pequeño detrás de la vieja estación del tren de Lajas, donde ocurrió nivelación del terreno por causa del arado. Se pudo identificar caracol moderado y cerámica escasa. Asociado al periodo cultural pretaíno (ostionoide tardío). Tiene peligro de destrucción debido al desarrollo urbano del pueblo, cercano al yacimiento.	1.2 km	Juan González, 1979

LJ-010002 – Piedras Blancas, detrás de la urbanización Linda Vista del barrio Sabana Yeguas	Yacimiento que consiste de pequeños residuarios donde hay cuevas y abrigos rocosos, asociados al periodo cultural taíno (chicoide). Algunos sitios se encuentran dentro de la colindancia de la urbanización Linda Vista. Hay peligro de destrucción por su cercanía al área urbana. Indica en la ficha de inventario que se encontró un aro lítico en 1931, pero no menciona de dónde proviene esta información.	2.07 km	Juan González, 1979
LJ-010003 – Los Quenepos, Barrio Lajas Arriba	Se identificó abundante caracol, cerámica moderada, lítica en áreas específicas y huesos dispersos y escasos. Consta de un área de 20 metros cuadrados. Se asocia al periodo cultural pretaíno (ostionoide). Se describe como un pequeño campamento retirado de áreas de vivienda, por lo que no aparenta peligro de destrucción.	3.28 km	Juan González, 1979
LJ-010004 – La Guásima, barrio Lajas Arriba	Yacimiento que consiste en tres pequeños montículos de abundante concha, cerámica, lítica y hueso moderado. Presenta peligro de destrucción debido al cultivo de caña de azúcar y se relaciona con los sitios de concha del área.	2.09 km	Luis Ortiz Sepúlveda, 1979
LJ-010005 – Garza I, Barrio Lajas Arriba	Yacimiento, tipo campamento pequeño, donde se identificó cerámica y concha en pequeñas áreas. También se identificó hueso y lítica en áreas específicas. El material recuperado es escaso, lo cual evitó poder clasificarlo bajo algún periodo cultural.	3.45 km	Juan González, 1979
LJ-010006 – Garza II, barrio Lajas Arriba	Pequeño campamento donde se pudo identificar concha abundante y cerámica moderada en áreas específicas. Lítica y huesos, escasos y dispersos. Se asoció a periodo cultural pretaíno (ostionoide). El formulario origina indica que no existen indicios de saqueo, mas, adelante, se observa: residuario muy	3.62 km	Juan González, 1979

	removido y saqueado; destruido por las máquinas al hacer camino vecinal.		
LJ-010007 – Garza III, barrio Lajas Arriba	Pequeño campamento en área de 200 metros, donde se identificó concha y cerámica, moderadas, lítica y huesos escasos, todos en áreas específicas. Asociado al periodo cultural taíno (chicoide). Yacimiento muy superficial por lo que el continuo sembrado de frutos lo está destruyendo	3.46 km	Juan González, 1979
LJ-010008 – Buenos Aires, barrio Lajas Arriba	Pequeño campamento donde se pudo identificar cerámica y concha moderadas en áreas específicas. Sitio multicomponente: pretaíno (ostionoide) e histórico (indefinido). Se identificaron ruinas coloniales sin más información de ellas, en cinco cuerdas de terreno. Arado intensivo presenta indicios de destrucción.	3.17 km	Juan González, 1979
LJ-0100021 – La Haya, barrio Lajas	Residuario pequeño con fragmentos de caracol y cerámica concentrados en un pequeño montículo. No se pudo asociar a un periodo cultural debido al poco material arqueológico identificado.	1.78 km	Juan González, 1979
LJ-0100022 – Las Cuevas, barrio Lajas Arriba	Pequeño residuario frente a una cueva, con área de caracol y fragmentos de cerámica, asociado al periodo pretaíno (ostionoide).	3.77 km	Juan González, 1979

De acuerdo con los datos reportados, podemos decir que el poblamiento en Lajas comienza en periodos precolombinos, Periodo IB (3,000 a 250 a.C.) con los grupos preagroalfarero. Para el periodo IIA y IIB (50 a.C. a 600 d.C.) de grupos saladoides, es bien representativo los sitios de Las Cucharas. Para el periodo IIIA al IIIB, de grupos pretaínos, se representan con los yacimientos de Magueyes, Las Cucharas, Cañitas II, Las Cuevas y otros. Para el periodo IV-A (1200 a 1500 d.C), el grupo de los taínos, dónde aparece la cerámica Capá, Bocachica y Esperanza qué representa en los sitios Piedras Blancas de los barrios Sabana Yegua, los Quenepos, las Garzas y otros.

B. Notas a la historia colonial del periodo de Invasión, Colonización, Dominación Española -Norteamericana de Lajas, Investigación de archivo para trasfondo del terreno

Lajas fue fundado en el 1883 al separarse de San Germán, donde dependían sus habitantes en lo militar, lo económico y lo religioso. De acuerdo al historiador Cayetano Coll y Toste, con el fin de obtener su segregación del término de San Germán y cumplidos todos los trámites de la ley en el expediente promovido por la mayoría de los vecinos de los barrios Lajas, Santa Rosa, Lajas Arriba, Plata, Costa, Parguera, Sabana Yegua, Candelaria, Palmarejo, París y Llanos, con audiencia de la Comisión Provincial y asociados, y del Consejo contencioso administrativo, la proximidad de la renovación de los ayuntamientos que coinciden con el principio del próximo ejercicio económico, ofrece ocasión oportuna para plantear la resolución la cual se verificaría con su gestión a las reglas concomitantes (Coll y Toste, Lajas 1907, 291).

El decreto se publicó en la Gaceta Oficial para su cumplimiento, conocimiento de las autoridades, corporaciones, centros oficiales del público en general quién sectores correspondientes en Puerto Rico, firmaba el 13 de abril de 1883 el general Vega Inclán (Cruz Monclova 1979, 698).

Para el año 1910, la municipalidad de Lajas ya contaba con 11,692 habitantes desde que comenzó su vida municipal. Para el año 1921 la población había aumentado en algunos 11,908 habitantes (De Hostos 1976, 566).

De acuerdo con el censo oficial de 1960, Lajas contaba con unos 15,375 habitantes repartidos en una superficie cuadrada de 60 millas, en 11 barrios. En el censo de 2020, se registraron 23,334 habitantes en este municipio (U. S. Census Bureau 2020).

La Guerra Cubano-hispano-estadounidense, Lajas fue ocupada por el ejército invasor el 13 de agosto de 1898. Contaba con 3 haciendas: La Amistad, Aurora y Resolución (De Hostos 1976; Ferreras Pagán 1902, 64-65).

La hacienda La Amistad se fundó en el año 1850 por la familia Pelissie. En 1887 pasó a manos de los hermanos Vivoni de San Germán. Los Pelissie instalaron una caldera multitubular, batería sencilla, dos clarificadoras de serpentina, un molino y su máquina, un alambique francés, un azufrador, dos evaporadores, 12 enfriaderas, dos bombas, una casa para máquina, pulguero y alambique de mampostería, una casa de vivienda, una bagacera, 1 km de vía para vagones de caña. Contaban con 1,600 cuerdas donde fincaban alrededor de unas 400 cuerdas en pequeña y gran agricultura de caña, cosechando unos 1000 bocoyes de azúcar. La quebrada Cruz está cerca de los establecimientos y su agua es conducida por medio de zanjas. Está situada en el barrio Sabana Yegua (Ferreras Pagán 1902, 64).

La Hacienda Aurora se fundó en el 1840 por Narciso Pujals y viene a ser propiedad de Juan Cancio Ortiz para 1902. Poseía un pequeño trapiche que fue instalado para el año 1880 y es Pujals quién introduce la maquinaria y fabricó nuevos edificios o establecimientos que al venderla constaba de una casa de máquina, un pulguero, alambique francés, cuatro pailas, dos con serpentinas, 5 enfriadoras de mampostería, caldera multitubular, Trapiche de 3 masas, dos bombas, dos ranchos para bagacera y casa de vivienda en madera. Su extensión era de 300 cuerdas, dónde tenía fincadas

100 cuerdas y cosechaba alrededor de 200 bocoyes de azúcar. Poseía pozos de agua a poca profundidad la que era usada para el riego (Ferreras Pagán 1902, 64).

La Hacienda Resolución se fundó para 1850 por Antonio Tirado. Entre 1875 y 1992 pasa a pertenecer a Pedro S Vivoni. Vivoni modernizó su maquinaria que en 1902 constaba de una caldera multitubular, un molino y su máquina, dos evaporadoras, dos bombas, dos clarificadores de serpentina, ocho enfriadoras, una bomba de mano y batería sencilla. Sus establecimientos eran de mampostería y madera. A unos 600 metros de los establecimientos se encontraba hincado un pozo de manantial que suplía las necesidades de agua para la agricultura y el uso personal. Posee una extensión de tierras de 1,000 cuerdas de la cual se cosechaban unos 600 bocoyes de azúcar. Estaba situada en el barrio Palmarejo al suroeste del casco urbano de Lajas.

C. Investigación en el Registro de la Propiedad de San Germán, Libro de Lajas, Análisis Registral Historial Específico, Usos del Terreno y Cambios Estructurales

1. Registro de la Propiedad

De acuerdo a la documentación suministrada por las oficinas del Municipio de Lajas, la hoy Finca núm. 10,901, se segrega de la Finca #1,313 en escritura #280 en Mayagüez a 3 de julio de 1986 ante el Notario, Roberto M. García Rullán. (ver Apéndice E).

Por esta razón nuestro análisis Registral comenzaría con la Finca #10,901.

Finca #10,901 – Tomo #256 – Folio #283

1ra Inscripción:

Rústica, Parcela radicada en el Barrio Santa Rosa del término Municipal de Lajas, Puerto Rico con un área superficial de siete cuerdas con ochentiseis mil doscientos trece cien milésimas de otra, 7.86213 cdas., igual a 30,901.2715 mts.2. En lindes al Norte con varias alineaciones que suman 135.22 mts. con Canal de Riego de la Autoridad de Energía Eléctrica, en 63,778 metros, con terrenos de la Sucesión Salvador Lugo Lugo, al Sur en 146, [3110] mts., con parcela a uso público que a su vez la separa de la Carretera Estatal núm. 117, a; Este en 46.688 metros, con terrenos de la Sucesión Cancel Vargas, otros de Santos Cancel y otros de Manuel Pagán y en 198.247 metros con el remanente de la finca principal de la cual se segrega propiedad de Laura M. Tió Nazario; y al Oeste en 172,665 mts., con remanente de la finca principal de la cual se segrega propiedad de Laura Tió. – La finca matriz está inscrita al Folio 87 del tomo 26 de Lajas y es la número 1,313.

Dueña de la Finca Matriz: Laura Mercedes Tió Nazario, Vda., de Mayagüez. El terreno se halla afesto con una Servidumbre a favor de la Autoridad de Energía Eléctrica de Puerto Rico.

Naturaleza del Contrato: Segregación Compraventa Donación y Liberación, el 13 de sept. de 1986 – ante el Notario Roberto M. García Rullán... el Banco Royal Bank of Canada, libera este solar de las hipotecas, se aprueba la segregación... y se segrega y vende, cede y traspasa a Favor de la Iglesia Católica Apostólica Romana de la Diócesis de Mayagüez, Puerto Rico, representada en este acto por la Hermana Nancy McCloskey, C.S.J... Principal de la Academia San Luis.

La Sra. Tió-Nazario donó parte, o sea, \$60,000.00 lo que la Iglesia aceptó... y por esta razón se libera de las hipotecas el solar y por la Escritura #280 en Mayagüez a 6 de julio de 1987, ante el mismo Notario se inscribe y la ratifica el Monseñor Ulises Casiano Vargas y a su vez se inscribe al Registro la adquisición de la finca de este número por la Iglesia Católica- Diócesis de Mayagüez en San Germán a 5 de febrero de 1988.

Luego hemos dado el paso a revisar los datos registrados de la Finca Matriz #1,313:

Finca #1,313 – Tomo #26 – Folio # 87

1ra. Inscripción:

Rústica; Estancia a pastos; árboles frutales, palmas de Coco y Cañas, sita en los barrios de Lajas y Sabana Yeguas, término Municipal de Lajas. – Tiene de cabida Noventa y Cuatro Cuerdas, veinte y cinco céntimos, más o menos... contiene una casa habitación de madera, cobijada de zinc, esta atravesada en parte por el camino que de Lajas conduce a la Plata, de Este a Oeste y linda al Norte con terrenos de Juana Ortíz. Antonio Ortíz Cancel, Maximino Milán y el Camino de Lajas a la Plata que separa terrenos de Rosario Mercado y Ramón Díaz, al Este con el citado Camino que separa terrenos de Francisco Vélez, Fidel Lugo, Fermina Sepúlveda y Lugo, Juan de Dios Martínez y Antonio Cancel y Rivera; al Sur con terrenos de Evangelista Pagán, Juan de Dios Martínez, Sucesión de Esteban Ortíz y Antonio Ortíz y Velázquez y el camino que de Lajas conduce a la Plata y separa terrenos de Antonio Ortíz Velázquez y Manuel Ortíz Cancel y al Oeste con terrenos de Rosario Mercado y Matilde Milán y la carretera que de Lajas-conduce a la Parguera y separa terrenos de Rafael Muñoz y Luisa Ramírez... La Finca descrita se forma por Agrupación de las tres siguientes: una de sesenta y cinco cuerdas un cuadro, inscrita en cuanto a cuarenta y ocho cuerdas en dominio y en cuanto a veinte y siete cuerdas, veinte y cinco céntimos en posesión a favor de Juan Cancio Ortíz y Lugo, casado con Matilde Romeu y Marty, al folio ciento veinte y siete del tomo veinte y tres de Lajas, finca número mil ciento cuarenta y siete, inscripción primera, otra de ocho cuerdas, nombrada "ANDREITA", inscrita a favor del mismo Juan Cancio Ortíz y Lugo, de estado casado sin expresarse el nombre de su esposa, por título de compra, en veinte y seis de junio de mil novecientos dos, al folio doscientos veinte y tres resuelto del Tomo octavo de Lajas, finca número cuatrocientos sesenta, inscripción cuarta de dominio y otra de once cuerdas, inscrita a favor del propio Juan Cancio Ortíz y Lugo... y por título de compra en veinte y seis de Junio de mil novecientos dos del folio sesenta y dos resuelto del Tomo doce de Lajas, finca número seiscientos cuarenta y dos, inscripción segunda de posesión acreditándose con la partida de matrimonio ... del 29 de mayo de 1892... el Sr. Juan Cancio Ortíz y Lugo, las agrupa con descripción que figura al principio... con valor de \$6,000.00.

Lo que inscribe en parte dominio y posesión... y lo inscribe en ...

San Germán a 23 de abril de 1920

2ª Inscripción:

Don Juan Cancio Ortíz y Lugo... vende a Juan Ortíz Toro casado con Ana María Noriega... por el precio de \$6,000.00... lo que esta inscribe en ...

San Germán a 23 de abril de 1920

3ra Inscripción:

Rústica... Estancia, ... según la describe la inscripción 1ra – en este momento el Agrimensor J.F. Robert, según datos obtenidos dice que la finca tiene unas 94,522 cuerdas. Juan Ortíz Toro – Agricultor constituye hipoteca voluntaria al Federal Land Bank of Baltimore... lo que se inscribe en ...

San Germán a 18 de octubre de 1923

4ta Inscripción:

Folio #92 – Tomo #26 – al Folio #81 – Tomo #39...

Hipoteca a favor de Juan Angel Tió Malaret inscrita en...

San Germán a 11 de agosto de 1926

5ta Inscripción y Sexta Inscripción:

El Sr. Juan Ortíz Toro... vende a favor de Juan Angel Tió-Malaret casado con Laura Nazario... esta finca con todo lo a ella inherente, sin reservación de clase alguna incluyendo las plantaciones existentes en la finca... por \$16,500.00. Se menciona la finca de Caña y sus retoños que queda de la cosecha actual...

San Germán a 5 de julio de 1930

6ta Inscripción:

Cuerpo de terreno de 94.522 cdas... en Bo. Sabana Yeguas y Lajas [nótese que no se dice Bo. Santa Rosa, por el área de la localización y casa de vivienda.] Lo que al ocurrir las segregaciones su localización quedará hacia la Carr. PR-117 y de esa forma se inscribirá.

Los esposos Juan Angel Tió-Malaret y Laura Nazario ceden a título de Donación a su hija Laura Mercedes Tió-Nazario, casada con Carmelo Mendoza. Estando sembrada de Cañas de Azúcar, lo que los donantes deben mandar a efectuar sus cortes, etc.

San Germán a 23 de diciembre de 1946

7ma Inscripción:

Folio #84 - Tomo #39

Rústica... después de varias segregaciones la misma arroja un remanente de 52.42425 cdas. Inscrita a favor de Laura Mercedes Tió-Nazario Vda. De Carmelo Mendoza... Adquirir hipoteca por \$85,000.00...inscrita en...

San Germán a 25 de abril de 1985

8va Inscripción:

La dueña Laura Mercedes... adquiere otra hipoteca por \$70,000.00...

San Germán a 9 de diciembre de 1985

9na Inscripción:

Por certificación expedida el día 22 de enero de 1986 por la A.E.E. de Puerto Rico que constituye, Servidumbre Predial a Perpetuidad para el paso, instalación, operación y reparación de las líneas y artefactos del Sistema Eléctrico a favor de la A.E.E. Lo que inscribió en ...

San Germán a 2 de mayo de 1986

10ma Inscripción:

Motivo de la Inscripción: (Compraventa)

...en su virtud se inscribe la finca #1,313 a favor de la Cooperativa de Crédito de Lajas... en precio de \$530,000.00.

Se señala en la inscripción: "Será por cuenta y cargo de la vendedora desalojar a las personas que se encuentren viviendo en la finca y la demolición de las estructuras que esta o estos ocupen en o antes del 1- de julio de 1987.

En Nota Marginal se dice que después de varias segregaciones la finca queda reducida a 42.5185 cdas. En esta se dice que la finca da el frente a la Carretera de Lajas a la Parguera, hoy PR-116. [parte de los terrenos donde se efectuaba el Festival de Chiringas de Lajas, conversación telefónica con el Ing. Eduardo Martínez].

La nota tiene la fecha del 10 de marzo de 1988, San Germán.

La 10ma Inscripción con fecha del 18 de enero de 1989 en San German.

Nota: Referente a las estructuras en el terreno que se dice en esa finca de 42.5185 cdas. que daba al frente a la Carr. PR-116 hoy, nos dijo el Ing. Eduardo Martínez que allí vivía la Fa. Acosta-Silva.

11a Inscripción: Tomo #39 – Folio #89 – Finca #1,313 Inscrita a favor de la Cooperativa de Crédito y Ahorro de Lajas... (ver Inscripción anterior) en San Germán a 8 de Oct. De 1990.

Luego aparece en to Tomo #361-Serie 34 Municipio de Lajas – Folio #064 – en Finca #1,313 (Tomo #33 – Folio #87):

11a Inscripción:

Rústica, Porción de terreno de 36.19828 cuerdas... colinda al Norte con terrenos de José Hernán Ramírez, Vicente Vélez y Manuel Figueroa, al Sur con la Carr. PR-117, al Este con terrenos de Venero Acosta, Salvador Pagán, Salvador Lugo, y ACADEMIA SAN LUIS y al Oeste, con la Carr. PR-116 y terrenos de Neftalí Irizarry, terrenos donde ubica una gasolinera y terrenos donde ubica una tienda de comida rápida. La porción descrita constituye el remanente de esta finca luego de varias segregaciones. La Coop de Crédito y Ahorro de Lajas es dueño según la 10ma Inscripción y por medio de esta inscripción -rectificadora se hace saber su mensura real de 38.15191 cdas...

En San Germán a 10 de octubre de 2005

2. Análisis Registral - Historial Específico

De acuerdo a la documentación de las Fincas #1,313 (Finca Matriz) de 94,25 Cdas y la Finca #10,501, hoy en estudio de 7.86213 cdas. y la revisión de las diferentes inscripciones hemos visto varios cambios estructurales y de la tenencia a tierra. Además, incorporamos algunos datos relacionados del uso del terreno, servidumbres y entrevistas con los vecinos e investigadores locales, que nos ayudan a desarrollar el historial del terreno.

La Finca Matriz núm. 1,313 (de donde se segrega la Finca en estudio #10,901, componía unas 94,25 cdas. que se formaron de la agrupación de tres fincas (ver Inscripción 1ra). Destaca la Inscripción de los colindantes en la Inscripción (del 23 de abril de 19al 20) que la Finca agrupada en ese tiempo (la 1,313) "colindaba al Sur con la Carretera de Lajas que conduce a la Parguera". Se refiere a la Carr. Núm. 39 que pasara en parte a convertirse en la Carr. PR-315 y luego en la Carr. PR-116. Además, nos dice que corresponde a: "Estancia a pastos, árboles frutales, palmas de coco y caña. Continúa diciendo que, "...sita en los barrios Lajas y Sabana Yeguas...", no menciona el Bo. Santa Rosa ya que la Casa habitación de madera y techada de zinc", estaba ubicada al límite Oeste de la Finca que ocurría entre los Barrios, Lajas y Sabana Yeguas, razón esta para su Inscripción al Registro (ver fotos relacionadas y localización de esta en Cuadrantes U.S.G.S.). Como señala los límites al Este del Camino que conduce al Bo. La Plata, ese hoy día es la Carr. PR-117, el otro al Sur era la que ya dijimos la Carr. 39- luego Carr. PR-115 hoy Carr. 116, al Norte se localiza hoy día la Carr. PR-122 que hace Intersección con la Carr. PR-116 y conduce al Sector Christian y es proyecto a continuar a San Germán. En la Inscripción 1ra- Finca #1,313 se ofrece la mención de los dueños o colindantes al Norte.

En la Inscripción 5ta (1930) y 6ta (1946) se mencionan enfáticamente "las plantaciones de caña" y en la 6ta (1946)..."Estando sembrada de Cañas de Azúcar" – cuando dice... "Cuerpo de Terreno de 94.522 cdas." – No la señala ya como, Estancia.

En el Plano Topografía y Mensura, S-1, Escala 1:600 "reducida" por Agr. Nelson Pérez del Río, suministrado por Meliza Martínez Sánchez – Coordinadora, Programa Revitalización de la Ciudad – Municipio de Lajas, vía correo electrónico, aparece hacia la esquina N-O el dibujo de la: Servidumbre Canal de Riego "LAND TRAT NO. 268", Catastro 57-358-052-159-AV. (Ver Figura 6 y 12).

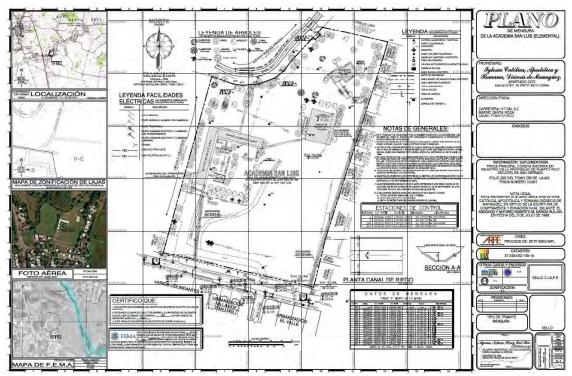


Figura 12: Plano de Mensura realizado por el Agr. Nelson Pérez del Río provisto por la Diócesis de Mayagüez.

Por medio de esa información y la cooperación de Meliza Martínez Sánchez, logré comunicación con la Ing. Karla M. Santiago Ruíz – Ingeniero Jefe-PREPA Oficinas en Yauco. La Ing. Karla M. Santiago Ruíz nos consiguió muy amablemente la información referente a la instauración de la Servidumbre de Paso para el Canal de Riego señalado y parte de su historial.

De acuerdo a los datos suministrados por la Oficina del Distrito de Riego del Valle Lajas ubicado en la Calle 25 de julio de Yauco, la historia del "Canal" y en específico, el Sistema de Riego del Valle de Lajas comenzó en 1945. Para ese año la Ley 101 facultó a la Autoridad de las Fuentes Fluviales para iniciar el Proyecto del Suroeste de Puerto Rico con el propósito de proveer riego, agua para uso doméstico e industrial y producción de energía eléctrica. Para el año de 1948 se dio comienzo a la a la primera fase estableciendo el desarrollo de las fuentes de agua y obras hidroeléctricas, lo que culminó en 1956.

Continua el artículo suministrado y continuamos citando que, en el año 1951, segunda fase, la constituyo el Sistema de Riego del Valle de Lajas, que dio comienzo su construcción y la primera entrega de agua el 12 de agosto de 1955 (ver figura 13A-13B).



Figura 13A: Opúsculo Distrito del Valle de Lajas; parte exterior. Preparado por el personal del Distrito de Riego del Valle de Lajas.

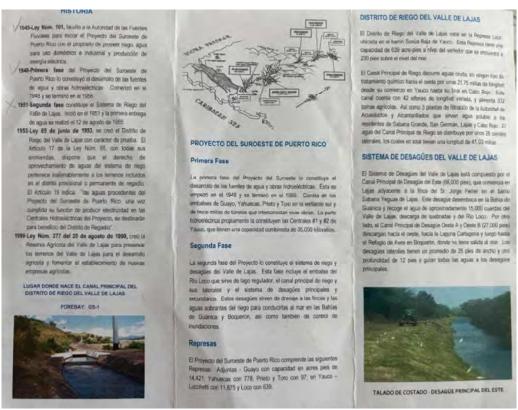


Figura 13B: Opúsculo Distrito del Valle de Lajas; parte interior. Preparado por el personal del Distrito de Riego del Valle de Lajas.

En la hoja suministrada (ver figura 13A-13B) señala que:

- El Distrito de Riego del Valle de Lajas nace en la Represa Loco, ubicada en el Bo. Susúa Baja de Yauco.
- El Canal Principal de Riego (en el cuál la servidumbre "Land Track No. 268" forma parte) discurren aguas crudas sin ningún tipo de tratamiento químico, hacia el oeste por unas 21.76 millas de longitud desde su comienzo en Yauco hasta su final en Cabo Rojo (Boquerón hasta el Refugio de Aves Silvestres).

De esta forma se entiende que el tramo del Canal de Riego al Norte del terreno en estudio ya había sido construido al hacerse la primera entrega de agua discurrió por el Canal Principal que este forma parte. Su construcción fue por expropiación forzosa como se señala y los documentos presentados corresponden a la compensación correspondiente (ver Figura 15, 16 y 17), según se citan los casos. Los datos presentados fueron suministrados por el personal de la Oficina de Yauco – Riego Valle de Lajas, por medio de la Ingeniero en Jefe, Karla M. Santiago Ruíz.

La información suministrada por la Ingeniero en Jefe, Karla M. Santiago Ruíz nos deja ver: Documentos y Planos Relativos a la Expropiación de la Franja de terreno entre las Fincas núm. 1,313 y 10,901, Propiedad de la Sra. Laura M. Tió Nazario, para la construcción de la Sección del Canal de Riego Valle de Lajas... en Servidumbre de Paso "Land Track no. 268". Entre los años de 1956, 1957, 1963, 1965, 1979 y 1980. (Ver Figuras 14A, 14B y 14C)

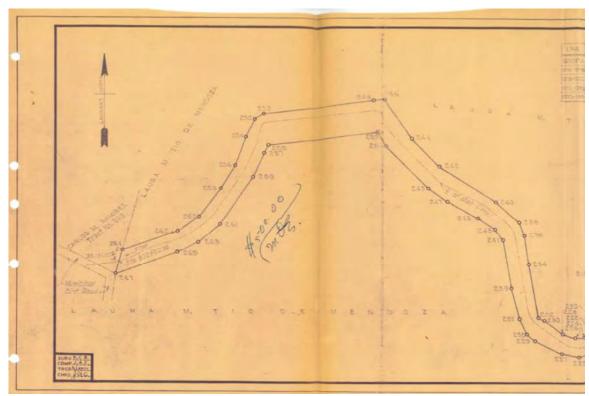


Figura 14A: Plano Escala: 1"=100' - Recomendado -Nov. 30-1956, Land Track No.268 – Puerto Rico Resources Authority Engineering and Construction División / Southwestern P.R., Project- Laura M. Tió de Mendoza-Track – Area to be Acquired, Bo. Lajas – Lajas, P.R.

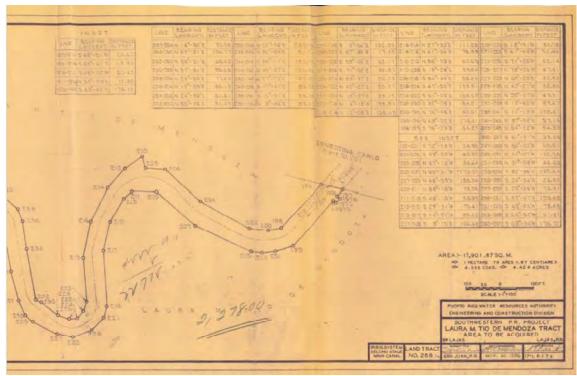


Figura 14B: Continuación de Plano Escala: 1"=100' - Recomendado -Nov. 30-1956, Land Track No.268 — Puerto Rico Resources Authority Engineering and Construction División / Southwestern P.R., Project- Laura M. Tió de Mendoza-Track — Area to be Acquired, Bo. Lajas — Lajas, P.R.

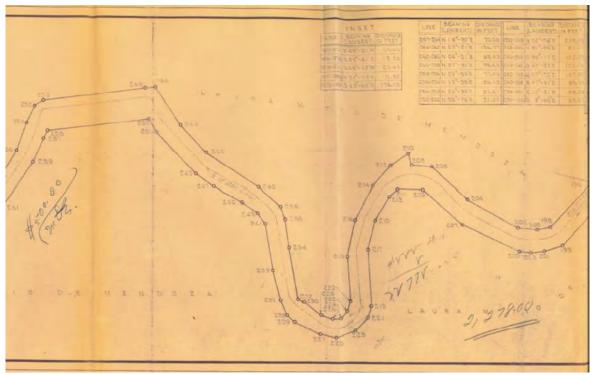


Figura 14C: Ampliación de sección de interés del Plano Escala: 1"=100' - Recomendado -Nov. 30-1956, Land Track No.268 – Puerto Rico Resources Authority Engineering and Construction División / Southwestern P.R., Project- Laura M. Tió de Mendoza-Track – Area to be Acquired, Bo. Lajas – Lajas, P.R.

El Plano descrito en las figuras 14A, 14B y 14C ofrece la ruta y servidumbre completa del terreno que le fue expropiado y adquirido de acuerdo a la leyenda del mismo unas 4.555 cdas. o 17,901.87 metros cuadrados. Las tres (3) secciones del Plano sugerido para adquirir el terreno discurre de Oeste a Este y así el flujo del agua de Riego por el límite norte, del terreno en estudio.

La Tabla en este Plano ofrece las Coordenadas, Rumbos y distancias entre los planos (ver figura 14B).

La sección al Oeste STA.802-90.00 en el Plano se ubica entre el Sifón #20 hoy al Oeste de la Carr. PR-116 y el Sifón #19. Cercano a su toma STA.772-51.00 al Oeste de la Quebrada MAMEY.

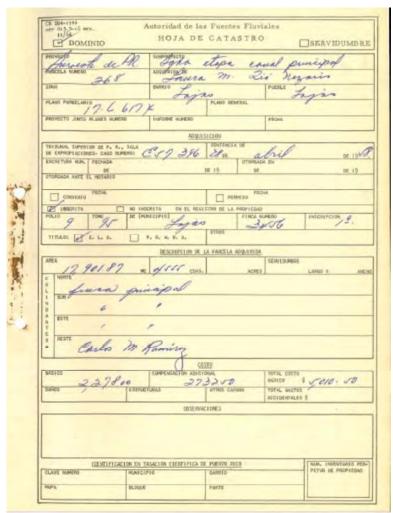


Figura 15: Hoja de Catastro de la Autoridad de las Fuentes Fluviales donde estipula el dominio de los terrenos del Sub Proyecto: "Segunda Etapa Canal Principal".

La Hoja de Catastro (Figura 15) ofrece datos referentes a la adquisición de la Servidumbre de Paso y adquisición/expropiación de la faja de terreno para el Sistema de Riego. Caso #E-57-396/ Tribunal Superior de P.R. – Sala de Expropiaciones. Sentencia del 28 de abril de 1958. Sub-Proyecto "Segunda Etapa Canal Principal, adquirida por la Sra. Laura Mercedes Tió-Nazario Bo. Lajas-Pueblo de Lajas. Se inscribió a; Registro de la Propiedad en el Tomo #95-Folio #9 como Finca #3456 – Inscripción 1ra Área total 4.555 cdas 17,901.87 Metros Cuadrados o 4.555 cdas. colindantes: Finca Principal al Norte, Sur, Este y al Oeste, Carlos M. Ramírez. Destaca el costo o desembolso por expropiación de: Básico \$2,278.00; compensación adicional \$2,732.50 – para un total de compensación por expropiación de \$5,010.50.

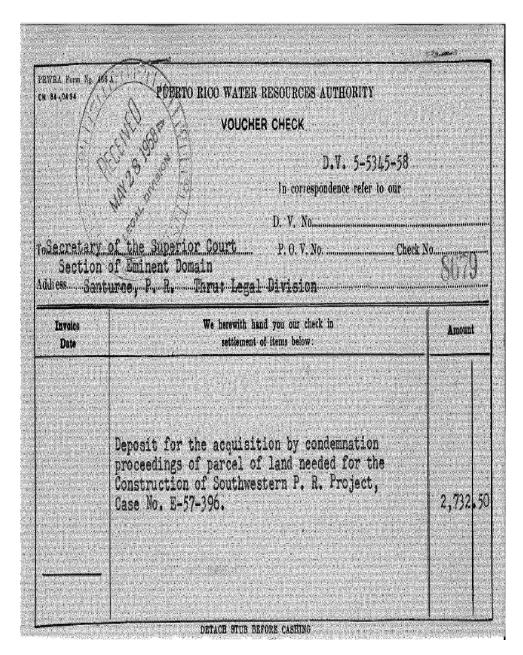


Figura 16: Evidencia del Pago por compensación y expropiación y adquisición de la Parcela necesaria para la Construcción del Proyecto Canal de Riego – Sureste de P.R.- Caso #E-57-396 con cheque #8679 por la PRWRA de Mayo 28, 1958 al Secretario de la Corte Superior Sección de Dominio Legal – Total \$2,732.50.

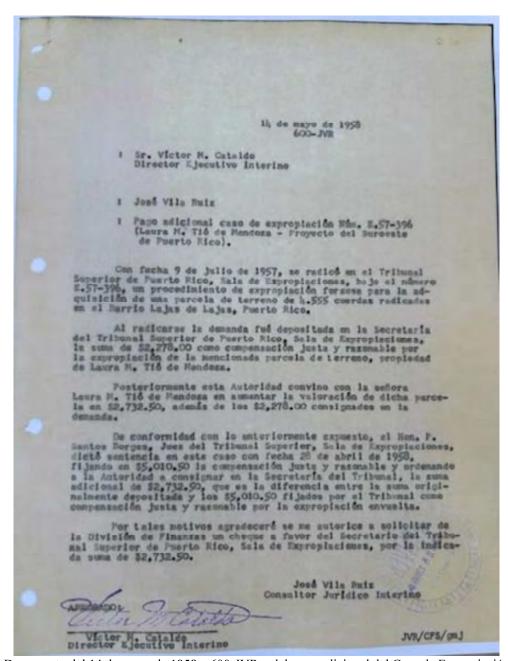


Figura 17: Documento del 14 de mayo de 1958 – 600-JVR – del pago adicional del Caso de Expropiación #E-57-396 (Laura M. Tió Mendoza – Proyecto Suroeste de P.R.)

Decía el documento en la Figura 17 que en fecha del 9 de julio de 1957 se había certificado en el Tribunal -Superior de P.R. — Sala de Expropiaciones bajo el núm. E-57-396 un procedimiento de Expropiación Forzosa para la adquisición de una Parcela de Terreno 4,555 cdas. radicadas en el Bo. Lajas de Lajas P.R. Al radicarse la demanda se depositaron la suma de \$2,278.00 como compensación justa y razonable por la expropiación señalada.

Posteriormente esta autoridad convino con la Sra. Laura Mercedes Tió-Mendoza en aumentar la valorización de dicha Parcela en \$2,732.50 para añadirlo al pago anterior. Por lo que el día 28 de abril de 1958 se dictó sentencia fijando en \$5,010.50 la compensación final.

El 23 de septiembre de 1963 el Ing. Edison sometió una revisión del predio número 535. Este predio incluye dentro de sus límites la propiedad en investigación. Esta revisión tenía como propósito la disminución del área total debido a la venta de 6.6 acres y posteriormente el 20 de abril de 1971, 0.9 acres adicionales. Estas ventas disminuyeron el agua regable por gravedad siendo necesaria la revisión antes mencionada. En este documento podemos identificar que el área de interés de nuestra investigación es clasificada regable por gravedad y la toma más cercana es la M-77. Ver Figura 18 para visualizar los datos antes mencionados.

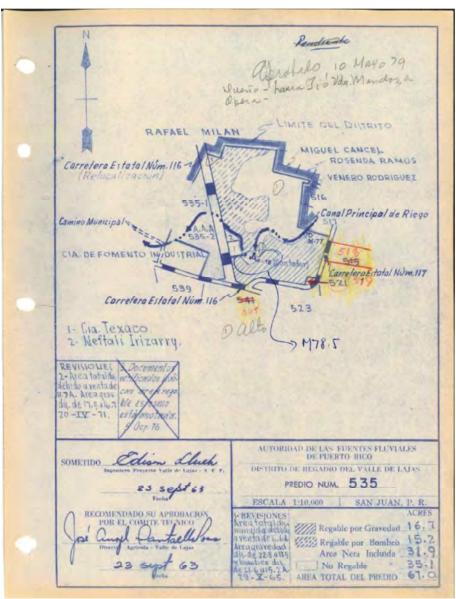


Figura 18: Documento sometido por Ing. Edison Lluch para la revisión del Predio Número 535 del Distrito de Regadío del Valle de Lajas en la Autoridad de las Fuentes Fluviales de PR.



Figura 19: Contrato para la venta de agua a terrenos incluidos en el Distrito de Regadío del Valle de Lajas con carácter de Prueba del Predio 535 fechado al 1 de marzo de 1965. Ver documento completo en Anejo F.

El 1 de marzo de 1965 el agricultor Carmelo Mendoza firmó el contrato número 535-65 para la venta de agua a terrenos incluidos en el Predio 535 pertenecientes a su esposa la Sra. Laura Mercedes Tió Nazario. En el mismo se estipulaba el canon a cobrar por acrepié de agua para regadío por gravedad o por bombeo del predio de terreno (ver Figura 19, documento completo en el anejo F). El mismo era de carácter de prueba y entre los archivos de este predio no fue provisto ningún otro contrato de carácter regular y/o permanente.

3. Usos del Terreno

Para poder señalar los usos del terreno en el terreno en específico en estudio, hemos utilizado los datos obtenidos en el Análisis Registral en el Registro de la Propiedad de San Germán, libros pertenecientes a Lajas. Obviamente destacando los cambios en el tiempo de la finca Matriz de 94.25 cdas. (Finca #1,313) hasta su segregación y "creación" de la finca específica en estudio, la #10,901. (de 7.86213).

Esto dicho debido a que la finca 10,901 siendo parte de la 1,313 su relación en el uso del terreno es obviamente el mismo, pero no así el uso de la 10,901 que ocurrió luego de segregarse de la 1,313. Las entrevistas de los vecinos, familiares, personas que de una u otra forma trabajaron o estuvieron relacionados al terreno. La adquisición de Servidumbres de paso, la documentación en Oficinas del Municipio, Museos, grupos culturales, Investigadores locales, literatura, oficinas gubernamentales y agencias concernidas SHPO, ICP-PAE, etc.

Todas estas nos ayudan a reconstruir los usos en la finca matriz y poder separarlo de la finca en estudio y así su historial, necesario para cumplir con los requisitos federales, estatales en esta fase investigativa de archivo (Fase 1A).

Podríamos señalar que al agruparse las tres (3) fincas: una de 65 cdas. la #1,147; otra de 8 cdas. nombrada "Andreita" la #460, adquirida por compra en 1902; y la tercera de 11 cdas., la #642, adquirida por compra en 1902. Es cuando se forma la finca 1,313 por agrupación de 94.25 cdas.

Su dueño quien las agrupa fue Juan Cancio Ortíz de la Renta y Lugo, Juan Cancio Ortíz (casado con Matilde Romeau y Marty) fue Alcalde de Lajas en 1908-1910 (José Luis Vargas: Lajas Notas para su Historia: 1986; "páginas sin enumerar"; y Pedro L. Crespo Vargas y Lidia Padovani de Ortíz: 2013 pp. 206-207). Terrateniente, agricultor prospero ocupó varios cargos municipales y en 1907 fundó el Instituto de Agricultura Artes y Oficios de Lajas – en el Bo. Palmarejo, donde hoy están los terrenos del Departamento de Agricultura de la UPR. Ese Instituto pasó a ser en 1910..."Instituto Politécnico de Porto Rico" del cual desde 1912-1917 fue el Presidente de la Junta de Síndicos. Ese Instituto se convirtió en la Universidad Interamericana.

Disculpen la digresión... la finca agrupada pasó a ser "ESTANCIA" (ver Inscripción 1ra -Finca 1,313 en Tomo #26-Folio #87 del 23 de abril de 1920)... a pastos, árboles frutales, palmas de coco y caña. Señalaba la inscripción que ubicaba en los barrios Lajas y Sabana Yeguas, de Lajas. Contenía una "Casa Habitación" (de esta hablaremos más adelante para ubicarla correctamente). Al no mencionar el Bo. Santa Rosa, donde ocurría el predio hoy en estudio nos deja ver que la ubicación de la "Casa" estaba al Oeste frente a lo que es hoy la Carr. PR-116. Lo que ocurre al inscribirse una finca por la localización de la Casa de Vivienda. La agrupa y la inscribió al Registro el 23 de abril de 1920.

Para esa misma fecha del 23 de abril de 1920 Juan Cancio Ortíz le vende a Juan Ortíz Toro, también agricultor. De manera que tuvo las fincas desde ca. 1902-1920 unos aproximadamente 20 años.

Para el año 1930 (ver Inscripción #5, Juan Ortíz Toro vende la finca a los esposos Juan Ángel Tió – Malaret y Laura Nazario, de acuerdo a los que dice la Inscripción 5ta, la finca de 94.522 cdas. estaba ya dedicada a la siembra de Caña de Azúcar.

Para el 23 de diciembre de 1946 la Inscripción 6ta señala que los esposos Juan Ángel Tió – Malaret y Laura Nazario, dan o ceden la finca en título de "Donación" a su hija Laura Mercedes Tió-Nazario, casada con Carmelo Mendoza.

Decía la Inscripción 6ta... "Cuerpo de Terreno de 94.522 cdas.... "Estado sembrada de Caña de Azúcar", no dice otra siembra, máxime que enfatiza que los donantes "deben efectuar los cortes de estas. Lo que nos deja ver que su uso fue entre 30' y 40' como cuerpo de tierra sembrado de caña de azúcar o uso agrícola.

Ya para los años de la década de 1980, 7ma Inscripción – Finca #1,313 aparece ya con unas 52.42425 cdas. y varias hipotecas. Para el 2 de mayo de 1986 se constituye una "Servidumbre Predial a Perpetuidad para la A.E.E. de Puerto Rico. (ver 9na Inscripción).

Para el 1ro de Julio de 1987, la Cooperativa de Crédito y Ahorro compra la Finca #1,313 que en ese momento poseía unas 42.5185 cdas. y pone cono cláusula que la vendedora "debe desalojar a las personas que ocupan la propiedad y demoler las estructuras existentes." De acuerdo a lo que explicamos anteriormente la estructura de habitación no ocurre en la sección que se estudia hoy.

4. Cambios Estructurales (Mapas, Planos y Fotos Aéreas)

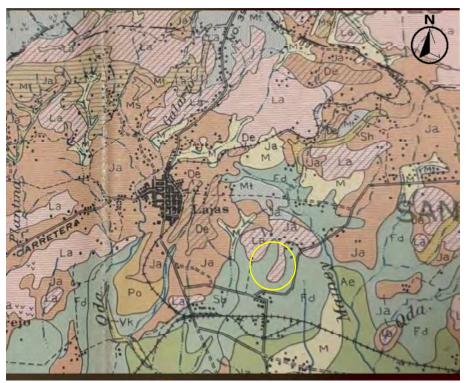


Figura 20: En Soil – Survey Map -Western Sheet – 1936 Field – Survey – Map – 1942, By R.C. Robert – ET AL, and UPR – University – Agriculture Experimental Station, J. A. Bonnet Chief Soil Division.

Se puede observar en la Figura 20 que el terreno en estudio en relación a su entorno inmediato, la Carr. #39 que limita al Sur y Oeste (hoy Carr. PR – 117 y al Sur la misma que será luego la Carr. #315 y hoy día en parte la Carr. PR – 116 al Sur a unos 250 mets. la vía Ferria y a unos 500 mets. al Sur – Oeste la Estación del Tren de la "Porto Rico American Rail Road, Corp. (PRARR – CORP.), hoy en parte de los terrenos del Supermercado MR. Special y las Oficinas del Centro Cultural de Lajas... Aún se observan allí las Cambijas de Hormigón. La Carr. #33 "atravesaba" el Casco Urbano y al Norte conducía a San Germán (hoy la Carr. PR-101). No se observa estructura

alguna en el terreno en estudio ni grúas, ni Establecimiento, sí al Oeste, la "Casa Habitación de la Estancia" de Juan Cancio Ortíz.

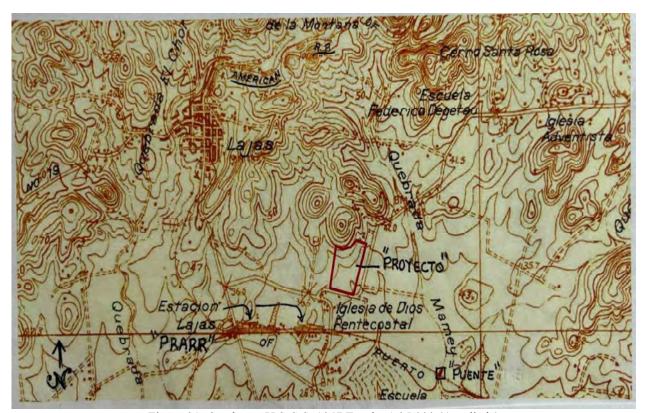


Figura 21: Cuadrante U.S.G.S. 1947 Escala: 1:25,000 (Ampliada)

En la Figura 21, destaca el terreno en estudio en relación al entorno, no se observan cambios estructurales en la finca. Se señala la localización de la estación del tren de la PRARR – CORP./Boquerón - Lajas. No se observa la localización de la grúa/caña de la Fa. Nazario, sí la Casa Habitación de la "Estancia" de Juan Cancio Ortíz, al Oeste fuera del terreno y el Camino de Acceso.



Figura 22: Localización del Proyecto En Cuadrante USGS – 1966, Escala 1:20,000, (modificada)

Se observa la Grúa para levantar Caña de la Fa. Nazario, y el "Canal de Riego – AEE Valle de Lajas", en la Servidumbre de Paso para el terreno desde 1957 – Fa. Nazario (La Grúa hoy día se encuentra en otro terreno privado).



Figura 23: Fecha de Vuelo: Feb./ 13/ 1936; Autoridad de Carreteras y Transportación — Oficina de Fotogrametría - Minillas, San Juan (Escala — ampliada) Foto Área 1936 — Escala: 1:18,000 núm. Rollo K-6, núm. Foto 530

Se observa en la Figura 23 un camino de tierra de acceso desde la hoy Carr. PR – 117 al Este y cruzando hacia N-O va la llamada "Casa de Habitación" en la Estancia de Juan Cancio Ortíz luego de la Fa. Nazario. Posiblemente luego en 1957, sobre el Canal de Riego se construyó el "Puente" que aún existe (hoy día detrás o al Norte de la Capilla en la Academia San Luis, ver figura 24) y servía de acceso a la "Casa Habitación". El mismo se encuentra dentro del APE pero no dentro de la propiedad investigada. Se observa al N-E del terreno la siembra de Caña. Al Este no se observa la Grúa/Cañera.



Figura 24: Puente sobre el Canal de Riego (ca. 1957), al Norte de la Capilla que servía de acceso peatonal y vehicular entre las Fincas de la Fa. Nazario Mendoza.



Figura 25: Foto Aérea – 1963 – Escala 1:20,000 (ampliada) Fecha de Vuelo: 2 de Feb./ 1963; Autoridad de Carreteras y Transportación Oficina de Fotogrametría – Minillas, San Juan

Se puede apreciar claramente en la Figura 25 el "Canal de Riego" hacia la esquina N-O que cambió el polígono rectangular de la Finca para su construcción adentrándose en el terreno en forma curva. (ver Figura 27). Hacia el N-O la "Casa Habitación" de la "Estancia" – ya terreno de Caña…, no se observa la Carr. PR – 116, en su tramo desde la Int. Con la PR – 117 hoy que al Norte conduce al Casco Urbano de Lajas.

5. FOTOS AÉREAS (GOOGLE EARTH Y PORTAL CATASTRO DIGITAL)

Hemos utilizado varios enlaces o portales para conseguir fotos áreas que nos ayudan a ilustrar visualmente los diferentes cambios estructurales en la finca en estudio y en específico lograr ilustrar el desarrollo o construcción de la infraestructura de edificios para la Academia San Luis en el Bo. Santa Rosa. De esta forma esperamos añadir estos datos visuales a lo que venimos describiendo desde el análisis registral, fotos de campo, fotos de los Cortes Estratigráficos de Prueba, análisis de los mismos en su pequeña reseña historial.

Se realizaron diversas entrevistas a personas relacionadas a la Academia San Luis. Las personas entrevistadas fueron:

- Sor Luz-Leida y Sor Teresita Alicea, principales de la Academia. Ambas Monjas de la Congregación de las Hermanas de San José de Brentwood, New York, co-fundadoras de la Academia San Luis.
- Ing. Eduardo Martínez, constructor en parte de las facilidades.
- Sra. Diana Martínez Vargas, profesora y maestra en la Academia San Luis desde 1992 (sección del Bo. Pueblo), luego en 2000 al 2015 en la sección del Bo. Santa Rosa.
- Ing. Jorge Irizarry Avilés, José (Che) y Ariel del mismo apellido que ayudaron a su padre el Arql. José Efraín Irizarry Avilés (Tatito) en la construcción de la Capilla entre los años de 2001-2002.
- Padre Eric García y el Sr. Alberto Rodríguez, representantes de la Diócesis de Mayagüez
- Sr. Luis Pinto Nazario, Investigador en el Registro de la Propiedad
- Sr. Cruz Crisanto Toro, anterior Director de la Oficina del Canal de Riego de Lajas
- Sra. Karla Santiago, Ingeniero en Jefe Oficina Canal de Riego de Yauco (quien nos suministró los datos del Canal de Riego que incluimos)
- Sra. Meliza Martínez, Coordinadora Programa de Revitalización de la Ciudad, Municipio de Lajas

Las entrevistas antes mencionadas nos han ayudado a la recopilación de información gráfica, testimonios, descripción de las fotos áreas que describimos y al historial del terreno en su totalidad y en especial con la Academia San Luis frente a la Plaza de Recreo de Lajas 1938 (cuando aún era de madera y estuvo junto a la Casa Parroquial y luego en 1946 se construyó el Edificio de Hormigón Armado) y de la del Bo. Santa Rosa Ca. entre 1985 al 2022) cuando cesaron sus operaciones. De 1985 – 1987 - planificación y en 1989 permiso de uso 1ra Etapa, Casa Residencia de las Monjas y 5 salones en el primer edificio, primera parte del de "L" y luego la 2da Etapa.

Luego por etapas la Cancha de Baloncesto, Piso y Bleachers (Ing. Neftaly) 1ra etapa y el techo por el Ing. Eduardo Martinez quien la instaló, entre ca. 1997-2000. (comunicación personal con el Ing. Eduardo Martínez, quien estuvo relacionado con la planificación y construcción de gran parte de los edificios y es natural y residente en Lajas).

Las fotos que hemos revisado en Google, comprenden desde 1993 al 2024. Además, la de 1998 del Portal Catastro Digital y productos Cartográficos, suministrados por la Sra. Meliza Martínez. Incluimos de estas las de Google Earth: del 12 de Julio 1993; la del 9 de octubre de 2004; la del 3 de abril de 2024, y la de 1998 (del Portal Catastro Digital) que hemos utilizado como portada. Las fotos señaladas tienen su descripción al calce de las mismas.



Figura 26: Foto Aérea de Google Earth: (12-7-1993)

En la Figura 26 se puede observar el Polígono del terreno en relación al entorno al Norte y Oeste el Canal de Riego (fuera del terreno, ver Figura 27), al Oeste la Carr. PR – 116. Dentro de Polígono ya se encuentra el Edificio en "L" y la Residencia de las Monjas de San José de Brentwood – New York.



Figura 27: Vista parcial al Este del Canal de Riego colindante al Norte con la Finca en estudio.



Figura 28: Foto Aérea de Google Earth: (9-30-2004)

En la Figura 28 apreciamos en esta ya las edificaciones que componen el complejo educacional Academia San Luis: al Sur en "L" muro de contención; más al Norte el Edificio en sí de la Academia, salones, oficinas, en Patio Gazebos – kioskos y Columpio. Al Norte de estos la Capilla. Al Este la Cancha y Residencia – Monjas.



Figura 29: Foto Aérea de Google Earth: (3-4-2024)

En la Figura 29 se observa el estacionamiento y muro de contención al Sur, al Norte de estos los edificios en sí de salones y oficinas "A.S.L." y sus gazebos – kioskos y área recreativa (columpios, etc.) provisto de vegetación alborea y más al Norte la Capilla Católica de la Virgen de Monserrate. Al Este la Cancha y la Res. de Las Monjitas, también con vegetación alborea adulta... Al Norte inmediato el Canal de Riego y al Oeste, Al N-O y N. la Carr. PR-122.



Figura 30: Foto Aérea Portal Catastro Digital y Productos Cartográficos (1998)

En la Figura 30 se observa ausente casi de vegetación alborea, solo detrás de la Res. Monjas. No se observa la Capilla, solo el Edificio en "L", la Cancha, y la Casa Res. de las Monjas Josefinas y la única vegetación alborea. Al Norte y Oeste el Canal de Riego, Hemos ubicado los 2 puentes de 1957 de acceso peatonal y de vehículos en la Finca de la Fa. Nazario. Al N – O la Casa habitación de la Estancia ca. 1920. Al Oeste fuera del terreno la Grúa/Cañera de la Fa. Nazario (ver Figura 31) y en Círculo los posibles Estacionamientos del terreno de Caña de la Fa. Nazario.



Figura 31: Entre la vegetación Grúa/Cañera hoy en terreno privado al Este perteneciente al Ing. Eduardo Martínez. Fue parte de la Finca de caña de la Fa. Nazario Mendoza que a su vez fue parte de la Finca en estudio.

Investigación de Campo y Resultados (Fase 1B)

A. Marco Teórico

El marco teórico para la Fase 1B en este trabajo de investigación arqueológica Fases 1A – 1B (Fase 1), toma en parte como base nuestros hallazgos en la anterior Fase 1ª de investigación de archivo y referencia sobre el terreno en estudio (Finca #1,313). En este aún se encuentran los edificios de la Academia San Luis – Bo. Santa Rosa – Carr. PR-177 al km. 0.2 (ver Figura 2).

En la anterior Fase 1A se determinó la presencia de sitios arqueológicos reportados en las Oficinas del S.H.P.O. y P.A.E., pre y post colombinos. Los más cercanos al área del proyecto en estudio fueron (ver Figura 4 y Figura 10), el LJ – 0100016 – CAÑITAS II en Bo. Sabana Yeguas a unos 0.72 km. al S-E del terreno. Corresponde a "un pequeño yacimiento con dos áreas separadas, donde se encuentran caracoles, fragmentos de cerámica, lítica moderada, huesos escasos y ruinas coloniales. Asociado al periodo (ostionoide) pre-taíno y al histórico. Reportado por el Arql. Juan Gonzales en 1979.

Asociado a la Quebrada Mamey, la cual discurre desde el Norte cercano su nacimiento entre las colindancias del límite municipal del Bo. Santa Rosa, Bo. Lajas Arriba y el límite municipal de la Ciudad de San Germán, a su vez a unos 200 mts. aproximadamente más al S-E se puede observar un puente (hoy destruido) que perteneció al Sistema Ferroviario de la "Porto Rico American Rail Road, Corp." Hacia el S-O a unos 1,000 mts. del terreno en estudio, ocurre el Sitio LJ–0100017 (pre – colombino), está asociado a la Quebrada Mondongo a unos 200 mts. al Oeste de esta. Ambos sitios ocurren en un Radio de 1 km., tomando la finca en estudio como centro. El LJ -17 de acuerdo a la descripción obtenida en el "SHPO y PAE", (ver tabla 1: Sitios arqueológicos y descripción), es determinado como "Sitio Estación Campo" en Bo. Sabana Yeguas... dice: "Yacimiento de Campamento pequeño detrás de la vieja Estación del Tren de Lajas [ver Figura 19, mapa de Suelos de R. C. Roberts de 1945 para ubicación de la Estación] donde ocurrió nivelación del terreno por causa del arado. Se puede identificar caracol moderado y cerámica escasa. Asociado al período cultural pre-taino (ostionoide tardío)... tiene peligro de destrucción debido al desarrollo urbano del pueblo, cercano al yacimiento ... Arql. Juan González – 1979".

Pudimos localizar en las visitas al Campo el Puente Ferroviario de Cañitas sobre la Quebrada Mamey y también localizamos a unos 30 mts. al Este del terreno en una propiedad privada hoy la Grúa de levantar cañas (figura 30) que perteneció a la Fa. Nazario, o sea, que estuvo asociada al terreno en estudio como finca cañera antes de ser segregado el terreno. Esto nos fue señalando junto a los datos del registro e investigación con los vecinos e investigadores locales la posibilidad (sensitividad del terreno) de localizar evidencia pre-colombina o histórico – colonial relacionado a la agricultura de caña y frutos menores.

A parte de esto señalado se tomó en consideración los trabajos de investigación anteriores nuestros y de otros arqueólogos e historiadores locales para el entorno del proyecto (ver figura 4). Esto nos ayuda a tener una mejor visión tiempo — espacial del uso y cambios estructurales de los terrenos en el área, así como la evidencia localizada y posible a localizar.

Hemos a su vez reseñado un pequeño análisis de los patrones de asentamiento en el caso de Lajas, Santa Rosa y Lajas Arriba, (Cerro de las Cuevas). Y la asociación de estos sitios con las quebradas, mayormente las Quebradas Margara, Plantina, Mondongo, Mamey, La Garza, entre otras donde ocurren (ver Figura 4) la mayor parte de los sitios pre-colombinos en Lajas donde esas quebradas ocurren localmente y la mayor parte aparecen como senderos desde los sitios hasta el Mar Caribe (área de pesca) y de regreso comunicación y vías o caminos.

Por lo tanto, para preparar nuestra metodología investigativa y sistemas de reconocimiento tomaremos lo antes dicho en consideración a pesar de ser una pequeña tesis en ciernes sobre los patrones de asentamientos en este sector de Lajas.

B. Metodología Investigativa, Sistema de Reconocimiento Utilizado y Resultados

Tomando en consideración lo discutido en las secciones A y B y en la Sección A, anterior, iría dirigida primeramente a la búsqueda de evidencia arqueológica pre-colombina en la presencia de restos de fogones, cerámica, lítica, de posibles petroglifos, etc. También los restos o cimientos de estructuras de vivienda, cerámica o artefactos relacionados con la colonización española en Lajas. Esto en las diferentes, "mudanzas de los criollos y los aún colonizadores españoles que se diseminaron por diferentes lugares en la isla y Lajas específicamente en la colonización. Además, en la época de la invasión y colonización de los anglosajones hoy "norteamericanos" en la tercera invasión.

1. Por tal razón, para nuestro estudio de campo de superficie y del subsuelo, se determinó efectuar la siguiente investigación de superficie mediante el sistema de Reconocimiento Intensivo según: Ruppé, R. J. "The Archaeological Survey, A Defense" – American Antiquity, 31:313 – 333, 1966.

En la totalidad de la Finca de 7.8621 cdas., comenzando en la esquina S – O, cruzando entre la colindancia Oeste y el edificio en "L", sección Oeste hasta la esquina O - N - O. Luego bajando hacia el Sur, entre un edificio (Capilla), que luego supimos para sorpresa nuestra que fue construido por el Arql. Efraín Irizarry Avilés (Tatito). De ahí bajamos luego de bordear la sección Este del Edificio en "L" (Academia San Luis), hasta la entrada al terreno por la Calle Tulipán. De ahí volvemos en dirección al Norte cercano a la Cancha de Baloncesto hasta el Norte en la esquina N – E detrás de la que fue la residencia de las Monjas hasta la esquina E – N – E. Bajando en dirección al Sur llegando a la esquena E – S – E. Todo esto caminando en "zig-zag" entre las edificaciones, observando en sus límites de los cimientos en busca de evidencia arqueológica que pudo aparecer desde el subsuelo cuando se efectuaron las zapatas y excavaciones para las estructuras. Los resultados fueron negativos en lo que respecta a la localización de evidencia arqueológica.

En este recorrido nos interesó la estructura de la "Capilla – Católica en nombre de la Virgen de La Monserrate" (comunicación personal con la Sister Luz – Leída, que fue Principal de la Academia y encargó al Arql. Efraín Irizarry [Tatito] la construcción de la Capilla). De lo que diremos algo más al respecto más adelante.

Posteriormente fue diseñado un Reconocimiento de Superficie mediante el Sistema de "Transectos" o Brechas arqueológicas, trazadas en el Plano de Mensura y topografía, tomando el

Norte como dato, vista al Sur y luego viceversa 9 (ver Figura 32). Cada "Transecto" o Brecha arqueológica estuvo separada entre sí unos 36 MTS. Se trazaron unos seis (6) Transectos en total: el T-1 cubrió un área total lineal de unos 90 MTS. hacia el Norte; el T-2 unos 180 MTS. lineales y entre el T-1 y T-2 un campo de visión de unos 36 MTS. a ambos lados de este tomando el transecto como eje o centro; así el T-3 por unos aprox. 180 MTS. lineales en dirección al Norte donde a unos 156 MTS. al Oeste ocurre la Capilla. Luego el T-4 al Sur [por unos 390 MTS. lineales pasando al Costado Oeste de la Cancha y terminando en la Esquina S-E del terreno. Siendo este el de más longitud de los "Transectos".

Luego caminamos por el borde de la verja o colindancia Este donde la esquina S – E unos 54 MTS. hasta localizar el punto donde comenzar el T -5 al Norte que cubrió unos 114 MTS. lineales. Finalmente, de ahí unos 36 MTS. por el límite Norte de la Finca y conseguir el Punto inicial del T -6 hacia el Sur, que de ahí resultó en unos 42 MTS. lineales a su final en el límite Este de la finca y que resultó ser el más corto.

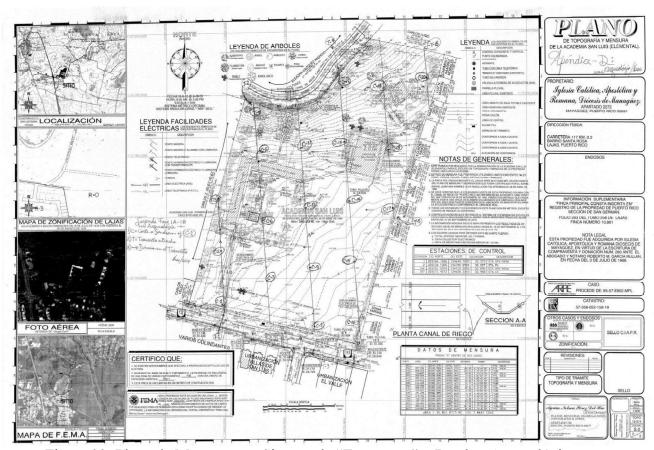


Figura 32: Plano de Mensura con Sistema de "Transectos" o Brechas Arqueológicas

Para estos efectos de trazar los Transectos o Brechas Arqueológicas entre la vegetación de gramíneas de poca altura de "hierba de Heno", el Municipio facilitó la maquinaria para poder cortar la hierba de heno en esas rutas.

Los resultados de los Transectos fueron negativos en la localización de evidencia arqueológica pre y post colombina.

En lo que respecta a los edificios no se encontraron propiedades elegibles de valor arquitectónico dentro de un radio de ¼ milla de la propiedad en estudio. Así nos lo confirma el Registro Nacional de Lugares Históricos en línea (ver figura 33). Se verificó en el Registro Nacional de Lugares Históricos (RNLH) de la Oficina Estatal de Conservación Histórica actualizada el 31 de mayo de 2024, página 16, Municipio de Lajas. En este documento tampoco está incluida la propiedad de interés, ni propiedades adyacentes.

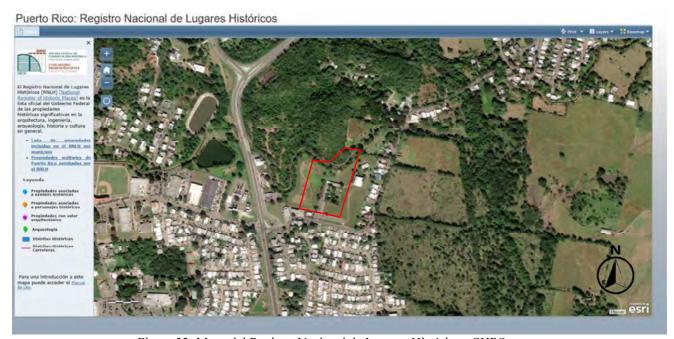


Figura 33: Mapa del Registro Nacional de Lugares Históricos, SHPO.

Como parte de la investigación en la Oficina Estatal de Preservación Histórica (PRSHPO) nos percatamos que dentro del inventario de estos se documentó el sitio como LJ-29. Este tiene una Clasificación Histórica que data de 1938. Esta ficha tiene una fecha de inspección de 1/1/2001. La ubicación de la Academia San Luis fundada en 1938 es una muy diferente a la propiedad en investigación (ver figura 34). En 1938 el reverendo José Torres Rodríguez funda la Academia San Luis en la Calle San Blás #28 del barrio Pueblo de Lajas frente a la Plaza Pública e Iglesia Nuestra Señora de La Candelaria. En 1946, el Reverendo Donato Liébanos reconstruye la Academia San Luis en un edificio de hormigón. Hoy día este edificio alberga el Centro de Desarrollo Familiar, La Visitación perteneciente a la Diócesis de Mayagüez (ver figura 35). Estos nos indica que es muy probable que la ficha en cuestión tiene un error.

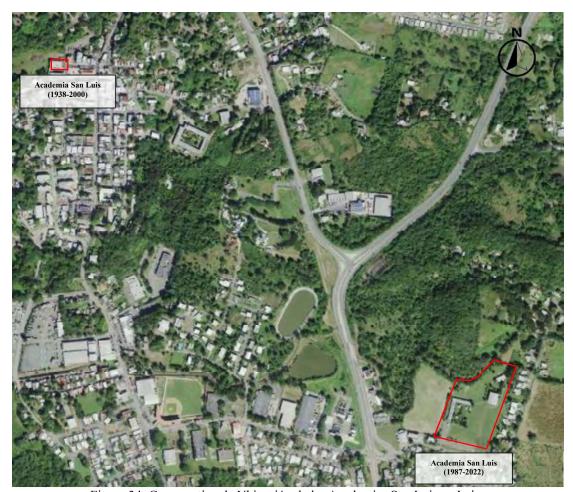


Figura 34: Comparativa de Ubicación de las Academias San Luis en Lajas



Figura 35: Foto de Antigua Academia San Luis que data del 1946 ubicada en el barrio Pueblo de Lajas.

Según nos narró la Hermana Teresita Alicea de las Monjas Josefinas, para el año 1987 ya se había completado la construcción de la Casa Residencia de las Monjas y se instaló un edificio prefabricado de hormigón, identificado en la Figura 2 como "Building 1". Este edificio albergó a la Academia San Luis Elemental (ver figura 36). Los estudiantes de nivel secundaria permanecieron en la Academia San Luis del barrio Pueblo. Luego se fueron añadiendo estructuras según estipula el permiso de uso en 1989 sometido por el Ing. Eduardo Martínez (ver figura 37) para una primera fase de 5 salones. Posteriormente, en 1990 se construyó el "Building 2" (ver figura 2) que albergaba la segunda fase de 4 salones.



Figura 36: Fachada principal del Edificio en "L", (1ra sección) de Sur a Norte, pre-fabricado colocado en 1987.

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Figura 37: Solicitud de permisos de uso primera y segunda fase de la Academia San Luis. (1989 y 1993)

Por la información recopilada entendemos que los edificios en forma de L y la residencia de las monjas son los edificios más antiguos de la propiedad. No obstante, ninguno de estos ha alcanzado el umbral de 45 años de construcción. Los edificios 1 y 2 constan de dos secciones que forman un edificio continuo en forma de L. Su construcción es en hormigón armado. Estos edificios se subdividen principalmente en salones y cuenta con baños. Las puertas y ventanas son metálicas. En este edificio en L existe un corredor techado de hormigón, extensión del techo de los edificios principales.

El predio cuenta con una Capilla dedicada a la Virgen de la Monserrate, construida al Norte del Edificio en "L" (ver Figura 2). La razón de su construcción, según nos narró la Hermana Sor Luz-Leida, es "que un niño le había preguntado ¿que dónde él podía ir a hablar con Papá Dios?". Fue así que ella hizo las gestiones para la construcción de la Capilla y contrató al Arql. y Maestro de Obra de Construcción, Efraín Irizarry Avilés (Tatito). Esta capilla fue construida entre los años 2000-2001 (ver figura 38) y está cubierto por un techo de hormigón armado a dos aguas con una cúpula de hormigón en la parte trasera lado del techo.

La campana pertenecía a un buque velero y fue donada por el hijo del Arql. Irizarry, el Sr. Jorge Irizarry. El interior de la Capilla contaba con un altar, sagrario e imágenes religiosas. El techo y paredes en Sagrario y Cruz fueron tallados por el Arql. Irizarry (ver figura 39). Todos los objetos de importancia religiosa fueron trasladados a la Capilla de San Juan Bautista del Sector Palmarejo II en Lajas por la Diócesis de Mayagüez al momento de cierre de la Academia.



Figura 38: Fachada exterior de la Capilla dedicada a la Virgen de La Monserrate.



Figura 39: Fachada interior de la Capilla dedicada a la Virgen de La Monserrate.

En este estudio arqueológico de campo del terreno en estudio para el "Complejo Deportivo", se vio diríamos "auxiliado" el Sistema de Reconocimiento Intensivo y de Transectos o Brechas Arqueológicas por el de la Implementación de Cortes Estratigráficos de Prueba o Sondeos Arqueológicos en el subsuelo. Esto para poder cumplir con la Fase 1B requerida.

De esta forma se determinaría la presencia o ausencia de evidencia arqueológica en el subsuelo, a pesar que tomamos en consideración que la finca fue utilizada por muchos años en la explotación agrícola de siembra de frutos menores, árboles frutales y finalmente en la siembra de Caña de Azúcar, ca. 1920 al 1975.

Se determinó efectuar unos 20 – Cortes Estratégicos de Prueba o Sondeos Arqueológicos, los mismos fueron ubicados en la ruta o brecha arqueológica que nos hemos acostumbrado a llamar Transectos. Con una separación de unos 48 MTS. uno de otro, esto tomando en consideración la sensitividad media del terreno, reconociendo los cambios estructurales en el terreno y los diferentes movimientos de terreno, que hemos señalado.

En el Transecto núm. 1 (T-1) se ubicaron Cortes... C-1, C-2 y C-3; en el T-2 los: C-4 al C-7; en el T-3 los C-8 al C-11; en el T-4, los C-12 al C-16; en el T-5, los C-17 al C-18; y en el T-6, el C-20. De esta forma de localizarse alguna evidencia arqueológica, podríamos tener un mejor control de su localización y de ser así con relación o que otro recurso. Ver Figura 31.

A continuación, la Tabla 2 de Sondeos, nos deja ver los resultados obtenidos.

Tabla 2: Sondeos

Esta tabla nos deja ver los resultados negativos en los Cortes Estratigráficos de Prueba o Sondeos Arqueológicos efectuados en relación a la presencia o ausencia de evidencia arqueológica Pre o Post Colombina. En el terreno de 7.8621cdas. en el Bo. Santa Rosa – Carr. PR – 117 al km. 0.2 Lajas, Puerto Rico – SHPO #CF – 07-11-24-01-PR-CRP-000892 (Lajas P.R.) – Lajas Recreational Sports Complex. Se incluyen los diferentes cambios estratigráficos de suelo y la descripción según la Carta Munsell.

ID Corte	Nivel de Excavación	Descripción de Suelos	Comentarios	
C-1	0-23 cm	Arcilla lomico, grisácea, estéril, 10 YR 4/1	En T-1, Comienzo	
	23-64 cm	Arcilla Pardo limosa-lomico	(ver foto 1)	
C-2	0-56 cm	Arcilla Pardo oscura, lomico, estéril	En T -1	
		10 YR 3/1		
C-3	0-67 cm	Arcilla Pardo lomico con piedras, 10	En T -1 (final)	
C-3		YR 5/3 y motas oscuras 10 YR 3/1		
	0-32 cm	Arcilla Pardo oscura, lomico estéril 10	En T-2 (comienzo al	
C_{A}		YR 3/1	,	
C-4	32-61 cm	Arcilla Pardo-claro, lomico-arcilloso,	Norte)	
		estéril 10 YR 5/3		

ID Corte	Nivel de	Descripción de Suelos	Comentarios	
	Excavación			
C-5	0-28 cm	Arcilla Pardo oscura, lomico estéril 10 YR 3/1	En T -2	
C-3	28-61 cm	Arcilla grisácea lomico -limosa estéril 10 YR 6/1	(ver Foto 3)	
C (0-19 cm	Arcilla Pardo oscura, lomico estéril 10 YR 3/1	E. T. 2	
C-6	19-61 cm	arcilla Pardo oscura, lomico estéril 10 YR 4/3	En T -2	
C 7	0-25 cm	Arcilla Pardo-limoso estéril 10 YR 6/4	E. T. 2	
C-7	25-61 cm	Arcilla Pardo oscura, estéril 10 YR 6/1	En T -2	
	0-20 cm	Capa removida gris y pardo oscura, mezclada		
C 0	20-36 cm	Arcilla Pardo-oscura, lomico y estéril 10 YR 4/1	En T -3	
C-8	36-51 cm	Arcilla Pardo-lomico, estéril 10 YR 5/4	(ver Foto 4)	
	51-76 cm	Arcilla Pardo-claro, lomico – limosa- arenosa estéril 10 YR 6/5		
C-9	0-61 cm	Arcilla lomica-esteril, 10 YR 3/1	En T - 3	
C-10	0-14 cm	Arcilla Pardo lomico-limosa estéril 10 YR 4/3	E. T. 2	
C-10	14-62 cm	Arcilla Pardo lomico, estéril 10 YR 3/1	En T - 3	
C-11	0-64 cm	Arcilla Pardo-clara grisácea, lomico- limosa estéril, 10 YR 6/1	En T - 3	
	0-30 cm	Arcilla Pardo oscura lomico estéril, 10 YR 3/2		
C-12	30-45 cm	Arcilla Pardo lomico, estéril 10 YR 4/3	En T – 4 (ver Foto 5)	
	45-67 cm	Arcilla, grisácea, limosa, estéril 10 YR 6/1		
	0-35 cm	Arcilla Pardo-oscura, lomico-esteril 10 YR 3/2		
C-13	35-41 cm	Arcilla Pardo lomico-limosa estéril, 10 YR 4/3	En T - 4	
	41-65 cm	Arcilla Pardo- grisácea, lomico- limosa, estéril 10 YR 6/1		
C-14	0-18 cm	Arcilla Pardo-clara, lomico limosa, estéril 10 YR 5/4	En T - 4 Tubería Pluvial encontrada a los 18cms.	
C-15	0-20 cm	Arcilla Pardo lomico-limoso estéril, 10 YR 5/4	En T 4	
	20-61 cm	Arcilla Pardo-grisaceo, lomico- limoso, estéril 10 YR 6/1	En T - 4	

ID Corte	Nivel de Excavación	Descripción de Suelos	Comentarios	
	0-9 cm	Arcilla Pardo-oscura-lomico-esteril10 YR 3/1		
C-16	9-15 cm	Arcilla grisácea, limosa, estéril 10 YR 6/1	En T - 4 (ver Foto 6)	
	15-62 cm	Arcilla Pardo-oscura-lomico-estéril, 10 YR 3/1		
0.17	0-21 cm	Arcilla limosa, grisácea, estéril 10 YR 5/1	En T – 5	
C-17	21-62 cm	Arcilla Pardo lomico-limoso estéril, 10 YR 4/2	(ver Foto 7)	
C-18	0-22 cm Arcilla lomioco-oscura, estéril 10 YR 2/1		En T – 5	
C-18	22-64 cm	Arcilla Pardo, lomico-limosa, estéril 10 YR 4/3	(ver Foto 8-9)	
C-19	0-28 cm	Arcilla Pardo-oscura, lomico, estéril 10 YR 3/1	En T – 5	
C-19	28-65 cm	Arcilla Pardo lomico, estéril 10 YR 4/2	EII 1 – 3	
C-20	0-25 cm	Arcilla Pardo-oscura, lomico, estéril 10 YR 3/1	En T – 6	
C-20	25-66 cm	Arcilla Pardo-claro, lomico-limosa, estéril 10 YR 4/2	(ver Foto 10-11)	

FOTOS DE CORTES ESTRATIGRÁFICOS DE PRUEBAS O SONDEOS ARQUEOLÓGICOS



FOTO 1: Destaca el Corte Estratigráfico de Prueba o Sondeo Arqueológico (C-1) ya efectuado.



FOTO 2: El Arqueo técnico Eric Montalvo Martínez mientras efectúa el corte Estratigráfico de Prueba núm. 1.



FOTO 3: Destaca el C-5 ya efectuado en el T-2. Foto en dirección al Sur. Se observa el Transecto núm. 2.



FOTO 4: Foto Acercamiento en el C-8 ya efectuado en el T-3.



FOTO 5: Se observa el C-12 en el T-4.



FOTO 6: Foto que nos destaca el área y el C-16 en el T-4.



FOTO 7: Vista general en el entorno del C-17 comenzando el T-5, al Este, verja de colindancia.



FOTO 8: Se observa en C-18 en el T-5, al Este inmediato a la Cancha de Baloncesto.



FOTO 9: Vista al sur desde el C-18, se observa el Transecto o Brecha Arqueológica núm.5



Foto 10: Foto en acercamiento que destaca el C-20 en el T-6, en esquina Noreste del terreno.



FOTO 11: Foto en dirección al Sur, área del C-20 en el límite Este de la finca.

Resultados de la Investigación: Conclusiones y Recomendaciones

Para poder llegar a estas conclusiones y recomendaciones referente al terreno en el S.H.P.O. # 07-11-24-01 y cumplir con los requerimientos de la sección #106 del acta Nacional de Preservación Histórica y la sección 36CFR – Part-800, Protection of Historic Properties. Hemos seguido los estatutos del Standards and Guidelines for Archaelogy and Historic Preservatation (48CFR44716)

De esta forma el referido Proyecto S.H.P.O. #07-11-24-01 se desarrollará en una finca o predio de 7.8621 cdas. En este terreno que pertenece a la Diócesis de Mayagüez y a cargo de la Parroquia de Nuestra Señora de la Candelaria de Lajas, Puerto Rico; previamente se había construido la 2da Academia San Luis: La primera fue inaugurada en la Estructura de Madera y Zinc donde estuvo la Casa Parroquial (1938) de Lajas frente a la Plaza de Recreo. En 1946 se construyó en Hormigón Armado – hoy existente. La 2da Academia se construyó entre 1987 al 2004 más o menos, sus demás edificaciones; como hemos explicado y que hoy nos ocupa en el proyecto señalado (ver Apéndice B).

La Fase 1A nos dejó ver el uso del terreno donde ca. previo al 1902 cuando el Sr. Juan Cancio Ortíz de la Renta y Lugo adquirió 3 fincas y el 23 de abril de 1920 las agrupa como una finca de 94.25 cdas. y nombrada como "Estancia de Pastos, Árboles Frutales, Palmas de Coco y Cañas de Azúcar. (ver 1ra Inscripción finca # 1,313). Ya en la 6ta Inscripción se menciona como "Cuerpo de Terreno de 94.522 cdas." – Estando nombradas de Caña de Azúcar – 23/SEPT/1946. De forma que nuestro terreno en estudio de 7.8621 cdas. finca #10,901 podríamos decir que en parte fue utilizado desde ca. 1890 (ver 1ra Inscripción finca # 1,313 al final comentario de 1892). Ya para los años de 1940 su totalidad... "Cuerpo de terreno de 94.25 cdas. es utilizado en la siembra de Caña de Azúcar. La Grúa/Cañera y los Establecimientos que aparecen en los cuadrantes USGS y las fotos aéreas ... especialmente en la de 198, son posiblemente ya de este cuerpo de terreno de la Fa. Nazario, de acuerdo a las entrevistas del Dueño de terreno colindante al Este el Ing. Eduardo Martínez.

La Casa habitación de la "Estancia" del Sr. Juan Cancio Ortíz de la Renta y Lugo aparece señalada en las fotos aéreas y cuadrantes al Noroeste del terreno en finca donde se celebraron Festivales de Chiringas de Lajas (ver fotos y cuadrantes en especial la de 1998).

Para el año 1956-57 se planifica por la Oficina del Canal de Riego Valle de Lajas la expropiación de la sección que correspondía a la Finca de la Sra. Laura M. Tió Nazario que hoy ocurre al Norte colindando como finca independiente. Se conoce ese tramo del Canal como "Servidumbre Canal de Riego – Land Tract NO. 268 – Catastro – 57-358-052-AV. (ver Figura 13 A-C y documentos relacionados a la expropiación, Figuras 14 al 16).

De acuerdo al Sr. Cruz Crisanto Toro (entrevista en persona) el proyecto Canal de Riego del Valle de Lajas comenzó a planificarse con el Gobernador Luis Muñoz Marín en 1932. Luego la 1ra Etapa que comprendía el Canal desde el Embalse Luchetti en Yauco hasta Boquerón fue inaugurada abriendo las compuertas en 1955. Lo inauguró el Agrónomo a cargo, Ismael Ramírez Murphy. Entendemos que el "Tramo – 268" ya estaba construido (?) si se inauguró esa sección Yauco – Boquerón en 1955 (ver Documentos y Planos citados).

Posteriormente el 13 de Sept. de 1986 la Sra. Laura Mercedes Tió Nazario Vda. De Mendoza hace la donación en parte y venta de la finca 10,901 (ver 1ra Inscripción) a la Diócesis de Mayagüez. La representó en el acto de donación la Hermana Nancy McClosky, C.S.J., Principal de la Academia San Luis. Esto fue ratificado por el Obispo – Monseñor Ulises Casiano Vargas y se inscribió al Registro el 5/Feb./1988.

De acuerdo a la Sister Teresita de las Monjas Josefinas quien fue Principal en la Academia San Luis de San Rosa, en 1987 ya estaba construida la Casa Residencia de las Monjas y el Primer Edificio del hoy en "L". Este edificio fue "instalado" en el lugar que hoy ocupa pues fue traído ya prefabricado. Posteriormente se fueron añadiendo estructuras con el permiso de uso en 1989 (Ing. Eduardo Martínez) la segunda sección de la "L" en 1990.

Para el 2000 y 2001 se construyó la Capilla – Católica a la Virgen de la Monserrate por el Arql. Efraín Irizarry Avilés (Tatito) y por último el techo de la Cancha, la instalación fue donada por el Ing. Eduardo Martínez.

De acuerdo a lo sintetizado en este resumen y lo investigado en la Fase 1ª no existe en el terreno ninguna estructura de valor arquitectónico o que deba ser incluida en el Registro Nacional de Lugares Históricos. La única estructura que entendemos debe ser incluida sería la del Canal de Riego del Valle de Lajas, Sección desde el Embalse Luchetti en Yauco que en parte pasa al Norte colindando con el terreno en estudio como finca independiente. En esto hemos incluido la documentación existente con Planos y documentos relativos en este informe a la sección solo que colinda al Norte. En 1994 al jubilarse el Sr. Cruz Crisanto Toro como director de la Oficina de Riego en Palmarejo – Lajas, a pedido del Sr. David Sotomayor de la Estación Experimental entregó los documentos y el libro o Revista de la historia del Canal – Riego/Lajas. No pudimos localizar al Sr. Daniel Sotomayor.

Aún con la recomendación de incluir la estructura del Canal de Riego, este no tiene potencial de efectos adversos directa o indirectamente ya que este canal fue diseñado con una zona de amortiguamiento entre el canal en el norte y el límite de la parcela en cuestión (ver figura 26). Esto minimiza los efectos de cualquier construcción nueva. El edificio existente más cercano al canal es la capilla y no se contempla mejoras a esta en el proyecto. Además, la topografía de la propiedad ayuda a que las escorrentías no afecten al mismo por estar más elevado en comparación al terreno.

En la Fase 1B no se pudo localizar evidencia arqueológica en la superficie ni el subsuelo en el terreno en estudio de 7.8621 cdas. Como señalamos los 6 Transecto o Brechas arqueológicas y los 20 Cortes Estratigráficos de Prueba fueron negativos en lo que respecta a la localización de evidencia arqueológica.

Por tal razón y lo señalado en este informe concluimos y recomendamos se continue con la siguiente etapa del Proyecto: Construcción del Complejo Deportivo, por las Autoridades del Municipio de Lajas.

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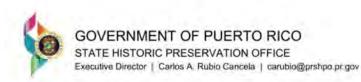
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Apéndices

Apéndice A: Cartas SHPO



Friday, August 9, 2024

Lauren B Poche

269 Avenida Ponce de León, San Juan, PR, 00917

SHPO-CF-07-11-24-01 PR-CRP-000892 (Lajas), Lajas Recreational Sports Complex

Dear Ms. Poche,

We have reviewed the documentation provided regarding the above referenced project pursuant with the requirements of section 106 of the National Historic Preservation Act and 36 CFR Part 800: Protection of Historic Properties. In accordance with § 800.4: Identification of Historic Properties, we have determined that a reconnaissance (Phase I) survey is necessary to identify historic properties within the project's area of potential effects. This survey consists of the following activities: research design, archival research, field survey (above-ground and archaeological) and reporting of results. Federal standards and guidelines on carrying out a reconnaissance survey are found in the Secretary of the Interior's "Standards and Guidelines for Archaeology and Historic Preservation" (48 FR 44716). Please send us one printed copy and one PDF file of the report, documenting the results of the survey, for review.

Pursuant to 36 CFR 800.1, no demolition, construction or earth movement should be carried out until the requirements of section 106 have been fulfilled.

If you have any questions regarding our comments, please do not hesitate to contact our Office.

Sincerely

Carlos A. Rubio Cancela State Historic Preservation Officer

State Historic Preservation Office

CARC/GMO/ EVR



Cuanal de Ballajá (Tercer Plac), Calle Norzagaray, Esq. Beneficencia, Viejo San Juan, PR 00901 | PO Box 9023935, San Juan, PR 00902-3935







Arch. Carlos A. Rubio Cancela

Executive Director Puerto Rico State Historic Preservation Office Cuartel de Ballajá, Third Floor San Juan, Puerto Rico 00901

Re: Authorization to Submit Documents for Consultation

Dear Arch. Rubio Cancela,

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

To expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

Aldo A. Rivera Vázquez, PE

Director

Division of Environmental Permitting and Compliance

Office of Disaster Recovery



July 11, 2024

Carlos A. Rubio Canoela State Historic Preservation Officer Puerto Rico State Historic Preservation Office Cuartel de Ballajá (Tercer Piso) San Juan, PR 00902-3935

Puerto Rico Disaster Recovery, CDBG-DR City Revitalization (City-Rev) Program

Section 106 NHPA Effect Determination Submittal for PR-CRP-000892, Lajas Recreational Sports Complex Project, Lajas, Puerto Rico – No Adverse Effect, Conditioned

Dear Architect Rubio Cancela,

On February 9, 2018, an allocation of Community Development Block Grant - Disaster Recovery (CDBG-DR) funds was approved by the United States Department of Housing and Urban Development (HLD) under the Federal Register Volume 83, No. 25, 83 R9 S844, to assist the Commonwealth of Purort Rice in mercing unmer needs in the wake of Hurricense Irms and Maria. On August 14, 2018, an additional \$6.22 billion recovery ellocation was allocated to Puerto-Rico under the Federal Register Volume 83, No. 157, 83 FR 40314. With these funding allocations, the Puerto Rico Department of Housing (PRODH) aims to lead a comprehensive and transparent recovery for the benefit of Puerto Rico residents. To faithfully comply with HUDs environmental requirements, the Puerto Rico Department of Housing contracted Home Federal, LLC (HORNE) to provide environmental records review services that will support the objectives of the Puerto Rico Department of Housing (PRODH) for the CDBG-DR funding.

On behalf of PRDOH, we are submitting documentation for the proposed Lajas Recreational Sports Complex Project in the municipality of Lajas. The proposed undertaking consists of the adaptive reuse of the circa 1996 former Academia San Luis complex, southeast of the historic town center. The municipality proposes the construction of new sports and recreational facilities, including an athletic and walking track, various courts, other recreational areas, and sports clinic rooms. The full scope of the project is described in the submitted documentation, which includes mapping, photographs, and the 100% construction plans.

Based on the provided documentation, the Program has determined that the proposed undertaking will have no adverse effect upon historic proportice, porticularly the Lejas triggation Conna which is adjocent to the project to the north due to the buffer zone established by the designer. Additionally, a Phase I (IAI-B) is recommended to establish the presence or absence of archaeological deposits as no known surveys were conducted when the current complex was constructed.

11414



If you have any questions or concerns, please contact me by email at lauren.poche@home.com or phone at 225-405-7676. As always, thank you for your assistance and we look foward to your response.

Kindest regards

Lauren Bair Poche. M.A.

Architectural Historian, EHP Senior Manager

Attachments

Apéndice B: Section 106 NHPA Effect Determination Project PR-CRP-000892 (Project Description Section)

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROG CITY REVITALIZATION PROGRAM (CRP) Section 106 NHPA Effect Determination	SPAM (Manufactor)	пишнос-
Subrecipient: Municipality of Lajas	7.7	
Project Name: Lajas Recreational Sports Comple	×	
Project Number; PR-CRP-000892		
Project Location: PR-117 Km. 0.2 Bo. Santa R Project Coordinates: 18.0425, -67.0498 TPID (Número de Catastro): 358-052-159-19 Type of Undertaking:	osa, Lajas, Puerto Rico 00667	
Substantial Repair New Construction		
Construction Date (AH est.): L-shape School Buildings and Nun Residence: Ca. 1986 Chapel and Basketball Court: Ca. 2000 Basketball Court Roof: Ca. 2006	Property Size (acres): 7.9	

SOI-Qualified Architect/Architectural Historian: Noel F. Roman Diaz, B.Arch	
Date Reviewed: 12/25/2023; 04/22/2024; 06/26/2024	
SOI-Qualified Archaeologist: Maritza Torres Martinez, Archeologist	
Date Reviewed: 12/25/2023; 04/22/2024; 06/26/2024	

In compliance with Section 106 of the National Historic Preservation Act (NHPA), the Program is responsible for identifying historic properties listed in the NRHP and any properties not listed that would be considered eligible for listing that are located within the geographic area of potential effects (APE) of the proposed project and assessing the potential effects of its undertakings on these historic properties.

Project Description (Undertaking)

The proposed site used to be the Academia San Luis, a closed Christian school built between 1985 and 1993, while other facilities, such as basketball court and chapel were built between 1993 and 2004. The Municipality of Lajas proposes the construction of new sports and recreational facilities, including an athletic and walking track, various courts, other recreational areas, and sports clinic rooms to be included within the City Revitalization Program projects with CDBG-DR funding.

The proposed project encompasses the following works and activities: the facilities will have a running and/or walking track as a major component. It is proposed to have a minimum running distance of 400 meters and 8 lanes. In addition, it is proposed to provide a tennis court, a pickleball court and batting cages. In addition to the athletic facilities, the rehabilitation, improvement and/or demolition of the existing infrastructure on the property including restrooms, administrative offices, classrooms, and storage is included.

This will be an improvement and rehabilitation project and will also include new construction. The proposed type of construction will be mostly concrete, cement blocks and asphalt, as well as steel, synthetic material, among others. Reforestation activities and

606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365 Tel: (787)274-2527 I www.vivienda.pr.gov

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM	
CITY REVITALIZATION PROGRAM (CRP)	(a) Perrame tradition
Section 106 NHPA Effect Determination	N.
Subrecipient: Municipality of Lajas	
Project Name: Lajas Recreational Sports Complex	
Project Number: PR-CRP-000892	

the implementation of green initiatives are envisaged for this project. Demolition activities include the east-west wing of the main, L-shape building and a basketball court due to the dimensions required for the running track. As part of the supporting documents, a photograph or aerial image is attached where the area and/or polygon comprising the proposed project is delimited.

The project arises from a demand from the nearby communities who desperately need such facilities as there is nothing similar in the area, so the community is sometimes forced to go outside their immediate environment to meet these needs. Facilities similar to the proposed one are: Interamerican University Athletic Track in San German about 8.5 km away, but privately owned, and the Guánica Athletic Track about 21.0 km away. Both were affected in the Huricanes referenced above and had to resort to facilities further away and/or private.

Another benefit of this project is that it will utilize part of a recently closed school campus. The area of the existing buildings will house classrooms for sports clinics and expanded sports offerings.

This project will benefit the entire population and communities of Lajas, as well as the surrounding municipalities, due to its public and free nature. According to data obtained from the 2020 Census, the population currently stands at 23,334 citizens, of which 63,2% is below the poverty level. The Municipality of Lajas has a free public transportation service that covers all the neighborhoods of Lajas and has a scheduled stop near these facilities. This facilitates access to all citizens regardless of their location within the Municipality. The population with the greatest impact will be the Santa Rosa neighborhood where the project is located. This neighborhood has 1,408 inhabitants. Although the project is located in the aforementioned community, it is adjacent to the urban center of the municipality, which has 699 inhabitants, and to the Lajas neighborhood, which has 2,915 inhabitants. This project will benefit the population with the intention of satisfying their need for this type of facility in the sector and correcting the problem of urban flooding in an appropriate and safe manner.

As it is a new project that will require new construction, there are no FEMA funds, insurance claims or other funds allocated to the project. The facilities will be managed by the Municipality of Lajas, which provides that the use is in the public interest in collaboration with non-profit groups and entities.

This former Christian school seems to be under construction in 1985 Google Earth Pro imagery, but it is absent in 1983 USGS imagery (ARL82058004078), and in 1975 HistoricAerials.com. However, based on its architectural elements, the estimated construction date is circa 1986. This complex consists of two, one-story buildings forming an L-shaped, continuous building at different elevations with a flat reinforced concrete roof. These buildings are divided into classrooms and restrooms. Access to these rooms is through flush metal doors in the front wall. Miami metal windows are also installed in the front and rear walls for cross ventilation. The concrete roof extends to the front side of the buildings to

606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365 Tel: (787)274-2527 I www.vivienda.pr.gov

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM	Ø.
CITY REVITALIZATION PROGRAM (CRP)	TANK TANK TANK TANK TANK TANK TANK TANK
Section 106 NHPA Effect Determination	No.
Subrecipient: Municipality of Lajas	
Project Name: Lajas Recreational Sports Complex	
Project Number: PR-CRP-000892	

cover the corridor throughout the buildings. Concrete beams help support the roof on these corridors.

Building one is situated parallel to the left-side property fence, which will remain, while building two is parallel to the front property fence and is scheduled to be demolished. Two separate concrete buildings, designated as office/classroom buildings in the design plans, are in front of building 1, connected to it with concrete pathways, and are scheduled to remain

Behind building two, a concrete pathway leads up to an existing concrete chapel, also scheduled to remain, which has a gabled, reinforced concrete roof with a concrete cupola on the rear side of the roof. Per Google Earth Pro, this chapel was built between December 1993 and October 2004. The main, arched-shaped, wood door is centered in the front wall within a concrete arch and sculpted concrete columns. The top of the façade is finished with an architectural church crown. Three, double-swing, wood windows are present on the side walls.

Access to this chapel is through a concrete ramp guarded by metal railings on both sides of the building, leading up to the front porch. This ramp will be demolished.

A concrete basketball court, also scheduled to be demolished, is in the rear-right side of building 2. As per Google Earth Pro, this court was built between December 1993 and October 2004. It is covered with a gabled, corrugated, metal sheet roof supported by a metal structure. A corrugated metal sheet roof extends to the left side of the court to cover the concrete, basketball bleachers, an outdoors kiosk, and storage room. These spaces are also scheduled to be demolished.

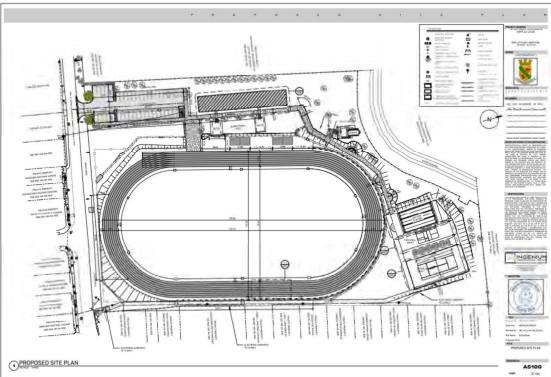
A detached residence is currently north of the basketball court. This former nun's house, also scheduled to be demolished, is of wooden and concrete construction with a gabled, corrugated metal sheet roof. Per Google Earth Pro, this house was built between February 1983 and December 1993. Miami metal windows are present in this residence and most of them are installed behind security, metal rejas. On its main façade, a concrete driveway leads up to the garage and front porch, which are both enclosed by metal rejas. The main, metal door is in the porch's back wall, while a secondary metal door is in the garage's back wall. More secondary metal doors are in the rear wall of the house, while another one, with an integrated Miami metal window is in the right wall. A second, long front porch is in the front-right comer of the house.

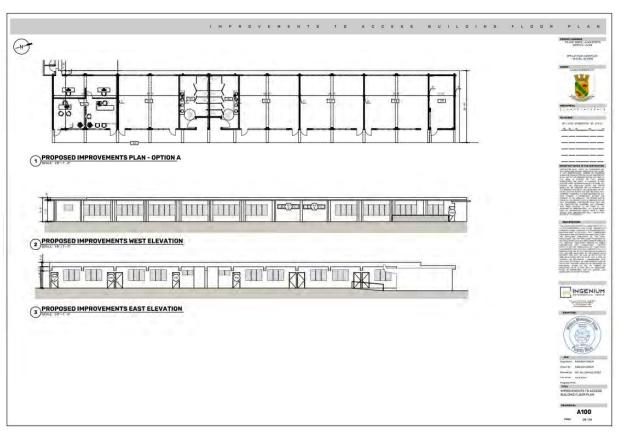
Area of Potential Effects

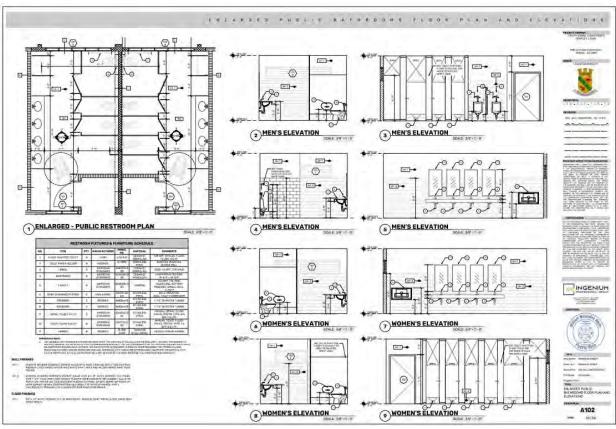
As defined in 36 CFR §800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the 606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365 Tel: (787)274-2527 I www.vivienda.pr.gov

Apéndice C: Plano de Construcción (documento parcial)













Apéndice D: Mapas Sitios Arqueológicos en SHPO y Tabla de Leyenda Referente [para los sitios y estudios arqueológicos ubicados en relación al Proyecto, ver Figura núm. 4]



Apéndice E: Estudio de Título

Lizandra Cintrón Henríquez

Investigadora de Títulos

305 Praderas del Río Flores Sabana Grande, PR 00637 Cel: 787-519-9399

email: lizandracintronhenriquez@gmail.com

CLIENTE: LCDA, LUISALMA RIVERA SANTANA

IGLESIA CATOLICA APOSTOLICA ROMANA

DIOSESIS DE MAYAGUEZ

FINCA: 10,901 INSCRITA AL FOLIO 283 DEL TOMO 256 DE LAJAS

DESCRIPCIÓN:

RE:

RUSTICA: Parcela radicada en el barrio Santa Rosa del termino municipal de Lajas, Puerto Rico con un área superficial de 7.86213 cuerdas, equivalentes a 30,901.2715 metros cuadrados. En lindes por el Norte, en varias alineaciones que suman 135.22 metros, con canal de riego de la Autoridad de Energía Eléctrica y en 63.778 metros, con terrenos de Sucesión Salvador Lugo Lugo; por el Sur, en 146.31 metros, con parcela a uso público que a su vez la separa de la carretera estatal 117; por el Este, en 46.688 metros, con terrenos de Sucesión Cancel Vargas, otros de Santos Cancel y otros de Manuel Pagán y en 198.247 metros, con el remanente de la finca principal de la cual se segrega propiedad de Laura M. Tió Nazario y por el Oeste, en 172.665 metros, con remanente de la finca principal de la cual se segrega propiedad de Laura M. Tió Nazario.

TRACTO: Es segregación de la finca 1,313 inscrita al folio 87 del tomo 26 de Lajas plano bajo legajo 96.

DOMINIO:

Consta inscrito a favor de Iglesia Católica Apostólica Romana, Diosesis de Mayagüez quien adquiere por compra a Laura Mercedes Tió Nazario, privativo de ella por el precio de \$120,000.00 de cuya suma recibe \$60,000.00 y los restantes \$60,000.00 la vendedora los dona a la Iglesia Católica; según la Escritura # 280 otorgada en Mayagüez el 3 de julio de 1986 ante el notario Roberto M. García Rullán e inscrita al folio 283 del tomo 256 de Lajas, finca 10,901 e inscripción Ira y única.

Continua...

Continuación Página Dos Finca 10,901 de Lajas

GRAVÁMENES:

Por su procedencia:

Servidumbre a favor de la Autoridad de Energía Eléctrica

Por Si

Según Registro, Libre de Cargas.

Esta sección posee un sistema automatizado de Bitácora A. G. O. R. A. y KARIBE. Estudio es de uso exclusivo del solicitante. No somos responsables de omisiones o errores cometidos por el técnico de registro al introducir información al programa. Este documento solo expresa realidad Registral. No somos responsables por la digitalización del Sistema KARIBE y sus Auxiliares en Sistema KARIBE. No somos responsables de los auxiliares en libro Karibe de errores y omisiones en la introducción al sistema. NO somos responsable de información omitida y/o errónea durante los estados de emergencia por Huracán Maria, Terremotos y/o COVID-19.

REVISADOS:

Libros de Embargos Estatales y Federales, Sentencias y Bitácora de San Germán hasta el Asiento 2023-013204 SG 01, hoy 6 de febrero de 2023.



Lizandra Cintrón Henriquez Investigadora de Titulos

Apéndice F: Contrato 535-65 para la Venta de Agua a Terrenos Incluidos en el Distrito de Regadío del Valle de Lajas con Carácter de Prueba

CONTRATO NUM. 535-65

CONTRATO PARA LA VENTA DE AGUA A TERRENOS INCLUIDOS EN EL DISTRITO DE REGADIO DEL VALLE DE LAJAS CON CARACTER DE PRUEBA

En San Juan, Puerto Rico, a 1 de marso de 1965

COMPARECEN:

DE UNA PARTE: El Servicio de Riego del Valle de Lajas, por conducto de su administradora, la Autoridad de las Fuentes Fluviales de Puerto Rico, una corporación pública e instrumentalidad gubernamental del Estado Libre Asociado de Puerto Rico, en adelante designada la "Autoridad", a través de su representante debidamente autorizado para este acto; y

DE OTRA PARTE: La persona o personas naturales o jurídicas, en adelante designada el "Agricultor", cuyas circunstancias personales y otros particulares se indican más adelante en la CLAUSULA DUODECIMA de este documento.

Ambas partes comparecientes de mutuo acuerdo

EXPONEN:

- La Autoridad tiene disponible agua para riego en el Sistema de Riego del Valle de Lajas.
- 2. El Agricultor es dueño o está en posesión de la propiedad, en adelante designada el "predio", que se describe en la CLAUSULA DECIMOTERCERA de este contrato cuyo predio tiene construidas facilidades para regadío.
- 3. La Autoridad y el Agricultor han convenido entre si la compra-venta de agua para fines de regadío del predio a que se refiere la CLAUSULA DECIMOTERCERA de este contrato y a tal efecto llevan a cabo su convenio sujeto a las siguientes

ery

CLAUSULAS Y CONDICIONES:

PRIMERA: La Autoridad entregará al Agricultor para fines de riego del predio antes referido aguas disponibles por la toma del Sistema de Canales del Riego del Valle de Lajas. La cantidad de agua que normalmente podrá entregarse será aquella solicitada por el Agricultor hasta un máximo que no excederá de 0.25 de acrepié mensual por cada acre de terreno autorizado por el Departamento de Agricultura a recibir riego; disponiéndose, que dicha cantidad podrá aumentarse hasta un máximo de 0.33 de acrepié mensual por cada acre de terreno autorizado a recibir riego, cuando el Agricultor así lo solicite, y a juicio de la Autoridad sea aconsejable suministrar dichas aguas, disponiéndose finalmente, que en circunstancias excepcionales y siempre y cuando haya aguas disponibles, dicho límite podrá aumentarse hasta 0.50 acrepié mensual por acre de terreno, previa recomendación al efecto del Departamento de Agricultura.

SEGUNDA: El canon que se cobrará por acrepié de agua de venta para regadío por gravedad o por bombeo del predio de terreno, o porción del mismo, será a razón de dos dólares (\$2.00) el acrepié por los primeros doce (12) meses en que se le haya ofrecido o entregado agua del Sistema de Riego. Por el período subsiguiente a dichos doce (12) meses el canon será de seis dólares (\$6.00) el acrepié; disponiéndose, que en el caso de los terrenos de tal modo situados que para ser regados requieran, a juicio de la Autoridad, que las

aguas se eleven hasta dichos terrenos por bombas propiedad del agricultor, el canon será de tres dólares el acrepié (\$3.00) durante el período subsiguiente a los primeros doce (12) meses en que se le haya ofrecido o entregado agua. Los pagos se efectuarán por el Agricultor a la Autoridad dentro de los veinte (20) días siguientes a la fecha en que se rindan las correspondientes facturas por la entrega de agua; disponiéndose, que la Autoridad podrá dar por terminado este contrato si transcurrido el término aquí concedido al Agricultor para efectuar dichos pagos, éste no cumple con tal obligación.

TERCERA: Podrá entregarse agua de regadío a distintas porciones de terreno del predio según éstas fueren autorizadas a recibir riego, bajo los términos y condiciones y por los cánones aquí indicados. El Agricultor solicitará de la Autoridad que se le sirva el caudal de aguas que interesa, viniendo obligado a indicar la porción de terreno del predio que habrá de regarse de manera que la Autoridad pueda anotar dicha información en los registros correspondientes. La Autoridad entregará las aguas solicitadas por el Agricultor siempre y cuando sea posible así hacerlo. En aquellos casos que la Autoridad determine que el agricultor no está dando el uso correspondiente al agua solicitada, la Autoridad hará las correcciones y enmiendas que estime pertinentes en sus registros de entrega de agua y le facturará por cualquier diferencia que resultare, viniendo éste obligado a pagar dicha diferencia o ajuste dentro del término de 15 días a partir del recibo de la notificación a tal efecto. En caso de que dichos ajustes o correcciones resulten en un crédito a favor del agricultor, el mismo será acreditado a la próxima factura.

CUARTA: Queda absolutamente prohibido al Agricultor vender, traspasar o enajenar en forma alguna las aguas objeto de este contrato.

QUINTA: El Agricultor se obliga a pagar por anticipado el costo de cualesquiera estructuras u obras adicionales a las existentes del Sistema de Riego que sean necesarias para la entrega de las aguas.

SEXTA: La Autoridad no efectuará entregas de agua por periodos menores de 24 horas; disponiéndose, que cuando a juicio de la Autoridad existan circunstancias que lo justifiquen, ésta podrá a su discreción reducir dicho periodo de entrega. Las solicitudes del Agricultor para entrega o suspensión de agua serán hechas a la Autoridad con no menos de 24 horas de antelación a la fecha en que el agricultor desee se ejecute su solicitud. La entrega de las aguas se hará de acuerdo con el REGLAMENTO adoptado por la Autoridad para la administración del Servicio de Riego durante la vigencia del Distrito de Regadío del Valle de Lajas con Carácter de Prueba.

SEPTIMA: Es requisito esencial que el Agricultor cumpla con las reglas y condiciones determinadas por el Secretario de Agricultura para el uso y aplicación del agua, las cuales se unen a este contrato y forman parte del mismo, y que además cumpla con las disposiciones del Reglamento adoptado por la Autoridad para la administración del Sistema de Riego del Valle de Lajas durante el período del Distrito de Regadío con Carácter de Prueba. Si el Agricultor no cumple a cabalidad con dichas reglas y condiciones, y con el antes mencionado REGLAMENTO, la Autoridad a su juicio, o por recomendación del Secretario de Agricultura suspenderá o se abstendrá de efectuar el servicio de agua parcial o totalmente. La suspensión total o parcial del agua será mantenida hasta tanto el Secretario de Agricultura o su representante notifique a la Autoridad que el Agricultor está cumpliendo con dichas reglas y condiciones o hasta que la Autoridad determine que el Agricultor está cumpliendo con las disposiciones del antes mencionado REGLAMENTO.

OCTAVA: La Autoridad se reserva los siguientes derechos y facultades:

- (a) Dar por terminado este contrato, si:
 - Los terrenos autorizados a recibir aguas de riego bajo este contrato son subdivididos, segregados, vendidos o enajenados total o parcialmente;
 - (2) Si el Agricultor cesa en la posesión total o parcial del predio;
 - (3) Si el Agricultor deja de cumplir con cualesquiera de las cláusulas del contrato.
- (b) Suspender total o parcialmente la entrega de agua al Agricultor, bajo este contrato, y por el tiempo que la Autoridad estime necesario:
 - Cuando a juicio de la Autoridad ello sea necesario para realizar inspecciones o efectuar cualesquiera obra o actividad relacionada con las instalaciones usadas para la entrega de las aguas.
 - (2) Cuando a juicio del Secretario de Agricultura o de la Autoridad la entrega de aguas bajo este contrato pueda ser perjudicial a los terrenos del predio o a otros terrenos en el Distrito de Regadío.
 - (3) En caso de venta, enajenación, traspaso, desviación, desperdicio o uso indebido de toda o parte del agua suministrada al predio.

(4) Cuando las zanjas del sistema partícular de riego y desague perteneciente al predio no estén limpias y en condiciones adecuadas para conducir las aguas con una eficiencia razonable.

- (5) Cuando los terrenos del predio dejen de estar adecuadamente preparados para recibir agua de riego.
- (6) Cuando el Agricultor esté utilizando, sin la debida autorización del Secretario de Agricultura y de la Autoridad, aguas para riego provenientes del Sistema de canales de riego y desague del Valle de Lajas u otras aguas provenientes del subsuelo, quebradas, lagunas u otras fuentes que puedan ser perjudiciales a los terrenos del Valle.
- (7) Cuando debido a circunstancias del tiempo el predio no requiera el uso parcial o total del agua que le ha sido asignada.
- (8) Cuando por razones fuera del control de la Autoridad, tales como condiciones climáticas, actos de la naturaleza o eventos de fuerza mayor, la provisión de agua en las fuentes de donde se surte el sistema de canales resultare insuficiente o fuere aconsejable la suspensión de las entregas de agua.

NOVENA: Ni el Estado Libre Asociado de Puerto Rico, ni el Sistema de Riegos del Valle de Lajas, ni la Autoridad, ni ninguno de sus oficiales o empleados serán responsables por cualesquiera daños o perjuicios ocasionados al Agricultor o a la finca como consecuencia de la entrega o falta de entrega de las aguas objeto del presente contrato o por cualesquiera otros daños resultantes de la vigencia y administración del presente contrato.

DECIMA: Este contrato estará en vigor solamente hasta que el Distrito de Regadío del Valle de Lajas comience a funcionar con carácter permanente en cuya fecha dicho contrato expirará automáticamente.

UNDECIMA: El presente contrato no deberá interpretarse en forma alguna en el sentido de que el predio o alguna porción del mismo que ha de recibir las aguas objeto de este contrato, será incluida en el Distrito Permanente de Regadío del Valle de Lajas.

DUODECIMA: El Agricultor relacionado en la comparecencia de este contrato es: Carmelo Mendoza

DECIMOTERCERA: El Agricultor está en posesión del predio a que se refiere el EXPONENTE SEGUNDO de este contrato en concepto de Operador , describiéndose dicho predio como sigue:

Predio Núm. 535 , incluido en el Distrito de Regadío del Valle de Lajas con Carácter de Prueba, con un área de 22.6 acres regables por gravedad y de 21.6 acres regables por bombeo, en colindancias:

Rafael Milán; Miguel Cancel; Rosenda Ramos; Salvador NORTE: Lugo Lugo F-517

Compañía de Fomento Industrial; Carr. Est. 116 Carr. SUR : Est. 117

ESTE : Rodrígues; Miguel Cancel; Carr. Est. 117

OESTE : Suem. Rafael Milán; Carlos M. Ramírez Acosta P-536; Compañía de Fomento Industrial

y que se compone de la (s) finca (s) Núm. 1313. Inse. 6a con cabida de 71-96 Cdas. radicada (s) en el (los) Barrio (s) Sabana Teguas y del (de los) municipio (s) Lajas e inscrita (s) al Folio 827 del tomo 39 .

Propiedad de: Laura Mercedes Tió Nazario

TAL ES EL CONTRATO que las partes firman en quintuplicado en el lugar y fecha arriba indicados, y aunque la fecha en que el representante de la Autoridad firme el mismo sea posterior a la antes indicada, a todos los fines legales, se tendrá laprimera como la fecha de otorgamiento de este contrato.

SISTEMA DE RIEGO DEL VALLE DE LAJAS representado por su Administrador, AUTORIDAD DE LAS FUENTES FLUVIALES DE PUERTO RICO

Por Harold Toro

Administrador General Servicios de Regadio

Agricultor med

REGLAS Y CONDICIONES DEL DEPARTAMENTO DE AGRICULTURA PARA EL USO Y APLICACION DE LAS AGUAS DE RIEGO EN EL VALLE DE LAJAS

La conservación de la productividad de los suelos es uno de los objetivos de mayor importancia en el Programa de Desarrollo del Valle de Lajas. El Departamento de Agricultura, en colaboración con todas las agencias agrícolas y con la Autoridad de las Fuentes Fluviales, conduce un programa de acción para hacer frente a los problemas de salinidad, desague, presiones artesianas y niveles freáticos que puedan surgir y otros que puedan afectar la productividad de los suelos.

El subsuelo en todo el Valle de Lajas es objeto de constante observación mediante 170 estaciones instaladas por la Estación Experimental para determinar las presiones artesianas y las variaciones en el nivel de las aguas subterráneas: Estas observaciones permitirán descubrir a tiempo cualquier cambio en las condiciones del Valle que requiera que se tomen medidas correctivas.

El agricultor del Valle de Lajas, también deberá establecer ciertas prácticas de control para la protección de los suelos y la productividad de los mismos. A tales efectos se reglamenta el uso y aplicación de las aguas de riego mediante las siguientes reglas y condiciones:

- Será requisito indispensable que para cada predio o subdivisión de terreno a regarse, el agricultor obtenga una autorización de riego del Departamento de Agricultura para que la Autoridad de las Fuentes Fluviales pueda suministrarle agua del Sistema de Riego.
- 2. No se emitirán autorizaciones para el riego de ningún predio o porción de terreno con problemas de riego y desague, salinidad, presiones artesianas, niveles freáticos u otros, cuando a la luz de los datos técnicos disponibles dichos problemas no sean susceptibles de ser corregidos.
- El agricultor consultará con la Oficina de Desarrollo del Valle de Lajas antes de establecer sus siembras a fin de que reciba la debida orientación con respecto a las potencialidades y limitaciones de sus suelos.
- 4. El Servicio de Conservación de Suelos, a solicitud del Director del Programa de Desarrollo del Valle de Lajas, diseñará y marcará los sistemas de riego y desague a implantarse en la finca. El Agricultor construirá e implantará dichos sistemas conforme a las instrucciones que reciba del Servicio de Conservación de Suelos.
- El uso del agua de riego por el agricultor de cada predio o porción de terreno se hará en forma controlada.
- La cantidad de agua a ser aplicada al terreno será aquella requerida para asegurar una buena producción.
- El agricultor mantendrá todas las zanjas y obras del sistema particular de riego implantado en su predio razonablemente limpias y en buen estado de operación.
- El agricultor construirá una o más charcas para almacenar agua de riego en cada uno de los predios o fincas con área

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regable de 15 cuerdas o más, que tenga bajo su dominio, siempre y cuando la topografía y condición de los suelos lo permitan.

- 9. Todas las charcas construidas se revisarán periódicamente y aquellas que demuestren tener filtraciones en un grado que pueda afectar la productividad de los suelos, deberá ser impermeabilizada por el agricultor siguiendo las recomendaciones del Servicio de Conservación de Suelos, del Departamento de Agricultura y de la Autoridad de las Fuentes Fluviales.
- 10. No está permitido el uso para riego de aguas subterráneas o provenientes del subsuelo, ni de aguas de los canales de desague, quebradas, lagunas y otras aguas que puedan afectar la potencialidad productiva de los suelos. El agricultor se abstendrá de usar dichas aguas para poder recibir o continuar recibiendo aguas del Sistema de Riego del Valle de Lajas.
- El agricultor mantendrá todas las zanjas y obras del sistema particular de desague implantado en la finca razonablemente limpias y en buen estado de operación.
- 12. El agricultor conducirá mediante zanjas, tubos u otras estructuras hasta los canales del sistema de desague del Valle de Lajas, todas las aguas sobrantes de la aplicación del riego y también las provenientes de fuentes artesianas, escorrentías y otras aguas superficiales que discurren por su finca y cuya acumulación pueda ser perjudicial a cosechas y suelos.
- 13. En áreas con niveles freáticos altos, el agricultor, asesorado por el Director del Programa de Desarrollo del Valle de Lajas, construirá en su finca un sistema de desague que permita mantener las primeras 24 pulgadas del perfil de los suelos libre de humedad excesiva.
- 14. De existir en la finca porciones de terreno con problemas de salinidad, desague, presiones artesianas, niveles freáticos altos u otros que sean susceptibles de corrección, el Departamento de Agricultura y la Estación Experimental Agricola determinarán el procedimiento a implantarse en los terrenos afectados. El agricultor vendrá obligado a seguir dicho procedimiento de rehabilitación.
- 15. Las autorizaciones de riego se expedirán solamente cuando, a juicio del Departamento de Agricultura, el Agricultor haya cumplido con las reglas y condiciones aquí consignadas.
- 16. El agricultor vendrá obligado, además, a cumplir con las disposiciones del "REGLAMENTO" adoptado por la Autoridad de las Fuentes Fluviales para la administración del Servicio de Riego del Valle de Lajas durante el período de vigencia del Distrito de Regadío del Valle de Lajas con Carácter de Prueba.

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GOVERNMENT OF PUERTO RICO

STATE HISTORIC PRESERVATION OFFICE

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

Friday, August 9, 2024

Lauren B Poche

269 Avenida Ponce de León, San Juan, PR, 00917

SHPO-CF-07-11-24-01 PR-CRP-000892 (Lajas), Lajas Recreational Sports Complex

Dear Ms. Poche,

We have reviewed the documentation provided regarding the above referenced project pursuant with the requirements of section 106 of the National Historic Preservation Act and 36 CFR Part 800: Protection of Historic Properties. In accordance with § 800.4: Identification of Historic Properties, we have determined that a reconnaissance (Phase I) survey is necessary to identify historic properties within the project's area of potential effects. This survey consists of the following activities: research design, archival research, field survey (above-ground and archaeological) and reporting of results. Federal standards and guidelines on carrying out a reconnaissance survey are found in the Secretary of the Interior's "Standards and Guidelines for Archaeology and Historic Preservation" (48 FR 44716). Please send us one printed copy and one PDF file of the report, documenting the results of the survey, for review.

Pursuant to 36 CFR 800.1, no demolition, construction or earth movement should be carried out until the requirements of section 106 have been fulfilled.

If you have any questions regarding our comments, please do not hesitate to contact our Office.

Sincerely,

Carlos A. Rubio Cancela

State Historic Preservation Officer

my afaction

CARC/GMO/ EVR







Arch. Carlos A. Rubio Cancela

Executive Director Puerto Rico State Historic Preservation Office Cuartel de Ballajá, Third Floor San Juan, Puerto Rico 00901

Re: Authorization to Submit Documents for Consultation

Dear Arch. Rubio Cancela,

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

To expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

Aldo A. Rivera Vázquez, PE

Director

Division of Environmental Permitting and Compliance

Office of Disaster Recovery



July 11, 2024

Carlos A. Rubio Cancela State Historic Preservation Officer Puerto Rico State Historic Preservation Office Cuartel de Ballajá (Tercer Piso) San Juan, PR 00902-3935

Puerto Rico Disaster Recovery, CDBG-DR City Revitalization (City-Rev) Program

Section 106 NHPA Effect Determination Submittal for PR-CRP-000892, Lajas Recreational Sports Complex Project, Lajas, Puerto Rico – *No Adverse Effect, Conditioned*

Dear Architect Rubio Cancela,

On February 9, 2018, an allocation of Community Development Block Grant - Disaster Recovery (CDBG-DR) funds was approved by the United States Department of Housing and Urban Development (HUD) under the Federal Register Volume 83, No. 28, 83 FR 5844, to assist the Commonwealth of Puerto Rico in meeting unmet needs in the wake of Hurricanes Irma and Maria. On August 14, 2018, an additional \$8.22 billion recovery allocation was allocated to Puerto Rico under the Federal Register Volume 83, No. 157, 83 FR 40314. With these funding allocations, the Puerto Rico Department of Housing (PRDOH) aims to lead a comprehensive and transparent recovery for the benefit of Puerto Rico residents. To faithfully comply with HUD's environmental requirements, the Puerto Rico Department of Housing contracted Horne Federal, LLC (HORNE) to provide environmental records review services that will support the objectives of the Puerto Rico Department of Housing (PRDOH) for the CDBG-DR funding.

On behalf of PRDOH, we are submitting documentation for the proposed Lajas Recreational Sports Complex Project in the municipality of Lajas. The proposed undertaking consists of the adaptive reuse of the circa 1986 former Academia San Luis complex, southeast of the historic town center. The municipality proposes the construction of new sports and recreational facilities, including an athletic and walking track, various courts, other recreational areas, and sports clinic rooms. The full scope of the project is described in the submitted documentation, which includes mapping, photographs, and the 100% construction plans.

Based on the provided documentation, the Program has determined that the proposed undertaking will have no adverse effect upon historic properties, particularly the Lajas Irrigation Canal which is adjacent to the project to the north due to the buffer zone established by the designer. Additionally, a Phase I (IA-IB) is recommended to establish the presence or absence of archaeological deposits as no known surveys were conducted when the current complex was constructed.



If you have any questions or concerns, please contact me by email at lauren.poche@horne.com or phone at 225-405-7676. As always, thank you for your assistance and we look foward to your response.

Kindest regards,

Lauren Bair Poche. M.A.

Architectural Historian, EHP Senior Manager

Attachments

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM
CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

Subrecipient: Municipality of Lajas

Project Name: Lajas Recreational Sports Complex

Project Number: PR-CRP-000892

Project Location: PR-117 Km. 0.2 Bo. Santa Rosa, Lajas, Puerto Rico 00667

Project Coordinates: 18.0425, -67.0498

TPID (Número de Catastro): 358-052-159-19

Type of Undertaking:

∑ Substantial Repair

Construction Date (AH est.):

L-shape School Buildings and Nun Residence: Ca.1986

Chapel and Basketball Court: Ca. 2000

Basketball Court Roof: Ca. 2006

Property Size (acres): 7.9

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SOI-Qualified Architect/Architectural Historian: Noel F. Roman Diaz, B.Arch

Date Reviewed: 12/25/2023; 04/22/2024; 06/26/2024

SOI-Qualified Archaeologist: Maritza Torres Martinez, Archeologist

Date Reviewed: 12/25/2023: 04/22/2024: 06/26/2024

In compliance with Section 106 of the National Historic Preservation Act (NHPA), the Program is responsible for identifying historic properties listed in the NRHP and any properties not listed that would be considered eligible for listing that are located within the geographic area of potential effects (APE) of the proposed project and assessing the potential effects of its undertakings on these historic properties.

Project Description (Undertaking)

The proposed site used to be the Academia San Luis, a closed Christian school built between 1985 and 1993, while other facilities, such as basketball court and chapel were built between 1993 and 2004. The Municipality of Lajas proposes the construction of new sports and recreational facilities, including an athletic and walking track, various courts, other recreational areas, and sports clinic rooms to be included within the City Revitalization Program projects with CDBG-DR funding.

The proposed project encompasses the following works and activities: the facilities will have a running and/or walking track as a major component. It is proposed to have a minimum running distance of 400 meters and 8 lanes. In addition, it is proposed to provide a tennis court, a pickleball court and batting cages. In addition to the athletic facilities, the rehabilitation, improvement and/or demolition of the existing infrastructure on the property including restrooms, administrative offices, classrooms, and storage is included.

This will be an improvement and rehabilitation project and will also include new construction. The proposed type of construction will be mostly concrete, cement blocks and asphalt, as well as steel, synthetic material, among others. Reforestation activities and the implementation of green initiatives are envisaged for this project. Demolition activities include the east-west wing of the main, L-shape building and a basketball court due to the

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CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination



Project Name: Lajas Recreational Sports Complex

Project Number: PR-CRP-000892



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dimensions required for the running track. As part of the supporting documents, a photograph or aerial image is attached where the area and/or polygon comprising the proposed project is delimited.

The project arises from a demand from the nearby communities who desperately need such

The project arises from a demand from the nearby communities who desperately need such facilities as there is nothing similar in the area, so the community is sometimes forced to go outside their immediate environment to meet these needs. Facilities similar to the proposed one are: Interamerican University Athletic Track in San German about 8.5 km away, but privately owned, and the Guánica Athletic Track about 21.0 km away. Both were affected in the Hurricanes referenced above and had to resort to facilities further away and/or private.

Another benefit of this project is that it will utilize part of a recently closed school campus. The area of the existing buildings will house classrooms for sports clinics and expanded sports offerings.

This project will benefit the entire population and communities of Lajas, as well as the surrounding municipalities, due to its public and free nature. According to data obtained from the 2020 Census, the population currently stands at 23,334 citizens, of which 63.2% is below the poverty level. The Municipality of Lajas has a free public transportation service that covers all the neighborhoods of Lajas and has a scheduled stop near these facilities. This facilitates access to all citizens regardless of their location within the Municipality. The population with the greatest impact will be the Santa Rosa neighborhood where the project is located. This neighborhood has 1,408 inhabitants. Although the project is located in the aforementioned community, it is adjacent to the urban center of the municipality, which has 699 inhabitants, and to the Lajas neighborhood, which has 2,915 inhabitants. This project will benefit the population with the intention of satisfying their need for this type of facility in the sector and correcting the problem of urban flooding in an appropriate and safe manner.

As it is a new project that will require new construction, there are no FEMA funds, insurance claims or other funds allocated to the project. The facilities will be managed by the Municipality of Lajas, which provides that the use is in the public interest in collaboration with non-profit groups and entities.

This former Christian school seems to be under construction in 1985 Google Earth Pro imagery, but it is absent in 1983 USGS imagery (ARL82058004078), and in 1975 HistoricAerials.com. However, based on its architectural elements, the estimated construction date is circa 1986. This complex consists of two, one-story buildings forming an L-shaped, continuous building at different elevations with a flat reinforced concrete roof. These buildings are divided into classrooms and restrooms. Access to these rooms is through flush metal doors in the front wall. Miami metal windows are also installed in the front and rear walls for cross ventilation. The concrete roof extends to the front side of the buildings to cover the corridor throughout the buildings. Concrete beams help support the roof on these corridors.

CITY REVITALIZATION PROGRAM (CRP)

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Project Name: Lajas Recreational Sports Complex

Project Number: PR-CRP-000892



Building one is situated parallel to the left-side property fence, which will remain, while building two is parallel to the front property fence and is scheduled to be demolished. Two separate concrete buildings, designated as office/classroom buildings in the design plans, are in front of building 1, connected to it with concrete pathways, and are scheduled to remain.

Behind building two, a concrete pathway leads up to an existing concrete chapel, also scheduled to remain, which has a gabled, reinforced concrete roof with a concrete cupola on the rear side of the roof. Per Google Earth Pro, this chapel was built between December 1993 and October 2004. The main, arched-shaped, wood door is centered in the front wall within a concrete arch and sculpted concrete columns. The top of the façade is finished with an architectural church crown. Three, double-swing, wood windows are present on the side walls.

Access to this chapel is through a concrete ramp guarded by metal railings on both sides of the building, leading up to the front porch. This ramp will be demolished.

A concrete basketball court, also scheduled to be demolished, is in the rear-right side of building 2. As per Google Earth Pro, this court was built between December 1993 and October 2004. It is covered with a gabled, corrugated, metal sheet roof supported by a metal structure. A corrugated metal sheet roof extends to the left side of the court to cover the concrete, basketball bleachers, an outdoors kiosk, and storage room. These spaces are also scheduled to be demolished.

A detached residence is currently north of the basketball court. This former nun's house, also scheduled to be demolished, is of wooden and concrete construction with a gabled, corrugated metal sheet roof. Per Google Earth Pro, this house was built between February 1983 and December 1993. Miami metal windows are present in this residence and most of them are installed behind security, metal rejas. On its main façade, a concrete driveway leads up to the garage and front porch, which are both enclosed by metal rejas. The main, metal door is in the porch's back wall, while a secondary metal door is in the garage's back wall. More secondary metal doors are in the rear wall of the house, while another one, with an integrated Miami metal window is in the right wall. A second, long front porch is in the front-right corner of the house.

Ground Disturbance: Activities underground

Relative to plans:

1. On p.28 drainpipes for runoff (everything that is rain),

Concrete channel Type No 1, excavations:

- ♣ Length 105 linear meters
- Width 0.9 meters

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♣ Depth 0.45 meters (This data is not fixed since in some cases it is installed in fill or in a ground cut.)

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Concrete channel Type No 2, excavations:

- ♣ Length 305 linear meters
- ♣ Width .95 meters
- ♣ Depth 0.4 meters (This data is not fixed since in some cases It is installed in fill or in a ground cut.)

Concrete channel Type No 3, excavations:

- ♣ Length 13 linear meters
- ♣ Width 1.3 meters
- ♣ Depth from 0.65 to 0.9 meters (This data is not fixed since in some cases, it is installed in fill or in a ground cut)

18" diameter pipes

- Length 447 linear meters
- ♣ Width 0.81 meters
- A Depth 0.96 meters
- o 24" diameter pipes
- Length 29 linear meters
- ♣ Width 1 meter
- ♣ Depth 1.10 meters
- o Natural Turf Strap (internal track drainage)
- ♣ Length 9050 linear feet
- ♣ Width 6"
- ♣ Depth 22"

Evaluate since half of the track will be built on material of filling, therefore, half of this amount could be used. For concrete retaining walls the recommended minimum excavation by the consultant is 0.91 meters and must be adjusted according to the study geotechnical. In the case of the potable pipeline, it will be connected to the existing network that have the bathrooms, excavation depth would be a maximum of 3" or in your default what is necessary to be able to make the connections. For sanitary pipes, the excavation would be between 2 and 6" to be able to assemble the new bathroom network internally in the building. For network connection exterior, the existing one will be used, which passes about 20 feet in front of the building, the depth of this excavation could be assumed to be between 10" and 24" since we are not certain of it. Excavation of the trenches for lighting the track and field's north of the project are:

- ♣ Width 16"
- ♣ Length 726 Ft
- ♣ Depth 4'-6"

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The measurements of the electrical panel will be on a pedestal located in the area from the parking lot. The excavation measurements will be:

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- ♣ Width 3 Ft
- Length 4 Ft
- ♣ Depth 3 Ft

All these constructions will have the minimum recommended excavation between 3" and 10" depending on the terrain), removal of vegetation layer and preparation of the land (in some cases, fill) and compact.

Area of Potential Effects

As defined in 36 CFR §800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the direct APE for this project is the property itself, which is a lot of approximately 802'-0" x 430'-0" or 7.9 acres, and the visual APE is the buildings that can be seen from the property and vice versa, which are discussed below.

To the north of the proposed project site is a body of water that can be seen from the west to the northeast of the site, which is the principal water canal system for the valley or "Canal de Riego del Valle de Lajas", built in 1940.

To the north is the Lugo Carlos F. property, located within the Lugo Salvador property. Also to the north is the property of Radman San German-D-LLC. The east property line shares the property fence with several residential parcels adjacent to PR-117. At the east end of PR-117, is located the Cooperativa de Ahorro y Credito de Cabo Rojo, next to the property of Irizarry Tirado Julia Mabel. Towards the northeast it can also be seen the property of the Developer 'Villas de San Blas Corp'.

Towards the south and across the street from the subject property is '*Urbanización El Valle* 2' which is a single-family residential complex and is first seen in 1985 Google Earth Pro imagery, but it is absent in 1975 HistoricAerials.com. Also, there are commercial spaces along PR-117, such as La Jolla Properties Corp. and Colmado Martinez. To the southwest, adjacent to PR-117, are the properties of Vélez Carlos, Vázquez Asencio Ever and Ruiz Ortiz Osvaldo. To the southwest, the PR-117 highway and the properties of Mutino Ivette and Valentín Irizarry Luis Saud. Finally, to the west of the project site is the Church of Jesus Christ of Latter-day Saints.

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Most of the buildings and residences within the APE are one- and two-story high, concrete or wooden buildings with flat, reinforced concrete roofs, or gabled, corrugated metal sheet roofs.

Identification of Historic Properties - Archaeology

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that in the project there is the Academy of San Luis, which was built in the twentieth century. This analysis reports that the land on this lot was used for agriculture, prior to the construction of the academy. There is no record or previous documented study to consult the archaeological information of this 7.9-acre lot, it is absent in the State Historic Preservation Office (PRSHPO) and the Institute of Puerto Rican Culture (ICP) agencies.

This section analyzes the known archaeological resources within ½ mile of the APE; through research in the PRSHPO and ICP offices. It also analyzes the potential for intact damage, archaeological sites and remains in the APE with research potential as well as background impacts in the project area. The ¼ mile research radius extends beyond the physical boundaries of each APE. Included in this section is a brief description of the identified archaeological resources that addresses the type of the site, cultural association, artifacts, date/period, and distance to APE. The team consulted the inventories of archaeological sites located in SHPO and/or ICP-PAE. The team also reviewed relevant archaeological reports and site inventory forms available in both SHPO and ICP-PAE. The team also reviewed the previous archaeological investigations carried out for those Sites relevant to the discussion. We have identified on a map the recorded historical resources that were identified in the archives. We include a discussion of the archaeological potential of precolonial and colonial resources.

Within the indirect APE of the project, seven (7) archaeological evaluations have been carried out, of which two (2) yielded positive results due to the presence of archaeological resources and five (5) were negative (see Figure 5). The evaluations that yielded positive results correspond to historical resources (see table 2). Of the same mentioned, five (5) historical archaeological evaluations are also performed within the project's APE (pre-Hispanic sites are not registered).

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One (1) historic site, Academia San Luis (SHPO-LJ0200002), is not listed on the National Register of Historic Properties (NRHP) (see Table 1 and Figure 6). This historical archaeology site consists of structural remains and artifacts related to the lifestyle of the past culture, such as the railroad. The State Historic Preservation Office (PRSHPO) has documented this site as LJ-29 with a Historic Classification dating back to 1938. This record does not link the site to any study but has an inspection date of 1/1/2001. It is very likely that this is an error related to the founding of the educational institution since the construction and acquisition of the property of the proposed project dates to 1986.

Historical context:

The archaeological background of the municipality of Lajas, dates to 1823, when the first person, María de los Ángeles, a black slave, was baptized. In 1824, Jácome Pagán donated land for the construction of an auxiliary parish in the Lajas neighborhood, and the Catholic Church built a chapel using yaguas. At that time, a significant number of residents already lived in this neighborhood, part of San Germán. In 1877, the public "plaza" was built, becoming a central point for community life. In 1878, a formal request was made for land segregation to establish a separate municipality. By July 1, 1883, Lajas successfully became an independent municipality, separating from San Germán, and by then, it already had six streets traced with its central plaza. In 1884, the Parish of Our Lady of La Candelaria was ecclesiastically segregated. In 1889, the City Hall was built, and the population reached 8,789 inhabitants. In 1897, the new Catholic Church, built of masonry and zinc roofing, was blessed. In 1900, a municipal cemetery was established on Unión Street, leading to the Palmarejo ward. In 1903, the American Railroad Company began traveling through Lajas as part of the island's railroad. In 1904, the Oliver Hazard Perry Artisan School was built. In 1905, the Presbyterian Church was founded. In 1907, the public "plaza" was reconstructed with a kiosk in the middle. In 1908, a new cemetery was built at the Sabana Yeguas ward. In 1909, a municipal slaughterhouse was established on San Blas Street, and the old cemetery on "Calle Abajo" was closed, leading to the expansion of the town (agencia.pr.gov & Toro, 1995, 228).

Between 1910 and 1914, there were expansions and improvements at the urban area, including the construction of roads and bridges. In the twenties (1920), the aqueduct and electricity services were installed, and the Municipal Hospital was built. Repairs and construction of sidewalks, sewers, and drains took place. Bridges were built to La Haya and Unión Street, and a pineapple canning factory was established in the Palmarejo ward. In 1919, the Gloria Theater was built. In 1922, the electric plant on Unión Street began its operations. In 1924, the Municipal Aqueduct was inaugurated. In 1925, the Luis Muñoz

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Rivera School was built. In 1927, the Plaza del Mercado was constructed, and, in 1928, the public "plaza" was remodeled. From 1930 to 1932, the Second Unit School of Palmarejo was established. In 1944-1945, the Lajas Valley Project with the Irrigation System was carried out, and the Agricultural Experimental Station was established at the Palmarejo ward. In 1950, the Fire Department Park was inaugurated. In 1955, the Arturo Grant Pardo Elementary School was built, and the Cooperative Savings and Credit Union of Lajas was established. In 1957, the Police Headquarters was located on Unión Street. In 1958, the post office was established on Amistad Street. In 1960, a new health center was inaugurated on Unión Street, and the old hospital became the J.F. Kennedy School. In 1964, the modern PR-116 highway was inaugurated (agencia.pr.gov & Toro, 1995, 227-229).

References:

SHPO's Reference.

Book: Toro Sugrañes, José A. Historia de los pueblos de Puerto Rico, 1995.

Agencia.pr.gov: Cronología Histórica de Lajas,

https://agencias.pr.gov/municipio/Lajas/sobrelajass/historia/Pages/CronologíaHistóricade

Lajas.aspx

Table 1: Historic Properties: Archaeology (See Figure 6)

Site Name	SHPO ID # Reference	IPRC ID # Code Number	Distance of proposed Project mi=miles mts=meters	Description Historic/Prehistoric	NRHP National Register of Historic Properties
Academia San Luis	SHPO- LJ020000 2	N/A	At the project site	Historic See important note below.	No data

Note: No more sites are in the agency system.

The State Historic Preservation Office (PRSHPO) has an inventory and documented the site as LJ-29 with a Historic Classification dating back to 1938. This record does not link the site to any study but has an inspection date of 1/1/2001. It is very likely that this is **an error** related to the founding of the original institution in Lajas town center, since the construction of the property of the subject project dates to 1986. The 1938 site and the 1986 site of the San Luis Academy have different locations, they are two different buildings.

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Table 2: Previous Archaeological Research Reviewed (See Figure 5)

Author/ Researcher	Year	Phase/Title	SHPO/IPRC code Num.	Results	Distance/ Direction
Fernando Alvarado Muñoz Lat: 18.0449239 4 Lon: - 67.0512740 5	2007	Fase IA-IB Urbanizació n Estancias de Santa Rosa	ICP/CAT -LJ-07- 07-01	Negative	0.01 mi NW
Adalberto Maurás Casillas Coordenadas de la tubería dentro del predio de 0.25 Millas Lat: 18.043289 Lon:-67.05075 Lat: 18.038319 Lon: - 67.051881	2013	Fase IB Diseño y construcción mejoras al sistema de agua potable, La Parguera	ICP/CAT -LJ-13- 09-01	Negative	0.10 mi. SW
José E. Irizarry Avilés Lat: 18.03968219 Lon: - 67.05063431	1992	Fase IA-IB Lajas Apartment s Carr. 315, Km 1.7	ICP/CAT -LJ-92- 02-01	Negative	0.12 mi. S
Armando J. Martí Carvajal	1997	Fase IA Lajas Sewer Line	ICP/CAT -LJ-97- 03-03	Negative	0.02mi. E

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Coordenadas de la tubería dentro del predio de 25 Milla. Lat: 18.045536 Lon: - 67.046164 Lat: 18.038128					
Lon: -					
67.04785 Antonio Daubón Vidal Coordena das de la sección de la carretera dentro del predio de 25 Milla Lat: 18.045344 Lon:- 67.053358 18.046453 -67.052667	1993	Fase IA Carr. PR 101, Lajas - San Germán	ICP/CAT -LJ-93- 02-04	Negative Recom mends Fase 1B. No other subsequen t studies were found.	0.25 mi. NW
Jaqueline López Meléndez Coordena das de la sección de la carretera dentro del predio de 25 Milla	2002	Fase IB Extensión De La Carretera PR-122 Desde La Carretera PR-166 Hasta La Carretera	ICP/CAT -SG-02- 05-05	Positive Historic materials	0.25 mi. NW

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Troject Northber. Th					
Lat: 18.045344 Lon:- 67.053358		PR-116 Entre San Germán y Lajas			
Lat 18.046453 Lon - 67.052667					
Jaqueline López Meléndez Coordena das de la sección de la carretera dentro del predio de 25 Milla Lat: 18.045344 Lon:- 67.053358 18.046453 -67.052667	2003	Fase II Documenta ción de los Remanentes de la Sección San Germán - Lajas del Ferrocarril de Circunvalaci ón de Puerto Rico, con evaluación y recomenda ciones sobre los elementos que podrían ser impactados por la Carretera PR-122 entre esas ciudades.	ICP/CAT -SG-03- 07-03	Positive Historic materials No other subseque nt studies were found.	0.25 mi. NW

Construction dating analysis:

The images from Historical Map of 1937 and 1941 were reviewed; no construction can be seen on the property. The images from 1957 and 1967 show construction areas to the

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northeast and southeast of the property not related to the San Luis Academy (See Figure 7).

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To determine an approximate date of construction of the San Luis Academy in the Santa Rosa Ward, in Lajas, the architecture section considered the fact that it was under construction in 1985, so it must have been completed around 1986, date it was built.

Summary of Previous Impacts Analysis

Looking at the aerial photos of the Google Earth system, we could see that they show significant changes in the number of structures that are added over the years, in the different times that we show below, allowing us to have an approximate number of documented structures in increase, as the new changes are exposed. These new constructions moved the land selectively according to the needs of each construction, but this did not affect the entire 7.9 acres.



Figure AFirst Intervention: 3 structures

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In the aerial photos of the Google Earth system, four construction interventions in different years can be observed. This begins in **December 1993** where we observed existing structures, to differentiate the following we painted it green.



Figure BSecond Intervention: 11 with sidewalk

In the aerial photo of **October 2004**, new construction and improvements to existing structures can be seen; in this case they are represented in red.

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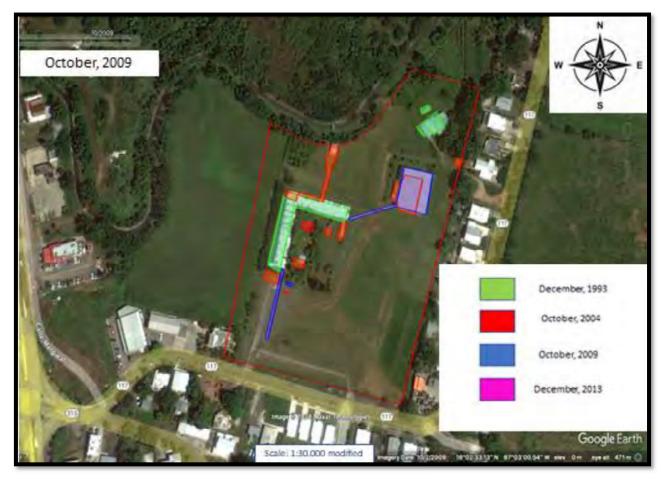


Figure CThird Intervention: 4 structures

In the aerial photo of **October 2009**, it can be seen that changes or improvements were made in the area again, various interventions in the property, in this case we present it in blue.

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Figure DFourth Intervention: 6 new structures

In the aerial photo of **December, 2013**, it can be seen that once again, in a fourth intervention, there is new construction or improvements in the area, and, in this case we present it in pink.

A discussion of archaeological potential to cultural resources:

Among the first academic studies carried out are those of archaeologist Irving Rouse, who visited the sites, known as Cucharas and Papayos in 1937. The latter was described as preceramic due to the presence of a large amount of shell and lithics and the absence of ceramic fragments. Prior to this, Lajas had been visited in 1915-16 by the North American archaeologist Samuel K. Lothrop, who reported sites in ten different points of Lajas. According to the most recent review (2016), there are twenty-seven prehistoric cultural resources reported among sites, remains, petroglyphs and caves or rock shelters. Some of these have been destroyed and others, such as the Cucharas site, are being continually looted by relic hunters, in violation of current state laws.

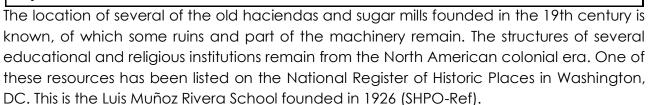
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An analysis has been carried out for the studies carried out by several researchers. The research findings are summarized below, highlighting positive and negative results with a conclusion on the potential impact on archaeological resources. Fernando Alvarado Muñoz, in the 2007 Phase IA-IB study titled "Urbanización Estancias de Santa Rosa" (ICP/CAT-LJ-07-07-01) located at .01 mi NW, reported negative results. Adalberto Maurás Casillas, during the 2013 Phase IB study titled "Design and construction improvements to the drinking water system, La Parguera" (ICP/CAT-LJ-13-09-01) located .10 mi SW, also reported negative results. José E. Irizarry Avilés, in the 1992 Phase IA-IB study for "Departamentos Lajas Carr. 315, Km 1.7" (ICP/CAT-LJ-92-02-01) located .12 mi S, presented negative results. Armando J. Martí Carvajal, in the 1997 Phase IA study for the "Lajas Cloaca Line" (ICP/CAT-LJ-97-03-03) located at .02 mi E, reported negative results for the study area. Antonio Daubón Vidal's 1993 Phase I A study for "Carr. PR 101, Lajas - San Germán" (ICP/CAT-LJ-93-02-04) located .25 mi NW was negative but recommended Phase 1B. No other subsequent studies were found (See Table 2 and Figure 5).

Jaqueline López Meléndez carried out the 2002 Phase IB study for the extension of Highway PR-122 from Highway PR-166 to Highway PR-116 between San Germán and Lajas" (ICP/CAT-SG-05-02-05. This study, located .25 mi NW, had positive results. In the subsequent Phase II study in 2003, the San Germán - Lajas del Ferrocarril Section were documented. She made recommendations on elements that could be impacted on Highway PR-122 (ICP/CAT-SG-03-07-03) and reported positive results for the same area described above. The location of the area with finds is .25 mi NW and is well removed from the proposed project site. This project does not represent a risk of impact for the area (See Table 2 and Figure 5).

The only linear study carried out with positive results for historical resources, with remains of the train track, is that of Jaqueline Meléndez (ICP/CAT SG-05--2-05) already originating in San Germán, located 0.25 mi NW of the proposed project.

We consider the study by Fernando Alvarado at 0.01 mi NW with negative results for archaeological resources and the study by Jaqueline Meléndez with positive results for archaeological resources at 0.25 mi NW away from the proposed project, quite far away,

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we do not have other archaeological studies that help us to conclude the lack of need for further studies, not enough to establish potential.

Due to the lack of studies within the indirect and direct APE, we consider the area as of interest to know the archaeological sensitivity. The existence of archaeological resources at the various depth levels of the APE area is unknown. This makes viable the potential of finding archaeological resources with integrity. See Figure 5.

Proposed actions include soil removal and pre-selected structural demolition. This undertaking will involve demolition and excavation. The indirect APE includes businesses, residences, sidewalks, streets, and the irrigation canal. The present project is being carried out in an area where known archaeological finds are minimal or absent.

This discussion must consider the potential and integrity of archaeological resources. Considering the lack of studies in the area, we do not have the elements (such as artifacts or cultural associations or sufficient studies) to establish the potential to find intact remains at the proposed project site.

The property was built in 1986 and there is no archaeological study of this site. To say that it has no archaeological potential is a mistake because we do not have the elements of judgment to be able to evaluate the archaeological potential, and for this reason we recommend a Phase 1 study to show us if there is the presence or absence of cultural resources on the property.

After analyzing the studies carried out in the area, we take into consideration the following arguments:

- There is no archaeological study carried out prior to this analysis of the property under study.
- When we analyze Figure 7, we can see in the old maps, structures to the north, east and south of the property under study that correspond to the historical years from 1937 to 1957 analyzed, including the church to the south of the property on the 1937 map. This suggests a cultural and historical relationship in the lives of the past inhabitants of the place, who had their properties adjoining.
- We also consider the new structures and extensions documented in our analysis of previous impacts (between 1993 and 2013, pp.12-15) of which no archaeological studies were carried out that correspond to the requirements of the law applicable

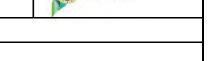
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to those years, which is why we continue without archaeological information that can confirm the existence of archaeological resources in the depths of the property under study.

Therefore, we determined that the lot under study has potential for findings to cultural resources, related to these historical periods analyzed.

Identification of Historic Properties - Architecture

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that the project area is not within nor adjacent to a a known eligible or listed National Register of Historic Places (NRHP) historic district or traditional urban center. Additionally, no known NRHP individually eligible or listed properties are within 1/4 mile of the project.

The L-shape buildings and the nun's residence are the oldest buildings within the subject parcel, but have not reached the 45 years threshold, since they were built between 1983 and 1993, per Google Earth Pro maps. The L-shape buildings consist of two, one-story buildings forming an L-shape, continuous building at different elevations with a flat reinforced concrete roof. These buildings are divided into classrooms and restrooms and are accessed through flush metal doors in the front wall. Miami metal windows are also installed in the front and rear walls for cross ventilation. The concrete roof extends to the front side of the buildings to cover the corridor throughout the buildings. Concrete beams help support the cantilevered roof on these corridors. The building parallel to the west property line is scheduled to remain, while the wing parallel to the south property line is scheduled to be demolished.

A concrete chapel -scheduled to remain in place, is located north of the L-shape buildings, and is covered by a gabled, reinforced concrete roof with a concrete cupola on the rear side of the roof.

A concrete basketball court, covered by a corrugated, metal sheet roof supported on a metal structure, is also in situ in the rear-right side of the L-shape buildings, and it is scheduled to be demolished. Its existing roof extends to the left side of the court to cover the concrete basketball bleachers, an outdoors kiosk, and storage room. Per Google Earth Pro, both the chapel and basketball court were built between December 1993 and October 2004, and the roof was is first seen in October 2009.

A detached residence is currently north of the basketball court. It was also built between 1983 and 1993, per Google Earth Pro maps. This former nun's house, also scheduled to be demolished, is of wooden and concrete construction with a gabled, corrugated metal

606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365 Tel: (787)274-2527 I www.vivienda.pr.gov

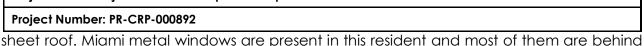
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security, metal rejas.

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As described before, the current campus at PR-117 Km. 0.2 Bo. Santa Rosa, Lajas was built between the 1980's and 2000's, but the original school was located near the Lajas main square, at 18.050695, -67.060105. Attempts to obtain more information regarding the school transfer from the original campus to the subject property were unsuccessful since the personnel who worked at the school could not be located nor was it possible to obtain a communication from the Mayaguez Diocese of the Catholic Church in Puerto Rico. The school was officially closed on May 30th, 2022.

As referenced above, the project property is not within a quarter-mile radius of a known eligible of listed National Register of Historic Places (NRHP) property. However, the Lajas Irrigation Canal, which borders the northern boundary of the parcel, is an NRHP-eligible property under criteria A, C, and D. It was originally built in the early 1950s and started operations in August 1955, when the first-time delivery of water was made to farmers in the Lajas valley. This canal changed the cattle/dairy production in the valley prior to 1955 to a cane and edible fruit industry. These crops occupied approximately 85 percent of the total area under irrigation¹. This irrigation canal formed part of the South Coast Irrigation Service, which served the purpose promoted by the local government agency to generate electricity in the Island in 1915. These canals channeled the water from reservoirs built to generate hydroelectric energy from the central mountain chain through the lower farmlands all the way to the sea.

A buffer zone was intentionally left by the designer between the canal in the north boundary of the subject parcel and any new construction. The existing chapel, which is the closest existing building to the canal, will remain in place.

The indirect APE also includes most of the buildings along the PR-117 road, which are mostly concrete, one- and two-story residential buildings with flat, reinforced concrete or corrugated metal sheet roofs built between the 1960s and 1980s. The community across the street, 'Urbanización El Valle 2' is first seen in 1985 Google Earth Pro map but absent in 1975 Historic Aerials.com.

¹ Avilés Cordero, Isidro, "An Investigation of factors Affecting the Intensity of Water Use in the Lajas Valley irrigation project". University of Puerto Rico Mayaguez Campus. 1974. Print.

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The following historic properties have been identified within the APE:

Direct Effect:

- o Architecture: No historic buildings are located within the direct APE.
- Archaeology: No documented archaeological sites were identified as there are no previous studies.

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o Indirect Effect:

- o Architecture: The NRHP-eligible Lajas Irrigation Canal is adjacent to the north.
- Archaeology: There is no known archaeological property documented that could have an adverse effect. However, between the dates analyzed on the maps from 1937 to 1957 there is evidence of structures to the north, south and east of the property under study, including a church in 1937, related to these historical periods analyzed. The new structures and extensions documented in our analysis of previous impacts (between 1993 and 2013, pp.12-15) for which no documented archaeological studies were carried out that correspond to the requirements of the law applicable to those years, which is why we do not have archaeological information that can confirm the existence of archaeological resources. The property under study has potential for findings to cultural resources, related to these historical periods analyzed.

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Recommendation

Carlos Rubio-Cancela

State Historic Preservation Officer

The Puerto Rico Department of Housing requests that the Puerto Rico SHPO concur that the following determination is appropriate for the undertaking (Choose One):

	No Historic Properties Attected
$\sum ert$	No Adverse Effect
st a c	Condition : In order to avoid duplication of future studies, a complete Phase 1 (1A-1B) tudy is recommended to determine the presence or absence of precolonial or colonial archaeological resources. It is very likely that the state's permitting process will require a complete Phase 1, for these properties, of which there is no prior information in the archives of the Institute of Puerto Rican Culture and State Historic of Preservation Office, as the case of this analyzed property for this project.
	Adverse Effect
	This Section is to be Completed by SHPO Staff Only
	The Puerto Rico State Historic Preservation Office has reviewed the above information and:
	Concurs with the information provided.
	Does not concur with the information provided.
	Comments:

Date:

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Figure 1 Project (Parcel) Location – Area of Potential Effect Map (Aerial)



Description: APE location of the proposed project Sports and Recreational Complex at Lajas Puerto Rico. The yellow polygon represents the subject parcel.

Location: +18.044116, -67.0501877 Scale 1:30 modified

Reference from Google Earth Pro [September 2023] – Area of Potential Effect Map

The yellow polygon represents the subject parcel.

Visual APE is within the continuous blue line.

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Figure 2 Project (Parcel) Location - Aerial Map



Figure 2

Description: Map showing the location of the APE of the proposed project Lajas Sport and Recreational Complex, Lajas Puerto Rico.

Reference: Puerto Rico Planning Board Office https://gis.jp.pr.gov/mipr/- Aerial Map



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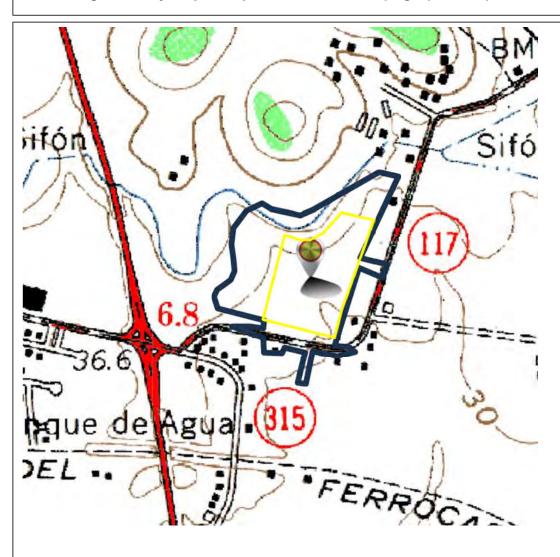
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Figure 3 Project (Parcel) Location - USGS Topographic Map



Description: USGS topographic map showing the location of the APE of the proposed project Lajas Sport and Recreational Complex, Lajas Puerto Rico.

> Scale: 1:20,000 (modified) The yellow polygon represents the subject parcel.

Visual APE is within the continuous blue line.

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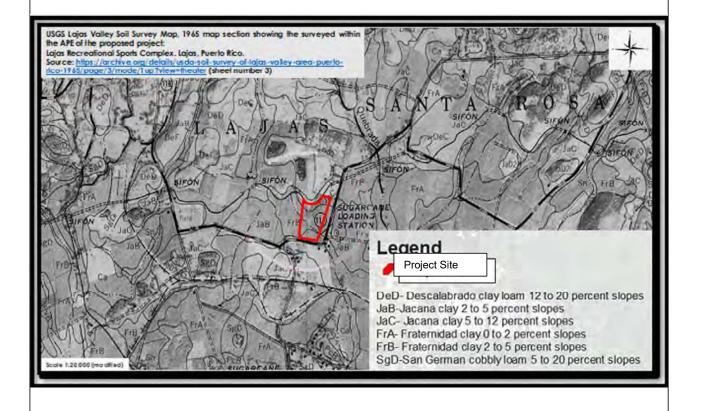
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Figure 4 Project (Parcel) Location – Soils Map



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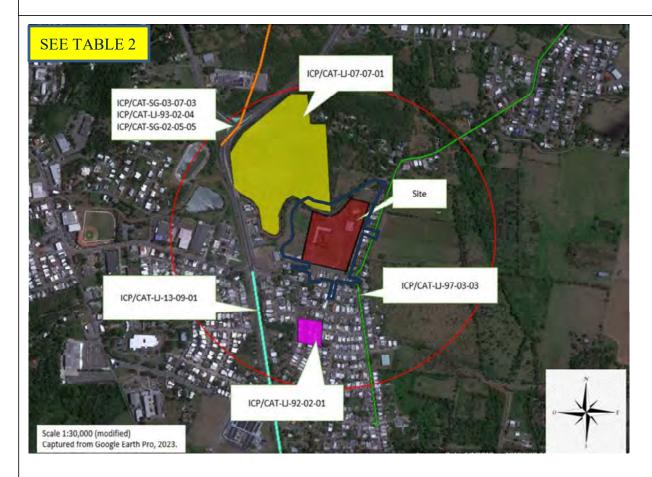
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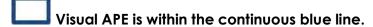
Figure 5 Project (Parcel) Location with Previous Investigations – Aerial Map



Referenced aerial map

Description: Aerial map showing the location of the proposed project Lajas Sport and Recreational Complex and previous archaeological studies within 1/4 mile of the APE.

See Table 2.



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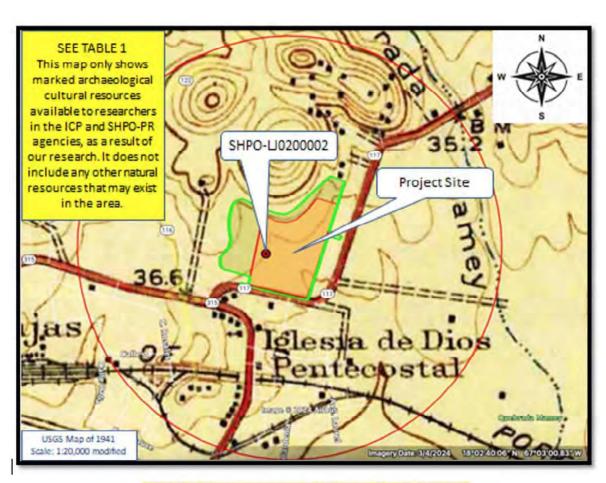
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Topographic Map

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The LJ-2 site appears marked on SHPO-PR maps

Referenced Topographic Map

Description: Topographic map showing the location of the proposed project

Laias Sport and Recreational Complex

See Table 1.



Visual APE is within the continuous green line.

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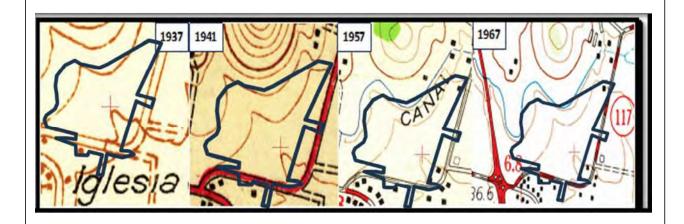


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The images of the 1937 map and 1941 do not show construction on the property. The 1937 map shows that there was a **church** to the south of the property under study.

The mages from 1957 and 1967 show construction areas to the northeast and southeast of the property no related to this project site. The maps from 1957 and 1967 already show the passage of the old "Canal de Riego de Lajas."

These maps show the existence of other constructions to the north, east and south of the property under study, such as the church and other structures, which existed since these historical periods.

USGS Historical Topographic Maps

Ref. https://livingatlas.arcgis.com/topoexplorer/index.html

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Figure 8. Project (Parcel) Location – Aerial map with NRHP Properties (Architecture)

Ref. PRSHPO

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The yellow polygon represents the subject parcel.

Visual APE is within the continuous blue line.

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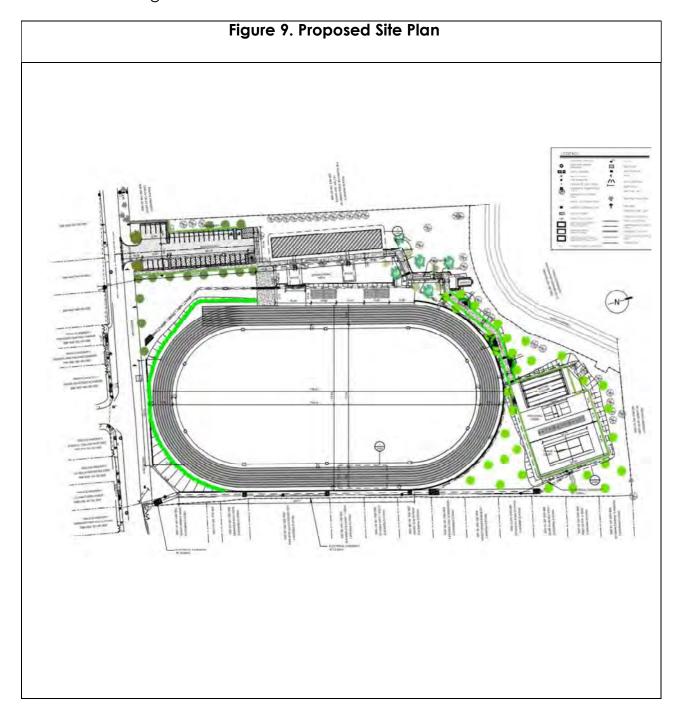
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Architecture Images:



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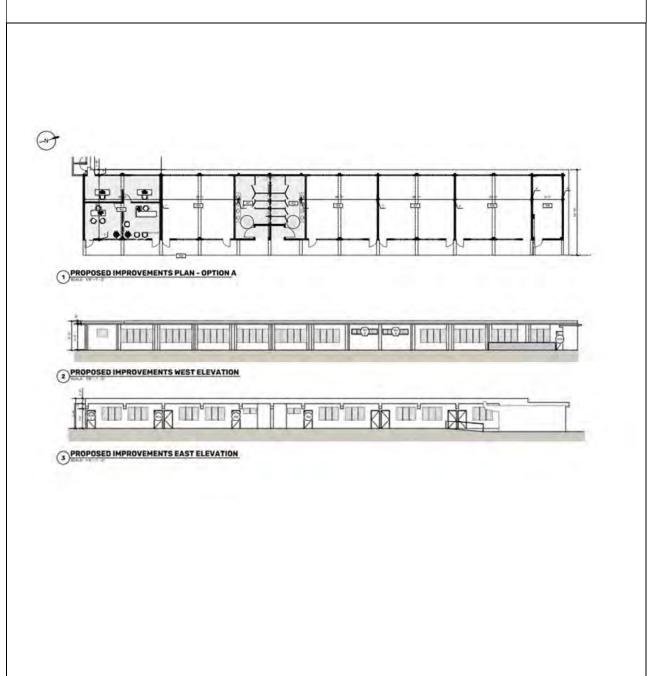
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Figure 10. Proposed Elevations



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Figure 12. Proposed Demolition Plan



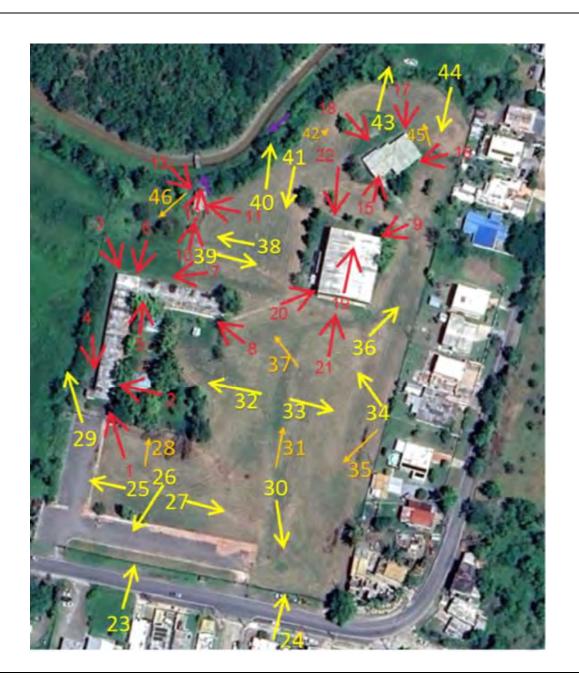


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Figure 13. Photograph Key

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01-Mar-2023 10/22 344* N LAJAS SPORT COMPLEX BLOG1

Photo #: 1

Description (include direction):

Date: 3/1/2023

Bldg 1 - Main façade oriented towards southwest.



Photo #: 2

Description (include direction):

Date: 3/1/2023

Bldg 1 – Right façade facing southeast.

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Photo #: 3

Description (include direction):

Date: 3/1/2023 Bldg 1 - Rear façade facing northeast.

LAPA STO

Photo #: 4

Description (include direction):

Date: 3/1/2023

Bldg 1 – Left façade facing northwest.

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Photo #: 5

Description (include direction):

Date: 3/1/2023

Bldg 2 - Front façade facing southwest.



Photo #: 6

Description (include direction):

Date: 3/1/2023

Bldg 2 – Left façade adjacent to building 1, facing northwest.

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Photo #: 7

Description (include direction):

Date: 3/1/2023

Bldg 2 – Rear façade facing northeast.



Photo #: 8

Description (include direction):

Date: 3/1/2023

Bldg 2 – Right façade facing southeast.

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Photo #: 9 De

Date: 3/1/2023

Description (include direction):

Basketball court with bleachers and kiosk. Camera facing

southwest.



Photo #: 10

Description (include direction):

Date: 3/1/2023

Front facade of existing chapel. Camera facing Northeast.

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Photo #: 11

Description (include direction):

Date: 3/1/2023

Right facade of existing chapel. Camera facing Northwest.



Photo #: 12

Description (include direction):

Date: 3/1/2023

Right facade of existing chapel. Camera facing Northwest.

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Photo #: 13

Description (include direction):

Date: 3/1/2023

Left-rear facade of existing chapel. Camera facing southeast.



Photo #: 14

Description (include direction):

Date: 3/1/2023

Materials and condition of the interior of the chapel. Camera

facing west.

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01-Marie 15:32 17:7 N

Photo #: 15 **D**

Description (include direction):

Date: 3/1/2023

Front and left facades of residential building. Camera facing north.



Photo #: 16

Description (include direction):

Date: 3/1/2023

Right facade of residential building. Camera facing south.

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Photo #: 17

Description (include direction):

Date: 3/1/2023

Rear-Right facade of residential building. Camera facing north.



Photo #: 18

Description (include direction):

Date: 3/1/2023

Rear facade of residential building. Camera facing southeast.

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Photo #: 19

Description (include direction):

Date: 3/1/2023

Basketball court with bleachers and kiosk. Camera facing northeast.



Photo #: 20

Description (include direction):

Date: 3/1/2023

Basketball court with kiosk. Camera facing east.

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91-Var 2023

Photo #: 21

Description (include direction):

Date: 3/1/2023

Basketball court with kiosk. Camera facing northeast.



Photo #: 22

Description (include direction):

Date: 3/1/2023

Basketball court with kiosk. Camera facing southwest.

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Photo #: 23

Description (include direction):

Project site facing northeast.

Date: 3/1/2023

Photo #: 24

Description (include direction):

Date: 3/1/2023

Project site facing northeast.

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Photo #: 25

Description (include direction):

Date: 3/1/2023

Project site facing west.



Photo #: 26

Description (include direction):

Date: 3/1/2023

Project site facing southwest.

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Photo #: 27

Description (include direction):

Date: 3/1/2023

Project site facing east.



Photo #: 28

Description (include direction):

Date: 3/1/2023

Project site facing north.

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Photo #: 29

Description (include direction):

Date: 3/1/2023

Project site facing northwest.



Photo #: 30

Description (include direction):

Date: 3/1/2023

Project site facing southeast.

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Photo #: 31

Description (include direction):

Date: 3/1/2023

Project site facing north.



Photo #: 32

Description (include direction):

Date: 3/1/2023

Project site facing west.

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Photo #: 33

Description (include direction):

Date: 3/1/2023

Project site facing east.



Photo #: 34

Description (include direction):

Date: 3/1/2023

Project site facing northwest.

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Photo #: 35

Description (include direction):

Date: 3/1/2023

Project site facing southwest.



Photo #: 36

Description (include direction):

Date: 3/1/2023

Project site facing northeast.

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Photo #: 37

Description (include direction):

Date: 3/1/2023

Project site facing northwest.



Photo #: 38

Description (include direction):

Date: 3/1/2023

Project site facing west.

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Photo #: 39

Description (include direction):

Date: 3/1/2023

Basketball court, camera facing northeast.



Photo #: 40

Description (include direction):

Date: 3/1/2023

Project site facing north.

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Photo #: 41

Description (include direction):

Date: 3/1/2023

Project site facing south.



Photo #: 42

Description (include direction):

Date: 3/1/2023

Project site facing northeast.

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Section 106 NHPA Effect Determination

Subrecipient: Municipality of Lajas

Project Name: Lajas Recreational Sports Complex

Project Number: PR-CRP-000892



Photo #: 43

Description (include direction):

Date: 3/1/2023

Project site facing southeast.



Photo #: 44

Description (include direction):

Date: 3/1/2023

Project site facing southwest.

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

Subrecipient: Municipality of Lajas

Project Name: Lajas Recreational Sports Complex

Project Number: PR-CRP-000892





Photo #: 45

Description (include direction):

Date: 3/1/2023

Project site facing northwest.



Photo #: 46

Description (include direction):

Date: 3/1/2023

Project site facing southwest.

PR-CRP-000892 COMPLEJO DEPORTIVO RECREACIONAL LAJAS, PUERTO RICO.



INDE	Y		LANDSCAPE				
IIIDL	-^		33	LD100	LANDSCAPE DEMOLITION SITE PLAN		
Sheet No.	Code No.	Sheet Title	34	LS100	PROPOSED LANDSCAPE SITE PLAN		
GENERAL			ARCHITE	CTURE			
1	6100	TITLE SHEET	35	A001	ARCHITECTURAL NOTES		
2	G101	GENERAL LOCATION PLAN	36	AS100	PROPOSED SITE PLAN		
SURVEY			37	A100	IMPROVEMENTS TO ACCESS BUILDING FLOOR PLAN		
3	VS100	TOPOGRAPHY PLAN	38	A101	ENLARGE ADMINISTRATION OFFICES FLOOR PLAN		
4	VS101	TOPOGRAPHY EXISTING - SECTIONS	39	A102	ENLARGED PUBLIC BATHROOMS FLOOR PLAN AND ELEVATIONS		
5	VAS1.1	EXISTING SITE PLAN_AS BUILT	40	A200	PROPOSED MARK RUNNING TRACK		
6	VAS2.1	EXISTING BUILDING_BLOW UP	41	A201	PROPOSED RUNNING TRACK RUBBER DETAILS		
7	VAS2.2	EXISTING ELEVATION BUILDING	42	A400	PROPOSED ALUMINUM BLEACHERS		
8	VAS2.3	EXISTING CHAPEL_BLOW UP	43	A500	PROPOSED BATTING CAGES		
9	VAS2.4	EXISTING BASCKETBALL COURT_BLOW UP	44	A501	PROPOSED TENNIS COURT DETAILS		
10	VAS2.5	EXISTING RESIDENCE _BLOW UP	45	A502	PROPOSED PADDLEBOARD COURT DETAILS		
11	VAS2.6	EXISTING CANTEEN _BLOW UP	46	A901	DOORS AND WINDOWS SCHEDULE		
12	VAS2.7	EXISTING OFFICE _BLOW UP	47	R100	3D VISUALIZATIONS		
13	GR1.1	PHOTO DOCUMENTATION	48	R101	3D VISUALIZATIONS		
14	GR1.2	PHOTO DOCUMENTATION	PLUMBIN	G			
15	GR1.3	PHOTO DOCUMENTATION	49	PL100	PROPOSED BATHROOMS PLUMBING PLAN		
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16	CD100	DEMOLITION SITE PLAN	50	ES100	PROPOSED ELECTRICAL SITE PLAN		
17	CD101	PARTIAL INTERIOR DEMOLITION PLAN - BUILDING 1	51	ES101	PHOTOMETRIC ANALYSIS NOTES		
18	C100	TITLE SHEET & INDEX	52	ES102	PHOTOMETRIC ANALYSIS SITE PLAN		
19	C200	GEOMETRIC PLAN	53	ES103	PHOTOMETRIC ANALYSIS MULTI-SPORT AREA		
20	C201	GEOMETRIC TABLES	54	ES104	ELECTRICAL NOTES AND DETAILS OF ELECTRIC POLES		
21	C300	GRADING PLAN	55	ES105	ELECTRICAL SYSTEM DETAILS		
22	C301	GRADING SECTIONS					
23	C400	RETAINING WALL PLAN					
24	C401	RETAINING WALL SECTIONS PART 1					
25	C402	RETAINING WALL SECTIONS PART 2					
26	C403	RETAINING WALL DETAILS PART I					
27	C404	RETAINING WALL DETAILS PART II					

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498

REV DATE DESCRIPTION BY CHICD





Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

Plot Scale: AS SHOWN

Progress Print:

TITLE SHEET

G100

Advanced 100% NOT FOR CONSTRUCTION

GENERAL NOTES

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STORM SEWER PROFILES

STORM SEWER DETAILS UTILITIES SITE PLAN CIVIL DETAILS

C501

C502

THE PRECISE LOCATION OF ALL POWER, GAS, TELEPHONE, WATER AND DRAIN SHALL BE VERHY IN FIELD. CONTRACTOR SHALL CONTRACT UTILITIES, LOCATE SHUT OFF VALVES AND PROCEED SAFELY ACCORDING TO THE RECOMMENDATION OF EACH UTILITY, CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY INTERRUPTION OF THESE LINES AT NO COST TO THE OWNER.

CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ARCHITECT, PROJECT MANAGER OR INSPECTOR PRIOR TO THE COMMENCEMENT OF WORK.

3 WHERE DIMENSIONS ARE LINCLEAD CONSULT THE ARCHITECT DROTTED MANAGER OF 3. WHERE DIMENSIONS ARE UNCLEAR, CONSULT THE ARCHITECT, PRODECT MANAGER OR INSPECTOR. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR HIS WORK, ALL DIMENSIONS SHALL BE FIELD VERHIED WHERE POSSIBLE. ALL DIMENSIONS ARE FINISHES DIMENSIONS UNLESS OTHERWISE INDICATED. ALL NEW WINDOW AND DOOR OPENINGS MUST BE VERHIED ON SITE FOR DIMENSIONS ACCURACY BEFORE ORDERING MATERIAL.

THE CONSTRUCTION DRAWINGS AND THE TECHNICAL SPECIFICATIONS ARE COMPLEMENTARY TO EACH OTHER. THE CONTRACTOR MUST ASSUME INFOROOMATION PRESENT IN EITHER AND IN BOTH DOCUMENT.

THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY TO COMPLETE THE BUILDING AS SHOWN, MATERIALS AND WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY EMPLOYED BY THE RESPECTIVE TRADES. EACH SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, REFINISHING ANY AND ALL EXISTING WORK ALTERED BY EITHER OPERATION.

6. CONTRACTOR AND HIS SUB-CONTRACTORS SHALL TURN THE PROJECT OVER TO OWNER

EDEE EDOM ALL CONSTRUCTION DERDIS AND CLEAN

CONTRACTOR SHALL REPLACE AND/OR REPAIR PAYEMENT, STRUCTURES OR EQUIPMENT DETERIORATED OR DAMAGED IN ANY WAY BY THE CONSTRUCTION PROCESS WETHER OR NOT SPECIFICALLY STATED IN THE DRAWINGS.

AND/OR REED TO MAKE A COMPLETE OPERATION INSTALLATION, SHALL BE PROVIDED WETHER MENTIONED OR NOT, OMITTING ONLY SUCH PARTS AS ARE SPECIFICALLY EXCEPTED.

10. THE DRAWINGS HAVE BEEN PREPARED ON THE BASIS OF OBSERVATION OF EXISTING CONDITIONS. THE ARCHITECT ACCEPTS NO RESPONSIBILITY FOR CONCEALED SITE CONDITIONS.

SUBMITTAL REVIEW **APPROVED**

REVIEW AND/OR APPROVAL
NEITHER EXTENDS NOR ALTERS
ANY CONTRACTUAL OBLIGATIONS
OF THE ARCHITECT OR
CONTRACTOR REFER TO THE
GENERAL CONDITIONS OF THE
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REVIEW AND/OR APPROVAL NETHER EXTENDS NOR ALTERS ANY CONTRACTULA DELIGATIONS OF THE ARCHITECT OR CONTRACTOR, REFER TO THE GENERAL CONDITIONS OF THE CONTRACT MONOR DIVISION FOR THE SPECIFICATION FIRST ARCHITECTURE SONIFICANCE.

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ANY CONTRACTULA OBLIGATIONS
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GENERAL CONDITIONS OF THE
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DESCRIPTION OF THIS SUBMITTAL
RECORPTION OF THIS SUBMITTAL
SCONIFICANCE.

LOCATION

CATASTRO: 358-052-159-19 COORDENADAS: LAT: 18.0425, LON: -67.0498

TOPOGRAPHY OBTAINED FROM: JUNTA DE PLANIFICACIÓN DE PUERTO RICO | GEOLOCALIZADOR- MIPR

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> CLASIFICACIÓN PT OFICIALIZACION DEL GEODATO EN
> PROCESO, FAVOR DE REFERIRSE AL MAPA DE CALIFICACION VIGENTE. CLASIFICACIÓN PUT SU (SUELO URBANO)



FLOOD MAP

Zona Inund. Advisory Zona Inundabilidad (firm) 172000C1570H

Suelo (NRCS) FrB (55.6%), Sn (31.1%), JaC (9.2%)

PR-CRP-00892: LAJAS SPORTS COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

Plot Scale: AS SHOWN

Progress Print:
TITLE
GENERAL LOCATION PLAN

G101 2/55



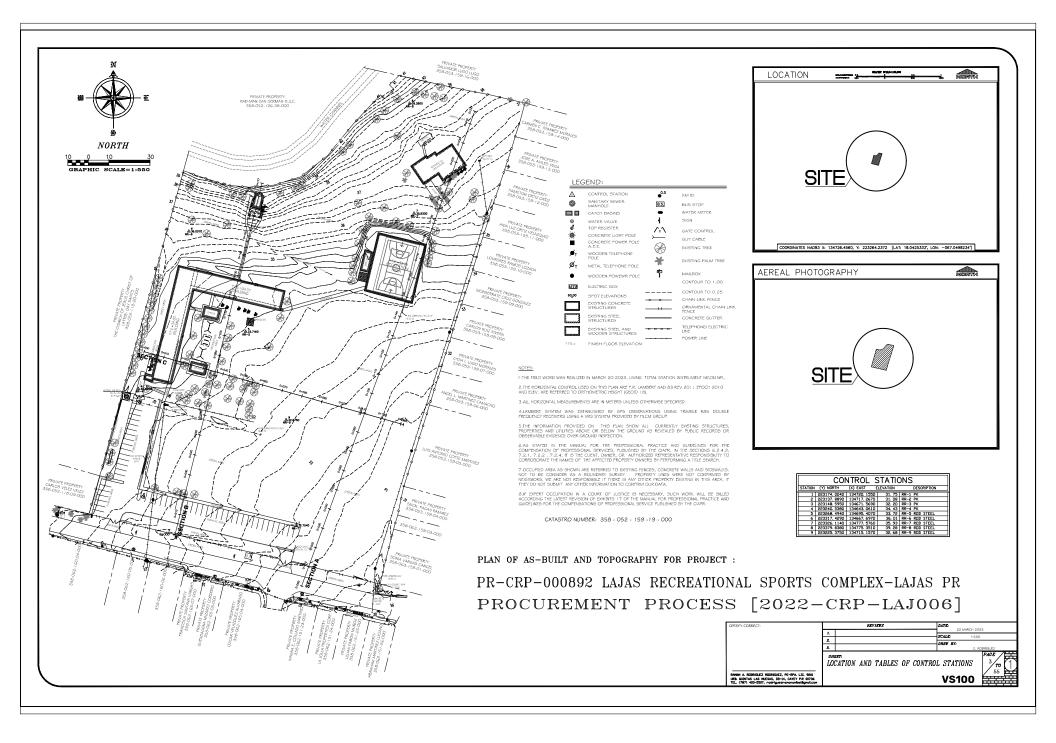


AERIAL VIEW



AERIAL VIEW





PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUD 18.0425. -67.0498

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654 Ave. Muhoz Pivera -1 654 Plura, San Juan, Pl Tel. (187) 918-5890 /

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Revised by: ING. WILLIAM MELENDEZ

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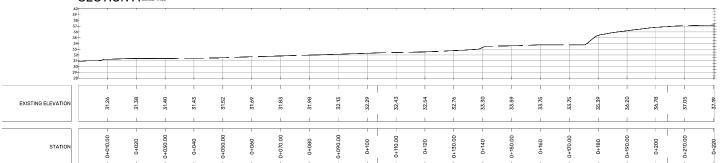
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DRAWING No.

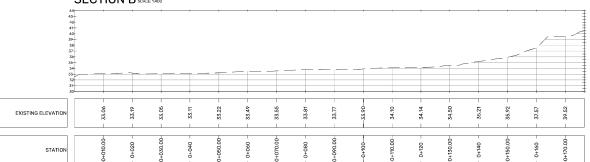
VS101

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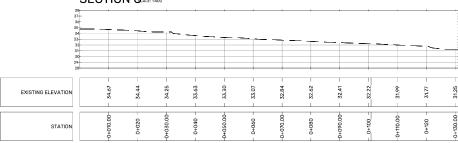
SECTION A SCALE: 1:400

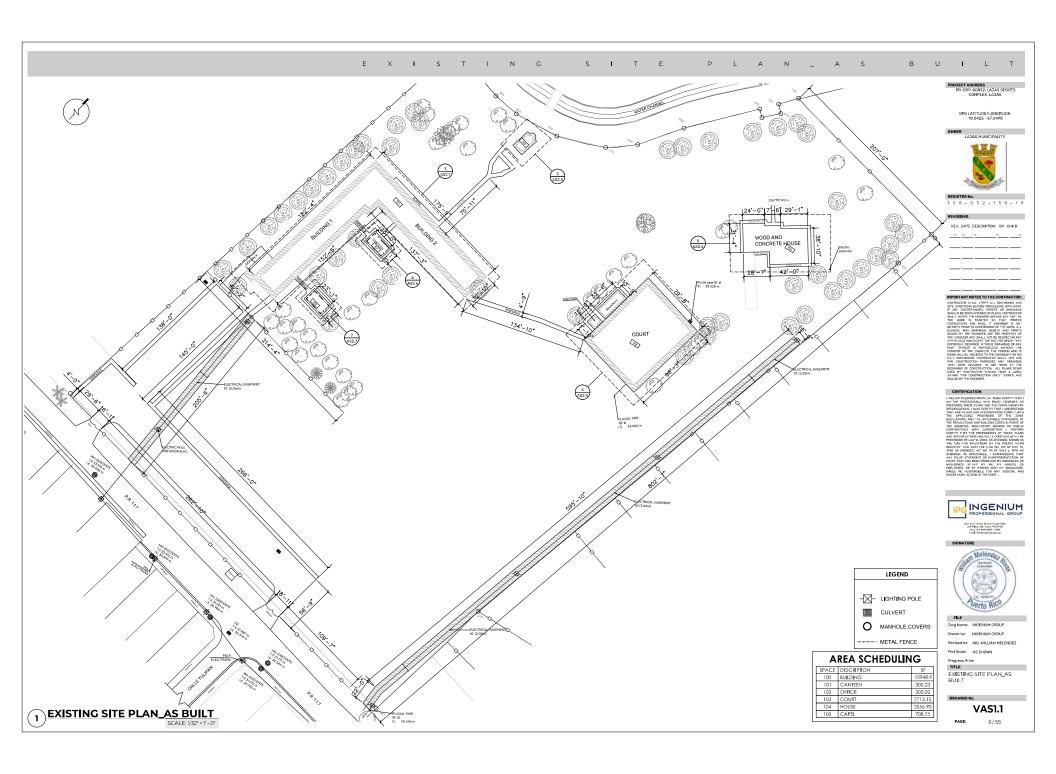


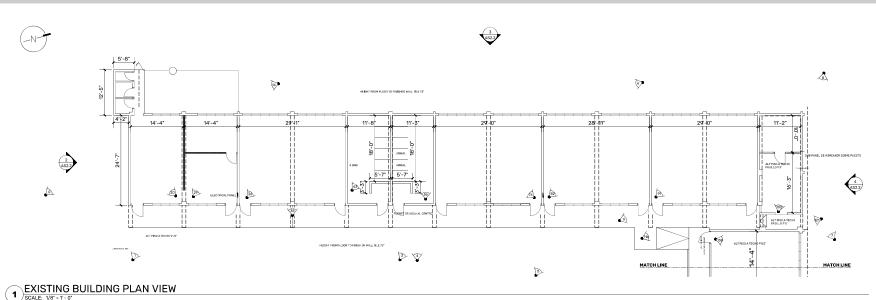
SECTION B SCALE: 1:400



SECTION GCALE: 1:400







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EXISTING BUILDING PLAN VIEW
SCALE: 1/8" = 1" - 0"

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498

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DEVICTORS

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INFORMATION TO THE CONTRACTOR

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Tel. (197) 910-3090 / 5091 Email infogringenium.group

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Drawn by: INGENIUM GROUP

Revised by: ING, WILLIAM MELEN

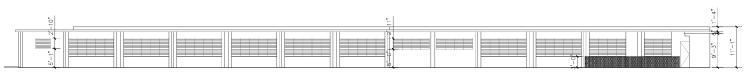
Plot Scale: AS SHOWN
Progress Print:
TITLE

EXISTING BUILDING_BLOW UP

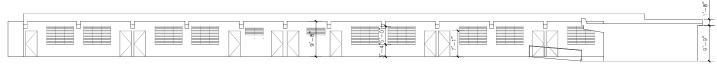
DRAWING NO.

VAS2.1

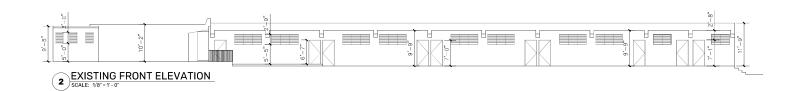
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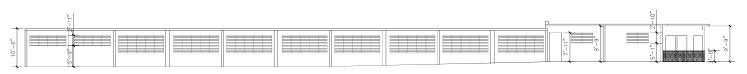


SCALE: 1/8 = 1' - 0"



5 EXISTING RIGHT ELEVATION
SCALE: 1/8" = 1'-0"





EXISTING REAR ELEVATION
SCALE: 1/8"=1'-0"

PROJECT ADDRESS
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COMPLEX, LAJAS

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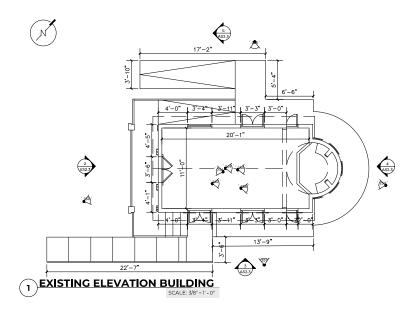
Plot Scale: AS SHOWN

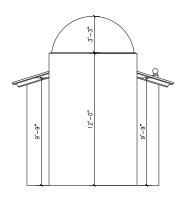
Progress Print: TITLE EXISTING ELEVATION BUILDING

VAS2.2

7/55

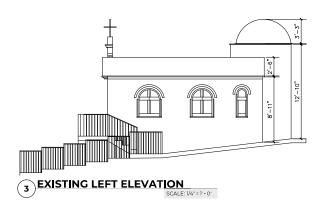
1 EXISTING ELEVATION BUILDING SCALE: 1/8" = 1' - 0"

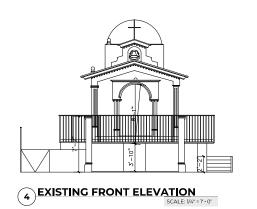


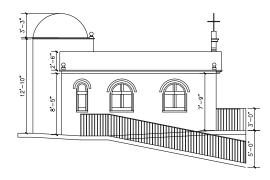


EXISTING REAR ELEVATION

SCALE: 3/8' = 1'-0'







SCALE: 1/4" = 1'-0"

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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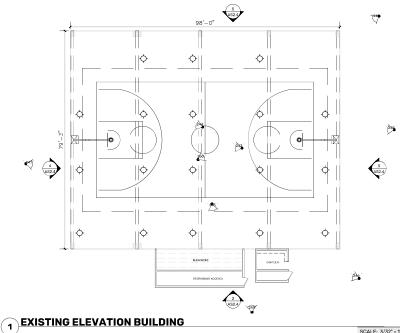
Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

Revised by: ING, WILLIAM MELENDEZ

Plot Scale: AS SHOWN

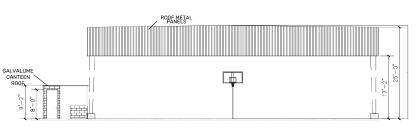
Progress Print: TITLE EXISTING CHAPEL_BLOW UP

VAS2.3



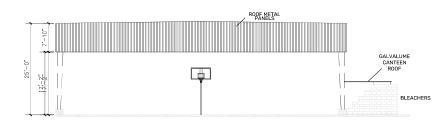
ROOF METAL PANELS BLEACHERS CANTEEN

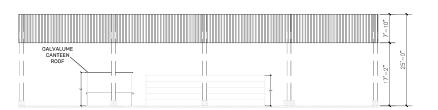
2 EXISTING LEFT ELEVATION SCALE: 1/8" = 1' - 0"



3 EXISTING FRONT ELEVATION SCALE: 1/8" = 1' - 0"

SCALE: 3/32" = 1' - 0"





4 EXISTING REAR ELEVATION SCALE: 1/8" = 1' - 0"

5 EXISTING RIGHT ELEVATION SCALE: 1/8" = 1' - 0" GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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REV. DATE DESCRIPTION BY CHK'D





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Plot Scale: AS SHOWN Progress Print: TITLE

EXISTING BASCKETBALL COURT_BLOW UP

VAS2.4

9/55

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498

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REV. DATE DESCRIPTION BY CHK'D

IMPORTANT NOTES TO THE CONTRACTO
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654 Ave. Mañoz Rivera - Su 654 Plaza, San Juan, PR C tal. (787) 910-3890 / Si

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Revised by: ING WILLIAM MELEN

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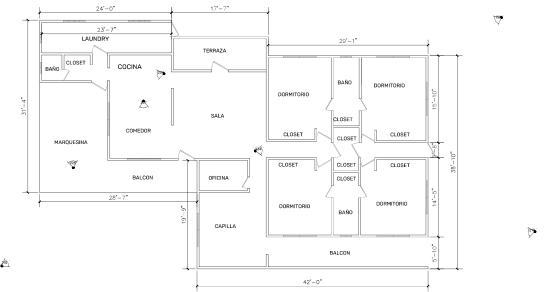
EXISTING RESIDENCE _BLOW UP

VAS2.5

10/55

POZO SEPTICO

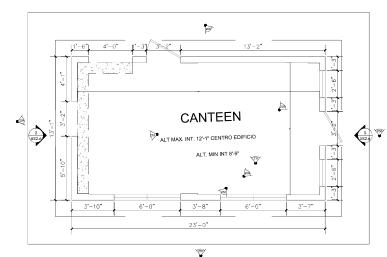
.



WOOD AND CONCRETE HOUSE

AS-BUILT RESIDENCE FLOOR PLAN
SCALE: 3/16" = 1" - 0"

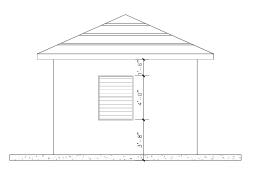




1 EXISTING ELEVATION BUILDING SCALE: 1/8" = 1' - 0"



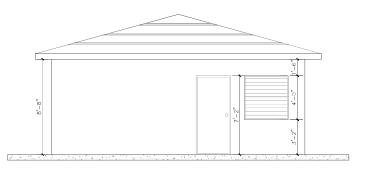
SCALE: 3/8" = 1" - 0"



2 EXISTING RIGHT ELEVATION SCALE: 3/8" = 1' - 0"



(3) EXISTING LEFT ELEVATION SCALE: 3/8" = 1' - 0"



5 EXISTING FRONT ELEVATION SCALE: 3/8" = 1' - 0" PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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REV. DATE DESCRIPTION BY CHK'D





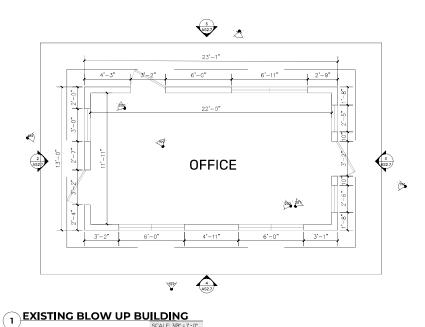
Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

Revised by: ING, WILLIAM MELENDEZ

Plot Scale: AS SHOWN Progress Print:

EXISTING CANTEEN _BLOW UP

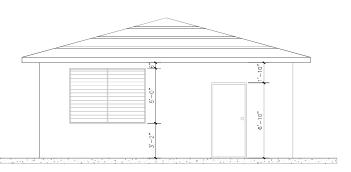
VAS2.6



2 EXISTING RIGHT ELEVATION



3 EXISTING LEFT ELEVATION



EXISTING FRONT ELEVATION

SCALE: 3/8" = 1'- 0"

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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REV. DATE DESCRIPTION BY CHK'D





Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

Revised by: ING, WILLIAM MELENDEZ Plot Scale: AS SHOWN

Progress Print: TITLE

EXISTING OFFICE _BLOW UP

VAS2.7

12/55

















FOR MORE LOCATION DETAIL SEE AS2.1

















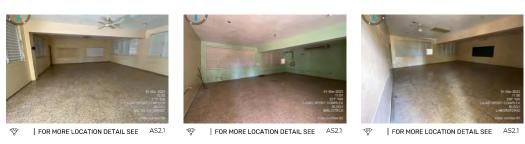






FOR MORE LOCATION DETAIL SEE AS2.1









GR1.1

PHOTO DOCUMENTATION

Drawn by: INGENIUM GROUP Revised by: ING, WILLIAM MELENDEZ Plot Scale: AS SHOWN Progress Print:

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PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498





























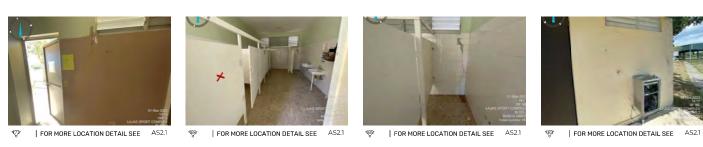


















PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



REV. DATE DESCRIPTION BY CHK'D





Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP evised by: ING, WILLIAM MELENDEZ Plot Scale: AS SHOWN Progress Print:

PHOTO DOCUMENTATION

GR1.2







FOR MORE LOCATION DETAIL SEE AS2.4



FOR MORE LOCATION DETAIL SEE AS2.4



FOR MORE LOCATION DETAIL SEE AS2.4



FOR MORE LOCATION DETAIL SEE AS2.4

FOR MORE LOCATION DETAIL SEE AS2.4



FOR MORE LOCATION DETAIL SEE AS2.4



FOR MORE LOCATION DETAIL SEE AS2.4

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498







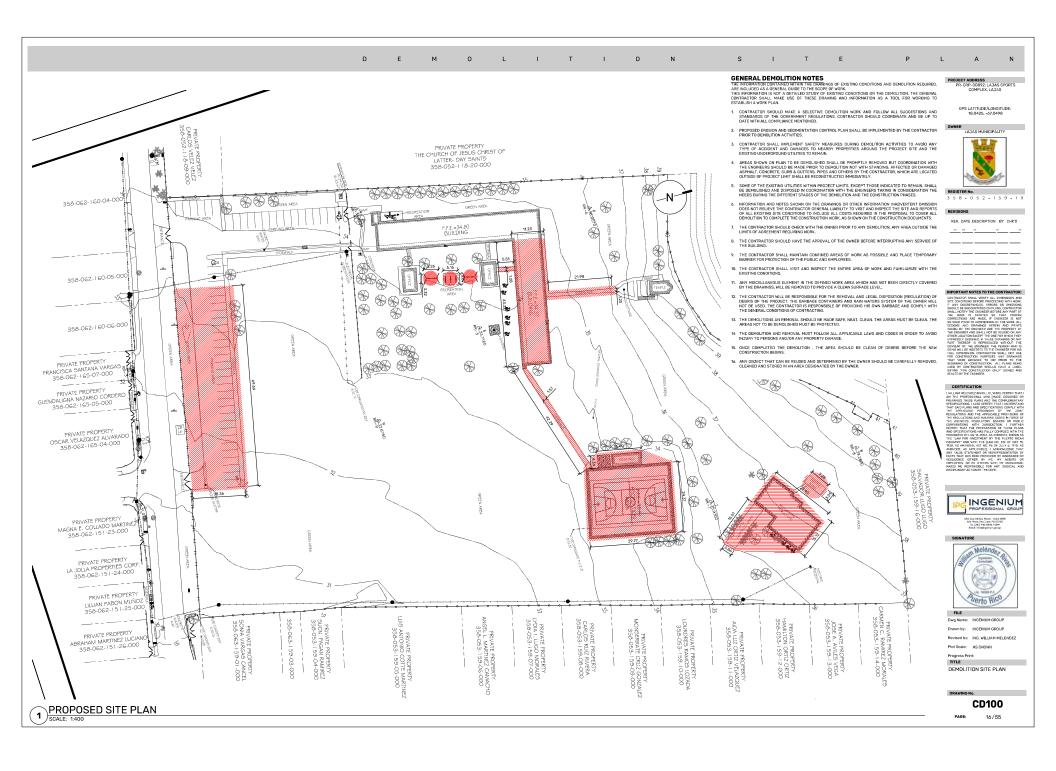


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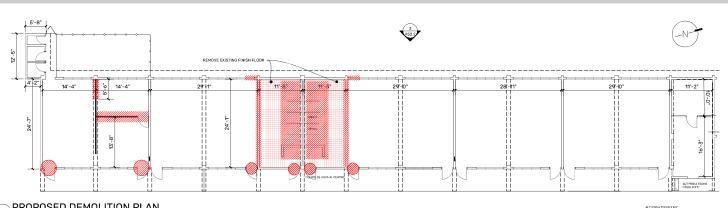
Plot Scale: AS SHOWN

PHOTO DOCUMENTATION

GR1.3

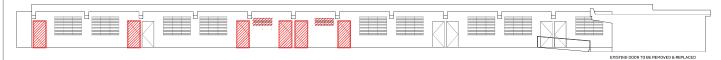


EXISTING WINDOWS TO BE REMOVED.



PROPOSED DEMOLITION PLAN 1) SCALE: 1/8" = 1' - 0"

PROPOSED DEMOLITION WEST ELEVATION 2)SCALE: 1/8" = 1' - 0"



PROPOSED DEMOLITION EAST ELEVATION 3)SCALE: 1/8" = 1' - 0"

A. DEMOLITION NOTES:

- . THE PLUMBING CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL EXISTING PIPING, EQUIPMENT AND FINITHESE REQUIRING DEMOLITION. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH THE ARCHITECT, GENERAL CONTRACTOR AND WITH THE OWNER.
- 2. EXISTING PANELBOARDS ARE TO REMAIN EXISTING PARKEDUARDS AND TO THE FORTH THE PROPERTY OF THE WORK TO RELOCATE CIRCUITS FROM THE EXISTING PANELBOARDS TO THE NEW PANELBOARDS SHALL BE COORDINATED WITH LUMA AND BE PERFORMED AT TIMES THAT DO NOT DISRUPT ONGOING WORK, IN THE AFFECTED SPACES.
- PATCH EXISTING WALL AND FLOOR PENETRATIONS FORMERLY OCCUPIED BY PIPING TO MATCH EXISTING CONSTRUCTION. SEE ARCH. DRAWINGS FOR FINAL FINISHES.
- THE PLUMBING CONTRACTOR SHALL ABANDON ALL EXISTING PIPING UNDERFLOOR THAT IS NOT TO BE REUSED FOR NEW WORK.

- COORDINATE ANY DISRUPTION OF PLUMBING OR FIRE PROTECTION SERVICE TO ADJACENT AREAS WITH THE LOCAL OWNER'S REPRESENTATIVE A MINIMUM OF 72 HOURS IN ADVANCE OF SAID DISRUPTION.
- THE PLUMBING CONTRACTOR SHALL REMOVE ALL EXISTING SANITARY SEWERS THAT ARE NOT BEING REUSED AND IN THE WAY OF NEW WORK.
- THE PLUMBING CONTRACTOR SHALL CUT EXISTING SANITARY AND WASTE PIPING 3" BELOW FLOOR AND PLUG WITH PERMANENT STOPPER.
- 9. REMOVE ALL ELECTRICAL APPURTENANCES (DISCONNECTS, STARTERS, WIRING, CONDUIT, ETC.) ASSOCIATED WITH EQUIPMENT TO BE REMOVED.
- 10. THE PLUMBING DEMOLITION WORK SHALL INCLUDE THE DISCONNECT, REMOVE AND DISPOSAL OF THE FOLLOWING PIPING AND ASSOCIATED VALVES, FITTINGS, ACCESSORIES AND SUPPORTS: 1) DOMESTIC COLD WATER, 2) DOMESTIC HOT WATER, 3) SANITARY VENT, 4) SANITARY DRAIN.
- PLUMBING CONTRACTOR SHALL CAP ALL UNUSED SANITARY BRANCH LINES NEAR MAIN WITHIN 2'-0" WHERE POSSIBLE. NO DEAD END RUNS ARE

- ALLOWED PER CODE.
- 12. FIELD VERIFY LOCATION, SIZE AND DEPTH OF EXISTING SANITARY BUILDING DRAINS FIELD VERIFY
- 13. ALL CONDUIT REMOVED SHALL BE REMOVED IN ITS ENTRETY. INCLUDING FITTINGS, MOUNTING CONDUIT PLUDS AND BLANKS FOR ALL OPENINGS CREATED BY THE REMOVAL OF CONDUIT. PROVIDE BLANK COVER PLATES FOR ALL OPENINGS CREATED BY THE REMOVAL OF THE EQUIPMENT AND/OR DEVICES.
- REMOVAL OF EXISTING PLUMBING FIXTURES AND EQUIPMENT, ETC. WILL REQUIRE CAPPING AND SEALING EXISTING MAINS OF BRANCHES AS NECESSARY AND REQUIRED TO ALLOW THE REMAINING SYSTEMS TO FULLY OPERATE WITHOUT DEGRADATION.
- 15. ALL CUTTING, PATCHING AND DEMOLITION WORK SHALL BE CLOSELY COORDINATED WITH THE EXISTING CONDITIONS AND THE REQUIRED NEW WORK, G.C. SHALL PATCH AND FINISH PENETRATIONS OF EXISTING SURFACES TO MATCH ADJACENT SURFACES.
- PROCEDURE DETAILS AS FOLLOWS:
 REMOVE EXISTING PLUMBING FIXTURES AND
- ASSOCIATED PIPING REMOVE EXISTING LIGHT FIXTURES AND
- ASSOCIATED CONDUITS REMOVE, SALVAGE AND RETURN ALL EXISTING
- REMOVE SALVAGE AND RETURN ALL EXISTING EXIT DEVICES REMOVE EXISTING PARTITIONS AS SHOWN DASHED SAW-CUT & REMOVE EXISTING FLOOR AS
- SHOWN DASHED
 REMOVE EXISTING FLOOR DRAIN AND WASTE
 PIPING

- PIPING
 REMOVE WATER AND WASTE LINE UP TO
 FIXTURE BEING REMOVED CAP AT MAIN
 REMOVE EXISTING TOLET PARTITIONS
 REMOVE EXISTING HEADS OF FIRE
 SUPPRESSION AND CAP TO MAIN
 REMOVE EXISTING WATER CLOSET WASTE
 STUB-UP AND ASSOCIATED UNTIT PIPING
 REMOVE EXISTING WATER CLOSET WASTE
 STUB-UP AND ASSOCIATED UNTIT PIPING

GENERAL DEMOLITION NOTES:

THE CONTRACTOR SHALL VERIFY WITH OWNER PRIOR TO ANY DEMOLITION WORK IF THERE AREA ANY AREAS OUTSIDE THE CONTRACT LIMITS WHICH MAY REQUIRE HIS WORK.

- THE CONTRACTOR MUST ACQUIRE OWNER'S APPROVAL PRIOR TO DISCONNECTING ANY BUILDING UTILITIES.
- THE CONTRACTOR SHALL VISIT AND INSPECT THE ENTIRE AREA OF WORK, FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS AFFECTING THE WORK AND ASCERTAIN THE EXTENT OF REMOVALS AND IF ANY.
- 4. ALL ALTERATIONS AND REMOVALS REQUIRED BY EXISTING CONDITIONS DISCOVERED BY THE CONTRACTOR IN THE FIELD AND MOT INDICATED ON THE DRAWINGS. SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH THIS WORK.
- 5. NOTES AND DRAWINGS MAY NOT BE ALL INCLUSIVE CONCEALED CONDITIONS WILL BE BROUGHT TO OWNERS REPRESENTATIVE WHEN FOUND PRIOR TO PROCEEDING WITH WORK.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND LEGAL DISPOSAL OF DEBRIS FROM PROJECT SITE. DISPOSAL IN OWNER'S TRASH CONTAINERS AND STORM SEWER SYSTEM WILL NOT BE ALLOWED.
- 7. DEMOLITION AND REMOVAL SHALL BE CONDUCTED IN A SAFE, NEAT, CLEAN AND WORKMANLIKE MANNER REMOVAL ON A DAILY BASIS, LEAVING ALL AREAS CLEAN, IS REQUIRED. PROTECT AREAS NOT DESIGNATED TO BE DEMOLISHED.
- DEMOLITION AND REMOVAL OPERATIONS SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL APPLICABLE LAWS AND CODES IN A MANNER AS TO AVOID DAMAGE TO PERSONS AND/OR DAMAGE TO ANY PROPERTY.
- 9. OPEN BURNING OR EXPLOSIVES WILL NOT BE ALLOWED.
- 10. CONTRACTOR SHALL BUILD A TEMPORARY WALL DUST BARRIER AROUND PROJECT AREA FROM FLOOR TO CELING. If MUST BE CONSTRUCTED TO PROPERTY SHEEP AND PROPERTY SHEEP ALL AROUND. IT SHALL BE PARHET OR BIT'S SIDES WITH LATE YEARNED SHEEP AND PROVIDE WHATEVER MANIFEMANCE IS REPED (SEALING PARTING, REVINE) AT WALL LURES AUTHORIZED NO MAINES WASHED PROPERTY OF THE PROPERTY OF
- FLOOR UNEVENNESS EXCEEDING ½" IN 20 FEET SHALL BE LEVELED AS PER SPECIFICATIONS, REFER TO CUTTING AND PATCHING.
- 12. FIRE HOSE CABINETS FIRE EXTINGUISHERS AND SMOKE DETECTORS SHALL BE KEPT OPERATIONAL DURING DEMOLITION WORK. EXTINGUISHERS SHALL BE REMOVED AND SALVAGED AT A LATER DATED. COORDINATE W/OWNER.
- EXISTING DOORS, FRAMES & HARDWARE TO BE REMOVED SHALL BE SALVAGED AND STORED, OR DISPOSED OF AS PER OWNER'S DIRECTION.
- PROTECT ALL EXISTING SAFETY SHOWERS, DUCTWORK, PIPING, FINISHES TO REMAIN IN AREAS UNDER DEMOLITION.
- 16. REMOVE EXISTING FLOOR AND/OR STRUCTURE TO BE DEMOLISHED, MUST BE ELIMINATED OR RELOCATED. THE CONTRACTOR MUST ACQUIRE OWNER'S APPROVAL PRIOR TO RELOCATION OR DEMOLITION OF THE UTILITY.
- ALL DEMOLITION DIMENSIONS RELATED TO OPENINGS TO BE CONSIDERED PER FINAL CONSTRUCTION DRAWINGS AND APPROVED SHOP DRAWINGS.

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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REV DATE DESCRIPTION BY CHICD

IMPORTANT NOTES TO THE CONTRACTOR: CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE PROCEEDING WITH WORK IF ANY DISCREPANCIES, ERRORS OR OMISSIONS PARTY TO CONTRACTOR, EMPORENCE OF CONTRACTOR

AND THE CONTRACTOR OF THE CONTRACTOR

AND THE CONT

CERTIFICATION

SPECIFICATIONS, I ALSO CERTIFY THAT I UNDERSTAND THAT SUD PLASS AND SPECIFICATIONS COMPTY WITH THE APPLICABLE PROVISIONS OF THE COURT REQUILATIONS AND THE APPLICABLE PROVISIONS OF THE REQUILATIONS AND BUILDING CODES IN FORCE OF THE RESILIZATIONS AND BUILDING CODES IN FORCE OF THE ADEROISE, BEIGULATION FOR IDARDS OR PURPLICABLY CORPORATIONS WITH JURISDICTION. I FURTHER CERTIFY THAT THE PERPARATION OF THESE PLANS





FILE Dwg Name: INGENIUM GROUP

Drawn by: INGENIUM GROUP

Plot Scale: AS SHOWN

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PARTIAL INTERIOR DEMOLITION PLAN - BUILDING 1

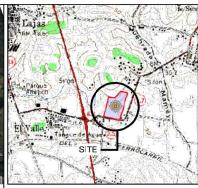
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FINAL 100% CIVIL PLANS SET FOR PR-CRP-00892 LAJAS SPORT COMPLEX

LAJAS, SAN JUAN PUERTO RICO







QUADRANGLE MAP: SCALE: 1:10.000

Coord. Nad83 X = 134735.0020 Y =223247.1505

- . IN CASE OF DISCREPANCY BETWEEN THESE NOTES AND THE CONSTRUCTION DRAWINGS, SPECIFICATIONS OR ANY REFERRED STANDARD, THE MORE RESTRICTIVE PROVISION SHALL APPLY.
- CONTRACTOR SHALL VERBY ALL DIMENSIONS AND EXISTING CONDITIONS FRIGHT TO CONSTRUCTION AND BEFORE ORIGINAL WEATHAIN DIFFERENCES BETWEEN FLANS AND ACTION, FRIGHT TO THE ATTENTION OF ENGINEER AND NOTION SHALL BE TAKEN UNTIL APPROVED BY ENONEER.
- SHOP DRAWINGS SHALL NOT BE REPRODUCTIONS, IN WHOLE OR IN PART, OF DRAWINGS PREPARED BY ENGINEER. SHOP DRAWINGS SHALL EE PEEPARED ENTRELF BY MANUFACTURER, FABRICATOR OR INSTALLER BASED ON INFORMATION WITHIN THESE DRAWINGS.
- ALL DIMENSIONS PERTAINING TO EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE STARTING ANY WORK OR FABRICATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING FEATURES WHICH ARE NOT PART OF THE CONSTRUCTION. IN THE EVENT OF ANY DAMAGE, CONTRACTOR SHALL RESTORE OR REPLACE THE DAMAGED FEATURES TO THE SATISFACTION OF THE CUENT REPRESENTATIVE AT NO COST.
- 6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBDONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPISHED AS SHOWN ON THE CONSTRUCTION DRAWNOS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR
- ALL MATERIALS FURNISHED AND INSTALED SHALL BE INSTIGLT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND KRDINANCES, SUBDONTRACTOR SHALL ISSUE ALL APPROPRIATE MOTICES AND CODEN, WITH LLAWS, GORNAMICES, RIVERS EGULATIONS, AND LIPWILL OBERS OF AMY PIBLIC AUTHORITY REGISTRONG AND UNITED AND CONTRACTOR OF A CONTRACT OF A
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

CIVIL PLANS INDEX OF DRAWINGS

- C-100 TITLE SHEET & INDEX
- C-200 GEOMETRIC PLAN
- C-201 GEOMETRIC TABLES
- C-300 GRADING PLAN
- C-301 GRADING SECTIONS
- C-400 RETAINING WALL PLAN C-401 RETAINING WALL PROFILES PART-1
- C-402 RETAINING WALL PROFILES PART-2
- C-403 RETAINING WALL DETAILS PART-1
- C-404 RETAINING WALL DETAILS PART-2 C-500 STORM SEWER PLAN
- C-501 STORM SEWER PROFILES
- C-502 STORM SEWER DETAILS
- C-300 UTILITIES SITE PLAN
- C-700 CIVIL DETAILS

FROJECT ADDRESS

PR-CRP-00892: LAJAS SPORT COMPLEX,LAJAS

CWNER LAJAS MUNICIPALITY

REV. DATE DESCRIPTION BY CHK'D

IMPORTANT NOTES TO THE CONTRACTOR-





Ewg Name: C-100 CIVIL TITLE SHEET_SPORT COMPLEX.DWG Erawn by: A.M.G.

Revised by: W.R.U.

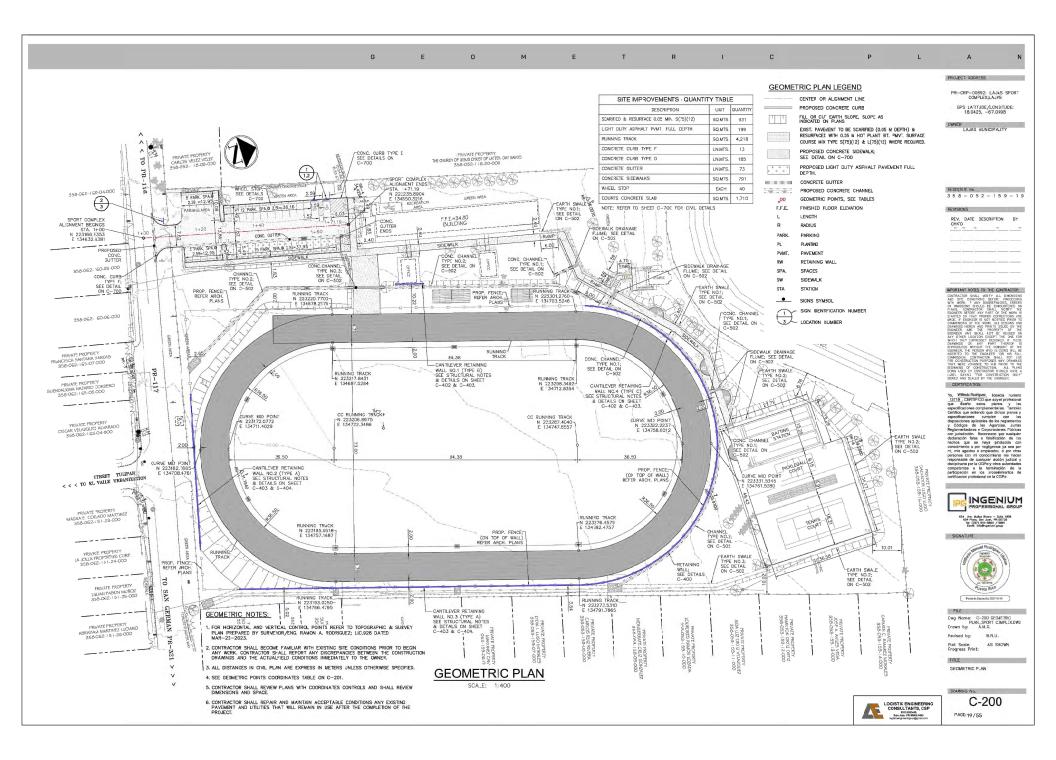
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TITLE SHEET & INDEX

PAGE:18/55

C-100





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1347' 3.3853 CENTER OF CURVE

SIDEWALK GEOMETRIC TABLE

2.94 N80* 30' 07"W 223340.3068 134747.8271 CENTER OF CURVE 13.93 N90° 00' 00"W 223340.7918 134744.9284

POIN" NO. DISTANCE BEARING COORDINATES N CCORDNATES E DESCRIPTION

2.92 S37* 35' 27"W 223329.4510 134715.1665

4.42 N42" 32' 58"W 223316.2321 134700.7657

3.92 N14* 18' 36"E 223319.4880 134697.7770

5.24 S42° 32' 58"E 223319.0652 134696.0964

2.02 NBI* 16' 09"W 223240.6649 134641.9488 SIDEWALK CORNER

13.54 S57* 27' 02"W 223340.7918

6.00 S47* 27' 02"W 2233333.5083

2.92 S57* 18' 36"W 223327.1372

13.79 S47* 27' 02"W 223325.5601

4.19 S75" 41' 24"E 223323.2892

1.48 N14" 17' 59"F 223322.2525

1.52 S14* 18' 36"W 223325.6698

2.13 S75" 41" 24"E 223324.1931

4.75 S1+' 18' 36"W 223323.6659

10.96 S47* 27' 02"W 223315.2015

15.75 S83* 47' 48"W 223307.7920

69.99 S13* 15' 22"W 223306.0897

1.83 S14" 23' 01"W 223237.9604

18.02 N75* 36' 59"W 223236.1882

7.85 N75' 21' 24"W 223323.6850

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PROJECT ADDRESS

PR-CRP-00892: LAJAS SPORT CDMPLEX,LAJAS

GPS LATITUDE/LONGTUDE: 18.0425, -67.0498

OWNER LAJAS MUNICIPALITY

REGISTER No. 358-052-159-19

REVISIONS

REV. DATE DESCRIPTION BY

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CERTIFICATION



SIGNATURE



FILE Revised by: W.R.U.

Plot Scale: AS SHOWN Progress Print:

TILE GEOMETRIC TABLES

LOGISTIC ENGINEERING CONSULTANTS, CSP	l
BCX 912040	ı
San Juan, PR 00162-0460 logisticeng/reningrepthamas.com	l

	SIDEWALK GEOMETRIC TABLE								
POINT NO.	DISTANCE	BEARING	COORDINATES N	COCRDINATES E	DESCRIPTION				
32	57.53	N14" 23' 01'E	223177.5446	134646.8440	SIDEWALK CORNER				
33	12.00	S75' 36' 59'E	223233.2672	134661.1340	SIDEWALK CORNER				
34	3.06	S72' 32' 58'E	22323C.2863	134672.7579	CONC. SIDEWALK				
35	9.14	N17' 27' 07'E	223227.8686	134680.4488	RUNNING TRACK CORN				
36	8.31	N72' 32' 58'W	22323£.5917	134683.1912	RUNNING TRACK CORN				
37	12.34	N75' 36' 59'W	223239.0828	134675.2665	CONC. SIDEWALK				
39	10.27	N13' 15' 22'E	223242.1485	134663.3123	SIDEWALK CORNER				
40	1.80	S78' 52' 32'E	223252.1447	134665.6672	SIDEWALK CORNER				
41	1.30	N14' 04' 08'E	223251.7983	134667.4293	OFFICE CORNER				
42	1.81	N78" 41' 21"W	223252.0589	134667.7452	OFFICE CORNER				
43	25.92	N13' 15' 22'E	223253.4147	134565.9664	SIDEWALK CORNER				
44	1.95	S76' 25' 45'E	223278.6436	134671.9099	SIDEWALK CORNER				
45	1.30	N12" 42' 13'E	223278.1872	134673.8006	OFFICE CORNER				
46	1.93	N76' 25' 45'W	223279.4555	134674.0865	OFFICE CORNER				
47	24.63	N13' 15' 22'E	223279.9089	134672.2080	SIDEWALK CORNER				
48	14.84	N83' 47' 48'E	223303.8872	134677.8568	SIDEWALK CORNER				
49	13.27	N47° 27' 02'E	223305.4911	134692.6134	SIDEWALK CORNER				
50	25.34	N47* 27' 02'E	223314.4640	134702.3886	SIDEWALK CORNER				
51	12.63	N57° 27' 02'E	223331.5983	134721.0550	SIDEWALK CORNER				
52	1.50	S90, 00, 00,E	22333E.3918	134731.6983	SIDEWALK CORNER				
53	2.92	N80" 08' 26'E	22333£.3918	134733.1963	SIDEWALK PC				
54	2.92	S80' 08' 26'E	223338.8918	134736.0732	CENTER OF CURVE				
55	19.75	N90" 00' 00'E	22333E.3918	134738.9501	SIDEWALK PT				
56	49.46	N90" 00' 00'E	22333£.3918	134758.6983	BATTING STATION CORNER				
57	36.58	NO. 00, 00.E	22333£.3918	134808.1558	TENNIS COURT COFN				
58	34.17	N90. 00, 00,M	223374.9718	134808.1558	TENNIS COURT COFN				
59	5.47	S0' 00' 00"E	223374.9718	124773.9831	FICKLEBALL COURT CORNER				
60	15.29	N90' 00' 00'W	22336£4998	134773.9891	PICKLEBALL COURT				
61	27.7	S0' 00' 00"E	223368.4998	134758.6983	BATTING STATION CORNER				
62	7.99	N89' 59' 28'W	223340.7913	134758.6983	BATTING STATION COR				
63	2.92	S80' 25' 29'W	22334C.7925	134750.7064	SIDEWALK PC				

		SIGNING TA	BLE			
CODE NUMBER	LOCATION NUMBER	LEGEND	REFERENCE MANUAL	SIZE OF SIGN PANELS	SIGN CODE	TOTAL
1	1	PARE	SEE D.T.P.W. MANUAL	30" x 30"	R1-1	1
1	1, 2, 3	ESICOMENTO RESERVADO	SEE DETAIL ON C-700	12" × 18"	R7-8	3

EDGE OF PAVEMENT / CLIRB GEOMETRIC TABLE

CLIDE TYPE E RECINS

CENTER OF CURVE

CURB PT

CLIFE TYPE E REGINS

CONC. SHALLOW GUTTER BEGINS

CENTER OF CURVE

CURB PT

CURB CORNER

CURB CORNER

CURB PC

CENTER OF CURVE

CURB PT

134658 4931

134653.7692

134653 3301

134630.6969

134635.2732

134634.8946

134625 1191

134628 7052

134626.5369

CURB CORNER

CURB CORNER

CURB PC

CENTER OF CURVE

CURB TYPE D END

CURB CORNER

CURB CORNER

CURB CORNER

CURB PC

CENTER OF CURVE

CURB PT

CURB CORNER

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CURR PT

CURB PC

CENTER OF CURVE

POINT NO. DISTANCE BEARING COORDINATES N COORDINATES E DESCRIPTION

4.57 N13" 56' 58"E 223 68.5520 134641.7417

4.57 N75* 36' 59"W 223:72.9892 134642.8438

0.72 N14' 23' 01"E 223174.1249 134638.4151

3.92 N14' 23' 01"E 223'74.8247 134638.5946

C.91 S75' 36' 59"E 223 78.6236 134639.5688

C.91 N14' 23' 01"E 223'78.3965 134640.4546

4.57 S75' 36' 59"E 223'79.2822 134640.6817

12.95 N14' 23' 01"E 223178.1465 134645.1104

4.72 N75* 36' 59"W 223:90.6944 134648.3283

0.76 N14' 23' 01"E 223191.8680 134643.7520

0.76 N14' 23' 01"E 223/92.5061 134643.9413

4.72 \$75° 36' 59"E 223'93.3443 134644.1306

39.40 N14° 23' 01"E 223192.1707 134648.7069

C.61 N75* 36' 59"W 223232.1331 134653.9206

13.11 N75* 36* 59"W 223235.0844 134654 0481

42.90 S14' 23' O1"W 223238.3401 134641.3526

0.76 S14' 23' 01"W 223 94.8776 134635.0839

3.05 S14* 23* O1"W 223|82,1594 134629,4624

2.79 S14* 23' 01"W 223:78.4498 134631.6577 4.57 N75" 36' 59"W 223175.7513 134630.9656

31 2.36 S48" 17' 33"W 223 72.4526 134625.4240 CURB "YPE D ENDS / CONC. SHALLOW CUTTER BEGINS

4.88 N75* 36' 59"W 223230.3312

C.61 N14' 23' 01"E 223231.5427

2.89 N14' 23' 01"E 223232.2846

4.72 \$75° 36' 59"E 223 96.7893

0.76 S14* 23' 01"W 223I95.6157

10.09 N75* 36' 59"W 223194.1395

12.95 S14' 23' 01"W 223' 96.6464

7.81 \$75° 36' 59"E 223'84.0985

3.05 S75' 36' 59"E 223 79.2069

4.57 \$14' 05' 19"W 223| 76.3871

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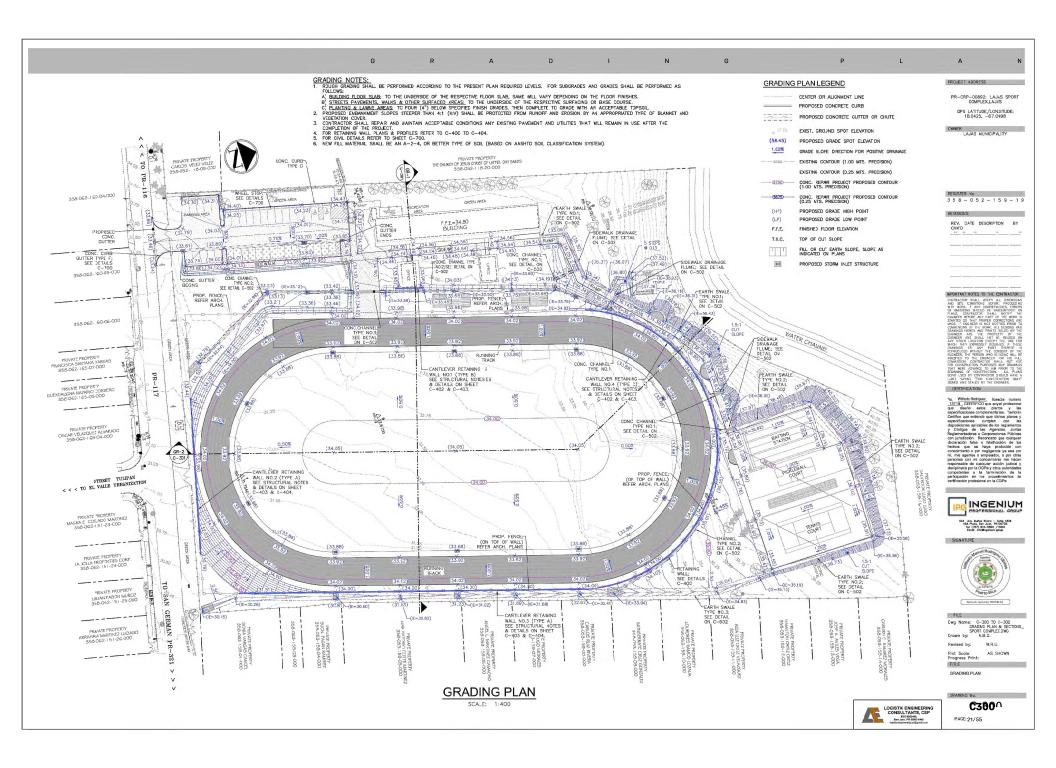
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LOGISTIC ENGINEERING
CONSULTANTS, CSP
BCX 9920463, San Jan, PR 90162-0468

C-201 PAGE: 20/55

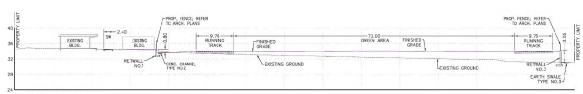


C T I

FROJECT ADDRESS

PR-CRP-00892: LAJAS SPORT COMPLEX,LAJAS

CWNER LAJAS MUNICIPALITY



GRADING SECTION GR-1 SCALE: 1:300



GRADING SECTION GR-2

FEGISTER No. 3 5 8 - 0 5 2 - 1 5 9 - 1 9

REVISIONS REV. DATE DESCRIPTION BY CHK'D

IMPORTANT NOTES TO THE CONTRACTOR:



SIGNATURE



Dwg Name: C-300 TO S-302
GRADING PLAN & SECTIONS_
SPORT COMPLEX.DWG

Erown by: A.M.G.

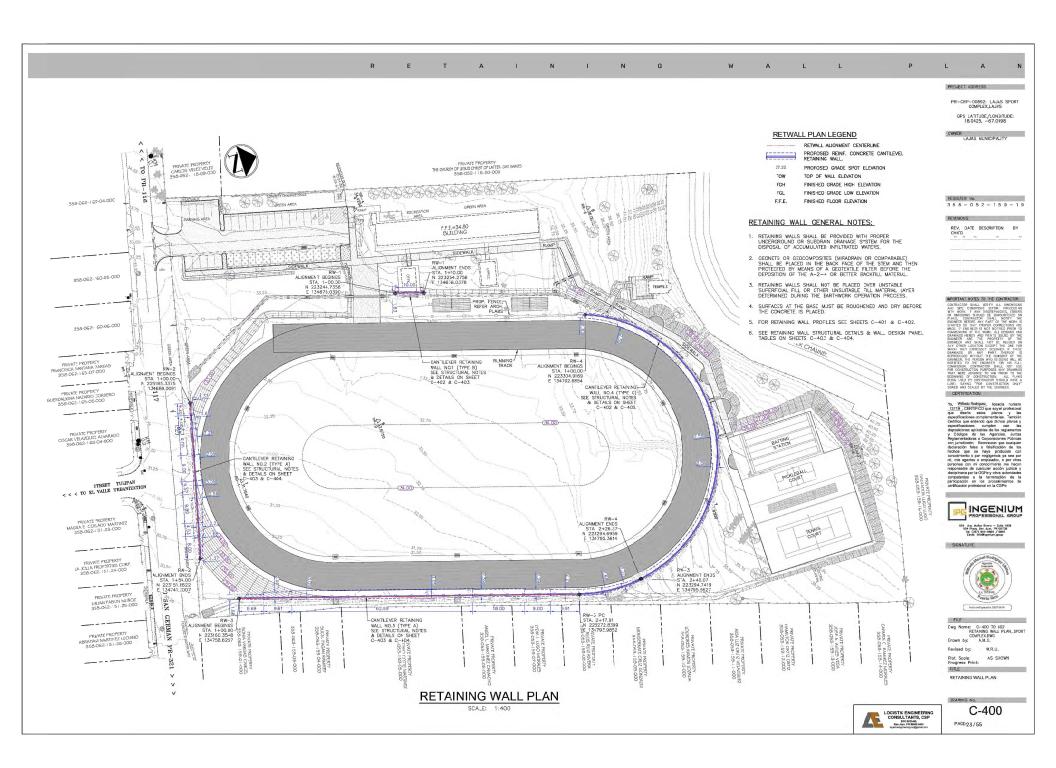
Revised by: W.R.U. Plot Scale: AS SHOWN Progress Print: TITLE

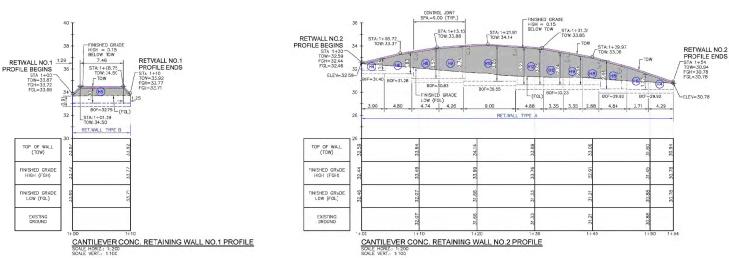
GRADING SECTIONS

DRAWING No. PAGE:22/55

LOGISTIC ENGINEERING CONSULTANTS, CSP 10X 8020400, Sam. Ass., PR 80292-4461 (applicable) and Ass., PR 80292-4461 (applicab

~C301





27.00

TOP OF WALL (TOW) FINISHED GRADE

HIGH (FGH) FINISHED GRADE LOW (FGL)

CANTILEVER CONC. RETAINING WALL NO.3 PROFILE
SCALE HORIZ: 1:200

SCALE HORIZ.: 1:200 SCALE VERT.: 1:100

FROJECT ADDRESS

PR-CRP-00892: LAJAS SPORT COMPLEX,LAJAS

CPS LATITUDE/LONGITUDE: 18.0425, -67.0198

CWNER LAJAS MUNICIPALITY

REGISTER No. 3 5 8 - 0 5 2 - 1 5 9 - 1 9

RETWALL PROFILE LEGEND

REVISIONS REV. DATE DESCRIPTION BY CHK'D

IMPORTANT NOTES TO THE CONTRACTOR:



SIGNATURE



Dwg Name: C-400 TO +02
RETANING WALL PLAN_SPORT
COMPLEX.DWG
Drawn by: A.M.G.

Revised by: W.R.U. Plot Scale: Progress Print: AS SHOWN

RETAINING WALL SECTIONS PART-1

LOGISTIC ENGINEERING CONSULTANTS, CSP 10X 90X446, Sep 10X 90X46, Sep 10X 90X46, Sep 10X 90X46, Sep 10X 90X46,

RETWALL NO 3 PROFILE ENDS

STA 1+00 TOW=34.15 FGH=34.00 FGL=34.00

BOF=3259

7.03

34.00

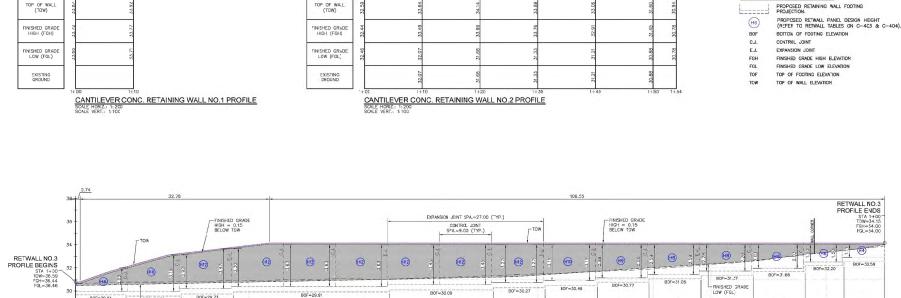
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B0F=32.20

9.00

9.00

DRAWING No. C-401 PAGE:24/55



18.00 RET.WALL TYPE A



PR-CRP-00892: LAJAS SPORT COMPLEX,LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498

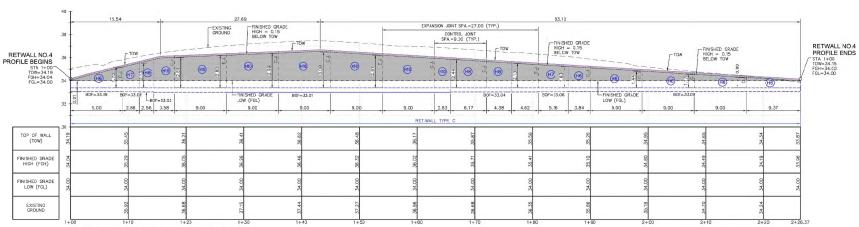
EWNER
LAJAS MUNICIPALITY

REGISTER No. 3 5 8 - 0 5 2 - 1 5 9 - 1 9

REVISIONS

REV. DATE DESCRIPTION BY CHK'D

IMPORTANT NOTES TO THE CONTRACTOR:



CANTILEVER CONC. RETAINING WALL NO.4 PROFILE SCALE HORIZ: 1:200 SCALE VERT.: 1:100

RETWALL PROFILE LEGEND

PROPOSED RETWALL PANEL DESIGN HEIGHT (REFER TO RETWALL TABLES ON C-403 & C-404). (46)

EOF BOTTOM OF FOOTING ELEVATION

C.J. CONTROL JOINT

EXPANSION JONT

FGH FINISHED GRACE HIGH ELEVATION

FINISHED GRACE LOW ELEVATION TOP OF FOOTING ELEVATION

TOP OF WALL ELEVATION

INGENIUM

CERTIFICATION



Ewg Nome: C-400 TO 402
RETAINING WALL PLAN_SPORT
COMPLEX.DWG
Erown by: A.M.G.

Feviaed by: W.R.U.

Flot Scale: AS SHOWN Frogress Print:

RETAINING WALL SECTIONS PART-2

LOGISTIC ENGINEERING
CONSLLTANTS, CSP
DOX 100008.
Ben Jain, Ph. 0002-0460
(opticonoplensingno) gaparal com

DRAWING No. C-402 PAGE:25/55

GENERAL NOTES:

REINFORCED CONCRETE

- 1. ALL CONSTRUCTION AND DESIGN WORK SHALL BE N ACCORDANCE WITH THE LATEST EDITION OF THE "BUILDING CCDE AND REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318).

 2. CONCRETE SHALL DEVELOP A 28 DAY COMPRESSIVE STRENGTH AS
- FOLLOWS:
- RETAINING WALLS (W/C = 0.58) RETAINING WALLS (W/C = 0.58)

 3,000 PSI

 3, REINFORCING BARS S-HALL BE NEV BILLET DEFORMED HIGH STRENGTH

 STEEL, CONFORMING TO THE LATEST EDITION OF ASTM A-615. (MINIMUM

 YIELD STRENGTH = 60,000 PSI, MAXINUM YIELD STRENGTH = 78,000
- YELD STRENDTH 60,000 PSI, MAXIMUM YELD STRENDTH 78,000 PSI, MONIMUM ULTIMANE TENSELS ETREDETH 122 YELD STRENDTH)

 4. ALL OND STRENDTH OF THE CONCRETE SURFACES WILL COMPORE TO THE STRENDTH OF THE STREN
- THICKNESS OF PLASTER OR ANY OTHER CONCRETE FINISH.

 7. UNLESS INDICATED, MINIMUM CONCRETE COVER FOR REBARS SHALL BE AS FOLLOW-
- FOOTINGS (SID: AND BOTTOM) FOOTINGS (TOP) 2 IN.

 8. ALL CONDUITS, INSERTS, BOLTS AND PLATES SHALL BE HOLD
- ACCURATELY IN PLACE BEFORE CONCRETE IS POUFED.

GEOTECHNICAL NOTES

- 1. RETAINING WALLS SHALL BE PROVIDED WITH PROPER UNDERGROUND OR SUBDRAIN CRAINAGE SYSTEM FOR THE DISPOSAL OF ACCUMULATED INFILTRATED WATERS

- INFLITATED WATERS

 2. A CONTINUES BACK DRAIN SHOULD BE LOCATED MBOVE THE BASE OF
 THE RETAINING MALLS. THE DRAIN SHOULD CONSIST OF A
 PERFORATE PIPE HAWING A DAMETER OF ABOUT E INCHES COVERED
 WITH CHUSHED STORE WITH NO "INES.
 3. THE PERFORATED PIPE WAIST BE WAUPPED WITH A SUITABLE
 GEOTETILE AND CONNECTED TO STORM SEWER SYSTEM.
 4. GEONETS OF GEOCOMPOSITIES (MIRADRAIN OR COMPANIBLE) SMALL BE
 PLACED IN THE BACK FACE OF THE STEM AND THEN PROTECTED BY
 MEANS OF A COLOTEXTIE FLITTER SPORE THE DEFOSIONION OF THE A-2-4 BACKFILL.
- A-2-4 BACKFILL

 A. PA-2-4 BACKFILL

 A. REVARING WALLS SHALL NOT BE PLACED OVER VISSTABLE SUPERFICIAL

 B. REVARING WALLS SHALL NOT BE PLACED OVER VISSTABLE SUPERFICIAL

 THE EARTHOUGH OPERATION PROFESS.

 SUBFACES AT THE BASE MUST BE ROUGHEND AND DRY BEFORE THE
 CONCRETE BY PLACED.

 B. GREAT CARE IS REQUIRED TO AVOID OVER-COMPACTION BEHAN THE
 RETAINING WALL, OTHERWISE, THE WALL MAY BE KEPLACED. OR
- OVER-STRESSED.

 7. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL RECOMMENDATIONS.

RETAINING WALL DESIGN DATA:

SOIL PROPERTIES

1.ALLOWABLE SOIL BEARING PRESSURE - SEE TABLE 2,000 PSF
2.BACKFILL SLOPE LEVEL (TYPE A & 3LIVE LOAD SURCHARGE 0.00 PSF LEVEL (TYPE A & B); 2:1 (TYPE C) 0.00 PSF

4.BACKFILL SOIL
4.1. INTERNAL FRICTION ANGLE
4.2. BACKFILL WOIST UNIT WEIGHT
4.3. COEFFICIENT OF ACTIVE PRESSURE
4.4. COHESION, C 32' 130 PCF 0.35 NEGLECTED

5.THE BASE OF THE RETAINING WALL SHALL 3E LOWERED TO A MINIMUM DEPTH OF 3.0-FT BELOW EXISTING GROUND.

6.SEISMIC LOADING

6.1. AVALYSIS METHOD: 6.2. DESIGN ACCELERATION, Kh 6.3. ALLOWABLE SCIL PRESSURE INCREASE: MONONOBE-OKABE 0.18 33%

LEGEND:

B.O.F. BOTTOM OF FOOTING F.G. FINISHED GRADE

FGH FINISHED GRADE HIGH ELEVATION

FINISHED GRADE LCW ELEVATION

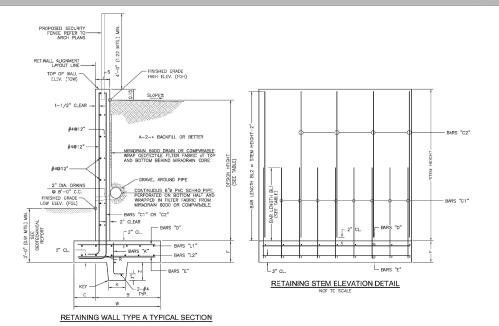
FGL H6 DESIGN HEIGHT ID (SEE RET.WALL TABLE)
(# REPRESENT DESIGN HT. IN FEET)

RETAINING WALL RW

STATION STA. TOW TCP OF WALL

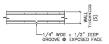
NOTES:

FOR RETAINING WALL PLANS & PROFILES ELEVATIONS SEE SHEETS C-400 TO C-402.
 FOR RETAINING WALL TYPE ID REFER TO PROFILES.

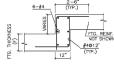


3/4" .T. FILLER MATERIAL REINFORCEMENT

EXPANSION JOINT AT RET. WALL



CONTROL JOINT AT RET. WALL



FOOTING STEP DETAIL

	RET	AINING WA	LL TYPE A	DATA TAE	BLE	
RW PANEL ID.	H4	H6	F8	H9	H10	H12
w	3'-6"	4'-6"	6'-3"	6'-6'	7'-6"	9'-0"
С	1"-0"	1'-0"	1'-6"	1'-6'	1'-6"	2"-0"
В	2'-6"	3'-6"	4'-9"	5'-0'	6'-0"	7'-0"
F	12"	12*	14"	14"	16"	18"
STEM, S	8"	8"	1)"	10"	12*	12"
BARS "C1"	#409"	#4@9"	#508"	#5 0 7'	#608"	#7096"
DIST BL1	=BL2	=BL2	4'-0"	4'-0'	4'-0"	4'-0"
BARS "C2"	NONE	NONE	#5@16"	#5@14"	#6@18"	#7012"
BARS "D"	#409"	₩4@9"	#598"	#5@7'	#6©8"	#7096"
BARS "L1"	4-#4	7-#4	9-#4	10−#4	12-#4	12-#4
BARS "L2"	NONE	NONE	6-#4	7-#4	8-#4	8-#4
BARS "E"	NONE	NONE	#5012"	#5@12"	#5@3"	#598"
KEY, (KxZ)	NONE	NONE	NCNE	NONE	12"x12"	12"x12"
BARS "K"	NONE	NONE	NCNE	NONE	#5@8"	#598"
ALLOW. SOIL BEARING	2,000 PSF	2,000 PSF	2,300 PSF	2,500 PSF	3,000 PSF	3,000 PSF

CANTILEVER CONCRETE RETAINING WALL TYPE A DETAILS

NOT TO SCALE (MAX HEIGHT = 12FT = 3.56 NTS.)

FROJECT ADDRESS

PR-CRP-00892: LAJAS SPORT COMPLEX, LAJAS

CWNER LAJAS MUNICIPALITY

FEGISTER No. 358-052-159-19

FEVISIONS REV. DATE DESCRIPTION BY

IMPORTANT NOTES TO THE CONTRACTOR:

CONTRACTOR SHALL VERFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE PROCEEDING WITH WORK, F ANY DISCREPANCES, ERRORS AND THE PROPERTY OF THE PROPER

CERTIFICATION

Yo, Wifinedo Rodríjusz, licescia numero 13719, CERTIFIDO que soy el profesional que deseño edos plaros y las especificaciones complementarias. Tembién Certifico que entendo que disteño planos y especificaciones cumplem con las deposiciones aplicables de los regilementos y Códigos de las Agentass, Junea Regiamentadoras o Corporaciones "Atlácias



SIGNATURE



FILE Dwg Name: C-403 TO >-404
RETAINING WALL PLAN_SPORT
COMPLEX.DWG

Grawn by: A.M.G.

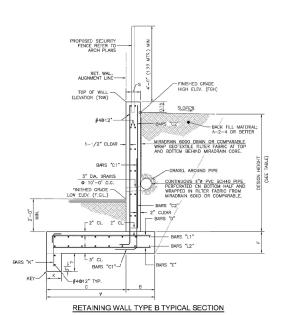
Revised by: W.R.U. Plot Scale: Progress Print: AS SHOWN

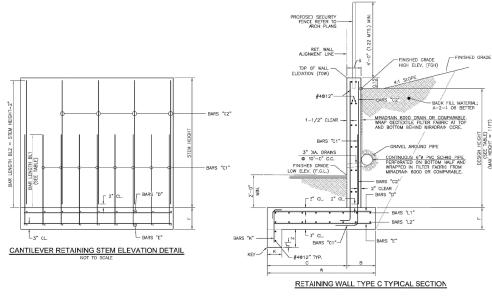
TITLE

RETAINING WALL DETAILS PART-1

DRAWNG No. C-403 PAGE:26/55







RET. WALL	TYPE B DA	ATA TABLE
RW PANEL ID.	H4	H5
W	N /	4'-6"
С	1 /	3'-2"
В	\ /	1'-4"
F	1 /	12"
STEM, S	\ \ /	8"
BARS "C1"	1/	#4@8*
DIST EL1	V	=BL2
BARS "C2"	Α	NONE
BARS "D"	/\	#4@8*
BARS "_1"	7.5	6-#4
BARS "_2"	7	6-#4
BARS "E"	/ \	#4@8"
KEY, (KxZ)	7	NONE
BARS "K"	7	NONE
ALLOW. SOIL BEARING	2,000 PSF	2,000 PSF

CANTILEVER CONCRETE RETAINING WALL TYPE B DETAILS

		RE	TAINING WA	LL TYPE (DATA TAE	BLE		
RW PANEL ID.	H4	H5	H6	H7	H8	H10	H12	HI4
w	Λ /	4'-C"	5'-0"	5'-9"	7'-6"	8'-6"	1	1
С	\ /	2'-8"	3'-8"	4'-3"	6'-C"	6'-3"	1 /	1 /
В	\ /	1'-4"	1'-4"	1'-6"	1'-6"	2'-6"	\ /	1 /
F	1 /	12"	12"	13"	14"	15"	1 /	\ /
STEM, S	17	8"	8*	9"	10"	12"	1 7	1 /
BARS "C1"		#4@9"	#409"	#5@10"	₹5@8"	#7@8"		1/
DIST BL1	V	=BL2	=BL2	=BL2	÷,-0,	4'-0"	V	V
BARS "C2"	Λ	NONE	NONE	NONE	#5@16"	#7916"	A	Λ
BARS "D"		#4@9"	#409"	#5@10°	₹5@8"	#698"	/ \	/ \
BARS "L1"	7.1	6-#1	7-#4	8-#4	9-#4	10-#4	7.1	7 1
BARS "L2"	/ \	5-#4	7-#4	8-#4	9-#4	10-#4	/ \	/ A
BARS "E"	7	#4@9"	#4@9	#5@10"	₹5@8"	#608"	/ \	/ \
KEY, (KxZ)	/	NONE	NONE	NONE	12"x12"	12"x12"	7 \	/
BARS "K"	V V	NONE	NONE	NONE	#5@10"	#5910"	7	/
ALLCW. SOIL BEARING	2,000 PSF	2,500 PSF						

CANTILEVER CONCRETE RETAINING WALL TYPE C DETAILS

NOT TO SCALE

PROJECT ADDRESS

PR-CRP-C0692: LAJAS SPORT COMPLEX,LAJAS

EWNER LAJAS MUNICIPALITY

REGISTER No. 358-052-159-19





FILE Cwg Name: C-403 TO C-404
RETAINING WALL PLAN_SPORT
COMPLEX.DWG
Crawn by: A.M.G.

Revised by: W.R.U. Flot Scale: AS SHOWN Frogress Print:

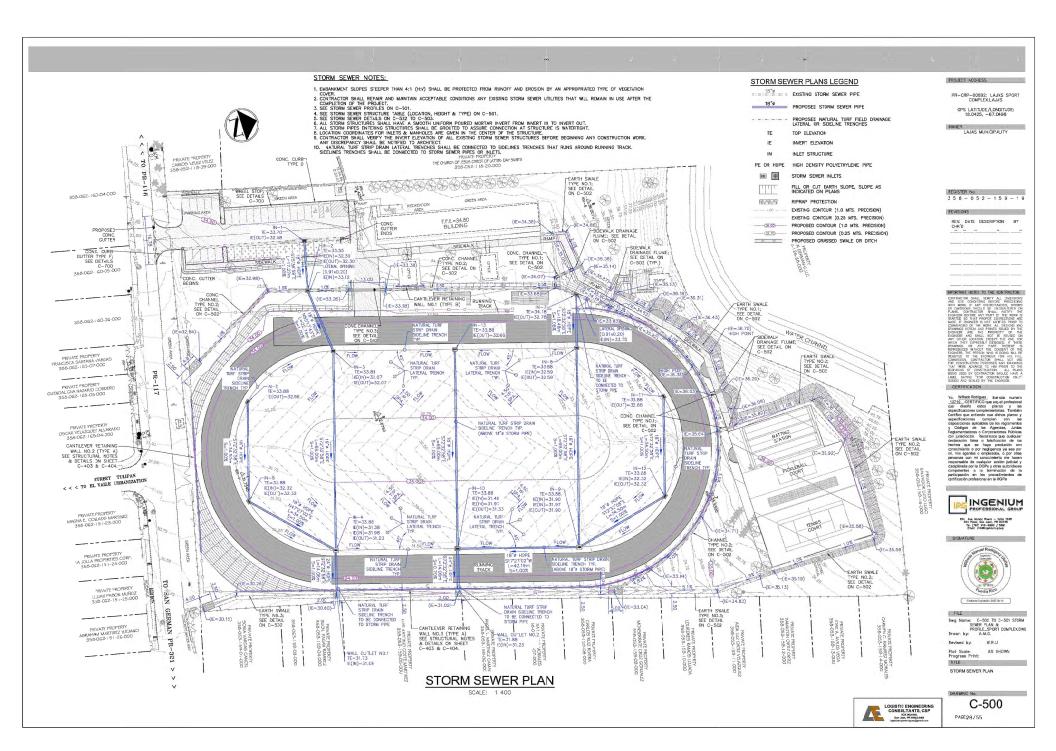
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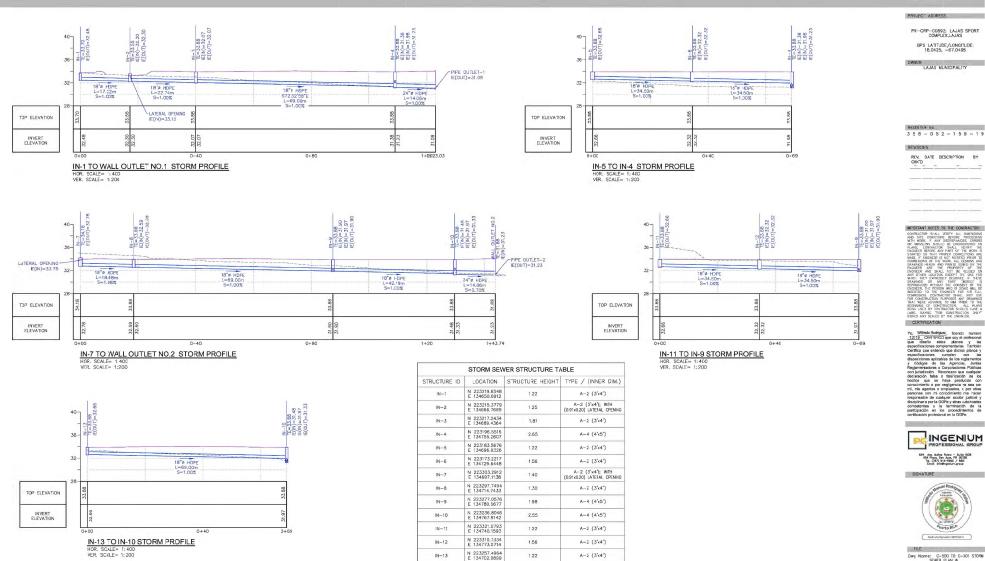
RETAINING WALL DETAILS PART-2

C-404



PAGE: 27/55





STORM SEWER PROFILES

WALL DUTLET NO.1

WALL OUTLET NO.2 N 223232.5868 E 134781.3317

N 223192.3338 E 134768.6782

0.65

0.65

0.61 Ø VALL OPENING



PR-CRP-00892: LAJAS SPORT

REV. DATE DESCRIPTION BY CHK'D

IMPORTANT NOTES TO THE CONTRACTOR:





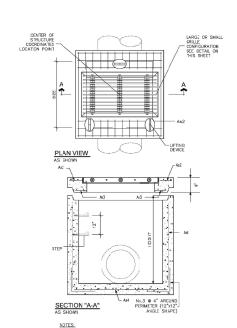
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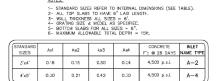
Revised by: W.R.U. Plo: Scale: Progress Print: TILE AS SHOWN

STORM SEWER PROFILES

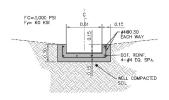
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C-501 PAGE: 29/55

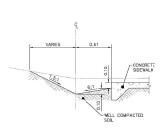




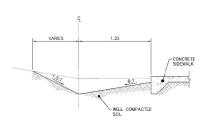
INLET TYPE "A-2 & A-4 SINGLE GRILLE" DETAIL NOT TO SCALE

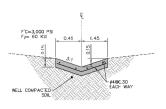


CONC. CHANNEL TYPE NO.1

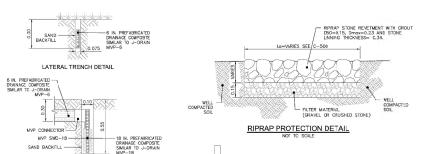


EARTH SWALE TYPE NO.1 DETAIL
SCALE 1:20



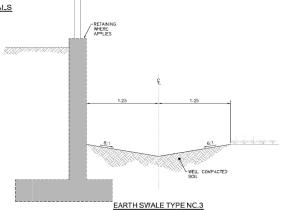


CONC. CHANNEL TYPE NO.2

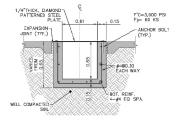


NATURAL TURF STRIP DRAINAGE DETAILS

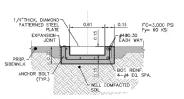
SIDELINE TRENCH DETAIL



EARTH SWALE TYPE NO.2 DETAIL



CONC. CHANNEL TYPE NO.3



NOTES:

1. #Y44" ANCHOR BOLTS TO BE PLACED WITH CONCRETE AND FLUSH WITH TOP OF PLATE, 30LTS TO BE SPACED 12" ON CENTER.

2. CONCRETE SHALL BE F'C= 3,000 PSI.

SIDEWALK DRAINAGE FLUME DETAIL

PROJECT ADDRESS

PR-CRP-00892: LAJAS SPORT COMPLEX,LAJAS

CWNER LAJAS MUNICIPALITY

REGISTER No. 358-052-159-19

REVISIONS

IMPORTANT NOTES TO THE CONTRACTOR:





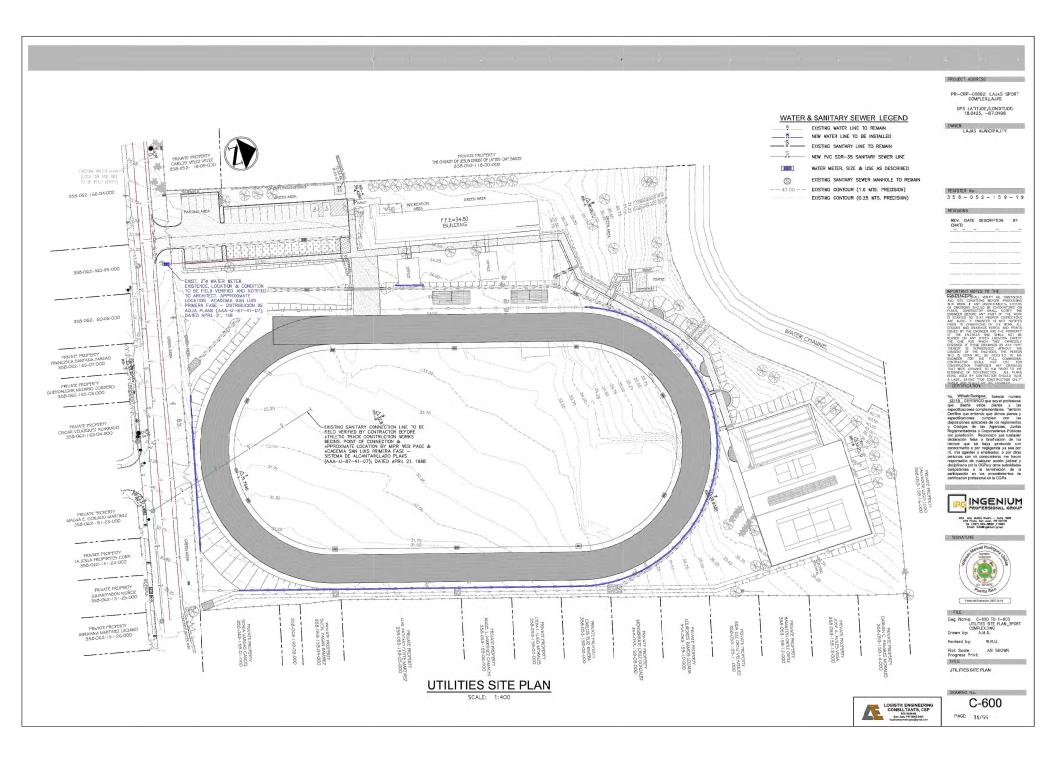
FILE Ewg Name: C-502 STORM SEWER
DETAIL_SPORT COMPLEX.EWG
Erawn by: A.M.G.

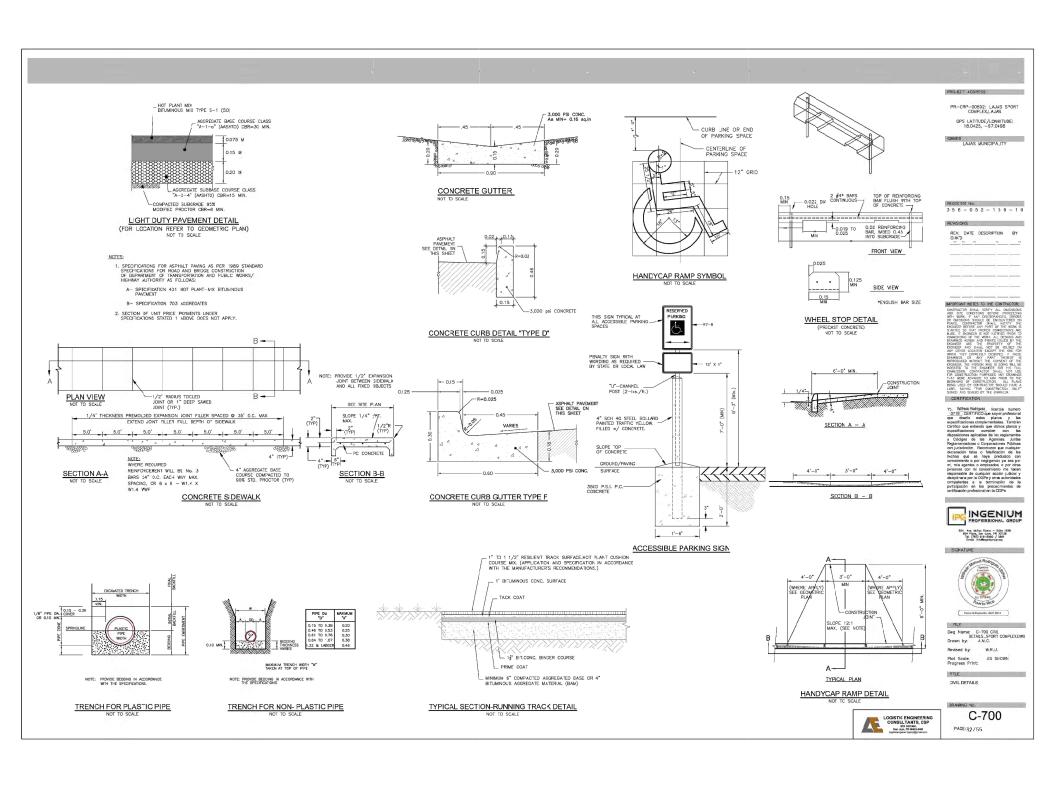
Revised by: W.R.U. AS SHOWN

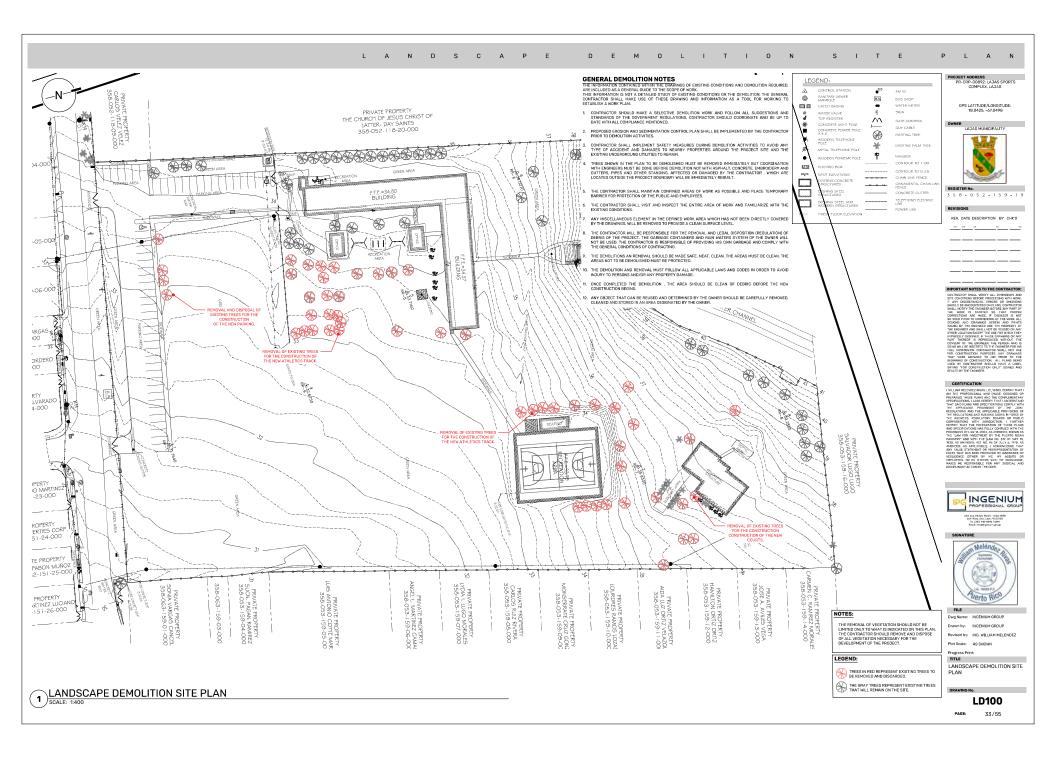
TITLE STORM SEWER DETAILS

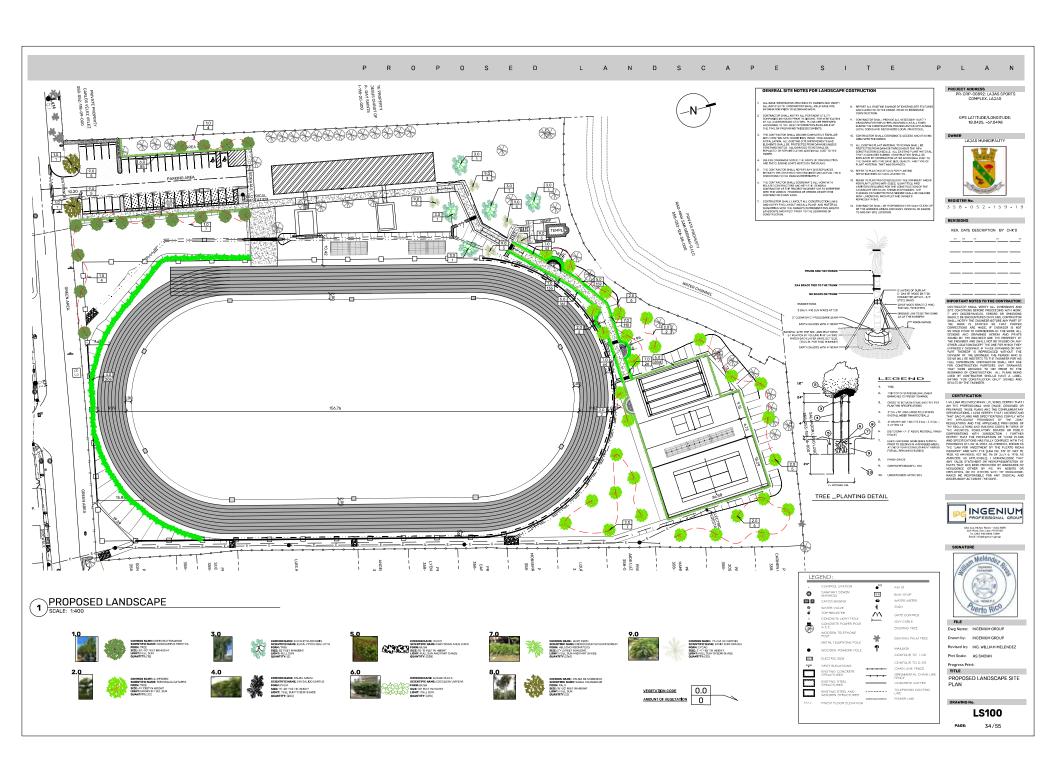
DRAWING No. C-502 PAGE:30/55











GENERAL NOTES:

THESE GENERAL NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.

3. CONTRACTOR AND ALL TRADES SHALL NOTE REQUIREMENTS OF "GENERAL NOTES" ON ALL SHEETS.

5. THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO VERIFY EXISTING CONDITION AND IDENTIFY VISIBLE PROBLEM AREAS OR DIFFICULTIES IN ORDER TO INCLUDE ALL COST IN BASE BID.

6. IF SPACE IS AVAILABLE, THE OWNER MAY PERMIT THE CONTRACTOR TO STORE SOME MATERIALS, EQUIPMENTS AND TOOLS ON THE STEE IN AN AREA APPROVED BY THE OWNER. THE CONTRACTORS ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL STORED MATERIALS, EQUIPMENTS AND TOOLS.

7. THE GENERAL CONTRACTOR SHALL CHECK AND VERFY ALL DIMENSIONS AND GRADE CONDITIONS, (BOTH NEW AND EXISTING) REPORTING ANY DISCREPANCIES TO THE ARCHITECT/ EXGINEER PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH ANY PHASE OF THE WORK.

11. THE CONTRACTOR SHALL COMPARE STRUCTURAL SECTIONS WITH ARCHITECTURAL SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT/ENGINEER PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.

12. REFER TO ALL CONSTRUCTION DOCUMENTS FOR REQUIREMENTS WHICH MAY AFFECT THE WORK IN ANOTHER DISCIPLINE AND COORDINATE WORK.

13. DIMENSIONS ARE FACE OF CONCRETE, FACE OF MASONRY, AND CENTER LINE OF ANY PARTITIONS UNLESS INDICATED OTHERWISE.

14. REFER TO DETAILS FOR ADDITIONAL DIMENSIONAL INFORMATION.

18. DO NOT SCALE DIMENSIONS FROM DRAWINGS, THE CONTRACTOR SHALL REQUEST, FROM THE ARCHITECT/ ENGINEER NECESSARY DIMENSIONS NOT SHOWN ON THE DRAWINGS. 19. IF ANY BIDDER IS IN DOUBT AS TO THE INTENT OF THE PLANS OR SPECIFICATIONS, THEY SHALL REQUEST AN INTERPRETATION FROM THE ARCHITECT/ENGINEER IN WRITING AT

22. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIFFECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR

25. THE CONTRACTOR SHALL PROVIDE ON-SITE INSTRUCTIONS FOR SEPARATING, HADDLING, RECYCLING SALVAGE, REUSE AND RETURN METHODS TO BE USED BY ALL PARTIES AT THE RETURN METHOD OF THE PROVIDED AND THE PROVIDED AND THE PROVIDED AND THE PROVIDED AND THE CONTRACTOR SHALL SUBBIT THIS REPORT AND THE DISPOSAL MANESTO OF ALL SUBBIT THIS REPORT AND THE DISPOSAL MANESTOR OF SHALL SUBBIT THIS REPORT AND THE DISPOSAL MANESTOR OF SHALL SHAL

DESCRIPTION OF THE PERSON OF THE PROPERTY OF T

SINGLE OPERATIONAL INCIDENTAL PERMIT (PUI) AND/OR PERMITS FOR INSTALLATION OF SIGNS AMONG OTHERS.

GENERAL SYMBOLS LEGEND: ABBREVIATIONS: LAMINATE/ION LAVATORY LABEL LEFT HAND LOW POINT LIMITED LIGHTWEIGHT LOUVER UNLESS NOTED OTHERWISE POUND OR NUMBER AR CONDITIONER ARI HANDLING UNIT ALUMINUM APPROXIMATE ANOHITCURIAL AUTOMATIC SPRINGLER READ AUTOMATIC SPRINGLER RISER AUTOMATIC SPRINGLER RISER AUTOMATIC SPRINGLER RISER AUTOMATIC SPRINGLER RISER AUTOMATIC AUT -V - VANITY - VARIES - VINTL CONPOSITION TILE - VENTCAL/-LY - VESTIBULE - VOLUME - VOLUME - VENT STACK - VINTL WALL COVERING MANA - CHAIN LINK FENCE М T. — MANTENANCE — MASONRY — MATERIAL — MAXMUM — REDION — MANUAL — MANUACTURE — MANUE — MINUUM — MISCELLIAGOUS — MISONRY OPENING — MOUNTED, MOUNTING METAL MAINT. — MAS. — MATL. — MAX. — MED. — MECH. — MFR. — MID. — - x - x -- AVERAGE - AIR VENT W ARROW INDICATE ELEMENT WERE HOTE APPLIES <u>B</u> - WITH WITHOUT WALL TO WALL WATER CLOSET WOOD WATER HEATER WEIGHT WELDED WIRE FABRIC BDARD BUILDING BLOCKING BEAM BASE PLATE BEARING BRACING REINFORCED CONCRETE COLUMN BUILDING/STRUCTURE WALL SECTION <u>C</u> N - CABINET - CAVITY - CEMENT - CATCH BASIN - CEMENT BOARD - CONTROL JOINT NOT APPLICABLE NOT IN CONTRACT NUMBER NOT TO SCALE - BUILDING/STRUCTURE CROSS SECTION 0 ------ GRASS SURFACE OC — ON CENTER OFF. — OFFICE OPEN. — OPENNING OPT. — OPTIONAL . DETAIL CROSS SECTION EEEE CONCRETE BLOCK SURFACE P PAR. — PARALLEL PER. — PERMETER PH. — PHASE PLBG. — PLUMING PINL. — PANEL PROJ. — PROJECT PROP. — PROPERTY PTD. — PANTED PTE — PDOXY PANT PVC — PCLYMNYCHLORIDE PAD. — PLYWOOD - TILE SURFACE - LEADER LINE ---- CENTER LINE ----- GLASS SURFACE D DEEP DEPTH DOUBLE DETAIL DIAMETER DIMENSION DOWN DOWN DOOR DOWNSPOUT DRAWING Q ----- MARKED SURFACE R x-xx R. RADIUS RD — RADFURAN RC. — RECESSED RECT. — RECTIMOULAR RD. — ROM REINF- — REINFORCE REV. — REVISION RFG. — ROOFING RH — RIGHT HAND RI. — ROSER RIU. — ROOM RO — ROUGH OPENING ROW — RIGHT OF WAY RV — ROOF VENT E ------ ANGULAR DIMENSION EACH EACH FACE ELEVATION ELECTRICAL EQUIAL/-LY EQUIPMENT EXTRING EXPANSION EXTERIOR ELEV. ELEC. EQ EQUIP. EXIST. EXP. EXT. __ SINGLE HINGED DOOR __ DOUBLE N. SANTARY 1 CO SOLD COME COUNTY 1 CO SOLD COME COUNTY 1 CO SOLD COME COUNTY 1 E <u>s</u> - STEP ON FLOOR FACE OF FLOOR DRAIN FIRE EXTINGUISHERS FINISH FLOOR FINISH FLOOR OR ROOF ELEVATION - FOUNDATION - FIRE HYDRANT - FINISH FOTN. FH FIN. FLUOR. (A) BUILDING COLUMNS, WALLS OR DRAWING AXIS 1)-G GAGE GALYANIZED GENERAL GYPSUM WALL BOARD - ROOM IDENTIFICATION - -Н __ DOUBLE SLIDING DOOR HOSE BIBB HOLLOW CORE HARDWARE HOLLOW METAL HORGONTALLY HIGH POINT HOUR HEATING, VENTILATION, A/C HOT WATER PIPINS HIGHWAY ----- WINDOW TAG - ROLLING DOOR STRUC. — STRUCTURAL SUSP. — SUSPENDED SW. — SWITCH SWR. — SEWER ♠ - INTERIOR DESIGN ____ EXISTING STRUCTURE TO REMAIN

PROJECT ADDRESS PR-CRP-00892: LAJAS SPORTS COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



REVISIONS REV. DATE DESCRIPTION BY CHK'D

IMPORTANT NOTES TO THE CONTRACTOR:

IMPORTANT NOTES TO THE CONTRACTOR

CONTRACTOR SILVEY ALL DEBEDGES AND CONTRACTOR SILVEY ALL DEBEDGES AND CONTRACTOR SILVEY ALL DEBEDGES AND CONTRACTOR SILVEY AND CONTRACTOR SIL

CERTIFICATION

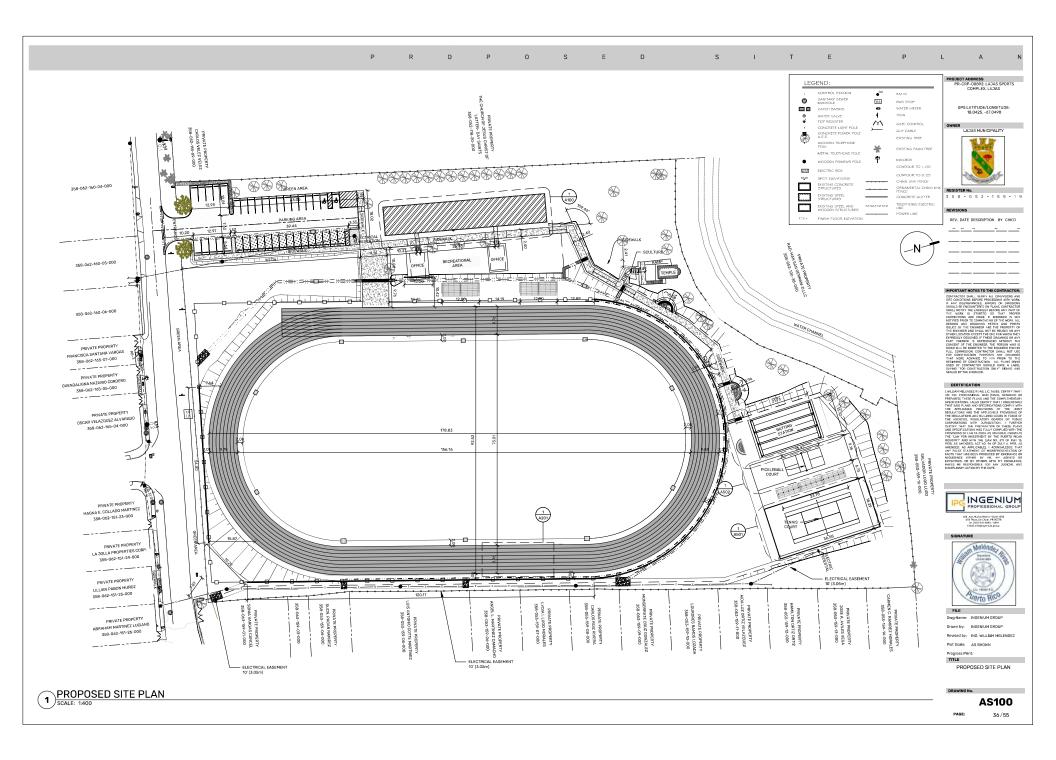




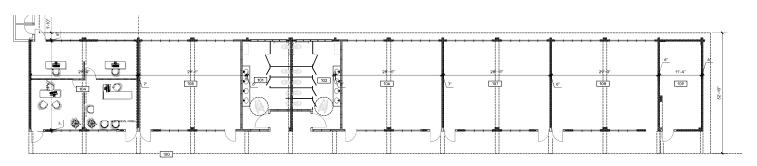
FILE	
Dwg Name:	INGENIUM GROUP
Drawn by:	INGENIUM GROUP
Revised by:	ING. WILLIAM MELENDE
Plot Scale:	AS SHOWN

TITLE ARCHITECTURAL NOTES

A001



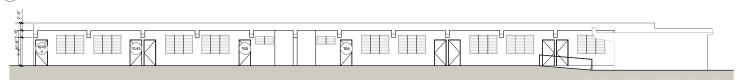




PROPOSED IMPROVEMENTS PLAN - OPTION A



PROPOSED IMPROVEMENTS WEST ELEVATION **(2**)



PROPOSED IMPROVEMENTS EAST ELEVATION

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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REV. DATE DESCRIPTION BY CHK'D





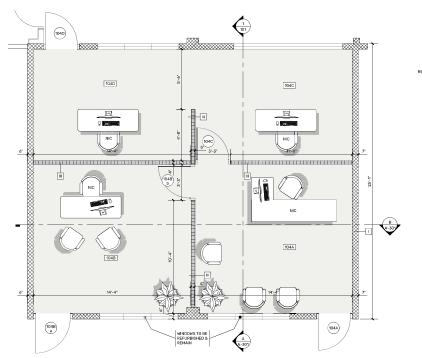
FILE Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

Plot Scale: AS SHOWN

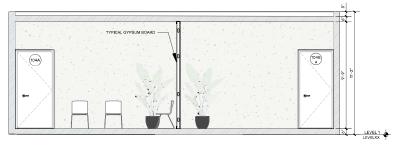
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IMPROVEMENTS TO ACCESS BUILDING FLOOR PLAN

A100



PROPOSED OFFICES_SECTION A



PROPOSED OFFICES_SECTION B
SCALE: 3/8"=1"-0"

(4).png

PROPOSED OFFICES_FLOOR PLAN

(6).png

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORT

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498

OWNER LATAS MUNICIPAL



REGISTER No.

REVISIONS

REV. DATE DESCRIPTION BY CHICD

PORTANT NOTES TO THE CONTRACTOR

BIT CONSTRUCT STORY BRIDGETON SHIP USES TO S

CERTIFICATI

AND THE PROFESSION OF THE PROF



654 Ave. Markot Rivera - Suite 187 654 Plaza, San Juan, PR 00738

SIGNATURE



Dwg Name: INGENIUM GROUP

Drawn by: INGENIUM GROUP
Revised by: ING, WILLIAM MELEN

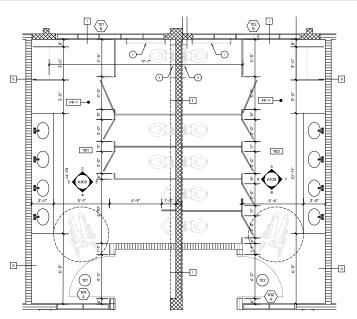
Plot Scale: AS SHOWN

Progress Print: TITLE

ENLARGE ADMINISTRATION OFFICES FLOOR PLAN

DRAWING No.

A101



1 ENLARGED - PUBLIC RESTROOM PLAN

SCALE: 3/8" = 1' - 0"

	RESTROOM FIXTURES & FURNITURE SCHEDULE								
NO.	ITEM	QTY.	MANUFACTURER	MODEL NO.	MATERIAL	COMMENTS			
1	FLOOR MOUNTED TOILET	8	ZURN	Z.WC5.M	CERAMIC/ PORCELAIN	1.28 GPF, MANUAL FLUSH, FLUSH VALVE			
2	TOILET PAPER HOLDER	8	BOBRICK	B-2890	STAINLESS STEEL	SURFACE MOUNTED, JUMBO-ROLL			
3	URINAL	2	AMERICAN STANDARD	6581001.0 20	CERAMIC/ PORCELAIN	.0125-1.0 GPF, TOP SPUD			
4	WASHBASIN	8	AMERICAN STANDARD	0614000.0 20	CERAMIC/ PORCELAIN	UNDERMOUNTED SINK, 19-3/4"x 13-3/4"			
5	FAUCET	8	AMERICAN STANDARD	6055205.0 02	CHROME	0.5 GPM, 1.9L/MIN, TOUCHLESS, BATTERY POWERED, SINGLE HOLE, 4-INCH			
6	BABY CHANGING STATION	2	KOALA KARE	KB310-SS WM	STAINLESS STEEL	WALL-MOUNTED, DUAL-CAVITY DISPENSER			
7	GRAB BAR	2	BOBRICK	B6806×42	STAINLESS STEEL	1-1/2" DIAMETER TUBING			
8	GRAB BAR	2	BOBRICK	B6806x42	STAINLESS STEEL	1-1/2" DIAMETER TUBING			
9	URINAL FLUSH VALVE	2	AMERICAN STANDARD	6045051.0 02	STAINLESS STEEL	MANUAL URINAL FLUSH VALVE, PISTON-TYPE, 0.5 GPF/1.9 LPF			
10	TOILET FLUSH VALVE	8	AMERICAN STANDARD	6047161.0 02	STAINLESS STEEL	MANUAL TOILET FLUSH VALVE, PISTON-TYPE, 1.6 GPF/6.0 LPF			
11	MIRROR	8	BOBRICK	B-290 2448	TAINLESS STEEL ANGLE	WELDED-FRAME MIRROR			

"NOTATION TOTAL".

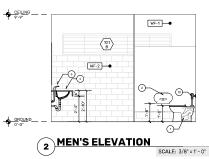
ANY SEGOMENT DITRUTES OR FURNITURE MUST MEET THE CONTERNA OR EQUIVALENCE OR SMULARTY, MITHOUT ADHERENCE TO SECURE BRANDS. THE MENTION OF PARTICULAR BRANDS IS SOLELY FOR THE CONVENIENCE OF THE CONTENCED AS OS HOULD NOT BE CONSTRUCTED AS COLUMNS OF DITRUTES. IN CONTRACTOR SHOULD NOT BE CONSTRUCTED AS COLUMNS OF DITRUTES, THE CONTRACTOR AND SHOULD NOT BE CONSTRUCTED. SOLECULAR OF DITRUTES AND SHOULD NOT BE CONTRACTOR. THE CONTRACTOR AND SHOULD NOT BE CONTRACTOR. ON THE CONSTRUCTION CONTRACT.

WALL FINISHES

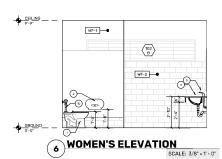
- EXISTING INTERIOR CONCRETE CEMENT WALLS WITH PAINT FINISHES. APPLY TWO-COATS OF PREMIUM LATEX-BASED, WATER-BASE WHITE PAINT, MOLD AND MILDEW-PROOF PAINT OVER PRIMER.
- EXISTING INTERIOR CONCRETE CEMENT WALLS WITH 6'× 12" WHITE CERAMIC TILE FINISH. APPLY 14". THICK PORTLAND CEMENT PLASTER OVER CONCRETE OR MASONRY MALLS TO PATCH AND REPRA ALL LEXISTING BOOKSTRUCTED METRICAL OR SITE WHERE AFFECTED BY WORK DURING THE NEW CONSTRUCTION AS A RESULT OF THESE DRAWINGS. APPLY TWO-COATS OF PREMIUM LATEX-BASED INTERIOR PAINT OVER PRIMER.

FLOOR FINISHES

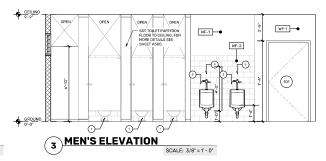
24" X 24" WHITE CERAMIC TILE IN BATHROOMS, MINIMUM JOINT INSTALLATION USING GRAY EPOXY GROUT.

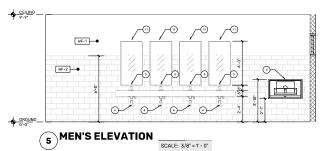


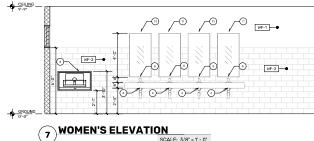


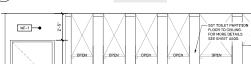




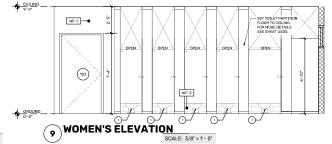








SCALE: 3/8" = 1' - 0"



PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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REV. DATE DESCRIPTION BY CHILD





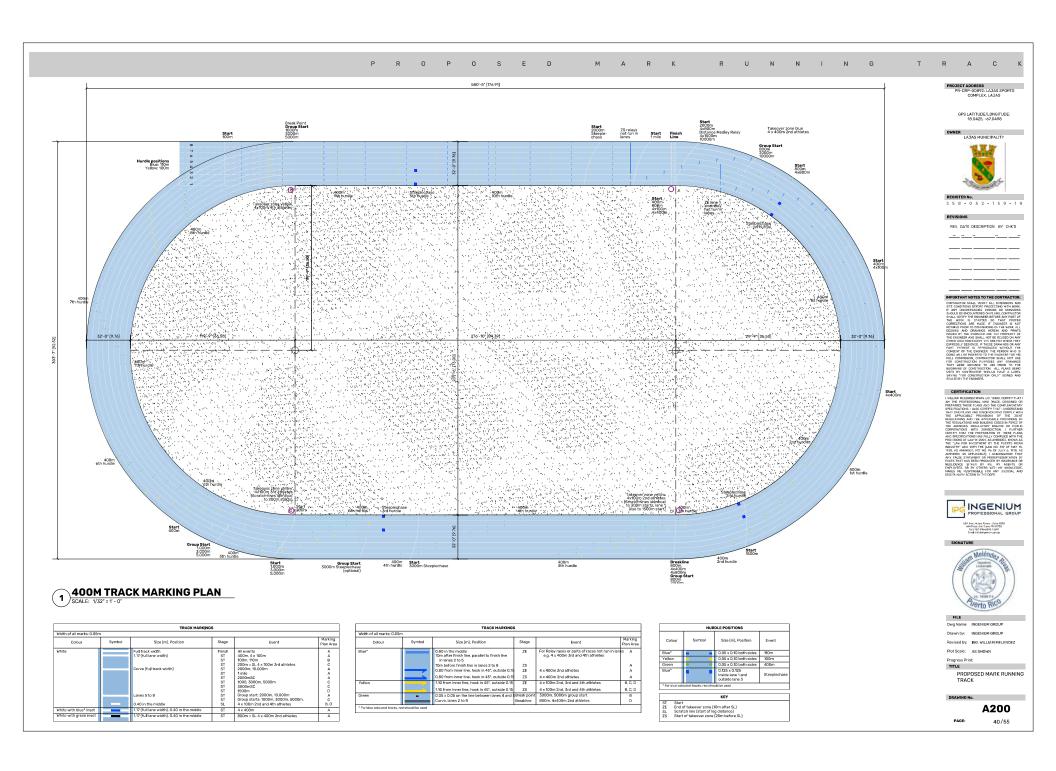
FILE Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

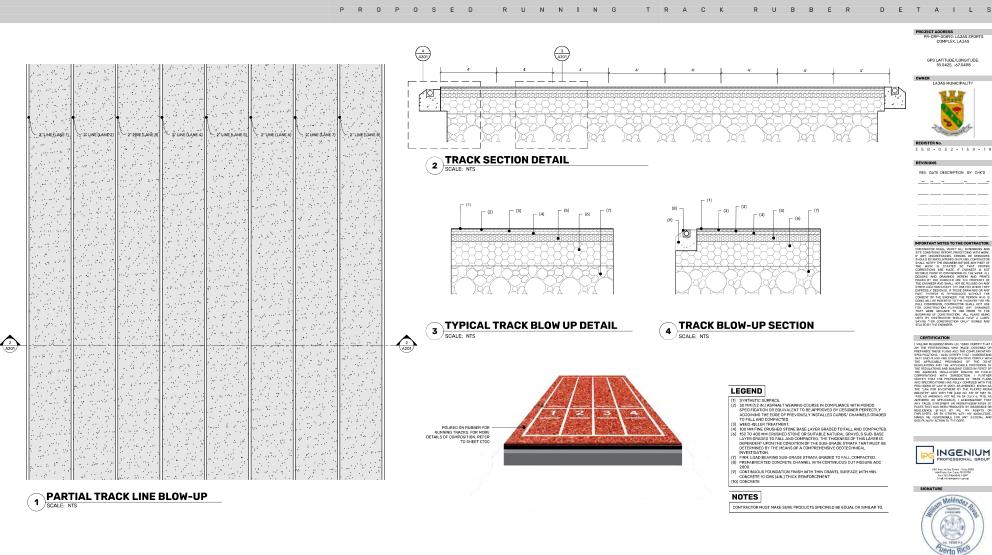
Revised by: ING, WILLIAM MELENDEZ

Plot Scale: AS SHOWN Progress Print:

ENLARGED PUBLIC BATHROOMS FLOOR PLAN AND

A102





PROJECT ADDRESS



REV. DATE DESCRIPTION BY CHICD





FILE Dwg Name: INGENIUM GROUP

Drawn by: INGENIUM GROUP

Revised by: ING, WILLIAM MELENDEZ

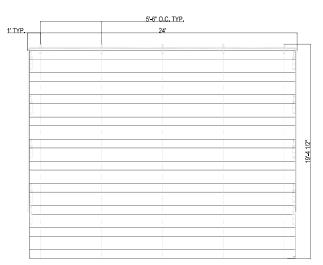
Plot Scale: AS SHOWN

Progress Print: TITLE

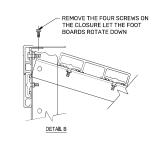
PROPOSED RUNNING TRACK RUBBER DETAILS

A201

PAGE: 41/55



1 TRANSPORTABLE BLEACHER PLAN VIEW





DETAIL A

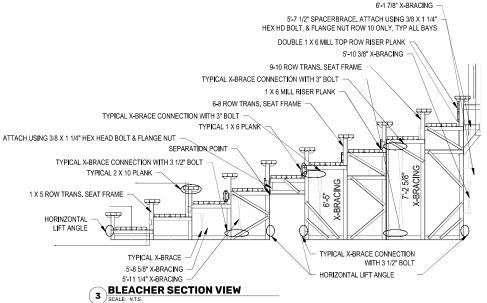
1/2" MACHINE BOLT X 11/2" LONG

> TR3 TOW BAR



BLEACHER TOW LINITS AREA NOT FOR BLEACHER TOW UNITS AREA NOT FOR HIGHWAY USE. THEY ARE ONLY TO BE MOVED ON LEVEL SURFACES AT A MAXIMUM OF 5 MILES PER HOUR. EAS SPECIALTY STANDS INC. IS NOT RESPONSIBLE FOR ANY DAMAGE TO THE BLEACHER OR OTHER PROPERTY THAT MAY OCCUR FROM THE MOVING OF THE BLEACHER OR OTHER OF THE OFFER OF THE OFFER OR THE OFFER OR THER OFFER OR THE OFFER OR T OF THE BLEACHER. IT IS THE RESPONSIBILITY OF THE OWNER TO INSPECT BEFORE OPENING IT TO THE PUBLIC. TOW BAR AND WHEELS TO BE REMOVED BEFORE USE.









PR-CRP-00892: LAJAS SPORTS COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



REV. DATE DESCRIPTION BY CHK'D



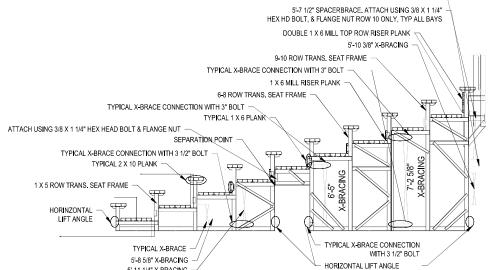


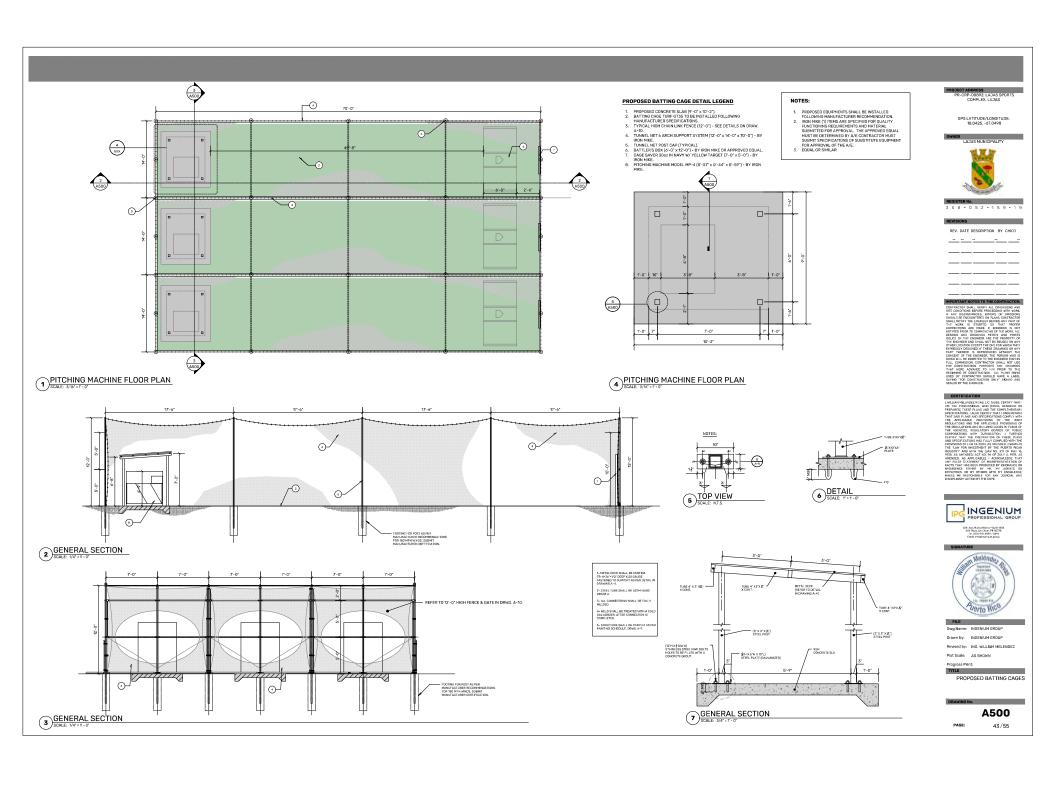
Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

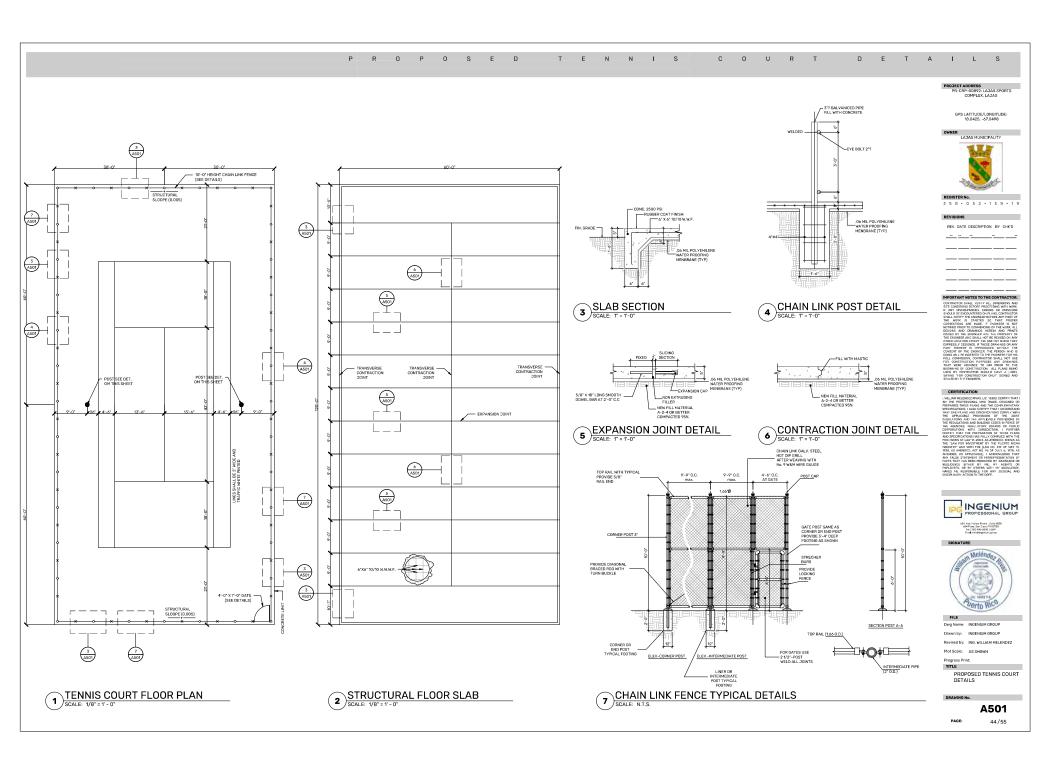
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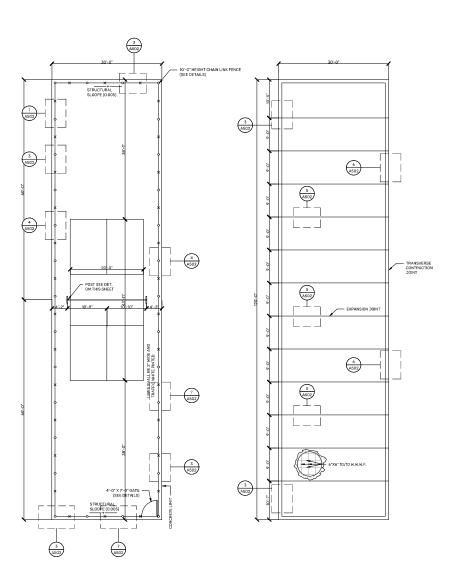
Progress Print: PROPOSED ALUMINUM BLEACHERS

A400



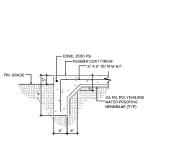


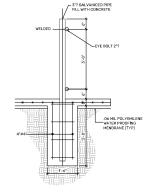




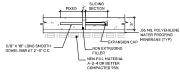
PADDLEBOARD COURT FLOOR PLAN
SCALE: 1/8'= 1'- 0"

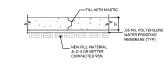
STRUCTURAL FLOOR SLAB





CHAIN LINK POST DETAIL





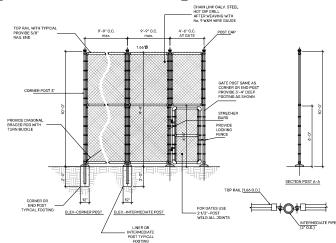
EXPANSION JOINT DETAIL

SCALE: 1" = 1'-0"

SLAB SECTION
SCALE: 1" = 1'-0"

CONTRACTION JOINT DETAIL

SCALE: 1" = 1'-0"



CHAIN LINK FENCE TYPICAL DETAILS
SCALE: N.T.S.

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

LAJAS MUNICIPALITY



REGISTER No.

REV. DATE DESCRIPTION BY CHK'D





Dwg Name: INGENIUM GROUP Revised by: ING. WILLIAM MELENDEZ

Plot Scale: AS SHOWN

Progress Print: TITLE

PROPOSED PADDLEBOARD COURT DETAILS

A502

W I N D O W S S C H E D U L E

PROJECT ADDRESS
PR-CRP-00892: LAJAS SPORTS
COMPLEX, LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



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FILE Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

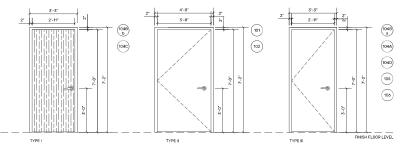
Plot Scale: AS SHOWN

Progress Print: TITLE

DOORS & WINDOWS SCHEDULE

A901

JLE		
FINISH OPENING DIMENSIONS	FINISH	COMMENTS
39" X 86"	ALUM / P.P.C. WOOD /SEMI. SOL.	-
48" X 86"	FLUSH HOLLOW METAL	SINGLE DOOR [2 COATS OIL BASED ENAMEL]
39" X 86"	FLUSH HOLLOW METAL	SINGLE DOOR [2 COATS OIL BASED ENAMEL]

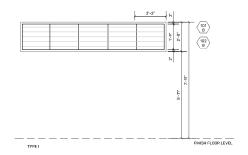




DOOR SCHEDULE TYPE NUMBER WIDTH X HEIGHT FINISH OPENING ACTUAL DOOR DIMENSIONS

101, 102 44 X 84*

III 104Ba, 104A, 104D, 105, 106 36 X 84*









R100





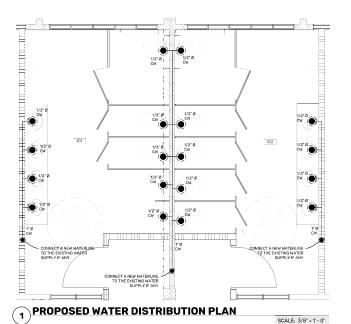




TITLE 3D VISUALIZATIONS

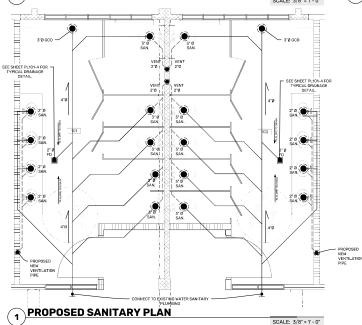
R101

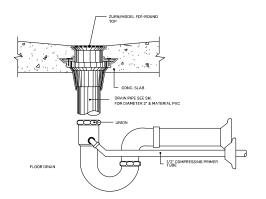
1 3D VISUALIZATIONS
SCALE: N/A



S: SINK W.C.: WATER CLOSET

3 SANITARY DISTRIBUTION ISOMETRIC PLAN





4 TYP. FLOOR DRAIN DETAIL

SCALE: N.T.S.

GENERAL NOTES:

BATHROOM FIXTURES AND ACCESSORIES REPRESENTED ARE JUST FOR REFERENCE. THE CONTRACTOR SHALL COORDINATE AND PROVIDE PIPES AND DRAINAGE PROVISIONS, AMONS OTHERS, FOR THE FUTURE INSTALLATION OF BATHROOM FIXTURES AND ACCESSORIES. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS OF THE FULMBRING JAVOUT FOR FINAL APPROVAL.

IT IS INCUMBENT UPON THE CONTRACTOR TO ASCERTAIN THE PRESENCE OF AN EXISTING VENTILATION PIPE TO WHICH THE PROPOSED CONNECTION CAN BE LINKED. IN THE EVENT THAT SUCH A PIPE DOES NOT EXIST, THE CONTRACTOR IS EXPECTED TO PROPOSE A SUITABLE SOLUTION AND ESTABLISH A CONNECTION TO THE PROPOSED LINK.

PLUMBING GENERAL NOTES:

INTENTION
IT IS THE INTENT OF THESE DRAWINGS TO PROVIDE A COMPLETE PLUMBING SYSTEM
READY FOR USE.COMPLETENESS MEANS THAT DETAILS NOT SHOWN BUT INCCESSARY
FOR A PROPER THE WORK AND OPERATION ARE PART OF THESE DRAWINGS.

COMPLICANCE
THE SECANDICAL WORK FOR THIS PROJECT MUST BE CONSTRUCTED IN COMPLETE
COMPLIANCE WITH FURETTO RICO DEPARTMENT
OF HEALTH STAMAGES, INTERNATIONAL PLUMBING CODE, USC REQUIREMENTS AND
THE REQUIREMENTS OF ANY OTHER GOVERNMENT AUTHORITY HAVING JURISDICTION
OVER THE PROJECT.

DRAWINGS

DRAMINGS
THE DRAWINGS ARE DIAGRAMMATIC AND LOCATIONS ARE APPROXIMATE ONLY. THE
CONTRACTOR SHALL COORGINATE WITH THE
STRUCTURAL LECETRICAL AND ARCHITECTURAL TRADES PRIOR TO INSTALLATION AS
ILLUSTRATED IN THE SHOP DRAWINGS THAT WILL BE SUBMITTED
FOR OWNERS APPROVAL

PROJECT INSPECTION
THE CONTRACTION MUST INSPECT PROJECT SITE AND MUST COORDINATE HIS WORK
WITH OTHER TRADES PRIGHT OF SUBMITTING
HIS PROPEDIAL AFTER CONTRACT OF SWARDED NO EXTRAS WILL BE ALLOWED FOR
COORDINATION DUE TO PROJECT SITE
CONDITIONS.

GUARANTEE
THE CONTRACTOR ALSO SHALL REPLACE OR REPAIR TO THE SATISFACTION OF THE
OWNER ANY AND ALL DAMAGE COME TO THE
BUILDING AND EQUIPMENT OR ITS CONTENTS IN CONSEQUENCE OF WORK PERFORMED

PLUMBING FIXTURES NOTES:

TYPE ALL FIXTURE UNITS SHALL BE OF LOW COMPSUMPTION

LOCATION
FINAL LOCATION OF UNITS SHALL BE INCLUDED IN SHOP DRAWING FOR OWNERS APPROVAL.

INSTALLATION
CONTRACTOR SHALL MANTAIN UNIT MANUFACTURER MINIMUM CLEAREANCE ON ALL
FIXTURES UNDER THIS SCOPE OF WORK.

SLEAVES

SLEAVES
THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR
FOR LEAVING SLEAVES AT SLAB OR BEAM FOR
FIXTURE INSTALLATION. THE PUMBING CONTRACTO SHALL PROJECT THE SLEAVES
WITH A CAP OF AN APPROPIATE SIZE.

PROTECTION
ALL PLUMBING FATURES SHALL BE PROTECTED TO AVOID DAMAGE TO THE SURFACE
OF THE EQUIPMENT. THE CONTRACTOR SHALL
REPLACE ANY FIXTURE THAT PRESENT DAMAGE PRIOR TO FINAL INSPECTION.

NOISE AND VIBRATION
THE CONTRACTOR SHALL INSTALL THE EQUIPMENT FREE FROM OBJECTIONABLE NOISE
AND VIBRATION, ALL NOISE MORE THAN 85
DB IN SCALE AND PIPING VIBRATION A SHALL BE ATTENUATED.

PIPING GENERAL NOTES:

COMPLIANCE
ALL PIPE SHALL BE INSTALLED USING SMACNA SEISMIC RESTRAIN MANUAL AND
SHALL BE INCLUDED IN THE SHOP DRAWINGS FOR OWNERS APRROVAL OR ITS
REPRESENTATIVE.

LOCATION

LOCATION

THE DRAWINGS ARE DIAGRAMATIC, PIPING LOCATION IS APROXIMATE ONLY, FINAL AND EXACT LOCATION SHALL BE EXCENCED BY THE CONTRACTOR AND SHALL BE ILLUSTRATED IN THE SHOP DRAWINGS SUBMITTED FOR OWNERS APPROVAL ALL PIPING SHALL BE CONCEALED IN FLOOR TOPPING, SLAB WALL DR CHASE DUKES OF THERMS ENOTICED.

SIZE SHOWN ON DRAWINGS ARE FOR MINIMUM COMPLIANCE AND SHALL BE INCREASED TO COMPLY WITH CODES IF APPLICABLE.

MATERIAL AND SLOPE SEE SCHEDULE FOR MORE DETAILS SEE SHEET PL100.

INSULATION MATERIAL

HOT WATER PIPE SHALL BE INSULATED USING 1/½" THICK URETHANE WITH A THERMAL CONDUCTIVITY NOT HIGHER THAN 0.14 BTU/HR.-FT20*FAND THE SEALED WITH B-F 60-25 MASTIC WITH PVG JACKET

STACKS
ALL STACK SHALL HAVE LONG TURN AND FITTINGS AT THE BASE OF ITS.

INVERTS
CONTRACTOR SHALL VERIFY IN FIELD ALL INVERT AND GRADE ELEVATIONS AND SHALL SUBMIT FOR APPROVAL THE NECCESARY ADJUSTEMENT AS REQUIRED TO OBTAIN THE PROPER SLOPE.

LEGEND

CW COLD WATER HW HOT WATER GROUND CLEAN OU FD ELOOR DRAIN

WATER LINE ____ VENTILATION PIPE

PROJECT ADDRESS PR-CRP-00892: LAJAS SPORTS

COMPLEX LAJAS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



58-052-159-19

REV DATE DESCRIPTION BY CHICD

MPORTANT NOTES TO THE CONTRACTOR: B TANY DESCRIPTIONS OF OPERATIONS OF OPERATION OPPORTUNITY OF OPERATION OPPORTUNITY OF OPERATION OPPORTUNITY OPP THE SWIGHEST MAY MANUAL THE DISC FOR WHICH THE OTHER LOCAL DISC SCHOOL THE OWNER OR ANY PART THEREOF IS REPRODUCED WITHOUT THE CONSISTS OF THE CHIEFLET FOR THE PERSON WHO IS DISKN WILL BE INDEED TO THE DEADLER FOR HE FULL COMMISSION CONTRACTOR SHALL NOT USE FOR CONSTRUCTION FURNORS ANY DEADLESS OF THE OWNER FOR CONTRACTOR SHALL NOT USE THE CONTRACTOR OF THE OWNER FOR THE OWNER FOR CONTRACTOR SHOULD ANY DEADLESS OF THE OWNER FOR CONTRACTOR SHOULD HAVE A LABIL TANKS SEED.

CERTIFICATION

IFICATIONS, I ALSO CERTIFY THAT I UNDERSTAND I SAN PERCHAPTONS COMPLY WITH APPLICABLE PROVISIONS OF THE JOINT LATTORS AND THE APPLICABLE PROVISIONS OF REGULATIONS AND BUILDING CODES IN FORCE OF REGULATIONS AND BUILDING CODES IN FORCE OF REMOLES, REGULATIONY BOARDS OF PUBLIC COATIONS WITH JUSTICITION. I PURTHER HY THAT THE PREPARATION OF THESE PLANS





FILE Dwg Name: INGENIUM GROUP

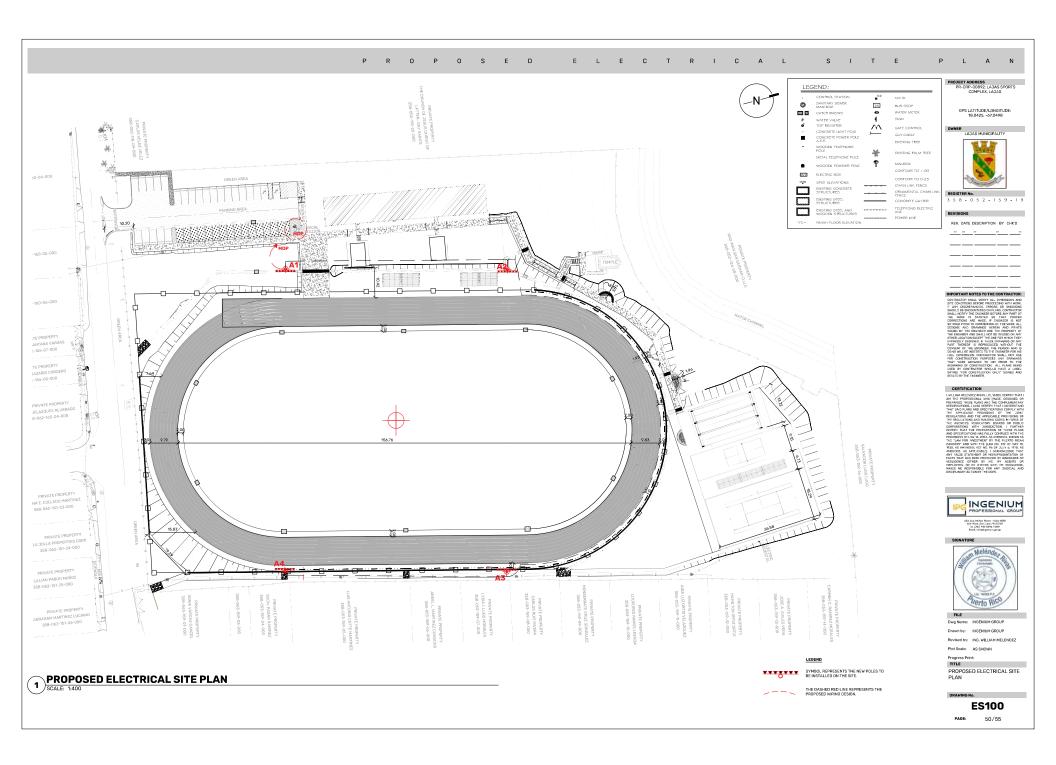
Drawn by: INGENIUM GROUP Revised by: ING, WILLIAM MELENDEZ

Plot Scale: AS SHOWN

Progress Print: TITLE

PROPOSED BATHROOMS PLUMBING PLAN

PL100



GPS LATITUDE/LONGITUDE: 18.0425, -67.0498

OWNER LAJAS MUNICIPALITY



REV.	DATE	DESCRIPTION	BY	CHK.D
			_	
_	_		_	





Drawn by: INGENIUM GROUP

Plot Scale: AS SHOWN

Progress Print:
TITLE
PHOTOMETRIC ANALYSIS
NOTES

ES101

Pole / Fixture Summary Pole Height Pole ID **Mounting Height** Fixture Qty. Luminaire Type Load Circuit MSI-MS4 15.2m 15.2m TLC-LED-550 1.08 kW

Circuit Summary

P1-P4

on our our many							
Circuit	Description	Load	Fixture Qty.				
Α	Track and Field	32.76 kW	28				
В	Multi-Sport Area	4.32 kW	8				

24.4m

Pole / Fixture Summary

1 ole / 1 ixture outliniar y										
Туре	Source	Wattage	Lumens	L90	L80	Quantity				
TLC-LED-1200	LED 5700K - 75 CRI	1170 W	150,000	>120,000	>120,00	28				
TLC-LED-550	LED 5700K - 75 CRI	540 W	67,000	>120.000	>120,000	8				

Single Luminaire Amperage Draw Chart

24.4m

Driver Specification

Lumens

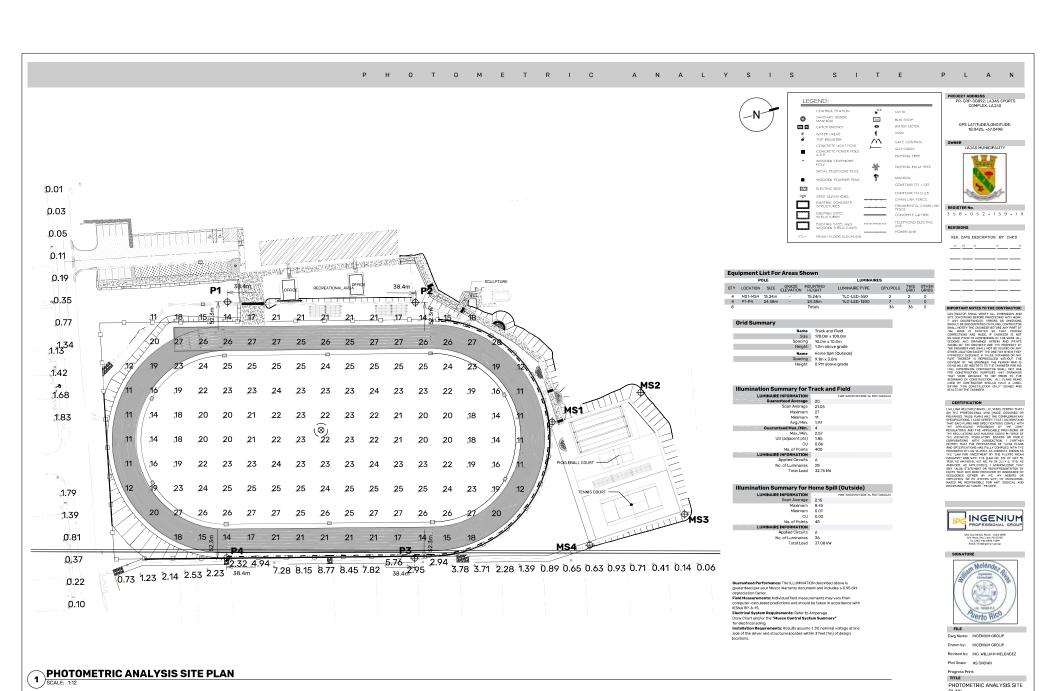
TLC-LED-1200

8.19 kW

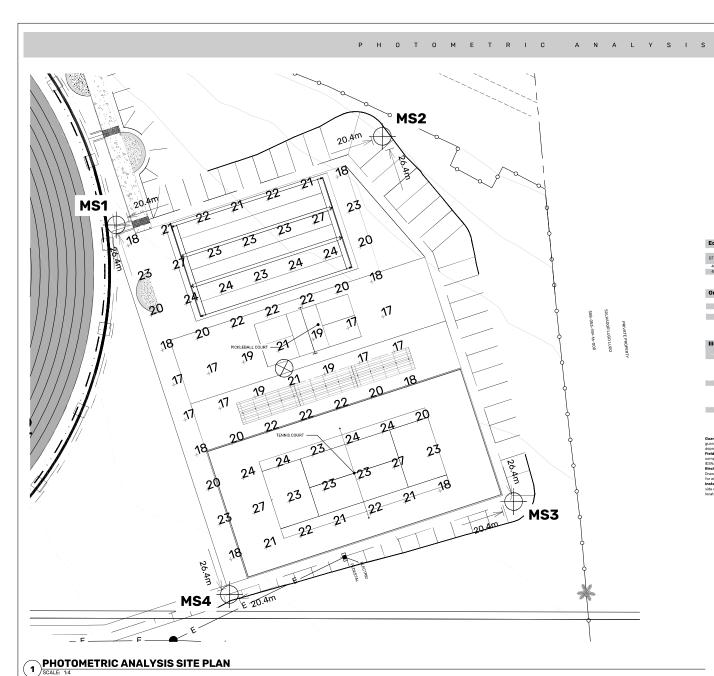
(.90 min power factor)							
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0
TI C-I FD-550	3.2	3.0	2.8	24	19	1.8	1.4

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination				Circuits	Fixture Qty.	
Oriu Name	Calculation Metric	Avg.	Min.	Max.	Max/Min.	Ave./Min.	Olicuits	i ixtui e qtyi
Home Spill	Horizontal	2.15	0.01	8.45		-	A,B	36
Multi-Sport Area	Glare Rating	35.8	32	40	1.26	1.12	В	8
Multi-Sport Area	Horizontal Illuminance	20.9	17	27	1.62	1.23	В	8
Track and Field	Glare Rating	40.5	32	45	1.41	1.27	Α	28
Track and Field	Horizontal Illuminance	21	11	27	2.57	1.91	Α	28



ES102





	CONTROL STATION	NO KM ID
0	SANITARY SEWER 05	Bus stor
п	GATCH BASINS	WATER METER
9	WATER VALVE	SIGN
	TOP REGISTER	GATE CONTROL
	CONCRETE LIGHT MOLE	GLIN CAPUE
	CONGRETE POWER POLE A.E.E.	EXISTING TREE
	WOODEN TELEPHONE POLE	P SYSTING PAIN TREE
	METAL TELEPHONE POLE	
	WOODEN POWEWR POLE	MAILBOX
		CONTOUR TO 1.00
9	ELECTRIC BOX	CONTOUR TO 0.25
a	SPOT ELEVATIONS	CHAIN LINK PENCE
	EXISTING CONCRETE STRUCTURES	ORNAMENTAL CHAIN LINK
~	EXISTING STEEL STRUCTURES	CONORETE GUTTER
٦		TELEPHONE/ ELECTRIC UNE
	WOODEN STRUCTURES	POWER LINE

MULTI-SPORT

Equipment List For Areas Shown									
	P	DLE			LUMINAI	RES			
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY/POLE	THIS	OTHER	
4	MS1-MS4	15.24m	-	15.24m	TLC-LED-550	2	2	0	
4				Totals		8	8	0	

Name	Multi-Sport Area
Size	37.0m x 50.0m
Spacing	5.0m x 5.0m
Height	1.0m above grade

Illumination Summary for M	Aulti-Sport Area
LUMINAIRE INFORMATION	MANTAINED HORIZONTAL FOOTCANDLE
Guaranteed Average	20
Scan Average	20.93
Maximum	27
Minimum	17
Avg./Min.	1.27
Guaranteed Max./Min.	4
Max./Min.	1.62
UG (adjacent pts)	1.27
CU	0.72
No. of Points	400
LUMINAIRE INFORMATION	
Applied Circuits	В
No. of Luminaires	8
Total Load	4.32 kW

heat Measurements in disclosed field measurements may vary from computer-calcularly predictions and thould be taken in accordance with IESNA R9-4-55.

Bectrical System Requirements: Series to companie.
Class Christ and or the "Measure Central System Summary: Interest to the Companie Companies Companies

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498



REV. DATE DESCRIPTION BY CHK'D





Dwg Name: INGENIUM GROUP

Drawn by: INGENIUM GROUP

Plot Scale: AS SHOWN Progress Print: TITLE

PHOTOMETRIC ANALYSIS MULTI-SPORT AREA

ES103

PROJECT ADDRESS PR-CRP-00892: LAJAS SPORTS

GPS LATITUDE/LONGITUDE: 18.0425, -67.0498

OWNER LAJAS MUNICIPALITY



3 5 8 - 0 5 2 - 1 5 9 - 1 9

REV. DATE DESCRIPTION BY CHILD

PORTANT NOTES TO THE CONTRACTOR





Dwg Name: INGENIUM GROUP

Drawn by: INGENIUM GROUP

Plot Scale: AS SHOWN

Progress Print:

ELECTRICAL NOTES AND

DETAILS OF ELECTRIC POLES

ES104

GENERAL NOTES

LED LIGHTING SYSTEM

- -THE MANUFACTURER/CONTRACTOR SHALL FURNISH LIGHTING EQUIPMENT THAT MEETS OR EXCEEDS THE STANDARDS SET FORTH
- -THE CONTRACTOR MUST ENSURE THAT LIGHTING LEVELS DO NOT FALL BELOW THE SPECIFIED VALUES FOR A PERIOD OF 10 YEARS
- -ALL MAINTENANCE COSTS WILL BE WAIVED DURING THE WARRANTY
- -THE CLIENT REQUIRES A REMOTE ON/DEE SYSTEM FOR THE LIGHTING SYSTEM, ALL COMMUNICATION AND MONITORING COSTS FOR A PERIOD OF 10 YEARS MUST BE INCLUDED IN THE BID.
- -LIGHTING LEVELS AND DESIGN EACTORS TRACK SURFACES SHOULD. BE ILLUMINATED TO THE DESIRED AVERAGE LEVEL OF ILLUMINATION AND UNIFORMITY.
- TO ENSURE PROPER STEERING ANGLES TO REDUCE GLARE AND PROVIDE BETTER PLAYABILITY, MINIMUM MOUNTING HEIGHTS WILL BE DESCRIBED BELOW.

NO. OF POLES OR ASSEMBLIES	DESIGNATION OF THE POST OR MOUNT	Height
4 POLES	A1-A4	80*

- -ALL COMPONENTS SHALL BE DESIGNED AND MANUFACTURED AS A SYSTEM, ALL LUMINAIRES, DRIVERS AND OTHER ENCLOSURES SHALL BE ASSEMBLED, POINTED, WIRED AND TESTED AT THE FACTORY.
- -ALL EXPOSED COMPONENTS SHALL BE MADE OF CORROSION RESISTANT MATERIALS AND/OR COATED TO HELP PREVENT CORROSION

- ALL EXPOSED CARBON STEEL SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123
- IN ACCORDANCE WITH AS IM A123.
 ALL EXPOSED ALLUMINUM SHALL BE POWDER COATED WITH HIGH PERFORMANCE POLYESTER OR ANODIZED.
 ALL EXTERIOR REFLECTIVE RECESSES SHALL BE ANODIZED.
- COATED AND PROTECTED FROM DIRECT ENVIRONMENTAL EXPOSURE TO PREVENT CORROSION OR DETERIORATION OF THE
- EXPOSORE TO PREVENT CORROSION OR DETERIORATION OF THE REFLECTIVE COATING.

 ALL EXPOSED HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL PASSIVATED AND COATED WITH ALUMINUM-BASED THERMOSETTING EPOXY RESIN TO PROTECT
- AGAINST CORROSION AND STRESS CORROSION CRACKING. STRUCTURAL FASTENERS CAN BE CARBON STEEL AND GALVANIZED, COMPLYING WITH ASTM A153 AND ISO/EN 1461 (FOR HOT-DIP GALVANIZING), OR ASTM B695 (FOR MECHANICAL

-LIGHTING POLES AND CROSSARMS SHOULD BE MADE OF

-ALL LIGHTING POLES SHOULD USE CONCRETE FOUNDATIONS.

- A PRESTRESSED CONCRETE FOOTING EMBEDDED IN A CEMENT -A PRES RESSEU CONCRETE FOUTING, EMBEDUED IN A CHEMENT BACKFILL, SHOULD BE USED FOR THE POLE FOUNDATION AND SHOULD HAVE A MINIMUM 28-DAY COMPRESSIVE DESIGN STRENGTH OF 3000 PSI, 3000 PSI CONCRETE SPECIFIED FOR EARLY POST ERECTION, THE ACTUAL MINIMUM REQUIRED CONCRETE STRENGTH IS 1000 PSI, ALL CEMENT CONCRETE PIERS AND BACKFILLS MUST BE SUPPORTED ON AND AGAINST FIRM, UNDISTURBED SOIL.

-WIND LOADS: WIND LOADS WILL BE BASED ON THE 2018 INTERNATIONAL BUILDING CODE, WIND LOADS WILL BE CALCULATED USING ASCE 7-10. WITH A FINAL DESIGN WIND SPEED OF 162MPH

-STRUCTURAL DESIGN OF POLES: THE STRESS ANALYSIS AND SAFETY FACTOR OF THE POLES SHALL BE IN ACCORDANCE WITH THE AASHTO 2013 STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (LTS-6).

-THE MANUFACTURER SHALL PROVIDE ALL DRIVERS AND SUPPORTING ELECTRICAL COMPONENTS IN CABINET(S) SEPARATE FROM THE LAMP.

-REMOTE DRIVERS AND SUPPORTING ELECTRICAL EQUIPMENT SHALL BE MOUNTED IN AN ALUMINUM ENCLOSURE. ENCLOSURES SHALL BE TACTILE SAFETY RATED AND INCLUDE CONDUCTORS AND FUSES WITH INDICATOR LIGHTS ON THE FUSES TO NOTIFY WHEN A FUSE SHOULD BE REPLACED FOR EACH LUMINAIRE. TO AVOID THE NEED TO CLIMB UP TO THE FIXTURES FOR MAINTENANCE, INTEGRAL CONDUCTORS ARE NOT PERMITTED.

CALCULATION GRID SHMMARY

-ELECTRICAL COMPONENT CABINETS WILL BE MOUNTED ON POLES 10' ABOVE GROUND LEVEL IN THE BASERALL PARK

2.2 CONTROL

- A. LIGHTING CONTRACTOR ENCLOSURE(S) CONSTRUCTED OF NEMA TYPE 4 ALUMINUM, DESIGNED FOR EASY INSTALLATION WITH CONTRACTORS, LABELED TO MATCH FIELD DIAGRAMS AND ELECTRICAL DESIGN. MANUAL ON-OFF SELECTOR SWITCHES SHALL
- B. Remote Lighting Control System: The system shall allow the owner and users with a security code to program the system on and off via website, phone, fax, or email up to ten years in advance. Trained personnel shall be available 24 hours a day, 7 days a week to provide programming support and assistance when reports are
- C. Remote Monitoring System: The system will monitor lighting performance and notify the manufacturer if outages are detected in individual luminaires so that appropriate maintenance can be
- D. Management Tools: The manufacturer shall provide a web-based database and tool for monitoring actual field usage, and providing reports by facility and user group. The monitoring tool shall also show the current status of luminaire outages, operation and services. A mobile application compatible with IOS. Android and BlackBerry devices will be provided.
- E. COMMUNICATION COSTS: MANUFACTURER SHALL INCLUDE COMMUNICATION AND CELLULAR SERVICE COSTS FOR 10 YEARS. THE SYSTEM SHALL NOT RELY ON WIFI FOR COMMUNICATION AND
- -THE CONTRACTOR MUST GUARANTEE THAT LIGHTING LEVELS WILL NOT FALL BELOW THE DESIRED LIGHTING LEVELS THAT MUST BE MAINTAINED THROUGHOUT THE 10-YEAR WARRANTY PERIOD.
- THE CONTRACTOR OR MANUFACTURER SHALL BE RESPONSIBLE - THE CONTRACTOR OR MANDEACT ORER SHALL BE RESPONSIBLE FOR ANY AND ALL CHANGES NECESSARY TO BRING THE FIELDS BACK INTO COMPLIANCE WITH LIGHT LEVELS AND UNIFORMITY. THE CONTRACTOR OR MANUFACTURER SHALL BE RESPONSIBLE FOR ALL DAMAGE DONE TO THE FIELD DURING THESE REPAIRS.
- ALL MANUFACTURERS SHALL PROVIDE A SIGNED WARRANTY COVERING THE COMPLETE SYSTEM FOR 10 YEARS FROM THE DATE OF SHIPMENT, THIS SHALL GUARANTEE THE SPECIFIC LIGHTING

POLE/ FIXTURE SUMMARY

POLE ID	POLE HEIGHT	FIXTURE QTY	LAMP TYPE	SWITCHING
A1	80.00	7	TCL-LED 1500W	A
A2	80.00	7	TCL-LED 1500W	A
A3	80.00	7	TCL-LED 1500W	A
Д4	80.00	7	TCL-LED 1500W	A

				LEVEL			
ORID NAME			UNIFORM				
	CALCULATION METRIC	TYPE	AVE	MIN	MAX	MAX/MIN	

PROPOSED ELECTRICAL SITE PLAN
SCALE: 1:400

EARTHING (LIGHTNING ROD)



GPS LATITUDE/LONGITUDE: 18.0425, -67.0498





3 5 8 - 0 5 2 - 1 5 9 - 1 9

REV. DATE DESCRIPTION BY CHK'D

MPORTANT NOTES TO THE CONTRACTOR:

CERTIFICATION

GROUND OR PAVEMENT

CONDUIT BASE SPACER (TYP.FOR ALL SECTIONS INSTALLED EVERY 4' TYP.)

(TYPICAL)

4

SECTION A

์ 3) SCALE: N.T.S

4 3 4







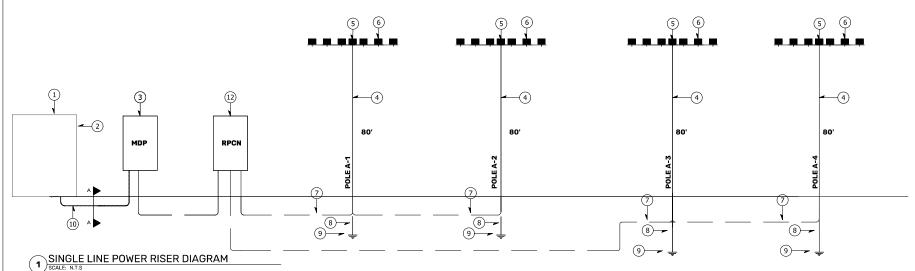
FILE Dwg Name: INGENIUM GROUP Drawn by: INGENIUM GROUP

Plot Scale: AS SHOWN

Progress Print:

ELECTRICAL SYSTEM DETAILS

ES105



SINGLE LINE RISER DIAGRAM LEGEND

- 1 EXISTING UTILITY SUBSTATION.

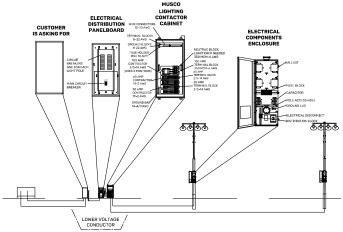
- 1 RISTING UTILITY SUBSTATION
 2 PROPOSAL SISER # 1
 3 MAIN DISTINGUIDING PARES 2006, 3 WIRE-GROUND, 240Y, 12 SPACES,
 4 ANALYMICES SISER # 1
 5 ANALYMICES SISER # 10 2007, 3 WIRE-GROUND, 240Y, 12 SPACES,
 5 ANALYMICES SISER # 10 2007, 3 WIRE-GROUND, 120 2717 (Ghosaird K8446 Ghly),
 5 4 (4) K86 DUTTOOR NET LIGHT
 5 4 (4) K86 DUTTOOR NET LIGHT
 5 ANALYMICES SISER SIS

Calculation Summary									
Type Units Avg Max Min Avg/Min Max/Min									
TRACK-10 FC	Fc	11	16	4	2.58	3.84			

12 - REMOTE POWER CONTROL SYSTEM PANEL BOARD.

ELECTRICAL NOTES

- ENTIRE INSTALLATION SHALL CONFORM TO N.E.C. P.R.E.P.A. REGULATIONS, LATEST EDITION.
- MINIMUM SIZE FOR ALL PULL BOXES SHALL BE 4" TRADE.
- MINIMUM WIRE SIZE SHALL BE NO. 12 AWG.
- PROVIDE IDENTIFICATION OF ALL BRANCH CIRCUITS ON A TYPEWRITTEN DIRECTORY CARD IN THE PANEL DOOR.
- ELECTRICAL CONTRACTOR SHALL VERIFY EXACT ELECTRICAL REQUIREMENTS AND EXTENT OF WORK.
- EXCEPT WHERE NOTED OTHERWISE, ALL FIXTURES & LAMPS SHALL BE FURNISHED & INSTALLED BY AN ELECTRICAL CONTRACTOR.
- EXCEPT WHERE OTHERWISE INDICATED, WIRE SHALL BE COPPER WITH 600 VOLT INSULATION TYPE THHN FOR BRANCH CONDUIT WORK, ALUM. WIRE NOT PERMITTED.
- OUTLET BOXES SHALL BE PRESSED TO THE STEEL.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT REQUIREMENTS WITH THE EQUIPMENT SUPPLIER.
- The ENTIRE INSTALLATION SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE.
- THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECT FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE.
- CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
- ALL REQUIRED INSURANCES SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY & PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- 14. MAXIMUM LOAD FOR ALL BRANCH CIRCUITS IS 80%.
- ALL WORK TO BE IN STRICT ACCORDANCE WITH THE OWNER'S REQUIREMENTS AND RECOMMENDATIONS. NO WORK IS TO BE STARTED WITHOUT WRITTEN APPROVAL FROM THE OWNERS.
- 16. ALL LIGHTING FIXTURE SHALL BE WIRED AS PER ARTICLE 410 OF N.E.C.
- THE PANEL BOARD SHALL BE PROVIDED WITH A FACTORY INSTALLED GROUND BUS FOR CONNECTING GROUND THE GREEN WIRE IN ALL P.V.C. CONDUITS.



PROVIDE BY

GENERAL ELECTRICAL DETAIL

SCALE: N.T.S

ATTACHMENT G LEAD BASE PAINT SURVEY REPORT

LEAD BASE PAINT SURVEY REPORT

<u>Sampling at Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000</u>



Submitted To:Ing. William Melendez Rivas

INGENIUM Professional Group, PSC.

Prepared By: Anthony Robinson Santana

R & S Professional Equipment, Inc. PO Box 1393, Naguabo, P.R. 00718

Phone: (787) 637-7267

Email. rsprofessionalequipment@gmail.com

June 2023

LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

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- 1.0 SUMMARY
- 2.0 INTRODUCTION
- 3.0 SAMPLING METHOD
- 4.0 LEAD BASED PAINT METHODOLOGY
- 5.0 RESULTS
- 6.0 CONCLUSION
- 7.0 DISCLOSURE

APPENDIX I - Certifications.

APPENDIX II - XRF Data.

APPENDIX III - Location for Lead Based Paint Survey

APPENDIX IV - Photos (LBP) Positive

LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

1.0 Summary

R & S Professional Equipment, Inc., conducted a study of Lead Based Painted (LBP) inspection at at Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000. The six inspected areas appear to be in good conditions however, they are not currently in use.

The inspection performance with Thermo Niton XLp 300A XRF Analyzer was conducted using H.U.D. Standard for Lead Based Paint as defined by Title X of Housing and Community Department Act of 1992 (unless HUD and EPA have lowered the standard) & Guidelines for the Evaluation and Control of Lead Based Paint in Housing of 1997, revised in 2012 and DRNA EQB Lead Based Paint Abatement Controls Regulation.

The Lead Based Paint inspection was conducted on June 16, 2023, by Anthony Robinson Santana certified lead-based paint inspector #LBPI-14623-180 with enough experience.

Three hundred eleven (311) XRF samples were taken during the inspection, five (5) were **positive**. During the evaluation **we found positive components with Lead Based Paint** only at yellow parking lines. (see table 1.1).

LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

2.0 INTRODUCTION

R & S Professional Equipment, Inc., conducted a study of Lead Based Painted (LBP) inspection at at Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000. The six inspected areas appear to be in good conditions however, they are not currently in use.

The Lead Based Paint inspection was conducted on June 16, 2023, by Anthony Robinson Santana certified lead-based paint inspector #LBPI-14623-180 with enough experience.

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

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

Three hundred eleven (311) XRF samples were taken during the inspection, five (5) were **positive**. During the evaluation **we found positive components with Lead Based Paint** only at yellow parking lines. (see table 1.1).

2.0 TESTING PROCEDURES

The test was performed with a Niton XLp 300A XRF Analyzer, an X-ray fluorescence (XRF) instrument manufactured by Thermo Fisher Scientific (SN: 109930). The instrument operates in two modes. The mode selected was the fast mode, which allows reference to the reduction level set at 1.0 mg / cm². Results are reported at 95% confidence levels.

LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

3.0 LEAD BASED PAINT TESTING METHODOLOGY

The Department of Housing and Urban Development (HUD) has determined that the hazard level for lead in paint is 1.0 mg / cm2, as measured by XRF or AAS (Atomic Absorption Spectroscopy), or 0.5% by weight (or 5000 ppm) as measured by AAS, or inductively coupled plasma (ICP). The same level was adopted by EPA regulations published in 1992, under Title X.

The only lead-based paint testing protocol officially available at this time was published by HUD initially in 1990, revised in 1991 and finalized in 1995 (see above HUD reference). A revised Chapter 7 was published in 1997 and finalized in 2012. According to the new protocol, almost all surfaces present in the units should be tested. The above guidelines were used to perform lead-based paint testing for this project.

The main steps involved in a multifamily inspection are:

- 1. Take inventory of all test combinations 2.
- 2. Select the painted area to test
- 3. Perform XRF testing (including calibration checks).
- 4. Collect and analyze paint chip samples for inconclusive results.
- 5. Classify XRF and paint chip results.
- 6. Review and evaluate the data.
- 7. Report results

R & S Professional Equipment, Inc. personnel classify each XRF derivative reading as positive, negative, or inconclusive. This classification is based on the manufacturer's XRF Performance Characteristics Sheet (PCS) for each substrate. Additional samples and/or readings are taken from inconclusive areas.

LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

Verification of instrument calibration was performed before the start of the daily task, when the instrument was turned on and at the end of the day. The verification was performed on a NIST standard of 1.0 mg / cm2. The acceptance criteria used were \pm -0.3 mg / cm2. The data for the calibration verification are in the results.

The structure was divided into room equivalents and labeled accordingly (see Appendix II). A test combination of similar components and four walls was tested for each room equivalent. Identification of the walls tested was based on HUD guidelines as follows:

	SIDE B (LEFT SIDE)	
SIDE A (ENTRANCE)		SIDE C (OPPOSITE SIDE OF ENTRANCE)
	SIDE D (RIGHT SIDE)	

Wall A-entry wall, walls B, C, and D-sequential walls, clockwise from A.

4.0 RESULTS

The results of the components tested are shown at Appendix II. Three hundred eleven (311) XRF samples were taken during the inspection, five (5) were **positive**. During the evaluation **we found positive components with Lead Based Paint** only at yellow parking lines. (see table 1.1).

LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

Table 1.1

	Substrate	Color	Components	Approxima te Area
Parking Area	Asfalt	Yellow	Yellow parking lines	516 Lft

5.0 CONCLUSION

R & S Professional Equipment, Inc., conducted a study of Lead Based Painted (LBP) inspection at at Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000. The six inspected areas appear to be in good conditions however, they are not currently in use. The Lead Based Paint inspection was conducted on June 16, 2023, by Anthony Robinson Santana certified lead-based paint inspector #LBPI-14623-180 with enough experience.

Three hundred eleven (311) XRF samples were taken during the inspection, five (5) were **positive**. During the evaluation **we found positive components with Lead Based Paint** only at yellow parking lines. If you need additional information, please call (787)637-7267.

6.0 DISCLOSURE

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

Anthony Robinson, EQB Lead Inspector LBPI-14623-180

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LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

APPENDIX I.

Certification

LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.



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LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

APPENDIX II XRF Data



Client Name: Ingenium Group Date:

Project Name: Lajas Sport Center / Academia San Luis Inspector: Anthony Robinson

Address: PR 117 KM 0.2 Bo. Santa Rosa, Lajas, P.R. XRF Serial No.: Niton XLp 300A

Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
				Retesting			
316	Building 6	Ceramic	White	Hose, loudry Floor	0.02	Fair	
317	Building 6	Ceramic	White	Hose Kitchen	0.03	Fair	
318	Building 6	Ceramic	Brown	Hose Bathroom 1, Wall C	0.02	Fair	
299	Building 6	Wood	Yellow	Exterior Hose	0.00	Fair	
300	Building 4	Concrete	Yellow	Basketball court, lines	0.60	Fair	
301	Building 4	Concrete	Yellow	Basketball court, lines	0.80	Fair	
302	Building 4	Concrete	Yellow	Basketball court, lines	0.50	Fair	
303	Building 4	Metal	Yellow	Basketball pole	0.60	Fair	
304	Building 1	Ceramic	White	Bathroom Boy Wall C	0.30	Fair	
305	Building 1	Ceramic	White	Bathroom PK Floor	0.20	Fair	
306	Parking Area	Asfalt	Yellow	Parking lines	4.00	Fair	
307	Parking Area	Asfalt	Yellow	Parking lines	3.00	Fair	
308			White	Calibration LPS	0.00		
309			Red	Calibration LPS	0.90		
310			Red	Calibration LPS	1.00		
311			Yellow	Calibration LPS	3.00		



Client Name: Ingenium Group Date:

Project Name: Lajas Sport Center / Academia San Luis Inspector: Anthony Robinson

Address: PR 117 KM 0.2 Bo. Santa Rosa, Lajas, P.R. XRF Serial No.: Niton XLp 300A

Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
295	Building 6	Concrete	White	Hose Room 2, Wall C	0.00	Fair	
296	Building 6	Ceramic	Brown	Hose Bathroom 1	0.03	Fair	
297	Building 6	Ceramic	Brown	Hose Bathroom 1	0.10	Fair	
298	Building 6	Ceramic	Brown	Hose Bathroom 1, Floor	0.03	Fair	
299	Building 6	Ceramic	Cream	Hose Bathroom 1, Floor	0.01	Fair	
300	Building 6	Ceramic	Cream	Hose Bathroom 1, Toilet	0.20	Fair	
301	Building 6	Concrete	White	Hose Room 3, Wall A	0.00	Fair	
302	Building 6	Ceramic	Brown	Hose bothroom 2	0.03	Fair	
303	Building 6	Ceramic	Brown	Hose bothroom 2	0.10	Fair	
304	Building 6	Ceramic	White	Hose bothroom 2 Toliet	0.10	Fair	
305	Building 6	Ceramic	Cream	Hose Bathroom 2 Sink	0.02	Fair	
306	Building 6	Concrete	White	Hose Room 4 Wall A	0.00	Fair	
307	Building 6	Concrete	White	Hose Storage, Wall A	0.00	Fair	
308	Building 6	Wood	Yellow	Hose Exterior Wall A	0.02	Fair	
309	Building 6	Wood	Green	Hose Exterior Wall A	0.00	Fair	
310	Building 6	Wood	White	Hose Exterior Bacony	0.03	Fair	
311	Building 6	Metal	White	Window Gate	0.01		
312			White	Calibration LPS	0.00		
313			Red	Calibration LPS	1.00		
314			Yellow	Calibration LPS	3.00		
315			White	Calibration LPS	0.00		



Client Name: Ingenium Group Date:

Project Name: Lajas Sport Center / Academia San Luis Inspector: Anthony Robinson

Address: PR 117 KM 0.2 Bo. Santa Rosa, Lajas, P.R. XRF Serial No.: Niton XLp 300A

Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
274	Building 5	Concrete	Blue	Chapel, wall C, Trim	0.00	Fair	
275	Building 6	Concrete	Yellow	House	0.02	Fair	
276	Building 6	Metal	White	Hose Gate	0.00	Fair	
277	Building 6	Wood	Yellow	Hose Exterior	0.02	Fair	
278	Building 6	Wood	Green	Hose Exterior	0.02	Fair	
279	Building 6	Wood	White	Hose Ceiling	0.01	Fair	
280	Building 6	Concrete	White	Hose Wall A	0.00	Fair	
281	Building 6	Wood	White	Hose Bathroom D. Frame	0.00	Fair	
282	Building 6	Concrete	White	Hose, Bathroom Wall C	0.00	Fair	
283	Building 6	Ceramic	White	Hose Bathroom Toilet	0.00	Fair	
284	Building 6	Ceramic	White	Hose Bathroom Sink	0.03	Fair	
285	Building 6	Concrete	White	Hose Loundry, Wall A	0.00	Fair	
286	Building 6	Ceramic	White	Hose Loundry	0.03	Fair	
287	Building 6	Concrete	White	Hose Loundry, Wall C	0.00	Fair	
288	Building 6	Concrete	White	Hose Loundry, Wall D	0.00	Fair	
289	Building 6	Wood	White	Hose Loundry, Wall A	0.01	Fair	
290	Building 6	Ceramic	White	Hose, Kitchen	0.03	Fair	
291	Building 6	Ceramic	White/ Brown	Hose, Kitchen	0.00	Fair	
292	Building 6	Concrete	White	Hose Kitchen Wall C	0.00	Fair	
293	Building 6	Wood	White	Hose, Wall A	0.00	Fair	
294	Building 6	Concrete	White	Hose Room 1	0.00	Fair	



Client Name: Ingenium Group Date:

Project Name: Lajas Sport Center / Academia San Luis Inspector: Anthony Robinson

Address: PR 117 KM 0.2 Bo. Santa Rosa, Lajas, P.R. XRF Serial No.: Niton XLp 300A

Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
253	Building 4	Concrete	Yellow	Basketball court, lines	0.70	Fair	
254	Building 4	Concrete	Yellow	Basketball court, lines	0.50	Fair	
255	Building 4	Concrete	White	Basketball court, lines	0.00	Fair	
256	Building 4	Concrete	Green	Basketball court, lines	0.30	Fair	
257	Building 4	Concrete	Green	Basketball court, lines	0.30	Fair	
258	Building 4	Metal	Yellow	Basketball court, Pole	0.60	Fair	
259	Building 4	Metal	Yellow	Basketball court, Pole	0.70	Fair	
260	Building 4	Metal	Yellow	Basketball court, Pole	0.50	Fair	
261	Building 5	Concrete	Green	Chapel, exterior	0.00	Fair	
262	Building 5	Concrete	Yellow	Chapel, exterior	0.00	Fair	
263	Building 5	Wood	White	Chapel, exterior	0.20	Fair	
264	Building 5	Ceramic	Terracota	Chapel, exterior floor	0.00	Fair	
265	Building 5	Concrete	Green	Chapel, exterior trim	0.00	Fair	
266	Building 5	Ceramic	Terracota	Chapel floor	0.10	Fair	
267	Building 5	Ceramic	Blue	Chapel floor	0.30	Fair	
268	Building 5	Concrete	White	Chapel Wall A	0.00	Fair	
269	Building 5	Wood	Green	Chapel Wall B	0.00	Fair	
270	Building 5	Concrete	White	Chapel Wall C	0.00	Fair	
271	Building 5	Concrete	White	Chapel Wall D	0.00	Fair	
272	Building 5	Concrete	Blue	Chapel Ceiling	0.00	Fair	
273	Building 5	Ceramic	Blue	Chapel, wall base	0.20	Fair	



Client Name: Ingenium Group Date:

Project Name: Lajas Sport Center / Academia San Luis Inspector: Anthony Robinson

Address: PR 117 KM 0.2 Bo. Santa Rosa, Lajas, P.R. XRF Serial No.: Niton XLp 300A

Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
232	Building 3	Concrete	Brown	Kiosco, Wall B	0.00	Fair	
233	Building 3	Ceramic	Green	Kiosco, Wall B	0.20	Fair	
234	Building 3	Ceramic	White	Kiosco, Wall B	0.10	Fair	
235	Building 3	Concrete	Brown	Kiosco, Wall C	0.00	Fair	
236	Building 3	Ceramic	White	Kiosco, Wall C	0.10	Fair	
237	Building 3	Ceramic	Green	Kiosco, Wall C	0.20	Fair	
238	Building 3	Concrete	Brown	Kiosco, Wall D	0.00	Fair	
239	Building 3	Ceramic	White	Kiosco, Wall D	0.10	Fair	
240	Building 3	Concrete	Green	Kiosco, Wall D	0.30	Fair	
241	Building 3	Ceramic	Green	Kiosco Center couter	0.30	Fair	
242	Building 3	Ceramic	White	Kiosco Center couter	0.10	Fair	
243	Building 4	Concrete	Yellow	Basketball court room	0.00	Fair	
244	Building 4	Metal	Green	Basketball court Door	0.10	Fair	
245	Building 4	Concrete	Green	Basketball court couter	0.00	Fair	
246	Building 4	Concrete	Yellow	Basketball Room, Wall B	0.00	Fair	
247	Building 4	Concrete	Yellow	Basketball Room, Wall C	0.00	Fair	
248	Building 4	Concrete	Yellow	Basketball Room, Wall D	0.00	Fair	
249	Building 4	Concrete	Green	Basketball Room, Bench	0.00	Fair	
250	Building 4	Concrete	Yellow	Basketball Room, Bench	0.00	Fair	
251	Building 4	Concrete	Yellow	Basketball court, lines	0.60	Fair	
252	Building 4	Concrete	Yellow	Basketball court, lines	0.50	Fair	



Client Name: Ingenium Group Date:

Project Name: Lajas Sport Center / Academia San Luis Inspector: Anthony Robinson

Address: PR 117 KM 0.2 Bo. Santa Rosa, Lajas, P.R. XRF Serial No.: Niton XLp 300A

Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
211	Building 1	Ceramic	White	Bathroom boy, Wall C	0.30	Fair	
212	Building 1	Concrete	Green	Bathroom boy, Wall C	0.00	Fair	
213	Building 1	Ceramic	White	Bathroom boy, Wall D	0.30	Fair	
214	Building 1	Concrete	Green	Bathroom boy, Wall D	0.00	Fair	
215	Building 1	Wood	White	Bathroom boy, Wall D	0.10	Fair	
216	Building 1	Concrete	Yellow	Exterior Wall A	0.00	Fair	
217	Building 1	Metal	Brown	Ralling	0.20	Fair	
218	Building 2	Concrete	Yellow	Office, Exterior	0.00	Fair	
219	Building 2	Concrete	Green	Office, Exterior	0.00	Fair	
220	Building 2	Ceramic	White	Office, Floor	0.10	Fair	
221	Building 2	Concrete	Cream	Office Wall A	0.00	Fair	
222	Building 2	Concrete	Cream	Office, Wall B	0.00	Fair	
223	Building 2	Concrete	Cream	Office , Wall C	0.00	Fair	
224	Building 2	Concrete	Cream	Office, Wall D	0.00	Fair	
225	Building 2	Wood	Cream	Office, Wall C	0.10	Fair	
226	Building 2	Wood	White	Office, ceiling	0.00	Fair	
227	Building 3	Concrete	Yellow	Kiosco, Exterior	0.10	Fair	
228	Building 3	Concrete	Green	Kiosco, Exterior	0.00	Fair	
229	Building 3	Concrete	Brown	Kiosco, Wall A	0.00	Fair	
230	Building 3	Ceramic	Green	Kiosco, Wall A	0.30	Fair	
231	Building 3	Ceramic	White	Kiosco, Wall A	0.10	Fair	



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Address: PR 117 KM 0.2 Bo. Santa Rosa, Lajas, P.R. XRF Serial No.: Niton XLp 300A

Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
190	Building 1	Concrete	Green	Bathroom girl, Wall B	0.00	Fair	
191	Building 1	Ceramic	White	Bathroom girl, Wall C	0.20	Fair	
192	Building 1	Concrete	Green	Bathroom girl, Wall C	0.00	Fair	
193	Building 1	Ceramic	White	Bathroom girl, Wall D	0.20	Fair	
194	Building 1	Concrete	Green	Bathroom girl, Wall D	0.00	Fair	
195	Building 1	Ceramic	White	Bathroom girl, Sink 1	0.30	Fair	
196	Building 1	Ceramic	White	Bathroom girl, Sink 2	0.20	Fair	
197	Building 1	Ceramic	White	Bathroom girl, Sink 3	0.30	Fair	
198	Building 1	Ceramic	White	Bathroom girl, Sink 4	0.30	Fair	
199	Building 1	Ceramic	White	Bathroom girl, Toilet 1	0.20	Fair	
200	Building 1	Ceramic	White	Bathroom girl, Toilet 2	0.40	Fair	
201	Building 1	Ceramic	White	Bathroom girl, Toilet 3	0.30	Fair	
202	Building 1	Ceramic	White	Bathroom girl, Toilet 4	0.30	Fair	
203	Building 1	Ceramic	White	Bathroom girl, Toilet 5	0.40	Fair	
204	Building 1	Wood	White	Bathroom girl, Partition	0.10	Fair	
205	Building 1	Metal	Brown	Bathroom girl, Door	0.10	Fair	
206	Building 1	Metal	Brown	Bathroom boy, Door	0.10	Fair	
207	Building 1	Concrete	Yellow	Bathroom boy, Wall A	0.00	Fair	
208	Building 1	Concrete	Blue	Bathroom boy, Wall B	0.00	Fair	
209	Building 1	Concrete	Green	Bathroom boy, Wall B	0.00	Fair	
210	Building 1	Ceramic	White	Bathroom boy, Wall B	0.20	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
169	Building 1	Concrete	Yellow	Classroom 9, Wall D	0.00	Fair	
170	Building 1	Concrete	Green	Classroom 9, Wall D	0.00	Fair	
171	Building 1	Metal	Brown	Classroom 9, Door	0.20	Fair	
172	Building 1	Metal	Brown	Classroom 10, Door	0.00	Fair	
173	Building 1	Concrete	Yellow	Classroom 10, Wall A	0.00	Fair	
174	Building 1	Concrete	Green	Classroom 10, Wall A	0.00	Fair	
175	Building 1	Concrete	Yellow	Classroom 10, Wall B	0.00	Fair	
176	Building 1	Concrete	Green	Classroom 10, Wall B	0.10	Fair	
177	Building 1	Concrete	Yellow	Classroom 10, Wall C	0.00	Fair	
178	Building 1	Concrete	Green	Classroom 10, Wall C	0.00	Fair	
179	Building 1	Gypsum	Brown	Classroom 10, Wall D	0.00	Fair	
180	Building 1	Concrete	Yellow	Classroom 12, Wall A	0.00	Fair	
181	Building 1	Concrete	Green	Classroom 12, Wall A	0.00	Fair	
182	Building 1	Gypsum	Brown	Classroom 12, Wall B	0.00	Fair	
183	Building 1	Concrete	Yellow	Classroom 12, Wall C	0.00	Fair	
184	Building 1	Concrete	Green	Classroom 12, Wall C	0.00	Fair	
185	Building 1	Concrete	Yellow	Classroom 12, Wall D	0.00	Fair	
186	Building 1	Concrete	Yellow	Classroom 10, Wall D	0.00	Fair	
187	Building 1	Concrete	Green	Bathroom girl, Wall A	0.00	Fair	
188	Building 1	Concrete	Brown	Bathroom girl, Wall A	0.00	Fair	
189	Building 1	Ceramic	White	Bathroom girl, Wall B	0.30	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
148	Building 1	Metal	Brown	Classroom 7, Door	0.10	Fair	
149	Building 1	Concrete	Yellow	Classroom 7, Wall A	0.00	Fair	
150	Building 1	Concrete	Green	Classroom 7, Wall A	0.00	Fair	
151	Building 1	Gypsum	Brown	Classroom 7, Wall B	0.00	Fair	
152	Building 1	Concrete	Yellow	Classroom 7, Wall C	0.00	Fair	
153	Building 1	Concrete	Green	Classroom 7, Wall C	0.00	Fair	
154	Building 1	Concrete	Yellow	Classroom 7, Wall D	0.00	Fair	
155	Building 1	Metal	Brown	Classroom 8, Door	0.10	Fair	
156	Building 1	Concrete	Yellow	Classroom 8, Wall A	0.00	Fair	
157	Building 1	Concrete	Green	Classroom 8, Wall A	0.00	Fair	
158	Building 1	Concrete	Yellow	Classroom 8, Wall B	0.00	Fair	
159	Building 1	Concrete	Green	Classroom 8, Wall B	0.00	Fair	
160	Building 1	Concrete	Yellow	Classroom 8, Wall C	0.00	Fair	
161	Building 1	Concrete	Green	Classroom 8, Wall C	0.00	Fair	
162	Building 1	Gypsum	Brown	Classroom 8, Wall D	0.00	Fair	
163	Building 1	Gypsum	Green	Classroom 8, Wall D	0.00	Fair	
164	Building 1	Concrete	Green	Classroom 9, Wall A	0.00	Fair	
165	Building 1	Concrete	Yellow	Classroom 9, Wall A	0.00	Fair	
166	Building 1	Gypsum	Brown	Classroom 9, Wall B	0.00	Fair	
167	Building 1	Concrete	Yellow	Classroom 9, Wall C	0.00	Fair	
168	Building 1	Concrete	Green	Classroom 9, Wall C	0.00	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
127	Building 1	Concrete	Yellow	Classroom 4, Wall A	0.00	Fair	
128	Building 1	Concrete	Green	Classroom 4, Wall A	0.00	Fair	
129	Building 1	Concrete	Yellow	Classroom 4, Wall B	0.00	Fair	
130	Building 1	Concrete	Yellow	Classroom 4, Wall C	0.00	Fair	
131	Building 1	Concrete	Green	Classroom 4, Wall C	0.00	Fair	
132	Building 1	Gypsum	Brown	Classroom 4, Wall D	0.00	Fair	
133	Building 1	Metal	Brown	Classroom 4, Door	0.10	Fair	
134	Building 1	Metal	Brown	Classroom 5, Door	0.10	Fair	
135	Building 1	Concrete	Yellow	Classroom 5, Wall A	0.00	Fair	
136	Building 1	Concrete	Green	Classroom 5, Wall A	0.00	Fair	
137	Building 1	Gypsum	Brown	Classroom 5, Wall B	0.00	Fair	
138	Building 1	Concrete	Yellow	Classroom 5, Wall C	0.00	Fair	
139	Building 1	Concrete	Green	Classroom 5, Wall C	0.00	Fair	
140	Building 1	Concrete	Yellow	Classroom 5, Wall D	0.00	Fair	
141	Building 1	Metal	Brown	Classroom 6, Door	0.20	Fair	
142	Building 1	Concrete	Yellow	Classroom 6, Wall A	0.00	Fair	
143	Building 1	Concrete	Green	Classroom 6, Wall A	0.00	Fair	
144	Building 1	Concrete	Yellow	Classroom 6, Wall B	0.00	Fair	
145	Building 1	Concrete	Yellow	Classroom 6, Wall C	0.00	Fair	
146	Building 1	Concrete	Green	Classroom 6, Wall C	0.00	Fair	
147	Building 1	Gypsum	Brown	Classroom 6, Wall D	0.00	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
106	Building 1	Concrete	Yellow	Classroom 1, Wall A	0.00	Fair	
107	Building 1	Concrete	Yellow	Classroom 1, Wall B	0.00	Fair	
108	Building 1	Concrete	Yellow	Classroom 1, Wall C	0.00	Fair	
109	Building 1	Concrete	Yellow	Classroom 1, Wall D	0.00	Fair	
110	Building 1	Concrete	Green	Library room, Wall A	0.00	Fair	
111	Building 1	Concrete	Yellow	Library room, Wall B	0.00	Fair	
112	Building 1	Concrete	Green	Library room, Wall C	0.00	Fair	
113	Building 1	Concrete	Green	Library room, Wall D	0.00	Fair	
114	Building 1	Metal	Brown	Library room, Door	0.10	Fair	
115	Building 1	Concrete	Yellow	Classroom 2, Wall A	0.00	Fair	
116	Building 1	Concrete	Yellow	Classroom 2, Wall B	0.00	Fair	
117	Building 1	Concrete	Yellow	Classroom 2, Wall C	0.00	Fair	
118	Building 1	Concrete	Yellow	Classroom 2, Wall D	0.00	Fair	
119	Building 1	Metal	Brown	Classroom 2, Door	0.10	Fair	
120	Building 1	Ceramic	White	Faculty Room Floor	0.20	Fair	
121	Building 1	Concrete	Green	Faculty Room Wall A	0.00	Fair	
122	Building 1	Concrete	Green	Faculty Room Wall B	0.00	Fair	
123	Building 1	Wood	White	Faculty Room Wall C	0.00	Fair	
124	Building 1	Concrete	Green	Faculty Room Wall C	0.00	Fair	
125	Building 1	Concrete	Green	Faculty Room Wall D	0.00	Fair	
126	Building 1	Ceramic	White	Faculty Room Sink	-0.10	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
85	Building 1	Concrete	Blue	Bathroom boy, Wall A	0.00	Fair	
86	Building 1	Ceramic	White	Bathroom boy, Wall B	0.10	Fair	
87	Building 1	Concrete	Cream	Bathroom boy, Wall B	0.00	Fair	
88	Building 1	Ceramic	White	Bathroom boy, Wall C	0.10	Fair	
89	Building 1	Concrete	Cream	Bathroom boy, Wall C	0.00	Fair	
90	Building 1	Ceramic	White	Bathroom boy, Wall D	-0.20	Fair	
91	Building 1	Concrete	Cream	Bathroom boy, Wall D	0.00	Fair	
92	Building 1	Ceramic	White	Bathroom boy, Sink 1	0.10	Fair	
93	Building 1	Ceramic	White	Bathroom boy, Sink 2	0.00	Fair	
94	Building 1	Ceramic	White	Bathroom boy, Sink 3	0.30	Fair	
95	Building 1	Ceramic	White	Bathroom boy, Sink 4	0.30	Fair	
96	Building 1	Ceramic	White	Bathroom boy, toilet 1	0.10	Fair	
97	Building 1	Ceramic	White	Bathroom boy, toilet 2	0.00	Fair	
98	Building 1	Ceramic	White	Bathroom boy, toilet 3	0.10	Fair	
99	Building 1	Ceramic	White	Bathroom boy, Urinal 1	0.30	Fair	
100	Building 1	Ceramic	White	Bathroom boy, Urinal 2	0.40	Fair	
101	Building 1	Ceramic	White	Bathroom boy, Urinal 3	0.40	Fair	
102	Building 1	Wood	White	Bathroom boy, Partitions	0.00	Fair	
103	Building 1	Metal	Brown	Bathroom boy, Door	0.10	Fair	
104	Building 1	Metal	Brown	Classroom 1, Door 1	0.10	Fair	
105	Building 1	Ceramic	White	Exterior hall / fountain	0.10	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
64	Building 1	Concrete	Yellow	Classroom 3, Wall C	0.00	Fair	
65	Building 1	Concrete	Blue	Classroom 3, Wall D	0.00	Fair	
66	Building 1	Concrete	Green	Bathroom girl, Wall A	0.00	Fair	
67	Building 1	Ceramic	White	Bathroom girl, Wall B	0.10	Fair	
68	Building 1	Concrete	Cream	Bathroom girl, Wall B	0.00	Fair	
69	Building 1	Ceramic	White	Bathroom girl, Wall C	0.00	Fair	
70	Building 1	Concrete	Cream	Bathroom girl, Wall C	0.00	Fair	
71	Building 1	Ceramic	White	Bathroom girl, Wall D	0.10	Fair	
72	Building 1	Concrete	Cream	Bathroom girl, Wall D	0.00	Fair	
73	Building 1	Ceramic	White	Bathroom girl, Sink 1	0.30	Fair	
74	Building 1	Ceramic	White	Bathroom girl, Sink 2	0.20	Fair	
75	Building 1	Ceramic	White	Bathroom girl, Sink 3	0.00	Fair	
76	Building 1	Ceramic	White	Bathroom girl, Sink 4	0.00	Fair	
77	Building 1	Ceramic	White	Bathroom girl, toilet 1	0.00	Fair	
78	Building 1	Ceramic	White	Bathroom girl, toilet 2	0.00	Fair	
79	Building 1	Ceramic	White	Bathroom girl, toilet 3	0.00	Fair	
80	Building 1	Ceramic	White	Bathroom girl, toilet 4	0.00	Fair	
81	Building 1	Ceramic	White	Bathroom girl, toilet 5	0.00	Fair	
82	Building 1	Ceramic	White	Bathroom girl, toilet 6	0.00	Fair	
83	Building 1	Wood	White	Bathroom girl, partitions	-0.10	Fair	
84	Building 1	Metal	Brown	Bathroom girl, door	0.10	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
43	Building 1	Ceramic	White	K Bathroom, girl, Wall C	0.20	Fair	
44	Building 1	Ceramic	White	K Bathroom, girl, Wall D	0.10	Fair	
45	Building 1	Concrete	White	K Bathroom, girl, Wall A	0.00	Fair	
46	Building 1	Concrete	White	K Bathroom, girl, Wall B	0.00	Fair	
47	Building 1	Concrete	White	K Bathroom, girl, Wall C	0.00	Fair	
48	Building 1	Concrete	White	K Bathroom, girl, Wall D	0.00	Fair	
49	Building 1	Concrete	Green	K exterior storage Wall B	0.00	Fair	
50	Building 1	Metal	White	K exterior storage gate	0.10	Fair	
51	Building 1	Ceramic	White	K Bathroom, boy, sink	0.30	Fair	
52	Building 1	Ceramic	White	K Bathroom, boy, toilet	0.30	Fair	
53	Building 1	Ceramic	White	K Bathroom, girl, sink	0.30	Fair	
54	Building 1	Ceramic	White	K Bathroom, girl, toilet	0.40	Fair	
55	Building 1	Wood	Brown	Interior Door	0.00	Fair	
56	Building 1	Metal	Brown	PK Door	0.00	Fair	
57	Building 1	Metal	Brown	K Door	-0.10	Fair	
58	Building 1	Metal	Brown	Classroom 3, Door 1	0.00	Fair	
59	Building 1	Metal	Brown	Classroom 3, Door 2	-0.10	Fair	
60	Building 1	Concrete	Yellow	Classroom 3, Wall A	0.00	Fair	
61	Building 1	Concrete	Blue	Classroom 3, Wall A	0.00	Fair	
62	Building 1	Concrete	Yellow	Classroom 3, Wall B	0.00	Fair	
63	Building 1	Concrete	Blue	Classroom 3, Wall C	0.00	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
22	Building 1	Concrete	Yellow	K-A Classroom Wall A	0.00	Fair	
23	Building 1	Wood	Yellow	K-A Classroom Wall B	0.10	Fair	
24	Building 1	Wood	Yellow	K-A Classroom Wall C	0.10	Fair	
25	Building 1	Concrete	Yellow	K-A Classroom Wall D	0.00	Fair	
26	Building 1	Wood	Yellow	K-B Classroom Wall A	0.00	Fair	
27	Building 1	Wood	Yellow	K-B Classroom Wall B	-0.20	Fair	
28	Building 1	Concrete	Yellow	K-B Classroom Wall C	0.00	Fair	
29	Building 1	Concrete	Yellow	K-B Classroom Wall D	0.00	Fair	
30	Building 1	Ceramic	White	K Bathroom, boy, Floor	0.40	Fair	
31	Building 1	Ceramic	White	K Bathroom, boy, Wall A	0.30	Fair	
32	Building 1	Ceramic	White	K Bathroom, boy, Wall B	0.20	Fair	
33	Building 1	Ceramic	White	K Bathroom, boy, Wall C	0.30	Fair	
34	Building 1	Ceramic	White	K Bathroom, boy, Wall D	0.10	Fair	
35	Building 1	Concrete	White	K Bathroom, boy, Wall A	0.00	Fair	
36	Building 1	Concrete	White	K Bathroom, boy, Wall B	0.00	Fair	
37	Building 1	Concrete	White	K Bathroom, boy, Wall C	0.00	Fair	
38	Building 1	Concrete	White	K Bathroom, boy, Wall D	0.00	Fair	
39	Building 1	Concrete	Yellow	K Bathroom boy, Ceiling	0.00	Fair	
40	Building 1	Ceramic	White	K Bathroom girl, Floor	0.30	Fair	
41	Building 1	Ceramic	White	K Bathroom, girl, Wall A	0.10	Fair	
42	Building 1	Ceramic	White	K Bathroom, girl, Wall B	0.10	Fair	



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Reading #	Building	Substrate	Color	Component & Location	XRF Reading	Paint Condition	Comments
1				Calibration			
2				Calibration LPS Blank			
3				Calibration LPS White			
4				Calibration LPS Red			
5	Parking Area	Asfalt	Yellow	Parking Line	4.90	Fair	516 Lft Ap.
6	Parking Area	Concrete	Yellow	Concrete low wall	0.20	Fair	
7	Parking Area	Asfalt	Yellow	Parking Line	3.60	Fair	
8	Parking Area	Asfalt	Blue	Parking Line	0.10	Fair	
9	Parking Area	Asfalt	Yellow	Parking Line	2.70	Fair	
10	Parking Area	Asfalt	Green	Parking floor paint	0.01	Fair	
11	Parking Area	Metal	Brown	Ornamental gate	0.01	Fair	
12	Parking Area	Concrete	Green	Concrete low wall	0.00	Fair	
13	Parking Area	Concrete	Yellow	Sidewalk floor marks	0.00	Fair	
14	Parking Area	Metal	Brown	Ornamental gate	0.10	Fair	
15	Building 1	Concrete	Yellow	Exterior, Side A	0.00	Fair	
16	Building 1	Concrete	Green	Exterior, Side A	0.10	Fair	
17	Building 1	Concrete	Yellow	PK Classroom Wall A	0.00	Fair	
18	Building 1	Concrete	Yellow	PK Classroom Wall B	0.00	Fair	
19	Building 1	Concrete	Yellow	PK Classroom Wall C	0.00	Fair	
20	Building 1	Wood	Yellow	PK Classroom Wall D	0.00	Fair	
21	Building 1	Concrete	White	PK Classroom Ceiling	0.00	Fair	

LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

APPENDIX III

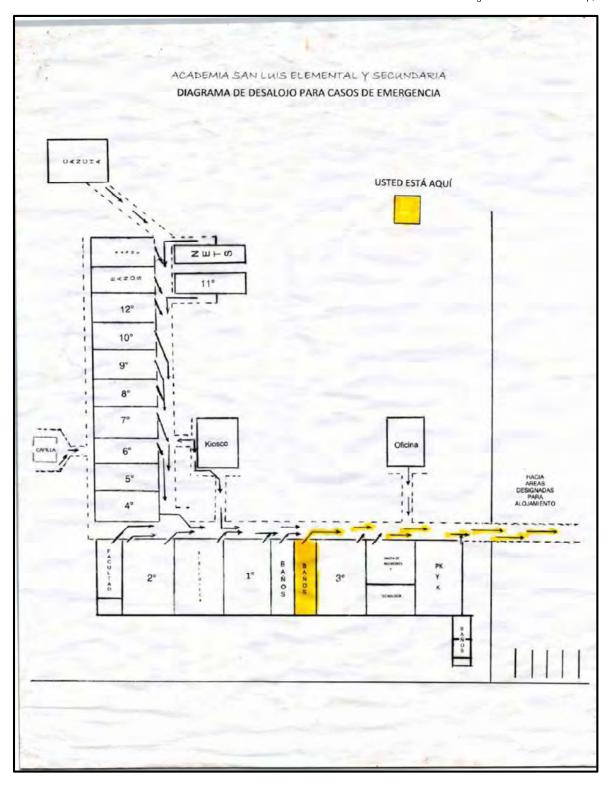
Location for Lead Based Paint Survey

Page 11 | 19

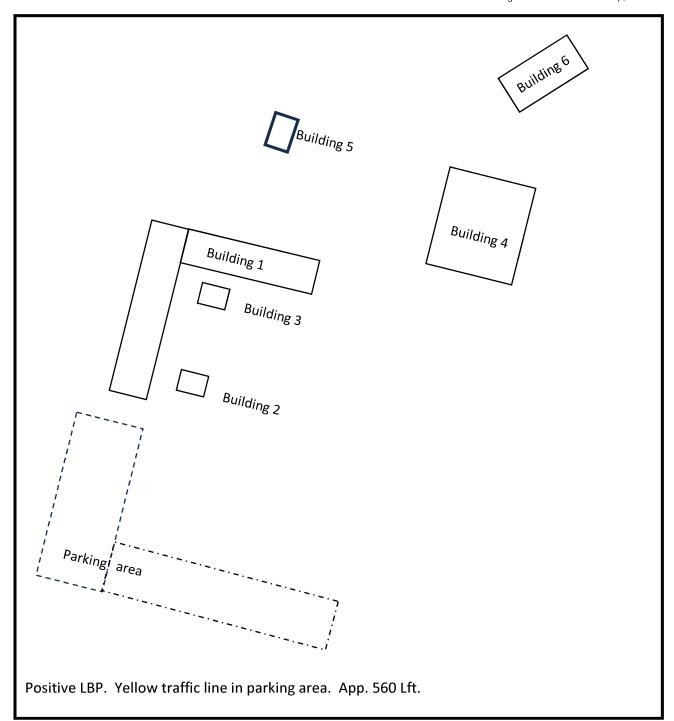
R & S Professional Equipment, Inc. LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.



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LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.

APPENDIX IV Photo of Positive Components

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R & S Professional Equipment, Inc. LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.





Positive LBP, Yellow traffic lines.

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R & S Professional Equipment, Inc. LEAD BASED PAINT SURVEY REPORT, Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667 Submitted to: Ingenium Professional Group, PSC.



Positive LBP, Yellow traffic lines.

ATTACHMENT H ASBESTOS CONTAINING MATERIALS SURVEY REPORT

ASBESTOS CONTAINING MATERIALS SURVEY REPORT

<u>Sampling at Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000</u>



Submitted To:Ing. William Melendez Rivas

INGENIUM Professional Group, PSC.

Prepared By: Anthony Robinson Santana

R & S Professional Equipment, Inc. PO Box 1393, Naguabo, P.R. 00718

Phone: (787) 637-7267

Email. rsprofessionalequipment@gmail.com

June 2023

Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

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Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

I. SUMMARY

R & S Professional Equipment, Inc. was contracted to perform a Asbestos Containing Materials Inspection at Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000. The six inspected areas appear to be in good conditions however, they are not currently in use.

The Asbestos Containing Material (ACM) inspection was conducted on June 14, 2023, by Anthony Robinson Santana certified asbestos inspector #ASB-0622-0202-SI, qualified by experience. The scope of the survey included sampling and physical evaluations of ACM suspect materials to the selective areas. Nine samples of roofing material were taken during the inspection. Laboratory results do not identify asbestos in the samples.

Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

1.0 INTRODUCTION

R & S Professional Equipment, Inc. was contracted to perform an Asbestos Containing Materials Inspection at Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000. The six inspected areas appear to be in good conditions however, they are not currently in use. All structures are one level. Building 1 contain 12 classroom, 3 office area, and 6 bathrooms. Building 2 is a office area. Building 3 is a Kiosco. Building 4 is the basketball court area. Building 5 is the chaplain. Building 6 is the concrete and wood house.

The Asbestos Containing Material (ACM) inspection was conducted on June 14, 2023, by Anthony Robinson Santana certified asbestos inspector #ASB-0622-0202-SI, qualified.

Asbestos Containing Building Material (ACBM) is defined as any material which contains more than 1% percent Asbestos. The asbestos inspection work was performed by the Asbestos Hazards Emergency Response Act (AHERA) accredited asbestos inspectors under the Puerto Rico Environmental and Natural Resources Department (DRNA) accreditation program. The inspection was conducted in accordance with EPA's "Guidance for Controlling Asbestos Containing Materials in Buildings (EPA 560/5- 85/024)". Asbestos Containing Materials Inspection and bulk sampling procedures to be implemented was based on the guidelines established by the ASTM E2356-14 Standard Practice for Comprehensive Building Asbestos Survey. Samples were analyzed by PLM using dispersion staining techniques in accordance with US EPA Method: 600/M4-82-020 of Dec. 1982 and 600/R-93/116 of July 93.

The inspection was carried out since the AHERA protocol, according to the following scenario:

- The surveyed area was	divided into	functional	spaces.
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Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

- A visual inspection was performed.
- Samples of suspicious materials were taken.

Nine samples were taken during inspection, the laboratory results do not identify asbestos.

2.0 GENERAL INFORMATION

Asbestos was used in the construction industry from 1900 to 1989. It is still being used today in various products. The health effects of asbestos have been studied since the 1930's. More health studies have been conducted in asbestos than any other natural substance. The mere presence of asbestos containing materials does not necessarily constitute a health hazard. However, when these materials become disturbed from building renovation, maintenance, or other everyday activities that allow fibers to be released into the environment, a potential hazard does exist.

The relationship between exposure level and health risk is very complex. Although this relationship is not completely understood, asbestos exposure has been associated with various types of lung diseases including a debilitating lung disease called ASBESTOSIS; a rare cancer of chest called MESOTHELIOMA; and cancers of the esophagus, stomach, colon and other organs. Asbestosis is not fatal; it is, however, incurable. One who has it cannot breathe easily, and physical activity becomes limited. MESOTHELIOMA is 100% fatal, as there is no cure. These diseases can be directly linked to asbestos because of the mineral particles that can be found in the lining of the lungs and stomach, since the body cannot absorb these minerals. Tests have determined that asbestos can cause cancer, but scientists disagree on the number of asbestos fibers that must be inhaled to cause cancer. The nose filters out all visible particles. Therefore, only the microscopic fibers are the ones who cause the problems.

Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

Studies indicate different health effects resulting from exposure to chrysotile asbestos versus exposure to the amphibole form of asbestos. The latter, which include tremolite, amosite, actinolite, anthophyllite and crocidolite have more significant health impact than chrysotile. Some scientists cite studies concluding that is the size of the fibers deposited in the lungs that result in cancer. Long, thin fibers, greater than 8 microns in length and less than 0.25 microns in diameter show the highest potential of cancer development.

2.1 National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA's rules concerning the application, removal, and disposal of ACM, as well as manufacturing, spraying and fabricating of ACM were issued under the asbestos NESHAP regulation (U.S. EPA National Emission Standards for Hazardous Air Pollutants, 40 CFR 61 Subpart M, October 30, 1987). The asbestos NESHAP regulation governs asbestos demolition and renovation projects in all facilities. The NESHAP rule usually requires owners or operators to have all friable ACM removed before the building is demolished and may require its removal before renovation. If friable ACM shall be disturbed, the NESHAP rule may require appropriate work practices, or procedures for emission control. The rule states that any ACM, which may become friable, poses a potential hazard that should be addressed.

A revised NESHAP ruling was released on November 20, 1990, effective February 20, 1991, which includes as the responsibility of the owner, or operator, to "prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II non-friable ACM." (40 CFR, Part 61, National Emission Standards for hazardous Air Pollutants, Asbestos NESHAP Revision, Final Rule, November 20, 1990).

Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

3.0 BUILDING INSPECTION METHOD

When samples are collected, has been classified according to the condition of Asbestos Containing Materials (ACM) in that location and the potential for material disturbance. The assessment scheme used followed that recommended by the EPA as a result of the Asbestos Hazard Emergency Response Act (AHERA) and outlined in the Code of federal Regulations 40 CFR Part 763.88 dated October 30, 1987, amended by 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision, Final rule, November 20, 1990.

All the functional spaces were visited and visually inspected. Each functional space was first visually inspected to identify the location of any suspected ACM.

ACM was categorized as follows:

- 1. Category I, non-friable asbestos containing materials (ACM). This includes asbestos containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1% asbestos.
- 2. Category II, non-friable ACM. This includes any materials, excluding category I non-friable ACM containing more than 1% asbestos, that when dry cannot be crumbled, pulverized, or reduced to power by hand pressure.
- 3. Friable asbestos materials. This includes any material containing more than 1% asbestos that, when dry, can be crumbled, pulverized, or reduced to powder be hand pressure.

Physical assessment was performed based on AHERA regulations. This protocol provides separate analysis for three types of materials: surfacing, thermal insulation and miscellaneous. The hazard assessment combines the level of

Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

potential disturbance with the current condition of ACM to indicate overall hazard potential.

The rankings of potential hazards range from 1-most hazardous, to 7-least hazardous. The highest rank is reserved for ACM, which is significantly damaged. A review of the definition of "significant damage" reveals that the definitions are designed to identify ACBM, which is so extensively damaged, or deteriorated that it requires immediate corrective action. Hazard rank 2-4 reflects ACBM, which is "damaged" as defined by AHERA, with rank 2 indicating a "potential for significant damage" and rank 3 indicating a "potential for damage". Hazard ranks 5-7 are reserved for ACBM currently in good condition, but with a range in the likelihood for future disturbance.

4.0 INSPECTION RESULTS

The asbestos inspection work will be performed by Asbestos Hazards Emergency Response Act (AHERA) accredited asbestos inspectors under the PR Environmental Quality Board accreditation program. Nine samples of roofing material were taken during the inspection. Laboratory results do not identify asbestos in the samples.

5.0 CONCLUSION

R & S Professional Equipment, Inc. has performed an Asbestos Containing Material inspection with commonly accepted industry standards. The Asbestos Containing Material (ACM) inspection was conducted on June 14, 2023, by Anthony Robinson Santana certified asbestos inspector #ASB-0622-0202-SI, qualified by experience. Nine samples of roofing material were taken during the inspection. Laboratory results do not identify asbestos in the samples.

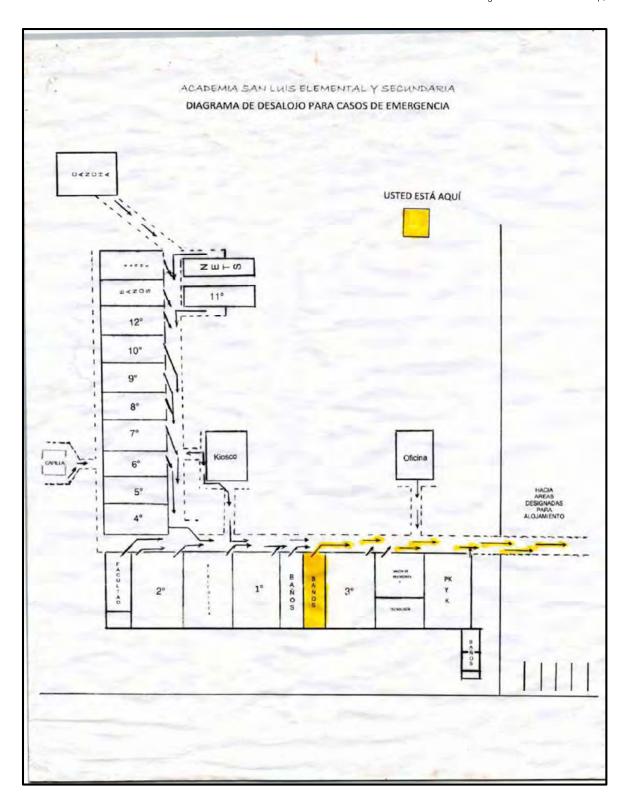
Anthony Robinson Santana EQB Asbestos Inspector Lic. #ASB-0622-0202-SI

Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

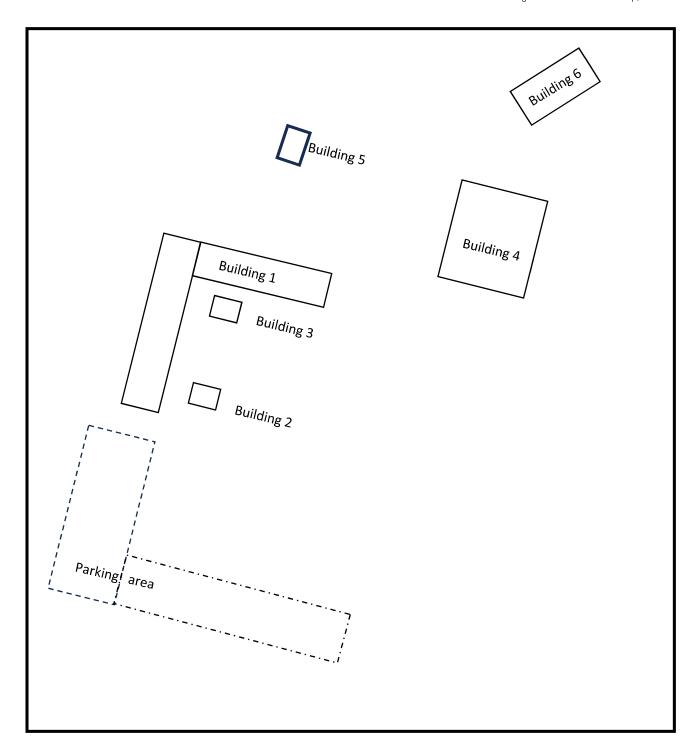
APPENDIX I - Location



Asbestos Containing Materials Report
Lajas Sport Center / Academia San Luis,
Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000
Submitted to: Ingenium Professional Group, PSC



Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC



Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

APPENDIX II – Certification

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GOBIERNO DE PUERTO RICO OFICINA DEL GOBERNADOR JUNTA DE CALIDAD AMBIENTAL



Área de Calidad de Agua

Forma PGC-009

CERTIFICACION DE NO PRESENCIA DE ASBESTO EN ESTRUCTURAS A DEMOLERSE

(Deberá completarse en letra de molde o impresa)

NUM. PERMISO:
Yo, Anthony Robinson Santana , mayor de edad, Casado , y vecino de Fajardo (Nombre) (Municipio)
PostalPO Box 1393 Naguabo, PR 00718
(Pueblo) (Zip Code) Teléfonos: Residencial () Oficina (_787) 6377267 Ext Fax ()
Certifico que:
 La estructura localizada en Academia San Luis, 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR, la cual será objeto de ur demolición se encuentra libre de asbesto.
2. La información antes indicada es cierta y correcta.
 Afirmo y reconozco las consecuencias de incluir y someter información falsa en este documento.
4. Para que así conste, firmo la presente certificación en de Puer Rico,
hoy día 21 de Sonto de 2023 (Municipio)
Nota: Esta certificación incluye edificio principal (tipo L), edificio de oficina, Kiosco, área de cancha, capilla y casa de madera y concreto.
ASB Inspector ASB-0622-0202-SI Exp. 21-Jun-2023
Firma y Sello del Profesional o Firma del Inspector de Asbesto registrado por la JCA (Original)

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

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



Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC



ASB-0622-0202-SI Número de Registro

21-jun-2023

Fecha de vencimiento

TARJETA DE REGISTRO PARA LA REMOCION DE ASBESTO

Esta tarjeta autoriza a:

Anthony Robinson Santana Inspector

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

Firma Autorizada - Departamento Recursos Naturales y Ambientales

Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

APPENDIX III - Photos













Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

APPENDIX IV – Hazard Assessment

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R & S PROFESSIONAL EQUIPMENT, INC.

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name Ingenium

Project Name: Lajas Sport Center / Academia San Luis

Inspection Date 6/14/2023 Page: 1 of 1

				Friabilit			Total	AHERA	
Homoge	eneous Material Description	Material	Asbestos	у	Location	Asbestos	Square	Assessment	Hazard
		Category	Content		of Materials	Contents	Feet of	Category	Ranking
I.D. Number	Material Description						ACM	(1-7,X, None)	(1-7)
ASB-LSP-01	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X
ASB-LSP-02	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X
ASB-LSP-03	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X
ASB-LSP-04	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X
ASB-LSP-05	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X
ASB-LSP-06	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X
ASB-LSP-07	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X
ASB-LSP-08	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X
ASB-LSP-09	Roofing Material, Building 1	Mic.	No	NF	Roof, Building 1	ND	X	X	X

Inspected by:	Anthony Robinson			Date:	

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged of significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM;

4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage;

7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials);

None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged;

5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

^{* -} Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

Asbestos Containing Materials Report Lajas Sport Center / Academia San Luis, Carr. 117, Km. 0.2, Bo. Santa Rosa, Lajas, PR 00667-000 Submitted to: Ingenium Professional Group, PSC

APPENDIX V – Laboratory Results

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611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B23060027



REPORT NUMBER

RP23062113

POLARIZED LIGHT MICROSCOPY	(PLM) BULK SAMPLE ANALYSIS REPORT	Т
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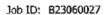
Client Name:	RS Profes	sional		Date Collected:	06/14/2023	
Project Name:	Academia	San Luis		Date Received:	06/20/2023	
Project ID:						
		RESULT OF ANAL	YSIS (BY	% AREA VISUAL	ESTIMATE)	
Lab S Client Sample ID	Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B23060027.01.A B23060027.01.A ASB-LSP-01 Layer % of Total		Semi-Hard, Paint with Aggregates and Fibers White	No		Cellulose 2	Sand/Aggregates 33 Binders/Paint 65
Date Analyzed: 0 Sample Location: Comments:	Roofing	Materials				
B23060027.02 B23060027.02.A ASB-LSP-02 Layer % of Total: Date Analyzed: 0		Semi-Hard, Bituminous with Aggregates Other - Fibers and Paint Black	No		Cellulose 10	Bitumen 45 Sand/Aggregates 15 Binders/Paint 30
Sample Location: Comments: Paint Included a	Roofing	Materials				
B23060027.03 B23060027.03.A ASB-LSP-03 Layer % of Total		Semi-Hard, Paint with Aggregates and Fibers White	No		Cellulose 3	Sand/Aggregates 27 Binders/Paint 70
Date Analyzed: 0 Sample Location: Comments:		Materials	<u>.</u> -			
B23060027.04 B23060027.04.A ASB-LSP-04		Semi-Hard, Paint with Aggregates and Fibers White	No		Çellulase 2	Sand/Aggregates 45 Binders/Paint 53
Layer % of Total		0.00			V CONTROL -	
MICROANALYST		[Jessica Garcia]		QUALIT	Y CONTROL:	[Ady Padan Ph.D]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788





REPORT NUMBER

RP23062113

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

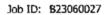
Client Name:	RS Profes	ssional		Date Collected:	06/14/2023			
Project Name:	Academia	a San Luis		Date Received:	06/20/2023			
Project ID:								
		RESULT OF ANAL	YSIS (BY 9	% AREA VISUAL	ESTIMATE)			
Lab S Client Sample ID	Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material		
Date Analyzed: 06	E12012022							
Sample Location:	Roofing	Materials						
Comments:	Rooting	Macci lais						
B23060027.05 B23060027.05.A ASB-LSP-05 Layer % of Total :	100%	Semi-Hard, Bituminous with Fibers Other - and Paint Black	No		Cellulose 2	Bitumen 70 Binders/Paint 28		
Date Analyzed: 00	6/20/2023							
Sample Location:		Materials						
Comments:								
Paint Included a	s Binders							
B23060027.06		Semi-Hard, Paint with	No		Cellulose 2	Sand/Aggregates 18		
B23060027.06.A		Aggregates and Fibers White				Binders/Paint 80		
ASB-LSP-06		write						
Layer % of Total :	100%							
Date Analyzed: 0	6/20/2023							
Sample Location:	Roofing	Mat.						
Comments:								
B23060027.07		Semi-Hard, Bituminous with	No		Cellulose 8	Bitumen 60 Binders/Paint 32		
B23060027.07.A		Fibers Other - and Paint				Dinuers/rant 32		
ASB-LSP-07		Black						
Layer % of Total:	100%							
Date Analyzed: 0	6/20/2023							
Sample Location: Comments:		Mat.						
Paint Included a	s Binders							
MICROANALYST:	([Jessica Garcia]		QUALITY	CONTROL:	[Ady Padan Ph.D]		

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907







REPORT NUMBER

RP23062113

Client Name:	RS Professional	Date Collected;	06/14/2023	
Project Name:	Academia San Luis	Date Received:	06/20/2023	
Project ID:				
	RESULT OF ANA	ALYSIS (BY % AREA VISUAL	ESTIMATE)	

Lab Sample ID Client Sample ID	Sample Description	Asbestos Asbestos Detected Fibers	Other Fibers	Non - Fibrous Material
B23060027.08 B23060027.08.A ASB-LSP-08	Semi-Hard, Bituminous with Aggregates Other - Fibers and Paint Black	No	Cellulose 7	Bitumen 60 Sand/Aggregates 13 Binders/Paint 20
Layer % of Total :100%				

Date Analyzed: 06/20/2023 Sample Location: Roofing Mat.

Comments:

Paint Included as Binders

B23060027.09Semi-Hard, Paint withNoCellulose 2Sand/Aggregates 35B23060027.09.AAggregates and FibersBinders/Paint 63

ASB-LSP-09

Layer % of Total :100%

Date Analyzed: 06/20/2023
Sample Location: Roofing Mat.

White

Comments:

Comments:

For all heterogeneous and layered samples easily separated into sublayers, each component is analyzed and reported separately.

Samples are analyzed by PLM using dispersion staining techniques in accordance with US EPA methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

MICROANALYST: QUALITY CONTROL: [Ady Padan Ph.D]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part. 763 and EPA/600/R-93/116.

611 Monserrate, 2nd. Floor, Santurce, P.R. 00907

Ph: (787) 722-0220 Fax: (787) 724-5788

Transmittal Sheet for Bulk Sample Analysis

Client Name: Address:	RLS INGENTUM PG			Project	ation:	LANAS	JAN WI
Contact: Phone/Fax:	ANTHONY RABIN	red		Sampler Compan	s Name:	105 1B	18635 Card
	Chain of	Custod	ly Recor	d			
Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Colle Date	Time	Analys PLM	is Required Other	Comments	Laboratory LD.
453-458-	of horing materia	14-300	11:15	V			150000000 10.
02	ROLFING MATERIAL	8-14	11 721	x			.12
03	Boolds Maieonal		11 123	<			.07
04			11:30	×			.04
05		4-14	1/:39	X			.4
06	ROOPING HAT	6.14	11:41	X			. 24
07	REOSTAL PLANT	4.14	11:44	X			.07
86	BLOTIUS HAR	4.14	11:49	*			٠٧٦
09	RAPPING. MAJ.	6.14	11:52	X			.09
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1							
	Turnaround Time:	Normal:			Rush:	X	
Relinquished By:	larrang has, USU,	Delivered	Directly t	o Lab: [Shipped:	
Date/ Time: Received By: Date/ Time:	16-24-23 /1/:45	Method o	f Shipmen	t:			
elinquished By:	0/20/25 11:58	Lab. Recipient:			*Job	ID:B230	060027
Received By:		Date:					(NAMEDIA NA
Date/ Time:						RS Professio	nal

ATTACHMENT I CONCEPTUAL PLANS

PR-CRP-000892 COMPLEJO DEPORTIVO RECREACIONAL LAJAS, PUERTO RICO.



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	V9101	TOPOGRAPHY EXCENSE- SECTIONS
7	VASILT	EXELENCE STEPLAN LAST BUILT
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×	HARRY ST	DEFINE GENERAL BALLINE
	VAGS.It	EXSTRE CHIPEL BLOW UP
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28	C201	DEGMETRIC SAILLE
28	G800	GRAZINE PLAN
77	C801	UNACINO SECTIONS
22	10400	HE SHARES MALL TO ME
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26	6409	HETAINING WILL SECTIONS PART 2
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LOCATION CATACTING . 000-002-007-17 COORDENAGAS LAT: 18.0425. LON: -67.0416



TOPOGRAPHY JUNTA DE PLANIFICACIÓN, PROGRAMA DE SISTEMA DE INFORMACION DECORAZICA, ESPI, HERE, GARMIN, INCREMENT P, NGA, USOS. CLASIFICACIÓN OFICIALIZACION DEL GEODATO EN PROCESO, FINANDE DE REFERIRSE AL HAPA DE CALIFICACION VISITANIA

LIZACION DEL GEGO ERIRGE AL MAPA DE



FLOOD MAP

Advanced 100% NOT FOR CONSTRUCTION GENERAL NOTES



REJECTED

G100

APPROVED













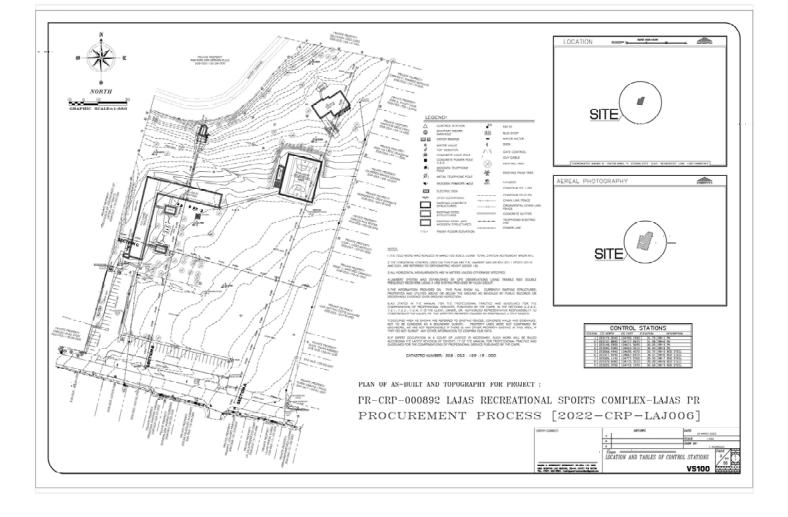


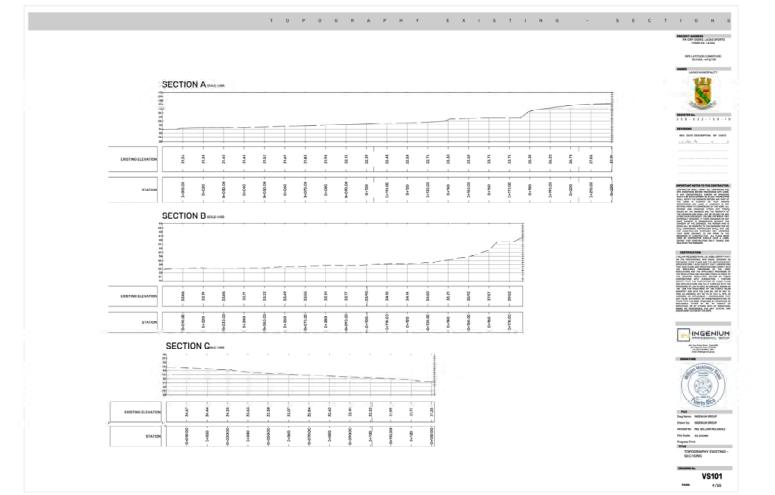


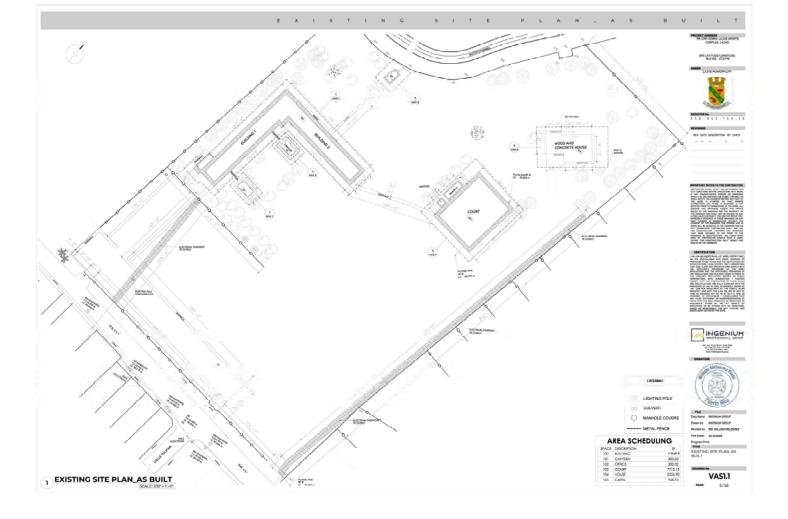


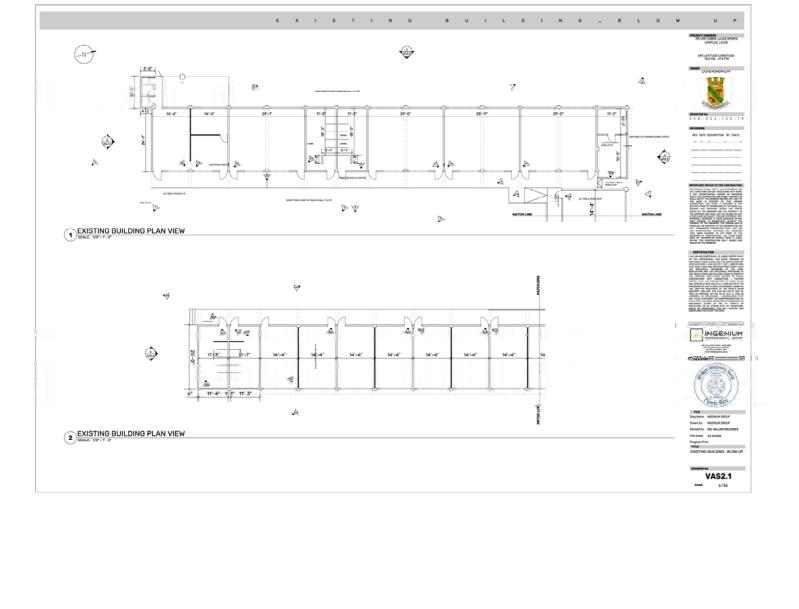
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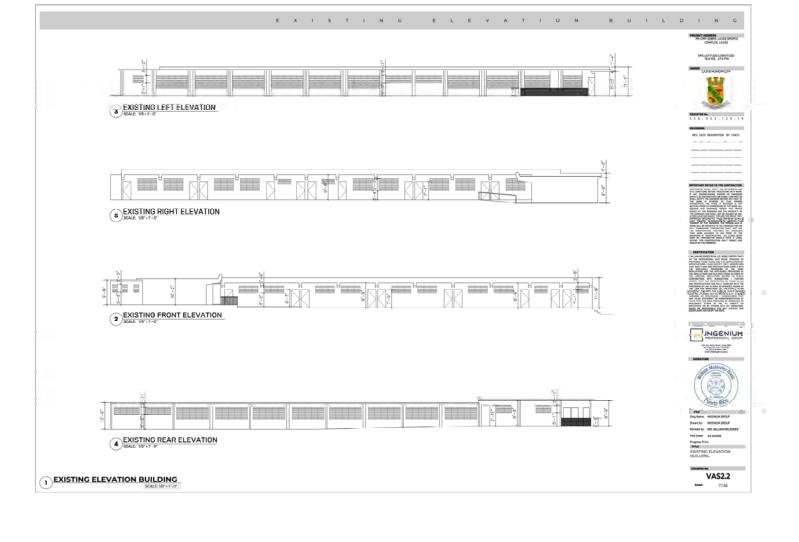
1 GENERAL SITE PLAN

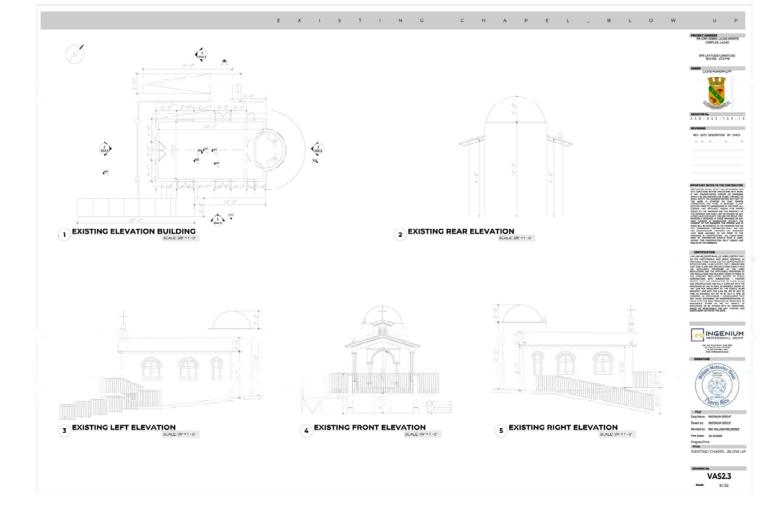


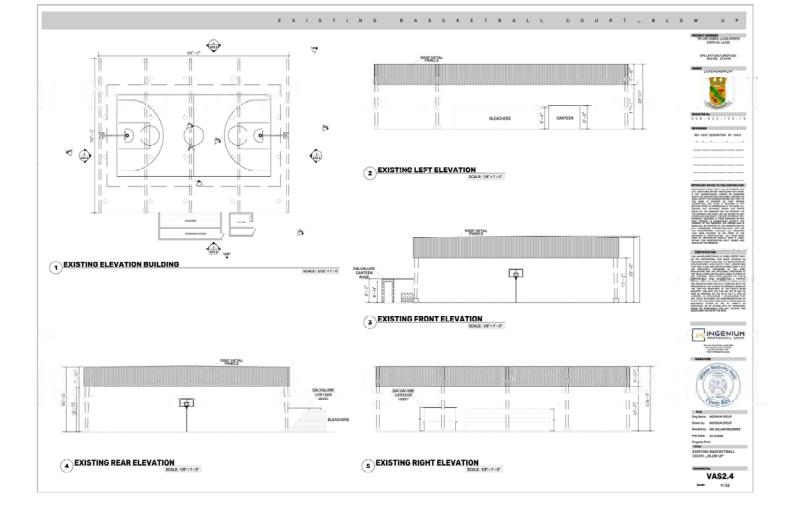


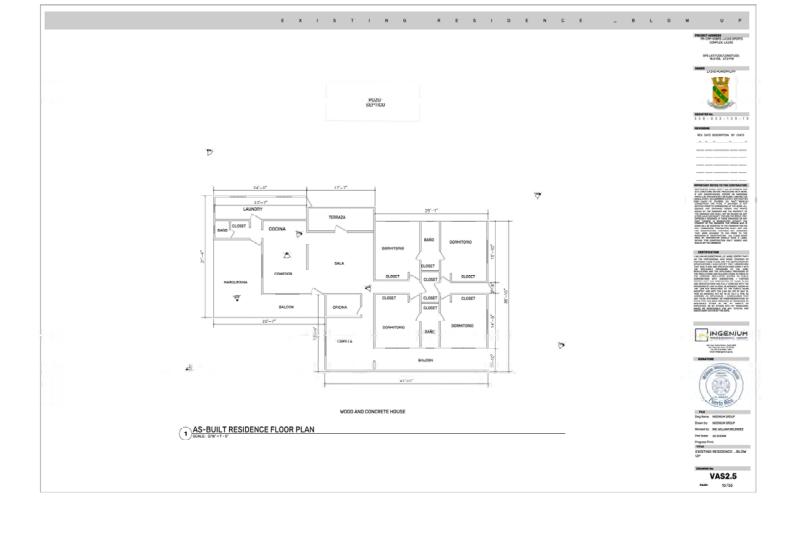


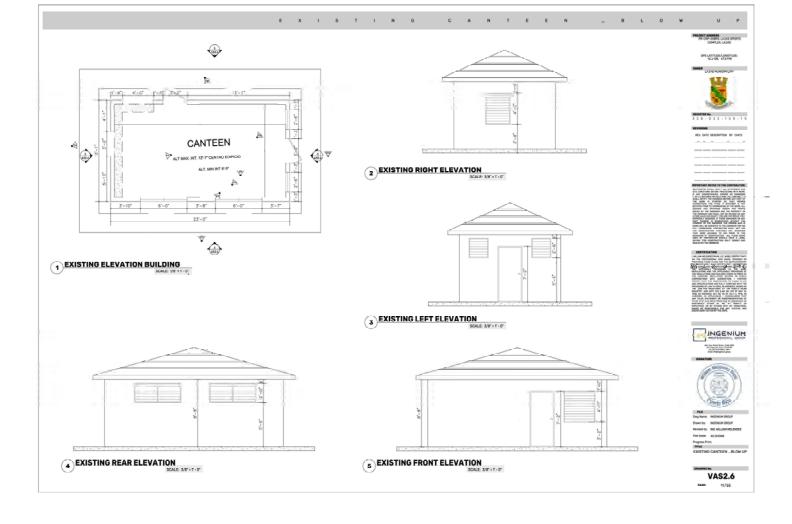


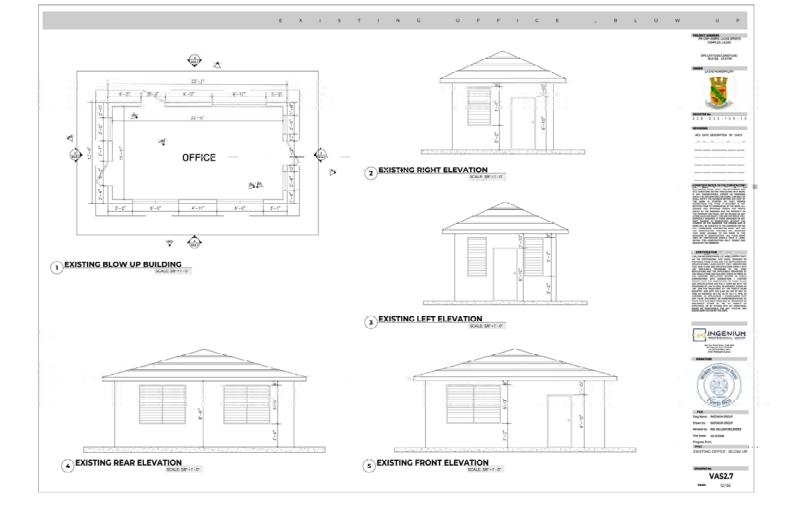


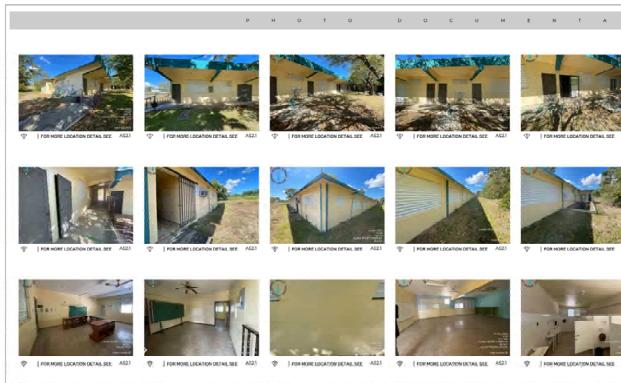














FOR MORE LOCATION DETAIL SEE AS2.1





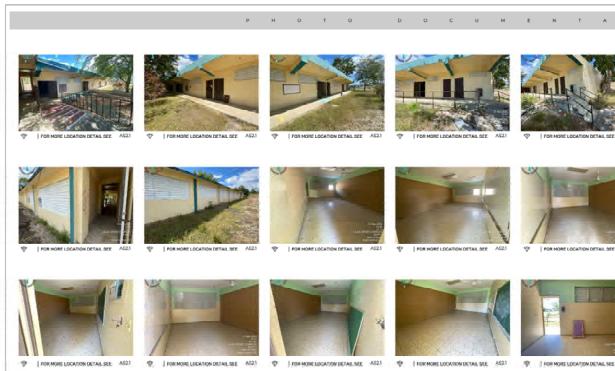












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FOR MORE LOCATION DETAIL SEE AS2.1

FOR MORE LOCATION DETAIL SEE AS2.1



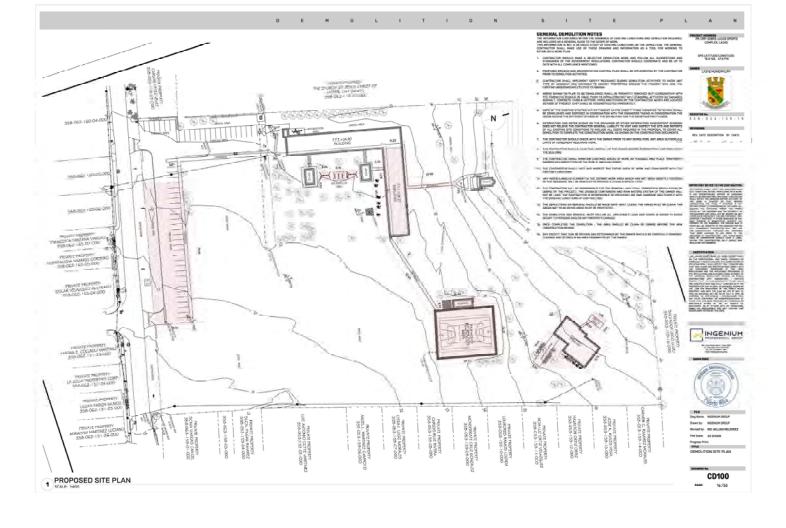


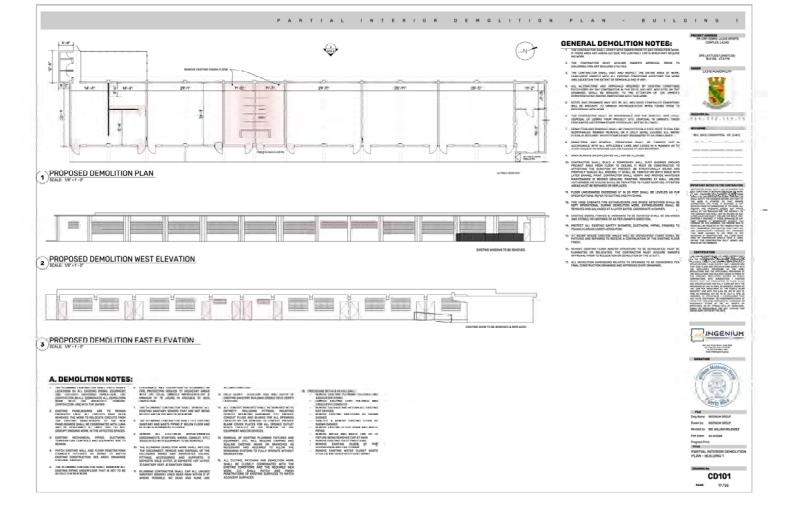












FINAL 100% CIVIL PLANS SET FOR PR-CRP-00892 LAJAS SPORT COMPLEX

LAJAS, SAN JUAN PUERTO RICO





- W ZAME OF DISCRIPANCY BETWEEN HIGH ARMY AND THE CONFINCION CHARMON, SHE'S RECORD TERMINAL TO MAKE STORY OF THE STORY AND THE CONFINENCE OF THE STORY OF THE STORY
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- E SON DELENCE STALL NOT BE REPORTED TO BE OFFICE OF REAT, OF DELENCE PREPARED BY DELENCE SON DELENCES. SHALL BE PREPARED REPORT OF MANAPACHERS, PARTICALOR OF RETAILED MADE ON MODIBLE TO WITHOUT DESCRIPTIONS.
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- AND LANDS STREET, TO COMPLETE ALL SCIENCES AS ACCUSED IN THE DELANGE.
- The BURGISTRACTOR SHALL RECTIFY SECTING ARROPMENTS TANBERTY CORRECTIONS AND STRUCTURES ANY UNMAKED HART SHALL BY REPARTS AT SHALL BY REPARTS AT SURCEINACTOR'S KERNING TO THE SURFRACTION.

CIVIL PLANS INDEX OF DRAWINGS



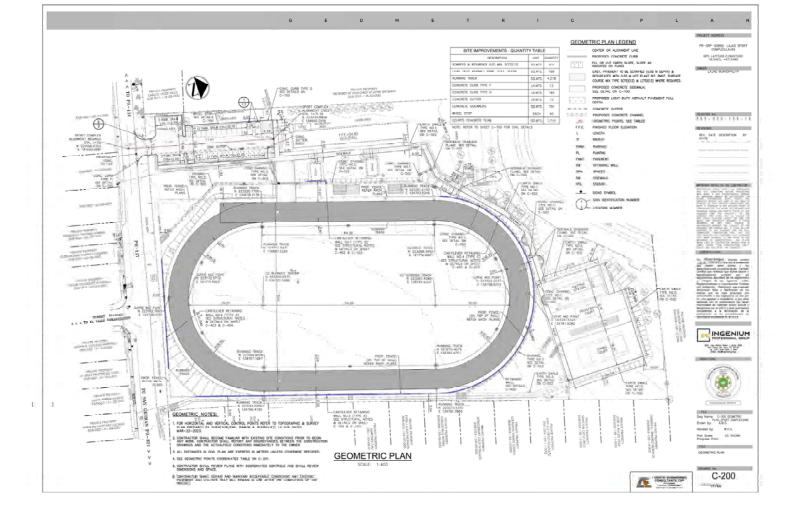
PR-ORF-00802 LAJAS SPORT COMPLEXILAJAS OPS LATITUDE A ONG TUDE: CHICK MINISTER ITY











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PONT NO.	DISTANCE	BEARING	COORDINATES N	COORDINATES E	DESCRIPTION
1	4.57	N13" 56" 56"E	223168.5525	134641.7417	OURS THRE I SEEMS
2	4.57	N75" 36" 59"W	223172.9892	134642 8438	CENTER OF CURVE
.3	0.72	N14" 25" 01"E	223174 1249	134638.4151	DIRE PT
4	3.92	N14" 25" 01"E	223174.8247	134638.5046	CURB THE F BECOM
6	0.61	535 M, 1945	223178.623K	134630 5688	CONC. SHALLOW QUITEX REGINO
6	0.91	MIN' SY DITE	223178.3065	134640.4546	course or come
7	4.57	575' 36' 50"0	223179.2822	134640.6817	CURR PT
8	12.95	N14" 23" 01"E	223178.1465	134645.1104	CURB CORNER
9	4.72	N75" 36" 59"W	223190.6944	134648.3283	CURB CORNER
10	0.76	N14" 25" DITE	223191.8680	134643.7520	0.88 PC
11	0.76	N14' 23' 01"E	223192.6061	134643.9413	CONTER OF CURVE
12	4.72	575' 36' 59'E	223193.3443	134644.1336	CORP PT
13	39.40	N14' 23' 01"E	223192.1707	134648,7069	OPB GREEN
14	4.88	N75" 36" 59"W	223230.3312	134658.4931	CURB CORNER
15	0.61	N14" 23" 01"E	223231.5427	134653,7692	DURB PC
16	0.61	N75" 36" 59"W	223232.1331	134653.9206	CENTER OF CURVE
17	2.89	N14" 23" 01"E	223232.2846	134653.3301	CURB TYPE D END
18	13.11	N75" 36" 59"W	223235.0844	134654.0481	CURB CORNER
19	42.90	514" 23" 01"W	223238.3401	134641.3526	CURB CORNER
20	4.72	575' 36' 59°E	223196.7893	134630.6969	CURB CORNER
21	0.76	514" 23" 01"W	223195.6157	134635.2732	DURB PC
22	0.76	514" 23" 01"W	223194.8776	134635.0839	CENTER OF CURVE
23	10.09	N75" 36" 59"W	223194.1395	134634.8946	Npm 35
24	12.95	\$14" 23" 01"W	223196.6464	134625,1191	CURB CORNER
25	7.81	575° 36° 59°E	223184.0985	134621.9012	CURB CORNER
26	3.05	514" 23" 01"W	223182.1594	134629.4624	CURB PC
27	3.05	575' 36' 59°E	223179.2069	134628.7052	CONTER OF CURVE
28	2.79	514" 23" 01"W	223178.4498	134631.6577	CURB PT
29	4.57	N75' 36' 59"W	223175.7513	134630.9656	CURB PC
30	4.57	\$14" 05" 19"W	223176.8871	134626.5369	CONTER OF CURVE

	TARLE	K GEOMETRIC	SIDEWA		
DESCRIPTION	COORDINATES E	COORDINATES N	BEARING	DISTANCE	PONT NO.
SOCIALY COINCE	134646.8440	223177.5446	N14" 23" 01"E	57.53	32
SECHALK CORNER	134661 1340	223233.2672	579' 36' 50'E	12.00	33
CONC. SEEWALK	134672.7579	223230.2663	572' 32' 58'E	8.06	34
RANGE TRACK (SS)	134680.4488	223227.8686	N17' 27' 07"E	9.14	35
BANK BUY OR	134683.1012	223236.6017	N72" 32" 58"W	8.31	36
CONC. SOCIETY	134675.2665	223239.0828	1/25" 36" 50"W	12.34	37
SECULA CORNER	134663.3123	223242.1485	N13" 15" 22"E	10.27	39
SECULA CORNER	134665.6672	223252.1447	578' 52' 32'E	1.80	40
OFFICE CORNER	134667.4293	223251.7983	N14" D4" D8"E	1.30	41
OFFICE CORNER	134667.7452	223253.0589	N79" 41" 21"W	1.81	42
SDEWAY CORNER	134665.9664	223253.4147	N13' 15' 22'E	25.92	43
SDEWALK CORNER	134671.9099	223278.6436	576' 25' 45'E	1.95	44
OFFICE CORNER	554673.8(\$)(7703200825	N12" 42" 65"E	530	45
OFFICE CORNER	134674.0865	223279.4555	N76" 25" 45"W	1.93	46
SOCWALK CORNER	134672.2080	223279.9089	N13" 15" 22"E	24.63	47
SOCWALK CORNER	134677.8568	223303.8872	N83' 47' 48'E	14.84	48
SOCIALK COINCE	134692.6134	223305.4911	N47" 27" 02"E	13.27	49
SOEWALK CORNER	134702.3886	223314.4640	N47" 27" 02"E	25.34	50
SOCWALK CORNER	134721.0550	223331.5983	N57" 27" 02"E	12.63	51
SOCWALK CORNER	134731.6983	223338.3918	590' 00' 00"E	1.50	52
SOCNALK PC	134733.1963	223338.3918	N80" 08' 26"E	2.92	53
CONTER OF CURNE	134736.0732	223338.8918	580" 08" 26"E	2.92	54.
SOEWALK PT	936230 id/a:	LESSAGE WAS	web! \$6100°c	52997	15.
BATTING STATION CORNER	134758.6983	223338.3918	N90" 00" 00"E	49.46	56
TENNS COURT CORN	134808.1558	223338.3918	NO" 00" 00"E	36.58	57
TENNS COURT CORN	134808.1558	223374.9718	N90" 00" 00"W	34.17	58
POLISAL COURT	134773,9891	223374.9718	50° 00' 00"E	6.47	59
POLITIAL COURT	134773.9891	223368.4998	N90" 00" 00"W	15.29	60
BATTING STATION CORNER	134758.6983	223368.4998	50" 00" 00"E	27.71	61
BATTING STATION CORN	134758.0983	223340.7913	N89" 59" 28"W	7.99	62
SOCNAL PC	134750.7064	223340.7925	580" 25" 29"W	2.92	63

SIDEWALK GEOMETRIC TARLE							
PONT NO.	DISTANCE	BEARING	COORDINATES N	COORDINATES E	DESCRIPTIO		
64	2.94	N80" 30" 07"W	223340.3068	134747.8271	CONTROL OF CHE		
65	13.93	N90" 00" 00"W	223340.7918	134744.9284	SOCHAX PT		
66	13.54	557° 27° 02°W	223340.7918	134730.9976	SDOWLK COM		
67	6.00	547' 37' 000#	223333.5083	134719.5867	SDEWLK COME		
68	2.02	517 15' 17'W	223329.4510	134715.1665	SECURE PC		
69	2.92	557 18' M'W	223327:1372	134713.3853	CONTR OF CUR		
70	13.79	547° 27' 02"W	223325.5601	134710.9278	SOCHUX PT		
71	4.42	N42" 32" 58"W	223316-2321	134700.7657	SDEWLK CON		
78	3.92	N14" 18" 36"E	223319.4880	134697.7770	SCOWLX CONG		
79	4.19	575" 41" 24"E	223323.2892	134698,7466	SCOWLX CONG		
80	1.48	N14" 17" 59"E	223322.2525	134702.8109	SDEWLK COINS		
81	7.85	N75" 21" 24"W	223323.6850	134703.1760	SOCIULIX COMO		
82	1.52	514" 18" 36"W	223325.6698	134695.5797	SOCIULIX COING		
83	2.13	575" 41" 24"E	223324.1931	134695.2030	SCEWAX COME		
84	4.75	514" 18" 36"W	223323.6659	134697.2699	SCEWLK COINS		
85	5.24	542' 32' 58'E	223319.0652	134696.0964	SCIENCE CONG		
86	10.96	547" 27" 02"W	223315-2015	134699.6429	SCIENCE CONG		
87	15.75	S83" 47" 48"W	223307.7920	134691.5708	SCIENCE CONG		
88	69.99	513" 15" 22"W	223306.0897	134675.9100	SDEWLK CORN		
89	1.83	514" 23" 01"W	223237.9604	134659.8600	SOCREUX CORNO		
90	18.02	N75" 36" 59"W	223236.1882	134659.4055	SDEWLK CORN		
91	2.02	NS1" 16" 09"W	223240.6649	134641,9488	SOCIETY COME		

G E O M E T R I C T A B L E

		SIGNING	TABLE			
COOK M.MRETE	LOCATION NUMBER	LEGEND	MATCHER CF	SIZE OF SIGN PANELS	54/A 2007	IOIA III)M
	2	PARE	MANUAL	NE year.	-pior	149
,	1, 2, 3	8/37ACC	SEE DETAIL DN G-700	12" x 18"	R7-8	3



PR-CRP-CORP2: LAURS SPORT COMPLEXIANS CPS LATITUDE/ADMORAGE 1E-0425, -67-0498

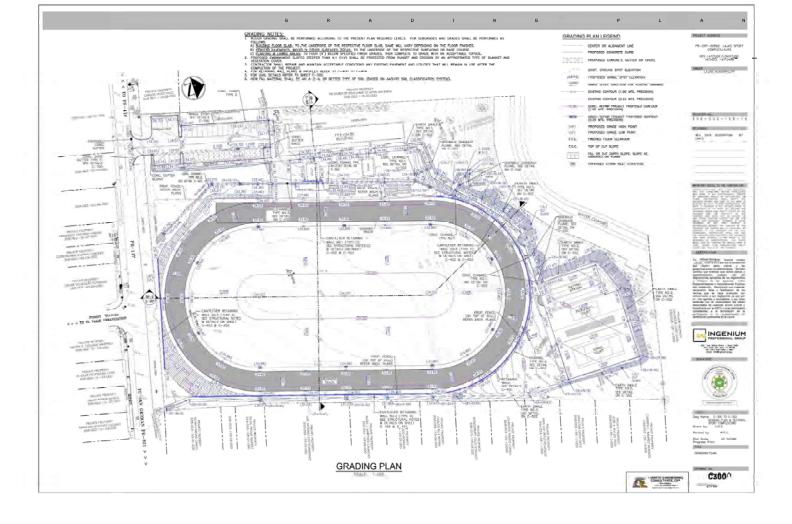
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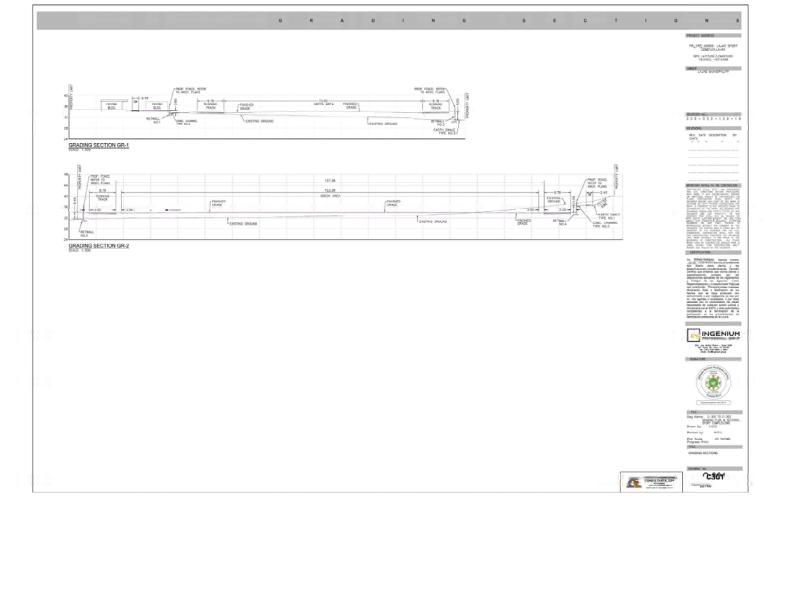
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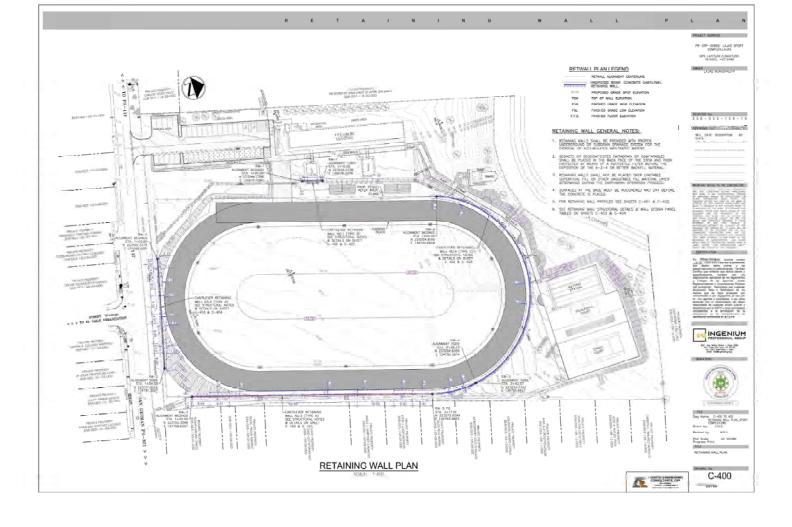
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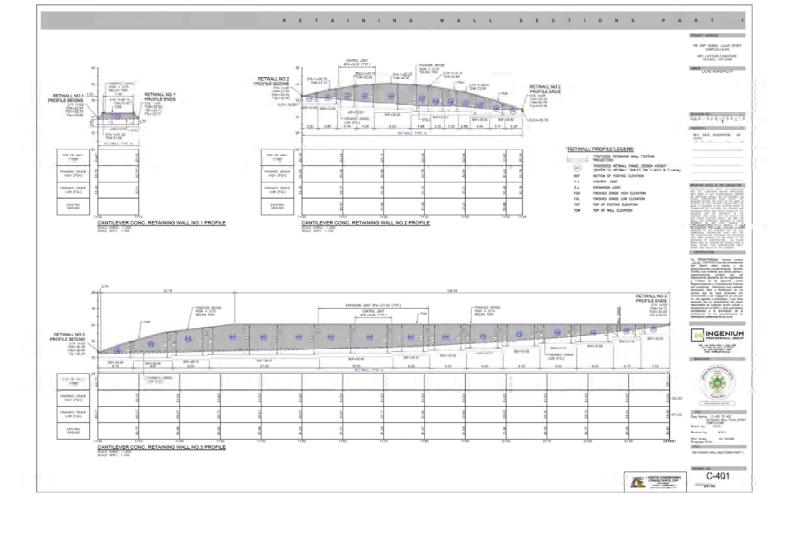


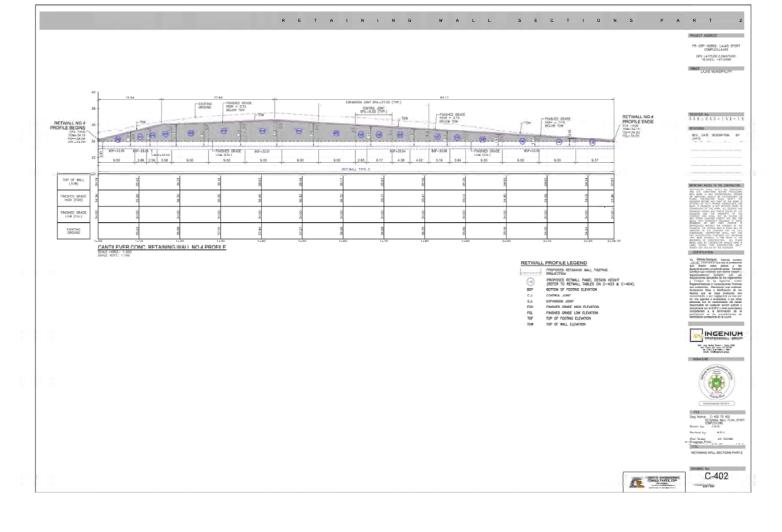


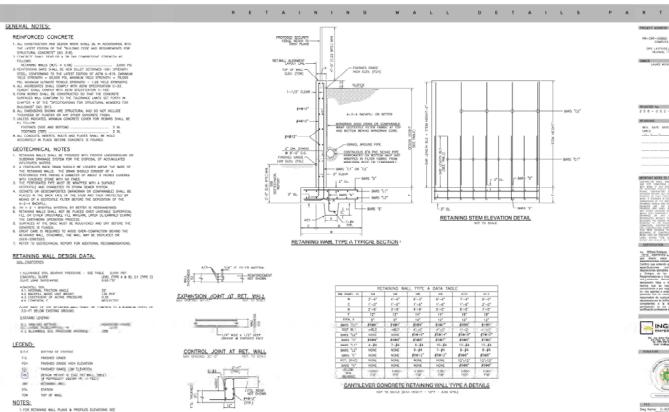












FOOTING STEP DETAIL

NOTES:

FOR RETAINING WALL PLANS & PROFILES ELEVATIONS SEE 194EDS 0-402 P3 C-402.
 FOR RETAINING WALL TYPE ID REFER TO PROFILES.









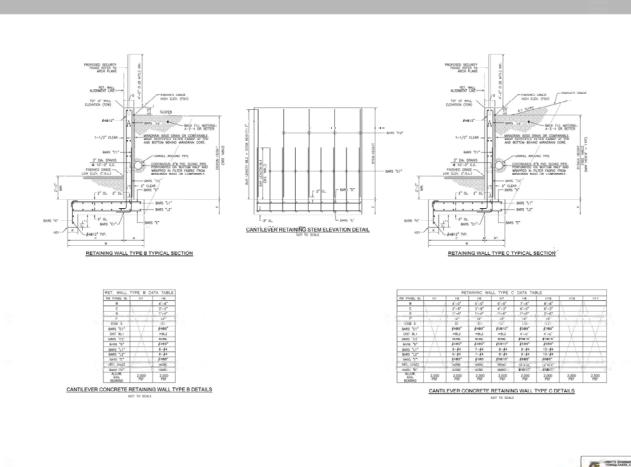
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PR-CRP-00892: LAJAS SPORT COMPLEX LAJAS

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PR-CRP-00892: LAJAS SPORT COMPLEXIAJAS CPS LATITUDE/LONGTUDE: 10.0425, =67.0498

GMMEN LAURS MURROPHUTT

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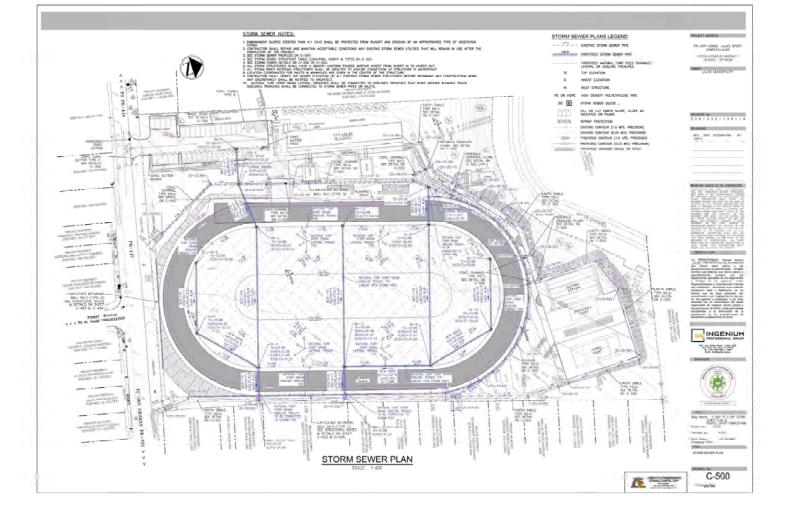


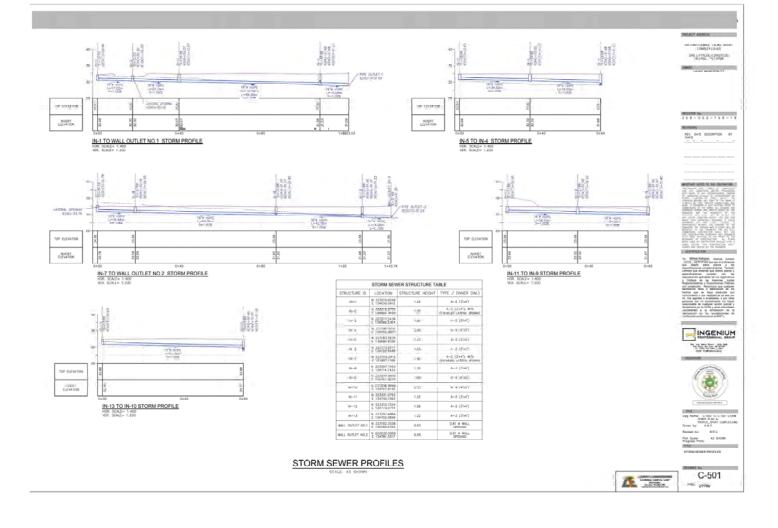
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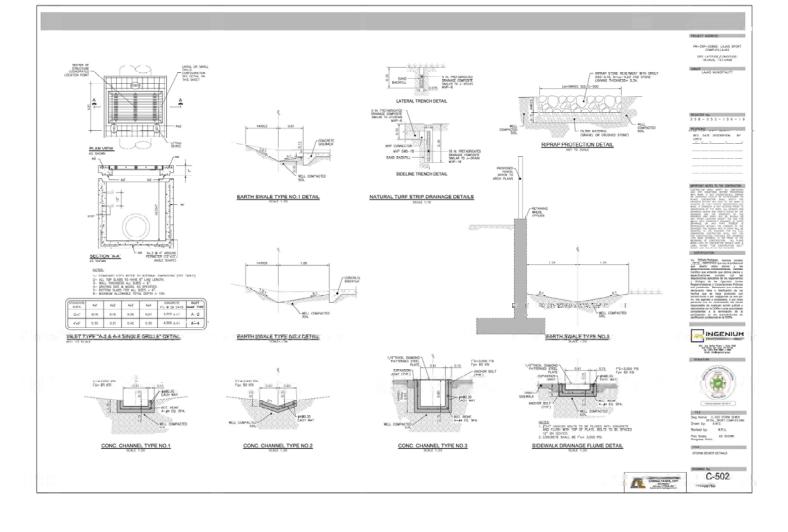
Progress Print:

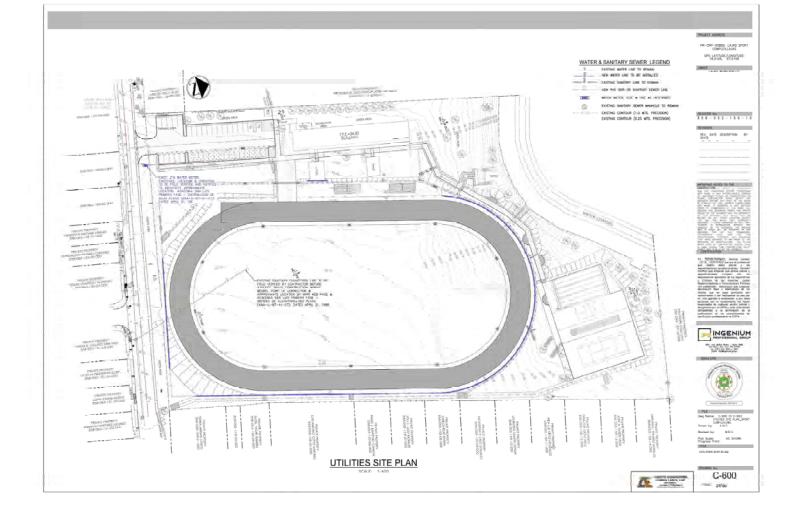
RETAINING WILL DETAILS PART 2

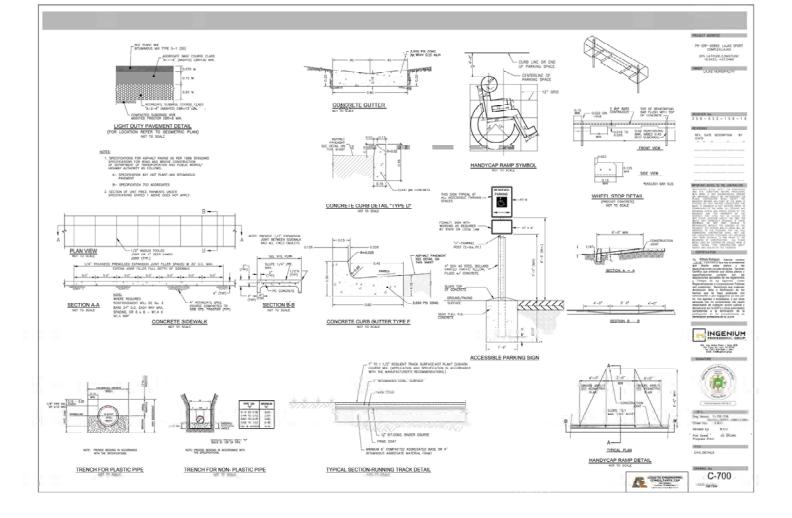
C-404

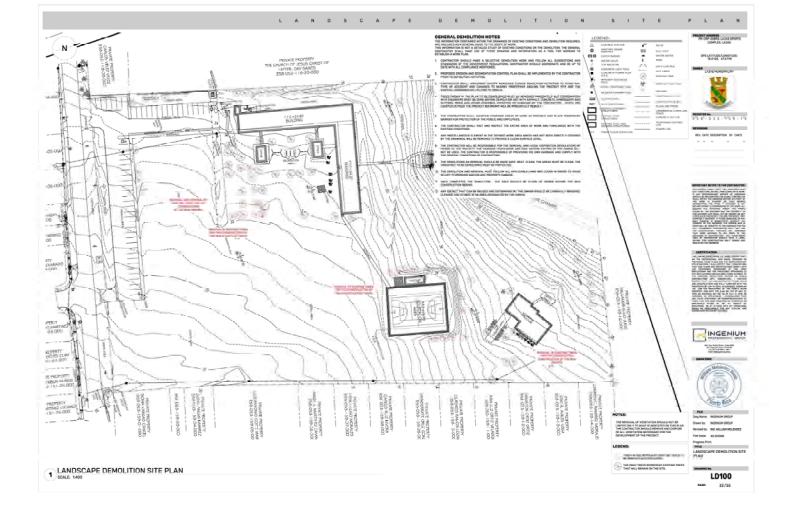


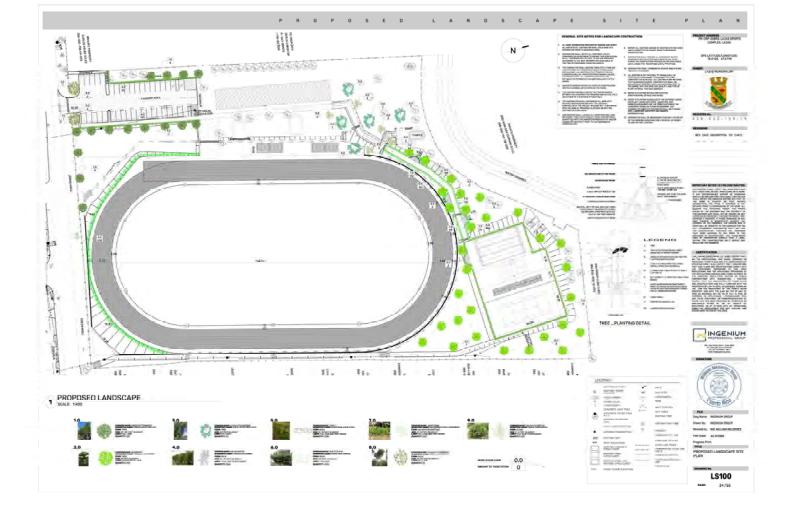


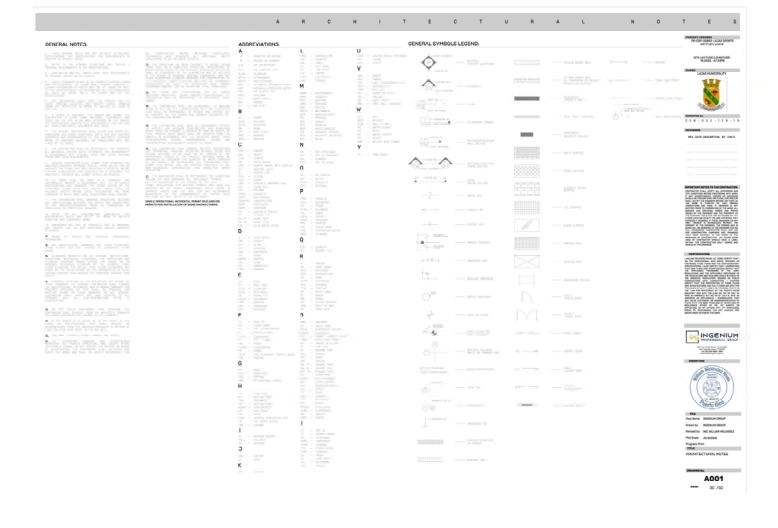


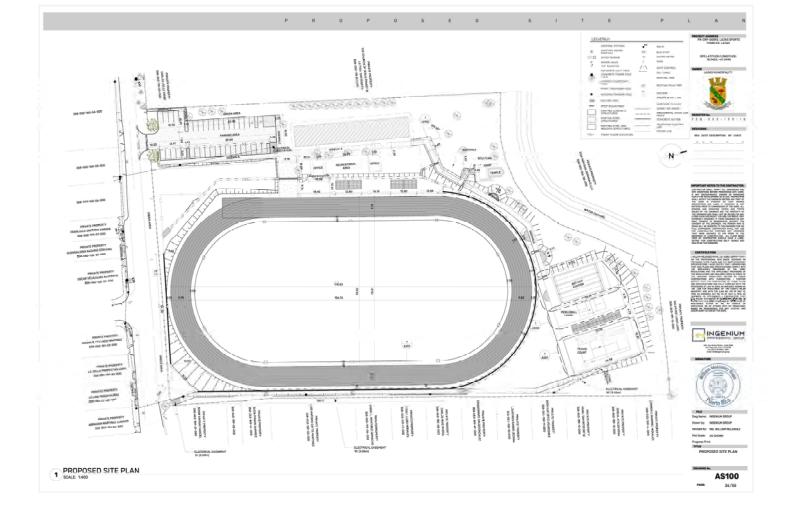


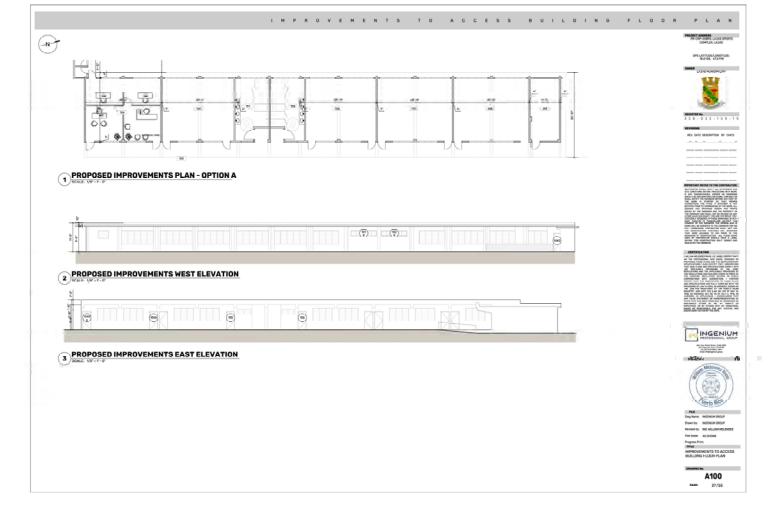


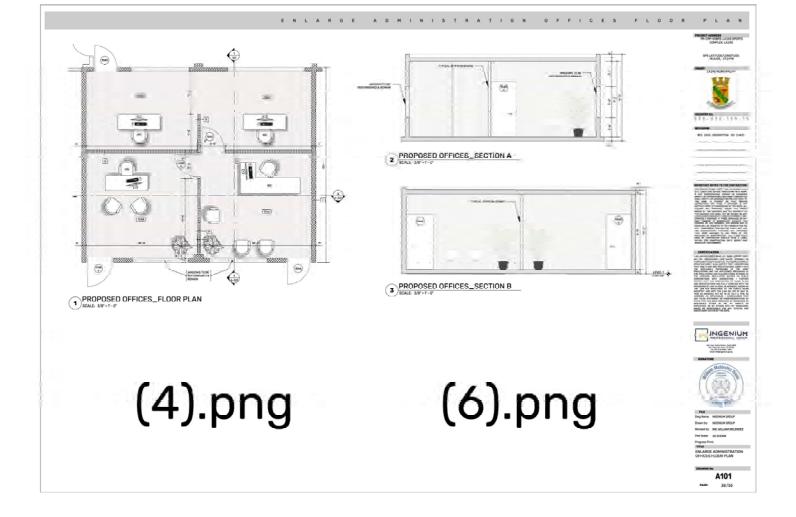


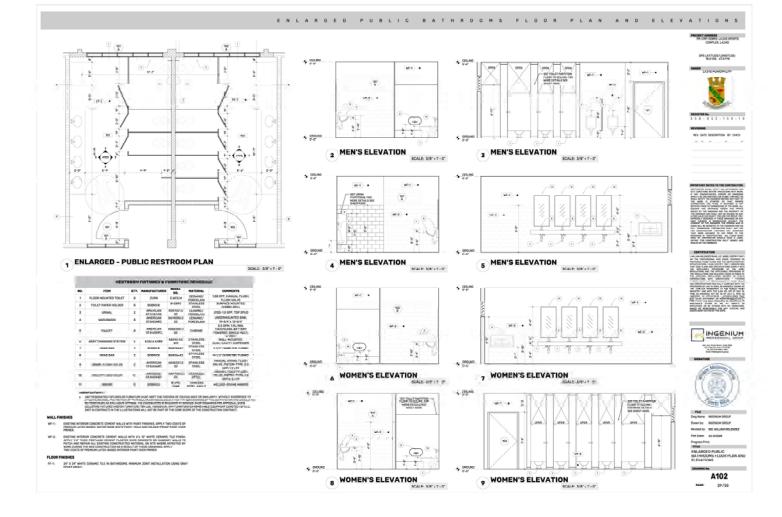


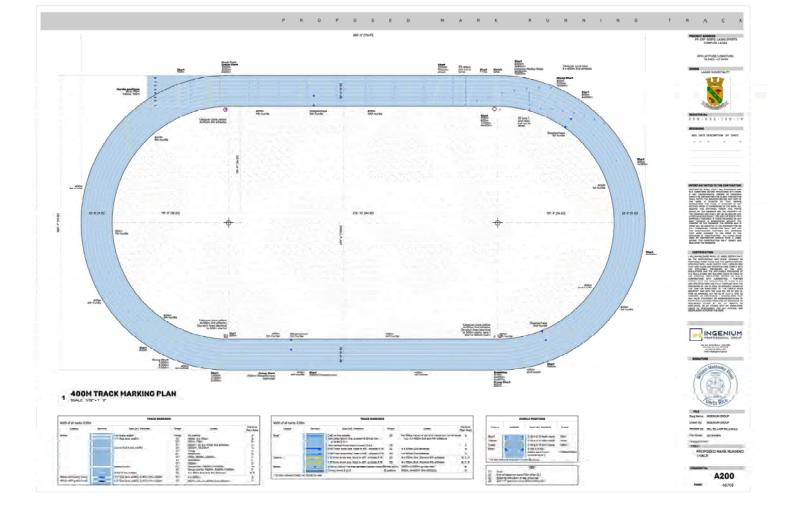


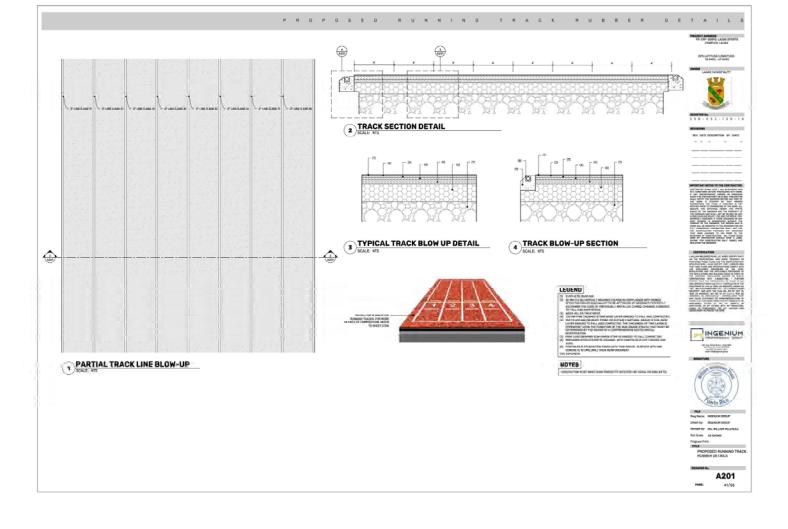


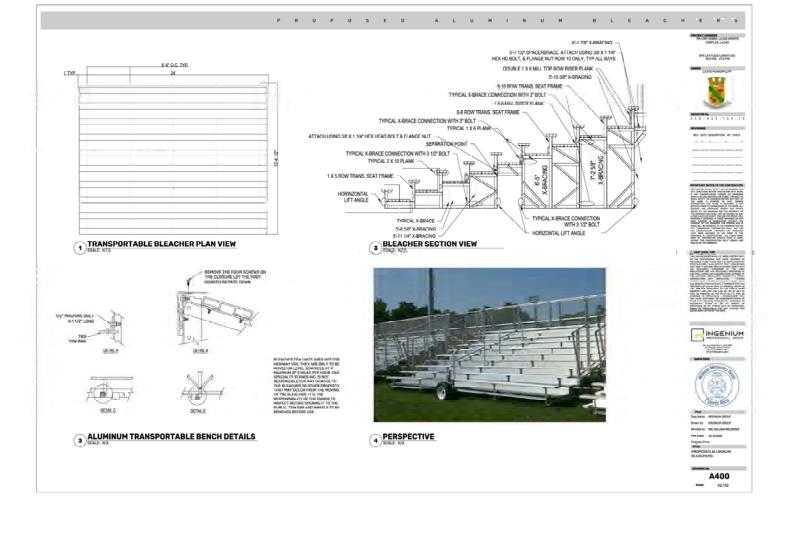


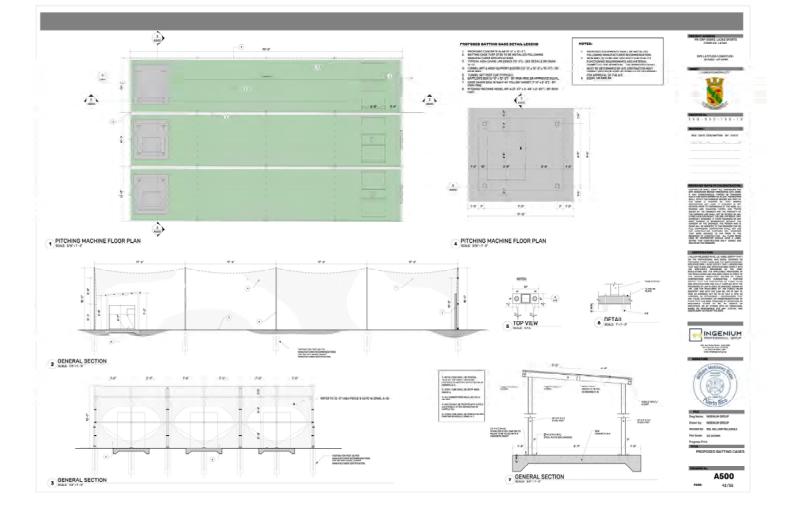


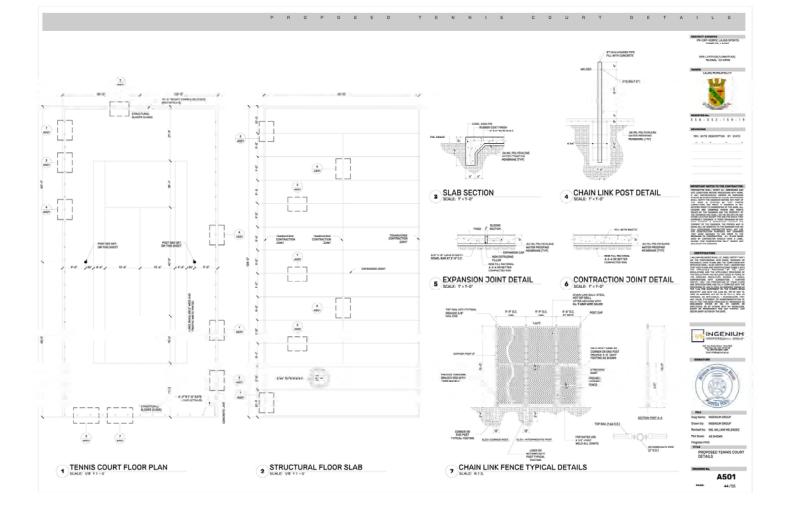


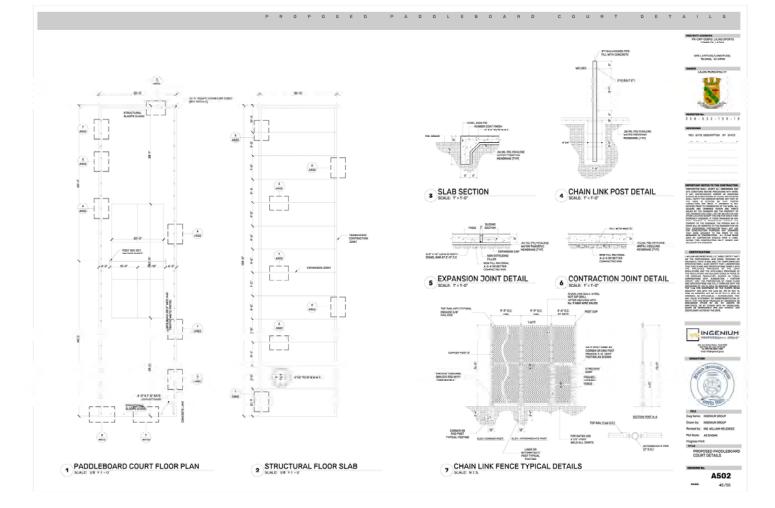






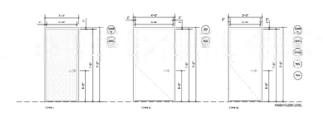




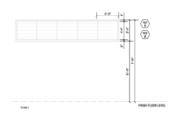


D O O R S & W I N D O W S S C H E D U L E

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1111	Name.	KOIA ROX	Depose.	PROF	-
,	10186, 1010	00 H 04"	80° 860°	AUM/FFC. WOOD/SEML SOL	
	101,100	44 × 54*	40° X 50°	FLUSH HOLLOW HETAL	SHIGLE GOOD IZ GOATS OIL SASED ENAMELS
	1048s, 104A, 1040	n. marer	ww	FLUSH HOLLOW METAL	SMOLE GOOD IS CONTS ON MASSES FRAMED



W	INDO\	NS SCH	HEDULE		
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ī	10489, 1040	36 X 64°	40" X 80"	FLUSH HOLLOW METAL	ALUMINUM LOUVER WINDOW FOR BATHROOM





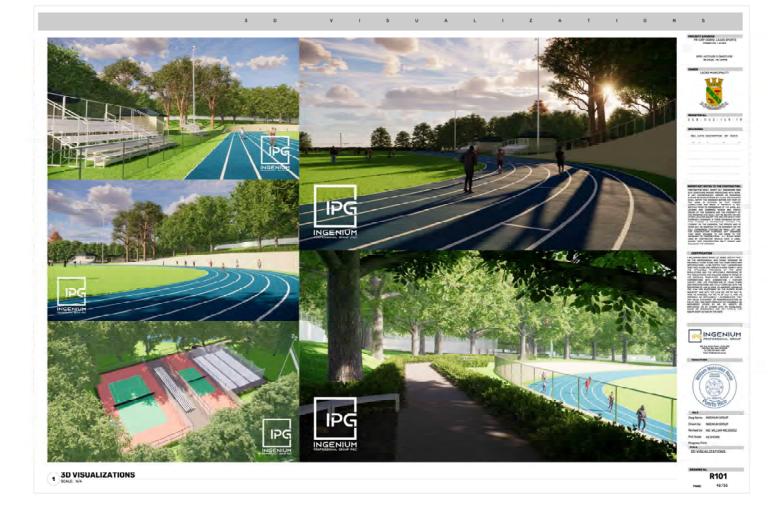


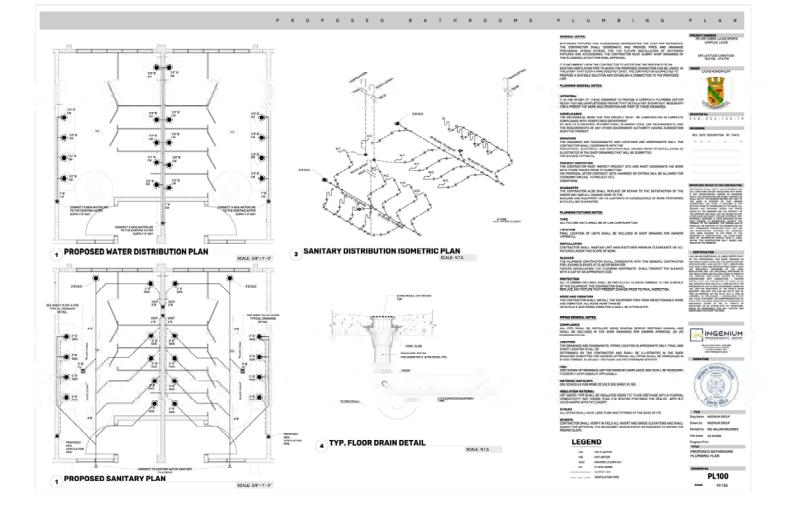


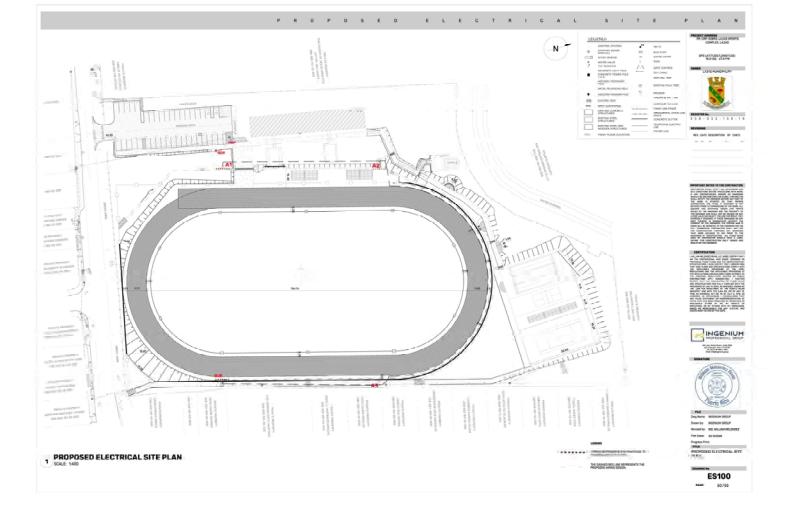


A901









P H O T O M E T R I C A N A L Y S I S N O T E

Pole / Fixture Summary

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	enter se sentiment (
Pole ID	Pole Height	Mounting Height	Fixture Qty.	Luminaire Type	Load	Circuit
M81-M84	T0.2m	15.7m	2	TLC-LED-550	7.08 kW	B
PT-MA	24.400	780.000		TLC-CED-T900	HAVAW	1787

Circuit Summary

Circuit	Description	Load	Fixture Qty.
- A	Track and Field	32.76 kW	28
В	Multi-Sport Area	4.32 kW	8

ole / Fixture S	ummary									
Туре	Source	Wattage	Lumens	L90	L80	Quantity				
TLC-(PD-1200	LED 5700K - 75 CRI	1170.W	150,000	V120,000	\$120,00	28				
TLC-LED-EEO	LED EZONY - ZE ODI	E40 W	67,000	>120,000	>120,000					

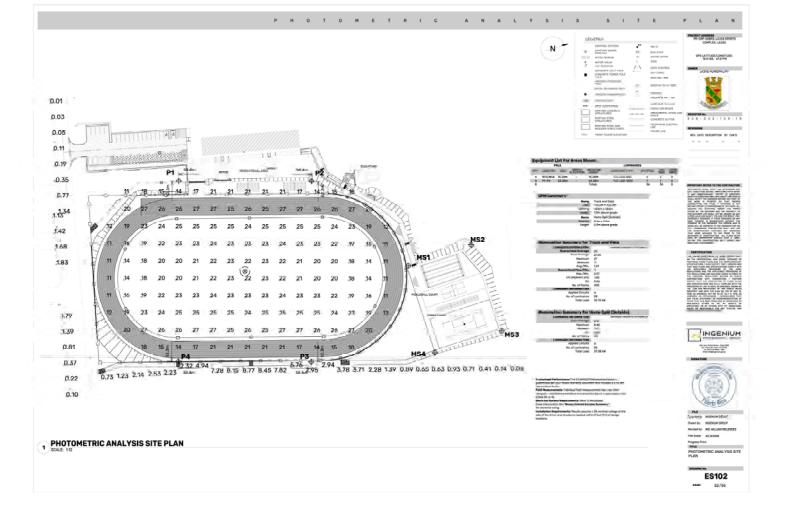
gle Luminaire Amperage	Draw Chart						
Driver Specification (.90 min power factor)		Lumens					
Snigle Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (80)
TLC-LED-1200	6.9	6.5	6.0	E.2	4.2	3.8	3.0
TO CHARD MIND	- 22	8.0	2.0	2.4	100	1.0	14

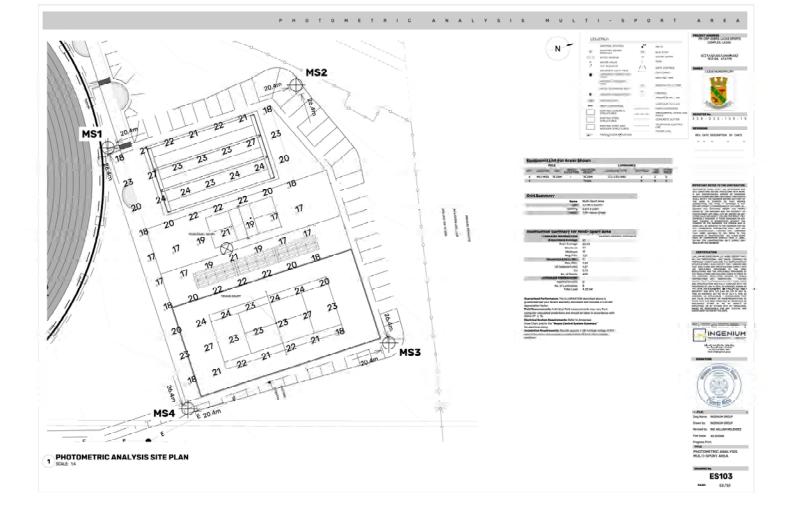
alculation Orio	Summary							
Grid Name	Calculation Metric			Illumir	ation		Circuits	Fixture Qty.
Oriu Name	Calculation Hetric	Avg.	Min.	Max.	Max/Min.	Ave./Min.	oncuits	
Home Spill	Horizontal	2.15	D 01	8.45	×	-	VR	36
Multi-Sport Area	Glare Rating	35.8	32	40	1.26	1.12	В	8
Multi-Gener Aras	Herizental Muminance	20.9	17	27	1.62	1.22		0
Track and Field	Glare Rating	40.5	32	45	1.41	1.27	Α.	28
Touck and Field	higgingstal likuminanga	21	21	27	2.57	191	- 4	700



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GENERAL NOTES

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ALL HARMENANCE COSTS WILL BE WANTED DURING THE WARRANTY

-THE CLIENT REQUIRES A REMOTE ON/OFF SYSTEM FOR THE LIGHTING SYSTEM. ALL COMMUNICATION AND MONITORING COSTS FOR A PURIOD OF 10 YEARS MUST BE INCLUDED IN THE BID.

-LIGHTING LEVELS AND DESIGN FACTORS TRACK SURFACES SHOULD BE ILLUMINATED TO THE DESIRED AVERAGE LEVEL OF ILLUMINATION AND UNH-DHM IY. -TO ENSURE PROPER STEERING ANGLES TO REDUCE GLARE AND

PROVIDE DETTER PLAYADILITY, MINIMUM MOUNTING BE DESCRIBED BELOW.	IICIOIITS	н

ASSEMBLES	THE POST DE HOUNT	Height.
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- ALL EXPOSED CARGON STEEL, SHALL DE 1071-007 DAL VANKEED IN ACCORDANCE WITH ALTER WEST.

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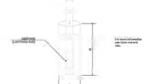
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A 10HTHM CONTRACTOR ENCLOSURED; CONSTRUCTED ON NUMBER OF SELECTION MANUAL ON-OFF SELECTION SWITCHES SHALL BE PROVIDED.







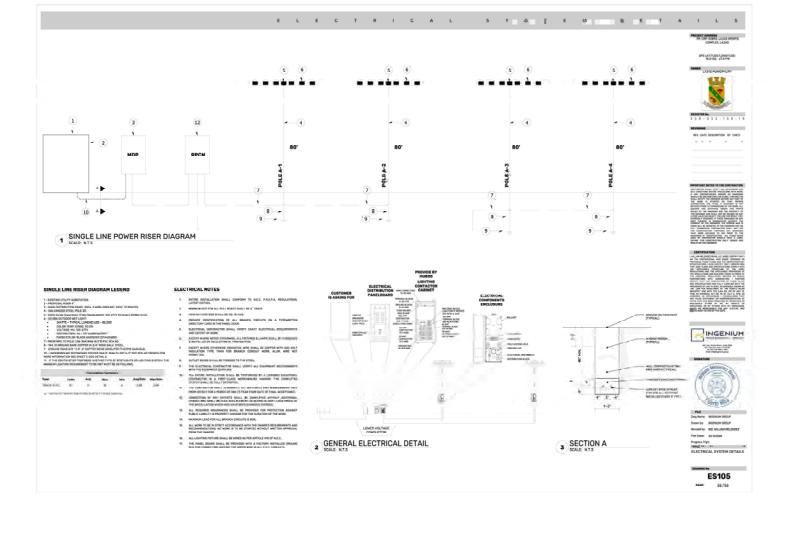
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1 PROPOSED ELECTRICAL SITE PLAN



ATTACHMENT J RADON ATTACHMENTS



Memorandum to File

Date: January 10, 2025

From: Clifford Jarman

Senior Environmental Scientist

CDBG-DR Program

Cofford I James

City Revitalization Program

Puerto Rico Department of Housing

Application Number: PR-CRP-000615

Project: Lajas Recreational Sports Complex, Municipality of Lajas

Re: Justification for the Infeasibility and Impracticability of Radon Testing

After reviewing Application Number PR-CRP-000615 under the City Revitalization Program, administered by the Puerto Rico Department of Housing (**PRDOH**), to complete the property's contamination analysis in accordance with 24 C.F.R. § 50.3(i) and 24 C.F.R. § 58.5(i), we have determined that testing the property's radon levels is infeasible and impracticable.

Per the U.S. Department of Housing and Urban Development's (**HUD**) CPD Notice 23-103, the recommended best practices and alternative options for radon testing are infeasible and impracticable in this case due to the following reason[s]:

- As required by the CPD Notice 23-103, the scientific data reviewed in lieu of testing must consist of a minimum of ten documented test results over the previous ten years. If there are less than ten documented results over this period, it is understood that there is a lack of scientific data. The latest report for radon testing in Puerto Rico was prepared in 1995 by the U.S. Department of the Interior in Cooperation with the U.S. Environmental Protection Agency. No other completed studies and reports on radon testing are available in Puerto Rico.
- There is no available science-based or state-generated information for Puerto Rico for the last ten years that can be used to determine whether the project site is in a high-risk area. The Department of Health and Human Services, Centers for

CDBG-DRProgram
City Revitalization Program
Memorandum to File
Infeasibility and Impracticability of Radon Testing
Page 2 of 2

Disease Control and Prevention (CDC), National Environmental Public Health Tracking, and Radon Testing map do not include Puerto Rico data.

- There are only two (2) licensed professionals in Puerto Rico who can conduct radon testing using the American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/AARST) testing standards, which makes it difficult, time-consuming, and highly expensive to coordinate and secure a site visit for the contamination evaluation.
- Do-it-yourself (DIY) radon test kits are known to be unreliable in assuring and controlling the quality of the test results; they are not readily available in Puerto Rico, and the cost and time required for purchasing and sending them for analysis are unreasonable when weighed against the results' reliability and the need for prompt results.
- Local authorities in Puerto Rico do not have the specialized radon monitoring equipment or trained staff needed to conduct the radon testing analysis and ensure proper quality control and quality assurance practices are adhered to. We also do not have a radiation laboratory certified for radon testing.

As part of the evaluation for this determination, PRDOH sent information requests to six (6) local agencies at the state and federal levels. We received responses from the following agencies:

- United States Geological Survey;
- Centers for Disease Control and Prevention;
- Puerto Rico Department of Health; and
- United States Environmental Protection Agency.

The agencies mentioned above confirmed the lack of scientific data on Radon testing for Puerto Rico and the technical difficulties that we face to comply with HUD's Radon testing requirement. For the above-mentioned reasons, Radon testing is infeasible and impracticable for this property, and no further consideration of Radon is needed for the environmental review.



August 20, 2024

Mrs. Carmen R. Guerrero Pérez Director Caribbean Environmental Protection Division City View Plaza II - Suite 7000 #48 Rd. 165 km 1.2 Guavnabo, PR 00968-8069

Vía email: guerrero.carmen@epa.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Ricco, as this information is crucial for our compliance with the. U.S. Department of Housing and Urban Development (HID) Community Planning and Development (CPD) Notice CDP-23-103,

Community Manning and Development (CPD) Notice CDP-25-103. This Notice emphasizes the importance of radon testing and mifigation in ensuring safe living environments, particularly in HtID-assited properties. PRDOH, as the grantee of the Community Development Black Grant for Disaster Recovery and Miligation (CDBG-OR/MIT), is responsible for enauting compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must complie comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the islands of Puerto Rico. Rico.

Specifically, we are seeking for possible availability of the following

Radon lesting data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

Barbosa Ave. #606. Building Juan C. Cordero Devila, Rio Piedret, PR 00918 | PO Box 21365 San Juan, PR 00928-1365 Tel: (767) 274-2927 | <u>Intervention of the 1888 San Juan</u>, PR 00928-1365



August 20, 2024

Dr. Silvina Cancelos College of Engineering
University of Puerto Rico – Mayagüez Campus 259 Norte Blvd. Alfonso Valdés Cobián Mayagüez, Puerto Rico

Via email: silvina.cancelos@upr.edu

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Barbosa Ave. #606 , Building Juan C, Cordero Davila, Rio Piedras, PR 00918 | PO Box 21565 San Juan, PR 00928-1565 Tel. (767) 274-2527 | www.enida.ci.gov

CDBG-DR/MIT Program
Resquest for information in relation with HUD CPO-25-103 for Puerto Rico
Poor 2 / 2

Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radion testing or mitigation.

<u>Policies and quidelines</u> – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

<u>Historical data</u> – if available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. If some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please lot us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

llmn figuez, Esq.

Sincerely.

CDBG-DR/MIT Program Request for information in relation with HUD CPD-23-103 for Puerlo Rico

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Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely.

Mmy Rodriguez, Esq.

Dr. Carlos Marín. carlos,marin3@upr.edu



August 20, 2024

Dr. Jessica Irizarry Director Office of Island Affairs U.S. Centers for Disease Control and Prevention 1324 CII Canada, San Juan, 00920 Guaynabo, PR 00968-8069

Via email: OIA@cdc.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Barbosa Ave. #606 ; Building Juan C. Cordero Davila, Rio Piedras, PR 00918 | PO Box 21365 San Juan, PR 00828-1365 Tel (787) 274-2527 | wayoo ayam ulu musuwa mayo



August 20, 2024

Mrs. Anais Rodriguez Secretary
Puerto Rico Department of Natural Resources Carretera 8838, km, 6.3, Sector El Cinco. Río Piedras San Juan, PR 00926

Via email: anais.rodriguez@dma.pr.gov

RE: Request for Information regarding available data on radon testing

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Barbosa Ave. #606, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365 Tel. (787) 274-2527 | www.vechindu.ir.u.d)

CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Ricc
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Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

LWYMY 5. Rodríguez Rodríguez, Esq.

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William O. Rodriguez, Esq. Secretary

Mr. Luis Márquez, <u>secretariaaire@dma.pr.gov</u> Eng. Amarilys Rosario, <u>aire@dma.pr.gov</u> Mrs. Elid Ortega, <u>eortega@dma.pr.gov</u>



August 20, 2024

Dr. Carlos R. Mellado López Secretary Puerto Rico Department of Health PO Box 70184 San Juan, PR 00936-8184

Vía email: drcarios.mellado@salud.pr.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Utban Development (HUD) Community Planning and Devolopment (CPD) Notico CDP 23-103.

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Barbosa Ave. #606, Building Juan C. Cordero Dávila, Rio Piedras, PR 0098 | PO Box 21365 San Juan, PR 00928-1365 Tel. (787) 274-2527 | <u>www.yiventuja = nou</u>



August 20, 2024

Mrs. Holly Weyers Regional Director, Southeast – Puerto Rico US Geological Survey 3916 Sunset Ridge Road Raleigh, NC 27607

Via email: hsweyers@usgs.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

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Request for Information in relation with HUD CPD-23-103 for Puerto ISCO

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incerely,

Villam O. Rodríguez Rodríguez, Esq.

Secretary

Mr. Raul Hernández Doble, <u>rhernandez 2@salua.pr.gov</u>

CDBG-DR/MIT Program
Request for information in relation with HUD CPD-23-103 for Puerto Rica
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Sincerely

William S. Rodriguez Rodriguez, Esc

~

Cr. Mr. R. Ramdall Schumann, rschumann/dusps gav.

From: Charp, Paul (CDC/NCEH/DEHSP) <pac4@cdc.gov>

Sent: Tuesday, September 3, 2024 6:36 AM

To: Miranda, Sandra (CDC/PHIC/DPS); Irizarry, Jessica (CDC/PHIC/DPS); Rzeszotarski, Peter

(CDC/NCEH/DEHSP); Vinson, D. Aaron (CDC/NCEH/DEHSP)

Cc: Kostak, Liana (CDC/PHIC/DPS); Vazquez, Germaine (CDC/NCEH/DEHSP)

Subject: RE. REHi: Puerto Rico Request for Information- Randon testing and levels

Good morning, Sandra and others,

In response to the request from Mr. William Rodriguez of the Department of Housing, Government of Puerto Rico, I have reviewed all the available data within the CDC National Environmental Public Health Tracking Network system for data related to radon in Puerto Rico. In addition to the tracking data available on the internet, I also reached out to Mr. Aaron Vinson of the NCEH Tracking Branch.

I was not able to find any data in the CDC systems and this was confirmed by Mr. Vinson. We also reached out the US Environmental Protection Agency who indicated they had no radon data in their systems. Please relay this information to Mr. Rodríguez in your response to his requests

If you have any additional questions, please contact me.

Thank you and best regards,

Paul A. Charp, Ph.D., Fellow, HPS
Senior Health Physicist
Emerging Environmental Hazards and Health Effects Branch (EEHHEB)
Division of Environmental Health Science and Practice (DEHSP)
National Center for Environmental Health (NCEH)
Centers for Disease Control and Prevention (CDC)
pcharp@cdc.gov
770-488-0723 office
404.388.0614 Cell



From: Schumann, R. Randall <rschumann@usgs.gov>

Sent: Wednesday, August 21, 2024 4:39 PM

To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>; Weyers, Holly S <hsweyers@usgs.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A.

Rivera-Vazquez <aarivera@vivienda.pr.gov>

Subject: RE: Request for Information- Radon testing and levels

Dear Ms. Medina Smaine,

In the early 1990s the U.S. Geological Survey (USGS) conducted geologic assessments of radon potential for all 50 states and the territories of Guam and Puerto Rico, in collaboration with the U.S. EPA. I conducted the geologic radon potential assessment for Puerto Rico. The PDF file of the report is too large to attach to this message but it can be obtained at https://pubs.usgs.gov/of/1993/0292k/report.pdf. The USGS did not conduct indoor radon testing and we did not conduct field studies associated with this assessment; it was based on existing data. Mr. David Saldana of the Puerto Rico Department of Health kindly provided us with data for 610 homes that were tested for indoor radon by his agency between 1993 and 1995, which are summarized in the report. I am not aware of any other radon-related geologic studies conducted in the Commonwealth of Puerto Rico by the U.S. Geological Survey.

Best regards,

R. Randall Schumann
Scientist Emeritus
U.S. Geological Survey
Geociences and Environmental Change Science Center
Denver, Colorado, USA
rschumann@usgs.gov
https://www.usgs.gov/staff-profiles/r-randall-schumann

From: Raul Hernandez Doble <rhernandez2@salud.pr.gov>

Sent: Wednesday, August 21, 2024 2:13:31 PM

To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>; Dr. Carlos Mellado <drcarlos.mellado@salud.pr.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>; Mayra Toro Tirado <mtoro@salud.pr.gov>

Subject: RE: [EXTERNAL] Request for Information-Randon testing and levels

Good afternoon. Ms. Medina

I regret to inform that we do not have any recent information on radon testing, since we do not have a certified radiation laboratory certified for radon testing. There are companies that sell test kits available online that can be done and mailed to a testing laboratory. There are also lists of radon contractors and these companies that process radon testing cartridges with instructions, on the Environmental Protection Agency Indoor air Quality web page. The last radon study in Puerto Rico done by the PR Department of Health was done on the year 1993.

Raul Hernandez Doble
Director, Seccion Salud Radiologica
Division de Salud Ambiental
Secretaria Auxiliar para la Vigilancia y la Proteccion de la Salud Publica rhernandez2@salud.gov.pr

Phone: (787)765-2929 ext. 3210

From: Reyes, Brenda < Reyes. Brenda@epa.gov>
Sent: Wednesday, September 18, 2024 11:48 AM

To: Cesar O Rodriguez Santos <cesarrodriguez@drna.pr.gov>; Maritza Rosa Olivares <maritzarosaolivares@drna.pr.gov>; Silvina Cancelos Mancini <silvina.cancelos@upr.edu>; Melanie Medina Smaine <mmedina@vivienda.pr.gov>

Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez

<aarivera@vivienda.pr.gov>; Povetko, Oleg (he/him/his) <Povetko.Oleg@epa.gov>

Subject: RE: Request for Information- Randon testing and levels

Saludos.

La EPA esta trabajando una respuesta a su petición. Se sometió borrador a la directora y el subdirector para su aprobación y firma.

Brenda Reyes Tomassini
Public Affairs
U.S. EPA
Region 2
Caribbean Environmental Protection Division
(787) 977-5869/(787) 977-5865
Mobile: 202-834-1290

From: Silvina Cancelos Mancini < silvina.cancelos@upr.edu>

Sent: Friday, September 6, 2024 15:04

To: Melanie Medina Smaine < mmedina@vivienda.pr.gov>

Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez

<a arrivera@vivienda.pr.gov>; Maritza Rosa Olivares <maritzarosaolivares@drna.pr.gov>; Reyes, Brenda

<Reyes.Brenda@epa.gov>; Povetko, Oleg <Povetko.Oleg@epa.gov>

Subject: Re: Request for Information-Randon testing and levels

Estimada Melanie Medina

Quería dejarle saber que recibimos su correo el 21 de agosto al igual que el de Maritza Rosa el pasado 4 de septiembre. Ya las personas involucradas de EPA, junto conmigo y el Dr. Marín estamos al tanto del asunto y estamos trabajando para poder enviarles la información.

Atentamente

Silvina Cancelos
Professor
Associate Director
Mechanical Engineering Department
University of Puerto Rico - Mayaguez
Call BOX 9000 Mayaguez PR 00680
Tel: 787-832-4040 ext 5956
email: silvina.cancelos@upr.edu





September 23, 2024

VIA EMAIL

William O. Rodriguez Rodriguez, Esq. Secretary Puerto Rico Department of Housing Barbosa Ave. 606 Building Juan C. Cordéro San Juan, PR 00917 Email: W.Rodriguez@vivienda.pr.gov

RE: EPA Response to August 20, 2024 request for information of data on radon testing and levels in Puerto Rico

Dear Honorable Secretary Rodríguez Rodríguez:

This communication is in response to your letter of August 20, 2024 addressed to the Puerto Rico Department of Natural and Environmental Resources (DNER) and referred to the U.S. Environmental Protection Agency (EPA) regarding available data on radon testing and levels within Puerto Rico.

EPA's National Radon Action Plan 2021–2025 sets a goal for the nation to find, fix and prevent high indoor radon levels in 8 million buildings by 2025 and prevent 3,500 lung cancer deaths per year. Under this Plan, leaders from across multiple sectors are working together to plan, guide, and sustain nationwide action to prevent exposure to radon.

Due to the lack of data in Puerto Rico, EPA undertook an investigation in collaboration with the University of Puerto Rico-Mayaguez (UPRM) Campus, Departments of Civil Engineering, and Surveying and Mechanical Engineering, to find out if radon presented a problem in Puerto Rico. Up until 2021, the only data we had for Puerto Rico was a 1993-1995 mail-in radon screening study referred to by the U.S. Geological Survey report (USSC), 1995) in which the USSC concluded that several areas of Puerto Rico have the geologic potential to generate indoor radon levels exceeding the EPA Action Level of 4 pC/L, (piccouries per liter), perhaps locally reaching very high levels above 50 pC/L, if a house construction and

ventilation allow for soil-gas radon to enter and concentrate within the structure. According to the USGS report, most of these areas are located in the northwest part of the island. Please note that the actual 1993-1995 study documentation is not available to the EPA.

Typical radon testing technology used in mainland United States (charcoal canisters or electric-powered devices) are impractical in Puerto Rico because of high humidity and power outages. The recovery and rebuilding of communities following the atternath of 2017 Humicanes ima and Maria presented an opportunity to develop radon prevention and mitigation strategies in 2019. Initially, EPA sampled indoor radon air in over 170 single-family residences in the municipalities of San Sebastian, Lares, Calles, Arecibo, Morovis, Camuy, and Hatillo and later expanded the project to other municipalities such as Rincon, Aguada, Aguadallis, Isabela, Questradillas, Barecloneta and Vega Baja. The quality assurance protocols were anchored in American National Standards institute/American Association of Radon Scientists and Technologists, MNSI/AARST) standards of practice (ANSI/AARS, 2019). The sampling was designed in two stages: scoping and confirmatory sampling. The scoping sampling was conducted using Corentium Home (CH) electronic monitors and E-Perm systems. Locations measuring above the EPA Action Level 64 of ACVI/V with CH were measured at the second stage of the sampling using RAD7 and Corentium Pro Continuous Radon Monitors (CRMS). Nationally certified andon sampling professionals led by one such professional form the UPRM conducted confirmatory sampling in the second stage. Also, during the study, the nationally certified radon mitigation professionals inspected several homes with elevated indoor radon levels.

Mapping radon in Puerto Rico proved to be a complicated endeavor given the COVID-19 pandemic in 2020. EPA and UPRM continue to work on the project, however, results have not been finalized, and no scientific report has been published yet. Unfortunately, EPA cannot share prehimany data at this time because it contains privileged information. Nevertheless, preliminary data at from the study does show homes with levels over 4 pC/L (EPA Action Level) that might need mitigation to protect the health of their inhabitants.

Although many states have developed laws and regulations governing radon disclosure, certification, and mitigation, Puerto Rico lacks legislation or mandatory radon testing provisions for new construction, remodeling, selling or buying homes. Given this loophole and aimling to answer your request, the EPA can provide information on Best Management Practices for sampling indoor radon in Puerto Rico.

CITY VIEW PLAZA II BUILDING, 7TH FLOOR

If you have any questions or need any additional information, please contact me at 787-977-5865 or <u>guerrero.carmen@epa.gov</u> or have your staff contact Reyes, Brenda at <u>reyes.brenda@epa.gov</u> or (787) 977-5869.

Sincerely,

CARMEN GUERRERO Digitally signed by CARMEN GUERRERO PEREZ Date: 2024.09.23 09:41:39 -04'00'

PEREZ -040 Carmen R. Guerrero Pérez Director

cc: Roberto Mendez, Esq (Acting Secretary, PR Department of Natural and Env. Resources)

Melany Medina: mredina@vivienda.pr.gov Elaine Dume Mejia: <u>Edume@vivienda.pr.gov</u> Luz S Colon Ortiz: <u>Lcolon@vivienda.pr.gov</u> Aldo A. Rivera-Vazquez: <u>partivera@vivienda.pr.gov</u> Cesar O. Rodriguez: <u>cesarrodriguez@drna.pr.gov</u> Marita Rosa Olivares: <u>maritzarrosaolivares@drna.pr.gov</u>

Reference: USGS. Geologic Radon Potential of Guam and Puerto Rico, Report 93-292-K. Washington, DC: USGS. Retrieved 9/11/2024, from https://pubs.ugs.gov/of/1993/0292k/report.pdf.